A DICTIONARY,

GEOGRAPHICAL, STATISTICAL, AND HISTORICAL,

OF

THE VARIOUS COUNTRIES, PLACES,

AND PRINCIPAL NATURAL OBJECTS

IN

THE WORLD.

ILLUSTRATED WITH MAPS.

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"Nec omnia dicentur sed maxime insignia."

"Id certe ab omnibus prudentibus conceditur, quod cognitio Telluris sit non tantum homine dignissima, sed etiam tam in republica literaria, quam ad vitæ usum pernecessaria." — Varenius.

A NEW EDITION REVISED, WITH A SUPPLEMENT.

IN TWO VOLUMES.

VOL. I.

LONDON:

LONGMAN, BROWN, GREEN, AND LONGMANS.

MDCCCLIV.

LONDON:
A. and G. A. SPOTTISWOODE,
New-street-Square.

NOTICE TO THIS EDITION.

In this edition the articles Australia, Russia, and Turkey, with others of less importance, have been mostly rewritten; and it has been, in other respects, materially improved.

London, June, 1854.

NOTICE TO THE EDITION OF 1851.

Extraordinary changes have taken place in this and most other countries since the first publication of this work in 1841, partly of a political nature, and partly from the unusually rapid progress of population, wealth, and civilisation. We have endeavoured to notice the most material of these changes, and to rectify the mistakes, and supply the omissions in the former edition. The alterations have, in consequence, been exceedingly numerous; and the greater number of the principal articles have been either wholly or partially rewritten. We have endeavoured, wherever it was practicable, to introduce the new and amended articles in their proper places in the course of the work; those which could not be so introduced being embodied in an Appendix at the end of the second volume. Neither labour nor expense has been grudged in attempting to improve the book, and to render it more worthy of the public confidence. And we flatter ourselves that the errors which may still be found in it are but few in number and not of much importance.

London, December, 1850.

PREFACE TO FIRST EDITION.

The utility of geographical works is so generally admitted, that it seems unnecessary to endeavour, by any lengthened statements, to conciliate the favourable opinion of the reader by dwelling on their merits. There are few so incurious as not to wish to learn something of the state of foreign countries, especially of those with which their own nation is connected, or which have been celebrated in history. The desire to gratify this laudable curiosity has, in all ages, prompted individuals to visit foreign countries; and has made the works of voyagers and travellers be eagerly sought after. But the situation of most people precludes the possibility of their leaving their native country; while few of those who do travel can survey more than a small part of the earth's surface. Neither is it possible adequately to supply this want of personal knowledge by resorting to the relations of travellers. These are frequently contradictory and inconclusive; the statements in them are usually, also, limited in their application, and are not always to be depended on; and, though it were otherwise, the command of many hundred volumes, and the free disposal of one's time, would be necessary to enable an individual to acquire, by their means, even a superficial acquaintance with the different regions of the earth. Hence the utility of geographical works, compiled with due care and knowledge: they embody the information scattered in the accounts of travellers, in topographical works, and in official returns and other public and private documents; sift and distribute it under its proper heads; and lay it before the reader in a condensed form, disencumbered from superfluous or irrelevant matter.

Systematical works, or those in which the various details with respect to the physical, moral, and political state of a country or district are arranged in their natural order, in a consecutive narrative, are probably the best adapted for the use of the student and scientific reader. But Dictionaries are much more convenient, and better fitted for public use. When arranged in alphabetical order they are easy of consultation; and, if properly compiled, the articles in them are not connected or mixed up with others, but are separately complete, supplying the inquirer with independent, and, at the same time, precise and well-authenticated information. Such works seem, from the extreme diversity and interest of the subjects treated of, peculiarly fitted to "excite curiosity by their variety, to encourage diligence by their facility, and to reward application by their usefulness." We need not, therefore, wonder that they have generally, even when their execution has been very indifferent, enjoyed a large share of popularity.

But how interesting and important soever the matter, it is still true that the value of a Geographical Dictionary must depend principally on its authenticity and trustworthiness. And we believe it will be pretty generally admitted, that by far the greater number of those publications that have hitherto appeared in this country have not been of a kind to inspire confidence. Most of them, perhaps we might say all, have been very carelessly compiled, and evince little discernment or sound criticism; and what is worse, their authors have seldom referred to the sources whence their statements have been derived; so that the reader has nothing better to trust to than the authority of, perhaps, an anonymous compiler, at the same time that he is deprived of the means of readily verifying his facts, or of referring to the original authorities for further information. These works are mostly also either on too contracted or too extensive a plan; so that while, in the one case, the reader is frequently not supplied with important information, in the other, the book is at once too bulky, costly, and inconvenient. Another defect by which most Geographical Dictionaries published in Great Britain have been characterised, is the disproportioned size of the parts, or the preponderance given to minor articles and uninteresting topics, while those having reference to great countries, or important places or subjects, have often been reduced in a more than corresponding degree. It is difficult, indeed, to hinder the description of towns in geographical works from extending beyond their due proportion; but still they may be confined within reasonable limits, and without displaying the glaring anomaly of an account of a capital city, for example, occupying a greater space than that of the country in which it is situated.

The researches connected with his Commercial Dictionary having led the author of this work to refer to a good many Geographical Dictionaries, he became strongly impressed with a sense of their defects; and it occurred to him that he might perhaps be able to produce one that should be more generally accurate and useful. At first, we were inclined to think that we might probably be able to construct our work on the basis of the Edinburgh Gazetteer, the property of Messrs. Longman and Co.: but on a closer examination of the latter, we found its plan and execution so very defective, that we considered it expedient to lay it wholly aside, and to endeavour to produce an entirely new work. The improved state of geographical knowledge, and the increasing relations of this country with others, required, indeed, that a Geographical Dictionary, aspiring to the character of a book of reference, should be principally drawn up from original sources, and with as much care and discrimination as possible.

It is necessary, however, to observe, that we have not attempted to supply the reader with a complete Geographical, Statistical, and Historical Dictionary. We have proceeded on a principle of selection;

and, instead of noticing unimportant places and objects, have endeavoured to notice those only that might reasonably be expected to interest the reader. A work of this class on any other plan would necessarily extend to many volumes, and would embrace multitudinous details of no general importance. In illustration of what has now been stated, we may mention that the *Grand Dictionnaire Géographique, Historique, et Critique*, by Bruzen de la Martinière, which aims at considerable completeness, occupies no fewer than 6 huge folio volumes*; and, gigantic as this may seem, it is far surpassed by the German edition of the same work, which extends to 13 similar volumes! Though on a compressed and far more judicious plan, the *Dictionnaire Géographique Universel*, Paris, 1823-1833, occupies 10 thick octavo volumes. It is needless to say that works of this size are quite unsuitable to the great majority of readers; and it has been our object, by excluding articles and statements of little interest, to keep our work within reasonable limits, and to allow, at the same time, sufficient space for treating the more important articles at adequate length. It is also necessary to bear in mind, that this being a work intended for the especial use of Englishmen, we have dwelt at greatest length on the articles and details we presumed most likely to interest them. Hence we have appropriated a much larger space to the description of our Eastern possessions, and of our colonies in different parts of the world, than they may appear, on other grounds, properly entitled to. On the same principle, we have lengthened the accounts of those countries and places with which our countrymen have the greatest intercourse, or which have acquired celebrity by the historical associations connected with them, and have proportionally shortened the others.

Still it may, perhaps, be supposed, that, however condensed, nothing like a really useful Geographical Dictionary can be compressed within the compass of two octavo volumes. And such, no doubt, would be the case were these volumes of the ordinary dimensions. But so far from this being the case, the quantity of letter-press contained in them is fully equal to three and a half times the quantity contained in the last edition of *Pinkerton's Geography*, in two large volumes quarto! The type, though remarkably clear and distinct, might, perhaps, have been justly objected to as too small, had the work been of a consecutive description; but, as it principally consists of rather short articles, the size of the type is of less consequence; and any inconvenience resulting from its smallness is more than countervailed by the advantage of having a great deal brought into a volume.

Without neglecting the *physical* geography of the different countries and places, we have directed our principal attention to what has been called their *political* geography,—that is, their industry, institutions, and the condition of their inhabitants. Neither have we

* The first edition of this work was in 10 vols. folio.

attempted to confine ourselves within what might, perhaps, be called the limits of a strictly geographical and statistical work. Wherever the occasion seemed to justify it, we have not scrupled to commend and censure, as well as to describe; and have endeavoured to appreciate the influence of institutions and habits on national welfare. The historical notices are necessarily brief, and, unless in the more important articles, are mostly restricted to an enumeration of leading events.

Our object being to supply a work of easy reference to the public at large, we have, in general, given our notices of countries and places under the names by which they are commonly known in England. This plan does not involve any want of scientific precision; though if it did, the defect would be much more than compensated by its being better adapted for public use. There are not very many readers who would think of looking for Leghorn under *Livorno*, or for Munich under *München;* and among the many thousands who might wish to acquire some information respecting the present state of the Dead Sea, there are not, perhaps, as many dozens who would seek for it under its Arabic name of *Bahr-el-Lout.*

It did not enter into our plan systematically to notice countries or places as they existed in antiquity. But, wherever it was supposed that such notices would be likely to interest the general reader, we have not hesitated to introduce them. Our object, in fact, was not so much to compile a dictionary on strictly scientific principles, and that should be perfectly homogeneous in its parts, as to produce one that might be relied on, that should omit few articles of importance, and that ordinary readers should find generally instructive and interesting.

None can be more fully satisfied than we are of the extreme difficulty of accomplishing even this much. In a work embracing so great a variety of statements, many of them relating to matters in regard to which it is frequently all but impossible to acquire correct information, perfect accuracy need not be looked for. But we can honestly say that we have spared no pains to make our work worthy of the reader's confidence; and would fain hope that its errors are not such as sensibly to detract from its utility.

The Maps which accompany the work have been carefully compiled from the latest and best authorities, and are entitled to rank with the first of that class of publications. Those of Asia, of the Inland Navigation, Railways, &c. of Great Britain and Ireland, and of the British Possessions in North America, will be found to be particularly valuable.

To prevent misapprehension, it may be as well to add, that the distances between one place and another are always, unless where the contrary is stated, *direct.* They have mostly been measured on the best maps, or deduced from other good authorities.

London, January, 1841.

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A DICTIONARY, GEOGRAPHICAL, STATISTICAL, AND HISTORICAL.

A A, the name of some small rivers in France, Switzerland, the Netherlands, Hanover, Saxony, &c. The wide diffusion of the name seems to prove, as has been judiciously remarked, that it has some general signification applicable to all the rivers to which it belongs. Probably it may be derived from the Celtic *Ack* or *Ac*, water. There are, indeed, two small German rivers, one of which falls into the lake of Constance, and the other into the Iller, that are called Aach.

AALBORG, an old town of Denmark, cap. diocese and bailiwick, and the principal town in Jutland, situated about 17 m. from the sea, on the S. side of the channel of the Lymfiord, or great internal gulf, entering from the Cattegat, near where it begins to expand into an extensive lake. Lat. 57° 2′ 32″ N., long. 9° 56′ 41″ E. Pop. 7,050. It is intersected by two small rivers, and surrounded by ditches; it is the seat of a bishopric, has a gymnasium or college, an episcopal library with 11,000 vols., a school of navigation, and an hospital and two workhouses. Exclusive of distilleries and breweries, it has manufactures of soap, fish-oil, fire-arms, refined sugar, leather, silk, &c., with a considerable amount of shipping and trade: principal exports corn, flour, fish, butter, spirits, &c. Formerly it was accessible to large vessels; but owing to the gradual filling up of the channel of the Lymfiord, it is now accessible only to the smaller class of merchantmen, or those not drawing more than 9 or 10 feet water.—(*Cattrau, Tableau des Etats Danois*, tom. i. p. 88.) Aalborg means Eeltown; a name derived from the immense number of eels that are found in the waters in its vicinity.

AALEN, a town of Wirtemberg, circ. Jaxt, cap. bailiwick, formerly a free imperial city, on the Kocher, 42 m. E. Stutgard. Pop. 2,400. It is surrounded by walls flanked with high towers; has manufactures of wool and cotton, and breweries. There are extensive forests in the environs, and iron mines.

AALSMER, a village of Holland, E. side of the sea of Haarlem, 10 miles S.W. Amsterdam. Pop. 1,800.

AALTEN, a village of the Netherlands, Guelderland, 7½ miles S.S.W. Groenlo. Pop. 3,520.

AAR, a river of Switzerland, the most considerable in that country after the Rhone and Rhine. Its principal sources are in the glaciers of the Schreikhorn and Grimsel mountains in Berne, near the source of the Rhone. Having united its different arms near Meyringen, it flows thence through the lakes of Brienz and Thun. Escaping from the latter, it takes a northerly direction till it reaches Berne; it then turns W. till having received its tributary, the Saane; it flows N. E. by Arberg, Soleure, Aarau, &c., till it unites with the Rhine, opposite to Waldshut. Its most important tributaries are, on the right, the Emme, Reuss, and Limmat; and on the left, the Saane, already noticed, and the Thiele. Its course is about 170 m. It becomes navigable on emerging from lake Thun. In the upper part of its course it dashes along with great fury, and is precipitated over several waterfalls. This also is the name of two small rivers in Waldeck.—(*Coxe's Switzerland*, Letters 29, 30. &c.)

AARAU, or ARAU, a town of Switzerland, cap. cant. Aargau, on the Aar, 1,140 feet above the level of the sea, 23 m. S. E. Basle, lat. 47° 23′ 35″ N., long. 6° 2′ 55″ E. Pop. 3,100. It is well built, has a gymnasium, a school of art, a *seminarium* or normal school for the instruction of teachers, a public or cantonal library, a society of national instruction, &c., with manufactures of silk and cotton, a cannon foundery, and bleach-fields. The peace, which terminated the civil war of 1712, was concluded here.

AARGAU, or ARGOVIA, one of the Swiss cantons, separated by the Rhine from Baden, having the canton of Zurich on the E., that of Lucern on the S., and Soleure and Basil on the W. Area 502 sq. m. Pop. (1836) 182,755, having increased from 144,093 in 1803. The mountains in this canton do not attain to any very great height, and it possesses a very considerable extent of fertile land. It is traversed by the Aar, whence it derives its name, and by its important tributaries the Reuss and Limmat. The country is well cultivated, and the produce of wheat and other grain exceeds the consumption: there are numerous vineyards, but the wine is inferior; with abundance of garden and orchard fruit. The rearing of cattle and sheep is not found to be productive, but they are advantageously fattened in the meadows, which are both extensive and excellent. Manufactures have made great progress. The principal is that of cotton, next to it is silk, and then follow linen, straw-platting, &c. Cottons are not woven by power-looms, but mostly in the cottages of the peasants, or small labouring farmers, as has been the case with linen in Ireland. But though this sort of double employment has hitherto afforded a considerable degree of security against the injurious influence of the vicissitudes incident to agriculture and manufactures, the presumption is that the rapid progress of mechanical improvements in other countries will force its abandonment, and that the Swiss will have to employ machinery in the weaving as well as in the spinning of cotton, or be compelled to abandon the former department. This canton is especially distinguished by the attention it has paid to education. Every district of 120 children must have at least one primary and one superior school. In every circle (*Bezirk*), the population being from 15,000 to 20,000, there are from 5 to 6 secondary schools. There is also in the capital a gymnasium, a school of arts, and a normal school for the instruction of teachers. The expense of the schools is defrayed partly by the communes and partly by the state funds. In the gymnasium and school of arts the state provides for the payment of 14 professors and their assistants. About 3-5ths of the population are Catholics and 2-5ths Protestants. The public revenue amounts to about 45,000*l.* a-year; but as nearly the half is derived from state property, interest, &c., it is immediately seen that taxation is very light. The cantonal contingent to the diet is fixed at 2,410 men, and 52,212 Swiss fr. For an account of the government, see art. SWITZERLAND. Principal towns Aarau, Laufenberg, Baden, Zoffingen, &c.—(*Bowring on the Commerce of Switzerland*, p. 80.)

AARHUUS, a sea-port town of Denmark, cap. diocese and bailiwick of the same name, on the E. coast of Jutland, lat. 56° 9′ 35″ N., long. 10° 14′ E. Pop. 6,765. It is pretty well built, has a large cathedral founded in 1201, a lyceum, a museum of antiquities, and a valuable diocesan library. Its commerce and industry have increased considerably of late years. The exports consist principally of agricultural produce; with spirits and beer, the produce of its distilleries and breweries; and cloth and gloves. Considerable sums have recently been expended on the improvement of its port, which has been rendered one of the best in Jutland. Packets sail regularly between it and Callundberg, on the west coast of Zealand.

AARONSBURGH, a small town of the United States, Centre Co., Pennsylvania.

B

AASZY, the *Orontes* of Greek geographers, which see.

AATYL. A town or village of Syria, in the Haouran or Great Plain, extending S. from Damascus and E. from the mountains beyond Jordan, lat. 32° 15′ N., long. 36° 33′ E. The inhabitants consist of Druses (see *Libanus* and *Syria*), of the number probably of 200 or 300. Though now insignificant, the remains of ancient grandeur in its vicinity prove that Aatyl was once a place of importance. These remains occupy a circuit of a mile, and in many instances are inhabited by the present population. W. of the town a perfect arch of very fine workmanship, with broken pillars and friezes, marks the site of a small but elegant temple. On the S. another temple, almost entire, with a portico of four columns and an entrance beautifully and elaborately carved, has been converted into a private residence.

Aatyl is 54 m. (direct distance) S.S.E. Damascus, and 48 m. E. Lake of Tabaria, the Genesareth of the Bible. —(*Robinson's Travels in Palestine and Syria*, vol. ii. pp. 155, 156.)

ABADEH, a town of Persia, prov. Fars. 115 m. N. Shiraz. Pop. 5,000. It is surrounded by walls in a state of decay; and is defended by a large square fort, now containing the whole population.

ABAKANSK, a town of Siberia, gov. Jenisseisk, on the Abakan near the Jenissei. The climate is mild; but it is notwithstanding a poor miserable place, and would be wholly unworthy notice were it not that on mount Isik, and other places in its environs, are found some of the most remarkable of those singular remains of former civilisation that are met with in many places of Southern Siberia. They consist principally of tumuli or tombs, which frequently contain ear-rings, bracelets, and other ornaments and utensils of gold, silver, and copper, with iron stirrups, &c. Near Abakansk are statues of men from 7 to 9 feet high, and covered with hieroglyphics, of which unfortunately no explanation has yet been given. —(*Malte Brun*, Balb. ed. 1837. p. 806. ; *Gmelin, Voyage en Siberie*, cap. 63, 64, &c.)

ABANO or ALBANO, a village of Austrian Italy, prov. Padua, 10 m. S. W. Padua. Pop. 3,000. This village derives its entire celebrity from its hot springs and *muds*. It is situated near the Euganean hills, in a place marked with some low eminences, whence issue copious springs of water capable at their source of boiling an egg quite hard. The waters are partly employed to prepare and soften mud, partly to supply the baths, and partly go to waste, or turn a mill which revolves amid volumes of smoke. They are supposed to be efficacious in cases of palsy, rheumatism, and a variety of complaints. The mud is applied hot to the affected part, somewhat after the manner of taking a stucco cast; and the baths are regarded principally as an auxiliary to the "dirty" application. The season is in the heat of summer; and, according to Mr. Rose, the accommodations for company are very deficient.

These baths were well-known to, and much used by, the Romans. They were called *Patavinæ Aquæ*, the principal source being distinguished by the name of *Aponus fons*, whence their modern name has evidently been derived.

——— Aponus terris ubi fumifer exit.
Lucan, vii. l. 194.

There is a very full account of these baths in *Rose's Letters on Northern Italy*, i. pp. 59—70.; see also *Cramer's Ancient Italy*, i. p. 123.

ABB, a town of Arabia, in the Djebel, or mountain land of Yemen, lat. 13° 58′ N., long. 44° 15′ E., 95 m. S. Sanaa, 73 m. N. E. Mocha, and 104 m. N. W. Aden. Number of houses said to be about 800, which at an average of 6 individuals to each gives a pop. of nearly 5,000. It is built on the summit of a mountain; is surrounded by a strong and well-built wall; and overlooks a well-watered (for Arabia) and extremely fertile country. Houses (as usual in the mountain towns of Yemen) of stone; streets well paved, which, in this country, is very uncommon. An aqueduct conveys water from a mountain at a little distance on the N. to a large reservoir in front of the principal mosque. —(*Niebuhr, Des. de l'Ar.* par. ii. p. 208.)

ABBEVILLE, a thriving industrious town, in the N. W. of France, dep. Somme, cap. arrond on the navigable river of that name, 25 m. N. W. Amiens, lat. 50° 7′ 4″ N., long. 1° 50′ 58″ E. Pop. 13,812. It is neat and well built; is regularly fortified on the system of Vauban; and has, exclusive of the old Gothic church of St. Vulfran, several public buildings worthy of notice and a public library. A fine cloth manufactory was established here in 1669, by a Dutchman of the name of Van Robais, under the auspices of Colbert; and Abbeville has since continued to be distinguished as one of the most industrious towns in France. Besides black cloths of the best quality, with serges, barracans, &c., there are produced calicoes and stockings, sackings, packthread, cordage, jewellery, &c. It has also establishments for the spinning of wool, print works and bleaching works, tanneries, soap works, a glass work, a paper manufactory, &c. The tide rises in the Somme about 7 feet, and vessels of from 100 to 150 tons come up to town. Being situated in the centre of a fruitful country, and communicating by canals and roads with all the surrounding districts, Abbeville has a considerable commerce.—(*Hugo France Pittoresque, Dép. Somme.*)

ABBIATEGRASSO, a town of Venetian Lombardy, prov. Pavia, on the canal of Bereguardo, 14 m. W.S W. Milan. Pop. 4,600. It is fortified; and its position has made it be always regarded of considerable importance in a military point of view.

ABB'S HEAD (ST.), a promontory on the E. coast of Scotland, being the most southerly point of the Frith of Forth, lat. 55° 54′ 50″ N., long. 2° 8′ 20″ W.

ABELA, ABIL, or ABILA, a town of Syria, in the Haouran, on the *Sheriat-el-Mandhour* (anc. *Hieromax*), one of the largest affluents of the *Jordan*, lat. 34° 47′ N., long. 36° E. It is now in a ruinous and dilapidated state, having probably not more than from 100 to 150 inhabitants; but formerly it was a place of considerable importance, being the capital of and giving its name to one of the six departments (*Abilene*) into which the Romans divided the country E. of Jordan. Some broken pillars and overthrown columns evince its ancient grandeur; but none of its old buildings remain entire, and it is preserved from desertion only by its vicinity to the water, which renders it a desirable residence for the few Arab families by whom it is still occupied. — (*Robinson, Travels in Palestine and Syria*, ii. 122. 214.)

ABERBROTHOCK, or ARBROATH, a sea-port, manufacturing town, and parl. bor. of Scotland, co. Angus or Forfar, at the mouth of the Brothock water, lat. 56° 34′ N, long. 2° 35′ W. Pop. of parl. bor. in 1841, 14,568. Parl. constituency in 1849, 402. Arbroath unites with Brechin, Bervie, and Montrose, in returning a m. to H. of C. It has a parish church and two chapels of ease, with churches for Episcopalians, Seceders, Methodists, and Independents. The other public buildings are the town-house, the trades-hall, the public schools, and the signal tower, which communicates with the Bell-Rock lighthouse, distant about 12 miles. The harbour is secure, though small, and of difficult entrance. It had in 1849, 116 ships of the burden of 12,609 tons. The town, which is rapidly increasing, owes all its prosperity to the flax manufacture; nearly half the population being employed in the spinning, dressing, weaving, and bleaching of coarse linen goods. Some of the mills are driven by the little rivulet that intersects the town; but steam mills are numerous, both in the town and the vicinity. Here are the ruins of an abbey, founded in honour of Thomas à Beckett, in 1178, by William the Lion, who, on his death in 1214, was interred within its precincts. It was destroyed in 1560.

ABERCONWAY, or CONWAY. See CONWAY.

ABERDARE, a par. and large village of Wales, co. Glamorgan. The village, in a beautiful valley, watered by the Cynon, an affluent of the Taff, is about 4¼ m. S.W. Merthyr Tydvil. Pop. of par. in 1831, 3,961; in 1841, 6,471; and at present (1850) probably 13,000! This extraordinary increase is wholly to be ascribed to the still more extraordinary increase in the production of iron and coal, on which by far the larger portion of the pop. is dependant. In 1850 there were 14 furnaces in full work in the par., and very large quantities of coal are raised, not merely for the use of the iron works, but, also, for shipment at Caerdiff. In addition to the par. church there are various places of worship, inc. chapels for Baptists, Independents, &c., with National, Sunday, and other schools.

ABERDEEN, a maritime co. Scotland, bounded N. and E. by the German Ocean, S. by the cos. of Perth, Forfar, and Kincardine, and W. by Banff, Elgin, and Inverness. Extreme length 86 m. from N. to S., and 42 from E. to W. Area 1,260,800 acres. In the southwestern division, called the district of Mar, are some of the highest mountains of Scotland. Ben Macdhu, the highest of the British mountains, rises to the height of 4,390 feet above the level of the sea, being 20 feet higher than Ben Nevis, formerly reckoned its superior; and several of the other mountains are but little inferior in altitude. About a fifth part of the surface consists of high mountainous tracts; and these, with hills, extensive moors, mosses, and waste lands, occupy nearly two thirds of the entire country. The arable land lies principally in the eastern parts. Principal rivers Dee and Don; and besides these are the Deveron, Bogie, Ythan, Urie, Ugie, &c. Limestone abounds in various places; there are quarries of excellent slate; and millstones are found of good quality. Vast quantities of granite are shipped at Aberdeen, particularly for London, where it is used in paving the streets. The mountains of Braemar contain numbers of coloured crystals, or cairngorms; and some real topazes have been met with. The winters, owing to the great extent of sea coast, are mild: but the summers are usually short and cold. Agriculture is prosecuted with much more spirit and success than might have been supposed. Oats is the principal crop, about 160,000 acres being sown with that grain; barley is also

raised; and some, though only a little, wheat. The culture of turnips and potatoes is extensively carried on. Several thousand acres of land in the vicinity of Aberdeen have been trenched. The practice is not, however, confined to that district, and large additions are being constantly made to the arable land. Farm houses and offices are now, with few exceptions, comfortable and commodious. A greater number of cattle are bred in this than in any other Scotch county: the native breed is preferred. They have increased much in size during the last thirty years; and are said, indeed, to have *doubled in weight* since the introduction of turnips! They are commonly black, but there are many red or brindled. Sheep comparatively few, and of a mixed breed. There are some large estates; but property is, notwithstanding, a good deal subdivided. Great diversity in the size of farms. It is usual for mechanics to occupy an acre or two. The woods, which are very extensive, afford shelter to the red deer. Average rent of land 6*s*. 9*d*. an acre. The woollen, cotton, and linen manufactures are carried on to a considerable extent, principally at Aberdeen. There are considerable fisheries on the coast and in the rivers, particularly in the Dee. Principal towns Aberdeen, Peterhead, and Fraserburgh. Parishes, 88. Pop. in 1841, 192,387; inhab. houses in do. 32,063. Returns one member to the H. of Commons. Parl. constituency in 1849, 3550. Valued rental 235,665*l*. Scotch. Annual value of real property in 1815, 325,218*l*. stg., do. in 1843, 603,962*l*. stg.

ABERDEEN, the cap. of the above co., and the seat of a university, an ancient, distinguished, and flourishing royal and parl. bor. and seaport, situated mostly on rising ground on the N. bank of the Dee, near its mouth, 94 m. N. N. E. Edinburgh; lat. (Observatory) 57° 8′ 10″ N., long. 2° 5′ 7″ W. Pop. in 1821, 44,796; in 1831, 58,019; in 1841, 61,923; and now (1850), above 72,000. Aberdeen acquired importance at an early period, and made a conspicuous appearance in many of the stormy scenes of Scottish history. It received a charter from William the Lion, dated Perth 1179; and the journals of the town council have been preserved nearly entire since 1398. It is indebted to Robert Bruce for a considerable portion of its property. Having suffered a good deal in the civil wars during the reign of Charles I., it continued in a nearly stationary state till about 1750, when it began to increase. It has since been signally improved, especially during the present century, by the formation of new streets and squares, which have superseded most part of its old narrow and winding thoroughfares. From the S. Aberdeen is approached by three bridges across the Dee; one of 7 arches of stone, originally erected in 1520-26, and rebuilt 1719-23; a suspension bridge of iron, opened in 1830; and the railway bridge of 8 arches opened in 1850. The roads from the first two bridges conduct to Union Street, which with Union Place and Castle Street, in the same straight line, form a magnificent street of about a mile in length, the houses all of dressed light-gray granite. This street is carried over a deep and partly wooded ravine by a bridge of a single arch of 132 feet span, opened in 1804. Among the public buildings may be specified the assembly rooms, the town-house, court-house, gaol, and new market; the E. and W. churches of St. Nicholas, the N. church, and others of late erection; St. Andrew's episcopal church; the orphan hospital; the barracks, on the castle hill, formerly the site of a fort; Gordon's hospital, bridewell, the infirmary, medical hall, and Marischal College, lately rebuilt on an extensive and elegant plan. Besides the latter seminary, there are various public and private academies and schools, among which is the grammar school, established before 1418. There are numerous charitable establishments and endowments, upwards of 70 being under the management of the magistrates, the nett revenue of which amounted in 1848 to 3800*l*. Gordon's hospital supports and educates 150 boys and has an annual revenue of about 3284*l*. Here is also an infirmary, with a lunatic asylum erected at an expense of upwards of 10,000*l*.; an institution for deaf and dumb persons; a large hospital for girls, and one for the education and support of the blind. The assessment for the relief of the poor amounted in 1848 to 7168*l*.

Aberdeen occupies a distinguished place both in the manufactures and commerce, and in the literature, of Scotland. During last century, the town and adjoining country were celebrated for the manufacture of knit woollen stockings, of which an interesting account is given by Pennant. (*Tour in Scotland*, i. 137. ed. 1790.) But the introduction of machinery has superseded that employment. There are now, partly in the town and partly in its immediate vicinity, several large factories for the spinning and weaving of cotton, flax, and wool, in most of which steam power is employed. The woollen fabrics comprise carpets, blankets, serges, stockings, worsted yarns, &c. The cotton manufacture, introduced in 1778, employed, in 1849, nearly 1800 hands. The linen manufacture, including that of canvas, is very extensive, employing, at present (1849), about 3000 hands. In 1848, there were imported 970 tons raw cotton, 3520 do. flax, and 966 do. wool. Extensive iron-works have been established, where steam-engines, anchors, chain-cables, and spinning machinery are produced. Paper of the best quality is made on a large scale, considerable quantities having been purchased of late years by government. Ship-building is carried on to a considerable extent, and there are rope-works, tanneries, soap and candle works, comb factories, distilleries, breweries, &c. The principal natural products exported are cattle, of which the exports to London have increased from 6,422 head in 1840, to 15,858 head in 1849; salmon, sent to London in ice; granite, with which the streets of the metropolis are mostly paved; eggs, butter, pork, corn, &c. The total value of the exports, most of which are coastwise, may be estimated at about 2,000,000*l*., and is steadily increasing. On the 1st of January, 1849, there belonged to the port 321 sailing-vessels, of the burden of 53,034 tons, of which 263 were above 50 tons burden; there also belonged to it, at the same time, 17 steamers, of the burden of 5,073 tons, 5 of which were under 80 tons burden. There is a regular communication by steam-ships with London, Leith, Peterhead, Inverness, and the Orkneys. The customs duties in 1849 produced 94,830*l*. In all 2490 vessels entered the port in 1849, having a tonnage of 311,282 tons.

The harbour in the æstuary, at the mouth of the Dee, labours under considerable natural disadvantages, which, however, have been to a great extent, though not wholly, obviated. Its improvement began under an act obtained in 1773; and it has been prosecuted at intervals, with more or less vigour, under that and other acts down to the present time. The principal object was to facilitate the access to the harbour, by removing the bar at the mouth of the river, and deepening its channel; and this has been effected partly by dredging, and partly by the erection of a pier about 2000 feet in length, projecting into the sea on the N. side of the river, by a breakwater on the opposite shore, and other subsidiary works. The interior of the harbour has been vastly improved. In it has recently been constructed a magnificent

wet dock, or floating harbour, the area of which comprises 34 acres, with locks capable of admitting the largest steam-ships. The quay walls and quays are all of granite; the work being executed in the best and most substantial manner. Still, however, the harbour is not accessible at all times of the tide to vessels drawing above 10 feet water; for there are not at present (1850) more than this depth on the bar at low-water springs. But, as the tide rises from 13 to 15 feet, vessels drawing 17 feet water may enter the harbour at high-water neaps, and those drawing 20 feet, at high-water springs. There are at an average 18 feet water in the floating harbour. The bay affords safe anchorage with off-shore winds, but not with those from the E. or N. E. A lighthouse has been erected on Girdle Ness, the S. point of the bay, having two fixed lights in one tower, the highest being 185, and the lowest 115 feet above high-water; there is, also, a tidal light on the N pier head, and two leading lights further up the harbour on its S. side. The affairs relative to the harbour are managed by a board of commissioners. In 1848-49, the total harbour revenue, including 18,167*l.* of shore-dues, amounted to 23,386*l.*, the total expenditure for the same year being 39,852*l.*, of which 20,627*l.* was on account of the works now in progress. There has in all been expended on the harbour, since 1810, the large sum of 480,000*l.*

In consequence of this heavy expenditure, and of the large outlay in opening new streets, constructing bridges, &c., the affairs of the borough became so much involved as to lead to its disfranchisement, in 1817. But, in the end, the corporation, having been restored, was enabled to meet all the demands upon it; and for several years its affairs have been in good order, and it has enjoyed a full share of credit. Burgh revenue, 1848-49, 16,718*l.*

Previously to the passing of the Reform Act in 1832, Aberdeen was associated with Arbroath, Brechin, Bervie, and Montrose in returning a member to the H. of C.; but that act conferred this important privilege on Aberdeen singly. Old Aberdeen and a considerable tract of the surrounding country is included within the parl. bor. — Parl. constituency in 1848-49, 4,167. The town is governed by a provost, 4 baillies, and 14 councillors. Municipal constituency in 1848-49, 2,820.

Aberdeen is connected by a canal, 18½ m. in length, with Inverury, and by railway with Montrose, Perth, Edinburgh, &c. The canal is chiefly used for the conveyance of heavy articles, such as granite, to the town, and of coal, manure, &c., to the country.

Aberdeen has three large banking companies, the oldest of which, the Aberdeen Bank, established in 1767, had recently 16 branches, and about 450 partners; but in 1849 it was incorporated with the Union Bank of Scotland. The other companies, viz. the Aberdeen Town and County Bank, and the North of Scotland Banking Company, have respectively 13 and 32 branches. The latter has about 1500 partners. The Bank of Scotland and some of the other Scotch banks have also branches in Aberdeen. The deposits in the different public banks are supposed to amount at present (1850) to the large sum of about 2,750,000*l.*; to which may be added the deposits in the savings-bank, amounting to 95,400*l.*

A regular post was established between Aberdeen and Edinburgh, in 1667. The first printing-press in the town was set up in 1621; and the first almanacks published in Scotland appeared here in 1677. It supports 4 weekly newspapers, the oldest of which, the Aberdeen Journal, commenced in 1748. Among recent events may be specified the arrival by sea of Her Majesty and Prince Albert in September, 1849.

ABERDEEN (OLD), an ancient and inconsiderable city, about ⅚ths m. N. Aberdeen. In former times it was the seat of a bishopric, the see of Mortlach having been removed to it, in 1154. It has no trade, and very little property, its importance depending entirely upon its college. Pop. in 1841, about 2000, inc. in the pop. of Aberdeen. The chief edifices are King's College, the cathedral, and the bridges across the Don. The buildings of King's College have an antique appearance, and are of different periods. They are in good repair, about 6,000*l.* having been expended upon them within these few years. The library and chapel are attached to a lofty square tower, surmounted by an imperial crown of open stone work. The cathedral of St. Machar, or Macarius, after whom the parish is named, is an ancient Gothic edifice, chiefly of granite, commenced in the 14th century: the choir, transept, and great central tower were demolished or fell down upwards of a century ago; the nave remains, and is used as the parish church; at the west end are two finely proportioned stone spires; the roof of the interior is also a curious relic. Near its mouth the Don forms a haven, which, however, admits only vessels of a few tons' burden. An ancient bridge, consisting of a Gothic arch, 70 feet in span, crosses a rocky and woody ravine in which the river flows. Lower down is a new bridge of 5 arches, opened in 1830.

Universities. — Aberdeen has two universities, each of which has one college. The most ancient is that of Old Aberdeen, founded by Bishop Elphinston in 1494, under a bull of Pope Alexander VI., of which Hector Boethius was first Principal. It early received the name of King's College, instead of that of the Virgin Mary, to whom it was originally dedicated. The other and later seminary, established in 1593, is called Marischal College, from its founder George Keith, Earl Marischal. King's College has a chancellor, a rector, a principal, &c., with 9 professors, and 11 lecturers. A sum of about 1770*l.*, arising from charitable foundations, is annually distributed in different proportions among 134 of its students, called bursars. Marischal College has also a chancellor, rector, principal, &c., with 13 professors, and 10 lecturers; about 1200*l.* is annually distributed in various amounts among 107 of its students. The attendance at each college is about equal; students of divinity hear prelections in both. In 1848-49, the different classes of both colleges were attended by 550 students. Although their bursaries are numerous, their other revenues are but limited. King's College was formerly entitled to copies of all works entered at Stationers' Hall; but in 1836, it relinquished this privilege for an annual payment of 242*l.* 14*s.* Marischal College has a museum, an observatory, and an extensive apparatus for teaching natural philosophy. The excellent education given in these seminaries has been highly useful in disseminating knowledge over the N. of Scotland; particularly in improving the character of the parochial schoolmasters, most part of whom, having been at college, are superior to the generality of their brethren in the southern parts of the country. The number of bursaries, which are mostly disposed of by comparative trial, is an inducement to attend. But independent of this circumstance, the cost of education is moderate in the extreme. The usual fee entitling to attend one of the literary classes is only from 2*l.* to 3*l.*; and the total annual fees paid by a student, not a bursar, going through the regular *curriculum*, or course of study prescribed by the faculty of arts, do not exceed 6*l.* or 7*l.* a year, during each of the 4 years to which it is limited. Respectable board may be had for from 25*l.* to 35*l.* during the session, which commences on the last Monday of October, and ends in the beginning of April. Many eminent men have been professors in these colleges; among whom may be mentioned Reid, the author of the Inquiry into the Human Mind; Fordyce, author of a Treatise on Moral Philosophy; Gerard, author of an Essay on Taste; Campbell, author of the Philosophy of Rhetoric; Blackwell, author of the Life of Homer, &c.; Beattie, the bard of the Minstrel; and Hamilton, author of the celebrated Essay on the National Debt, in which the quackery of the plans for borrowing money to pay off debt, by means of a sinking fund, was first fully exposed. The new buildings of Marischal College, erected on a large and well contrived plan, cost about 25,000*l.* of which government contributed 15,000*l.*, the rest having been raised by the subscriptions of the friends and alumni of the establishment. The consolidation of these universities would certainly be a great improvement; but though often proposed, it has not hitherto been effected.—(*Official Documents and Private Information.*)

ABERFOYLE, in Scotland, a parish, and a celebrated pass or narrow valley leading into the Highlands, in the district of Monteith, in the S.W. part of Perthshire. The village or clachan of Aberfoyle in this pass is the scene of some of the most interesting adventures in the novel of *Rob Roy*. Pop. of parish, 660.

ABERGAVENNY, a town of England, co. Monmouth, at the confluence of the Gavenny with the Usk, 14 m. S.W. Monmouth, 120 m. W. by N. London. Pop. of parish 4230. It is built in a straggling manner; has a fine bridge of 15 arches over the Usk, and some branches of the woollen manufacture. There are very extensive

iron works in the vicinity. On an eminence, near the S. end of the town, are the ruins of its ancient castle.

ABERGELEY, a sea-port and m. town of Wales, co. Denbigh, hund. Isdulas, considerably resorted to of late years for bathing.

ABERNETHY, a parish of Scotland, partly in Fife and partly in Perthshire. It was once the seat of an archiepiscopal see, removed to St. Andrew's in the ninth century. All that now remains of its ancient structures is a round tower 75 feet high, and 16 in diameter. The modern village of Abernethy is small, and the houses mean. Pop. of parish, 1776.

ABERYSTWITH, a sea-port town of Wales, co. Cardigan, at the mouth of the Ystwith, over which is a neat bridge, 178 m. W. N. W. London. Pop. 4,128. It stands on an eminence overlooking the bay; and the streets, though well paved and Macadamised, are steep and uneven. It is a place of considerable trade, exporting lead, calamine, oak bark, flannels, &c., mostly to Liverpool; but owing to the shallowness of the water, it is accessible only to small vessels. As there is no market town within 18 m. it has the supply of a considerable adjacent territory. Latterly it has been extensively resorted to in summer for sea-bathing. Public rooms were opened for the accommodation of visiters in 1820, and a new theatre in 1833. It seems to have been once strongly fortified. Its castle, of which some vestiges still exist, was rebuilt by Edward I. in 1277. A considerable extent of fen land to the N. of the town has recently been recovered from the sea.— (*Municipal Boundary Reports, &c.*)

ABERYSTWITH, a parochial chapelry, hund. Abergavenny, co. Monmouth, celebrated for its collieries and iron works, which have greatly increased during the last 20 years.

ABIAD (BAHR EL). See NILE.

ABINGDON, an ancient town of England, co. Berks, at the confluence of the Ock with the Isis, and at the junction of the Berkshire canal with the latter, 55½ m. W.N.W. London. Pop. 5,259. It has several well-paved streets terminating in a spacious market-place, having a market-house in the centre. It has two churches, with places of worship for Dissenters, a well-endowed grammar school, and sundry almshouses and charitable endowments. It has a considerable corn market: some trade is carried on in malting, hemp-dressing, &c. During the late war a good deal of business was done in the manufacture of canvass, sacking, and such like coarse articles; but since the peace this employment has materially diminished. It returns one m. to the H. of Commons. No. of houses in 1831, 1,114, of which 451 were estimated at 10*l.* a year and upwards. Constituency in 1836, 292. This was formerly a scot and lot borough; every inhabitant assessed to the poor rates exercising the elective franchise. —(*Boundary Reports*, i. p. 27.)

ABO, the ancient capital of Finland, near the extremity of the promontory formed by the gulfs of Bothnia and Finland, on the river Aurajocki, by which it is intersected, lat. 60° 26′ 58″ N., long. 22° 17′ 15′ E. It was the seat of a university, and has a considerable trade. But in 1827 it suffered severely from a fire, which destroyed the university and above 700 private houses. The university has been since removed to Helsingfors, now the capital of the province. Previously to the fire the town contained about 13,000 inhabitants. It has a gymnasium, a bank, and some unimportant manufactures. A treaty was concluded here in 1743 between Russia and Sweden.

ABOMEY, cap. of the kingdom of Dahomey, in Africa, nearly 100 m. N. from the sea, lat. 7° 30′ N. long. 2° 17 E. Pop. said to be 24,000.

ABOUKIR, a village of Egypt, with a citadel, on a promontory, about 10 m. N. E of Alexandria, being supposed by some to occupy the site of the ancient *Canopus*, lat. 31° 19′ 44″ N. long. 30° 7′ 16″ E.

ABOUKIR BAY, on the north coast of Egypt, formed on the west side by the point of land on which Aboukir is situated, and on the east by that which lies at the mouth of the Rosetta branch of the Nile. Here, on the 1st of August, 1798, was fought the famous battle of the Nile, when the French fleet that had conveyed Napoleon to Egypt was totally defeated by the British fleet under Lord Nelson; and here also, on the 7th of March, 1801, the English army, under Sir Ralph Abercromby, effected its disembarkation.

ABOUSAMBUL. See IPSAMBUL.

ABRANTES, a fortified town of Portugal, prov. Estremadura, lat. 39° 26′ N., long. 8° 15′ W., at the S. extremity of a ridge that trends S. W. from the great range dividing the valleys of the Douro and Tagus. Pop. 4,814. Its position adapts it admirably for a military station; and Sir A. Wellesley availed himself of its local advantages by resisting there the progress of the French in 1809. (See *Napier*, ii. 317. &c.) It is about ½ m. from the right bank of the Tagus and 72 m. above Lisbon. The hill-side on which the town is built, as well as the hills about, bear vines, olive, peach, and other fruit trees, while the plain eastward produces pumpkins, water-melons, and other vegetables: all these products are carried down the river in barges to the capital, with which this town has very considerable traffic. The trade, now occupying above 100 barges, would be much increased if the navigation were improved. A few small craft go 24 m. higher, as far as Villabella; but the stream is rapid, and the bed much impeded with sand and rocks. The church of San Vincente is the largest and finest in Portugal. —(*Miñano, Napier.*)

ABRUZZO, an extensive territory of Italy, forming the N. E. portion of the Neapolitan dominions, between 41° 50′ and 42° 55′ N. lat.; bounded E. (a distance of about 80m.) by the Adriatic, N. and W. by the Papal dominions, and S. by other provinces of Naples. It is divided into the provs. of Abruzzo Ultra I., Abruzzo Citra, and Abruzzo Ultra II., so called from their position with respect to Naples. The first two, lying along the Adriatic, are divided by the Pescari, and occupy the whole country to the E. of Monte Corno and Monte Prata. Abruzzo Ultra II. is an interior prov., and comprises the whole country included between the others and the Papal states. Their extent, population, and revenue, ordinary and extraordinary, in 1831, were as follows:—

	Area.	Population.			Revenue.	
	Sq. m.	Males.	Females.	Total.	Duc.	Grani
Abruzzo Ultra I.	976	94,876	96,040	190,916	107,971	60
Abruzzo Citra -	1,088	133,074	132,400	265,474	207,779	27
Abruzzo Ultra II.	1,908	140,872	138,669	279,541	217,555	32
Totals -	3,972*	368,822	367,109	735,931	533,306	19

The country presents every variety of soil and surface; but the greater part is mountainous, rugged, and occupied by extensive forests. It is traversed throughout its whole extent by the Apennines, and has some of their highest summits. Monte Corno, surnamed *Il Gran Sasso*, or the Great Rock, rises to the height of 9,527 feet above the level of the sea, Monte Majella to about 8,500, and Monte Vellino to 8,397. It is watered by many rivers, most of which fall into the Adriatic; and in Abruzzo Ultra II. is the celebrated Lago Celano, the *Lacus Fucinus* of the ancients (see CELANO, LAKE OF). The climate differs with the elevation of the soil; but though very cold on the mountains, and comparatively hot in the low grounds, it is, speaking generally, temperate and healthy. Along the Adriatic, and in the valleys and plains, the soil is very productive; and large quantities of corn, oil, wine, silk, liquorice, almonds, &c., are produced. Saffron used to be very extensively cultivated in the valley of Aquila, but the quantity raised is now very much restricted. The inhabitants of the mountainous districts are principally engaged in the rearing of sheep and cattle. The upper regions and recesses of the mountains, which cover by far the larger portion of Abruzzo Ultra II., are depastured in the summer season by vast flocks of sheep, brought from the Capitanata and other level provinces more to the S. Their migrations are regulated by law, and are similar to those that take place in Spain and in the S. E. depts. of France. The migratory sheep are supposed to amount, at present, to between 500,000 and 600,000, having been formerly much more considerable. The inhabitants are stout, well-made, healthy, and industrious. The occupiers and labourers, who form the vast majority of the population, are mostly poor, living in miserable dirty huts, feeding principally on Indian corn, and drinking a poor wine. Many thousands of the peasants emigrate every autumn to seek for employment in the Roman and Tuscan Maremme. Manufactures have made but little progress; but woollens, silks, earthenware, &c., are produced. An extensive contraband trade is carried on with the Papal dominions; and the coasting and foreign trade would be much more extensive than it is, were it not that the entire coast is without a single good port. Principal towns Chieti, Aquila, Teramo, Sulmona, Avezzano, &c. (See the 2nd vol. of the *Descrizione, Topografica, Fisica, &c. del Regno delle Due Sicilie*, Napoli, 1835, which is entirely occupied by an account of the Abruzzi: see also Mr. Keppel Craven's *Excursions in the Abruzzi*, 2 vols. Lond. 1838; and Sir R. C. Hoare's *Classical Tour*, 4to. 1819.)

ABU-ARISCH. A petty state in the S.W. of Arabia, on the borders of the Red Sea, between 15° 50′ and 17° 40′ N. lat. and 41° 30′ and 43° E. long., consisting of the narrow slip of low land which lies between the coast and the mountain district of *Haschid-u-Bekel.* On the N. it is separated from *El-Hedjaz* by a small district inhabited by wandering tribes of peculiar manners; and on the S. it borders upon the state of *Loheia*. Its extreme length is about 130 m., and its greatest width from 70 to 80 m. It forms part of the *Tehama* or low lands of *Yemen*, being almost wholly a sandy plain (see ARABIA), extremely hot and dry, destitute of permanent

* These are Italian sq. m. 60 to the degree, and are equivalent to 5,270 Eng. sq. m. 69·15 to the degree.

water courses, and preserved from utter sterility only by the abundant rains in the neighbouring mountains, which periodically inundate its otherwise waterless soil. Its principal products are dhourah or barley, which forms the principal food of the inhabitants, and a peculiar and highly esteemed breed of asses.

ABU-ARISCH, a town of Arabia, cap. of the above state, and the residence of the sheriff, lat. 16° 40′ N., long. 42° 20′ E. It occupies the centre of the principality, being midway between the Red Sea and the mountains, and between its N. and S. boundaries. It is walled; and though its population be not certainly known, it may be safely estimated at from 4,000 to 5,000. In 1809 its strength and resources deterred the Wahabees from attempting its capture, after the battle in which they defeated the sheriff. Some rocky hills in the neighbourhood yield salt, which is exported.

It seems probable that Abu-Arisch, which at present is 24 m. from the sea, was formerly much nearer to it, if, indeed, it were not once what Gheran now is, the port of this part of Arabia. This is rendered probable as well from the appearance of the surrounding country as from the well-known fact mentioned by Niebuhr, that the coast here is constantly and rapidly gaining on the water. —(*Niebuhr, Des. de l'Ar.* par. ii. p. 232.; *Voy. en Ar.* ii. 59.)

ABURY. (See AVEBURY.)

ABUTIGE, a considerable town of Upper Egypt, on the site of the ancient Abotis, lat. 27° 2′ N., long. 31° 23′ E. It is the seat of a Coptic bishop, and is celebrated for its opium.

ABYDOS, an ancient city, founded by the Thracians, and subsequently occupied by a colony of Milesians, on the Asiatic side of the Hellespont, where it is narrowest, bearing nearly S. from Sestos on the European side of the strait. It had a commodious harbour, and was strongly fortified. It was here that Xerxes constructed the bridge of boats by which he conveyed his ill-fated host across the Hellespont; and it is distinguished in ancient history for the desperate resistance made by its inhabitants to Philip of Macedon, who, however, partly by force and partly by treachery, succeeded in taking it. But Abydos, and also Sestos, are mainly indebted for their imperishable celebrity to the story of the loves of Hero and Leander, and the melancholy fate of the latter. *Abydos magni quondam amoris commercio insignis est.* (*Amm. Marcellinus*, lib. i. s. 19.) It was destroyed by the Turks; and the fact that the materials were carried 3 m. S. to assist in building the *Sultanie Kalessi*, or old castle of Asia, the strongest fort on the Dardanelles, and its contiguous town, accounts for few ruins being found at Abydos. The modern fort of Nagara occupies its site.—(*Mannert, Géographie; Tournefort, Voyage du Levant*, &c.)

ABYSSINIA, an extensive country of Eastern Africa, of which the boundaries are not well defined, but which may be regarded as occupying the space included between 9° and 15° 40′ N. lat. and 36° E. long. and the Red Sea; having E. the latter, N. Senaar and Nubia, and on the W. and S. Senaar, Kordofan, and other barbarous and nearly unknown countries. It is supposed to include in all above 300,000 Eng. sq. m.

Name. — Abyssinia was included in the Ethiopia (from αἰθίοψ, *a man burnt by the sun, or of a dark colour*) of the ancients. The name Abyssina, or more properly Habessina, from the Arabic *Habesch*, signifying a mixture or confusion, has been given to the country by the Arabic and Portuguese geographers, and indicates the supposed Arabic origin of the people, and their subsequent intermixture with the Africans. The Abyssinians do not use this name; and either assume that of the provinces in which they live, or call themselves *Itjopians*, and their country *Manghesta Itjopia*, or kingdom of Ethiopia, a name given it by the Greeks during their ascendency at Axum.

Face of the Country. — Abyssinia presents great inequalities of surface. It consists principally of a series of plateaus, intersected and separated by mountain ridges. Ritter classes the plateaus under three great divisions. Setting out from the coast of the Red Sea, and traversing the low arid ground by which it is bordered, and ascending the heights or mountains of Taranta, we arrive at the first plateau, or country of the Baharnegash, lying between the Taranta on the E. and the river Mareb on the W. Passing through the Baharnegash and making another ascent, we arrive at the great plateau of Tigré, between the Mareb on the E. and the Tacazze on the W.; but including to the south the mountain regions of Enderta, Wojjerat, Lasta, &c. The last-mentioned country contains the sources of the Tacazze, one of the principal affluents of the Nile. The towns of Adowah and the ancient Axum (see the names), are situated in the middle of the plateau of Tigré. Antalow lies more to the south, in the province of Enderta. The mountains of Samen, on the W. side of the plateau of Tigré, are the highest in Abyssinia, and form, with those of Lamalmon and Lasta, a great but not continuous chain, running N. E. and S. W., and separating the high lands of Tigré, from the still more elevated plateau or alpine country of the Habesch or Amhara, including the provinces or countries of Dembea, Gojam, Damot, &c. This region, the highest in Abyssinia, and the nucleus and centre, as it were, of the old empire, contains the sources of the Bahr-el-Azrek, or eastern arm of the Nile, and the great lake of Tzana or Dembea. It has a mean elevation of about 8,000 feet, and is fenced and intersected by mountain ridges, of which those of Gojam, from their containing the sources of the E. Nile, are the most celebrated. Gondar, the capital of Amhara, and formerly the residence of the Negus or emperor of Abyssinia, lies a little to the N. of the lake. From this plateau the country shelves down on the W. to the barbarous and unknown regions already alluded to.

The provinces of Efat and Schoa, which now form, with their dependent territories, the most powerful of the Abyssinian states, lie to the S. E. and S. of Amhara. The first is very elevated, part of its waters flowing westward to the Nile, and part eastward to the Hawash. Its chief town is Ankober. The province of Schoa, lying along the southern side of the Nile, is comparatively low, and is renowned for its magnificent pastures and fruitful valleys. It has several towns and some celebrated monasteries. Salt is inclined to think that the Ethiopic language and literature, and the ancient manners of the Abyssinians, are preserved in a purer state in these provinces than in any of the others; but they are very imperfectly known.

Exclusive of the above, there is a vast and but little known country in the S. E. part of Abyssinia, between Efat and Lasta, and the Red Sea and the sea of Bab-el-mandeb. It is almost entirely occupied by tribes of Gallas, some of them the most brutified of any to be found in Abyssinia. The country of Nana, at the sources of the Maleg, S. W. from the prov. of Damot, is one of the most elevated of the African plateaus. Its inhabitants are said to be nearly as white as the Spaniards and Neapolitans.

On the S. E. of Tigré, between it and the low country or province of the Dankali, lying along the Red Sea, and between the fourteenth and fifteenth degrees of latitude, is an extensive salt plain, having, in most parts, the appearance of ice covered with partially thawed snow. The salt is perfectly pure and hard for about two feet deep; but that lying beneath is coarser and softer till purified by exposure to the air. It is cut into pieces with a hatchet; and not only serves to season and preserve food, but even circulates as money. The salt is carried off by caravans, or companies, consisting of from 300 to 600 beasts of burden, and its digging is not unaccompanied by danger from the attacks of the savage Galla.

Mountains. — Those of Abyssinia have not been accurately measured. They were represented by the early Portuguese travellers and the Jesuits as being of such vast height that, compared with them, the Alps and Pyrennees were mere hillocks! But these exaggerated representations have been since reduced to their proper value. Bruce states, that during his residence he saw no snow in any part of the country, and he even affirms that it is there totally unknown. This, however, was a rash and unwarrantable assertion. It is doubtful, indeed, whether snow be not always to be found on the highest summits and crevices of the mountains of Samen: at all events, Mr. Pearce was overtaken by a snow storm when passing them in the middle of October, and Mr. Salt saw snow on them from a great distance on the 8th of May. It is clear, therefore, that if the highest summits of the Samen do not attain, they approach closely to the line of perpetual congelation, so that their elevation may be fairly estimated at from 12,000 to 13,000 feet. The mountains of Gojam are of very inferior altitude, and are cultivated to the summits. Generally the Abyssinian mountains have a peculiarly abrupt and precipitous appearance. Sometimes they form what are called *ambas* or hill forts, consisting of steep, rocky, and all but inaccessible sides, having on the summit a level surface covered with trees and verdure. The most celebrated of these hill forts is that of Ambu Geshm, formerly used as a place of confinement for the princes of Abyssinia.

Rivers. — Of these the Bahr-el-Azrek, Blue River, or eastern branch of the Nile, is by far the most famous. It rises from two mountains near Geesh in Gojam, being, according to Bruce, in lat. 10° 59′ 25″ N., long. 36° 55′ 30″ E., and at an elevation of 10,000 feet above the level of the sea. Its course is thence N. to the lake Dembea, a large sheet of water, which receives many other streams; but the Nile is said to preserve its waters with but little intermixture with those of the lake, across which its current is always visible. Escaping from this lake it sweeps in a southerly direction round the E. frontier of the provinces of Gojam and Damot, till, between the ninth and tenth degree lat., it takes a N. W. direction, which it preserves till, at Halfaia, near the sixteenth degree lat., it unites with its other and more important branch, the Bahr-el-Abiad, or White River, flowing from the S. W. (see NILE). The next most important stream is the Tacazze, whose source has been already noticed. It drains the mountains of Samen and Tigré; and pursuing a pretty direct N. N. W. course through Senaar,

falls into the Nile near the eighteenth degree lat. The Mareb, which rises in the heights of Taranta, runs nearly parallel to the Tacazze. In the dry season it loses itself in the sand; but Bruce says that in the rainy season it continues its course till it unites with the Tacazze. The Hamaso and Hawash run E. in the direction of the Red Sea; but the latter is swallowed up in the sands before meeting it. Exclusive of the great lake of Dembea or Tsana, already referred to, the lake of Ashangee, on the E. side of the Samen, is also of very considerable size.

Mineralogy.—This is very imperfectly known. Granite and schistus or slate seem to have been extensively observed; and it is probable that these primitive rocks occupy a large portion of the principal chains. In Tigré, the strata are chiefly vertical; but in the mountains of Samen they incline more to a horizontal position. They seem remarkably destitute of metals; the gold which passes through Abyssinia is brought from the barbarous countries on the S. and W.

Climate. — This necessarily differs with the elevation of the country, the direction of the mountains, &c. In the deep valleys and low grounds (*kollas*) the heats are frequently excessive; and this, combined with excess of moisture, renders them unhealthy. But the climate of the plateaus is extremely fine, particularly that of Amhara, which is said to enjoy a perpetual spring, *ver æternum*. The Portuguese found it quite as temperate as that of their own country. According to Ludolph, the natives often attain, in that happy climate, to the age of 100 years and upwards! The climate of Tigré is not quite so mild; but there, also, the great extent of pasturage and of verdant plains shows that the country is not visited by the extreme of heat. The plateau of the Baharnegash is the hottest. In March, Mr. Salt found its air hot and dry, and the beds of the rivers without water. The year is sometimes divided into four, but more properly into *three*, seasons. Winter (*kramt*) is the season of rain, which always falls in great quantities, and often with much violence, rendering rivers and even brooks quite impassable. Harvest (*tzadai*) follows winter; the rest of the year consisting of summer (*hagai*,) or the season of heat and drought.

Races — Population. — The inhabitants of Abyssinia comprise a variety of tribes. They all, however, closely resemble each other in their physical character and manners; and, in respect of bodily conformation, are entirely distinct both from the Negroes and the Arabians. They belong to what has been called the Ethiopic variety of the human race; and their most prominent characteristics will be found described in the article AFRICA, to which the reader is referred. Of the different tribes, the principal are the Tigrani, or inhabitants of Tigré; the Amharans, or inhabitants of Amhara; the Agows, inhabiting the province of Damot; the Efats, occupying the southern banks of the Nile; the Gongas and Enareans, still further S.; and the Falashas, occupying the mountains of Samen, &c., who profess Judaism, and pretend, though it is believed on no very good grounds, to deduce their origin from Palestine. These tribes are easily distinguished by their language; but it is not clear whether their idioms be really distinct languages, or, which is most probable, only dialetic varieties of a much smaller number of mother-tongues. — (*Prichard on Man*, vol. ii. p. 136. 2d ed.)

The Galla, or savage tribes by which large portions of Abyssinia have been overrun, are said to have made their first appearance on the southern frontier in 1537. No doubt they belonged originally to the central parts of the African continent. They have a brown complexion, with long black hair; and their tribes are all independent of, and often at war with, each other. Most of them have adopted the Mahommedan faith, and have partially conformed to the manners of the Abyssinians. They are still, however, distinguished by their greater ferocity. In proof of this, it is sufficient to mention that the young men are denied certain privileges, and are, in fact, contemned by the women, as well as their seniors of the same sex, till they have given proof of their manhood by killing an enemy.

No means exist by which to form any probable estimate of the number of people in Abyssinia. Mr. Salt could obtain no accurate information on the subject. If the country were tranquil, it could hardly fail, owing to the fruitfulness of the soil and the general healthiness of the climate, to be exceedingly populous; but the anarchy and civil war in which it is constantly involved more than neutralise these advantages, and keep the population far below its natural level. Its total amount is estimated, in the Weimar Almanack, at 4,500,000; and this, perhaps, is as good a guess as can be made.

Language. — The Gheez, or Ethiopic, a language akin to the Arabic and Hebrew, was the language of Axum, and of the subjects of the Axumite sovereign, at the æra of their conversion to Christianity in the 4th century. It is now extant only as a dead language, consecrated to literature and religious uses. The Amharic, or modern Abyssinian, is not a dialect of the Gheez, though it has adopted from it a great number of words, but a totally distinct language. It is probably an ancient African language, and the original idiom of the inhabitants of the south-eastern provinces of Abyssinia. As regards literature and learning, the Abyssinians are at the lowest ebb. Their clergy are ignorant, and have no taste for learning. Mr. Gobat thinks that in the country where Amharic is spoken about 1-5th part of the male population can read a little, and in Tigré about 1-12th part.

Productions. — The country is very fertile, and has a vast variety of products; among which are wheat, barley, millet, and other grain. On the high grounds wheat is raised in considerable quantities; but in the low grounds the heat is too strong for it. Barley (*dhourra*) is raised in large quantities; but the principal dependence of the country is on the *teff* (*Poa Abyssinica*), which grows on every soil, except the very lowest, and affords the bread in general use. The plant is herbaceous. From a number of weak leaves rises a stalk about 28 inches in length, and not much thicker that of a carnation. Out of the top spring a number of branches, which contain the seed or fruit inclosed in a species of capsula. The grains are not larger than the head of the smallest pin, yet so numerous as to constitute on the whole a bulky crop. But the lowest grounds (*kolla*) are unfit even for the production of teff; and on these is raised a species of corn called *tocousso*, which yields a black bread, the food of the lowest classes. There are at least two harvests in the year; and in the same place may at once be seen in progress the operations of ploughing and reaping, with corn in every different stage of advancement. Among the other vegetable products are cotton, of which clothes are usually made; senna, myrrh, &c. The stalk of the *ensete*, a species of palm, the banana of Abyssinia, is said, when stripped of its green covering, to be the very best of all vegetable food. It is found in great abundance Various species of figs, some of them of a very large size, as the *Ficus sycamorus*, are also very plentiful. Citrons, oranges, and sugar-canes are met with in the low grounds, but not on the elevated plateaus. Dates and vines are met with, but neither are supposed to be indigenous. Both are believed to have been imported and cultivated by the Portuguese. At present the vine is grown only in the district of Emfras, on the E. side of lake Dembea, where it produces magnificent grapes. The Abyssinians do not use wine except for the communion table. Tellez says expressly, that in his time the vine was unknown in Abyssinia. The *papyrus*, so celebrated for its furnishing the principal species of paper used by the ancients, is abundant in the lakes and rivers; and Bruce contends that it was thence transplanted to Egypt.

The domestic animals of Abyssinia do not differ materially from those of Europe. The horses, which are the principal wealth of the inhabitants of the plateaus, are strong and active. They are used in war and the chase, mules and asses being used principally as beasts of draught and burden. Oxen are very abundant. The most remarkable species is a native of the low grounds, and has horns of an enormous magnitude, Mr. Salt having seen one 4 feet long, and 21 inches round at the base. It is called the Galla ox, from its having been brought to Tigré by the Galla. Of the wild animals, the most numerous and characteristic is the hyæna, called here the *dubbah*, exceedingly fierce and untameable. In most parts of the country they are found in vast numbers, place travellers in continual danger, and even enter houses. They are not naturally gregarious, yet sometimes assemble in vast troops, attracted by some common object, particularly the scent of dead bodies, which, according to the barbarous custom of the country, are often left unburied. Bruce contradicts the common report of their digging into sepulchres. They are protected by the superstitious belief of the people, who regard them as a species of enchanted men! The elephant and rhinoceros are numerous in the low grounds, and in places full of moisture. They are hunted by the Shangalla, who use their teeth as an article of commerce, and feed upon their flesh. It is a mistake to suppose that any of them have ever been tamed in this country, or, indeed, in any part of Africa. There is a species of rhinoceros with two horns, found only in a few districts. Its horns have no connection with the bone; its skin, which has no folds, is used for shields; the horns for handles for swords, and also as a lining to drinking vessels. The antelope species, which is very numerous, is seldom found in the cultivated districts, but chiefly appears on broken ground near the rivers. The buffalo, domesticated in Egypt and elsewhere, is here one of the most ferocious of animals; he lodges himself in deep and sultry valleys, under the shade of the tallest trees, and near the largest and clearest rivers. The hippopotamus, called *gomari* by the natives, is abundant in the lake of Dembea; but Ludolf affirms that this lake contains no crocodiles. They are both, however, found in the deep pools of the Nile, Tacazze, and other rivers. The crocodiles in the latter are of an enormous size, of

a greenish colour, and are more dreaded by the natives than the hippopotamus. The torpedo is found in the rivers and lakes. The lion is found only occasionally. There are several species of leopard. The zebra is frequent in the southern provinces, where its mane adorns the collars of the war horses. A small animal, the jerboa, about the size of a rat, burrows in the fields, both here and in Barbary.

The feathered creation in Abyssinia bears more than its usual proportion to the other species. The vast profusion of insects, grains, and plants, even the waste and destruction attending continual wars, afford them an abundant supply of food. The nisser, or golden eagle, perhaps the largest bird of the old continent, and a beautiful species called the black eagle, are particularly noticed by Bruce. To these Salt adds a new species called goodie-goodie, the size of the common falcon. Storks, partridges, snipes, pigeons, and swallows, occur in great number and variety. Bruce never saw a woodcock, sparrow, magpie, or bat; and ostriches are not found in Abyssinia Proper.

Among insects the most numerous and useful are bees. Honey constitutes every where an important article of food. Several provinces used to pay a large proportion of their tribute in this article. The honey assumes different appearances, sometimes black, sometimes blood-red, according to the plant on which the insect feeds. Of a very different character is the locust, which commits here ravages quite as terrible as in the other countries of Northern Africa. It sometimes depopulates whole provinces. In the sublime language of the prophet, "*A fire devoureth before them, and behind them a flame consumeth: the land is before them as the Garden of Eden, and behind them a desolate wilderness; yea, and nothing escapeth them.*"

Government — Political Divisions. — The former government of Abyssinia, or that which existed in it when it became known to the Portuguese and the Jesuits, was an absolute and despotic monarchy, in which the emperors, restrained by no written laws, popular assemblies, or privileged classes, had full power to dispose at pleasure of the lives and property of their subjects. But this ancient government may now be said to be totally extinct. The force of the central government was gradually weakened, partly by the rebellion of the governors of the different provinces, and partly by the irruption of the Gallas and other savage hordes, who have subjugated some of its finest countries. Salt has ingeniously compared the state of Abyssinia in a political point of view to that of England during the heptarchy; and since he visited it anarchy seems to have made a still more rapid progress. The whole country is now split into an endless variety of states, the limits of which are perpetually changing, and between which the most deadly animosities and interminable contests constantly prevail. The kingdoms of Amhara, Tigré, including the country between the Red Sea and the Tacazze, with the provinces of Enderta, Wojjerat, &c., and Schoa, including Efat, are supposed to be at this moment (1837) the most powerful of these states. But we have no exact information as to their boundaries, organization, or condition. They have this in common, that they are all despotisms, and anarchy and bloodshed prevail in them all to a greater or less extent. Schoa, which is now entirely separated from the rest of the country, is said by Mr. Gobat to be less devastated by civil war than either of the others, and to be, in consequence, the least depopulated and most flourishing part of Abyssinia.

Manners and Customs. — This perpetual state of civil war and confusion, and not any peculiar cruelty of disposition, seems to be the main cause of that barbarism and brutality by which the manners of the Abyssinians are characterised. All the feelings by which man is restrained from shedding the blood of his fellows seem entirely blunted. Human life is scarcely more respected than that of brutes. Bruce seldom went out at Gondar without seeing dead bodies lying in the streets, left to be devoured by dogs and hyænas, without being even allowed the rites of sepulture. To show the indifference usually felt on such occasions, he mentions that one day, passing along the streets, he saw an officer of rank about to execute three men who had offended the sovereign. This person, calling to Bruce, begged him to stop till he had despatched this business, as he wished to have a short conversation with him. But the circumstance which seems to place the Abyssinians below even the most savage tribes, is the extreme coarseness of their festive indulgences. Their *brinde* (raw beef) feast has excited the astonishment of all travellers. Alvarez, who visited the country as ambassador from Portugal in 1520, and remained there for 6 years, describes it as a thing "of which he dare not in a manner speak." Being invited to a feast, he was much surprised, instead of the usual dishes, to see brought in "pieces of raw flesh, with warm blood." The landlord, on seeing his guests show no favour to this savoury dish, ordered other food better suited to their tastes; but immediately began eagerly to devour the flesh, "as if it had been marchpane or comfits." The lady of the house did not appear at dinner; but, in drinking, she "bravely seconded" the rest of the company. Bruce and Salt have furnished still more particular descriptions. The table, which is low, is first covered with successive piles of teff cakes, serving to the guests at once as food and as towels with which to wipe their fingers. The company being then seated, the next process is the slaughter of the cattle, which are standing at the door, and the cutting warm steaks from their flesh. Bruce says that these are extracted while the animal is yet alive, and bellowing under the pain of the wound. But this disgusting circumstance is not mentioned by any of the earlier writers, and Mr. Salt affirms that the head is separated from the body before the operation of slicing commences. Salt, however, as well as Bruce, admits that the luxury of an Abyssinian feast consists in having the pieces brought in while the blood is yet warm and the fibres palpitating. The female who sits next to each chef then wraps up the slice in a teff cake, and thrusts into his mouth as large a quantity as it is capable of containing, which is greedily devoured. All parties drink copiously of hydromel, and bouza, the beer of the country. Having satisfied themselves, they rise, and give place to another company of inferior rank, and these to a third, till all is consumed. The gross indecencies which Bruce represents as perpetrated on these occasions, and which he has described with such revolting minuteness, have been denied by Mr. Salt, and it is hardly possible to suppose that they can be other than rare occurrences. Mr. Gobat, the missionary, admits that a feast such as that described by Bruce may have taken place among the most shameless libertines; but he adds, that "excesses of that kind are not customary either as to their cruelty or indecency." The practice reported by Bruce, and which subjected him to no little ridicule, of cutting steaks from a living animal on a journey, and then closing up the wound and driving it on, appeared at first quite unfounded to Mr. Salt; but in his second journey he witnessed it, and found that it was called by a peculiar name — cutting the *Shulada*; which certainly goes a good way to prove its frequency, though that also is disputed by Mr. Gobat, who denies its occurrence, unless, perhaps, in cases of extreme hunger.

Justice in Abyssinia is altogether barbarous, venal, and corrupt. When a person accused of a criminal offence is found guilty, he is detained in prison till he has made satisfaction to the accuser; or, if he have committed murder, till he be disposed of by the relations of the deceased, who may either put him to death or accept a ransom. The latter is generally fixed at 250 dollars for a man, but the relations are under no obligation to accept it. Mr. Gobat says that the Tacazze is never passed on either side in pursuit of murderers; so that they must very frequently escape without even the pretence of a trial. When a murdered person has no relations, the priests take upon themselves the office of avengers of blood.

Marriage in Abyssinia is a very slight connection, formed and dissolved at pleasure. The most formal mode of concluding it is, when the lover, having made certain engagements to the parents, and obtained their consent (for that of the bride is seldom asked), seizes her and carries her home on his shoulders. A magnificent feast is then given of brinde and bouza; and at a fixed period of twenty or thirty days afterwards, they go to church and take the sacrament together. It is in a few rare instances only that even this slight ceremony is used. In most cases, mutual consent, and a plentiful administration of raw meat and bouza, form the only preliminaries. The will of either party, or of both, is at any time sufficient to dissolve the connection. If they have several children, they divide them; if they have but one, and he is under 7 years of age, he belongs to the mother; if above 7, to the father. Gobat says that after a third divorce they cannot contract another regular marriage, nor partake of the communion *unless they become monks*; Bruce, however, mentions being in a company at Gondar, where there was a lady present, with six persons, each of whom had been successively her husband, although none of them stood in this relation to her at the time: nor do either party consider themselves bound to observe with rigid fidelity this slight engagement, even while it lasts. Manners may be considered, in this respect, as in a state of almost total dissolution. Slaves are common in all parts of Abyssinia. They consist of Shangallas, a race of savage Negroes inhabiting the low countries on the N. N. W. and N. E. frontiers. They are very numerous in Gondar and other places of Amhara, and also in Tigré; are well treated, and escape many of the privations to which they are subject in their wild state.

The only display of architectural magnificence in Abyssinia is in the churches. They are built on eminences; are of a circular form, with conical summits and thatched roofs; and are surrounded with pillars of cedar, within which is an arcade, which produces an agreeable coolness. The houses of the sovereigns and

grandees are also large and commodious; though, in this warlike country, the camp is considered as their more proper residence. All the houses are mere hovels of a conical form, with a thatched roof. Their dress consists chiefly of a piece of cotton cloth, 24 cubits long by 1½ in breadth, which they wrap round them like a mantle, with close drawers reaching to the middle of the thigh, and a girdle of cloth. Their food consists of the different species of grain already enumerated, fish, fruits, honey, and raw meat at festivals. The most general drink is bouza, a species of sour beer, made from the fermentation of their cakes, particularly those left at entertainments. Tocousso, the coarsest grain, produces bouza equal or superior to any of the others. Hydromel is also made in great quantities. Agriculture, the only art much cultivated, is very far behind the perfection which it has attained even in the most backward parts of Europe. The ploughs, of the rudest construction, from the root or branch of a tree, are drawn by oxen. The land is twice ploughed; after which women are employed to break the clods. In the course of ripening, the corn is carefully weeded. As previously stated, there are two or three crops in the year. The worst grain is commonly used for seed. In general, every family cultivates for itself, and little is brought to market. The poor people live miserably on black teff and tocousso, and even persons of consideration use little except teff and bouza.

The Abyssinians profess Christianity, but it has little influence over their conduct. At present they are split into three parties, violently opposed to each other. They retain a great number of Judaical observances, abstaining from the meats prohibited by the Mosaic law, practising circumcision, keeping both the Saturday and Sunday as Sabbaths, and regarding fasts as essential. But their fasts, though apparently long and rigorous, are dispensed with on payment of a sum of money, according to the rank and wealth of the party. The Coptic patriarch of Cairo continues still to be the nominal head of the church, from whom the Abuna, the resident head, receives his investiture. They have monasteries, both of monks and nuns, who are far, however, from professing that rigid austerity which is the boast of the Romish church. Their veneration for the Virgin is unbounded; and the Catholic missionaries found that they completely outdid, in this respect, their own ultra zeal. Their saints are extremely numerous, and surpass, in miraculous power, even those of the Romish calendar. They represent them by paintings, with which their churches are lavishly adorned; but they do not admit any figures *in relievo*. The clergy do not attempt to prohibit divorce, or even polygamy, the propensity to which in the nation is probably too powerful to render any prohibition effectual.

Mohammedans, as well as Jews, are also found in Abyssinia. The former appear to have increased since Bruce's visit; at present they are most numerous in Adowah and its vicinity. Few of them have any knowledge of the Koran. They engage more in traffic than the Christians, and have more money. They are said to engross the whole traffic in slaves; the Christians, according to Mr. Gobat, never taking any part in it.

Though low, as compared with Europe, the manufactures of Abyssinia occupy a prominent place among most of the African nations. It supplies itself with all the most indispensable articles. Cotton cloths, the universal dress of the country, are made in large quantities, the fine sort at Gondar, and the coarse at Adowa. Being unable to dye their favourite dark blue colour, they unravel the blue Surat cloths, and weave them again into their own webs. Coarse cloth circulates as money. Manufactures of iron and brass are also considerable, the material being procured from Sennaar, Walcayt, and Berbera; knives are made at Adowa and spears at Antalow. The business of tanning is well understood in Tigré; and at Axum sheepskins are made into parchment. Saddles, and all sorts of horse furniture, are good. The foreign commerce of Abyssinia is carried on entirely by way of Massuah, whence the communication with the interior is maintained by the channel of Adowa. The imports are chiefly lead, block tin, gold foil, Persian carpets, raw silk from China, velvets, French broad cloths, coloured skins from Egypt, glass beads and decanters from Venice. The exports consist of gold, ivory, and slaves. The slaves are reckoned more beautiful than those which come from the interior of Africa.

Progress of Discovery. — The ancients never acquired any accurate knowledge of Abyssinia. To it, along with Sennaar, they, in a peculiar sense, applied the comprehensive name of Ethiopia; for though that term was made to extend generally to the interior of Africa, and even to a great part of Asia, yet *Æthiopia sub Ægypto* was regarded as the proper Ethiopia. Descriptions of Ethiopian nations are given by the ancients at considerable length; but they serve chiefly to show the imperfection of their knowledge, and are tinctured with a large admixture of fable. Rennell supposes, seemingly on good grounds, that the Macrobian, or long-lived Ethiopians, said to live farther to the south than the others, belong to Abyssinia. The ancients had no distinct knowledge of more than two Ethiopian kingdoms: the first and only one known to the earliest writers is Meroe, or the Peninsula, which they erroneously supposed to be an island formed by the successive union of the Nile with the Astaboras and the Astapus (Blue River and Tacazze). The chief city of Meroe was placed by them on the Nile, in lat. 16° 26′; and Bruce, in passing through Sennaar, saw, near Chendi, immense ruins, which probably belonged to this celebrated capital of Ethiopia. The other kingdom became known after the Greeks, under the successors of Alexander, extended their navigation along the eastern coast of Africa. It was that of the Axumitæ, situated upon the Red Sea, and occupying part of Tigré. Its capital, Axum, still remains, and though in a state of decay, exhibits remains so vast as amply to attest its former greatness. The inscriptions discovered here by Salt shows that the Axumites had received amongst them the religion and the arts of foreigners, and that they made use of the Grecian language in the inscriptions on their monuments. The port of Axum, Adulis, was the channel by which the finest ivory then known was exported, and a commercial intercourse maintained with the coasts both of the Red Sea and the Indian Ocean. Salt, though unable to visit it, seems to have ascertained its situation near Massouah.

Prior to the middle of the fourth century, Abyssinia was converted to Christianity, which it has ever since nominally professed.

After the rise and rapid spread of Islamism, those of the Egyptians who were reluctant to change their faith being compelled to fly southwards before the sword of the Saracens, Nubia and Abyssinia became filled with Jewish and Christian refugees. And as both these countries were at that time Christian, the Arabian geographers, who have fully described other parts of the continent, make a very slight mention of them; so that Abyssinia remained almost unknown till near the æra of modern naval discovery. In 1445, the emperor of Abyssinia sent an ambassador to the senate of Florence, and wrote a famous letter to the priests his subjects at Jerusalem. This, and the favourable reports of the Abyssinian priests now referred to, gave rise to the most exaggerated reports. It was said that a Christian prince, to whom the Portuguese gave the fantastical name of *Prester* or *Presbyter John*, ruled over a vast, highly civilised, and rich empire, in the centre and E. of Africa. This statement inflamed at once the spirit of discovery and of religious zeal, the two ruling principles in that age. The Portuguese monarchs, who took the lead in exploring the eastern world, immediately devised measures for acquiring a knowledge of so remarkable a region. The passage to India by the Cape of Good Hope had not yet been discovered; Abyssinia was therefore viewed as a tract through which the commerce of India might be conducted. Two envoys, Covilham and De Paiva, were therefore sent, under the direction of Prince Henry, upon a mission to explore it. They went by way of Alexandria, and descended the Red Sea. De Paiva perished by some unknown accident; but Covilham, after visiting different parts of India and Eastern Africa, entered Abyssinia, and arrived, in 1490, at the court of the emperor, residing then in Schoa. Being brought before the sovereign, he was received with that favour which novelty, when there is nothing to be feared from it, usually secures; and being a man of address and ability, he contrived to maintain this friendly disposition. The reports which he transmitted of the country were favourable; and having prevailed on the empress-mother to send an Armenian as an ambassador to Portugal, whose arrival excited a great sensation in that country, the Portuguese sent out several other embassies. Of these the most remarkable is that described by Alvarez, in 1520. He remained six years in the country, and traversed it from north to south, visiting the provinces of Amhara, Schoa, and Efat. Paez, Almeyda, Lobo, and several others successively undertook journeys into Abyssinia. Paez, who resided in the country from 1603 till his death in 1622, visited, in 1618, the sources of the Bahr-el-Azrek or eastern arm of the Nile, and describes them nearly in the same terms as Bruce, who absurdly claims the honour of being their discoverer. From the accounts of these and other missions, Tellez first (1660), and afterwards Ludolph (1681), principally compiled their histories and descriptions of Ethiopia. Ludolph, who was well versed in the language, derived a considerable part of his information from the communications of Gregory, an Abyssinian monk of the province of Amhara, then in Europe.

Public curiosity, however, with respect to Abyssinia gradually subsided, till, towards the close of last century

(1790), it was revived by the publication of Mr. Bruce's Travels. Many of the circumstances he relates are so very extraordinary as to give to his descriptions a good deal of the appearance of romance. The authenticity of his work was in consequence very generally doubted; and it must be admitted that some of his statements have been shown to be unfounded, and that others are of very questionable authority. But the accuracy of the leading features of his work has been fully established by Mr. Salt and other late travellers.

Our limits will not permit of our attempting to lay before the reader any sketch of the history of Abyssinia; and though we had abundance of space, the subject is too uninteresting to attract attention. Dr. Lee has prefixed a short notice of the church of Abyssinia to the Journal of Mr. Gobat's Residence in that country. An excellent summary of the information as to Abyssinia, contained in the earlier travellers and historians, will be found in the Modern Universal History, vol. xv. pp. 1—204. 8vo ed. Besides it, we have consulted, in drawing up this article, the Travels of Bruce, Salt, and Lord Valentia; Mr. Gobat's Journal; the account of Abyssinia in Ritter's Geography; Prichard's Researches on Man, ii. pp. 128—164. 3d ed., &c.

ACAPULCO, a celebrated sea-port and town of Mexico, in the intendency of that name, on the coast of the Pacific Ocean, 190 m. S.S.W. Mexico, lat. 16° 50′ 29″ N., long. 99° 46′ W. Pop. 4,000 (?). The harbour is one of the finest in the world. "It is familiar," says Captain Hall, "to the memory of most people, from its being the port whence the rich Spanish galleons of former days took their departure to spread the wealth of the Western over the Eastern world. It is celebrated, also, in Anson's delightful Voyage, and occupies a conspicuous place in the very interesting accounts of the Buccaneers: to a sailor therefore, it is classic ground in every sense. I cannot express the universal professional admiration excited by a sight of this celebrated port, which is, moreover, the very *beau-idéal* of a harbour. It is easy of access; very capacious; the water not too deep; the holding ground good; quite free from hidden dangers*; and as secure as the basin in the centre of Portsmouth dock-yard. From the interior of the harbour the sea cannot be discovered; and a stranger, coming to the spot by land, would imagine he was looking over a sequestered mountain lake." — (*South America*, ii. p. 172.) There are two entrances to this splendid basin, one on each side of the small island of Roqueta or Grifo, the broadest being nearly 1½ m. across, and the other from 700 to 800 feet. The town, commanded by the "extensive and formidable" (Hall) castle of San Carlos, is poor and mean. Since it ceased to be the resort of the galleons, it has ceased to be of any considerable importance; and, when visited by Captain Hall, had only 30 houses, with a large suburb of huts built of reeds, wattled in open basket work to give admission to the air. The climate is exceedingly hot and pestilential. To give a freer circulation to the air, an artificial cut was made through the chain of rocks by which the town is surrounded. But, though this has been of considerable service, it still continues to be very unhealthy. Its natural insalubrity is increased by the poisonous vapours exhaled from a marsh situated to the E. of the town. The annual desiccation of the stagnant water of this marsh occasions the death of innumerable small fishes; which, decaying in heaps under a tropical sun, diffuse their noxious emanations through the neighbouring air, and are justly considered a principal cause of the putrid bilious fevers that then prevail along the coast. Some trade is carried on between Acapulco and Guayaquil, Callao, &c.; but, owing to the extreme tediousness and difficulty of the voyage from Acapulco to Callao, the intercourse between Mexico and Peru is confined within very narrow bounds. — (*Hall*, loc. cit.; *Humboldt, Nouvelle Espagne*, 2d ed. iv. p. 88.)

ACERENZA (an. *Acherontia*), a small and very ancient archiepiscopal city of Naples, prov. Basilicata, 14 m. N. E. Potenza. Pop. 3,600. It is situated, according to the description of Horace (*Od.* lib. iii. car. 4. l. 14.), on an almost inaccessible hill, *Nidus celsæ Acherontiæ*, the foot of which is washed by the Brandano. It has a castle, a cathedral, two convents, a grammar school, and an hospital. The archbishop resides at Matera. This town was looked upon by the Romans as one of the bulwarks of Apulia and Lucania.

ACERNO, a town of Naples, prov. Principato Citra, 16 m. N. by E. Salerno. Pop. 2,800. It has a cathedral, a parish church, a *mont de piété*, which makes advances of seed to indigent cultivators, a fabric of paper, and a forge.

ACERRA, a town of Naples, prov. Terra di Lavoro, 9 m. N. E. Naples. Pop. 6,300. It has a cathedral, a seminary, and a *mont de piété*. The country is fruitful, but unhealthy. This is a very ancient town. In the second Punic war it was destroyed by Hannibal, the inhabitants having deserted it on his approach. (*Liv.* lib. xxiii. s. 17.) Under Augustus it received a Roman colony.

ACHEEN, a principality occupying the north-west extremity of the island of Sumatra (which see).

ACHEEN, the capital of the above principality, situated near the N. W. extremity of Sumatra, on a river, about 3 miles from the sea, lat. 5° 35′ N., long. 95° 45′ E. It is very populous, being said to contain 8,000 houses built of bamboo and rough timber, and raised on posts, to secure them from inundations. A good deal of trade is carried on with Singapore, Batavia, Bengal, &c. Owing to a bar at the mouth of the river, none but small vessels pass up to the city.

ACHERN, a town of the G.D. Baden, on the Achern, 14 miles N. E. Kehl. Pop. 3,000. Within a short distance of Achern is the village of Sassbach, contiguous to which is a granite monument, erected at the expense of the French government in 1829, on the spot where the Marshal de Turenne, one of the greatest generals of modern times, was killed by a random shot on the 27th July, 1675. His bowels were interred in the chapel of St. Nicholas at Achern. — (*Schreiber's Rhine; Biographie Universelle*, art. "Turenne.")

ACHIL, or EAGLE ISLAND, an island on the W. coast of Ireland, co. Mayo, separated from the main land by a narrow channel. It is about 20 m. in circumference, and contains above 23,000 acres. Pop. 5,277. It is mountainous; and eagles — whence its name — breed in its inaccessible fastnesses. The inhabitants speak the Irish language, and are in an extremely depressed, miserable condition.

ACHMIN, or ECHMIN, a town of Upper Egypt, on the right bank of the Nile, 230 m. S. Cairo. Pop. 3,000. Streets well disposed, broad, and straight, which is very unusual in Egypt; so that this would be a handsome town, were the houses built of better materials than baked bricks cemented with clay. It was anciently called Panopolis, or Chemnis; the former being the Greek, the latter the Egyptian name. It contains a church of some antiquity, and held in much veneration; but its chief ornament is the granite pillars taken from the ruins of Panopolis.

ACHMUNEIN, a large village of central Egypt, prov. Minyeh, on the site of the an. *Hermopolis Magna*, lat. 27° 43′ N., long. 30° 53′ E. In the environs is the portico of an ancient temple, covered with hieroglyphics, and regarded as one of the finest remains of Egyptian architecture.

ACHONRY, a parish of Ireland, co. Sligo, which gives name to a bishopric, now united to Killala. 16 m. W. Sligo. Pop. of parish 15,357.

ACI-REALE, a sea-port town of Sicily, prov. Catania, cap. cant., at the foot of Mount Ætna, 9 m. N. E. Catania. Pop. 19,762, incl. cant., of which the town may have about 15,000. It stands on a vast mass of basaltic lava, about 800 feet above its port, the *Marina of Aci*, and is supported on arches constructed with great labour and expense through ten alternate strata of lava and earth. The situation is healthy; the town is regularly built, clean, with many churches, convents, and public buildings, the whole giving evidence of a thriving and industrious population. A considerable trade is carried on, particularly during the fair in July, in wine, fruit, gold, filigree-work, cotton, flax, and diaper, the last being bleached in great quantities in the plain below the town on the banks of the Acque Grande. The port is small; the mole is formed out of a mass of lava, and there are some good warehouses. During the servile war Aci-Reale was the head quarters of the consul Aquilius, who succeeded in suppressing that dangerous revolt, anno 101 B. C. — (*Smyth's Sicily*, p. 132. &c.)

ACKEN, a town and castle of the Prussian states, prov. Saxony, on the Elbe, 10 m. E. S. E. Calbe. Pop. 3,000. It has manufactures of cloth and tobacco, and tanneries.

ACONCAGUA, a province of Chili (which see). This also is the name of the cap. of the same prov., a town containing about 5,000 inhab. — (*Miers' Chili*, p. 420.)

ACQUA, a village of Tuscany, 15 m. E. Leghorn, celebrated for its baths.

ACQUAPENDENTE, a small ill-built town of the Papal dominions, 15 m. W. Orvieto. Pop. 2,400. It has a cathedral and 5 churches.

ACQUA-VIVA, town of Naples, prov. Terra di Bari 18 m. S. Bari. Pop. 5,300. It is surrounded by walls has a handsome parish church, some convents, 2 hospitals, and a *mont de piété*.

ACQUI, or AQUI, a town of the Sardinian States, cap. prov. same name on the left bank of the Bormida, 47 m. E.S.E. Turin. Pop. 6,700. It has a citadel, a cathedral, two churches, and a seminary; and is celebrated for its warm sulphurous baths. The inhabitants are principally employed in the silk manufacture.

ACRA, a small district on the Gold coast of Africa, belonging to the Ashantees, nearly under the meridian of Greenwich. The English, Dutch, and Danes have forts at Acra.

* This is not quite accurate. There is one shoal of limited extent on which a vessel was lost in 1781. But being mentioned in the charts it is easily avoided. — *Humboldt, Nouvelle Espagne*, iv. p. 90.

ACRE, AKKA, or ST. JEAN D'ACRE, a town of Syria, cap. pachalic of same name, on the coast of the Mediterranean, lat. 32° 54′ 35″ N., long. 36° 6′ 5″ E., 33 m. S.S.W. Tsour (an. *Tyrus*), and 35 m. W. Lake Tabaria or Genesareth. It is situated on a promontory, forming the N.E. limit of a fine semicircular bay (the Bay of Acre) opening to the N., bounded N.W. by Cape Carmel, at the extremity of the mountain of that name. The harbour of Acre, on the S. side of the town, within the bay is shallow, and accessible only to vessels drawing little water; but opposite to Caipha, a small town at the foot of Mount Carmel, on the W. side of the bay, there is good anchorage ground in deep water. Few towns are more advantageously situated as a centre of commerce or seat of political power; but these advantages, by making its possession of importance, have served to expose it over and over again to hostile attacks. The climate is unhealthy; the winter rains, descending in torrents from the mountains, fill the adjacent plain with stagnant lakes, from which, and the decomposition of vegetable remains, constant malaria is produced, forming a striking contrast to the healthy atmosphere of the neighbouring mountain land. Cotton and corn are the chief products of the plain of Acre, and these form its staple exports.

Previously to 1832 the population of Acre was loosely estimated at from 15,000 to 20,000; but the siege of that year having ended in its almost total destruction, it is impossible to state the number of its present inhabitants. The same cause operates to make an account of the place historical, rather than descriptive of its existing state. Even before the period alluded to, a few broken columns of granite, and other dilapidated and neglected relics, were the only remains of antiquity; but of the Gothic age there were, at this epoch, the cathedral churches of St. Andrew and St. John. The mosque of Djezzar Pacha was a fine quadrangular building, paved with white marble, and surmounted by a cupola supported on pillars brought from the ruins of Cæsarea. The same governor also constructed a large fountain, of incalculable advantage to the town.* The bazaars were numerous and good, being arched over, and well supplied with commodities. Houses built of stone, and flat-roofed, the terraces on their tops forming agreeable promenades; the more useful, as the streets were extremely narrow. At present, however, Acre is, or at all events within a year or two was, little better than a mass of ruins; of all its buildings, public or private, the fountain of Djezzar was the only one that escaped uninjured from the effects of the siege by the Egyptians in 1832.

Although the modern town be of comparatively recent date, its site has been occupied by buildings from the remotest antiquity. Here stood a Hebrew, or perhaps a Phœnician city, called Accho. Being improved and enlarged by the Greek sovereigns of Egypt, they gave it the name of Ptolemais; and it was justly regarded by them and their Roman successors as a port of great importance. Syria was one of the first conquests of the Mohammedans (*see* ARABIA), into whose hands Ptolemais fell, A.D. 636. It then received the name of Akka, which continues to be its Saracenic appellation. In 1104 it was captured by the first crusaders, and formed for eighty years part of the kingdom of Jerusalem, when it was taken by the famous sultan Saladin. About four years afterwards Richard Cœur de Lion and Philip Augustus appeared before its walls, and after a siege of twenty-two months it surrendered to their arms in 1191. It subsequently remained in the possession of the Christians exactly a century; and under the government of the Knights Hospitallers of St. John attained considerable importance and prosperity. It derived from the magnificent cathedral erected by these soldier monks to their patron saint its common western name of *St. Jean D'Acre*. In 1291, however, the knights were driven from Syria, and Acre was the spot on which their last desperate but useless struggle took place. From 1291 till 1517, it formed part of the Caliphate, when it passed, with the last paltry wrecks of that once mighty power, into the hands of the Turks. Neglected by the government, and exposed to the depredations of every wandering tribe, it continued to decay, till, in the beginning of the 17th century, it was seized by Fak'r-el-din, the celebrated emir of the Druses, under whose wise and energetic government it began to show symptoms of returning prosperity; but in the latter part of his life Fak'r-el-din, apprehending a Turkish invasion, destroyed the harbour, and thus left the place in a worse condition than that in which he found it. Another century of decay and misery ensued, till, in 1749, the Bedouin Arab Daher expelled the Turkish aga, and made Acre the capital of a territory which for more than 20 years was virtually independent of the Porte. Daher partially fortified Acre, partly cleared its ruins, and settled colonies of Greek and Mussulman farmers, harassed and despoiled in the neighbouring countries, in the surrounding plain. On Daher's fall in 1775, Acre reverted to the dominion of the Turks. For once, however, the change of masters was not productive of ruin. Djezzar, who was immediately appointed pacha, how inferior soever to Daher in personal character, seems to have resembled him in his political energy, promptness, and decision. He strengthened the fortifications, and embellished the town. The determined and successful resistance which it made in 1799 to the arms of Napoleon have rendered it famous in modern history. There is, indeed, good reason to think that the termination of the siege had a powerful influence over the future fortune of that extraordinary person, and consequently of the world. (See *Voyage du Maréchal Marmont*, iii. p. 76., &c.) Acre continued to prosper till 1832. Though fettered by imposts and monopolies, it carried on a considerable foreign trade, and had resident consuls from most of the great states of Europe. During its siege by Ibrahim Pacha in 1832, which lasted 5 months and 21 days, its private and public buildings were mostly destroyed. But its great importance to its Egyptian masters has already made them repair its fortifications, and render them stronger than ever; and no doubt also its streets and houses will be again re-opened and rebuilt. — (*Volney's Travels in Syria*, ii. passim; *Robinson's Travels in Palestine and Syria*, ii. 196—201.; *Hogg's Visit to Alexandria*, ii. 159—172.; *Russell's Palestine*, 317—357.; *Voyage du Maréchal Marmont*, iii. pp. 76—83.)

* However bloodthirsty and selfish, it is evident, from the accounts of those who were little inclined to partiality, that Djezzar (the butcher) Pacha possessed many of the qualities that constitute an able and energetic ruler. Under his firm, though iron sway, the pachalic rose to an importance which made it be respected alike by the Porte and by all the unruly spirits in its neighbourhood. When his own passions did not interfere, he saw clearly and advanced steadily the interests of those beneath his government, as the public buildings he erected and his steady encouragement of European trade sufficiently evince. His subjects too were safe from all oppression except his own; a species of security which, though little valued in Europe, is no light matter in many parts of the East.

ACRI, a town of Naples, prov. Calabria Citra, cap. cant., on the Mucone, in a healthy situation, 12. m. N. E. Cosenza. Pop. 7,000. It has 6 parish churches and an hospital. The surrounding country is very fruitful.

ACTIUM. See ARTA, GULPH OF.

ACTON, a village and parish of England, formerly resorted to for its mineral waters. Pop. 1,929. 5 m. from London.

ACUL, an inconsiderable sea-port town of Hayti, on its N. coast. Lat. 19° 47′ 40″ N., long. 72° 27′ 12″ W. It was called St. Thomas by Columbus.

ADALIA, or SATALIEH, a sea-port town of Turkey in Asia, Anatolia, cap. Sangiack Tèkè-ili, on the gulph of the same name, near the mouth of the Douden-sou, lat. 36° 52′ 15″ N., long. 30° 45′ 3″ E. Pop. 8,000 (?) two thirds Turks and one third Greeks. It is finely situated, being built amphitheatre-wise round a small harbour on the declivity of a hill, the summit of which is surmounted by a castle. It is enclosed by a ditch, a double wall, and a series of square towers about 50 yards apart. Streets narrow, and houses mostly of wood. It is the residence of a pacha and of a Greek archbishop; and has numerous mosques, churches, baths, caravansaries, &c. The surrounding country is beautiful, and the soil deep and fertile.

Adalia is supposed to occupy the site of the ancient Olbia; and the fragments of columns and other remains of antiquity found within its walls attest its former flourishing state.—(*Beaufort's Karamania*, p. 126.; *Dict. Geographique*, &c.)

ADAM'S PEAK, the highest mountain in the island of Ceylon, altitude 6,152 feet; 45 m. E.S.E. Columbo. It has a sugar-loaf shape; and its summit, supposed to be the point where Buddha ascended to heaven, is esteemed sacred, and is resorted to by pilgrims.

ADANA, a town of Asia Minor, the capital of a district or government of the same name on the Sihon (*Sarus*), about 25 m. above where it falls into the sea, lat. 36° 59′ N., long. 35° 16′ E. Pop. 10,000. It is very ancient, stands on a declivity, surrounded on all sides by groves of fruit trees and vineyards; is large, well-built; has a castle; a bridge over the river, said to have been built by Justinian; and a noble portico in the middle of the bazaar. It carries on a considerable trade in wine, fruits, and corn. In summer it is rather unhealthy, and the majority of the inhabitants retire to the country.—(*Kinneir's Asia Minor*, &c., p. 131.)

ADANAD, a town or place of Hindostan, prov. Malabar, div. Shirnada, the residence of a class of Brahmins called Namburies. This sect refuse to eat or drink with other Brahmins. The elder sons marry as many wives as they can support, and live with them; but the younger sons of the family seldom marry, in order to prevent the decline of their dignity by their becoming too numerous.

ADARE, an ancient town of Ireland, co. Limerick, with some fine ruins, now much decayed, situated on the Maig, over which it has a bridge of 9 arches; 130 m. S.W. Dublin. Pop. 766.

ADDA, a celebrated river of Italy, formed by the junction of several rivulets near Bormio, in the Valteline

Having traversed that province it passes Sondrio, enters the lake of Como near its northern and issues from its southern extremity, and passing Lodi and Pizzighettone, falls into the Po 6 m. W. Cremona.

ADELAIDE, see SUPPLEMENT.

ADELSBERG, a village and cavern in Illyria, about half way between Laybach and Trieste. The cavern is decidedly the most magnificent and extensive hitherto discovered in Europe. It has been explored to a distance of between 1 and 2 miles (1310 fathoms) from the entrance, and is terminated by a lake. It is believed, however, that this is not the end of these vast hollows, and that, were it carefully examined, its extent would be found to be much greater. The cavern is placed under the care of an officer in the adjoining village, who appoints guides to conduct strangers through it. It is easily accessible, and may be visited without any risk The entrance is situated about a mile from the village, in the face of a cliff, below a ruined castle. At this point the river Poik, after winding through the plain, disappears beneath the mountain, sinking into the rock below a natural penthouse formed by the slope of the limestone strata. The entrance for visitors is a small hole above this, closed by a door. At a distance of 180 yards from the mouth, a noise of rushing waters is heard, and the Poik may be seen, by the light of the taper, struggling along at a considerable depth below; and on a sudden a vast hall 100 feet high, and more than 300 long, called the Dome, is entered. The river having dived under the wall of rock on the outside, here re-appears for a short space, and is then lost in the bowels of the mountain. It is believed to be identical with the Unz, which bursts forth at Planina; planks of wood, thrown into the stream of the cavern, appear there, it is said, after ten or twelve hours.

The Dome was the only part of the cavern known down to 1819, when a labourer, working in the cave, accidentally broke through a screen of stalactite, and discovered that this was, to use the words of Russel, "but the vestibule of the most magnificent of all the temples which nature has built for herself in the region of the night." Rude steps, cut in the rock, lead down the sloping sides of this chamber to the level of the river, which is crossed by a wooden bridge; and the opposite wall is scaled by means of a similar flight of steps. Here the visitor enters the newly-discovered part of the cavern, consisting of a range of chambers varying in size, but by far the most interesting, from the variety, beautiful purity, and quantity of their stalactites. Sometimes uniting with the stalagmite below, they form a pillar worthy to support a cathedral; at others a crop of minute spiculæ rises from the floor; now a cluster of slender columns reminds one of the tracery of a Gothic chapel, or of the twinings or interlacings of the ascending and descending branches of the banyan tree. The fantastic shapes of some masses have given rise to various names, applied by the guides, according to the likeness which they imagine they can trace in them, to real objects; such as the throne, the pulpit, the butcher's shop, the two hearts, the bell, which resounds almost like metal, and the curtain (Vorhang), a very singular mass about an inch thick, spreading out to an extent of several square yards, perfectly resembling a piece of drapery, and beautifully transparent. The stalactical matter pervades almost every part of the cavern; it paves the floor, hangs in pendants from the roof, coats and plasters the wall, cements together fallen masses of rock, forms screens, partitions, and pillars. The only sound in the remote chambers is produced by the fall of the drops of water charged with lime, which are found, on examination, to tip each pendant mass, forming an ascendant spire, or stalagmite, on the spot where it descends. One of the long suite of chambers, larger and loftier than the rest, and with a more even floor, is converted once a year (in May) into a ball-room. On that occasion the peasant lads and lasses assemble from miles around, and the gloomy vaults re-echo with sounds of mirth and music.—(*Murray's Handbook for South Germany*, p. 289.)

ADEN, a small state of S. Arabia in Yemen, lying between 12° 32′ and 13° 3′ N. lat., and between 43° 30′ and 45° 30′ E. long. It extends from E. to W. about 115 m., its greatest width being about 30. The mountains in this part of Arabia are close upon the sea, and, for an Arabic district, it is well supplied with water; and from both these causes the heat of the climate is considerably mitigated, and vegetation flourishes upon a more extensive scale than in most other parts of the peninsula. It has a considerable forest. The cultivated parts produce wheat, dhourah, and cotton; the woods consist of mangoes, sycamores, and pomegranates, and the surface of the whole country is interspersed with date trees Wellsted (*Travels*, ii. 409.) states that in purity of atmosphere, richness of soil and verdure, nature of vegetation, and proximity of production and desolation, this country resembles Egypt. The barren parts are represented as *peculiarly* so; but they occur in comparatively small patches, and in the midst of fertility. The inhabitants are mostly agriculturists; but such is the miserable state of the country, that the husbandman never goes to his labour without being armed, and resorts to the towns for security during the night. The town inhabitants of the interior carry on an extensive trade with the Bedouins, who bring to market their ghee (butter), frankincense, and milk, receiving in return grain and cloth. Manufactures limited to a fine striped cloth or silk, used for the dresses of the superior classes, the weaving of which occupies about 30 looms in the town of Lahedsje. —(*Niebuhr, Descr. del' Ar.* par. ii. pp. 221, 222; *Voy. en Ar.* ii. pp. 52, 53.; *Wellsted's Travels in Arabia*, ii. 400—411.)

ADEN, a sea-port town of Arabia, cap. of the above state, now in the possession of the E. I. Company, on the Indian Ocean, 118 m. E. from the straits of Babelmandeb, lat. 12° 46′ 15″ N., long. 45° 10′ 20″ E. It stands on the E. side of a promontory, projecting S. into the ocean, called the Peninsula of Aden. This peninsula, which terminates in a lofty mountain, bearing a striking resemblance to the rock of Gibraltar, is connected with the main land by a low isthmus about 400 yards in breadth. On the N. and W. the town is overhung by steep and craggy rocks on which are the remains of old fortifications. The E. or outward harbour of Aden, formerly (and apparently at a recent period) large and commodious, is now partly filled up with sand. But the harbour on the W. side of the town, between the promontory on which it stands and another parallel thereto, is a magnificent basin, capable of accommodating the largest fleets. It has a contracted entrance, which might easily be fortified, so as to make it inaccessible to a hostile squadron. From this harbour the approach to the town is over a low ridge of the mountain, the road being in parts cut through the solid rock.

The site of this town, the best adapted for trade on the whole coast of Arabia, and the key of the Red Sea, has always made it a point of primary importance in the direct trade between Europe and the East. It became at a very early period a celebrated emporium (the *Arabiæ emporium* of Ptolemy). After the Romans obtained possession of Egypt, and Hippalus (A. D. 50) had discovered the direct route to India, they destroyed Aden lest it should fall into hostile hands, and interfere with their monopoly of this lucrative traffic. (*Vincent's Commerce, &c. of the Indian Ocean*, ii. 527. 528.) It is not known when or by whom it was rebuilt; but from the 11th till the 16th century it was the great, or rather the exclusive, entrepôt of Eastern commerce. The discovery of the passage by the Cape of Good Hope was the first great blow to its importance. Simultaneously with the appearance of the Portuguese in India, the Turks, under Solyman the Magnificent, took possession of various Arabic ports. Aden among the number. They erected the fortifications, the ruins of which excite the admiration of every traveller, and which repelled the attacks of the famous Portuguese general Albuquerque. From this date, however, Aden rapidly declined; nor did the expulsion of the Turks, which took place about the middle of last century, retard its downfall. Its ruin was more complete than could have been anticipated; for its convenient harbours and plentiful supply of water make it, apart from other considerations, a most desirable port.

When the first edition of this work was published in 1840, we noticed the fact that the town and the peninsula on which it is built, had been ceded to the E. I. Company, who intended to make it a station for the steamers between Bombay and Suez; and we ventured to express our conviction, that it would, under British rule, again become a considerable emporium. And we have now to state that these anticipations have been fully realised. When first occupied by the British it had not more than 100 houses, with a parcel of wretched huts, and from 3,000 to 4,000 inhabs. It had indeed the ruins of several cisterns and reservoirs cut in the solid rock, and of aque-

ducts for conveying water from the mountains of the interior, which fully testified its former greatness. But within the last half dozen years a vast change has taken place, and the ancient prosperity of Aden bids fair to be again restored. Hotels for the accommodation of the passengers by the steamers have been erected; and the population of the vicinity, attracted by the security afforded by the English flag, have flocked to the place, which has now (1850) from 25,000 to 30,000 inhabs.! Some defensive works have already been constructed, and others are projected which, if completed, will make it, (which it should be), the Gibraltar of the Red Sea.

While its commanding position, excellent port, and abundant supply of water, make Aden an important station in the route from India to Europe by the Red Sea, it is no less favourably situated for becoming an *entrepôt* for the contiguous countries of Arabia and Africa. It owed its former consequence mainly to its natural advantages, and these it still retains. And it can hardly fail again to become an important emporium, and to be of the greatest utility to the surrounding continents. The climate though hot is not unhealthy.

The abundant supply of water, for which Aden is remarkable among Arabic towns, is drawn from the ravines and gulleys of the surrounding mountains; and from the land springs, which are abundant on the sea shore.

(*Niebuhr, Descr. de l'Ar.* par. ii. pp. 221, 222.; *Voy. en Ar.* ii. 51. 52.; *Salt, Voy. to Abyss.* pp. 105—111.; *Wellsted*, ii. 382—399.; *Forster's Historical Geography of Arabia*, ii. 104. and 156.)

ADJYGHUR, a town of Hindostan, prov. Allahabad, lat. 24° 50′ N., long. 80° 3′ E. It has a fortress at the top of a steep hill that was taken by the British in 1809, after a stout resistance.

ADIGE, a large river of Italy, the *Atesius* or *Athesis* of the ancients. It is formed by several rivulets which have their sources in the Rhetian Alps, and unite near Glurns; thence it flows E. till near Bolsano it is joined by its important tributary, the Eisack. It then takes a southerly course past Trent, where it becomes navigable, Roveredo, and Pontone. It then changes its course to the E., and passing Verona, Legnago, and Aquileia, falls into the Adriatic, 20 miles S. Venice. It is deep, rapid (*Velox Athesis*, Claud.), and is usually navigated with difficulty. In spring, on the melting of the snow in the mountains, it is liable to sudden floods, to prevent the injurious influence of which in the Polesino of Rovigo and other low grounds, it is fenced by strong banks, while a part of the surplus water is carried off by canals. Exclusive of the Eisack, its principal affluents are the Noce, Aviso, and Agno.

ADMIRALTY ISLAND, an island on the W. coast of America, between George the Third's Archipelago and the continent, about 90 m. long and 25 broad. Lat. 57° 2′ to 58° 24′ N., long. 225° 10′ to 226° 31′ E.

ADMIRALTY ISLANDS, a cluster of 20 or 30 islands in the South Pacific Ocean, of which the largest, called Great Admiralty Island, is from 55 to 60 m. in length: in about 2° 10′ S. lat., and from 126° to 128° E. long. They were discovered by the Hollanders in 1616, and are inhabited.

ADOUR, a considerable river in the S. W. of France. It has its source in the Pyrenees, 6 m. E. Bareges, whence it flows N. by Bagneres and Tarbes to Oise; here it takes an easterly course, and passing St. Sever, Dax, and Bayonne, falls into the sea a little below the latter. It is navigable to St. Sever. The Oleron and the Pau are the most considerable of its affluents.

ADOWA, the capital of Tigré, in Abyssinia, partly on the side and partly at the foot of a hill, commanding a magnificent view of the mountains of Tigré. Lat. 14° 12′ 30″ N., long. 39° 5′ E. The houses are all of a conical form, pretty regularly disposed into streets or alleys, interspersed with trees and small gardens. Pop. probably 8,000. It has manufactures of cotton cloths; and an extensive trade in cattle, corn, salt, and slaves.

ADRA, a sea-port town of Spain, cap. district same name, prov. Granada on the Mediterranean, 45 m. S. E. Granada. It is situated near the mouth of the Adra. In its vicinity are some of the richest lead mines in the world, the produce of which constitutes the principal article of export from the town.

ADRAMYT, a town of Turkey in Asia, Anatolia, about 4 m. from the E. extremity of the gulph of the same name, 78 m. N. Smyrna, lat. 38° 29′ N., long. 26° 57′ 15″ E. Pop. 5,000 (?) Streets narrow, ill-paved, and filthy; houses, with few exceptions, mean, and miserably built. The olives produced in the adjoining territory, with large quantities of wool from the interior, are principally shipped for Constantinople; little except galls being shipped for other parts of Europe. — (*Turner's Levant*, iii. p. 265.)

ADRIA (an. *Atria* or *Hatria*), a town of Austrian Italy, deleg. (formerly the Polesino of) Rovigo on the Castagnano, between the Po and the Adige, 12 m. E. Rovigo. Lat. 45° 2′ 57″ N. long., 12° 3′ 55″ E. Pop. circa 10,000. This is a very ancient city, being supposed to be of Greek origin, and having afterwards formed part of the dominions of the Etruscans. It was originally a sea-port of such magnitude and importance as to be able to give its own name to the great arm of the Mediterranean on which it stood; but owing to the gradual extension of the land, in consequence of the mud and other deposits brought down by the rivers, the port of Adria has been long since filled up, and it is now an inland town 18 or 19 m. from the sea. When Strabo wrote, it had become a comparatively unimportant place, and it subsequently suffered much from inundations and war, particularly from the attacks of the barbarians. During the twelfth century it began to revive. Its climate, which had become very unhealthy, and its environs, have both been materially improved by the drainage effected by opening the canal of Portovico. It is the seat of a bishopric, has a fine collection of Etruscan and Roman antiquities found in the vicinage, with manufactures of silk, leather, &c. The surrounding country is productive of corn, wine, and cheese.—(*Cramer's Ancient Italy*, i. p. 116. Balbi Abrégé ed. 1837.)

ADRIAMPATAM, a town of Hindostan, on the sea-coast of Tanjore, 37 miles S.E. Tanjore, long. 79° 30′ E., lat. 10° 20′ N.

ADRIANOPLE (called *Edreneh* by the Turks), a celebrated city of Turkey in Europe, prov. Roumelia, on the Maritza (an. *Hebrus*), where it is joined by the Toonga and the Arda, 134 m. N.W. Constantinople, lat. 41° 48′ N., long. 26° 29′ 15″ E. Pop. variously estimated at from 80,000 to 140,000. According to the Hon. Mr. Keppel it contains 23,000 houses and 90,000 inhabitants, of whom 45,000 are Turks, 30,000 Greeks and Bulgarians, and the remainder Armenians and Jews. It is beautifully situated in one of the richest and finest plains in the world, on the sides and base of a low hill, and when viewed from a distance has a magnificent appearance; but, as is the case in most Turkish towns, the illusion vanishes on entering. The streets are narrow, crooked, and filthy; and in certain periods of the year it is unhealthy. Some of the houses are three stories high, and their shelving roofs project so much as to meet those on the opposite side. In the centre of the town an old wall, supported by massive towers, the work of the sovereigns of the Lower Empire, encloses a space occupied by the rayah population. Originally it may have been the citadel; but it is now useless as a defence. Among the public buildings the most distinguished are the ancient palace of the sultans, in a state of decay; the famous bazaar of Ali Pacha, appropriated to the warehousing and sale of various descriptions of commodities; and the numerous mosques. Of the latter, the one erected by Selim II. is the most splendid; and ranks, indeed, among the finest Mohammedan temples. There are numerous booths and retail shops stored with all sorts of merchandise. There are also numerous baths and fountains supplied by water conveyed into the city by an aqueduct. A medrasseh, or superior school, is attached to the mosque of Sultan Selim, and there are a number of other schools. The Maritza is navigable up to the city during winter and spring; but in summer the sea craft only ascend as high as Demotica. Enos, at the mouth of the Maritza, is properly the sea-port of Adrianople. It formerly admitted large vessels; but owing to the carelessness of the Turks, who have allowed a sand-bank to accumulate, it is now accessible only to vessels of comparatively small burden. With the exception of tanning, which is rather extensively carried on, manufactures are inconsiderable. It has, however, a pretty extensive commerce. The exports consist principally of the raw products of the adjacent country, comprising excellent wool, cotton, silk, good wine, otto of roses, fruits, berries for dyeing, &c. The imports consist principally of manufactured goods; as cottons and hardware from England, woollen stuffs from Germany, &c. The trade is principally carried on by Greek merchants. It is the seat of a Greek archbishop.

In early times Adrianople was the capital of the Bessi, a people of Thrace, and was then called Uskadama. It derives its present name from the emperor Adrian, by whom it was improved and embellished. The Turks took it in 1360; and it continued to be the seat of their government from 1366 till the taking of Constantinople in 1453. It was occupied by the Russians in 1829; but was evacuated on a treaty being concluded between them and the Turks in September that year.—(*Keppel's Journey across the Balkhan*, i. pp. 250—563.; *Macmichael's Journey from Moscow to Constantinople*, p. 156.; *Walsh's Journey from Constantinople to England*, p. 144.; *Dict. Geographique*, art. "Andrinople," &c.)

ADRIATIC SEA, or GULPH OF VENICE (*Mare Adriaticum* or *Superum*), is that great arm of the Mediterranean extending S. E. and N. W between the coasts of Italy on the W. and those of Illyria and Albania on the E., from about 40° to 45° 55′ N. lat. Its southern extremities are the Capo di Leuca, or St. Mary's, in Naples,

and the isle of Fano to the N. of Corfu; and its northern extremity the bottom of the gulph of Trieste. It derived its ancient name from the once flourishing sea-port town of Adria (which see), now 18 m. from the shore, and its modern name from Venice. Its W. or Italian shore is deficient in harbours, is generally low, and from the entrance to Rimini has deep water; but from the latter northwards it has been partially filled up by the deposits brought down by the Po and the Adige, and is edged by lagoons, marshes, and shoals. On the E. side its coasts are generally high, steep, and rocky, and are broken into deep bays and gulphs formed by the numerous islands by which it is fenced. With the exception of those already mentioned, it receives no river of any considerable magnitude; and the saltness of its waters is said to exceed that of the ocean. The ebb and flow are considerable at Venice and other places. The *bora* or N. E. wind is the most formidable obstacle to its safe navigation. It comes on in sudden and impetuous squalls, which generally continue for three days, and in an advanced season from 9 to 15 or more. A vessel overtaken by it should always make for a port or anchorage ground on the E. coast, those on the W. being open and unsafe. The S.E. wind throws up a heavy sea; but is not dangerous, as vessels may easily get to an anchorage on the E. shore. Venice, Trieste, Ancona, and Fiume are the principal trading ports on the Adriatic. — (*Dict. Geographique; Purdy's Directions for the Gulph of Venice*, &c. p. 23. &c.)

AERSCHOT, a town of Belgium, prov. S. Brabant, on the Demer, 9 miles N. E. Louvain. Pop. 3,722. It was formerly fortified; and has some breweries and distilleries.

AFFGHANISTAN, the name applied to a country of Central Asia inhabited by the Affghan nation; and, sometimes, to a kingdom of which that country formed the principal part. In the latter sense, the boundaries of Affghanistan have been subject to the same political changes which have affected other Asiatic states. In the former, considered as the country of the Affghan people, it may be described as extending from the 30th to the 35th degree of N. latitude, and from the 62d to the 71st degree of east longitude; having the Indus on the E., the crest of the Himâleh or Hindoo-Coosh, and part of the Paropamesan or Goor mountains on the N.; the districts of Seeweestan, Cutch Gundava, and Sareewan, with part of the desert of Beloochistan on the S.; part of Seistan, with Ghorian of Khorasan on the west; and Merghâb, and the Hazareh country on the N. W. This rather indefinite bounding line will exclude the Eymauk country, as well as the Hazarehs, neither of these tribes being of Affghan descent; while it includes Herât and its dependencies, which are entirely inhabited by genuine Affghans.

History and Political Changes. — Affghanistan having, from the remotest period of authentic record, followed the fortunes of its more powerful neighbours, or formed but the centre of a greater whole, cannot correctly lay claim to any history of its own, until after the death of Nader Shah. For though several dynasties sprung from its soil, they never erected there a separate kingdom of any duration, unless perhaps in the instance of Subuctageen, father of the celebrated Mahmood of Ghiznee, who resided at that city before the rise of his son's power — a power which extended over great part of Asia. On the murder of Nader, in Khorasan, Ahmed khan Abdallee, after an indecisive conflict with the Persian troops of that conqueror's army, fought his way with 3,000 Affghan horse to Kandahar, where, seizing on a convoy of treasure on its way to Nader's camp, he assumed the ensigns of royalty; and, at the age of 23, in October 1747, was crowned as king, the Doorânee, Kuzbilbash, Belooche, and Hazâra chiefs assisting at the ceremony. Wise and prudent beyond his years, Ahmed consolidated the discordant mass of the Affghan tribes by employing them in the congenial occupations of foreign conquest and plunder; in which he was so successful, that before his death, in June 1773, after a reign of 26 years, his dominions extended from Nishapour of Khorasan to Sirhind of the Punjâb, and from the Oxus to the Indian Ocean. He was succeeded by his son Timour Shah, a weak and indolent prince, who died in 1793.

Zemaun Shah, the son of Timour, who was placed on the throne by a faction headed by the queen, began his reign with a promise of energy and talent, which the event but ill redeemed; for after a seven years' reign of ill-directed enterprises, domestic rebellions, and dark conspiracies, he fell a victim to the revenge of a chief whom he had provoked, and who first opposed, then seized the Shah, and delivered him to Mahmood, his half-brother and most formidable competitor, who blinded the unfortunate Zemaun.

Mahmood, however, was in his turn soon opposed by Shujah-ool-Moolk, full brother of Zemaun, who, seizing the treasure at Peshawur, proclaimed himself king. But his prosperity was short-lived. Mahmood, who had been made prisoner, escaped, and joining with Futeh Khan, the able chief of the Baurikzehees, who had caused the ruin of Zemaun, raised a rebellion against Shujah. At this period the British mission under Mr. Elphinstone arrived at Peshawur; and before it had well quitted the country, the ill-fated Shujah was forced to fly and seek a refuge with Runjeet Sing, chief of the Sikhs, from whose persecutions he afterwards with difficulty escaped to throw himself on the protection of the British government at Loodheana. Mahmood, a king only in name, became a pageant in the hands of Futeh Khan. This minister, turning his arms westward, seized Herât, but soon after fell a victim to treachery and the feelings of disgust which his arrogance had excited in the mind of his royal dependant, being first blinded and then put to death by order of Mahmood and his son Camrân Meerza. His numerous brothers alarmed, at this act, fled to their various governments and strongholds, exciting discontent and rebellion throughout the kingdom, until nothing of his dominions remained to Mahmood, save Herât and its immediate dependencies. Since then the affairs of Affghanistan present little save a series of civil broils, till the late Sikh chief, Runjeet Sing, stripped it of Cashmere and Peshawur, with the country between it and the Indus. It was subsequently partitioned among the chiefs of Caubul, Candahar, and Herât. The attempt made by the English, in 1839, to dethrone the first of these chieftains, the disasters to which it led, and our subsequent invasion of and final departure from the country, events with which the bulk of our readers are no doubt well acquainted, will be shortly noticed in another part of this article.

Divisions and Aspect of the Country. — The former depending rather upon natural features and formation than upon political or artificial arrangement, will best be noticed in describing the latter. This, so far as is known, presents an aggregation of mountainous groups and ranges, diverging from certain principal points, and thus becomes divided into numerous valleys of greater or lesser size, which are watered by streams of corresponding magnitudes, and which sometimes stretch out into plains of considerable extent. The south face of the Hindoo-Coosh is furrowed by a variety of subordinate glens and ravines, which carry their waters to the Caubul river. This stream, which rises near Ghiznee, but drains also the highlands of Kohistan, runs in a large and frequently very broad valley from that city to the Indus, which it enters at Attock. It separates the mountains of Hindoo-Coosh from those to the southward, which, originating in the huge peak of Speengur or Suffeed-koh (White Mountain), spread east and west, confining the Caubul valley on the south, and stretch in a variety of huge ranges in that direction: one of these uniting with that of the Tucht-e-Solymaun, extends to Dereh Ghazeekhan; another enters Seeweestan; and another, tending more to the westward, by Shawl and Pisheen, sinks into the deserts of Beloochistan and Seistan.

The Caubul valley is the most important of the natural divisions thus constituted. It contains the largest river, the finest plains, and the principal cities of the country, including the ancient town of Ghiznee; and extends from the westward of Baumian to the Indus, a distance of more than 200 miles. It is subdivided into several sections, of which the western is formed by Kohistan or "the Highlands," comprising the valleys and lowlands of Nijrow, Punjsheer, Ghorebund, Tugow, and Oozbeen, which are all blessed with a delightful climate, embellished

with the finest scenery, produce the finest fruits in abundance, and are well watered and cultivated.

Lugmaun, also on the north side of the river, comprehends the valleys of Alingâr and Alisheng, with numerous subordinate glens, all equally rich and beautiful. The fertile plains of Jelallabad afford the produce of both torrid and temperate climates. The Dell of Coonnur forms but a bed for the rapid river of Kashkâr, which, traversing Kafferistan, here pierces the Himâleh range to join that of Caubul. The small valleys of Punjecora and Bajour pour their streams into the more extensive and very fertile district of Swaut, where forest, pasture, and cultivated land are found admirably blended, and every valuable fruit and grain is produced. The same description will apply to Boonere, Choomla, and all the glens that discharge their waters into the Caubul or Indus rivers from the north. Peshawur, the lower division of the great Caubul valley, is divided from the plains of Jelallabad by a range of small hills, which stretch from the Hindoo-Coosh across to the Suffeed-koh. It is well watered and extremely rich, but suffers from heat in summer.

Damaun, which signifies the "skirt," and is the tract between the foot of the Solymaun mountains and the river Indus, is poorly cultivated and thinly inhabited; being chiefly hard tenacious clay, scantily covered with tamarisk and thorny shrubs. It is bounded on the north by the Salt range of the Khuttuk country, and stretches southward to Dereh Ghazee Khan. A wide extent of mountains intervenes between this district and the valleys which furrow the western face of the Solymaun range; but even in this wild region we hear of fertile tracts. The plain of Boree, for instance, is compared by the natives to that of Peshawur for extent and richness; the rivers Zhobe and Goomul water some fine valleys; and Tull, Chooteealee, and Furrah are mentioned as well peopled and cultivated.

Among the valleys opening westward, those of Shawl, Burshore, Pisheen, Yessoon, Saleh, Urghessan, Guashtâ, are described as interspersed with well cultivated spots, but as more generally suited to pasturage than agriculture; but the two first are stated to be rich and productive. Beyond these, to the N. W., the river Turnuk, rising near Ghiznee, but on the southern slope of the country, runs through a poorly watered and ill cultivated district, till, to the westward of Kandahar, it is joined by the Urgundâb, and both fall into the great river Helmund. The district of Kandahar is fertile and highly cultivated, but is circumscribed within narrow limits by the desert. In like manner the valley of Herât, which may be 30 miles long by 15 wide, constitutes the most important portion of that district.

A vast and varied surface, such as has been described, must naturally exhibit much diversity of aspect and fertility. Of the mountainous tracts, some are covered with deep forests of pine and wild olive trees; others afford excellent pasturage for sheep and cattle, while others again are bare, rocky, and sterile. Of the valleys, as we have seen, many are fertile, well watered, and wooded, especially those which pierce the Hindoo-Coosh range; while others, particularly to the south, are bare, or covered only with tamarisk and thorny shrubs.

Mountains. — These have been already mentioned. The chief ranges are those of Hindoo-Coosh, or Himâleh; the Speengur or Suffeed-koh, called Râjgul by Captain Burnes, a branch from which joins the Solymaun range; and perhaps that of Khojeh Amrân, which seems to be the prolongation of a spur from the last-mentioned range. The Hindoo-Coosh, or Himâleh, is described by Mr. Elphinstone as rising above the level of Peshawur in four distinct ridges, the lowest of which, clear of snow on the 24th of February, was clothed with forests of oak, pine, and wild olive, and a profuse variety of fruit trees, and graceful herbs and flowers. The second was still more densely wooded; the third was at that time white with snow; and beyond rose the glittering and stupendous crest of the true Himâleh, spiring into sharp peaks and bold masses.

Captain Burnes states that the term Hindoo-Coosh, though applied generally to this chain, which is a continuation of the Himâleh, belongs properly to one single peak, forming the western buttress of the range, which beyond that point declines in height, and is lost in the Paropamesan or Ghôr mountains. The peak of Koh-e-Baba, estimated by him at 18,000 feet high, is the only one covered with perpetual snow to the westward of the passes. Little is known of the height of the other ranges, but the Suffeedkoh obtains its name from its snowy cap. The Tucht-e-Solymaun is estimated at 12,000 feet in height; and there is a very lofty peak to the south-west, named Kund.

Rivers. — The principal of these have also been mentioned. They are the Caubul, the Helmund, the Turnuk, and Urghundâb; the Goomul, the Zhobe, the Lorah. The courses of the three last are little known, and their waters are lost in the sand, excepting in the time of floods. The river of Kashkâr (called Kama in Arrowsmith's map to Captain Burnes' Travels), which comes from the north-east, running by Chitrâl, can be only considered as partially belonging to this country: the same may be said of the Helmund.

There are no lakes of any consequence known to exist in Affghanistan.

Climate and Soil. — These, as remarked in the general description, vary in an extreme degree, according to locality. In the eastern part of the Caubul valley and in those to the south, bordering on Cutch Gundava, the heat is sufficient to mature all the products of India, such as the sugar-cane, indigo, and some of the tropical fruits; while the northern valleys abound in the productions of cold regions, and the mountains are covered with forests of pines. The plain of Peshawur must, according to Captain Burnes, be one of the most fertile regions of the earth, and wants only industry to become one of the richest and most productive. "The soil," says he, "is a rich mould; it is intersected with water on all sides; and, it is said, continues green during the whole year. It yields a succession of three crops annually; and if we reckon the barley (which is cut twice before it ears, and given to horses), we have no fewer than five returns in the year!" (*Travels*, iii. p. 258. 12mo ed.) After this statement we need not be surprised to learn that wheat is sold in Peshawur for less than 1*s.* 6*d.* a bushel, and barley for less than 1*s.* In like manner with regard to fertility, the plains of Jelallabad, Swaut, Boonere, Boree, Shawl, &c. are composed of rich loam and alluvium, yielding the most abundant crops; but the baked clay of Damaun is almost impracticable to the plough; and the vast tracts of secondary mountains and undulating plains, to the west, are only suited for grazing lands, and are lost in the sandy deserts of Seistan.

Mineral Products. — The mineralogy, as well

as the geology, of Affghanistan, is but little known; but enough is known to render it probable that the mineral riches of its mountains are great. Gold, copper, iron, and antimony have been already produced. Burnes tells us of two sorts of sulphur, of wells of petroleum or naphtha; and, above all, of what may prove still more valuable, of coal, which exists in the district of Cohat, below Peshawur. This, with the discovery of the same mineral in Cutch, may, by facilitating steam navigation, have a powerful effect on the condition of Central Asia.

Agriculture is in the same rude state as in Persia and most Asiatic countries. The soil is broken by a crooked log of wood, sometimes shod with iron, which is generally dragged by oxen; and irrigation is resorted to wherever rain does not fall in sufficient abundance to bring forward the crops. Only the richest and most promising tracts are thus employed; so that, as the seasons are usually regular, the harvest afforded, even by so rude a process, is for the most part abundant. Wheat, barley, rice, maize, form the produce of the more temperate regions; while in the warmer, the smaller grains common to India, as *moongy*, *chunna*, *joar*, *dâl*, &c., with the sugar-cane, cotton, tobacco, indigo, madder, &c., reward the farmer's labours. Horticulture is carried to a considerable extent in the neighbourhood of the principal towns; and to the fruits of Europe, in high perfection, are added grapes, pomegranates, figs, the mango, orange, lemon, guavas, plantains, and other fruits of India. Vegetables are also reared in great abundance, and of excellent quality; of these two, the rhubarb (ruwaish) and the assafœtida plant, deserve mention: the former is used when young and tender, blanched artificially, and is eaten both raw and dressed in great quantities, as a very wholesome delicacy; the latter is not only cultivated for its valuable gum, but is eaten roasted, when it springs young from the earth, like the flower of a cauliflower in appearance. It is esteemed a great delicacy; but it smells so strong, that to those unaccustomed to its odour, one head of it, while being cooked, is enough to poison the air of a whole camp.

Manufactures are confined to home-made stuffs of cotton and wool, and a little silk, which serve for the dress of the inhabitants: little or nothing is manufactured for export.

Commerce. — The disturbed state of the country for a succession of years has been unfavourable to trade; and the large and valuable caravans which formerly carried the rich productions of India and Cashmere to Caubul and Herât, for the consumption of the courts at these cities, or for transit, by Yez, into Persia, now no longer venture to traverse lands where robbery and extortion combine to ruin the merchant. There is still, however, a less extensive traffic carried on, chiefly by a pastoral tribe called the Lohânees, occupying much of the country between the Indus and Ghiznee, who at certain periods of the year repair to India to make their purchases, or receive goods from those who have brought them from thence, at the ferry of Kaheree. With these they return, carrying them on their own camels, through their own country, by the Golairee pass, and the valley of the Goomul, not only to Ghiznee and Caubul, but northward, across the mountains, to Berkhara. Captain Burnes tells us, that a thousand camel-loads of English and Indian chintzes, calicoes and muslins, brocades, shawls, Punjab turbans, spices, &c. are yearly consumed in Caubul; in return for which, are sent back horses in great numbers, madder, saffron, assafœtida, and fruit, both fresh and dried, in large quantities, &c. This trade is increasing, and will probably continue to do so, provided tranquillity and security of property be established in the country, and the present moderate scale of duties levied at Caubul be not increased: and the expected opening of the river Indus for trade, a channel which, with the Caubul river, will enable goods to be conveyed into the heart of Asia, cannot fail to stimulate the commercial propensities of the people, and give rise to a vast increase of civilisation as well as traffic.

Population. — There are no data on which to ground a tolerably accurate estimate of the population of this country. It must vary greatly in different districts. The rich tracts bordering the Caubul river, and the fertile glens that penetrate the Hindoo-Coosh, are certainly more densely peopled than the high and bleak pastoral countries to the west. Mr. Elphinstone, from the best information he could obtain, has mentioned the supposed numbers of several of the principal clans; but it is to be feared that these are not to be depended on. Thus the Eussufzehees, who occupy a very small district at the extreme N. E. corner of the country, are set down as 700,000 souls at least; and the whole of the Berdoorânees, a collection of tribes including the Eussufzehees, who inhabit a country of about 15,000 squ. m., are estimated at nearly 1,400,000, or 90 to the square mile. The Doorânees, on the contrary, who occupy at least 52,000 squ. m., are said to amount to only 800,000 or a million, being from 17½ to 19½ per square mile. The Ghiljees, in like manner, from 500,000 to 600,000 souls, are spread over 1,500 squ. m., or about 40 per square mile. This is on a calculation of five individuals to a family, which is too little in these countries.

Now the whole of Affghanistan as here defined does not quite amount to 170,000 sq. m. of surface, of which suppose the richer parts, such as, and including the,

	sq. m.	per sq. m.	Pop.
Berdoorânee country, to be -	30,000	at 90	2,700,000
Country of secondary fertility - - -	20,000	40	800,000
Poor high land, such as much of the Doorânee country - - -	60,000	18	1,080,000
The remainder, taken at a low average - -	60,000	20	1,200,000
	170,000		5,780,000
Add estimated amount of Tanjiks, &c. scattered over the country and in cities - - - -			1,500,000
			7,280,000

And this is independent of Hindoos, &c., who are stated to be numerous.

This estimate, founded on the vague numbers stated above, would give to Affghanistan a population of more than 7 millions, or nearly 43 to the sq. m., which, taking into account the vast tracts of high and unproductive lands on the west of the Suleiman range, and north of Kundahar and Zemeendawur, is undoubtedly far beyond the truth. The rate of population in Persia does not most probably exceed 10 per sq. m.; and if double be assigned to Affghanistan, it may be received as an ample rate for that country, notwithstanding the large extent of desert in the former and the many fertile districts in the latter. Upon grounds of analogy and probability, therefore, rather than from any existing data, the population of Affghanistan may, perhaps, be regarded as little exceeding four millions.

Tribes. — The Affghan nation is composed

of a great number of tribes, who claim a common origin, and assuredly differ intrinsically very much from all their neighbours. This origin is very obscure: a lately translated history derives them from *Saul* * the king of Israel, whose progeny was carried away in the time of the captivity; but no proof of this is adduced, and Mr. Elphinstone classes this among other fabulous genealogies. The name *Affghan* is not known to the people, who call themselves *Pooshtoon*, in the plural *Pooshtâuneh*, from whence, by corruption, *Pâtân* or *Patân*, the name they have obtained in India; and of their great antiquity there is no reasonable doubt. The tribes of Soor and Lodi, from both of which kings have sprung, are mentioned as owing their origin to the union of an Arab chief, Khaled ibn Abdoolla, with the daughter of an Affghan chief, in A. D. 682; and Mahmood of Ghiznee, though sprung from another race, ruled over the Affghans in the ninth century. According to their own traditions, the whole of the tribes descended from the sons of one Kyse or Kais Abdor-resheed, who, whether a real or imaginary character, is the person to whom all their genealogies refer; but as it would be impossible to examine all these, the following classification must suffice to enumerate the principal tribes, with their *habitats*, as they at present exist:—

EASTERN DIVISION. — *Berdooranees.*

Eusuffzehee.†	Peshawur tribes.	Bungush.
Otman Kheil.	Khyburees.	Khuttuk.
Turcolanees.		

Neighbourhood of Salt range.

Eesawkheil.	Bunnoochees.	Khoostees.
Sheetucks.	Dowers.	

Tribes of Damaun.

Dowlutkheil.	Baboors.	Gundepoorees.
Meankheil.	Stooreeanees.	

CENTRAL DIVISION. — *Including mountain tribes.*

Jaujees.	Vizeerees.	Zmurrees.
Toorees.	Murheils.	Sheeranees.
Jadrans.	Moonakheil.	Speenterreens.

WESTERN DIVISION. — *Dooranees.*

Zeeruk.	*Pungepaw.*
Popul-zehee.‡	Noor-zehee.
Alleko-zehee.	Ali-zehee.
Baurik-zehee.	Iskhak-zehee.
Atchik-zehee.	Kouganee.
	Makoo.

Ghilgees.

Tooran.	*Booran.*
Hotukee.	Solymaunkheil.
Tokhees.	Alikheil.
	Under.
	Turrukee.
Sheerpah.	Wurducks.
Kharotee.	Baraitchee.
	Tor Tereens.

National Character. — This aggregation of tribes, though exhibiting considerable diversity in customs, dress, and appearance, among themselves, form, taken together, a nation singularly homogeneous; yet Mr. Elphinstone remarks, that "amidst the contrasts which are apparent in the government, manners, dress, and habits of the different tribes, I find it difficult to select those great features which all possess in common, and which give a marked national character to the whole of the Affghauns." And this becomes the more perplexing, because even the virtues and attributes on which they most value themselves, and which separate them most from their neighbours, are apt to be misunderstood or overlooked by strangers. Thus an English stranger might regard their wild freedom as but a savage mixture of anarchy and arbitrary power. Alarmed at the absence of any organised government, or regular courts of justice, and witnessing the summary inflictions of retributive and customary law ‖, he might fancy that violence and revenge entirely usurped the place of justice and equity; while the rude hospitality, the bold and simple manners, and martial and lofty spirit of the people, would scarcely in his mind compensate for their proneness to violence and rapine—to the deceit and fraud which are the vices necessarily engendered by the lawless freedom in which they exult.

The traveller from India, on the other hand, sickened with the servile vices of its pliant, timid, and indolent inhabitants, would probably be favourably impressed, not less with the bold and independent bearing of his new acquaintance, than with their sobriety, their superior energy, their strong and active forms, their fair complexions, and features marked and striking even to harshness; and he might view, in the stormy independence of their mode of life, a favourable contrast to the apathy of that which he had left. The result in both cases might be, that, mingled with many a vice and failing, he would find the germ of many a virtue and noble quality; and that however much he might lament their great failings, he would not be able to deny them a portion of his esteem.

One of the strongest characteristics of this people, according to all travellers, is their hospitality, which is founded on national feeling, and there are some usages connected with this principle which deserve mention. The first is that of *Nannawautee* (two Affghaun words, signifying, "I have come in"), by which a person having a favour to entreat goes to the house of the individual on whom it depends, but refuses to sit on his carpet or partake of his food until the boon be granted; and this, if in the power of the party besought, custom makes it imperative on him to concede. A still stronger appeal is the second, being made by a woman, when she sends a person her veil, and implores assistance for herself or for her family.

All persons, even a man's bitterest enemy, is safe under the protection of his roof; but this protection extends not beyond the lands of the village, or at most of the tribe; and it is not uncommon for the stranger who has benefited by it, and experienced the kindest treatment, to be robbed and plundered when once beyond its influence. "There is no point in the Affghaun character," remarks Mr. Elphinstone, "of which it is more difficult to get a clear idea, than the mixture of sympathy and indifference, of generosity and rapacity, which is observable in their conduct to strangers. . . . So much more do they attend to granting favours than to respecting rights, that the same Affghaun who would plunder a traveller of his cloak if he had one, would give him a cloak if he had none." In this, as well as in their regard for hospitality, their customs much resemble those of the Desert Arabs.

The pastoral tribes in the west are more addicted to robbery and theft than the agricultural ones; but, in general, a previous understanding with the chiefs, confirmed by the presence of a single man, ensures safety; and the Affghans, it

* Burnes says, the Affghauns call themselves "Bin-i-Israeel, or children of Israel: but consider the term of "Yahoodee," or Jew, to be one of reproach.

† The termination zehee corresponds exactly to the Scotch *Vich* or *Mac*, or the Arab Ben; thus Eusuffzehee means "the sons of Eusuff," *Kheil* means Clan, or subdivision of a tribe.

‡ Both the Suddoozehee and Baurikzehee,—the first the tribe of the kings, the second that of their ministers and of Futehkhan — are divisions of the Populzehee.

‖ A striking instance of this is given by Captain Burnes, who saw on a dung-hill the mangled and hardly dead bodies of a woman, caught in an act of infidelity by her husband, and of her paramour: both of whom had fallen victims to the sanguinary, but here justifiable rage of the injured party. — *Travels*, ii. p. 80.

is said, are less prone to add murder to plunder than most other rapacious tribes. They are reproached with ignorance, barbarism, and stupidity, by the Persians, but on no sufficient grounds. They are less polished, it is true, and have less of worldly knowledge than their reproachers; but are in general prudent, sensible, and observant, and are less indifferent to truth than most of their neighbours. Like most mountaineers, they are proud of their lineage, and will hardly acknowledge one who cannot prove six or seven descents. Like Highlanders too, they are highly national. Love of individual freedom, strong though it be, is exceeded by devotion to family and clan, and this seems by no means to prejudice their love of country at large; for the "*Nung du Poosh tauneh*," or, honour of the Affghan name, which is one of the feelings warmest in their breasts, appears to be equalled by local attachments, so strong in all mountaineers. A native of the wild valley of Speiga, who for some offence had been forced to wander abroad, declared, on his return, that he had "seen all Persia, India, Georgia, Tartary, and Beloochistan, but in all my travels I have seen no such place as Speiga." "To sum up their character in a few words," says Mr. Elphinstone, "their vices are, revenge, envy, avarice, rapacity, and obstinacy; on the other hand, they are fond of liberty, faithful to their friends, kind to their dependants, hospitable, brave, hardy, frugal, laborious, and prudent; and they are less disposed than the nations in their neighbourhood to falsehood, intrigue, and deceit."

Customs, Manners.—The former of these heads comprehends the internal government of the tribes. This is patriarchal. Tribes are subdivided into branches, which are termed *ooloos*, and each of these are commonwealths, which have their chief or *speen-zherah* (literally white beard), or *mullik* (master), if small; or if large, a khan, who is always chosen from the oldest family, and is sometimes selected by the king, sometimes by the people. These carry on the internal government, in conjunction with certain assemblies of heads of divisions, which are called Jeerga, and which determine all matters of consequence. In civil actions the statutes of Mahomet are generally adhered to; but criminal justice is administered according to *Pooshtunwullee*, or Affghan usage, a system sufficiently rude, and founded on the law of retaliation. This, however, as tending to perpetuate feuds and quarrels, is modified by judicial *jeergas* composed of khans, elders, and moollahs, who inflict suitable penalties on offenders; and in fact this whole system is subject to various and considerable modifications. A family forced or induced to quit its ooloos may be received into another; and once received, it is treated with peculiar attention, and placed in all respects on an equality with the original members of the community. Every ooloos, moreover, has many persons called *Humsayahs* (or companions), who are not Affghans, and who are regarded with consideration, but not permitted to share in the administration of affairs. Of such *kheils oolooses* and tribes the nation is composed; and when placed under one sovereign, has seldom yielded him a full or implicit obedience. Mr. Elphinstone has compared it to that yielded by Scotland of old to its kings, who ruled pretty absolutely over the principal towns and country in their vicinity, but whose authority diminished as it extended to the extremities of the kingdom; whose court nobles were inordinately proud, and whose more distant chiefs were nearly independent.

Women, Marriage.—Their customs with regard to their females are nearly those of most Mohammedan countries; those in towns are jealously secluded, those in the country have greater liberty. They purchase their wives, who therefore are regarded as property. The husband can divorce at pleasure; a man marries the widow of a deceased brother *, and it is a mortal affront for any other man to take her without his consent; but she is not forced to marry at all. The age for marriage is twenty among men, sixteen for women. In towns, courtships resemble those in Persia, &c. In the country, matches are made more according to the liking of the parties. If a lover can cut off a lock of his mistress's hair, or snatch away her veil, and in doing so proclaim her his affianced wife, no other will approach her with these views, and he generally obtains the consent of her parents on payment of her price; if not, they elope; and this offence, which ranks not less gravely than a murder, is settled by intervention of parties. Among some tribes the bridegroom earns his wife by service, as Jacob did Rachel; some permit not the least familiarity before marriage, others an excessive and perilous degree of it. Polygamy is permitted, as in other Mohammedan countries, but less practised; the poor content themselves with one, those of middle rank with two wives, and perhaps as many concubines. The wives of the rich live in luxury and indolence; the poor not only employ themselves in household, but in field labour. In towns they go about, as in Persia, veiled from top to toe; in the country they only veil in the presence of strangers, and that more from decency than obligation. The Affghan women are said to be correct in conduct and deportment; but adultery or incontinence is punished with death to both parties upon the spot, by the injured relative. (See *ante*, p. 17. note.)

Education is conducted much as in the conterminous countries. A village moollah, or schoolmaster, teaches the children of the poor to say their prayers and to read the Korân; the rich keep *lallas*, or private tutors, in their houses; the village schoolmasters are paid in allotments of land and some small fees. Those intended for the learned professions go to towns, and live in colleges instituted for the purpose of instruction.

Literature is at a very low ebb. The Pooshtoo language is an original stock, embracing a good deal of Persian, with some Zend and Sanscreet words: they use, in writing it, the Niskee character of the Persian alphabet; but there are few or no works of much repute in the language.

Religion.—The Affghans are all Mohammedans of the Soonee persuasion, and are superstitious enough, believing in alchemy, astrology, and magic; but are far from being intolerant to others. Hindoos remain unmolested, on paying a slight tax. Christians sustain neither persecution nor reproach; they are called people of the *book*, as deriving their tenets from a written source, which they themselves respect, instead of being pagans, as the Hindoos. Sheahs are detested more than any sect: yet the country is full of Persian sheahs, many of whom held important offices under the crown, and now do so under the several chiefs. Sooffeeism (or free-thinking), though denounced by the moollahs, is common, and gains ground among the higher orders. The priests and moollahs, like those of Persia, are avaricious, hypocritical, and bigoted, as well as arrogant and overbearing, and they

* This looks like a relic of Jewish custom, and tends, pro tanto, to indicate the Israelitish descent they claim.

exert a very absolute and dangerous power over the people. This is strengthened by the occasional exercise of good offices, and by the influence of some rare examples of wisdom and virtue, evinced in repressing bloodshed and violence. But the blind regard of the Affghans for these holy impostors is chiefly attributable to their ignorance and superstition, which lead them almost to adore all dervishes and other ascetics, and to visit their tombs as those of canonised saints.

Personal Appearance, Amusements. — The men of Affghanistan are for the most part robust, generally lean, though bony and muscular. They have elevated noses, high cheek bones, and long faces; their hair is commonly black, sometimes brown, rarely red; they wear long thick beards, but shave the middle of the head: the western tribes are stouter than those to the east; the latter have darker complexions, and more strongly marked features: their demeanour is frank and open, equally free from stateliness and puerility: they are very social, delighting in dinner-parties, smoking after dinner, and sitting in a circle telling stories of kings, viziers, and genii, or singing songs, generally about love, to the sound of instruments like rude guitars, fiddles, and hautboys: they take much snuff, of a high-dried fine-powdered sort, like the Scotch: they are fond of the chase, driving the game into some valley, and killing great quantities; also of coursing hares, foxes, and deer with greyhounds; and they ride down partridges in the open ground, tiring them out till they can knock them down with sticks: they are also fond of horse-racing and fighting cocks, quails, rams, dogs, and even camels. The western Affghans have a dance, called the attum or ghoomboor, in which ten or twenty people move in strange attitudes, shouting and clapping hands in a circle, round a single person, who plays on an instrument in the centre. The national costume appears to consist of a loose pair of trousers of dark cotton stuff; a large shirt like a waggoner's frock, reaching a little below the knees; a low cap, the sides being of black silk or satin, and the top of some sort of brocade; half-boots, lacing up to the calf; and a cloak of soft grey felt, or of well-tanned sheepskin with the wool inside. The women wear a shirt like that of the men, but much longer and of finer materials, coloured or embroidered with silk; their trousers are tighter than those of the men; a small cap of bright-coloured silk, embroidered with gold thread, comes down to the forehead or the ears; and they throw over their head a large sheet of plain or printed cotton, with which they hide their face when a stranger approaches; they divide the hair on the brow, and plait it into two locks which fasten behind; they wear round their head strings of Venetian sequins, and chains of gold or silver, which are hooked up, and end in two large balls hanging down on either side: ear rings, finger rings, and nose pendants are worn. In towns the fashions more approach those of Persia, particularly to the westward.

Of individual Tribes. — What has been said applies to the nation in general; but almost every tribe has its peculiar characteristic, which can be but shortly touched upon. The Berdooranees, who occupy the north-eastern districts, are brave but quarrelsome, active, industrious; but selfish, bigoted, and remarkable for vice and debauchery. Their quarrelsome disposition is thought to have given origin to a sort of federative alliance, offensive and defensive, among tribes and subdivisions called *Goondees*, which were held more binding than ties of blood. From these *Goondees*, however, were excepted the Eussuffzehees, the most powerful and numerous, as well as most haughty, insolent, and turbulent tribe of the Berdooranees, who are said to number 700,000 souls. They now occupy Swaut, Bunere, Punjecora, &c., and are notorious for the anarchy which reigns among their *oolooses*. Though an agricultural people, they do not themselves labour; this is left to their *fakirs*, a species of *villains* or servants, consisting of strangers or individuals of conquered tribes of other nations, reduced to serve these invaders, and protected by them for their services. Their masters, or *khawunds*, can beat or kill them at pleasure, but are bound by custom to protect them; and provided they pay the customary tax, and do their work, they may engage otherwise in trade as they please, and are commonly treated mildly.

The *Toorkolanees*, who are brave, active, industrious, and cheerful, are all subject to one powerful chief, who exercises over them a very powerful authority.

The *Khyberees*, who possess the upper branches of the Rajgul or Speengur mountain, and derive their name from the formidable pass of Khyber, are the most rapacious and treacherous robbers of all Affghanistan: no previous agreement secures the traveller from their assaults; they watch the approach of the caravan, matchlock in hand, and choose their victims with certainty and security. They are a lean muscular race, capital marksmen, and carry swords and short spears in addition to their matchlock; they are altogether more uncouth than most of their countrymen.

The *Khuttuks*, occupying the banks of the Indus, from the Caubul river to the Salt range, are a tall well-favoured people, as remarkable for honesty and orderly conduct as is their country for dreary and rugged barrenness.

The tribes of *Damaun* are said to be more simple and honest, less bigoted and litigious, less vicious and debauched, than the northern tribes. They are a more bony and fairer race than the Berdooranees, and universally wear long hair and beards. They owe the greater order which prevails in their oolooses to an establishment of magistrates, formed some fifty or sixty years ago, which has been eminently efficient.

The *Gundepoors* are a particularly thievish and quarrelsome race, in spite of a commercial turn, which leads many of them to make annual trading journeys to India and Khorasan.

The *Baboors* are a civilised tribe, much employed in merchandise. The *Slooreanees* were shepherds, till robbed of their pasture lands by the *Caukers*, when they betook themselves to agriculture. These agricultural tribe shave all fakirs, or villains, like the Eussuffzehees.

Of the central division, the *Jaujees* and *Toorees*, hereditary enemies, live in the glens and valleys of the Solymaun range. The country of the former is colder, wilder, and higher than that of the latter; the mountain sides are covered with pines. The *Jaudrans*, who dwell in a pleasant district westward of the rich plain of Bunnoo, are remarkable only for their disgusting vices.

The *Sheeranees*, who inhabit the borders of the Tukhtu-e-Solymaun, a wild inaccessible country, are very poor and uncivilised, plunder every one, and are at war with all the world; yet they never break their word, and a single individual of their tribe suffices to secure the safety of a party: they are described as wild and savage in their ap-

pearance, as in their habits and mode of life. The *Zmurrees*, neighbours of the last, resemble them closely, but are less inveterately predatory. The *Vizeerees*, N. W. of the two last-mentioned tribes, live in little societies, among pine-covered mountains, and are equally uncivilised and addicted to plunder; yet the smallest escort ensures safety, and the chiefs, powerful khans, are, it is said, remarkable for their love of peace. The Vizeerees are divided into a fixed and erratic population. The long valley of Zawura, which opens on the plain of Tull and Chooteeallee, is inhabited by the white and black (*speen* and *tor*) *Zereens*, great carriers of merchandise between Upper Sinde and Candahar.

The two most noble and important tribes, however, are the *Dooranees* and Ghiljees. Their territory consists chiefly of high bleak downs, interspersed with hills, in some parts desert, in others sparsely cultivated, in all open, bare, and fit chiefly for pasture. They are therefore chiefly a pastoral people, with patriarchal habits, and live for the most part in tents of black wool. These (*kizhdees*) are from 20 to 25 feet long by 10 or 12 broad, and 8 or 9 high, supported by a row of three poles, and closed all round with a curtain. In winter they are lined with felt, and are warm and comfortable. The country of the Dooranees is 400 miles long by 130 broad, extending from the Paropamesan mountains to the Khojeh Amrân range. They were formerly called Abdallees, till the late Ahmed Shah, their chief and sovereign, changed the name, in consequence of the dream of a famous saint, he taking that of Shah Dooree Doorân. They may amount to 800,000 souls; the Suddoozehee, from whence sprung the king, is a subdivision of the Populzehee. The king is their hereditary chief, and military commander of the whole: he claims a horseman's service for every plough of land; and the officers commanding them are the civil magistrates of their respective districts, besides being employed in offices of state at court, when there was a court. The internal government of the clans is better maintained than among other tribes, and the progress of improvement and civilisation among the agricultural Dooranees has been correspondingly great. They are generally handsome stout men, with good complexions and fine beards. They are brave and hospitable; and though not quite strangers to rapacity, still may be esteemed the worthiest of their race.

The *Ghiljees* occupy the upper valley of the Turnuk, and great part of the Caubul valley, to the Berdooranee country; a tract which contains some of the principal cities, with some fine districts of land, but the climate of which is cold. The Ghiljees were formerly the leading tribe of Affghanistan. It was a branch of them that conquered Persia and broke down the power of the Seffavean kings; and they are still a high-minded, brave, and numerous people.

The *Hotekee* and *Tokhee* are the noblest of their clans, having produced — the first, kings; and the second, their viziers; and they are a hospitable and good people, ranking deservedly as the second of the Affghan tribes: they amount to about 100,000 families, and resemble much the Dooranees in appearance, customs, manners, and dress, though hating them, as their successful rivals, with an unquenchable hatred. They are perhaps the fairest and handsomest of all the Affghans.

There is yet another class, which, though not strictly Affghan, still, as amalgamated with that people, ought to be mentioned — the *Tâjuks*.* The word is used in opposition to that of *Toork*, the peaceable to the warlike; and it was applied to the subdued Persians by their Tartar masters. In Affghanistan they are supposed to be descendants of Arabs displaced by their conquerors, who now live scattered over the land which they might once have cultivated as their own. As tenants or servants, they are mild, sober, peaceable, and industrious, and live on good terms with the Affghans, who, though they regard them as inferiors, do not treat them with contempt. They are most numerous in and around the great cities, and are all zealous soonnies. Mr. Elphinstone calculates the Taujuks as numbering 1,500,000 throughout the whole country.

Invasion of Affgharistan by the English in 1839. — Affghanistan has been for a considerable time past split into three or more chiefships And an attempt unwarily made by us, in 1839, to dethrone Dost Mahomed Khan, the chief of Caubul, on account of treachery and bad faith, led to some of the severest reverses we have met with in the East. The Bolan Pass, a long and narrow defile, leading through the mountains on the S. frontier of Affghanistan, having been passed with difficulty, the British forces advanced to Candahar and Ghuznee. The latter was taken by storm on the 22d July, 1839. The army soon after entered Caubul; and the chief Shah Shoojah was established on the *musnud*, Dost Mahomed Khan having retreated with a few followers beyond the Oxus.

A force of about 8,000 men, partly Europeans and partly Sepoys, exclusive of native troops, having been left in the country (mostly at Caubul) to support and consolidate the newly established order of things, the rest of the British army returned to India. But no sooner had they withdrawn than plots and conspiracies began to be formed against the English garrison. From some unexplained fatality, the latter did not become fully alive to their danger till the envoys, Sir Alexander Burnes and Sir William Macnaghten, had been assassinated, when it was too late to adopt the precautions necessary to ensure their safety. Being unable to maintain themselves in Caubul, the troops, amounting to about 5,000 men, exc. of an infinitely greater number of camp-followers, women, and children, commenced their retreat from it in January, 1842. The defiles through which they had to pass being of the most impracticable description, the cold extreme, and the attacks of the Affghans incessant, the retreat was most disastrous, and resulted in the all but total destruction of those engaged in it.

The receipt of this melancholy intelligence produced a great sensation in India and England. Government immediately resolved to march a fresh army into Affghanistan to inflict a signal and well-merited punishment on its treacherous people and chiefs. This was effected in 1842. Having entered Caubul the British troops destroyed its fortifications; the prisoners and detachments that were left in the country were relieved; and our ascendancy and the *prestige* that had so long been attached to our arms were again triumphantly restored. But having wisely renounced all idea of maintaining a permanent footing in the country, we finally quitted it in December, 1842. The revolutions of which it

* In Persia the inhabitants of great part of the northern provinces bordering on the Caspian Sea are *Tâjuks*, or *Tats*. They are held to be the aboriginal people of the country, and speak a peculiar language, supposed a mixed dialect of ancient Persian.

has since been the theatre are but little known; and are too unimportant to deserve being noticed in a work of this description. —(Principally founded on a communication from J. B. Fraser, Esq.)

AFIUM-KARA-HISSAR (or *Black Castle of Opium*), a city of Asiatic Turkey, in Anatolia, cap. Sanjiack, 188 m. E. Smyrna, lat. 38° 45′ N., long. 30° 56′ E. It is situated on the declivity of a mountain range, and is defended by a citadel, built on a high and almost inaccessible rock. Pop. estimated by Kinneir at 12,000 families, or from 50,000 to 60,000 individuals. It is pretty well built; but the streets are exceedingly narrow, and in many parts very steep. Some of them are washed by streams that descend from the adjacent mountains. It has numerous mosques, two Armenian chapels, six khans, and five public baths; an extensive manufactory of black felts, fire-arms, short sabres or *yatagans*, with stirrups, bridles, &c. But it is principally celebrated for the great quantity of opium grown in its vicinity; from which, indeed, it derives its modern name. It is said by D'Anville to be the *Apamea* of the Greeks and Romans; but the latter was situated a good deal further W. According to the Turkish annals, it was founded by Aladdin, one of the Seljuckian sultans. It was the patrimony of Othman, the founder of the Turkish empire, of which it has ever since formed a part.—(*Kinneir's Journey*, p. 229.; *Olivier*, vi. p. 400.)

AFRAGOLA, a town of Naples, prov. Terra di Lavoro, 5 m. N. N. E. Naples, in a plain. Pop. 3,000. It has manufactures of straw hats; and a great annual fair, which commences on the second Sunday of May.

AFRICA. A vast peninsula, one of the great divisions of the globe, situated to the S. of Europe, and to the W. and S. W. of Asia. It is separated from the former by the Mediterranean Sea and the Strait of Gibraltar; the two continents approaching at the latter within about 10 m. of each other. It is separated from Asia by the Red Sea, at whose southern extremity, the strait of Bab-el-mandeb, the shores of the two continents are only 16 m. apart. But at the most northerly extremity of the Red Sea, Asia and Africa are united by the isthmus of Suez; the Mediterranean being there about 72 m. from the Red Sea.

The most southerly point of Africa, Cape das Agulhas (Cape Needles), is in lat. 34° 52′ S.; and the most northerly, Cape Blanco, opposite Sicily, in lat. 37° 21′ N. Cape Gardafui, the most easterly point, is in long. 51° 30′ E., and lat. 11° 50′ N.; and Cape Verde, the extreme western point, is in long. 17° 33′ W., and 14° 43′ N. lat. The distance between the most southerly and most northerly points is consequently about 5000 m., and between the extreme eastern and western points not much less. The area probably falls little short, if it do not exceed, 12,000,000 sq. m.

I. Africa is distinguished from the other continents by its coasts extending mostly in continuous, unbroken lines, having but few indentations of the sea, and no extensive peninsulas; so that it forms a more compact and undivided mass of land. The uniformity of its outline seems to be in accordance with the uniformity of its interior. The surface of the latter does not present that endless succession of changes which are met with in Europe and southern Asia, and which are found in both Americas, but on a greater scale and at greater distances. It resembles rather the northern parts of Asia, exhibiting elevated table-lands and low plains, both of immense extent and of remarkable uniformity. The whole of Africa south of the equator, and north of it up to 10° lat., seems to constitute an extensive table-land, fringed in most parts by a comparatively narrow stripe of low land along the sea. North of this table-land, between 10° and 30° N. lat., extends an immense but low plain, the greater part of which is occupied by the Great Desert, or Desert of Sahara. A comparatively narrow tract of mountainous country, including Atlas and its dependencies, separates the desert from the Mediterranean. On the E. the desert does not reach the Red Sea; being separated from it by the mountains of Abyssinia and the rocky countries extending from them northward along the Red Sea to the shores of the Mediterranean.

1. *The elevated table-land* in South Africa is less known than any other portion of the continent, the nature of its surface rendering it extremely difficult to penetrate from the sea-coast into the interior. We are only well acquainted with the southern extremity, which forms the Cape Colony. Here Africa presents to the Indian Ocean a broad line of coast, running east and west nearly along the 34th parallel from 18° to 26° E. long., or from the Cape of Good Hope to Algoa Bay. Along this coast extends an undulating country, intersected with a few elevations deserving the name of hills. Its width varies between 10 and 50 miles. North of this the table-land rises in terraces. The first terrace, called the Long Kloof, is enclosed by the double ridge of the Zwarte Berge, or Black Mountains, of which the northern, or the Groote (Great) Zwarte Berge, rises to about 4,000 f. above the sea. North of this range is the second terrace, called the Great Karroo, which is about 100 miles across and 3,000 feet elevated above the sea. It is bounded on the N. by the Nieunveld Bergen, a chain of which some summits are considered to rise to 9,000 or 10,000 feet. On its northern side the table-land seems to have attained its mean elevation, which probably is not less than from 4,000 to 5,000 feet.

At both the eastern and western extremities the two above-mentioned ranges run N. W. and N. E. parallel to the sea-shore, at a distance of from 30 to 200 miles; the intermediate space being likewise occupied by two or more terraces. The ranges along the W. shores do not extend farther than about 29° S. lat., where they terminate in isolated hills and with a high bank on the Gareep or Orange River. N. of this river the coast, when seen from the sea, presents only high sand-hills without any traces of water, and is, consequently, entirely destitute of vegetation. It extends as far as Cape Negro (18° S. lat.). The interior east of the western ranges and of this coast is an elevated sandy desert, with few wells and little rain. Only that portion lying S. of Gareep river has been visited, the remainder, and by far the greater portion, is less known than the Sahara itself. This desert country, which presents a level without hills or mountains, extends over half the breadth of the continent as far as 24° E. long.

The eastern half of the table-land from the Cape Colony to 16° S. lat. offers a different aspect. A great number of mountain-ridges, of moderate elevation, traverse it in different directions; and at the foot of these ridges the country is well watered and fertile; though here, too, extensive sterile tracts occur, but they are not continuous. We are, however, only acquainted with the southern part, up to 26° S. lat. Farther north, about 20°, a high mountain range is said to exist, called the Lupata Mountains, but this is doubtful. The descent from the table-land to the Indian Ocean is also formed by two or three terraces, the highest edge of it being about 90 or 100 miles distant from the shore. This edge, formed by a mountain ridge, prevents the rivers of the table-land from escaping to the Indian Ocean; so that they either run westward, and fall partly into the Gareep river, or are partly lost in the sands of the desert.

North of the Zambese river (about 18° S. lat.), which appears to have the greatest part of its course on the table-land, the interior of its eastern parts is entirely unknown. A lake, called Moravi, is reported to extend over many degrees of lat., but its existence is doubtful. The eastern descent of the table-land resembles that farther south, being formed by terraces. This, however, extends only to the equator, or the mouth of the river Juba; for farther north, up to Cape Gardafui, the coast itself is formed by high rocks, rising to 400 feet and upward, and no mountain ranges are visible from the sea. A few rivers, apparently of considerable size, break through the rocks along the coast.

It would seem that on the western side of the continent, between 18° and 40° S. lat., there is a considerable depression in the table-land. This country, which is known under the name of Lower Guinea, has low shores, behind which at a considerable distance the surface seems to rise, but not to a great height. Then follows an uneven plain, watered in its lower parts by numerous rivers, among which the Zaire or Congo and the Cuanza are the largest; but towards the sources of these rivers the country is mountainous, and it is even reported that some of the mountains are always covered with snow. In the plain numerous lakes of considerable extent are met with.

North of the river Zaire, at about 4° S. lat., the country again rises at no great distance from the sea to a great height. This high ground is called Serra Complide. Its W. declivity extends N. W., by degrees approaching nearer the Atlantic, till it reaches the innermost corner of the Bay of Biafra, where it comes close down to the sea, and forms for more than 30 miles the shore, rising, under the name of Cameroon Mountains, to 13,000 feet above the water. These great mountain masses seem to form the W. extremity of an extensive range, which at about 5° of N. lat. seems to traverse the whole continent, and of whose central parts we get some information from the Arabian geographers, by whom it is called

Djebel-el-Kumri, or the Moon Mountains. This range, which seems to constitute the higher edge of the table-land to the north, appears to stretch eastward towards the Strait of Bab-el-mandeb, until it unites to the mountain system of the Abyssinian Alps. North of this range, as far as about 10° N. lat., a mountainous country extends between 10° and 25° E. long., which may be considered as the terraces by which the table-land descends gradually to the low plain, which extends farther north.

The extensive mountain region which has obtained among us the name of Kong may be considered as a continuation of the high table-land of southern Africa, being separated from its northern terraces only by the narrow valley of the Quorra, between 7° and 8° N. lat., and farther south from the Cameroon Mountains by the extensive delta of that river. East of the meridian of Greenwich it approaches by degrees nearer the sea, whilst its northern edge draws off in a N. W. direction, until between 4° and 5° W. long. it approaches 15° N. lat., so that between 5° and 12° W. long. it extends over ten degrees of lat. It terminates rather abruptly near 12° W. long., but its rocky masses come down close to the shore between Cape Palmas and Cape Sierra Leone. This mountain region, in which a great number of fertile valleys and plains are embosomed, is of very moderate height in its eastern and more narrow portion, rising hardly to more than 3000 feet; but farther west it is higher, and between 5° and 8° W. long. it is reported to be crowned by several peaks which pass the snow line. But only a very small portion of it has been visited by Europeans. In its western districts are the sources of the Quorra.

2. *The Great Plain*, which, on the south, is bounded by the high table-land of southern Africa and the Kong Mountains, and hence stretches northward to Mount Atlas and the ridges depending on it, contains two different countries — a fertile and a sterile. The former called Soodan, and the latter Sahara.

Soodan, under which name the lower terraces of the table-land seem also to be comprised, extends from the E. descent of the Kong Mountains to the banks of the Bahr-el-Abiad (the W. branch of the Nile), occupying, inclusive of the lower terraces of the high table-land, the country lying between 5° and 15° N. lat. Its lower districts, which lie contiguous to the Sahara, are, according to a vague estimation, from 1000 to 1200 feet above the sea, but the terraces of the table-land rise to 3000 feet and upward. In many parts it is well watered by rivers, which descend from the table-land or originate in the low ridges by which the country is intersected; such districts are covered with immense forests, and are very fertile where cultivated. In other parts water is rather scarce, and some of them partake largely of the nature of the Sahara. Its climate is extremely hot, nevertheless it sometimes happens that during night the thermometer descends to the freezing point.

The Sahara, or sea of sand, covers perhaps nine tenths of the whole plain. For on the west of the meridian of Greenwich, it extends from the foot of the Kong Mountains (15° N. lat.) to that of Mount Atlas (about 30°), occupying the whole width of the plain, which is here 1000 miles across. Farther east, where it is bounded on the south by Soodan, it is some what less wide, which is produced by some mountain ranges connected with the Atlas, extending in an E. S. E. direction. But its breadth is nowhere less than 750 m. It is divided into two parts by a tract of stony country, by which it is traversed from N. to S., between 13° and 15° E. long., and which in parts offers some cultivable land, while in others the stony surface is covered with sand. By following this stony tract Messrs. Denham and Clapperton, who set out from Tripoli, succeeded in reaching Soodan. That portion of the desert which extends between this tract and the Atlantic Ocean is called *Sahal*, and is almost entirely covered with a fine sand, which being agitated by strong easterly winds, appears like the surface of the sea, and often rises in the air in the form of sands pouts. Low hills and wells occur in a few places; and water, in many parts, is only found at a depth of more than 100 feet. In that division of the desert which extends between the above-mentioned stony tract on the one side and Egypt and Nubia on the other, the surface is covered rather with gravel than with sand, and in many places with a hard clay; elevations, and even ridges of low hills are here much more frequent, and consequently also wells. All the western part of the Sahara would, owing to its burning heat and the want of water, be totally impassable, were it not that it is here and there interspersed with verdant well-watered spots or oases, which appear like islands of the blest in the midst of desolation. The ancients compared them to the spots on a leopard's skin. (*Strabo*, p. 130.) These oases are mostly of very limited dimensions; but some of them, particularly those on the east side of the great desert, are very extensive: the country of Fezzan, for example, is in fact an oasis. They are usually surrounded by higher land, which serves to account for the springs, and consequently the verdure, for which they are so celebrated. But there seems to be much probability in the shrewd conjecture of Major Rennell, that the oases are indebted for no inconsiderable portion of their reputed beauty and delicious freshness to the striking contrast between them and the parched desert by which they are surrounded. — (*Geography of Herodotus*, 8vo. ed. ii. p. 185.) Those only who have toiled for days amid a pathless burning sand, can form a proper idea of the delight experienced in falling in with one of

——— the tufted isles,
That verdant rise amid the Libyan wild.

In England or France they might be thought nothing of; but in the Sahara they seem more than a paradise. The famous temple of Jupiter Ammon was erected in the oasis of Siwah, in the N. E. angle of the great desert, in lat. 21° 12′ N., long. 26° 18′ E.

3. *The Abyssinian Mountains*, which are little known to us, except in their north-eastern and northern declivities, where they approach the strait of Bab-el-mandeb and the shores of the Red Sea, and terminate at about 12° N. lat., seem to constitute an extensive mountain system, whose centre is placed between 8° and 9° N. lat. in the countries called Narea and Effat. In this part it seems to approach the snow-line, but not to rise above it. It is less elevated at the source of the Barh-el-Azrek or Blue River, one of the upper branches of the Nile, where it rises, according to Bruce, at from 9,000 to 10,000 feet above the sea. We do not know whether or in what manner the Abyssinian Mountains are connected with the Gebel-el-Komri, or whether they are separated from the high table-land, or constitute its N. E. boundary, which seems to be the more probable hypothesis. The valleys of this mountain system are fertile and well peopled.

From the northern declivity of the Abyssinian Mountains extends along the shores of the Red Sea as far as the isthmus of Suez a rocky country, which, between 12° and 20° N. lat., occupies in width an extent of between 300 and 400 m., but farther north by degrees grows narrower. Between 23° and 30° N. lat. it is only from 150 to 200 miles across. Near its western border it has a deep, but comparatively narrow depression, in which the river Nile flows N. from the Abyssinian Mountains to the Mediterranean. This long valley is mostly very fertile. The small portion of the rocky country which lies to the west of this valley, and which forms the eastern boundary of the Sahara, does not rise to a great height, rarely to more than about 1000 f. above the valley. But the countries east of the valley of the Nile and between it and the Red Sea are more elevated. They form a table-land, mostly of an uneven surface, which however in many places exhibits extensive plains, whilst in others it rises into ranges of high hills. Many of the plains are covered with sand, and resemble the eastern portion of the Sahara; other districts afford pasture ground, but very few places are fit for agriculture and cultivated.

This rocky country terminates on the banks of the Nile in the parallel of Kahira (Cairo), from the neighbourhood of which its northern boundary runs off in an E. N. E. and W. N. W. direction. The former constitutes the isthmus of Suez, and reaches to the Mediterranean between the Lake of Menzaleh and Ras Kasaroon in Syria; farther east it joins the mountains of Arabia Petræa. This rocky country lies to the E. of the delta of the Nile. On the W. of the delta the rocks run from Kahira W. N. W. to the Arabs' Gulph, where they approach the Mediterranean near the Arabs' Tower (31° N. lat. and 29° 30′ E. long.). From this line the rocky country extends westward with a width of about 70 m. at the outset, which, however, increases as it advances farther W., so as to occupy between 200 and 300 miles at 20° E. long., where it suddenly terminates. In the neighbourhood of the Egyptian delta, the rocks are hardly a hundred feet above the plain, but farther W. they rise into high hills and mountain-ridges (Gerdobah Mountains), and terminate with the high table-land of Barca, whose mean elevation above the sea is estimated to be about 1500 feet. Where the table-land of the Barca terminates with a rather abrupt descent (near 20°), a narrow strip of the Sahara comes up to the very shores of the Mediterranean, at the most southerly corner of the Gulf of Sydra or Kibbir (the Great Syrtis,) where it terminates on the beach with sand-hills. This strip of the Sahara separates the rocky region of the Nile from the mountain system of the Atlas.

4. *Mount Atlas and its dependencies*, by far the most celebrated of the African chains, occupy that portion of the continent most to the north and nearest to Western Europe. It seems to begin on the E. near the eastern boundary of the country of Fezzan, whence two ridges of moderate elevation run W. N. W., and in the beginning are called Karush. Farther E., however, they receive

other names. This mountainous country, which traverses the N. of Fezzan and the S. of Tripoli, is nowhere probably more than 120 miles in width; but the ridges of low hills which issue from it advance to the very shores of the Mediterranean, between Cape Mesurata and the Gulf of Cabes (the Lesser Syrtis), so that the whole region may be from 180 to 200 m. across. At the Gulf of Cabes, however, the region of Mount Atlas enlarges considerably towards the N., and thence to its western extremity on the shores of the Atlantic Ocean its mean breadth exceeds 350 miles. The highest ridge seems to traverse the region in an oblique line, beginning on the east opposite Sicily, at Capes Bon and Blanco, and terminating on the shores of the Atlantic at Capes Geer and Non. The mountains which occur in that line do not appear to rise above the line of congelation, or at least only in a few insulated points. The country which extends N. of it to the shores of the Mediterranean is mountainous, and contains a number of fertile longitudinal valleys. Farther W. (about 5° W. long.), however, where its northern slope is diverted W. to the Atlantic Ocean, it extends in large plains, which follow each other in the form of terraces. The tracts of country which lie to the S. of the highest ground cannot be called mountainous, their surface being formed by wide, broad-backed ridges, of very moderate elevation, and by slight depressions between them in the form of shallow valleys. These latter tracts partake of the hot and dry character which distinguishes everywhere the African continent; whilst the district situated towards the Mediterranean and the Atlantic Ocean resembles more the countries of southern Europe. (See ATLAS.)

5. *Climate.* — By far the greater part of Africa lies within the torrid zone, those countries only which are situated towards its southern and northern extremities being beyond the tropics, or within the temperate zones. Owing to the vast extent of its arid plains, and the general want, in so far as we are able to discover, of the tempering influence of extensive inland lakes or seas, the temperature of Africa is decidedly higher than that of any other of the great divisions of the globe. The parts without the tropics are destitute of that regular succession of four seasons which is considered as a characteristic feature of the temperate zone. Here, as between the tropics, the year is divided into the dry and rainy seasons; but with this difference, that between the tropics the rainy season sets in when the sun approaches the zenith, whereas it occurs in the countries beyond the tropics when the sun approaches the opposite tropic, and consequently is at the greatest distance from their zenith. The rainless zone, or the space intervening between the countries which have the rainy season in summer and those which have it in winter, occupies in Africa a much wider extent of surface than in the other divisions of the globe. In the northern hemisphere, the tropical rains cease on the southern borders of the Sahara at about 16° N. lat., and the winter rains begin at its northern border about 28°; so that the rainless region here occupies twelve degrees of lat. In the stony country E. of the Sahara, the tropical rains cease between 18° and 19° N. lat., and the winter rains between 27° and 38°; here therefore the rainless season occupies nine degrees of lat. We are less acquainted with the climate of the countries lying contiguous to the southern tropic; but it is certain that on the western side of Africa, between 29° and 20° S. lat., a great sandy desert extends over the greatest portion of the table-land, in which there falls very little if any rain. The eastern declivity of the table-land, which is exposed to the immediate influence of the north-east monsoon, has a regular succession of dry and rainy seasons.

The great extent of the rainless regions seems to be one of the principal causes of the high temperature of this continent. Nearly all the countries of Africa are hotter than those of Asia and America situated under the same parallels. The highest degree of heat is experienced in the Sahara and the countries bordering the great desert. It is, however, worthy of remark that in Soodan, in about 10° N. lat., and at no great distance from the Sahara, the temperature sometimes descends at night to the freezing point.

6. *Rivers.* — Though Africa, being mostly situated between the tropics, has the full advantage of the abundant tropical rains, it is less favoured with running waters than the other divisions of the globe. This is partly ascribable to the great extent of the rainless regions, and partly to the elevation of the table-land occupying the southern half of the continent. The countries which are well watered are not numerous, and occupy but a small portion of the whole surface. Such are the northern declivity of Mount Atlas, the countries embosomed within and lying contiguous to the Kong Mountains, Soodan, the valleys of the Abyssinian Mountains, the western coast between 4° and 18° S. lat., and the comparatively narrow strip of country lying along the east coast from the Cape of Good Hope to the equator; to which are to be added the deltas of the Nile and the Quorra.

The largest river is the Nile, which probably has a course of not less than 2500 m.; but as the source of its remotest branch, the Bahr-el-Abiad (the White River), is still unknown, its length cannot be determined with any degree of precision. It is equally impossible to determine the length of the Quorra or Joliba, the Niger of the ancients. For though its middle portion was ascertained by Mungo Park, and its lower by Clapperton and the Landers, its upper portion, which seems to traverse the high table-land enclosed by the Kong Mountains, has not been visited. Its whole length does not probably exceed 2000 m. The course both of the Senegal and Gambia are known; the former running about 1000 and the latter 700 m. The rivers traversing the high table-land of Southern Africa are only known at their mouths and a short distance inwards. These are the Congo or Zaire, and the Coanza, which fall into the Atlantic Ocean; and the Zambese, which falls into the channel of Mozambique. The river Gareep or Orange, which flows a short distance to the N. of the Cape Colony, is pretty well known in its whole course, and may run about 900 miles.

7. *Lakes.* — These are neither numerous, nor generally of great extent. In the older maps a large lake is laid down to the W. N. W. of Mozambique, called Moravi or Zambre; but its existence is problematical. The largest lake by far of which we have any certain account is that of Tchad, made known and partly explored by Messrs. Denham and Clapperton. It is situated almost in the centre of the continent, in Soodan, to the S. of the great desert, near the 15th degree of N. lat., and under the 15th degree of E. long. The lake Debo, or Dibbie, in the same lat., and under the 5th degree of W. long., traversed by the Niger or Joliba, though considerable, is of very inferior dimensions. Some lakes are met with in the ranges of Mount Atlas, especially towards the Gulf of Cabes, among which that of Lowdejah is the most extensive. The greater number of lakes seem to occur within the depression of the table-land of southern Africa, between 4° and 18° S. lat.; but our information on this as on most other points connected with the geography of Africa is in the last degree vague and unsatisfactory. The lake of Dembea, in Abyssinia, traversed by the Bahr-el-Azrek, or Eastern Nile, is also of very considerable magnitude.

8. *Minerals.* — The mineral riches of Africa are very imperfectly known; but the probability seems to be that in this respect it is but little if at all inferior to any of the other great divisions of the globe. Gold dust, principally obtained from the sands in the upper parts of the rivers, forms a principal article of import from Africa; and iron, the most useful of all the metals, is known to be very generally diffused. Salt is wanting in Soodan and some other very extensive districts; but on the other hand it is found in immense quantities both to the S. and N. of this central district.

II. *Races of People.* — Although we are accustomed to consider the inhabitants of Africa as being generally of the Negro race, the actual number of varieties of the human family occupying this portion of the globe is not only much greater than those found in Europe, but the differences in colour, form, and stature are much wider. There are about *seven* ascertainable varieties, which may be enumerated as follows, beginning with the southern extremity of the continent; viz., the Hottentot, Kaffer, Abyssinian, Egyptian, Numidian, Nubian, and Negro. We shall give a brief description of each race in this order. In the *Hottentot* the colour of the skin is a yellowish brown, and has been compared to that of a "faded leaf." The cheek bones are high, and much spread out in the lateral direction; and from these the face is suddenly contracted below to a very narrow and pointed chin. Nose remarkably flat and broad towards end. Colour of the eyes a deep chesnut; they are long, narrow, and removed to a great distance from each other. The hair of the head is of a singular nature; it does not cover the whole scalp, but grows in small tufts at certain distances from each other. When kept short, it has the appearance and feel of a hard shoe-brush; with this difference, that it is curled, and twisted into small round lumps about the size of a marrowfat pea. When suffered to grow, it hangs on

the neck in hard twisted tassels like fringe. There is little beard; and the hair on other parts of the body is either scanty or altogether wanting. The stature of the Hottentot is very short, about four feet six inches being considered about the middle size for the men, and four feet for the women, which is about fourteen inches short of the average stature of Europeans. Their form is slender, delicate, and not ill proportioned; but altogether they may be pronounced a very ugly race. The sex is distinguished from all others of the human race by a pendulous rugose elongation of the *nymphæ* of from two to five inches long, and by a vast accumulation of fat over the *glutei* muscles, which invariably takes place after the first conception. Both these appearances are well ascertained to be natural, and in no way the result of art. The language of the Hottentots is as singular as their persons. Its pronunciation has been compared to the clucking of a turkey. There are numerous guttural sounds produced deep in the throat, and pronounced with a peculiar clack of the tongue, which is quickly struck against and withdrawn from the teeth or palate. The aspirated gutturals are combined with harsh consonants in a manner unpronounceable by Europeans, except those who have acquired the language in infancy. No portion of this race, unconnected with Europeans, has advanced beyond the rudest stage of the pastoral state of society. When discovered, they had domesticated the ox and the sheep, the flesh and milk of which afforded them food, and their skins, with those of wild animals, clothing; they knew nothing of tillage, had no fixed dwellings, and practised no mechanical art except that of fabricating the bow and arrow. The ancient country of the Hottentot variety may generally be described as that which now constitutes the British colony of the Cape of Good Hope.

The immediate neighbours of the Hottentots, and lying N. and N. E. of them, are the *Kaffers* — a very different race. The colour of the Kaffer is neither black, like that of the Negro, nor of the colour of a faded leaf, like that of the Hottentot, but of a deep brown. Hair short, curling, and woolly; but it is not of the wooliness of the Negro. Nose tolerably elevated; lips large and thick; but the lower maxillary bone does not project in the remarkable manner of the Negro, and consequently the fascial angle is much greater. The body, instead of being, as in the Hottentot, diminutive and feeble, is muscular and athletic, and the stature is equal to that of the European race. The peculiarities of the female form in their southern neighbours have no existence among them, and the genius of their language is distinct and peculiar. In the useful arts they have made considerable progress. Besides domesticating the ox and sheep, they have also tamed the horse and goat; and their agriculture extends to the cultivation of barley and millet. It is a singular and distinctive trait that they practise universally the rite of circumcision. Of the origin of the practice they can give no account; and it has most probably been derived from intercourse, at some remote period, with some people by whom it was practised.

The *Abyssinian* race is entirely different from those previously mentioned. Their colour is nearly black; but the hair is long, and generally lank, like that of an Arab or Hindoo. Features regular, after the European model, and the nose often aquiline. The stature equals that of the European; and the whole person is generally well formed, and occasionally handsome. The nations comprehended under this race have made considerable progress in the useful arts. They have domesticated most of the useful animals, as the ox, sheep, horse, ass, and camel; and cultivate most of the common corns, as wheat, barley, and millit. They also work, with some skill, articles of iron, copper, and brass; and except the ancient Egyptians, and probably the Numidians, are the only native race of the entire continent who have invented an alphabet or possessed a literature.

The *Egyptian* race is represented by the Copts of Egypt. These have long hair, a yellowish dusky complexion, neither Grecian nor Arabian, a puffed visage, swollen eyes, flat noses, and thick lips; and in short, according to Volney, much resemble Mulattos, or the mixed offspring of the European and Negro. It is almost unnecessary to add, that this was one of the earliest civilized races of mankind; and that at least thirty ages ago it had already tamed the useful animals, cultivated the most valuable plants, smelted the useful and precious metals, and erected architectural monuments which for their durability, extent, and grandeur, still astonish the world. They were also among the first to invent hieroglyphic and alphabetic writing.

The next race to be named is the *Numidian*. The people, not yet mentioned, who inhabit the northern portion of Africa from about the 18° of N. latitude to the Mediterranean, and known by the various names of Moors, Berbers, Tuanghis, and Tibbans, are, in some cases with an admixture of Arab blood, probably the aboriginal inhabitants of the country before the settlement of the Phœnicians, Romans, Vandals, or Arabs; — that is, they are the descendants of the Lybians, Numidians, Mauritanians, &c. With this race the hair is long and black; eyes dark; the colour of the skin a light brown, little deeper than that of the inhabitants of Spain; the features are European, but the nose generally not very prominent, and never aquiline, as is often the case with the Arabian. Although apparently superior at all times in civilization to any Negro nation, this race appears at no period to have made any remarkable progress in arts or arms, and scarcely any in letters; for it has been ascertained only of late years, rather as a matter of curiosity than any thing else, that they once possessed the art of alphabetic writing. Their language, indeed, is but the jargon of a rude people, destitute of terms to express the most common distinct ideas, such as *shortness, roundness, sloth, death*, &c. Such ideas are either expressed by circumlocutions, or in more difficult circumstances recourse is had to the Arabic language. Their inferiority is indeed most decidedly implied by the facility with which they have given way before every successive race of conquerors, during a period of at least 2500 years.

The next race to be described may be called the *Nubian*; and, with the exception of the Abyssinians, will comprehend nearly all the people of Africa from about 8° of N. latitude to the southern confines of Egypt, and from the Red Sea and Indian Ocean on the east to about the 25° of E. longitude westward. In this race will be included the people called Barabra or Nuba, the people of Sennar, the Sumuli, the Suaking, the Bishari, the Ababdah, the Galla, and others. A long oval countenance; a curved nose, somewhat rounded towards the top; rather thick lips, but not protruding excessively, like those of the Negro; a retreating chin; scanty beard; lively

dark eyes; strongly frizzled, but never woolly hair; a finely formed person of the middle size, with a bronze complexion—are the physical characteristics of this race. Some of the nations of this race have made considerable progress in the common arts of life, but they have no indigenous literature.

With the exceptions now mentioned, the rest of the African continent may be said to be peopled by the *Negro* race, which commences at the southern boundary of the great desert, and, embracing both the western and eastern coast, with the island of Madagascar, extends to about 20° of S. latitude.

The following are the leading characteristics of this well-known variety of our species:—Skin and eyes black; hair black and woolly; skull compressed laterally, and elongated towards the front; forehead low, narrow, and slanting; cheek bones prominent; jaws narrow and projecting; upper front teeth oblique; chin receding; eyes prominent; nose broad, thick, flat, and confused with the extended jaw; lips, particularly the upper one, very thick; palms of the hand and soles of the feet flat; tibia and fibula convex; pelvis narrow; knees turned in, toes turned out. The stature and physical strength are equal to that of the European, while the latter exceeds that of any other race. Many of the Negro nations have made considerable progress in the necessary and useful arts,—a progress which, it may be safely affirmed, greatly surpasses that made by any native nation of America. They cultivate many useful grains, roots, and fruits; have appropriated the services of the most useful of the domestic animals, such as the ox, horse, ass, camel, goat, sheep, and hog, all of which appear to be indigenous. It is singular, however, that no Negro nation, nor even any native African nation, has ever had the ingenuity to tame and train the elephant, a service to civilization which has been performed by almost every Asiatic nation to whose country this animal is indigenous, and which there is abundant evidence to show was done by the Carthaginian and Roman settlers in Africa.

It is a still more striking fact that no Negro, and indeed no African nation, save the Egyptians, Abyssinians, and partially the Numidians, ever possessed a literature, or had ingenuity to invent any alphabet, however rude.

The general character thus sketched belongs with more or less intensity to the whole Negro race within the limits we have assigned to it; but it is not at the same time to be forgotten that there is much variety—a greater perhaps than exists among the European or any other family. We shall endeavour to describe a few of the most remarkable and best ascertained of these. The *Mandingos* are a numerous people, occupying the mountainous country on the west side of the continent which lies towards the sources of the rivers Senegal and Gambia. They possess the true Negro features, but not in an exaggerated form. The colour is black, with a mixture of yellow; the person strong, symmetrical, and above the middle stature. Of all the Negro races the Mandingos have exhibited the greatest aptitude for improvement. They are industrious, enterprising, and, compared with their neighbours, of an open and generous character. They have adopted the Mohammedan religion, and with it the letters and literature of Arabia. The *Foulahs*, or Paules, inhabit the same portion of Africa. The colour of the skin with this race is a sort of reddish black. Their countenances are regular, and their hair longer and not so woolly as that of the ordinary Negro. They are robust, courageous, industrious and enterprising, and like the Mandingos have adopted the literature and religion of Arabia. Altogether they make a considerable approach to the family which we have before described under the name of the *Nubian*. The *Suhnias* are a squat robust Negro race, not exceeding 5 feet 8 inches high. They are remarkable for their courage and hardihood, and have made considerable progress in the common arts of life, but have not adopted Mohammedanism or the Arabic letters. The *Jolofs* inhabit both the maritime and mountain country on the south banks of the Senegal, and are, in fact, the first Negro nation we encounter on the western side of the continent after quitting the Berbers. Their complexion is a fine transparent deep black. With the exception of thick lips and a nose much rounded at the end, their features make some approach to the European. The hair is crisp and woolly, the stature tall, and the figure good. To the south of the Gambia, and extending to Cape Palmas, we find the race called *Feloups*, of a deep black colour; with longish woolly hair; features so regular as to be thought to bear some resemblance to the Hindoo; and of slight and short stature, but much agility. These are nearly in a savage state. To the south of the Feloups are the *Papals*, a race of very ugly Negroes, of dull, gross, and ferocious aspect, with very flat noses, and of a dirty livid colour. These and some other races resembling them are followed in proceeding southward by the *Bullom*, &c., of a fine black colour, of good features, and well made, with persons above the mean stature. Proceeding southward, and more to the Gold coast and the country lying inland from it, we find the Intor, Fantee, and Ashantee nations, which appear to constitute another distinct variety of the Negro race. It is of the mean stature, and well proportioned. The face is of an oval form; the eyebrows lofty and thick; the lips fresh, red, and not hanging down as in the extreme forms of the Negro; and the nose not so flat. The hair is rather curled than woolly, and occasionally so long as to reach to the shoulders. Now and then are to be seen examples rather Asiatic than African. No nation of this variety has ever possessed the art of writing, either springing up among themselves or borrowed from strangers; and, although they have all made considerable progress in several of the common arts of life, they are in the habitual perpetration of cruel and ferocious rites, not to be paralleled by any other race of mankind. From the Bight of Biafra down to 20° S. latitude, where we encounter the Kaffers, there is comparatively little variation from our general description of the Negro family. In the interior of Africa lying between the Mountains of the Moon, which cross, or are supposed to cross, the entire continent in about 10° of N. latitude, and the great desert, we have, as far as our very imperfect information extends, little variety from the common type of the Negro. This is the country which the Arabs call Soudan; a word which means the country of "black men," and is exactly equivalent to the Persian word Hindostan. On the east coast of Africa, between the *Kaffer* and *Nubian* races, we have nothing but true Negroes. It is, however, to be observed of these, that although the woolly head, black skin, flat nose, thick lips, and projecting jaws are never absent, their excess which is found in general on the western coast does not exist. Under the same denomination, though shorter and feebler, is to

be included the inhabitants of the great island of Madagascar; who, because their language contains probably about 100 or 150 words of Malayan, are absurdly supposed by some writers to be of the Malayan race, which they no more resemble than they do Europeans. The introduction of such terms has in fact been satisfactorily accounted for by the drifting of boats with crews of Malays from the shore of the island of Sumatra, two or three authentic examples of which have occurred within our own times. The fact of such occurrences having taken place is a sufficient answer to the apparent difficulty of open boats with their crews performing a voyage which cannot be less than 3000 nautical miles. The manner in which such events would take place is, we think, obvious enough. A trading or fishing boat with a few cocoa nuts, affording meat and drink to the crews, and known to be a constant sea-stock in such cases, driven from the coast of Sumatra in the height of the N. E. monsoon, would in due course be carried into the S. E. trade wind, and, going with a flowing sheet before the wind (the only course she could pursue), would be carried to the shore of Madagascar in a shorter time and with more safety than might at first be imagined.

Such is a brief and necessarily imperfect account of the races of men inhabiting Africa. The subject is indeed full of difficulty; not only from its extent, variety, and complexity but also from the imperfect information, and indeed in most cases the entire ignorance, which exists regarding it. The number of different nations, and even of distinct languages, is proportional to the barbarism of the people; and there is no quarter of the globe, America excepted, in which the number of both is so great. In our inquiry we have been able to detect at least 200 languages, and indeed the empire of Bornou alone is said to contain no less than thirty.

Amount of Population. — There are no means whatever by which to form any estimate of the population of Africa. Hence the great discrepancy among the guesses that have been made of its amount. According to Balbi it contains 60,000,000, whereas Malte-Brun gives it 70,000,000, and the Weimar Almanac 101,000,000.

III. *Animals of Africa.*—These, at its northern extremity, where it approaches Europe, and at its eastern, where it approaches, or rather joins Asia, are generally the same as those of these two portions of the globe; but throughout its greater part they are not only different from the European and African species, but equally also from the animals of the two portions of America, and from those of the Oceanic continent and islands. We shall confine our observations chiefly to those more immediately subservient to the uses of man.

Of 1270 known species of terrestrial *Mammalia* there have been discovered in Africa, although more imperfectly explored than any other portion of the globe, no fewer than 290, of which 242 are peculiar to this continent. Of the *Quadrumana*, comprehending apes, monkeys, and lemurs, there are 55 species, of which 48 are peculiar to it; not one of them being identical with the species found in Asia or America. The most remarkable of the whole tribe is the *Simia troglodytes*, or chimpansee, which, after a careful anatomical comparison with the *orung utan* of Borneo, is now considered to make in physical formation a nearer approach to man than the latter, while it is unquestionably more lively and intelligent. Of the *Cheiroptera*, or bats, there are 30 species in Africa, 4 of which only are common to it with Europe and Asia. The carnivorous animals of Africa are 66 in number, of which 14 only are found in other parts of the world. The most remarkable of these is the lion, which is known historically to have once existed in the east of Europe and west of Asia. With the exception of an inferior variety found in some parts of northern Hindostan, this animal, so renowned in the fable, poetry, painting, and sculpture of almost every nation of the old world, from China to Spain, is now confined to Africa (*Leonum arida nutrix*); which it ranges from its N. to its S. extremity. Panthers, leopards, and many small species of the feline race also exist; and the cat has been domesticated, though it be much more rarely found in this state than in Europe, Asia, or even America.

Of the Canine family, Africa contains the dog, wolf, fox, jackal, and hyena. The dog has not been found there in the wild state, but many varieties exist in a semi-domesticated condition, living in troops in the towns and villages, as it does in almost all the countries of Asia. The Africans have never, that we are aware of, used it for food or labour, or even for the chase. Jackals and foxes are numerous. Africa may be considered the peculiar country of the hyena; for of four existing species one only, belonging to Hindostan, is found out of its limits. Of the *Viverra*, or civets, several species exist in Africa; among which is the true civet cat, domesticated by the natives to produce civet; and a species of the Mongoos, viz. the celebrated Ichneumon, or rat of Pharaoh. Of bears, which either still exist, or are known to have existed, in almost every country of Europe, Asia, and America, no example has yet been found in Africa.

The Marsupial order of animals, or that of which the females have a double womb, is wholly wanting in Africa, as it is in Europe and continental Asia. Of the Rodent Mammalia, or gnawers, Africa yields many species of rats, squirrels, and four or five species of hare; while the rabbit is thought to have been originally brought to Europe through Spain from the African coast of the Mediterranean. The *Pachydermata*, or *thick-skinned* order, is very abundant; more so indeed than in any other part of the world. We find among these the horse, ass, zebra, dow, and quagga; the elephant, rhinoceros, hippopotamus, common hog, and lingallo or African boar. Although the horse cannot be asserted to be a native of Africa, not being found in the wild state, it has been domesticated there from the earliest ages of history. The Numidians had their cavalry when the Romans first became acquainted with them; and the horse does not appear to have been a stranger even to the ancient Egyptians; though among the mummies of quadrupeds found in the catacombs that of this animal does not appear. The most improved of the Negro tribes possess the horse, and have often a numerous cavalry; but, like Asiatics, generally the Africans do not apply the horse to draught or burthen, and confine its use to war or pleasure. When the Arabs conquered Egypt and northern Asia, they introduced their own breed, which, mixed in some degree with the native one, constitutes the barb and Egyptian horse — little inferior to the pure Arabian blood itself. The Dutch and English introduced into the colony, at the southern extremity of the continent, their respective national breeds; and the soil and climate of Africa being found generally congenial to the constitution of the horse,

it has thriven and multiplied there as every where else.

The ass is most probably not a native of Africa, or we should still, in a country so little occupied by man, find it in its wild state, as we do in so many countries of Asia. It has, however, been introduced into Egypt and Barbary, — possibly by the Arabs, — and thrives extremely well in both. The zebra, the dow, and the quagga, quadrupeds peculiar to Africa, and beautiful, at least as to colour, are found in troops all over its arid plains and deserts. But from a natural indocility or waywardness of temper, or from the unskilfulness of the African people, — probably, indeed from both causes, — and the possession of the horse and ass, they have never been tamed and applied to economical uses.

Ruminating animals are not less abundant than the *Pachydermata*. Of the 157 species of those which are ascertained to exist, 73 are found in Africa; and, with the exception of 10, all of them are peculiar to it. The dromedary, or single-humped camel, is now abundant in all the dry parts of Africa, and is the principal beast of burthen. In the earliest portion of scriptural history it is mentioned as being employed in carrying on the trade between Syria, Arabia, and Egypt, and therefore it is fairly concluded that it was well known to the ancient Egyptians. It is also found sculptured on some of the earliest Egyptian architectural monuments. Egypt, however, from position, physical character, and civilization, was always more an Asiatic than an African country; and from the fact of the camel's existing there, its general diffusion over the country cannot be inferred. It does not appear to have been known in the portion of Africa lying along the coast of the Mediterranean during its possession by the Romans; and it seems not improbable, therefore, as some have conjectured, that its general diffusion over the continent was the work of the Arabs, after their adoption of the Mohammedan religion in the 7th century. The *Giraffe*, known to the Romans, and used in their games, is exclusively an inhabitant of the dry parts of Africa. Notwithstanding its size, strength, and gentleness, it has never been applied, in its domesticated state, to any useful purpose of man; and from its eccentric and awkward form and movement, is probably unfit for any.

Horned cattle, or oxen, of many varieties, are general among all the more civilized tribes of Africa; and in Egypt the existence of the ox is coeval with the earliest records of the country. Mummies of this animal have been found in the catacombs, supposed to be not less than three thousand years old. Whether the original stock was imported or was indigenous, cannot be ascertained; but most probably the latter, for the common ox in the wild state is not known to exist in any part of this continent as it does in many parts of Asia and its islands, and as it is known once to have done in Europe. The buffalo (*Bos bubalus*) has been naturalised in Egypt since the middle ages, having been introduced from India through the conquests of the Arabs. One species of the ox family only is ascertained to be indigenous to Africa, and is peculiar to its southern extremity. This is the buffalo of the Cape, or *Bos Caffer;* an animal of great size and ferocity, which has never been tamed, and is probably untameable.

Sheep and goats exist throughout all the drier parts of the continent; but neither are found in the wild state, and have probably been introduced. The prevalent variety of the first is that with the fat tail, of from 10 to 30 pounds weight, the same which is so general in Persia, Arabia, and Tartary; and which, though long looked upon as a rarity and a monstrosity, is probably as extensively diffused over the globe as the variety more familiar to us. The wool and flesh of the fat-tailed sheep are greatly inferior to those of our own breed; but the flesh of the lamb is thought to be superior. There are said to be but two species of deer — one of which is the common fallow deer — existing in this continent, and these are confined to the countries bordering the Mediterranean. This is compensated by the existence of not less than 60 species of antelope, all peculiar to it; a number far exceeding that of the genus found in every other part of the world. Some of the species, as the gazelle, do not exceed a foot and a half high, and are remarkable for the beauty and gracefulness of their form. Others are equal in size to a large ass or zebra; as the gnu, which has the body, tail, and paces of a horse. The most numerous species is perhaps the springbok; which, in the wide plains of southern Africa, is said to be found in herds of 10,000, or even 50,000. Not one of the whole family has ever been domesticated for the purposes of food or labour by the natives, as the rein and fallow deer have been in Europe.

The elephant is found in all the wooded and low parts of Africa, from the northern limits of the great desert to the southern cape; and generally in greater numbers than any where else in the world, if we except Ceylon and the countries lying between Hindostan and China. The African elephant differs, specifically, from the Asiatic. The crown of the tooth is marked by a lozenge instead of ribbon stripes; the hind foot has *three* toes instead of *four;* the forehead is convex instead of concave, and the ears are longer. In point of size, general form, sagacity, and docility, there is probably no great difference. No native African people, that we are aware of, ever tamed the elephant. When an African is told that this is done in the East, he is as incredulous as a European would be if an African told him that his countrymen tamed the hippopotamus, and used it as a beast of burden. The only hint we have seen that such a thing may be, is given by Mr. Campbell, the African traveller, who informs us that he was told by a people of the interior whom he encountered, that another people more advanced in civilization than themselves, the Mahalasley, "wear clothes, *ride on elephants*, climb into their houses, and are gods." That the elephants used by the Carthaginians were of the African species there cannot, we think, be the least question. One of the conditions of the treaty forced upon them by the Romans after the battle of Zama implies this clearly enough. They were to surrender all the elephants which they had tamed, and to tame no more for the future.* It is obvious enough that had the elephants been Asiatic, they would only have been brought to Africa when already tamed. The Carthaginians being of an Asiatic, and not an African stock, form no exception to our previous remark. The Egyptians, the only people of Africa from whose ingenuity we might have looked for the domestication of the elephant, had

* "Perfugas, fugitivosque, et captivas omnes rederent Romanis, et naves rostratos, præter docem triremes traderent, *elephantosque, quos haberent domitos; neque domarent alios.*" — (Livy, lib. xxx. c. 37.) The elephants of Pyrrhus were, no doubt, Asiatic, and received through the Macedonian conquests. His invasion of Italy was but 47 years after the Indian invasion of Alexander; and therefore considering the long age of the elephant, the very individual animals in the army of Pyrrhus may have been the same which Alexander brought from the banks of the Indus.

none to tame; nor was their highly cultivated country well suited for their use, if they had. As a contrast to the Africans, it may be observed, that there is no people of Asia whose country produces the elephant by whom it has not been domesticated and used as a beast of burden, from the Hindoos, the most civilized, to the Malays, the least so. The Africans consider the elephant only as a beast of chase, and hunt it for its ivory, its flesh, and its hide; and the herds are so numerous, and the population so scanty, that the supply, according to present circumstances, appears for all practical purposes inexhaustible.

The two-horned rhinoceros, of a different species from the two-horned rhinoceros of Sumatra, inhabits the same localities as the elephant, and is hunted with the same avidity by the natives for its tough and thick hide and its horns. Traces for ox-harness, but above all shields, are made of the former, which are in repute throughout all eastern countries; and the latter are used for their supposed medical virtues, and are a regular object of traffic. It may be observed of this species of rhinoceros, as well as of the two which belong to India and its islands, that their docility and capacity for domestication are not inferior to those of the elephant itself. The slow and sluggish movements of this animal make it, notwithstanding these qualities and its great strength, an unsuitable beast of burthen, especially in countries where the elephant, the ox, the buffalo, and the horse exist; and, consequently, it has never been applied to such a purpose.

The hippopotamus is exclusively a native of Africa, inhabiting the rivers and fresh-water lakes of the whole continent, from the southern confines of the Sahara nearly to the extreme cape. It was well known to the Greeks and Romans as an inhabitant of the Nile; from which, however, it has now disappeared every where below the third cataract. In the rivers and lakes of tropical Africa it still exists in undiminished numbers, being from its locality difficult to come at by the hunter.

The common hog, in the wild state, is said to be found at the two extremities of the continent, where it approaches Europe and Asia, viz. Barbary and Egypt; but there is no evidence of the existence, anywhere else in Africa, of this animal, which was at one time general throughout Europe, and is still general throughout Asia and its large islands. Its place seems to be taken by the lingallo, or masked boar. This animal, which has teeth of a formation and growth resembling those of the elephant, and a large pendulous protuberance supported by a bony process on each cheek, giving it a hideous appearance, is not only found on the continent, but in Madagascar and the Canary Islands. It has never been domesticated, but the common hog has to a limited extent.

The native Ornithology of Africa does not present the same number of subjects subservient to man as that of Asia, or even of America. The common fowl, goose, and duck are all of them probably strangers, and there is no doubt that this is the case with at least the first. They are bred by the native inhabitants, but only to a very limited extent. The only bird which Africa has contributed to the poultry-yard is the Guinea hen; of this genus there are four or five species found abundantly on the western coast and its islands. The bird, as its Latin name, *Numida*, implies, was known to the Romans, and bred by them. Most probably they received it domesticated from the Carthaginians. It is very remarkable that it is now wholly unknown to any African people in the domestic state, except as imported by European colonists — a singular proof of apathy and dulness in the whole race. This bird seems to supply, in Africa, the place of the common fowl of Europe, the peacocks and pheasants of Asia, and the turkeys and alectros of America. The ostrich, which once extended to the nearest parts of Asia, is now confined to Africa; and the Arabs are said to have introduced the practice of breeding them in the domestic state, in order to obtain their feathers in greater perfection. Of our summer birds of passage many pass their winters in Africa; as the cuckoo and nightingale, some swallows, and the common quail and land-rail. The cheerful and active period of their lives, therefore, is passed among us, and the note of the cuckoo and song of the nightingale are wholly unknown to the people of Africa. The woods of tropical Africa abound with birds of the parrot family, from those which are no bigger than a lark, to some which are equal in size to a large falcon. As in South America, the Indian Islands, and Australia, they are remarkable for the variety and brilliancy of their plumage, their dissonant and incessant notes, and their utter inutility to man. Proportional to the number of graminivorous and frugivorous birds, and of wild mammals and reptiles, is that of eagles, hawks, vultures, and other birds of prey.

Among Reptiles are to be found a great variety of the lizard family, from the chameleon up to the crocodile; and of snakes (a few poisonous, but the greater number harmless), some species not exceeding a few inches long, up to the python, which measures 30 feet in length. All the species of this class differ from those of Asia and America, not to say of Europe, or the Indian Islands, or Australia. Africa, of course, abounds in the insect tribe. Of these the bee alone is directly useful to man, but has never been domesticated by the Africans. Africa yields no useful insect, such as the kermes of Europe and Western Asia, the lac of Eastern Asia, or the cochineal of South America.

IV. *Plants of Africa.* — In reference to its Flora, Africa may be divided into three regions, the Atlantic, the Equinoxial, and the Austral; to which we may add the principal islands on its western and eastern side, viz. the Canaries and Madagascar, with the Mauritius and Bourbon. The plants of the Mediterranean coast differ little or nothing from those of the opposite shore of Andalusia. Wheat, barley, maize, rice, the grape, the fig, and olive, thrive here in perfection, as does the date. It is not until we reach as far south as Egypt that the Flora assumes a character intermediate, as it were, between European and Tropical; and here, to the plants already enumerated, may be added the sugar-cane, cotton, indigo, and coffee. In Upper Egypt, Nubia, and Abyssinia, we have a somewhat peculiar vegetation; and here we find the *acacias*, which produce gum-arabic, and the *cassias*, which yield the medicinal senna. In Abyssinia first appears the Scitamineous family of plants, the same which in the East yields ginger, turmeric, and cardamoms. The coffee plant still grows wild in the same region, which is indeed supposed to be its native country.

In the Equinoxial part of Africa a totally new vegetation presents itself, entirely differing from that of Europe, and almost equally so from those of tropical Asia and America. One conspicuous forest tree of great size, however, the

Bombax pentandrum, is common to the three continents. Another forest tree of vast magnitude, the Baobab, or *Adansonia*, is supposed to afford examples of the oldest living organized matter on our globe; some specimens, by counting the number of their concentric circles, being estimated at near 6,000 years old. The African oak, or teak, which, however, is probably neither the one nor the other, though its botanical place has not been as yet ascertained, is an inhabitant of the same region. The bamboo, so common and so useful in Asia and America, is unknown to Africa. Whole plains in this quarter are occasionally overspread with the papyrus plant, to the exclusion of every other. Peculiar palms of course abound; among which, however, the date is no longer found. The most useful of these is that which yields the oil of commerce, the *Elais Guineensis*. Whether from the barbarism of the natives or the uncongeniality of the soil and climate, corns are little grown, and their place is taken by hardy farinaceous roots, pulses, &c.; as the *Dioscoria* or yam, the *Arachis* or ground nut, and the pigeon pea or *Cytisus cajan*. The fruits of tropical Africa, in comparison with those of Europe, Asia, the Asiatic islands, or America, are few in number and of indifferent quality. The most remarkable are the nitta or donna (*Parkia Africana*), a species of custard apple (*Anona Senegalensis*), the safu, the cream fruit, the negro peach (*Janocephalus laurina*), the monkey apple, pigeon plums (*Chrysohalanus*), the Rammee apple (*Mammea Africana*), and the star apple (*Chrysophyllum*). The pine apple, a native of America, grows luxuriantly in the forests, as if it were indigenous.

As we approach the southern extremity of the continent, a new form of vegetation presents itself, differing essentially from that of every other part of the world, but bearing the nearest analogy to that of Australia. Its character is suited to the arid nature of the soil and climate; and the prevailing genera are euphorbias, aloes, crassulas, and heaths, of endless species, and often of great beauty; plants generally with fleshy leaves, and slender roots, which are nourished more by dew than by the moisture of the earth. The grasses are generally coarse, and forest trees are only found in the moister parts near the banks of rivers.

In the Canary Islands the species are for the most part European, but their growth and luxuriance is tropical. The great island of Madagascar has on its western side plants common to Africa, and on its eastern some that are common to the Indian archipelago. But generally both here and in Bourbon and the Mauritius, the Flora is peculiar and local.

From this brief sketch of the native Flora of Africa, we shall be disposed to conclude, that although it may be equally varied, grand, and beautiful with those of Asia and America, it yields far fewer objects ministering directly to the uses of man. To Asia, or Egypt (a country African only by position), Africa probably owes the banana, the orange, lime and lemon, the tamarind, the cocoa-nut, cotton, and sugar-cane. It may even be conjectured that it owes to the same source, and perhaps through the Phœnician settlers, wheat, barley, the grape, fig, and pomegranate. To America it unquestionably owes maize, tobacco, manioc, and the pine apple.

If Africa be excelled by Europe, Asia, and America, in its turn it immeasurably exceeds Australia, which yields neither useful corn, root, nor fruit.

V. *Religion.*—Fêticism *, in its most degrading and offensive form, is the religion of the greater number of the inhabitants of Africa, being professed by almost all the Negroes, and by nearly all the natives of Madagascar. They appear generally to admit a good and an evil principle, have their lucky and unlucky days; and their priests claim the power of preserving men and animals from the influence of evil spirits. Several of these nations have a national and supreme *fétiche*: the people called Ouidah or Widah, for instance, worship the serpent, an order of priests and priestesses being set apart to minister to this reptile. The Bissagos worship the cock; and the tribes on the Bight of Benin, who regard their own shadow as a *fétiche*, have a lizard for their principal divinity. Other tribes worship alligators, hyenas, leopards, &c.; and in some instances immolate to them human victims. The Agows, who reside near the sources of the Nile in Abyssinia, have, with less absurdity than most others, from time immemorial, offered sacrifices to the genius of that river. The narrative of the Moor Sydy Hamed represents the inhabitants of Wassenah and some tribes of Nubia, and of other countries in the region of the Nile and the interior of Africa, as worshippers of the moon; and those contiguous to Cape Mesurado in Guinea as worshippers of the sun. The Galla hold as sacred certain trees and stones, the moon, and some of the stars. Sometimes the Negroes frame idols with a human countenance; and Capt. Tuckey and Dr. Smith were surprised to see, on the banks of the Zara in the interior of Africa, idols with European figures, and resembling the Egyptian, or rather the old Tuscan statues. The Betjouanas have a kind of high-priest, who ranks as the most important personage after the king. At Dagoumba, in central Guinea, there is a famous oracle, the resort to which renders it the entrepôt of a flourishing commerce. According to M. Douville (who, though referred to by Balbi, is a very doubtful authority), the Cassange, Molouas, Muchingi, Moucangama, and other nations of southern Nigritia, like many tribes in its centre, unite to idolatrous superstitions the horrible practice of human sacrifices; and though of an hospitable disposition, are said to be cannibals. Such are the dreadful aberrations to which uninstructed and uncivilized man is exposed.

Among these nations, human sacrifices, according to M. Douville, take place only on the accession of a sovereign or on the occurrence of some great epidemic. The victim is always selected out of the country, and, if possible, at a great distance from the place of sacrifice: it must be a young man or woman, and ignorant of the fate that awaits him or her till the moment of immolation. Should any one reveal the fearful secret, death is the inevitable penalty. During the interval between the selection and the sacrifice the victim is kept with the greatest care, and every possible means is adopted for the purpose of making him fat. On the arrival of the fatal moment, he is suddenly put to death in the midst of imposing solemnities, and in the presence of the king, grandees, and people assembled to witness the spectacle. His body is

* *Fêticism* is the worship of natural objects, whether animate or inanimate. The word is derived from the Portuguese *Fetisso*,—something enchanted, sacred, or divine; and comes most probably from the Latin *fanum*, *fatum*, *fari*. Any thing, however vile or worthless, may be a fétiche, that pleases the fancy of a nation or an individual, and requires merely to be consecrated and set apart as a special object of adoration. When this is done it is regarded with every mark of the most profound veneration and respect — is referred to on all occasions of difficulty, sworn by, &c. — See the Treatise *Du Culte de Dieux Fetiches* (by the President Debrosses), 12mo. 1760, cap. 1. &c.

usually quartered, and immediately roasted, to be portioned out among the spectators according to their rank, and devoured on the spot. But enough of these brutalizing enormities perpetrated in the sacred name of religion. *

With the exception of Abyssinia and the colonies founded in modern times on some points of the African coast, where Christianity is professed, Mohammedanism prevails in all the countries of Africa not devoted to Feticism and idolatry. It is very widely diffused, having extended itself over the whole of Barbary, Egypt, Nubia, &c., and being professed by a considerable number of the more advanced Negro nations. Its introduction has been, perhaps, the greatest boon ever conferred on Africa, and has tended materially to improve the habits and morals of the people. The Koran is the only recognized code in many countries; and, what is singular, the Arabic is every where throughout Africa, with the exception of Abyssinia, the language used by such of the natives as either read or write. It was introduced in the first age of the Hegira, and has participated but little in the improvements that have since been made upon it in Asia. Arabic has been for some centuries the language of the Copts or descendants of the ancient Egyptians.

The Christianity that prevails in Abyssinia is largely alloyed with debasing practices and observances; and the priests are as ignorant and worthless as can well be imagined. With the exception of the Cape Colony, the seats of Christianity in other parts of the continent are too trifling to deserve notice; but a considerable number of Christians of various denominations, and of Jews, are found in countries where Mohammedanism and Fêticism are prevalent.

VI. *Language.* — Balbi has given a classification of the people of Africa according to their languages. Perhaps it was impossible to have selected a worse standard. We know little, and sometimes literally nothing, of the people in some very extensive countries, and if it be possible we know still less of their languages. Our knowledge of the latter is indeed in most instances exceedingly imperfect; so that any classification of the people bottomed on it must necessarily be little else than a tissue of errors. The Arabic, as we have just seen, is the learned language of the entire continent. The Berber is the vernacular idiom of the Barbary states; the Sangoâ is used in Guinea; and the Poul, the Iolof, &c., bear the names of the people by whom they are spoken. The Ambounda is the language of all the tribes between the Congo and the coast of Mozambique. As was to be expected from the low state of civilization of those by whom they are used, these languages are all miserably poor. The reader will find in the article Abyssinia some account of the language of that singular portion of the African continent.

VII. *Government.* — Most forms of government may be found in Africa. Despotism, however, in its worst and most offensive shape, is by far the more prevalent. In some states there exists a sort of feudal aristocracy, and in others an aristocracy depending on the rude distinctions of superior strength and prowess in war, which participates to a greater or less extent in the rights of sovereignty, and in some they are occasionally shared by the people. Some large states consist of a kind of confederacy of petty chiefs, who, however, are very frequently at war with each other. In fact, with but few exceptions, slavery and anarchy reign triumphant throughout Africa. And it would be to no purpose, even if we were accurately informed as to the discrepancies in the forms of government established in different parts, to waste the reader's time by detailing in what respect one barbarous and generally fluctuating system of government differed from another.

VIII. *Industry* in Africa is at the lowest ebb. Except where they are associated with or have been instructed by Europeans or Arabs, the Africans have made little progress in the arts. All the more laborious occupations are devolved on females; and in some parts the wives of kings or petty princes are made to till the land for the support of their barbarian lords. Even the most necessary arts are in an extremely backward state. The ground, after being soaked with rain or covered with the mud brought down by the rivers during the inundation, is not ploughed, but merely scratched with a hoe. There are no doubt sundry exceptions to the extreme indolence, stupidity, and barbarism that seem to distinguish the bulk of the native races. The Mandingoes have made considerable advances in civilization, and are advantageously distinguished among the people of the west coast; but the Ovas of Madagascar are said to be in this respect discriminated from the others, and to be not only the most industrious people of that great island, but of the whole African continent, Egypt and Barbary excepted. The Ashantees, too, seem to be in this as in some other respects superior to the bulk of the Negroes; and this, indeed, is one of the grounds on which they have been supposed to be not of Negro but of Abyssinian or Ethiopic origin. — (*Bowditch*). It is farther true, as has been remarked by Balbi, that the cotton and other manufactures of Egypt have recently attained to considerable importance. But their progress has been, as every one knows, forced and factitious. In point of fact, too, they are carried on wholly under the superintendence of Europeans, and are no evidence whatever of the improvement of the Africans in manufacturing industry.

It is a curious fact, that the smelting and working of metals, which would seem to require a degree of intelligence or of traditional knowledge hardly consistent with their backward state in other respects, is pretty extensively carried on by several of the Negro tribes. — (*Balbi*, p. 844.). Generally, however, the arts practised by the natives are of the most limited description, and are restricted to those necessary to supply the most indispensable wants. The tanning of leather, the weaving of cotton cloths, and the manufacture of mats are every where carried on; and in parts the articles produced are of a very good quality, and have much beauty. But the natives are for the most part ignorant of the use of the shuttle; and in weaving pass the threads of the woof between those of the warp one after the other, by the unassisted agency of the hand; taking a month or two to despatch as much work as a European could effect by means of his loom in as many hours! In all their works, in fact, they display little contrivance or design, but generally only a sort of indolent, stupid routine. — (*Mod. Universal History*, xiv. p. 31.)

IX. *Commerce.* — It may appear a singular and not easily explained fact, that notwithstanding the low state of the arts in Africa, and the difficulties of the country, an extensive intercourse has been carried on, from the remotest antiquity, between very distant parts, of that con-

* Those who wish for further details may consult Balbi, 3d ed. p. 840, &c.

tinent. This, no doubt, has been owing to the natural productions in greatest demand being confined to certain localities; and to the facilities afforded for traversing the vast deserts which intersect Africa by the aid of the numerous oases with which they are studded; and the employment of the camel, or *ship of the desert*. Salt and dates are the principal articles conveyed from northern to central Africa. The extensive region of Soudan, to the south of the great desert of Sahara, is completely destitute of these valuable articles. Both of them, but especially salt, are, however, in great demand in it; the latter being, in many parts, so highly prized and so scarce as to be employed to perform the functions of money. This necessary article is found in various places in the desert, while dates are found in the greatest abundance all along its north frontier, the country adjoining to it being called from this circumstance Biledulgerid, or the *country of dates*. But, though destitute of these important products, central Africa has others; such as gold dust, ivory, gums, palm oil, feathers, and above all slaves, for which there has always been a ready market in Barbary and Egypt. In consequence of this natural adaptation of the products of one part of the continent to supply the wants of another, an intercourse has subsisted amongst them from the remotest antiquity. Even so early as the days of Herodotus, the merchants engaged in the interior traffic had penetrated as far as the Niger, or one of the rivers flowing into lake Tchad; which the venerable father of history correctly describes as a considerable river beyond a sandy desert, which it required many days to cross, flowing eastward, and infested with crocodiles! (II. § 32.) Egypt and different towns in the N. or Barbary states have always been, and continue to be, the great seats of this trade. It is carried on at present as it was 3,000 years ago, wholly by caravans. These consist of an indefinite number of camels, seldom less than 500, and often as many as from 1,500 to 2,000. They do not follow a direct course across the desert from their point of departure to where they are destined, but diverge to the oases, or verdant spots, where they procure water and refresh themselves. If they be disappointed in finding water at one of these resting-places, or be overtaken by a land-storm, the consequences are often most disastrous. In 1805, a caravan proceeding from Timbuctoo to Tafilet, not having found water at a resting-place, the whole persons belonging to it, 2,000 in number, with about 1,800 camels, perished miserably!—(*Jackson's Morocco*, p. 339. See also the excellent chapter in *Heeren*, on the Land Commerce of the Carthaginians.)

Exclusive of this internal commerce, Africa has carried on a considerable commerce by sea, since the discovery of her W. coasts by the Portuguese; but the probability seems to be that she has lost more than she has gained by this commerce. Slaves have been the staple article of export from the African coast; and in some years as many as 110,000 or 120,000 have been carried across the Atlantic. It has been said, and no doubt truly, that the opening of this new and vast outlet for slaves was advantageous to Africa, by lessening the odious practice of cannibalism, and preventing the immolation of the captives taken in war. But, admitting this, it seems notwithstanding abundantly certain that the slave-trade has been productive of a far greater amount of misery than it has suppressed. Without stopping to inquire whether death might not be preferable to slavery, it has multiplied the latter in no ordinary degree. Formerly the peace of the country was comparatively little disturbed by wars; but now a wholesale system of brigandage and robbery is organized in many extensive districts; the bulk of the people being hunted down like game by the petty princes, and by the Mohammedans, who affect to believe that they are entitled to capture and sell the "idolaters," to serve as beasts of burden in another hemisphere. Hence it is that the suppression of occasional instances of cannibalism, and of the sacrifice of human victims, has been supplanted by a widely diffused system of rapine, productive of a total want of security, and subversive of every thing like good government and good order. Until this state of things be totally changed, it would be idle to expect that civilization should make any progress in the countries where it exists. Its abolition is indispensable as a preliminary measure to give them even a chance of emerging from the barbarism in which they have been so long involved.

There seems to be a reasonable prospect that the meritorious efforts of Great Britain for the suppression of the slave-trade will, at no very distant period, be crowned with success, in so far at least as the nations of Europe and America are concerned. But it is quite otherwise with the slave-trade carried on from the interior with the Barbary states, Egypt, and Arabia. There are no grounds for supposing that it will be speedily suppressed. Probably, indeed, it is destined for a while rather to increase. Luckily, however, it is much less extensive than that carried on from the W. coast, the entire export of slaves rarely amounting to so many as 10,000 in a single year, and it is not accompanied by so many disastrous results.

Exclusive of slaves, palm oil, gold dust, ivory, gums, teak, timber, wax, hides, feathers, &c. are the principal articles imported into W. Europe and America from Africa. The most exaggerated notions seem to have been always entertained of the value of the trade and of its capacity of extension. That it may be materially increased is, no doubt, true; but the fair presumption seems to be, that the wants of the native Africans, and their industry, are much too contracted to admit of their ever becoming extensive demanders of European produce.

Carthage, the first maritime power of antiquity, though situated in northern Africa, was a Phœnician colony, and her fleets were principally manned from her colonies in the Mediterranean. Since the fall of this powerful republic, no African people has had the smallest claim to be called maritime. The most advanced nations are at this moment, and have always been, nearly ignorant of the art of ship-building. It is to European engineers and carpenters that the Pacha of Egypt is indebted for his ships; and every one knows that this was formerly the case with the deys of Algiers, Tunis, &c. In some few places the natives fit out a sort of large cutters; not, however, for the purpose of trade or fishing, but to engage in piracy.

Besides salt, to which we have already alluded, gold dust or *tibbar* and cowries are the articles principally used as money in Africa. The latter, a species of small shell gathered on the shores of the Maldive islands, are used in small payments throughout Hindostan; but in the interior of Africa their value is about ten times greater than in Bengal.

X. *The social condition* of the people of Africa is as depressed as their industry and their science. But what else could be looked for where Fêticism,

idolatry, and the most revolting superstition are so very prevalent? Polygamy may be said to be diffused all over Africa; and though forbidden in Abyssinia, the marriage tie is there so slight as hardly to have any sensible influence; and morals are, in this respect, in a state of almost total dissolution. That cannibalism formerly existed to a frightful extent in many parts of Africa, cannot be doubted; and though it has greatly declined, partly because of the introduction of Mohammedanism, and partly, and principally, perhaps, because of the ready and advantageous markets that have long been opened in the West Indies and America for the slaves or captives taken in war, there seems to be no doubt that it still exists among certain tribes. Among some considerable nations the exposure of children, and the slaughter of those that are deformed or maimed, is not tolerated merely, but enforced. In some parts human blood is reported to be mixed up with the lime or mortar used in the construction of temples. And it is said to be usual among the greater number of the nations on the coast of Guinea for rich individuals to immolate human victims once in their lives to the manes of their fathers!—(*Balbi, Abrégé*, p.849. 2d ed.) Atrocities like these are, however, principally confined to the least improved tribes of the Negro race. But, speaking generally, barbarism, cruelty, and the most degrading superstition are universally prevalent among by far the greater number of the nations of African origin.—(See art. ASHANTEE.)

As already stated, with the exception of Egypt and Abyssinia, all the science and literature to be found in Africa are of Arabic origin. The Arabs have schools established in Cairo, Merou, and Darfour, in the region of the Nile; in Morocco, Fez, Algiers, Tunis, &c., in Barbary; and there are schools among the Mandingoes, Foulahs, Jolofs, and other Mohammedan nations of central Nigritia or Soudan: these are placed under Mohammedan teachers, and assist in disseminating the rudiments of Arabic learning and science. The European colonies at the Cape, Algiers, and various other places along the coast, have been regarded as so many centres, whence the language and literature of Europe might be expected gradually to spread over the whole continent. But our anticipations in this respect are far from sanguine; and the presumption seems to be that if barbarism and ignorance are not to be immortal, they are, at all events, destined to a prolonged existence in Africa.

XI. *Causes of the Inferiority of the Africans.*—The low state of the arts in Africa, and the barbarism that so generally prevails in it, have been variously accounted for; and, perhaps, we are yet without the means of coming to any satisfactory conclusion in regard to either matter. But it would seem that the first, or the low state of the arts, is mainly attributable to the climate, which supersedes the use of many articles indispensable in regions more to the N. and S. Manufacturing industry is principally devoted, in European and Asiatic countries, to the production of articles of clothing; but where clothes are an incumbrance, and most of the people are satisfied if they have a piece of coarse common cotton stuff to wrap round their middle, it would be absurd and contradictory to expect that this great department of manufacturing industry, and its many dependent and subsidiary arts, should make any progress. The agriculture, too, of the greater part of Africa is exceedingly unfavourable to the development of a spirit of enterprise and invention. The seasons differ but little from each other; and in those tracts not condemned to perpetual sterility, that is, in the tracts watered by the periodical rains, or by the overflowing of the rivers, the rudest husbandry is sufficient, the heat of the sun operating on the moisture of the soil being all but enough to produce the most luxuriant crops. The houses, too, in tropical climates may be constructed at comparatively little expense; and, except for the cooking of victuals, fires would be a nuisance. It is idle, therefore, to wonder at the backward state of industry in Africa. It would be as reasonable to expect to find a manufactory of freezing machines at the North Cape, as to expect to find extensive cloth factories in Nigritia. The industry of a country always bears some proportion to the wants and necessities of its inhabitants; and few comparatively of those things which employ a large part of the industry of Europeans being wanted in Africa, they are but little produced.

It is true that besides the great articles now referred to, there are others, such as articles of show and ostentation, arms, &c., for which it might be supposed the taste in Africa would be as strong as in Europe. But these are costly articles; and, in point of fact, are never found generally diffused in any country not distinguished by its industry. Men are not instinctively laborious or enterprising. Industry is with them only a means to an end—a sacrifice they must pay to obtain supplies of the necessaries and conveniencies of human life. Wherever the sacrifice required to procure food, clothes, and other necessary accommodations is considerable, the population is generally industrious; and a taste for labour being widely diffused, those who are not obliged to apply themselves to the production of necessaries, engage in the production of superfluities. But wherever the principal wants of man may be supplied with but little exertion, indolence becomes the distinguishing characteristic of the population; and instead of employing their spare time in the production of articles of ostentation and luxury, they usually waste it in idleness and apathy.

In addition to the circumstances now mentioned explanatory of the low state of the arts in Africa, and the barbarism prevalent in it, the Negroes and other African races have been supposed by some philosophers to be naturally inferior in point of intellect, and not to possess the same capacity for improvement as the Europeans, or people of the Caucasian variety. This supposition has, however, been vehemently denied; and it has been contended over and over again that the peculiar circumstances under which they have been placed sufficiently account for the condition of the Africans—for their want of a literature and their low civilization. That great weight should be attached to the considerations now mentioned is true; but still we do not think that they are sufficient wholly to account for the existing state of things. Egypt was, at a very remote period, the principal seat of science and of art; and various nations of Africa were in contact with, and had a pretty extensive intercourse with the Egyptians, and also with the Phœnicians, and afterwards the Romans. But they seem to have profited little or nothing by this association. And while the people of Greece, Asia Minor, and Magna Græcia raised themselves in a comparatively brief period to the highest pitch of civilization and refinement, the nations of Africa continue, without a solitary exception, down even to the present day,

immersed in the grossest barbarism. Surely, however, during the space of 3,000 or 4,000 years, opportunities must have been afforded to some of them to make some advances. But if so, not one has had sagacity to profit by them. Africa, in fact, does not seem to have produced a single great man. She has had no Hercules, no Minos, no Theseus, no Confucius, no Manco Capac. Among all the varieties of superstition that exist in it, we look in vain for hero-worship — for the divine honours paid in rude but improving nations in other parts of the world, by the public gratitude, to departed heroes, legislators, and authors of important discoveries in the arts.

With the exception of that of the ancient Egyptians and Ethiopians, whose descent is involved in the greatest uncertainty, almost all the civilisation that exists in Africa seems to be of foreign origin. The introduction of Mohammedanism, though in a debased form, has, as previously stated, gone far to banish cannibalism from many countries; and some of them have also adopted the letters and literature of Arabia. But the progress they have hitherto made is not such as to lead to any very sanguine anticipations as to their future advancement; and it would not, indeed, be very philosophical to suppose that those who have been wholly unable to produce any thing original should attain to much eminence in the practice of foreign arts and sciences.

It is unnecessary to enter into any examination of the *vexata questio* whether the varieties of the human race in Africa originally sprung from different sources, or whether they all belong to the same stock, but changed to the state in which we find them by the influence of circumstances in the lapse of ages. Whatever conclusion may be come to on this point cannot in anywise affect the question as to the comparative intelligence of the African people. The same circumstances that are supposed by those who contend for the original identity of the races to have so greatly affected their appearance and physical capacities, could hardly fail to have an equally powerful influence over their mental faculties. This in fact is substantially admitted by Dr. Pritchard, who has ably contended for their common origin, and the equality of their intellect with that of the other races. "The tribes," says he, "in whose prevalent conformation the negro type is discernible in an exaggerated degree, are uniformly in the lowest stage of human society; they are either ferocious savages, or stupid, sensual, and indolent. Such are the Papals, Bulloms, and other rude hordes on the coast of Western Guinea, and many tribes near the Slave coast, and in the Bight of Benin; countries where the slave trade has been carried on to the greatest extent, and has exercised its usually baneful influence. On the other hand, wherever we hear of a Negro state, the inhabitants of which have attained any considerable degree of improvement in their social condition, we constantly find that their physical characters deviate considerably from the strongly marked or exaggerated type of the Negro. The Ashantee, the Sulema, the Dahomans, are exemplifications of this remark. The Negroes of Guber and Hausa, where a considerable degree of civilization has long existed, are, perhaps, the finest race of genuine Negroes in the whole continent, unless the Jolofs are to be excepted. The Jolofs have been a comparatively civilised people from the æra of their first discovery by the Portuguese." — (*Researches into the History of Man*, ii. p. 338. 3rd ed.)

Here we have it distinctly laid down that the existence of the distinguishing features of the Negro race in a strongly marked degree is uniformly associated with the lowest state of barbarism; and that as they recede from this strongly marked type, we find a greater degree of civilization and improvement. The inevitable conclusion is, that every variety of the Negro type, which comprises the inhabitants of almost all central Africa, is indicative of mental inferiority; and that ferocity and stupidity are the characteristics of those tribes in which the peculiar Negro features are found most developed. We believe that this is a perfectly correct statement; and we do not know that anything that can be said could show more conclusively the radical inferiority of the great bulk of the African people.

But we do not form our opinion as to their inferiority on their configuration and appearance, but on the fact that while numberless European and Asiatic nations have attained to a high state of civilisation, they continue, with few exceptions, in nearly primeval barbarism. It is in vain to pretend that this is the result of the unfavourable circumstances under which they have been placed. An intelligent enterprising people contend against unfavourable circumstances, and make them become favourable. But the Africans, with the questionable exception of the ancient inhabitants of the valley of the Nile, have never discovered any considerable degree of enterprise or invention, or any wish to distinguish themselves either in arts or arms. From the remotest antiquity down to the present day they have been hewers of wood and drawers of water for others, and have made little or no progress; and the only legitimate inference from this lengthened induction seems to be, that they are incapable of making it; that civilization will not spring up spontaneously amongst them; and that if it ever grow up it must be introduced from abroad, and fostered and matured under foreign auspices.

XII. *Divisions.* — Africa has been variously divided, according as one standard or another has been adopted. Owing to the barbarism of the people, our ignorance of the different states into which the continent is divided, and the revolutions to which they are perpetually subject, any distribution of the country founded on its political divisions would be almost impossible; and however accurate at the time, would speedily become quite obsolete. A better method would be to distribute it according to the races of people by which it is principally occupied; but as these are in parts very much blended, and it is sometimes no easy matter to say which predominates, it seems, on the whole, the better way to distribute it according to the great natural features of the country. On this principle, Africa may be distributed as follows, beginning with the North: —

1. The *Barbary States*, including the whole country N. of the desert of Sahara, and W. of the 25th degree of E. long.
2. *Sahara*, or the Great Desert.
3. The *Region of the Nile*, including Egypt, Nubia, Abyssinia, Senaar, Kordofan, and all the country drained by its affluents.
4. *Nigritia*, which may be subdivided as follows, viz.:
   a. *Soudan*, or N. Nigritia, being the country to the S. of the Sahara and N. of the Kong mountains, watered by the Senegal, Gambia, Niger, and the rivers flowing into the great lake of Tchad.
   b. *Central Nigritia*, being the region between the Kong mountains and the N. shore of the gulph of Guinea to the Bight of Biafra.
   c. *Southern Nigritia*, including the countries from the Bight of Biafra along the coast to Cape Negro, and inwards to the sources of the rivers flowing through it to the coast.
5. *Southern Africa*, or the region S. of Cape Negro on the W., and of the Zambese river on the E.
6. *Eastern Africa*, or the region N. of Zambese river, round by the sea coast to the confines of Abyssinia and the Gebel-el-Komri, or Mountains of the Moon.
7. *The islands of Africa*, including the Madeira, Canary, and Cape de Verde islands on the W. coast, with those of St. Helena, Ascension, &c.; and on the E. coast the great island of Madagascar, the isles of France and Mauritius, Socotra, &c.

XIII. *Progress of Discovery.* — Africa, among the quarters of the globe, has always been the chief object of curiosity and discovery. Her Mediterranean coast indeed was well known to the ancients, and included in their circle of civilized states. But her eastern and western limits, stretching an indefinite extent southward, long baffled the attempts to reach their termination and that of the continent; while immense deserts barred the access into the interior. A peculiar difficulty was also found in tracing the source, and sometimes the termination, of the mighty rivers by which its inland regions are watered.

Tyre, the earliest seat of a flourishing commerce, might be expected to seek a route to the distant parts of Africa. In the curious account given by Ezekiel, Tarshish is mentioned as both the most remote and most important place with which she trafficked. The learned, however, have been much divided respecting its site; but the Tarshish to which the Tyrians sailed down the Mediterranean, whence they imported iron, silver, lead, and tin, the products of Spain and Britain, was most probably either Carthage, or the S. part of Spain. Carthage made violent efforts to prevent other commercial powers from penetrating beyond Sicily, thus seeking to monopolise the exclusive trade of the remoter countries, of whose products her merchants would, of course, keep an assortment.

Mention, however, is made of another route to Tarshish, by the Red Sea, which has singularly perplexed geographers. It was opened by Solomon, during the most prosperous period of the kingdom of Judæa, and aided by an alliance with Hiram, king of Tyre. To reconcile these two voyages, M. Gosselin supposes the term to mean "the ocean" as distinguished from inland seas or gulphs: so that one voyage was to the Atlantic, the other to the Indian Ocean. But all the modes in which Tarshish is mentioned — the fare of a vessel thither, its merchants, its kings — seem inconsistent with so very vague a sense; nor does there appear any room to think the Jews ever viewed the Mediterranean as an inclosed sea. We are disposed therefore to prefer the suggestion of Mr. Murray, in the *Encyclopedia of Geography*, that the Tyrians gave the name of Tarshish to the whole continent, of which it formed for them the most important part. Tarshish, in this larger sense, becomes nearly synonimous with Africa; the one voyage was along its northern, the other along its eastern coast.

Ophir is another country much celebrated in the Jewish scriptures, particularly for its gold. Many learned men have sought it in India, though gold was not then an article of export from that country, but the contrary; and no one staple of Indian trade is mentioned as brought from Ophir. Indeed its position seems clearly fixed, when we find the Red Sea voyage to Tarshish described elsewhere as one to Ophir. The latter, then, was on the eastern coast of Africa, where gold is no where found north of the Zambeze. Here accordingly we find Sofala, long the chief emporium of that river; and it may be observed that Ophir is called in the Septuagint Soopheira, while the modern Arab term is indifferently Zofar or Zofoat.

This intercourse did not survive Solomon, whose successors, weakened by the division of the kingdoms, were unable to maintain it.

Our next information is derived from Herodotus, who, during his residence in Egypt, made very careful inquiries of the priests and learned men. He gives a very curious report of no less an exploit than the entire circumnavigation of Africa. Necho, one of the greatest Egyptian princes, engaged for this purpose Phœnician mariners, who descended the Red Sea, and having reached the ocean, landed, sowed a crop, reaped it, and renewed their voyage. Thus they proceeded for two years, and in the third entered the Pillars of Hercules. They remarked that, in rounding Africa, they had the sun on the right, that is, on the south, which must have been correct. This brief relation has given rise to a mass of controversy, greater perhaps than the slight narrative can well support. The curious reader may consult Rennell in favour, Gosselin against it.* On the whole, we are disposed to conclude in favour of its authenticity. The time is adequate; and, as Rennell observes, the flat-bottomed vessels of the ancients, keeping always close to the shore, might avoid dangers that arrested larger ships in the open sea. That the event should be afterwards forgotten or discredited, would be only a common occurrence in those early periods, when knowledge was very little diffused.

Herodotus has given a detailed account of the wild and wandering tribes behind the Atlas ridge, extending to and somewhat beyond Fezzan. — He adds an interesting narrative† of an expedition to explore the interior, undertaken by some youths from the country of the Nasamones lying inland from Cyrene. They passed, first, a verdant and cultivated territory; then a wild region filled with wild beasts; next entered into an arid dreary desert. Here, while plucking some wild fruits, a party of black men surprised and carried them along vast marshes and lakes to a city situated on a river flowing eastward. These last features, after they were within the desert, could not be found short of central Africa; but it is doubtful whether they refer to Timbuctoo and the Niger, as supposed by Rennell and Heeren, or to the lake Tchad, and the Yeou or river of Bornou.

Another singular circumstance mentioned by Herodotus relates to a traffic for gold carried on by the Carthaginians with a people beyond the straits, and managed in a peculiar manner, without the parties seeing each other. There is no gold in Africa north of the Senegal or Niger; but whether the Carthaginians penetrated thither, or the gold was brought by natives across the desert, there seem no means of certainly determining.

The records of Carthage, which would have thrown so much light on ancient commerce and geographical knowledge, have unfortunately perished. There remains only one valuable document, the narrative of a voyage by a commander named Hanno, sent to found colonies on the western coast, and to push discovery as far as possible. He is said to have carried with him 60 vessels, and no less that 30,000 men, women, and children. After passing the straits, he founded successively four colonies in convenient situations; then sailing three days along a desert coast, came to Cerne, a small island in a bay. In its vicinity he visited a lake through which flowed a large river; and another stream full of crocodiles and hippopotami. Then, returning to Cerne, he sailed twelve days along the coast of the Ethiopians, a timid race, who fled at the approach of strangers. His party then reached and sailed for several days along a coast, where

* Herodotus, iv. 42. Gosselin, Géographie des Anciens, i. 199—216. Rennell, Geog. Herodotus, s. 24, 25.

† Herodot. lib. ii. 32.

they observed many striking objects. In one place the earth was so hot that it could not be trodden; torrents of flame were seen to roll along it and rush into the sea. During the day there appeared only a vast forest; but in the night, the air was filled with the sound of musical instruments and of human voices. Landing on an island they found a singular race of beings, in human shape, but with rough skins, leaping from rock to rock with preternatural agility. Towards the close of their voyage, there appeared a very lofty mountain, seeming to reach the skies, called the Chariot of the Gods.

This voyage has been the subject of elaborate dissertation by learned men, who have differed very widely as to its extent. Bougainville carries it to Cape Three Points on the Gold coast, Rennell to Sierra Leone; while Gosselin restricts it to the river Nun in Morocco. The first space exceeds 3,000 miles; the latter falls short of 700. The difficulties are very great; not a single name coincides; the descriptive features are too slight to fix any one spot with precision. The period, estimated only at 38 days, seems scarcely adequate to so long a voyage of discovery along an unknown coast. Yet the aspect of man and nature; the Ethiopians or black races; the garillæ, evidently large apes, whose form resembled the human; the great rivers, full of crocodiles and hippopotami; the conflagrations, apparently occasioned by the still prevalent custom of burning the grass at a certain season; silence during the day, with music and gaiety in the night,— all these strongly suggest tropical Africa. Gosselin indeed maintains that the coast of Morocco, in its then comparatively rude state, would much more than now resemble the Negro countries; but this seems scarcely to account for all the above particulars.*

The Persians, who entertained an almost superstitious dread of the sea, were little likely to extend maritime knowledge. Yet Xerxes showed some interest in the subject. Having condemned to death Sataspes, a Persian nobleman, he was persuaded to commute the sentence to that of circumnavigating Africa. Sataspes passed the straits, but soon terrified by the stormy ocean and rocky shores, he returned, and declared to his sovereign that the vessel had stopped of itself, and could not be got forward. The monarch indignantly rejected this apology, and ordered the original sentence to be executed.† The attempt was not renewed; and under this empire, the knowledge of Africa seems to have on the whole retrograded. When Alexander sent an expedition down the Persian gulph to seek its way into the Red Sea, it returned without success; whence the inference was made that no communication existed.

Under the Ptolemies, though they were an enterprising dynasty, and a learned school of geography was then formed, little progress was made. The prevailing hypothesis of an uninhabitable torrid zone at once indicated the limited amount of knowledge, and tended to perpetuate it. The map of Eratosthenes makes Africa an irregular trapezium, of which the N. and S. sides were nearly parallel, and the whole terminated N. of the equator. The coasts beyond the Straits of Gibraltar and Cape Gardafui, being observed on both sides to converge, were supposed to continue in that direction and meet. A navigator named Eudoxes, partly aided by Ptolemy Evergetes and by the merchants of Cadiz, made several spirited attempts to perform this voyage, of which he did not suspect the extent; but he returned always without success.‡

The Romans did not much advance the knowlege of interior Africa. Mela, without any additional information, adopts the system of Eratosthenes, with some fanciful additions. Pliny, however, had access to all the information collected by the Roman chiefs and commanders. Scipio had sent Polybius to explore the western coast, which was surveyed by that officer for about 800 miles, consequently not beyond the limits of Morocco. Suetonius Paulinus had penetrated into the region of Atlas, describing its lofty and rugged steeps richly clothed with forests. Under Vespasian, Cornelius Balbus made an expedition into the desert, receiving the submission of Cydamus (Gadamis), and Garama (Germa), but we can scarcely identify Boin with Bornou.||

Alexandria meantime, under the impulse given by the luxurious consumption of Rome, acquired a great extension of commerce. She opened a regular communication with India, and also to a considerable extent along the eastern coast of Africa. Both are described in an important commercial work written in the first century, called the *Periplus of the Erythrean Sea*. The African course terminates at Rhapta, a promontory and flourishing port, the position of which, however, from the usual causes of changed names and vague descriptions, is open to controversy. Vincent fixes it at Quiloa, while Gosselin makes it Magadorea, not quite a third part of the distance from the ascertained point of Cape Aromata (Guardafui). But the former has one conspicuous feature; five successive large estuaries, which Gosselin owns himself unable to find within his limits, but which actually occur a little north of Quiloa, in the mouths of the great river Quillimanci. There seems little room to hesitate therefore in fixing Rhapta at Quiloa. The gold of the Zambeze had not reached this port, the exports from which consisted only of ivory, tortoise-shell, and slaves.¶

About a century after Ptolemy published his geographical work, the most complete of any in ancient times. On the eastern coast he adds to that described in the Periplus an additional range, stretching south-east from Rhapta to another promontory, and port called Prasum; considerably south-east from which lay a large island, Menuthias, evidently Madagascar. According to Gosselin, Prasum is Brava, while Vincent makes it Mozambique; but the south-easterly direction of the coast seems to limit it to Cape Delgado. This too would harmonize with Ptolemy's singular theory of a great austral continent extending from Prasum to the coast of the Sinæ (China), thus making the Indian Ocean an immense inland sea.

In regard to the W. boundary, Ptolemy's ideas seem by no means very precise. His graduation shows an extent of coast which would reach far into tropical Africa; yet the Canaries are placed opposite to his most southern limit, which would thus seem scarcely to have reached beyond Morocco. Gosselin accuses him of having employed the materials afforded by three different voyages along the same line of coast, supposing them to apply to separate and successive parts, thereby trebling its extent; but we must hesitate

* Hannonis Periplus, in Hudson's Geog. Græc. Min. tom. I. Rennell, Geog. Herodot. sect. 16—26. Gosselin, Géog. des Anciens, I. 61—164. Bougainville, in Mémoires de l'Académie des Inscriptions, tom. 18.

† Herodotus, iv. 43.

‡ Strabo, ii. 67-8. and xvii. passim. Gosselin, Géographie des Grecs.

|| Plin. Histor. Nat. lib. v. cap. 1—8.

¶ Periplus, in Geog. Græc. Minor. tom. I. Gosselin, Géog. des Anciens. Vincent, Periplus of the Erythrean Sea.

in imputing to this eminent geographer an error so flagrant.*

On the side of central Africa, Ptolemy delineates a very extensive region, reaching far south, which he names Interior Lybia. It contains two spacious lakes, the Lybian and the Nigritian, receiving the great rivers Gir and Niger, derived from chains of lofty mountains. A number of cities are inserted which cannot be recognised by modern names. But the remarkable circumstance is, that these objects appear contiguous to, and even connected with others, that unequivocally belong to northern Africa. Hence Gosselin and other writers conclude that his interior Lybia was not central Africa, but merely the region along the northern borders of the desert. We must observe, however, that the former, described as a region of mountain, river, and lake, all on a great scale, bears very little resemblance to the desert border of northern Africa. Our impression is that Ptolemy, receiving his intelligence from caravans coming E. from Bornou to the Nile, not from those crossing the great desert, was ignorant of the extent of the latter, and consequently of the interval separating northern from central Africa; and that he hence supposed and delineated the two as almost in contact. Yet this geographer had received intelligence of two marches, one by Julius Maternus from Cyrene, the other by Septimus Flaccus from Garama, who during periods respectively of three and of four months had penetrated into the country of the Ethiopians. Ptolemy scarcely gives credit to routes of such an extent; but he lays down Agysimba (perhaps Agadiz), into which they penetrated, as the most southerly known region. As it contains neither rivers nor lakes, it cannot be central Africa; but if, in the manner above supposed, he was ignorant how far south that region lay, the length of the marches would necessarily oblige him to protract Agysimba beyond it.†

In the seventh century a grand revolution changed the face of the world. The followers of Mohammed, inspired by fanatical zeal, issued forth from Arabia, and not only shook the Roman empire, but spread their conquests and settlements over countries never visited by the Roman arms. To Africa particularly they gave an entirely new face. Along its Mediterranean coast, they established several flourishing and civilised kingdoms. Their wandering habits, and the use of the camel, an animal expressly formed for sandy deserts, enabled them to overcome obstacles that baffled the Romans. The Sahara, across which no regular route appears to have been known to the ancients, was penetrated by them in different directions. Their dispersion was aided by the great schism between the dynasties of the Abbassides and Ommiades. The vanquished party, in large bodies, crossed the desert, and formed settlements, where, under the title of Fellatas or Foulahs, they still exist as a race entirely distinct from the Negroes. Their possessions extended along a great river called by them the Nile of the Negroes, which, however, was not, as long supposed, our Niger, but a tributary flowing into it from the east, termed by Clapperton the Quarrama or Zirmie. Ghana, the modern Kano, was then the chief seat both of empire and commerce. The sovereign displayed a pomp unrivalled in Africa, having his throne adorned with a mass of pure gold, indicating the commerce by which the city was enriched. This gold was found in a country to the south called Wangara, intersected by numerous branches of the Nile, and where the metal was extracted from alluvial earth. There is evidently some confusion here, as gold, in alluvial deposits, is only found in countries far to the west: the error probably arising from the channel by which it was brought. Farther east, on the Nile of the Negroes, Edrisi represents Berissa and Tirka, which seem to have been recognised by Clapperton in Bershee and Girkwa, still considerable towns. Farther in that direction, Kuku, a great and flourishing kingdom, is evidently Bornou, the capital of which still bears that name; while Kaugha, twenty days to the south, and distinguished by its arts and industry, appears pretty clearly to be the Loggun of Denham. Returning to Ghana, and proceeding down the river, we are conducted to Tocrur, an inferior yet large and powerful kingdom. It appears evidently to be Soccatoo, which, in a document quoted by Clapperton, is even called Takror. Sala, two days' journey lower, cannot now be identified. Farther west, the knowledge of the Arabians became most imperfect. They considered the ocean as only 500 miles beyond Tocrur, when it is nearly 2000. They notice in that direction the island of Ulil, at the mouth of the great river, whence all the countries on its banks were supplied with salt. This was pretty evidently suggested by Walet, the great mart for the salt of the northern desert; and its being reached across the great lake Dibbie might attach to it the idea of an island.‡

About four centuries after Edrisi, central Africa was visited and described by Leo, a Moslem Spaniard, who was even surnamed Africanus.‖ A great change had now taken place, Timbuctoo having risen to be the most powerful city, the chief seat of commerce and splendour, the mart for gold. The neighbouring states, including even Ghana, called now Kano, had become its tributaries. This writer mentions Bornou under that name, and adds for the first time other states that still subsist — Cassina, Guber, Zegzeg, and Zanfara. Eyeo, under the name of Gago, is justly described as a large and fine kingdom, 400 miles south-east of Timbuctoo. In a western direction, Ghinea or Gheneoa, distinguished for its great commerce, is the Jenné of Park. Thus all this part of the continent had assumed nearly the shape which it has ever since retained.

Soon after began that grand career of maritime enterprise, which terminated in the circumnavigation of the African continent and the discovery of a passage to India. It was carried on entirely by the Portuguese, and proceeded by gradual steps, from the rounding of Cape Bojador in 1433 by Gilianez, to the memorable passage of the Cape of Good Hope in 1497 by Vasco de Gama. During this long period, at every successive point, vigorous efforts were made to penetrate into the interior. These were inspired, not only by the report of gold mines and other objects of commerce, but still more by a hope of reaching the court of a mysterious personage named Prester John. This name appears to have originated in reports brought by Rubruquis and other early travellers of a ruling Nestorian bishop in central Africa. When, however, notices arrived of a Christian prince in Abyssinia, the name Prester

* Ptolomæus, lib. iv. 9. Gosselin, Geographie des Anciens. Vincent, Periplus.

† Ptolomæus, i. 8. 10. iv. 6. Gosselin, Geog. Anc. tom. iv.

‡ Geographia Nubiensis (Edrisi), in Latinum versa a Gabriele Sionita et Joanne Hesronita Climate, i. parts 1, 2, 3, 4. Notices des MSS. de la Bibliothèque du Roi (Paris, 1789). The passages of these writers relating to central Africa transl. in Murray's Discoveries in Africa, App. (2d ed.) ii. 519—53.

‖ In Ramusio, tom. i. Purchas, ii.

John settled down upon him; and, ignorant of the breadth of the continent, they supposed that, at no very great distance from the western coast, his dominions might be found. The commanders were therefore instructed on every new discovery to make their first inquiry concerning Prester John; and though total ignorance was everywhere professed, they persevered, and really appear to have sent embassies even to Timbuctoo. Di Barros has given a pretty correct account of the position of that city, and of Genni (Jenné) its rival. The English and French found a considerable Portuguese population on the Senegal and Gambia, and many words of that language current among the people of Bambouk. Yet nothing was done to correct the Arabian idea of the Niger rolling westward into the ocean; and the Senegal was therefore considered as forming its lower course, though Di Barros expresses wonder that after passing through so many regions it should not have rolled a greater body of waters.

The Portuguese formed leading settlements at Elmina on the Gold coast, and at the mouth of the river Formosa, which has now proved to be that of the Niger. They learned that the rulers here, on their accession, were accustomed to send ambassadors about 250 leagues into the interior to the court of a prince named Agané, from whom, as from a superior lord, certain symbols were received, which formed the prince's investiture. This potentate, during the interview, was screened from view by a silk curtain, and only at the close his foot was put forth, to which they did homage.* Major Rennell, with seeming reason, presumes this to be the king of Ghana; and in the maps of the sixteenth and seventeenth centuries there appears a very large lake named Guardia, which, from the site and a rude resemblance of name, we suspect to be the Tchad; but D'Anville, finding no authority in its support, expunged it. The Portuguese also formed considerable settlements on the coast of Congo, which to a certain extent they still retain; and their missionaries penetrated to some distance inland. After passing the Cape, and on the way to India, they sailed along nearly the whole of the eastern coast as far as Melinda and Mombasa. The king of Portugal had previously sent out two envoys, Covilham and De Payva, to reach India by way of the Red Sea. Their notices and observations, coupled with those of the circumnavigators, first conveyed to Europe a full view of the outline and circuit of this vast continent.

Covilham in returning settled in Abyssinia, and transmitted such accounts as induced his sovereign to send thither a succession of missionaries, through whom copious accounts were received of that remarkable country, scarcely at all known to the ancients. They did not, however, carry discovery far into the interior of the continent; and indeed such ignorance prevailed on the subject that in the maps of the seventeenth century Abyssinia and Congo are brought nearly into contact, while the Nile rises almost in the vicinity of the Cape of Good Hope.

In Europe meantime a growing interest was excited respecting the course of the Niger, the country of gold, and the trade of Timbuctoo. It was heightened by the conquest of that city by the emperor of Morocco in the end of the sixteenth century.† In 1618, an English company was formed for the purpose of penetrating thither, by ascending the Gambia, supposed one of the mouths of the Niger. They sent out Captain Thompson, who, leaving his vessel at Kassan, went in a boat to Tenda, which no European had yet reached; but he was killed in a contest with the natives, another body of whom, instigated by the Portuguese, attacked and massacred most of the men in the vessel. Another crew, sent to reinforce him, fell almost all victims to the climate. In 1620, Captain Richard Jobson came out with a larger armament, and, undismayed by these evil tidings, made his way considerably higher than his precursors. He even supposed, on erroneous information, that he was near Timbuctoo, and returned with the intention of actively resuming his researches, but was prevented by a quarrel with the merchants, who lost courage, and dropt the undertaking.‡

A century elapsed without further effort, till the Duke of Chandos, director of the African Company, entertained the idea of enlarging its scanty profits by opening a communication with the country of gold. He sent out, in 1723, Captain Bartholomew Stibbs, who having procured canoes, pushed vigorously up the river. On passing the falls of Barraconda, however, the stream became in many places so extremely shallow, that even his little boats could scarcely be dragged upward. He was finally obliged to stop nearly at the point which Jobson had already reached. His information led him to conclude that "the original or head of the river Niger is nothing near so far in the country as by the geographers has been represented." The Gambia, at a little distance upwards, was described as dwindling into a mere rivulet. It had no communication with the Senegal, or with any lake. He no where heard the Niger named, and had great doubts if such a river existed. Moore, a zealous agent of the company, strenuously repelled this conclusion, and endeavoured to overwhelm him by quoting Pliny, Ptolemy, Leo, and other high authorities; but Stibbs, though unable to meet him on this ground, continued not the less steadily to affirm what he had seen with his own eyes.‖ In fact, notwithstanding one or two other attempts, the English made no farther discoveries in this quarter, nor obtained any intelligence of the real Niger.

The French meantime were making greater exertions on the Senegal, which they early chose as their place of settlement. About 1630, a commercial intercourse had been opened by some merchants of Rouen and Dieppe, without any settlement, the crews merely erecting temporary huts during their stay.¶ They were obliged, however, in 1664, to give way to the great West India Company, whose privilege included also western Africa. In nine years, however, it fell; and on its ruins was erected a second, succeeded by a third, fourth, and fifth, which last was merged in the Mississippi scheme. These, like similar mercantile associations, were all disastrous; but each had its interval of activity, during which a good deal was done to extend discovery and trade. The chief efforts were made by the Sieur Brue, appointed governor in 1697. From Port St. Louis, where a settlement was now formed, he immediately sailed up the river, with a view to adjust some differences with the Siratik or king of the Foulahs, and open a trade with its upper regions. He succeeded in his negotiations, and had hoped to reach Gallam, but was obliged to stop at Ghiorel, where he erected a fort. In

* Di Barros, Asia, b. iii. ch. 3—12.
† Hackluyt, vol. ii. pt. ii. p. 192.
‡ Jobson, Golden Trade, or a Discovery of the River Gambia. Lond. 1623.
‖ Moore, Travels in the Inland Parts of Africa. Lond. 1738.
¶ Tannezina, Voyage de Lybie. Paris, 1645.

1698 he reached Gallam, and arrived at the rock of Felu, which stops the navigation for large barks. At Dramanet he fixed on a position for a fort, which was soon after erected under the name of St. Joseph, and became the centre of French interior trade. Through the exertions of one Compagnon, he acquired a full account of Bambouk, and its gold mines, the most productive in Africa. He laid before the company a plan for conquering the country, which he undertook to effect with 1,200 men, but could neither obtain the requisite authority nor means. He made diligent inquiries respecting the regions beyond, and obtained pretty distinct accounts of Bambarra, the lake Maberia (Dibbie), and Timbuctoo. Respecting the Niger, two opposite statements were made. According to one, it flowed westward, and divided into the three branches of the Gambia, the Faleme, and the Senegal; while others asserted its course to be eastward. The former continued to be the popular belief; but D'Anville, who bestowed much attention on the subject, and had access to the best documents, became convinced that there was a great river quite distinct from the Senegal, which flowed eastward, and was the one that passed by Timbuctoo. Upon this principle he formed his map of Africa, a wonderful effort of sagacity and ability, and which, in fact, is still tolerably correct as to a great part of that continent.* By restricting Abyssinia and Congo to their true limits, and obliterating imaginary features, this great geographer first exhibited that vast interior blank which so strongly excited the curiosity and enterprise of Europe.

The spirit of African discovery slumbered in Britain till 1788, when it burst forth with an ardour which led to the most splendid results. In that year was formed the African Association, composed of a number of distinguished individuals, among whom Sir Joseph Banks and Mr. Beaufoy took the lead. Ledyard was sent to penetrate by way of Egypt, and Lucas by that of Tripoli. The former, who, with an iron frame, had travelled great part of the world on foot, excited great expectations; but unhappily a fever carried him off before leaving Cairo. Mr. Lucas, long vice-consul at Morocco, had the advantage of understanding perfectly the African languages. He found no difficulty in obtaining the concurrence of the Pacha of Tripoli; and had set out for Fezzan, but was arrested by an insurrection among the Arab tribes. Valuable information, however, was obtained from several intelligent natives, confirmed by the testimony of Ben Alli, a merchant, who happened to be in London, and had travelled far into the interior. From these sources pretty copious accounts were received respecting the great countries of Bornou and Cassina, the latter of which had become the chief among the states of Houssa. The informants described also a great caravan route across the continent, from Tripoli to Asiente or Ashantee, behind the Gold coast. In this course it crossed the great central river, described, however, as flowing to the westward. It was in fact the Arabian Nile of the Negroes, the Quarrama of Clapperton, which in that direction proceeded to the main river, of which it is only a tributary. Rennell, having these materials put into his hands, and not being aware of any central river but one, reversed the direction given by D'Anville to the Niger, making it flow westward to the ocean by the channel of the Senegal. At the same time Bornou, understood t[…] scribed as bordering on Nubia, was ca[…] to the north and east of its real positi[…] the bordering countries displaced in […]quence; so that this map, though abl[…] up, formed decidedly a retrograde step in […] geography.†

The Association now turned their at[…] to W. Africa, and engaged Major Ho[…] for some time consul at Morocco, to procee[…] the Gambia. He went on foot, impru[…] loaded with a quantity of valuable article[…] passed unmolested through Medina and […]bouk; but on reaching the territory c[…] Moors, was seduced by that people int[…] desert, where he was either killed or aban[…] to perish.‡

On receiving this intelligence, the Assoc[…] lost no time in seeking a substitute, and […] fortunate enough to engage Mr. Mungo […] That gentleman, in December, 1795, set out […] the Gambia, and passed through Medina, Bor[…] Gallam, Kasson, and Kaarta. Having suff[…] on the way severe spoliation, he was se[…] and detained long in captivity by the Moo[…] Ludamar. He contrived to escape, and tho[…] in extreme distress, made his way through […] kingdom of Bambarra to Sego, its capital. […] formed a crisis in African geography, for he th[…] saw "the long-sought majestic Niger, glitter[…] to the morning sun, as broad as the Thames […] Westminster, and flowing slowly to the eastwar[…] The extent of the city, its crowded populati[…] and the numerous canoes on the river, present[…] altogether a scene little expected in the he[…] of Africa. Mr. Park penetrated down the Nig[…] as far as Silla; but his destitute condition, a[…] the formidable accounts of the bigotry prevailin[…] at Jenné and Timbuctoo, deterred him from pro[…]ceeding farther.

This traveller's arrival in England in Decembe[…] 1797, with accounts of such important discoverie[…] raised higher than ever the enthusiasm for Africa[…] discovery. He retired into private life; but th[…] Association obtained the services of Hornemann, a German, who possessed many requisites of a traveller. He went by way of Egypt to Fezzan, thence into central Africa, and appears to have penetrated by way of Cashna to Nyffe on the Niger, where he fell a victim to the climate. The same fate befell Mr. Nicholls, who attempted to reach the Niger by way of the Gulph of Benin. Some years before, Mr. Browne, an enterprizing individual, by his own resources had penetrated by way of Egypt into the interior country of Darfour, about midway between Abyssinia and Bornou. He obtained there some important detached notices respecting the neighbouring nations, and the origin of the White River or main branch of the Nile, said to rise in the mountainous territory of Donga.

Meantime Park's mind was intensely bent upon Africa; and through his acquaintance with Mr. Maxwell, who had commanded a vessel employed in the Zaire or Congo, he became persuaded that that river was the termination of the Niger. Being invited by government to lead an expedition on a large scale, he readily accepted it, and its arrangements were adjusted with a view to his hypothesis. On the 4th of May, 1805, he departed from the Gambia, with a well appointed party of upwards of forty; but the harassing attacks of the natives, with the pestilential influence of the rainy season, reduced

* Labat, Afrique Occidentale, 5 tom. Paris, 1728. Golberry, Fragmens d'un Voyage en Afrique, 2 toms. D'Anville, sur les Rivières dans l'Interior de l'Afrique, Académie des Inscriptions, tom. xxvi. 64.

† Proceedings of the African Association. Lond. 1790.
‡ Ib. Lond. 1797.

them to seven before they reached the Niger. He proceeded downward, however, and at Sansanding obtained materials for constructing a schooner, 40 feet long, which he named the Joliba; and on the 17th November, 1805, set sail to explore the mysteries of interior Africa. It appears that he passed Timbuctoo, and made his way down the river to Boussa, where the king of Youri, indignant at having received no presents, pursued with a large body of men, and attacked him in a narrow and rocky channel. Park and his companions, unable to resist, threw themselves into the water, attempting to reach the shore, but were drowned. His papers are reported to be still in the king's possession, having never been recovered.

A German named Roentgen attempted to penetrate by way of Morocco, and set out in 1809 from Mogadore; but he appears to have been murdered by his guides. Some intelligence was gleaned from Adams and Riley, two Americans, who were successively shipwrecked on the coast of Sahara; but much uncertainty attached to their statements. In 1809, the Association engaged the services of the celebrated Burkhardt, who undertook to accompany the interior caravan from Cairo. While preparing himself for the expedition he made excursions through Nubia, and also through Syria and Arabia, his observations on which have been published, and are extremely valuable. In 1817, however, when about to set out on his main destination, he fell a victim to dysentery.

The public mind continued to be intently fixed on African discovery; partly from a wish to learn the real state of countries so difficult to explore and so different from those of the temperate zone, and partly, and perhaps principally, from absurdly exaggerated ideas as to the value of the commerce that might be carried on with the natives. At length government, on the suggestion of Sir John Barrow, determined to make a more extensive effort than ever. Following up the hypothesis of the identity of the Niger and Congo, two expeditions were prepared; one to ascend the latter river, another to descend the former. Captain Tuckey, who commanded the first, sailed from England in February, 1816, and arrived in June at the mouth of the Congo. The party proceeded for some time with great spirit; but being obliged by the cataracts to leave their boats, and proceed on foot through a rugged country affording little shelter, they became exposed to the baneful influence of the climate. Severe sickness soon assailing the whole party, obliged them to stop short, and ultimately proved fatal to all the officers, including the commander. The other expedition, destined to go down the Niger, was commanded by Major Peddie, who endeavoured to reach the interior through the country of the Foulahs. Having died before the march began, he was succeeded by Captain Campbell, who reached the Foulah frontier; but the sovereign, jealous of their designs, detained them under various pretexts, till exhausted supplies and general sickness obliged them to return. Immediately after Captain Campbell died, and his fate was shared by Lieutenant Stokoe, just as he had planned a new expedition. Captain Gray of the Royal African corps penetrated by another route to Gallam, but could not obtain permission to proceed through Bambarra.

All this series of disaster did not shake the perseverance of the British government. A new opening was afforded through the Pacha of Tripoli, who, inspired with a desire of improvement new in this quarter of the world, cultivated European connection, and through the judicious conduct of consul Warrington was rendered friendly to Britain. Holding Fezzan tributary, and having a commanding influence over the central states, he could secure the safe passage of a traveller through a great part of Africa. Under his auspices, in 1819, Mr. Ritchie and Lieutenant Lyon reached Fezzan; but through the climate, and the treacherous ill treatment of the sultan, they incurred such severe illnesses as proved fatal to the former, and obliged the latter to return.

This failure did not prevent the speedy formation of another expedition, for which a more fortunate destiny was reserved. Its chiefs, Major Denham, Lieutenant Clapperton, and Dr. Oudney, arrived at Tripoli in November, 1821. Next spring they proceeded to Fezzan; but through the neglect of the sultan were unable to procure camels, which obliged Denham to return to Tripoli. Here he received assurances of protection from Boo Khalloon, a great Arab slave-merchant, who was setting out for the very countries which he sought to explore. Under his guidance, the party, in the end of 1822, began their route through the great desert, passing between the territories of the two remarkable native tribes, the Tuaricks and the Tibboos. They then travelled for a fortnight amid hills of moving sand, without the slightest vestige of life or vegetation. Soon after they entered Kanem, the northern province of Bornou. At Lari they came in view of lake Tchad, the great interior sea of Africa, 200 miles long, receiving two great rivers, and containing numerous islands. In proceeding along its eastern shore they visited most parts of Bornou and its chief cities of Kouka (Kuku of Edrisi), New Birnie, and Angornou. This kingdom, once the most powerful in central Africa, had about thirty years before been conquered and dreadfully ravaged by the Fellatas from Houssa; but a private individual, by valour and ability, had reasserted its independence and driven out the enemy. That person, under the title of Sheik, exercised all the real power, while he suffered the legitimate king to reign in empty pomp. Major Denham also visited the smaller kingdom of Mandara, bounded by an almost interminable range of mountains filled with savage tribes, who are hunted down for slaves. In Loggun, situated along the great river Shary, which falls into the Tchad, he found a people more ingenious and industrious than those of Bornou.

Meantime Clapperton and Oudney were making an expedition through Houssa, the most interesting region of central Africa. It was found inhabited by the Fellatas, a people having nothing of the Negro features, but apparently descended from the great body of Moslem Arabs, who had migrated many centuries ago. They were quite superior to the Bornonese both in aspect and character, cultivating the land with greater skill and diligence, and manufacturing very fine cottons. The sway of Ghana, and even of Cassina, had been transferred to Sackatoo (Tocrur), the sultan of which, about the beginning of the present century, overran all Houssa, and for some time occupied Bornou. Ghana, however, under the name of Kano, was found great in its decay, and still the chief seat of commerce. The transactions were extensive and well arranged; but slaves were the staple commodity. Sackatoo was found considerably larger than Kano, and the traveller was hospitably received by sultan Bello. The river Quarrama

was observed traversing this country, and flowing westward into the Niger, which, at the nearest point to Sackatoo, had a southward course; but accounts varied, whether continuing in that direction it reached the sea, or making a great circuit emptied itself into the lake Tchad. The traveller, having in vain solicited the means of proceeding to the river and the coast, returned to Bornou by a new route, which enabled him to see Cassina, a capital now greatly decayed. Dr. Oudney died early on this journey.

The British government determined to follow up these extensive and important discoveries. Clapperton was employed to land on the coast of Guinea, thence to penetrate to Sackatoo, and on his way explore the termination of the Niger. Instead of attempting to ascend the river of Benin, he was advised to proceed by land from Badagry; but from imprudent exposure to the climate two companions died, and he became sickly. He soon, however, reached the Yarriba, or Kingdom of Eyes, which he found populous and flourishing; and the natives, not imbued with Mohammedan bigotry, courteously received him. In traversing it he crossed the chain of the Kong Mountains, peopled to the summit. Leaving Yarriba, and passing through the large cities of Kiama and Wawa, he reached Boussa on the Niger, where he received a confirmation of Park's death, and even an invitation from the king of Youri, who promised to give him that traveller's books and papers; but this visit was delayed till he should return from Sackatoo. On his way thither he passed through Nyffe, a highly improved territory, though dreadfully laid waste by the Fellatas; and through Zegzeg, also very populous and well cultivated. At Sackatoo, or Soccatoo, an expedition against the rebel territory of Goober enabled him to procure farther information. The sultan, however, prepossessed with groundless jealousies, treated him with a harshness, which, with previous sickness, brought this spirited traveller to a premature grave. His servant, Lander, after doing the last duties, conceived the plan of himself exploring the termination of the Niger, but was forcibly prevented.

The information attained on this journey afforded the strongest reason to suppose that the Niger terminated in the sea. Lander on his return submitted to government a plan for proceeding to Boussa, and thence navigating the stream downwards. Government agreed to furnish the means, though promising only a very slender reward. In March, 1830, accompanied by his brother, he arrived at Badagry, and proceeded by nearly the former route to Boussa. Thence he visited Youri, which proved a very rich and populous country; but the king treated him ill, and he had no success as to Park's books and papers. On the island of Patashie, below Boussa, he procured, with great difficulty, two canoes, afterwards exchanged for one of larger size, and thus began the navigation down the Niger. He soon found it expand into a most magnificent river, about three miles broad, and bordered by noble forests. The large island of Zagoshi presented an active scene of industry and navigation, and by a large force of armed canoes maintained its independence of the neighbouring states. On the adjoining shore appeared a very large town, named Rabba. Farther down, Egga, another great port on the river, terminated the comparatively civilized territory of Nyffe; below which were only detached states of a very turbulent and lawless character, among which serious dangers were encountered. The next striking object was the influx from the westward of the great river Tshadda, three or four miles broad, and with a current so strong that they soon gave up the attempt to ascend it. They learned, however, that three days' journey up was Fundah, of whose importance they had often heard. It became more and more evident that their voyage was to terminate in the sea, and that the numerous river branches which open into the Gulph of Benin are the delta of the Niger. Near the large town of Kirree, they passed the one which runs towards Benin. Here the natives were almost entirely clothed in the manufactures of Europe, and had fleets of large canoes adorned with European articles. The travellers, however, were made prisoners, and carried down to Eboe, the great mart for slaves and palm oil, with which trade the natives, who are rude and dissolute, do not hesitate to combine piracy. With great difficulty, and the promise of a high ransom, they succeeded in getting arrangements made for conveying them to the sea. They reached it by the channel called by the Portuguese Nun, by the English Brass River; not the largest of the æstuaries, but that which comes in the most direct line from the main trunk. Thus, by very humble agency, was solved that grand problem in African geography, in the search after which so many abortive efforts had been made.

This important discovery, opening a water communication into the very centre of the continent, made a strong impression on the mercantile world. Mr. M'Gregor Laird, and some other gentlemen of Liverpool, entered into an association for forming a settlement and opening a trade on the Upper Niger. Two steamers, the Quorra and Alburkah, were fitted out; while the Columbine, a larger sailing vessel, was laden with goods. They arrived in the mouth of the Nun in October, 1832, but suffered severely from sickness amid the swamps of the delta; and though before the end of the year they reached a healthier station, the survivors did not regain their health. In the course of the next two years, Mr. Laird ascended the Tshadda, and reached Fundah, nine miles inland, which he found a large city, with nearly 40,000 inhabitants, situated in a very extensive and beautiful plain. Its commerce, however, had been much injured by war, and by the tyranny of its ruler, from whose power Mr. Laird had some difficulty in escaping. Mr. Oldfield in the Alburkah sailed about 100 miles up this river, but neither found its banks so fruitful nor the commerce so active as on the Niger. He also visited Rabba, which proved equally extensive with Fundah. The streets were crowded and dirty, but the markets spacious and well arranged. The state of the vessel frustrated the attempt to ascend to Boussa. Lander had unfortunately died of wounds received in a contest with the natives. The expedition was unfortunate in a commercial view, the only valuable article being ivory, in too small quantity to pay the expense of the voyage. As the natives, however, are active and eager for gain, Mr. Laird conceives that this and other articles could be supplied to almost any extent, if a steady demand were once understood to exist for them.

From the southern extremity of Africa, interesting discoveries have also been made. It was not till 1650 that the Dutch formed a colony at the Cape of Good Hope, which quickly became flourishing. Beyond the Karroo desert they settled rich grazing farms, at the foot of the high interior ranges of the Nienweld and Sneuwgebirge, compelling the natives to labour as slaves.

Towards the end of the eighteenth century, Sparrman and Vaillant brought interesting accounts of the scenery of this tract, and its natural productions, both animal and vegetable. The settlement having been captured by Britain, Mr. Barrow, as secretary to Lord Macartney, made in 1797 an excursion into the interior, and gave striking pictures of the pastoral life of the Caffres, and of the miserable aspect and condition of the Bosjesmans or mountain Hottentots. In 1801 Messrs. Trutter and Somerville passed the Sneuwgebirge, discovered the large stream of the Orange River, with the pastoral tribe of the Koranas, and finally arrived at Lattakoo, capital of the Boshuanas, a more industrious and improved people than any yet known in southern Africa. On receiving this intelligence, Lord Caledon sent Dr. Cowan and Mr. Donovan, with a party of twenty, to attempt to penetrate as far as Mozambique; but after proceeding considerably beyond Lattakoo, they were surprised and killed by a party of natives.

The Rev. Mr. Campbell, in his zealous pursuit of missionary objects, considerably extended our knowledge of this part of Africa. Beyond Lattakoo, he passed through a succession of towns always rising in importance. Kurrechane, the last, was estimated to contain 16,000 inhabitants, who, besides agriculture, showed considerable skill in adorning their habitations, tanning skins, and smelting iron and copper. Dr. Lichtenstein and Mr. Burchell made important observations on the Boshuana people; but neither penetrated so far as Mr. Campbell. In 1823, while Mr. Thompson was at Lattakoo, these districts were invaded by a numerous and formidable Caffre people, from the vicinity of Cape Natal. These, it was discovered, had been driven from their country by a still more powerful tribe, the Zoolas, whose chief, Chaka, could muster 100,000 fighting men. Yet there was found to be in that quarter a large extent of fertile territory, to which a number of Dutch farmers were induced to emigrate; but having been involved in hostilities with this savage tribe, they have of late suffered dreadfully, and many of them have perished.

During the years 1822 to 1826, Captain Owen was employed by government in making a very careful survey both of the eastern and western coasts. He obtained much information respecting the former, which had hitherto been very imperfectly known. In 1837, Sir James Alexander, under the auspices of the Geographical Society, performed an expedition to the north-west from the Cape, into the country of the Damaras, where he penetrated farther than any former traveller.

After all that has recently been done to explore Africa, there still remain very important points involved in obscurity. The most important relates to the courses of the Tshadda and the Shary, flowing respectively into the Niger and lake Tchad. It is a favourite hypothesis with some, that both are one stream, pursuing an unbroken course from the lake to the river; but the fact observed by Denham, that the Shary flowed into the Tchad, renders this physically impossible. It has been recently conjectured that the Yeou may be identical with the Tshadda, and thus unite the two great receptacles; but the travellers, who crossed that river and went a great way along its banks, could not well be mistaken in their belief of its flowing into the Tchad. It seems more probable that these two great rivers have their sources in the mighty chain to the south of Mandara; that their sources, and perhaps some of their branches, may be at no great distance from each other.

Another object should be to connect lake Tchad and the surrounding countries with Nubia and Abyssinia, exploring on the way the source and early course of the Bahr-el-Abiad, or principal branch of the Nile. This wide interval has as yet been only broken by Brown's journey into Darfour, and some notices procured by him respecting the adjacent countries. An expedition, we understand, is at present projected from Egypt to the head of the Nile.

There remains still farther to the southward a great mass of unknown territory, between the Portuguese settlements on the eastern and western coasts. The people in these have formed a few stations on the Zambeze, with a view to the traffic in gold and slaves; and they have others on the eastern coast, whence merchants, with similar objects, penetrate to some distance in the interior. Still the great body of the country remains unexplored. The intimations received represent it as occupied by numerous tribes, who have made some progress in culture and the arts. To explore it with any degree of completeness, two expeditions would be necessary; one from the Cape northward as far as Bornou and Houssa; the other across the continent, between Congo and Mozambique. Both, however, would be accompanied with considerable difficulty and danger; and though they could hardly fail to add to our knowledge of the physical structure of the country, we incline to think that they would be of little or no importance in other respects.

AFRICA, or MAHADIAH, a sea-port town of Barbary, E. coast reg. Tunis, 110 m. S.S.E. Tunis, lat. 35° 32′ N., long. 11° 16′ E. It may contain about 3,000 inhab., and is at present a wretched place, surrounded with broken down walls, and without shops or bazars. Formerly, however, it was a sea-port and fortress of very considerable importance. In 1550 it was besieged by a powerful armament, under the orders of the viceroy of Sicily and of Doria the famous admiral of Charles V., who took it after an obstinate and desperate resistance. But being found to be untenable it was subsequently abandoned. (*Temple's Algiers, &c.*, i. p. 137.)

AFRIQUE (ST.), a town of France, dep. Aveyron, cap. arrond., on the Sorgue, lat. 43° 57′ N., long. 1° 47′ 15″ E. Pop. 4,757. It is situated in a fine valley. Streets broad; but houses mostly old and ill built. It has tribunals of original jurisdiction and commerce, a communal college, and an agricultural society; with manufactures of coarse cloth, coverlets, cotton yarn and hosiery, tanneries, &c.; and a very considerable trade in wool, cheese, &c. It was formerly fortified.

AGABLY, a town of the desert of Sahara, cap. of an oasis, on the caravan road from Tripoli to Timbuctoo, lat. 27° 44′ N., long. 4° 25′ E.

AGADIR, or SANTA CRUZ, a sea-port town of Morocco, on the Atlantic Ocean, and the most S. in the empire, lat. 30° 26′ 35″ N., long. 9° 35′ 56″ W. It is built on the declivity of a hill on the shore of a gulph or large bay of the same name, well defended from the winds, and affording good anchorage for shipping. Agadir belonged at one time to the Portuguese, by whom it was surrounded by walls. It was taken from them by the Moors in 1536, when its fortifications were farther strengthened. It was for a considerable period the centre of an extensive commerce; but having rebelled against the government in 1773, the principal part of its population was transferred to Mogadore; and it had so much declined that it is said by Mr. Jackson, in 1809, not to have had more than 300 inhabitants. The vast sandy deserts of N. Africa commence immediately to the S. of Agadir; and hence its bay is aptly termed by the Arabs *Bab-Soudan*, that is, *Gate of the Blacks*.—(*Jackson's Morocco*, p. 115.; *Ritter's Géographie. Trad. Franc.* iii. p. 161.)

AGDE (an. *Agatha*), a town of France, dep. Herault, on the river of that name, near where it is traversed by the canal of Languedoc, about 3 m. above where the former falls into the Gulph of Lyons, and about the same distance from where the latter is united with the lake Thau, lat. 43° 18′ 40″ N., long. 3° 28′ 10″ E. Pop. 7,965. Ships of 200 tons burden come up to the town by the river, near the mouth of which is fort Briscou. It has a considerable coasting and some foreign trade, with

ship-building, manufactures of verdigrise and soap, and distilleries. Being entirely built of black basaltic lava, and surrounded by a wall and towers of the same material, it has a grim appearance, and is called by the country people the *Ville Noire*. It made a part of *Gallia Narbonensis*, and was in 506 the seat of a council summoned by Alaric. — (*Hugo, France Pittoresque, dep. Herault.*)

AGEN (an. *Aginum*), a town of France, cap. dep. *Lot-et-Garonne*, on the right bank of the Garonne, nearly half way between Bordeaux and Thoulouse, lat. 44° 12′ 22″ N., long. 0° 36′ 35″ E. Pop. 12,851. It is ill built; streets narrow, crooked, and dirty. The hotel of the prefect is worth notice, and there is a fine bridge over the Garonne of eleven arches: it is the seat of a *cour royale* for the depts. Lot-et-Garonne, Lot, and Gers; has a college and several literary institutions, a public library with above 12,000 vols., and a theatre. Its situation, though rather unhealthy, makes it the entrepôt of the commerce between Bordeaux and Thoulouse. There is here a sail-cloth manufactory, which recently employed above 600 work-people, and produced annually 130,000 metres of canvass for the navy: there are also manufactures of serges, printed cloths, cottons, braziers' ware, pottery, soap, spirits, &c. Environs beautiful; the *promenade du Graviers* is one of the finest in France. Agen is very ancient, and under the Roman emperors was a prætorian city.—(*Hugo, France Pittoresque, dep. Lot-et-Garonne; Briand, de Verzé Dictionnaire de la France, &c.*)

AGGERHUUS, a bishopric of Norway, and one of the most important divisions of that kingdom; which see.

AGGERSOE, a small Danish island in the Great Belt, near the E. coast of the island of Zealand, lat. 55° 12′ N., long. 11° 12′ E.

AGHRIM, or AUGHRIM, an inconsiderable town or village of Ireland, co. Galway, 82 m. W. Dublin. One of the greatest battles ever fought in Ireland took place in the vicinity of Aghrim in 1691, when the troops of William III., commanded by Ginkell, afterwards Earl of Athlone, gained a complete and decisive victory over those of James II., commanded by St. Ruth, who fell early in the action.

AGINCOURT, or AZINCOURT, a village of France, dep. *Pas de Calais*, 13 m. N.W. St. Pol; famous in history for the great victory gained near it in 1415 by the English monarch, Henry V., over a vastly superior French force.

AGLIE, or AGLIA, a town of the Sardinian states, Piedmont, 10 m. S. W. Ivrea. Pop. 3,240. It has a collegiate church, and a magnificent palace with a considerable library.

AGNES (ST.), one of the Scilly Islands (which see), being the most S. of the group. It contains about 300 acres, and had in 1831 a pop. of 289. It is celebrated for its light-house with a revolving light, in lat. 49° 53′ 37″ N., long. 6° 19′ 23″ W. The lantern is elevated 138 feet above high-water mark.

AGNONE, a town of the Neapolitan dominions, prov. Sannio, 18 m. N.N.E. Isernia, in an elevated healthy situation. Pop. 7,000. It has an immense number of churches, an hospital, and five monts-de-piété, which make loans of seed corn to the peasants. It is the seat of the principal copper manufactures in the kingdom. Some writers have affirmed that it occupies the site of the ancient *Aquilonia* of the Samnites.

AGOA DE PAO, a sea-port town of St. Michael, one of the Azores, 12 m. E. Punta del Gada. Pop. 3,000.

AGON, a small sea-port town of France, dep. La Manche, 7 m. W. Coutances. Pop. 1462.

AGOSTA, or AUGUSTA, a maritime town of Sicily, cap. cant., prov. Syracuse, on its E. coast, 12 m. N. Syracuse, lat. 37° 13′ 35″ N., long. 15° 14′ E. Pop. 8,667. It stands on a peninsula, and was built in the 13th century by the emperor Frederick, who peopled it from Centurissa, which was razed for sedition. It was nearly destroyed by the earthquake of 1693, when numbers of people were crushed to death under the ruins of their houses, and a sulphurous vapour finding its way to the principal powder magazine, it blew up with a tremendous explosion. Streets regular and parallel, with some tolerable municipal edifices and magazines for articles of commerce; but the houses are low and mean, and the inhabitants have an air of dejection and poverty. Their whole existence depends on the export of salt, and a little oil, honey, and wine. It is strongly fortified both on the land and sea sides. The harbour, though rather difficult of entrance, is deep, spacious, and secure; but in E. and S. gales there is often a heavy swell. The holding ground is excellent. — (*Smyth's Sicily*, p. 159.; and *App.* p. 14.)

AGOWS, a people of Abyssinia, inhabiting the territory to the E. of the sources of the Bahr-el-Azrek, or Abyssinian Nile. This district is uncommonly fertile, particularly in cattle and honey, with which it almost exclusively supplies Gondar. The country is also very populous; and though of limited extent, can bring a considerable force into the field. There is another tribe of the same people, called Tcheretz Agows, inhabiting a district along the N. bank of the Tacazze.

AGRA, one of the *subahs*, great divisions, or provinces into which Hindostan, or India N. of the Nerbuddah River, was divided by the emperor Acbar. It lies chiefly between 25° and 28° N., and may be computed to contain about 45,000 sq. m., and from 6 to 7 millions of inhabitants. These subahs or provinces of the Moghul empire were in fact equal in extent and population to kingdoms. The province of Agra lies in the alluvial plain of the Jumna and Ganges, with an elevation but a few hundred feet above the level of the sea; and the finest portion of it, well known under the name of the Doab, or country of the "two rivers," lies between these streams. By far the greater portion of its surface is a dead flat. Although watered by three great navigable rivers, the Chumbul, Jumna, and Ganges, the country is characterised in general for its drought, the greater part of its irrigation being effected by means of deep wells. It may also be described as eminently deficient of timber. From March to June the climate is dry, and extremely sultry; from June to October, sultry and rainy; and from November to February inclusive, serene, dry, and cold, the thermometer almost every morning falling below the freezing point. With the exception of a few woody portions of the province lying towards its W. extremity, and here only during the season of the periodical rains, the climate is healthy. No metallic mines exist in the province; and its only valuable minerals are the red sandstone, of which nearly all the monuments of the cities of Delhi and Agra are constructed; and a species of tufous limestone, called *kanghar* in the language of the country, and which is the only source from which lime is obtained for economical purposes. There are commonly two harvests; the greater crops being reaped before the setting in of the rains in May and June, and the lesser in December and January. The principal corn crops are those of wheat and barley. Rye is not known, and oats hardly so, and rice is not cultivated for want of a sufficiency of water. Of the smaller kinds of corn, those chiefly cultivated are two species of millet, viz. *Holcus Sorghum*, called in the language of the country *Jevar*; and *Holcus spicatus*, called *Bajera*. These two constitute the chief bread corn of the labouring people, who seldom taste wheat. Great quantities of pulses are raised as a winter crop for the food of man and cattle, the most common of which is the *Cicer arrietum*, called grain by Europeans. Mustard seed is raised for oil, and the sugar cane is cultivated for the manufacture of sugar. Cotton is cultivated to a very considerable extent, and indigo is produced more extensively in this province than in any other part of Upper India. It was, indeed, from hence that the drug, in the earlier periods of European commerce, was procured for the trade of Europe. The great mass of the inhabitants are Hindoos; among whom the two first classes in rank, the Braminical and Military, are more frequent than to the eastward, or to the south. To the W. of the Jumna, chiefly are found two nations or tribes well known in the history of Upper India, the Jauts and the Mematties, both distinguished by their warlike and predatory habits. It is remarkable of a country so long subject to Mohammedan rule, and the immediate seat of power, that the proportion of Mohammedans found in this, as indeed in the neighbouring provinces, is smaller than in the more remote one of Bengal. The inhabitants, of whatever denomination, are of more robust frames and a far bolder spirit than those of the last-named country. The language of the people throughout is the Hindi or Hindustany. The basis of this language is the Hindoo dialect, which was spoken in the kingdom of Kanoje, which is within the limits of this province, on the first Mohammedan invasions. The Persian, the most cultivated tongue, spoken by the conquerors, has been superadded to this local tongue, in the same way as Norman French has been added to the Anglo-Saxon; so that, in short, the history of the formation of the Hindi is exactly a parallel case to that of English. Another Indian dialect, now nearly extinct, was the ancient language of the country near the town of Agra.

AGRA, the name of a zillah, or district, constituting a judicial and fiscal division of the last-named province, lying on both banks of the Jumna. Its computed area is 4,500 Eng. sq. m.; and if it be equally populous with the neighbouring province of Delhi, of the population of which some estimate has been made, and it is probably somewhat more so, it contains 273 inhabitants to the square mile, or near one million of absolute population. In 1813, ten years after this district came into British possession, it was estimated to contain 2,456,214 begahs of land, each equal to near one third of an English acre, of which there were under actual culture 1,222,667; fit for culture 330,807; and waste or uncultivable 902,740. Half the area of the whole district, therefore, was under actual tillage. The land

tax as assessed to the land under culture was at the rate of two rupees and two anas a begah, or near 13s. an acre; a very high or rather oppressive land tax, for a poor country just recovering from long disorder and anarchy.

AGRA, a city of Hindostan, cap. of the above province and district, on the S.W. bank of the Jumna, which during the season of the floods is here about half a mile broad, and at no season fordable, in lat. 27° 11′ N., long. 77° 53′ E. It is distant from Calcutta 950 m., Madras 1190, and Bombay 850. Agra, like other considerable towns of India, is built of bricks, the houses having terraced roofs; the streets being extremely narrow, and never paved or flagged. Much of it is at present in a state of ruin. No census of its population, that we are aware of, has been taken; but judging by the amount of the town duties, which have been about 60,000 rupees a year, or 6,000*l*., it would appear to be about equally populous with Dacca, Bareilly, and Mirzapore, and may contain about 65,000 inhabitants. It is very conveniently situated for the commerce of W. India and E. Persia, and is the mart of a very considerable inland and frontier trade. The trading communication is carried on by boats on the Jumna and Chumbul; and by horses, camels, bullocks, and bullock carts by land. The goods comprising the imports consist of shawls, horses, camels, rock-salt, and the dry and fresh fruits and drugs of Persia; cotton wool and coarse cotton fabrics from the S., with European commodities by the Jumna and Ganges. The chief exports consist of raw silks, indigo, and coarse sugar. In 1832, the custom duties levied on these, commonly at the rate of from 7½ to 10 per cent. on the value, were, for the exports 202,960 rupees; and for the imports 1,100,495 rupees. In 1818 the amount of the joint export and import duties was 1,082,157 rupees; so that in 14 years' time the increase was 34 per cent. Agra, in remote times, appears to have been a fortified town of some consequence; but it was not until the year 1504 that it was made the seat of Mohammedan empire. This was effected by the Afghan emperor Sihundur Lodi. About half a century later the place was greatly embellished by Acbar, by far the most illustrious of all the Indian emperors. It continued to be the seat of government during his reign and that of his son; and Delhi was not restored as the metropolis until the reign of his grandson, Shah Jehan, in the year 1647. When Acbar fixed the seat of his government at Agra, he changed its name to Acbarabad, which continues to be its Mohammedan designation. It contains many fine monuments, all of Mohammedan origin. The fortress is of great extent, the double rampart and bastions being built entirely of hewn red sandstone, and at least 60 feet above the level of the Jumna, on the bank of which it stands. The most remarkable structure, however, is the Taj Mahal, literally the "Crown of Empires." This stands about 2 m. below the fortress, and on the bank of the river. It is a mausoleum, built by the emperor Shah Jehan in honour of his empress the Begum Narr Mahal; a building of white marble raised on a terrace, and in the ordinary form of a Mohammedan mosque with minarets. The mosaic ornaments of the interior, including even the marble pavement, are extensive, rich, and elaborate, the flowers and arabesques being composed of no less than twelve different stones, such as agates, jaspers, lapis lazuli, and various coloured marbles, and the numerous quotations from the Koran being in black marble. A garden with fountains and highly ornamented gateways surrounds the mausoleum; and the *toute ensemble* is supposed, whether for extent, symmetry, *matériel*, or execution, to surpass any thing in the world of the same description. This is the uniform opinion, even of those who have seen the master-pieces of Italian art. "It is possible," says the celebrated and accurate Bernier, "I may have imbibed an Indian taste; but I decidedly think that this monument deserves much more to be numbered among the wonders of the world than the pyramids of Egypt,—those unshapened masses, which, when I had seen them twice, yielded me no satisfaction, and which are nothing on the outside but heaps of large stones piled in form of steps, one upon another; while within there is very little that is creditable either to human skill or to human invention." The architect was a Mohammedan native of Sahar, and the whole building is said to have cost 750,000*l*. It is kept in excellent repair by the British government, which assigns a handsome annual revenue for this object. The tomb of the emperor Acbar at Secundra, 6 m. from Agra, would be considered a splendid building in any place that had not the Taj Mahal to boast of. It was constructed by his son the emperor Jehangire. A marble palace of Shah Jehan exists within the fortress; and the neighbourhood of the town, for miles, contains the ruins of palaces and tombs of costly materials and workmanship. Agra, with the district to which it belongs, was conquered by the chief Madhajee Sindiah in 1784, and formed a portion of the jagheer assigned by this prince for the maintenance of the army, organized on the European system, and officered by Europeans, by means of which he maintained his supremacy in Upper Hindostan. In the course of the military operations which deprived the Mahrattas in 1803 of nearly the whole of their possessions in Hindostan, Agra was besieged by Lord Lake, and surrendered after a practical breach had been effected in one of the bastions. Since that time it has continued in our occupation, and constitutes our only depôt or military magazine on the N. W. frontier. The fortress has always a considerable garrison, and about two m. beyond its walls is a cantonment where a much larger military force is stationed. Agra was the birth-place of Abul Fazel, the famous prime minister of the emperor Acbar.

AGRA, the name of a new government in British India, founded under the charter act of 1833. The unwieldy size of the Bengal presidency, which is far greater in extent, and contains more than double the population of both, the presidencies of Madras and Bombay, along with the additional duties assigned by the act in question to the governor-general of India, suggested the convenience of erecting a new presidency, and the historical reputation of Agra suggested the name. The new presidency was to have had a governor and council, but all the civil and military establishments were to have been borrowed from Bengal. The inconvenience of this arrangement in this respect soon became obvious in practice, and accordingly an act of parliament was obtained doing away with the new presidency, and substituting for it a lieutenant-governor, named by and subject to the governor of Bengal. By this change the essential administration rests with the latter authority, but local details are conducted by the lieutenant-governor. The authority of this officer extends over all the territories N. and W. of Allahabad inclusive, conquered or obtained by cession since 1801. The names of the districts subject to the lieutenant-governor of Agra are as follow:—Allahabad, Futtehpore, Bundlecund North, Bundlecund South, Benares, Ghazeepore, Gurruckpore, Juanpore, Azimghur, Mirzapore, Agra, Allyghur, Furruckabad, Bareilly, Shahjehanpore, Seharunpore, Meerut, Cawnpore, Etawah, Moradabad, and Bolundshuhur. These are computed to contain 66,510 sq. m. The authority of the lieutenant-governor, however, also extends to other districts possessing a less regular form of civil government, as the hill districts ceded by the Nepalese, which are computed to contain 18,000 sq. m. The population of all the territories now enumerated has been reckoned at 30,000,000. It has further, however, jurisdiction over the districts ceded by the Mahrattas on the Nerbudda in 1817, estimated to contain 29,800 sq. m.; and by the rajah of Berar in 1826, calculated at no less than 55,900. sq. m. No estimate of the population of these two last territories has been made, but they are known to be very thinly inhabited. The political correspondence with the chiefs on the W., N., and S. frontiers of his jurisdiction is also under control of the lieutenant-governor of Agra.

Authorities for these *four* articles, viz. Agra province, Agra district, Agra city, and Agra government:—*Hamilton's Description of Hindostan; Hamilton's East India Gazetteer; Bernier; Return of the Population of British India made in* 1831 *to the H. of Commons; Briggs' Ferishta; Trevelyan's Report on the Inland Customs of Bengal.*

AGRAM, or ZAGRAB, a fortified city of the Austrian empire, cap. Croatia, and the residence of the governor-general, on a hill on the banks of the Save, lat. 45° 49′ 2″ N., long. 15° 4′. E. Pop. 17,000. Agram is the seat of a bishopric and of a tribunal of appeal for Croatia, the Bannat, and Slavonia. It has a superior academy, a gymnasium, a Franciscan convent, and a considerable commerce, particularly in the tobacco and corn of Hungary.

AGREDA, a walled town of Spain, prov. Soria, at the foot of Mount Cayo, celebrated by Martial. Pop. 3,200. It is ill built, has 6 churches and 4 convents, with tanneries and potteries.

AGREVE (ST.), a town of France, dep. Ardeche, cap. cant. Pop. 2,500.

AGUAS CALIENTES, a town of Mexico, prov. Guadalaxara, 100 m. N.E. Guadalaxara, lat. 22° N., long. 101° 45′ W. It is situated in a fertile district, has a fine climate, and is one of the handsomest of the Mexican towns. Being intersected by several great roads, it has an active and considerable commerce. It is celebrated for its great cloth manufactory which employed, in 1825, 350 hands (Ward), and the hot springs in its vicinity, whence it derives its name. Its pop. may probably amount to 18,000 or 20,000.

AGUILAR DE LA FRONTERA, a town of Spain, prov. Cordova, 22 m. S. S. E. Cordova.

AGUILAR DEL CAMPOS, a town of Spain, prov. Palencia, on the Pisuerga, 40 m. N.W. Burgos. Pop. 1,600.

AHANTA, a territory on the Gold Coast of Africa, between the rivers Ancobia and Suberin.

AHMEDABAD, a town of Hindostan, presid. Bombay, prov. Gujrat, cap. district of same name, on the navigable river the Sabermatty. Lat. 22° 58′ N., long. 72° 37′ E. Pop. 100,000? About the middle of the 15th century it was a flourishing city celebrated for the magnificence of its mosques, palaces, and streets; but it has since fallen greatly to decay. It is surrounded by a high wall flanked with towers; and is a great resort of itinerant players and poets. It suffered severely from the plague in 1812, and from an earthquake in 1819. The district of which Ahmedabad is the cap. produces a land revenue of about 120,000*l.* a year.

AHMEDPORE, a town of Hindostan, prov. Orissa, 11 m. S. Juggernaut.

AHMEDNUGGUR, a city and fortress of India, presid. Bombay, prov. Aurungabad, cap. district of same name, on the river Seena, 70 m. N.W. Poonah, lat. 19° 5′ N., long. 74° 55′ E. The town, founded in 1493, is enclosed by a stone wall, and has a handsome market-place and some pretty good streets. At present it is the head station of a civil establishment, and has about 20,000 inhab., exclusive of the garrison. The fortress, a little way from the town, is oval shaped, and about 1 m. in circ.: it is built entirely of stone and is surrounded by a broad and deep ditch. It surrendered to General Wellesley (now Duke of Wellington) in 1803.

The district or collectorate of which Ahmednuggur is the cap., contains an area of 9,910 sq. m. with a pop. of about 667,000. The land revenue amounted in 1827-28 to 181,584*l.*, the average rate of assessment being 1¼ rup. per begah. The total revenue for the same year was 203,400*l.* — (*Parl. Papers on Indian affairs; Revenue, Appendix*, p. 660.)

AHMOOD, a town of Gujrat, 20 m. N. by W. Broach, lat. 22° 3′ N., long. 73° 6′ E.

AHRBERG, a town and castle of Bavaria, circ. Rezat, 10 m. S. Anspach. Pop. 3,300.

AHRWEILER, a town of the Prussian states, prov. Lower Rhine, cap. arc., on the Ahr, 23 m. W.N.W. Coblentz. Pop. 2,100.

AHUN, a very ancient town of France, dep. Creuse, cap. cant., 10 m. S.E. Gueret, on a mountain at the foot of which flows the Creuse. Pop. 2,183.

AHWAZ, or **AHWUZ**, a town of Persia, prov. Kuzistan, on the Karoon, 48 m. S. Shuster. In former times this was a large and flourishing city, cap. prov. of same name, and the winter residence of the Persian kings. It is now a wretched place, with 600 or 700 inhabitants. Some ruins of the old city are still to be seen. Of these the most worthy of attention are the remains of a bridge over the river, and of a royal palace. The portion of the wall of the latter now standing is built of large blocks of hewn stone, and is about 300 feet in length, and 14 or 15 feet high. A little below Ahwaz, at the deserted village of Sabla, are the remains of a remarkable mound or dam made across the river to procure water for the irrigation of the surrounding country.—(*Kinneir's Per. Emp.*, p. 89.)

AIAS, or **AJASSO**, a ruined sea-port of Asiatic Turkey, on the N. shore of the gulf of Iskenderoon.

AICHACH, or **AICHA**, a town of Bavaria, circ. Upper Danube, on the Paar, 12 m. E.N.E., Augsburg. Pop. 1,600. It is surrounded by walls and ditches.

AIGLE, a town of Switzerland, cant. Vaud, cap. dist. same name, on the torrent Grande-Eau, near the Rhone. Pop. 1,750.

AIGLE (L'), a town of France, dep. Orne, cap. cant., on the Rille, 18 m. N.N.E. Mortagne. Pop. 5,454. Though old and surrounded by the remains of old walls, it is well built, neat, and clean, and is distinguished by its industry. The needles and pins manufactured here are celebrated all over France, and it has also fabrics of iron and copper wire, wire gauze, nails, &c. It has withstood several sieges.

AIGNAN (ST.), a town of France, dep. Loire et Cher, cap. cant., 24 m. S. Blois. Pop. 2,856. There is in the vicinity the only quarry of gun-flints in France. The quantity annually manufactured is estimated at from 35,000,000 to 40,000,000. Those for the use of the army are kept in depôt in the castle of Amboise.

AIGRE FENILLE, a village of France, dep. Charente Inférieur, cap. cant., 13 m. N.N.E. Rochefort. Pop. 1,700.

AIGUE PERSE, a town of France, dep. Puy de Dome, cap. cant., 11 m. N.N.E. Riom. Pop. 3,115. Near it is the Château de la Roche, the birthplace of the chancellor de l'Hôpital.

AIGUES MORTES. A town of France, dep. Gard, cap. cant., 20 m. S.W. Nismes, lat. 43° 33′ 58″ N., long. 4° 11′ 22″ E. Pop. 3,240. Though now about 4 m. inland, Aigues Mortes was formerly a sea-port, and was, in fact, the place where St. Louis embarked on his two expeditions to Africa. At present it is connected with the sea by a canal, which is prolonged to Beaucaire on the one hand, while it is united on the other with that of Languedoc. It is fortified, and, from its position, is an important post for the defence of the coast. Owing to the retrogression of the sea, the town is surrounded by marshes (whence its name *Aquæ Mortuæ*), and is very unhealthy. The salt lake of Peccais, in the neighbourhood, is celebrated as well for the quality as for the quantity of the salt obtained from it. — (*Hugo*, art. "Gard.")

AIGUILLE (L'), a celebrated mountain in France, dep. Isere, 4 m. N.W. Corps, height 2,000 m. (6,365 feet). Its under part has the appearance of a truncated cone, and its upper part is of a cubical form. It was long supposed to be inaccessible, and was hence called *Mons Inaccessus;* but in 1492 an officer of Charles VIII. reached its summit.

AIGUILLON, a town of France, dep. Lot et Garonne, at the confluence of the Lot and the Garonne, 17 m. N.W. Agen. Pop. 3,919. It was unsuccessfully besieged by John Duke of Normandy in 1345; when, it has been said, but incorrectly, that cannons were first made use of.

AIGURANDE, a town of France, dep. Indre, cap. cant., 12 m. S.W. Châtre. Pop. 1,945. It is the centre of an extensive cattle trade; and has, or had, an octagonal monument, believed to be very ancient, but of which the object is unknown.

AILAH, or **ELANA**, a decayed town of Arabia, on the gulf of Akabah; which see.

AILSA, an insulated rock in the Frith of Clyde, 10 m. W. Girvan. Its base is elliptical, and it rises abruptly from the sea to the height of 1,098 feet. It consists of columnar trap. The N.W. side is almost perpendicular, being formed of successive tiers of immense columns. It is frequented by innumerable flocks of sea fowl, and is a very striking object from every part of the Ayrshire coast. It gives the title of Marquis to the noble family of Kennedy.

AIN, a frontier department in the E. of France, having the Rhone, which separates it from Savoy on the E. and S., the Saone on the W., and the depts. of Saone et Loire, Jura, and part of Switzerland, on the N. and N.W. Area 592,674 hectares. Pop. 346,188. Exclusive of the Rhone and Saone, by which it is partly bounded, it is divided by the Ain, whence it derives its name, into two nearly equal parts; that to the E. being rugged, mountainous, and principally adapted to pasturage; whereas that to the W., though in parts marshy, is generally level and fit for cultivation. There are in the S.W. portion of this dep. a great number of lakes or ponds, some of which are subjected to a very peculiar species of rotation. It is usual to drain and cultivate them for a season; and when the crop has been gathered they are again filled with water, and with different sorts of fish, according to the nature of the pond; and after being occupied in this way for two years, or thereby, are again dried and subjected to the plough. The extent of the ponds so employed is estimated at nearly 16,000 hectares. This is found to be a very profitable species of cultivation; though, from the humidity it occasions, it is said to render the climate unhealthy. Oxen, of which large numbers are bred, are generally used in tillage. Produce of corn crops sufficient for the consumption. Vintage considerable, three-fifths of the produce exported. Woods very extensive, amounting to about 120,000 hectares. Near Belley are produced the best lithographic stones in France. Manufactures inconsiderable. Great numbers of the inhabitants emigrate annually after harvest to seek for employment in the contiguous departments. Ain returns 5 members to the Ch. of Deputies, and has 1,203 electors. Public revenue of the dep. in 1831, 6,258,042 fr. Chief towns Bourg, Nantua, Trevoux, Belley, and Gex. But the most celebrated place in the dep. is Ferney, long the residence of Voltaire. — (*Hugo, France Pittoresque, dep. Ain; French Official Tables.*)

AIN-TAB, a large town in the N. of Syria, on the S. slope of the Taurus, lat. 36° 58′ N., long. 37° 13′ 15″ E., 70 m. N. Aleppo, and 30 m. W. Bir, on the Euphrates. Pop. has been estimated at 20,000, which, if the town be two thirds the size of Aleppo, as stated by Maundrell (*Journal*, 210.), can scarcely be considered as exaggerated. The inhabitants consist of nearly equal numbers of Armenian and Greek Christians, Curds, and Mohammedans, among whom a spirit of toleration and unity prevails unparalleled in most other Eastern societies. They use the Turkish language. Houses well built, of a fine stone resembling porphyry, flat-roofed, and generally of only one story. There are 5 mosques, and several large and well supplied bazars. In the centre of the town is a castle on a mound, resembling, in every respect, that of Aleppo, but much smaller. Water abundant, many of the streets having streams flowing through them. On the S. is a large burial ground, which at a short distance resembles an important suburb, and is perhaps not much inferior in extent to the town itself. Manufactures of goat-skin leather, cotton and woollen cloths, are carried on to some extent; and there is some trade in raw and tanned hides, cloth, honey, and tobacco.

Ain-Tab may be regarded as the capital of a limited

but very fine country, consisting of small hills and valleys among the roots of the Taurus. The towns and villages in this little district are very numerous, the most important being Adjia, Silam, and Kles. At Adjia, 6 or 7 m. distant, is the source of the Koeik (the river of Aleppo); and within 10 yards of this stream there runs another, the Sejour, the banks of which are thickly set with trees and villages. The Sejour has a good bridge over it, about 2½ m. from Ain-Tab. The air is good and the soil fertile; but cultivation is not much followed, the majority of the rural population being shepherds. Principal agricultural products corn and tobacco. Bees are very plentiful.

Ain-Tab was taken and plundered by Timur Bec in 1400: but its favourable site and the tolerant spirit of its inhabitants have kept the district remarkably free from the usual Eastern casualties. The Turkish pachas, notorious as they are for exaction and oppression, respect the homes and rights of these hardy mountaineers. They have, indeed, been taught this forbearance by some severe lessons, having experienced, in every attempt at tyranny and extortion, a firm and successful resistance. The last of these attempts was made in 1780, when the Turkish forces were completely defeated; since which the men of Ain-Tab and its vicinity have been suffered to enjoy the produce of their fields, flocks, and bees in undisturbed tranquillity. According to Maundrell, Ain-Tab is identical with the *Antiochia-ad-Taurum* of the ancients; but this is doubtful.—(*Maundrell's Journey*, p. 209; *Volney*, ii. 137.; *Browne's Travels*, 210.)

AIRDRIE, a royal and parl. bor. and m. town of Scotland, co. Lanark, pa. New Monkland, on rising ground between two little rivulets, 11 m. E. Glasgow. Pop. of parl. bor., in 1841, 12,408, and now (1850) probably 16,500. It consists principally of two parallel streets joined by cross streets. It has a handsome town-house, and the houses of the labouring population are well built and comfortable. In the early part of last century Airdrie contained only one solitary house. It owes its rapid rise to the coal and iron mines in its immediate vicinity, and to its contiguity to the Monkland canal, and the Garnkirk railway. The Calder and other great iron works in the neighbourhood employ a number of hands; and within the town there are iron founderies, at which machinery is made, with distilleries, breweries, malt barns, &c. The weaving of cotton goods on account of the Glasgow manufacturers has hitherto, however, been the principal source of employment; and it has, also, a cotton factory. It is divided into 2 parishes; and besides the churches attached to them, it has sundry chapels in connection with the Free Church and the different classes of dissenters; with various schools and charitable institutions. It is governed under a charter of 1833, by a provost, 3 baillies, and 12 councillors. Burgh revenue 1845-46, 1468*l*. The Reform Act united Airdrie with Hamilton, Lanark, Falkirk, and Linlithgow in the return of a member to the H. of C. Parl. and municip. const. 1848, 440. Annual value of real property in 1843, 35,967*l*. — (*Boundary Report*, p. 121, &c.)

AIRE, a river of England, important from its navigation and the numerous canals with which it is connected. It rises in Yorkshire in the central mountain ridge, a little to the E. of Settle. It pursues a S.E. course, till passing Leeds it is joined by the Calder at Castleford; its course is thence E., with a good many windings, till it falls into the Ouse, a little above Goole. From Liege to Ferrybridge the Aire flows through one of the richest plains in the kingdom.

AIRE (an. *Vicus Julii*), a decayed city of France, dep. Landes, cap. cant., on the Adour, 80 m. S.S.E. Bordeaux. Pop. 4,029. This is a very ancient city, and has been since the 5th century the seat of a bishopric. The Goths became possessed of it in the 6th century, and it was for some time the residence of Alaric II. It suffered much in the wars with the English, and still more in the religious contests of the 16th century. The fortifications by which it was once surrounded have now wholly disappeared. It is pretty well built, has a cathedral, a college, and a secondary ecclesiastical seminary. A bridge has been recently built over the Adour. — (*Hugo*, art. "Landes.")

AIRE, a fortified town of France, dep. Pas de Calais, cap. cant., at the confluence of the Lys and Laquette. Pop. 8,610. It is pretty well built; has several public fountains; with manufactures of linen, hats, soap, Dutch tiles, geneva, &c. In a military point of view, it is of considerable importance for the defence of the country between the Lys and the Aa.

AIRVAULT, a town of France, dep. Deux Sevres, cap. cant., on the Thoué, 15 m. N.N.E. Partenay. Pop. 1,923. It is well built, and has the remains of an old castle and monastery destroyed in the 16th century.

AISNE, a dep. in the north of France, between 48° 80′ and 50° 4′ N. lat., and 2° 56′ and 4° 12′ E. long.; the principal town, Laon, in its centre, being 75 miles N.E. Paris. Area, 728,530 hectares. Pop. 557,422. It is traversed by the Aisne, whence its name, the Oise, Marne, and by several canals. Surface generally flat or undulating, but in parts hilly; soil fertile. The cultivated land amounts to about 500,000 hectares, about 100,000 being occupied with woods, and 42,000 with meadows. Agriculture good; and after providing for the inhabitants there is a large export of corn, as well as of sheep, oxen, horses, and pigs. It also produces flax and hemp, hops, rape, beet root, potatoes, &c. In the southern part wine is made; but the ordinary drink of the inhabitants is wine and beer. This dep. is celebrated for its manufactures, at the head of which must be placed the cottons, laces, lawns, shawls, table linen, &c. of St. Quentin; the mirrors of St. Gobain; and the bottles, of which Folambry furnishes about 3,000,000 a year, for the wines of Champagne. It has also cast iron and iron plate founderies, brick and tile works, manufactures of chemical products and of beet-root sugar, bleach fields, &c. It is divided into 5 arrond.; and had, in 1835, 209,256 separate properties. Public revenue, in 1844, 18,825,191 fr. Chief towns, Laon, St. Quentin, Soissons, Chateau-Thierry, Vervins, &c.—(*Hugo, France Pittoresque*, art. "Aisne;" *French Official Tables, &c.*)

AIX, an ancient city of France, dep. Bouches du Rhone, cap. arrond. and cant., formerly cap. Provence, in a plain at the foot of some hills, 16 m. N. Marseilles, lat. 43° 31′ 35″ N., long. 5° 26′ 47″ E. Pop. 18,240. It was founded by Caius Sextius Calvinus, a Roman general, 120 years B.C., and received the name of *Aquæ Sextæ*, from its famous hot springs. It is a well-built handsome town. Streets generally well paved, wide, and clean. It has a beautiful public promenade, and some good squares ornamented with fountains. A side of one of the squares is formed by what is called the *Palais*, an old building containing some spacious halls, formerly occupied by the parliament of Provence and other public bodies. It has also a town-hall, containing a valuable collection of antiquities, a magnificent cathedral, a museum of pictures, a theatre, and other public buildings. Previously to the Revolution Aix was the seat of a university; and at present it has a royal academy equivalent to a university, with faculties of theology and law, and a valuable library containing above 90,000 vols. It is also the seat of a *cour royale* for the depts. of the Bouches du Rhone, Basses Alpes, and Var, and of an archbishopric; and has several learned societies. Aix has manufactures of silk, wool, and cotton, and its industry and commerce have materially increased within the present century. Inhabitants said to be decidedly aristocratical, while those of Marseilles incline strongly to democracy. The mineral springs, from which the town took its ancient name, were accidentally discovered in 1704, and were identified by the medals, inscriptions, and other Roman monuments then dug up. The establishment of the baths belongs to the hospital. Tournefort, celebrated as a botanist, and one of the best of the travellers that have visited the Levant, was a native of Aix; as were Vanloo and Adanson. — (*Hugo*, art. "Bouches du Rhone.")

AIX, an ancient town of the Sardinian States, Savoy, 8 m. N. Chamberry. Pop. 2,200. It is celebrated for its hot baths, which were in vogue among the Romans, and are still extensively resorted to. The king of Sardinia has constructed a large and convenient building for the accommodation of visitors.

AIX-LA-CHAPELLE, the *Aachen* of the Germans, and the *Aquisgrana* of the Italians), an old and well-built city of the Prussian states, prov. Lower Rhine, near the confines of the Netherlands, lat. 50° 47′ N., long. 6° 15′ E. It was formerly a free imperial city, and is now the cap. of a reg. of the same name. It is divided into the inner and outer town, and contained, in 1846, 46,585 inhab. It is the seat of a bishop, of a court of appeal, a tribunal of commerce, and has an exchange, a gymnasium or college, a school of arts, a picture gallery, and a public library with above 10,000 volumes. Manufactures considerable, and recently increased. The most important are those of broad-cloth and cotton; and next to them the famous needle-works, which employ and support large numbers of individuals; watchmaking, jewellery, &c., are extensively carried on; and there are also print-works and tan-works. Exclusive of the cathedral, there are 8 Catholic churches, a Protestant church, and a synagogue. It had at one time 21 monasteries and convents, but most of them have been suppressed. Among the public buildings, the most remarkable are the town-house, enriched with portraits of the different ministers present at the negotiation of the treaty of 1748; the cathedral, founded by Charlemagne, the theatre, the fountain in the principal market-place, &c. Handsome private houses are to be met with in every street. Aix-la-Chapelle was the favourite residence of Charlemagne, and for some time the capital of his empire; hence it was long customary to hold the coronation of the emperors of Germany in this town; and till 1794, when they were carried to Vienna, the regalia used on

the occasion were to be seen in the convent chapel. Strangers are still shown a sabre of Charlemagne, a copy of the gospel written in gold characters, and an immense number of relics.

Aix-la-Chapelle is cel brated for its hot baths, which issue from 6 distinct springs. The most celebrated is that called the *Source de l'Empereur*. The water is strongly impregnated with sulphur, and has a temperature of 143° Fah. The baths are generally opened with much ceremony on the 1st of May. Two celebrated treaties of peace have been concluded in this city; the first in 1688, between France and Spain; and the second in 1748, between the different powers engaged in the wars of the Austrian succession. Here also a congress was held in 1818.

The *Salle des Redoutes*, one of the most splendid gambling-houses on the Continent, is thus noticed in Mr. Murray's *Handbook*: "The lower story is occupied by print and music shops, by a restaurant, and a reading room, where the principal European newspapers are to be found. In the grand suit of apartments, balls are given once or twice during the season; but they are principally devoted to gambling. Games of hazard, rouge et noir, &c. are carried on in them, almost without interruption, not only by night but by day, beginning at 10 or 11 in the morning. The tables are open to all comers except inhabitants of the town and officers of the Prussian army, who are expressly forbidden by a police order to play at the tables. Before 10 P.M. the lowest stake allowed is a kron-thaler; after 10, half a kron thaler is the lowest sum. Public gaming is not tolerated anywhere else in the Prussian dominions. The tables are let out to a company, who are compelled to apply a large portion of the gains to the improvement of the town and the walks in the neighbourhood."

AJACCIO, a sea-port town of the island of Corsica, of which it is the cap., on its W. coast, and on the N. side of a gulf to which it gives name, lat. 41° 55′ 1″ N., long. 8° 44′ 4″ E. Pop. 9,003. It has a citadel built in 1554; is the seat of a bishopric; has a royal court and other judicial establishments, a college, a model school, a public library, a good theatre, and a fine promenade along the bay. The latter is spacious and commodious, but exposed to the W. gales. Streets straight and broad, and houses good; but it labours under a deficiency of good water. It has a considerable trade, exporting wine, oil, and coral. Ajaccio will be memorable in all time to come, from its having been the birthplace of by far the most extraordinary, and, perhaps, also the greatest, man of modern times. Napoleon Bonaparte was born here on the 5th of August, 1769. He was descended of a respectable family long settled in the island. — (*Hugo*, art. "Corse.")

AJMERE, a town of Hindostan, cap. district belonging to the British, in Rajpootana, 225 m. S. W. Delhi, lat. 26° 31′ N., long. 74° 28′ E. It is a well built moderate sized town, on the slope of a high hill, at the summit of which is a fortress, formerly deemed impregnable, and which, with a little improvement from European skill, might easily be made a second Gibraltar. Ajmere is a holy city, having the good fortune to possess the tomb of a saint, whose miracles are renowned all over India. The emperor Acbar made a pilgrimage on foot to the shrine of the saint; and it continues to be resorted to by devotees from all parts of India. It is not uncommon, in Malwa, for pilgrims who have been at Ajmere to set up a brick or a stone taken from the sanctuary near their dwelling, and to become saints themselves, and have pilgrimages made to them! A strong detachment of troops is usually stationed at Ajmere, and the neighbouring town of Nuseerabad.

At a short distance W. from Ajmere is the celebrated Hindoo temple of Pooshkur, on the banks of a sacred pool nearly a mile in circuit. It is annually visited in October by crowds of pilgrims from all parts of India. (*Heber*, ii. pp. 440—443.)

AKABAH (GULPH AND CASTLE OF). The gulf of Akabah is a deep narrow inlet, uniting with the N. E. extremity of the Red Sea. It extends in a N.N.E. direction from 28° to 29° 32′ N. lat., a distance of above 100 Eng. m.; being, where broadest, 16 or 17 m. across. It communicates with the Red Sea by channels on each side the isle of Tiran at its S. extremity. This gulph, the *Sinus Elaniticus* of antiquity, so called from the port of Elana or Elath, forms the E. boundary of the peninsula occupied by Mount Sinai. It has the appearance of a narrow deep ravine, the cliffs rising in some places 2,000 feet perpendicularly from the sea; and has been very little frequented in modern times. Being exposed to sudden and heavy squalls, and encumbered in parts with coral reefs, its navigation is not a little dangerous.

The castle of Akabah, from which the gulph takes its modern name, is not a place of any strength. It is situated about 150 yards from the beach, on the E. side of the gulph, and about 2½ m. from its extremity, in lat. 29° 30′ N., long. 35° 3′ E. It has a supply of good water, and there are several Arab huts within its walls. The garrison consists of about 30 Egyptian soldiers, kept to guard the corn deposited in it for the supply of the caravans, in their journey from Cairo to Mecca.

Akabah has been supposed to occupy the site of Elan or Elath, from which an extensive intercourse was carried on in the earliest ages with Rhinoculura, now El Arish, on the Mediterranean, only 116 m. distant. There are, however, no ruins of any kind at Akabah, and no port. It would, therefore, seem more probable that the situation of Elath is identical with that of Jezirat Faroun, on the W. side of the gulph, and about 6 m. from its extremity. There are there very extensive ruins, and a natural harbour. Dr. Shaw supposes, apparently with much probability, that Meenap-el-Dsahâle, i. e. the *Golden Port*, on the W. coast of the gulph, and nearly opposite to Mount Sinai, occupies the site of *Eziongaber*, whence the ships of Solomon sailed to fetch gold from Ophir. It is said by Lieutenant Wellsted to be the only "well-sheltered" harbour in the gulph. — (See *Shaw's Travels in Barbary* &c. 4to. ed. p. 322.; *Laborde's Arabia Petræa*, Eng. Trans., p. 94.; *Wellsted's Travels in Arabia*, ii. passim.)

AKERMAN, (an. *Tyras*,) a town of Russia in Europe, in Bessarabia, on the W. side of the æstuary or *liman* of the Dniester, near its junction with the Black Sea, lat. 46° 12′ N., long. 30° 24′ E. The statements as to its pop., even in works whose authors may be supposed to have had access to the best sources of information, differ extremely. Probably, however, it may be estimated, suburbs included, at nearly 12,000. The citadel, surrounded by a deep ditch, was constructed by the Genoese during the time that they were masters of the Black Sea. The Dniester being rapid and not well suited for internal navigation, the commerce of the town is not very considerable. The exports consist principally of salt, the produce of the salt lakes in its vicinity, which in 1833 yielded 1,326,000 poods of salt to government, and 2,227,048 poods to individuals. Their produce however is said sometimes to amount to 7,000,000 poods. The salt is sold by government at 66 copecks per pood. The basin of the Dniester having only from 5 to 7 feet water, the larger class of vessels anchor outside the bay, in the Black Sea, about 16 m. from town.

Akerman is distinguished in recent diplomatic history by the treaty concluded here in 1826 between Russia and the Ottoman Porte, by which Wallachia, Moldavia, and Servia were emancipated from all but a nominal dependence on the latter. — (*Schnitzler la Russie &c.*, p. 741.; *Hagemeister on the Commerce of the Black Sea*, p. 81. 131. &c.)

AKHISSAR (an. *Thyatira*), a city of Turkey in Asia, Anatolia, the seat of one of the Apocalyptic churches, 58 m. N.E. Smyrna. It stands on an eminence elevated but little above the surrounding marshy and alluvial plain. Messrs. Smith and Dwight, the American missionaries, state that, having suffered severely from fire a few years ago, it is now mostly of wood; that its aspect is poor and mean, with but few remains of ancient grandeur; and that the pop. is not supposed to exceed 1,000 families, (5,000 individuals,) of whom 1,500 may be Greeks. — (*Missionary Researches in Armenia*, p. 5. &c.) Mr. Elliott's account is not so unfavourable. He states that, being situated on the direct road between Constantinople and Smyrna, it wears an appearance of comfort superior to that of Anatolian towns in general, that the bazars are large and amply supplied; the khan handsome, clean, and well ordered; and that it contains 1,740 houses, of which 400 belong to Greeks, and 40 to Armenians. If we suppose each house to lodge, at an average, 6 individuals, the town would, according to Mr. Elliott, have a population of about 10,400! — (*Elliott's Travels*, ii. p. 111.) Perhaps the truth may lie midway between these conflicting statements. There is in the town a Greek school, attended by 150 children of both sexes.

AKHLAT, a town of Turkey in Asia, in Koordistan, on the N.W. shore of lake Van, at the foot of the Seibandagh. It is very ancient, and was formerly a place of considerable importance; but it is now greatly decayed, not having more than 1,000 houses, or perhaps 6,000 inhab. Its territory is filled with gardens and vineyards. — (See *Kinneir's Persian Empire*, p. 328., where it is noticed under the name *Argish*; and the *Dict. Géographique*.)

AKHTYRKA, a town of Russia in Europe, govern. of Kharkoff, 60 m. N.W. Kharkoff. Pop. 12,000. It has a pretty considerable commerce; and among its churches is one that attracts a good many pilgrims to visit a miraculous image of the virgin.—(*Schnitzler la Russie*, &c., p. 477.)

AKISKA, or AKHALZIKH, a city of Asiatic Russia, prov. Georgia, formerly the cap. of a Turkish pachalik, on an affluent of, and at a short distance from, the Kur, 115 m. W. Tiflis, lat. 31° 45′ N., long. 43° 1′ E. Pop. has been estimated at above 20,000, but at present it does not probably reach half that amount. It is an open town; but is defended by a strong castle situated on a rock. It is remarkable for its fine mosque of Sultan Ahmed, built in imitation of St. Sophia, and for the college and library attached thereto. The latter was

reckoned one of the most curious in the E.; but the Russians have removed about 300 of the rarest and most valuable works to Petersburgh. Akiska is also the seat of a Greek archbishopric, and has about 60 Jewish families and a synagogue. Its environs are productive of silk, honey, and wax; and it has some manufactures. It was formerly a principal seat of the slave trade. The slaves sold in its markets were brought from Georgia, Mingrelia, Imeritia, &c.; and being conveyed to the nearest ports on the Black Sea, were shipped for Constantinople and Alexandria. This commerce is now entirely suppressed. Many of the Turkish inhabitants have left the town since its occupation by the Russians. —(*Balbi Abrégé*, 3rd ed. p. 809.; *Missionary Researches in Armenia*, p. 100.)

AKSERAI, a town of Turkey in Asia, in Caramania, cap. sanjiack of same name, on the S.W. arm of the Kizil Ermak, 90 m. N.E. Konieh (an. *Iconium*). Pop. uncertain. It has a castle; and its territory is productive of corn and fruits.

AK-SHEHR (the *White City*), a city of Asiatic Turkey, Caramania, cap. sanjiack of the same name, 55 m. E. S. E. Afium Karahissar, lat. 38° 13′ N., long. 31° 30′ E. It is situated near the S. extremity of a considerable lake, at the foot of a mountain chain, in a rich and well watered country. Its position is said to be identical with that of the ancient *Thymbrium*, visited by the younger Cyrus; and, according to D'Anville, it was denominated *Antiochia ad Pisidiam*, from its being on the confines of Pisidia, of which prov. it afterwards became the capital. It is mentioned in Turkish annals as the place where Bajazet was confined by Timour, and where he expired. It is supposed by Mr. Kinneir to have about 1,500 houses, with many fine gardens in the vicinity. Its principal ornament is a handsome mosque and college, dedicated to the memory of Bajazet. The streets are cleaned by means of streams from the neighbouring mountains that run through them.—(*Kinneir's Journey through Asia Minor, &c.* p. 226.; *Olivier*, vi. p. 396.)

AKYAB, a marit. town of India beyond the Ganges, cap. prov. Arracan, and of a dist. of same name, on the E. side of the island of Akyab, lat. 20° 8′ N., long. 92° 54′ E. It is built of wood; has broad streets, and markets for grain, and European and Indian goods. Its harbour, though inferior to that of Kyouk Phyos, is safe; and it is, in most other respects, superior to the last mentioned town as a place of trade. The vicinity is level, fertile, free from jungle, and traversed by several roads. It is the residence of a British commissioner, and is garrisoned by two companies of Sepoys. —(*Pemberton on the E. Frontier of India*, p. 87.; *Journal Geog. Society*, i. p. 175.)

ALA, a small town of the Tyrol, on the Adige, 7½ m. S. Roveredo. Pop. 2,400. It has a gymnasium, and a Capuchin convent.

ALABAMA, one of the United States, in the S. part of the Union, between 30° 10′ and 35° N. lat., and 85° and 88° 30′ W. long., having S. Florida, S. W. Gulph of Mexico, W. State of Mississippi, N. Tenessee, and E. Georgia. Area, 51,770 sq. m. Pop. in 1820, 144,041; in 1830, 309,527, of whom 117,549 were slaves, and 1,572 free blacks. The principal river, the Mobile, formed by the junction of the large rivers Tombigbee and Alabama, both of which flow S., falls into the bottom of Mobile Bay. The Chattahoochee also flowing S., forms in part the E. boundary of the State. The country gradually rises from the low level lands along the Gulph of Mexico, to an elevation of from 1,000 to 1,500 feet in its N. parts. It has in consequence a considerable difference of temperature. Soil mostly very fertile, particularly in the N. counties. Cotton is the staple product, the crop of which, amounting to above 300,000 bales, is rapidly increasing. The sugar cane is cultivated in the S. districts. Indian corn is the principal corn crop. Alabama was erected into a state in 1819. The government is vested in a governor, elected for 2 years, a senate elected for 3 do., and a house of representatives elected annually. Members of the latter receive 4 doll. a day each, and their number is not to fall short of 60 nor to exceed 100. Judges of the supreme and circuit courts are elected by a joint vote of the two houses of assembly for 7 and 6 years. Several canals and railways have been completed, and more projected. Liberal provision has been made for education; and a state university, well endowed, and on a large scale, has been founded near the cap. Tuscaloosa. The principal foreign trade of the state is carried on from Mobile (which see). The value of the domestic produce, principally cotton, exported during the year ended 30th September, 1835, amounted to 7,572,128 doll. The salubrity of the climate, the fertility of the soil, its suitableness for the production of cotton, and the great facilities it enjoys for internal navigation and foreign commerce, sufficiently account for the rapid progress made by this state. —(*Darby's United States*, p. 485; *American Almanac, &c.*)

ALABASTER, or ELEUTHERA, one of the Bahama or Lucayo Islands, which see.

ALAIS (an. *Alesia*), a town of France, dep. Gard, cap. arrond., on the Gardon d'Alais, at the foot of the Cevennes, 25 m. N.W. Nismes, lat. 44° 7′ 22″ N., long. 3° 4′ 25″ E. Pop. 11,749. It is ancient, and pretty well built. During the religious wars of France the inhabitants were distinguished by their attachment to the Protestant party, and to bridle them Louis XIV. constructed a fort in the town. It has a communal college, a tribunal of primary jurisdiction, a theatre, a public library, a consistorial Protestant church, &c. It has, also, manufactures of riband, silk stockings, and gloves; with a glass work, potteries, copperas works, &c. Besides its own products, it has a considerable trade in the raw and dressed silks, oil, grain, &c. of the surrounding country. There are mines of iron and coal in the vicinity.—(*Hugo*, art "Gard;" *Dict. Géographique*.)

ALAND (ISLANDS OF), a group of islands at the entrance of the Gulf of Bothnia, between 59° 50′ and 60° 32′ N. lat., and 19° 10′ and 21° 7′ E. long., consisting of more than 80 inhabited and upwards of 200 uninhabited islets and rocks (*Shären*), occupying an area of about 470 sq. m., and divided into three oblong clusters by the straits of Delet and Lappväsi. The Baltic bounds them to the S.; on the W. the straits of Alandshaf separates them from Sweden, its width being about 24 m.; and on the E. the straits of Wattuskiftet, which are scarcely two m. broad where they are narrowest, and about 14 where they are broadest, interpose between them and the Finland shore. Pop. 14,000, of Swedish extraction. Most of the islands stand at a considerable elevation above the level of the sea, and are intersected by chains of granite rocks, which occasionally rise into peaks and are full of hollows. There are no rivers, but many small lakes. The surface is either a thin layer of clay or rich mould, slate-stone, or sand. The climate, though keen, and at times severe, is more temperate than that of Finland. There are extensive forests, chiefly of birches and pines; the pasture grounds are very poor, excepting near some parts of the coast; and the arable land, on which rye and barley are mostly grown, produces a sufficiency for domestic consumption, the best yielding seven-fold. Hops, cabbages, parsnips, carrots, and other roots, potatoes, and a little flax are likewise raised. Nuts form an article of export. The horned cattle, of which there are upwards of 12,000, are small in size, and few of the cows have horns; the latter furnish the "Aland cheeses," which are much sought after, and made principally in the island of Fagloe. Of sheep there are above 13,000, the wool of which is converted into coarse stuffs and sail-cloth; horses and goats are also bred in considerable numbers. The fisheries are productive, particularly of (*strömlinge*) herrings and seals, of the first of which 6,000 tons and upwards are salted. Waterfowl abound. The exports consists of salt meat, butter, cheese, hides and skins, dried and salted fish, wood for fuel, &c.; and the imports of salt, colonial produce, ironware, woollens, cottons, and other manufactures, &c. The Alanders are excellent seamen, and navigate small vessels of their own that trade with the adjacent parts: they are Swedes in their language, manners, and usages. There are a number of good harbours, many of which have been fortified by the Russians, who keep up a disproportionately large military force in the islands, as well as a numerous flotilla, called the "Skaerenflott." The islands contain 8 parishes and as many churches, and 7 churches or chapels of ease. Aoland, the largest island, is nearly circular, being about 17 miles in length and 16 in breadth; it contains above 9,000 inhabitants, and has an excellent harbour at Ytternaes, on the W. side. It is divided by a narrow strait from Ekeroe, the westernmost island, which has a telegraph. On the E. coast of Aoland is the old castle of Castleholm, now in ruins. Kumlinge has a pop. of 3,000 These islands were wrested by Russia from Sweden in 1809; and give the former a position from which they may easily make a descent on the Swedish coast.

ALA-SHEHR. (The exalted city, an. *Philadelphia*.) A city of Turkey in Asia, prov. Natolia, famous as the seat of one of the Apocalyptic churches. It is situated 83 m. E. Smyrna, near the Cogamus, partly in the plain, and partly on one of the roots of Tmolus, which, separated by a valley from the posterior range, and rising to a very considerable elevation, is the site of the Acropolis. The old wall of the town formed of small stones, held together by a strong cement, and strengthened with towers, is broken down in many places, and the Acropolis is also in ruins. The modern houses are mean and irregular, and the streets narrow and filthy. The ruins of the church of St. John are of great antiquity, and ancient relics meet the eye at every step. "Here, a broken Ionic column forms the angle of a house, and an architrave its step; there fragments of a rich cornice are built into a wall; a modern mosque is supported by the truncated shafts of antique columns; and sacred sar-

cophagi are desecrated by conversion into common water troughs: fountains in the dirtiest streets, and the very pavement on which one treads, teem with vestiges of antiquity; and in a neglected spot, near the S. wall of the city, amid dirt and rubbish, we remarked two venerable marble pillars lying unheeded on the ground."—(Elliott.) According to Mr. Elliott, Ala-Shehr contains nearly 3,000 Turkish and 250 Greek houses; so that, supposing this statement to be correct, the pop. may be estimated at from 15,000 to 18,000. It is the seat of a Greek archbishop, and divine service is regularly performed in 5 Christian churches. The Greeks, at present, as in the time of Chandler, are exceedingly ignorant; and though few of them know any language except Turkish, the Liturgy is always read in the language of their forefathers. The country round is very fruitful; — the waters are said to be excellent in dyeing; and being situated on one of the most frequented roads to Smyrna, it is much resorted to by caravans, and has a good deal of trade. It is held so sacred, even by the Turks, that they occasionally convey their dead thither for interment, from Constantinople; and apply to it the epithet of *Ala*, or the exalted.

Philadelphia derived its name from Attalus Philadelphus, brother of Eumenes, by whom it was founded in the second century B.C. Strabo says, that it suffered much from repeated shocks of earthquakes; and it was one of the fourteen cities which were partially or wholly destroyed by a subterranean convulsion in the reign of Tiberius. Anciently, indeed, it was matter of surprise, that it was not abandoned; but it continues to be a considerable place; and the church of Philadelphia is still erect, "a column in a scene of ruins." It was the last city of Asia Minor that submitted to the Turks. "At a distance from the sea, forgotten by the emperors, encompassed on all sides by the Turks, her valiant citizens defended their religion and freedom, above fourscore years; and at length (in 1390), capitulated to the proudest of the Othmans, (Bajazet)."—(*Chandler's Asia Minor*, 4to ed. p. 280; *Elliott's Travels*, ii. p. 85.; *Gibbon*, cap. 64.)

ALASSAC, a town of France, dep. Correze, 5 m. N. N. W. Brive. Pop. 4,029. There are vineyards in its vicinity.

ALASSIO, or ARRACI, a sea-port town of the Sardinian States, prov. Albenga, cap. district, 5 m. S.S.W Albenga. Pop. nearly 5,000, industrious, active, and daring seamen. There is good anchorage opposite to the town, which consists of a long narrow street. Fine coral is fished on the coast. A good harbour for the largest class of vessels might be formed between Cape Melo and the island of Gallinara; but this has always been discouraged by the Genoese, the former masters of this part of Italy.—(*Rampoldi Corografia dell' Italia*, art. "Alassio.")

ALATRI, a city of Italy, Papal States, prov. Campania, deleg. Frosinone, 6 m. N. E. Frosinone, lat. 41° 44′ N., long. 13° 12′ 15″ E. Pop. *circa* 8,000. It is the seat of a bishopric, has a cathedral, a collegiate church, and some convents. Antiquities are frequently dug up in the environs, which abound in olives and vines.

ALATYR, a town of Russia in Europe, gov. Simbirsk, at the confluence of the Alatyr with the Sura, 90 m. N. N. W. Simbirsk. Pop. 3,000. It is built of wood, has tanneries, a glass work, and a considerable trade in corn.

ALAYA (an. *Coracesium*), a sea-port town of Turkey in Asia, Anatolia, cap. sanjiack of the same name, on the E. side of a lofty promontory, lat. 36° 31′ 51″ N., long. 32° 2′ 24″ E. Pop. 1,800 or 2,000. The promontory on which this town is built bears a striking resemblance to that of Gibraltar. It is joined to the continent on the N. by a low sandy isthmus, from which it rises abruptly; and its W. and S. sides consist of perpendicular cliffs 500 or 600 feet high. The E side, on which the town is built, is also so steep that the houses seem to stand on the top of each other. "In short, it forms a natural fortress that might be rendered impregnable; and the numerous walls and towers prove how anxiously its former possessors laboured to make it so." At present it is of trifling importance. Streets and houses miserable; mosques few and mean. When visited by Captain Beaufort it had no signs of commerce. The bay is open to southerly winds, and the anchorage indifferent.

Coracesium shut its gates against Antiochus when all the other towns of Cilicia had submitted; and at a subsequent period it was the place selected by the pirates at which to make a last stand in their struggle with Pompey.—(*Beaufort's Karamania*, p. 172, &c.)

ALBA, a town of the Sardinian States, in Piedmont, cap. prov. same name, on the Tanaro, 32 m. S.S.E. Turin. Pop. 7,000. It has a tribunal of original jurisdiction, a cathedral, 3 parish churches, a college, and a considerable trade in cattle.

ALBACETTE, a town of Spain, prov. Murcia, 9. m. N. W. Chinchella, agreeably situated in a vast and fruitful plain. Pop. of town and suburbs, 11,508. It has manufactures of coarse cloth and soap of wine and saffron are collected in great cattle market is annually held i

ALBAN (ST.), a town of France, N. N. W. Mende. Pop. 2,428.

ALBANIA, a large prov. of Europe N. by Dalmatia and Servia, E. by Mac S. by Livadia, and W. by the Adriat part of the Mediterranean called th thus comprehends, in its widest accep Illyria and Epirus, and is at preser Turkish government of Romania.

ALBANO (TOWN, LAKE, A OF), in the Papal dominions, in the C The town is situated in the line of the hill, near the S. W. side of the lake, a Rome. Pop. 4,200. This town is have supposed, on the site of *Alba L* on the other side of the lake, but on the villa. Its situation, at a moderate e level of the plain, fine salubrious air magnificent views of the "eternal city and the sea, make it a favourite retreat Roman citizens, particularly during s It is the seat of an archbishop; is cathedral and some convents, with among which may be specified those Barberini families. At a little distanc the lake, is Castel Gandolfo, the sumn Pope. The adjacent country is alm priated to the culture of the vine; and yields still maintains its ancient reputa

The lake of Albano, a little to the is surrounded on all sides by very h towards the N., where they are a little form of an irregular ellipse, and there little doubt that it occupies the cra volcano. The distance round the cra the basin of the lake, is estimated at a round the water's edge about 4 m. deep: a variety of fish are found in it, eels of an immense size and highly est

But the subterranean conduit or tu Italians an *emissario*, for conveying water, is the feature most worthy the a telligent traveller who visits this lake. tended to prevent the waters of the l the surrounding country by overflowi to keep them always at their present le at an early period of the Roman histor B.C.), and bears unequivocal proofs perseverance of those by whom it wa cut right through the mountain, an solid rock, a distance of considerably r being generally about 3 feet 10 inches to 7 feet in height; at its entry from issue in the plain, it is solidly built stones, arched at top, and is in perf This great work is said to have been c a year; but it has been objected to this, or at most four men could have wro these at the outer end of the tunnel or being under water, it must have taken completion. But Piranesi has shown the line of the tunnel above ground, sha by which workmen might have been l places, and the work completed within

The Alban Mount (*Mons Albanus*), lies a little to the E. of the lake. It is height; and the view from its summi Latium and a great extent of country, is that can be imagined. It was crown honour of Jupiter Latialis, where sacri offered up by deputies from the various the Romans at their head, to their co protector. Here, also, the Roman gen honour of the great triumph in the ci lesser triumph, or ovation, and sacr Latialis. Some fragments of this famo in 1750; but they have since disappear authorities referred to, see the excellent *on the Antiquities of Rome*, pp. 453—46

ALBAN'S (ST.), an ancient boro co. Hertford, occupying the summit a hill, on a feeder of the Colne. 20 m. N The old borough had, in 1831, a pop. new parl. borough a pop. of 5,771. It privilege of returning 2 m. to the H. of voting having been vested in the f

* For an account of the circumstances whi occasioned the undertaking of this work, see *Li* and *Cic. de Divinatione*, lib. i. s. 44. No do made, as Cicero has elsewhere said, *ad utilit non ad arcem urbemque retinendam*. (*De Divina*

† M. Simond has repeated this objection (*T ily*, p. 313.), apparently unconscious of wha in his *Descrizione e Disegno dell' Emissario del*

resident or not, and in scot and lot householders. It is very ancient, and is either on or very near the site of the ancient Roman *Verulamium*. The abbey church is the most imposing object in the place; and is celebrated alike for its antiquity and great magnitude. It lately underwent a thorough repair. In the church of St. Michael is the tomb of the famous Lord Bacon, with a fine marble monument to his memory. There is a free grammar school, with several charitable institutions. The town is not thriving. Straw plait is the principal manufacture; and there are besides a cotton mill and a silk mill, but neither on a large scale. There is a market each Saturday. No. of 10*l.* houses in Parl. borough 507; constituency in 1837, 606. — (*Boundary Report*, &c.)

ALBAN'S HEAD (ST.), a cape of England, on the English Channel, co. Dorset, lat. 50° 38′ 10″ N., long. 2° 0′ 15″ W.

ALBANY, a city of the United States, cap. state of New York, on the W. bank of the Hudson. 145 m. N. New York, lat. 42° 39′ 3″ N., long. 73° 44′ 50″ W. Pop. in 1825, 15,971; in 1840, 33,721. Besides being the seat of government, it is, in population, wealth, and commerce, the second city in the state. It is finely situated at the head of the river navigation of the Hudson, and is now connected by canals with Lake Erie and the Mississippi on the one hand, and with Lake Champlain and the St. Lawrence on the other; so that it has become one of the principal centres of internal commerce in the Union. A fine basin has been constructed for the accommodation of the shipping on the river and the canals. Among the public buildings are the capitol, the state house, an academy, a splendid museum, a jail, with numerous banks and places for public worship. The steam-boats perform the voyage from N. York to Albany in about 10 hours.

On the 17th of August, 1848, this city was visited with a dreadful fire, which destroyed above 400 houses, many of which were of brick, and a vast amount of property. But measures were immediately taken to rebuild the houses and squares that had been burned on an improved plan.

ALBANY, a district of S. Africa, belonging to Great Britain, at the E. extremity of the Cape Colony. It has on the E. the Great Fish river, on the W. Boshuans river, on the N. an imaginary line, drawn from the junction of the Great and Little Fish rivers to the Konap, and on the S. the ocean. Its area has been variously estimated, but may probably amount to about 2,000 sq. m. or 1,280,000 acres. Its aspect is highly pleasing, being diversified with hill and dale, its verdant pastures and smooth grassy knolls, contrasting agreeably with the dark masses of forest, which clothe the broken ground near the river courses. Soil very various. The stiff clayey lands would be the most productive, were they sufficiently watered; but as rain is precarious, and the rivers are said not to be suitable for irrigation, light friable soils are preferred. Climate temperate, salubrious, and suitable for European constitutions. Lions, wolves, and leopards are occasionally met with; but are every day becoming rarer. Elephants are now seldom seen within the limits of the district. Horses, cattle, sheep, goats, hogs, &c., thrive remarkably well, and their produce forms the great dependence of the colonists. The country is traversed by numerous streams, of which the Great Fish river is by far the most important. Previously to 1820, there were not more than 1600 Europeans in the district; but government having given encouragement to emigration to this quarter, 3,720 emigrants landed in 1820, at Algoa Bay, whence the greater number proceeded to this district. For the first 4 or 5 years, the colonists suffered severely from a failure of the wheat crops; but their progress from 1825 down to 1835 was comparatively rapid, and presented a picture of prosperity and advancement, not often to be met with in the early annals, even of the most successful colonies. At the last-mentioned epoch, however, this career was suddenly arrested by an irruption of the Kaffers, who destroyed a great quantity of valuable property, and killed several of the colonists. This invasion having been repelled, and peace having been again restored with the Kaffers, a lieutenant-governor was appointed to the E. province, and the district is fast recovering from the losses it had sustained. In 1837, it had a population of 11,728, of which 11,500 were whites. During the same year, the births were 700, and the deaths only 150. The value of the produce exported in 1836, was 47,307*l.*: the principal articles being — hides, 15,476*l.*; wool, 7,353*l.*; skins, chiefly goat, 5,749*l.*; tallow, 4,427*l.*; ivory, 2,546*l.*; with horses, beef and pork, butter, &c. The colonists had in 1836, 38,945 head of cattle, 104,000 sheep, and 2,735 horses. Graham's Town, the cap. of the E. prov. and the residence of the lieut.-governor, is situated almost in the centre of this district. It contained, in 1834, 512 houses; and 1800 inhab. exclusive of the military. A town, called Port Francis, has been founded at the mouth of the Kowie river; but as the access to it is obstructed by a dangerous bar, it is doubted whether it will ever become of any material importance. The entire shipping trade of the district is at present carried from Port Elizabeth on Algoa Bay.— (See *Cape Almanacs* for 1834 and 1838; *Parl. Paps.* Session 1837, &c.).

ALBEMARLE SOUND, United States, coast of N. Carolina, in the N. E. part of the state, being 60 m. long from E. to W., and from 4 to 15 wide. It communicates with Pamlico Sound and the ocean by several narrow inlets, and with Chesapeake Bay by a canal cut through Dismal Swamp.

ALBENGA (an. *Albium Ingaunum*), an ancient seaport town of the Sardinian States, cap. prov. same name, 44 m. S.W. Genoa, on the Centa. Pop. 4,000. It is the seat of a bishopric, and has several remains of antiquity. The situation is unhealthy; but the surrounding country is productive of oil and hemp. This is the birthplace of Proculus, a competitor with Probus for the throne of the Cesars.

ALBERT, a town of France, dep. Somme, cap. cant., on the Miraumont, 15 m. E. N. E. Amiens. Pop. 2,542. It has a cotton mill, with print works, bleachfields, paper mills, &c. In its vicinity is a cave or quarry where there are a variety of petrifactions.

ALBINO, a town of Venetian Lombardy, prov. Bergamo, on the Serio, 7 m. N. E. Bergamo. Pop. 2,300. It is very well built, the castle and gardens of Count Spini being particularly worthy of notice. There are silk filatures, with a manufactory of agricultural implements and machinery for polishing whetstones renowned all over Europe.

ALBION (NEW), a large tract of the N.W. coast of America. This designation was given by Sir Francis Drake to California and part of the adjoining coast; but recent geographers, and among others Humboldt, limit the denomination of New Albion to that part of the coast which extends from the 43d to the 48th deg. N. lat. It was carefully explored by Vancouver in 1792.

ALBUFEIRA, a sea-port town of Portugal, S. coast Algarve, 28 m. E. Lagos, lat. 37° 7′ 30″ N., long. 7° 19′ 12″ W. Pop. 3,000. Large vessels may anchor in the port, which is defended by a citadel and batteries. The inhabitants mostly subsist by fishing.

ALBUHERA, a town of Spain, Estremadura, 14 m. S.S.E. Badajos, on the river and near the mountain of the same name. Here, on the 16th May, 1811, a sanguinary conflict took place between the allied British, Spanish, and Portuguese troops under Marshal Beresford, and a French force under Marshal Soult. Each army lost about 7,000 men in killed and wounded. On the allied side the chief brunt of the action fell on the British, who suffered severely. In the end Soult, who commenced the attack, was compelled to retreat.

ALBUQUERQUE, a town of Spain, with on old castle, prov. Estremadura, on the frontier of Portugal, 22 m. N. N. W. Badajos. Pop. 5,500. It has cloth and cotton manufactures.

ALBY (*Albiga*), a city of France, cap. dep. Tarn, on the Tarn, which is crossed by an old-fashioned bridge, lat. 43° 55′ 46″ N., long. 2° 8′ 23″. Pop. 9,367. It is situated on a hill, and has few public buildings worth notice, except the cathedral, begun in 1277 and finished in 1480. It is ill-built; the houses being gloomy, and the streets narrow, crooked, and dirty; but the shady *Promenade de la Lice*, on the side next the country, is universally admired. It has a public library, a museum, and barracks, with various manufactures of coarse cloth, sacking, table linen, handkerchiefs, cottons, hats, paper, a foundery for balls, &c. The preparation of woad has been long carried on in the vicinity. Alby has suffered much at different periods for its attachment to Protestantism.

ALCALA DE GISVERT, an ill-built town of Spain, prov. Valencia. Pop. 3,600.

ALCALA DE HENARES (*Complutum*), a city of Spain, prov. Madrid, on the right bank of the river of the same name, 17 m. E.N.E. Madrid. Pop. 5,800. Though much decayed from what it was in the 16th century, this is said by Mr. Townsend (i. p. 245.) to be one of the handsomest, best built towns of Spain. It is surrounded by walls flanked with square towers, has a fine Gothic cathedral, a magnificent palace of the archbishop of Toledo, with numerous churches and convents. It is the seat of a university founded in 1510 by the illustrious statesman Cardinal Ximenes, which, next to Salamanca, is the most celebrated seminary in Spain. it had, in 1831, 17 colleges and 31 professors. The cardinal also bequeathed his library to the university, and founded in it a printing press, which produced, at his expense, in 1512-17, the famous Polyglott Bible, denominated the *Biblia Complutensia*; an imperishable and noble monument of his piety, learning, and liberality. The remains of the cardinal were interred in the college church. But it is the chief glory of Alcala de Henares to have given birth, in 1547, to Cervantes, the inimitable author of Don Quix-

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ote; it is, also, the birth-place of the poet Figuerroa, of Solis the historian of Mexico, &c.

ALCALA DE LOS GAZULES, a town of Spain, prov. Cadiz, in a hilly and bleak district, totally unfit for tillage, but well adapted for rearing sheep, which accordingly constitutes the chief employment of the people: — it is at a very short distance from the river Barbate, which flows into the sea 35 m. S. E. Cadiz. Close to the town, are the remains of an old Roman castle. Dist. 38 m. E. Cadiz, and 48 m. S. Seville. Pop. of town and sub. 17,916.

ALCALA LA REAL, a town of Spain, prov. Jaen, on the Gualcoton, at an elevation of more than 2,700 feet above the level of the sea, 30 m. W.S.W. Jaen. Pop. 4,374. It had, and perhaps still has, a rich abbey, with various churches, convents, and an hospital. On the 28th January, 1810, the French defeated the Spaniards in the vicinity of this town.

ALCAMO, a town of Sicily, in the Val di Mazzara, on the great road from Palermo to Trapani, 24 m. W.S.W. Palermo. Pop. said by Swinburne to be 8,500; perhaps it may now be estimated at 10,000, the pop. of the district being, in 1831, 15,589. Streets straight, but ill paved and dirty. It is situated on high ground, in a fine open, cultivated country, and is well sheltered by large woods of olive trees. Within the district of Alcamo, and at no great distance from the town, finely situated on an eminence, are the magnificent ruins of an ancient Doric temple, — all that now remains of the once powerful Segista! It is a parallelogram, 162 by 66 feet, and has 36 columns, which, when examined by Swinburne, were all, with one exception, perfectly entire. (For an account of the ruins, see *Swinburne's Two Sicilies*, ii. p. 236. 4to ed.)

ALCANDATE, a town of Spain, prov. Jaen, in a rugged mountainous country at a short distance from the river Guadajoz, lat. 37° 45′ N. long. 4° 12′ W. The Roman inscriptions seen here show its antiquity. Pop. 6,500.

ALCANIZ (Arab. for *treasury*), a town of Spain, prov. of Teruel, Aragon, on the r. bank of the Gaudaloupe on a hill side, above which is a castle, built by James I. of Aragon, 62 m. S.E. Saragossa. Pop. 5,834. A handsome collegiate church, with a noble portico, is the chief building. It is encircled by walls; and is connected by a canal, constructed by the Moors, with the Ebro. There are in the vicinity rich mines of alum, and thriving plantations of mulberry and other trees; there is also in its vicinity a pond which produces remarkably large fine eels.

ALCANTARA, (from the Arabic *al-cantarat-al-seif*, the bridge of the sword,) a fortified town of Spain, prov. Estremadura, lat. 39° 41′ 30″ N., long. 6° 43′ W., and the cap. of a dist. having the same name, Pop. 3,332. It stands on a steep hill, close to the E. bank of the Tagus (running here N. W.), was called by the Romans, its founders, *Norba-Cæsarea*, and they in the reign of Trajan erected the famous bridge, whence its present name is derived. It was of granite, its length 577 ft., breadth 22 ft., span of the two centre arches 110 ft., thickness of piers, 38 ft., height above river-level, 175 ft.; in the middle of the bridge, was a triumphal arch 46 ft. high, with a Roman inscription. (*Laborde's Voyage Pittor.*; where see views and sections of the bridge. Ponz. viii. 63.) This fine relic of antiquity was unfortunately destroyed, together with some adjoining buildings, by the British troops, June 10. 1809, owing to a mistake of military orders. (*Napier*, vol. ii. 316.) The river was once navigable up to this town, and before the separation of Portugal, in 1580, a large trade in fruit was carried on with Lisbon (*Miñano*); but it now serves only to turn a few mills, and to supply the people with dace, barbel, eels and other fish, which greatly abound (*Ponz*). It is joined a little below Alcantara by the Alagon, Jartin and Salor. At the expulsion of the Moors in 1213, which was aided by the knights of San Julian del Pereyro, the defence of the town was entrusted to them, and they thenceforward assumed the title of knights of Alcantara. The order is now a dignity of some value, and the monarch has been the grand-master since 1495. The knights in 1506, built a handsome convent and church, which still exist. A cloth manufacture once existed here; but it has perished. Brick-making and tanning are all the signs now to be seen of industry.

ALCANTARA, a sea-port town of Brazil, prov. Maranham, on a hill, 15 m. N. W. San Louis de Maranham. The surrounding territory is productive of excellent cotton and rice; and the salt lakes, a little to the N. of the town, might yield the largest supplies if they were properly managed. Its port admits only small vessels.

ALCANTARILLA, a dist. and town of Spain. prov. Murcia, lat. 37° 56′ N., long. 1° 13′ W. 4 m. from the l. bank of the Segura. Dist. 5 m. S. W. Murcia, and 50 S. W. Alicant. Pop. 4037.

ALCAREZ, a town of Spain, prov. La Mancha, on the Guadarama, 45 miles W.S.W. Manzanares. Pop. 3,300. It has a citadel, manufactures of cloth, mines of calamine and copper, and an aqueduct.

ALCAZAR DE SAL, a town of Portugal, prov. Estremadura, on the r. bank of the Sado, 29 m. S.E. Setubal. It is delightfully sit. in the midst of an extensive and fertile plain, and is chiefly distinguished for its salt works and sedge-mat factories.

ALCAZAR DE SAN JUAN, a town of Spain, prov. La Mancha, lat. 39° 25′ N., long. 3° 15′ W., and the cap. of a dist. so called, which contains 16 towns and villages. The dist. (besides its pasture, corn, oil and fruits, which are abundant,) produces salt-petre, and other minerals, supporting above 500 workmen and their families. The town contains 12 soap-factories, and had formerly 40. Dist. 5 m. N. E. Ciudad Real, 55 m. S. E. Toledo. Pop. of dist. 7000.

ALCESTER, a pa. and m. town of England, co. Warwick, 103 m. N. W. Lond., 16 m. W. S. W. Warwick. Pop. 2,405. The town, situated at the confluence of the Alne and Arrow, has a handsome Gothic church, a free school, a good corn market, and carries on a pretty large needle manufacture.

ALCIRA, a town of Spain, prov. Valencia, on an island of the Xucar, 25 m. S.S.W. Valencia, and so low that the river by rising 12 ft. above its usual height inundates the town, lat. 39° 6′ N. long. 0° 25′ W. Pop. 8,415. It is fortified and flanked with towers; has several churches, convents and hospitals, with two fine bridges over the Xucar. This is a very ancient town, having been successively occupied by the Carthaginians, Romans, and Moors. The inhab. are thrifty and intelligent farmers, superior to most in Spain, and in the immediate neighbourhood of the town they raise excellent pimentos and tomatos, in addition to the rice and other produce of the district. About 2 m. E. are some limestone hills, among which is a stalactitic cave, (*Cueva de las Maravillas*), visited as a natural curiosity. (*Bowles*.)

ALCKMAER. See ALKMAAR.

ALCOBAZA, a town of Portugal, prov. Estremadura, lat. 39° 36′ N., long. 9° W., 15 m. S.S.W. Leiria, and within 5 m. of the sea, at the confluence of two small rivers. Pop., according to Minano, 1,716. It contains a very handsome and extensive Cistercian monastery, founded by Alfonso I., possessing a good library with valuable MSS., and a collection of pictures, among which are portraits of all the Portuguese kings, from Alfonso I. to Donna Maria I. The cotton manufacture is carried on here to some extent; the Marquis de Pombal set 250 looms at work in the monastery; but the late disturbed state of the country has very much impaired the industrial resources of this place.

ALCOLEA DEL REY, a town of Spain, prov. Seville, 26 m. N. E. of that city, near the r. bank of the Gudalquivir, in the midst of a fine and productive plain. Pop. 2000. When the Guadalquivir was more navigable than at present, this town appears to have been of some importance; the completion of the projected canal will perhaps restore it to its former prosperity.

ALCORA, a town of Spain, prov. Valencia, 48 m. N. Valencia, in a country watered by the Mijares. Pop. 6,000. Its agricultural and industrial products are not important.

ALCOVER, a town of Spain, prov. Cataluña, on the banks of the small river Angura. In the time of Alfonso VIII., it was a place of some importance; but the oppressions of the French, at different times, have driven away the principal landholders; and the people seem now to be in a very wretched condition. 13 m. N.N.W. Tarragona. Pop. 2,300. Contrib. to rev. 39,000 reals v.

ALCOY, a town of Spain, Valencia, at the source of the Alcoy, 24 m. N. Alicant. Pop. town and district 14,600. Besides churches and convents, it has a college, a considerable manufactory of fine cloth, soap works, and paper works; the contiguous territory is very fertile.

ALCUDIA, a town belonging to Spain, near the n. extrem. of the isle Majorca, on a small peninsula between the bays of Pollensa and Alcudia, lat. 39° 50′, long. 3° 8′ E. Pop. 1018. Two stagnant pools, or Albuferas, lie between it and the bay; and the exhalations from them greatly injure the health of the inhabitants, a sickly and miserable race. The pools might be drained, and the soil rendered useful, if the natives were possessed of any enterprise or energy. Coral-fishing employs some 40 vessels in the bay. At about 3 m. S. E. is a stalactitic cave, visited, and well described by Antillon. (*Geog.* p. 76.)

ALCUDIA DE CARLET, a town of Spain, prov. Valencia, in a plain about 8 m. from the Xucar, whose water supplies its rice grounds with nourishment. It is on the royal road of Madrid, about 18 m. S. Valencia. Pop. 3,000.

ALDBOROUGH, a borough of England, W. R. co. York, wapentake Claro, 185 m. N. N. W. Lond., 18 m. W. N. W. York. Pop. in 1831, 620. Its former importance was wholly derived from its having enjoyed since

the æra of Philip and Mary the privilege of returning 2 members to the H. of C. It was disfranchised by the Reform Act.

ALDBOROUGH, or ALDEBURGH, a sea-port town of England, co. Suffolk, hund. Plomesgate, 85 m. N.E. Lond. Pop. of bor. and pa. 1,341. It returned 2 m. to the H. of C. from the 15th Eliz. down to the passing of the Reform Act, when it was disfranchised. It has suffered much from encroachments of the sea.

ALDEA DEL REY, a town of Spain, prov. La Mancha (Ciudad Real), on the l. bank of the Jabalon, an affluent of the Guadiana, 17 m. S. Ciudad Real. Pop. 2,800. The climate is very unhealthy, owing to inundations of the river, which a very slight industry might obviate. Here is a palace of the knights commanders of Calatrava.

ALDEA GALEGA, a town of Portugal, prov. Estremadura, æstuary of the Tagus, on the E. side of the bay of Montijo, well known as a ferry station between Lisbon and the great road to Badajos and Madrid. Pop. 3,480.

ALDERNEY, an island belonging to Great Britain, in the English channel, 55 m. S. from the Isle of Portland, and 18 m. W. Cape la Hogue in Normandy. The channel between Alderney and the latter, called the Race of Alderney, is dangerous in stormy weather from the strength and rapidity of the tides. This island is about 3½ m. in length by ¾ m. in breadth, and had in 1831 a pop. of 1,045. It is a dependency of Guernsey, and is principally celebrated for a small breed of cows, which afford excellent milk and butter. It has no good harbour.

ALDSTONE MOOR, a par. and m. town of England, co. Cumberland, Leath ward, on the borders of Northumberland. The town stands on a hill washed by the Tyne. The parish contains 35,060 acres. Pop. 6,858. It is chiefly celebrated for its lead mines, formerly the property of the earls of Derwentwater, and now of Greenwich Hospital. Their present (1848) annual produce is estimated at from 4,000 to 4,500 tons of pure metal.

ALEDO, a town of Spain, in the prov. of Murcia, sit. on a mountain side, 6 m. from the l. bank of the Sangonera, a branch of the Segura, and about 25 m. W. S. W. Murcia. Pop. 2330.

ALENÇON, a town of France, cap. dep. Orne, in an extensive plain of the same name, on the Sarthe, near the southern boundary of the dep. 56 m. S.S.E. Caen, lat. 48° 25′ 45″ N., long. 0° 5′ 22″ E. Pop. 13,277. The town is agreeably situated and well built; streets generally broad and well paved; the walls by which it was formerly surrounded have nearly disappeared, and it has several considerable suburbs. Among the public buildings may be specified the cathedral church, the town-house embodying two well preserved towers, the only remains of the ancient castle of the Dukes of Alençon, the courts of justice, the corn-market, &c. It has a communal college, several hospitals, a public library, and an observatory. Its manufactory of the lace, known by the name of *Point d'Alençon*, established by Colbert, still preserves its ancient celebrity, and it has in addition manufactures of muslin, of coarse and fine linen, buckram, serges, stockings, straw hats, &c., with tanneries. There are freestone quarries in the neighbourhood; and at Hartz, a little to the W. of the town, are found the stones, called Alençon diamonds, which when cleaned and polished are said to be little inferior, in respect of lustre, to the genuine gem. Several fairs are held in the town, which is the seat of a considerable commerce. During the religious wars, Alençon, which was generally attached to the Protestant party, suffered severely. — (*Hugo*, art. *Orne*; *Dictionnaire Géographique*, &c.)

ALENQUIR, a town of Portugal, prov. Estremadura, 26 miles N.N.E. Lisbon. Pop. 3,000. It is one of the principal points for the defence of Lisbon.

ALENTEJO, a prov. of Portugal, which see.

ALEPPO, a city in the N. of Syria, called by the natives, Haleb-es-Shahba (an. *Chalybon* and *Berræa*), lat. 36° 11′ 25″ N., long. 37° 10′ 15″ E.; 76 m. E. S. E. Iskenderoun, and 126 m. N.N.E. Damascus. Its present pop. is probably under 70,000; though from the middle of the 17th to the beginning of the present century it was variously estimated at from 200,000 to 258,000. According to Russell, it had in 1794, 235,000 inhab., of whom. 30,000 were Christians, and 5,000 Jews, the rest being Mohammedans; but, according to Volney, the pop. in 1785 did not exceed 100,000, which we incline to think is the more probable statement. Aleppo occupies an elevation in the middle of an open plain; and is surrounded by walls 30 ft. high and 20 broad; supposed, from the massive style of their architecture, to be Saracenic. The city, within the walls, is about 3½ m. in circ. but including its suburbs, it occupies a circuit of more than double that extent. Houses of freestone: they are said to be elegant and durable, and those belonging to the better classes exhibit an elaborate degree of ornament in their lofty ceilings decorated with arabesques; and their large windows of painted glass. Roofs flat, as in most Eastern towns; during the summer months, the inhabitants pass their nights upon them, unprotected by tents or awnings of any kind. These flat roofs form also a continuous terrace, upon which it is easy, by climbing over the low partition walls, to pass from one end of the town to another. Streets broad, well paved, and clean, remarkable qualities in the East: the latter may, perhaps, be owing, in part, to the drainage, occasioned by the slight elevation of the town and neighbourhood above the surrounding plain. The seraglio, or palace of the Pacha, which used to be admired for its magnificence, was destroyed in 1819-20 during the siege of the town by Khourchid Ahmed Pacha. Mosques numerous, but nearly all have been injured, and many of them are in ruins, from the effects of the earthquakes which have so often shaken this part of Syria; the Djameé, Zacharie, and El-Halawe, are, however, fine remnants of the ancient Roman style; they were originally Christian edifices, the latter built, it is said, by the Empress Helena. There are ten or twelve Christian churches, three Christian convents, and several wakfs, the conventual establishments of the Mohammedans. An ancient aqueduct conveys a plentiful supply of good water from two springs. This work is an object of much care; and it is singular, that being certainly constructed before the time of Constantine, it should have remained uninjured amid the frequent convulsions to which the town has been subject. In the centre of the city* is a castle, partly in ruins, built upon an artificial mount, of considerable height, and ½ m. in circumference; this is surrounded by a broad and deep, but dry ditch, crossed by a bridge of 7 arches. From this spot is commanded a very extensive view, bounded N. by the snowy tops of the Taurus, W. by the elevated rocky bed of the Aassy; while to the S. and E. the eye reaches over the desert, as far as the Euphrates. Here are several large khans, principally occupied by Frank and other foreign merchants. These are handsome and convenient buildings, containing counting-houses and store-rooms ranged round an interior court, in which are stands for loading and unloading the beasts of burden, and a fountain to supply them with water. At present, however, Aleppo can be regarded as little more than the shadow of its former self: slight earthquakes are frequent in its neighbourhood, but in 1822 a tremendous shock overturned most of the public buildings, and reduced the greater part of the city to a heap of ruins. This calamity has occasioned the erection of a new suburb, materially altering the appearance, and injuring the beauty of the town. The houses in this suburb, intended at first for the temporary shelter of the population that had escaped from the town, were hastily constructed of wood, lath, and plaster; but from want, either of funds to repair their more substantial dwellings, or of energy to set about the work, or probably from a fear of returning into the city, these hastily constructed edifices have become permanent residences, while many, perhaps the greater number, of the large and convenient stone buildings in the city are either in ruins or tenantless.

Although upon the borders of the desert, Aleppo is advantageously and agreeably situated. A small stream, called the Koeik (an. *Chalus*), waters the W. side of the town. This brook, which is about the size of the New River, and never dry, swells, in the rainy season to a formidable and rapid current; it rises at the foot of Mount Taurus, about 70 m. N., and after a course of 80 or 90 m. loses itself in a large morass full of wild boars and pelicans. The upper course of the Koeik lies between naked rocks, but near Aleppo, and S. of that town, it flows through an extremely fertile valley, in a high state of cultivation. This river, and the aqueduct before mentioned, furnish an abundant and unfailing supply of water; and besides the public fountains and baths, every private individual, who chooses to be at the expense of pipes, may have his house served with water in the European fashion.

The far-famed *gardens of Aleppo* are situated to the S. E. of the city, upon the banks of a small rivulet, one of the very few affluents of the Koeik. They are rather orchards than gardens, consisting of fruit trees, with vegetables growing between them, but scarcely any flowers. They are pleasant spots, from the luxuriance of their productions, and the nightingales that resort to their shades; but very little taste is exhibited in their arrangements. W. of the town the banks of the river are covered with vines, olives, and fig-trees, and towards the E. are some plantations of pistachio trees, which, though still extensive, are only the remains of much more majestic groves, for which this country was formerly famous.

The air of Aleppo is dry and piercing, but accounted salubrious both to natives and strangers; the former, however, are subject to a peculiar disease, said to attack

* This is Volney's statement. Robinson describes the castle as situated at the N.E. corner; the apparent discrepancy probably arises from the one including, and the other excluding the suburbs. The N.E. corner of the walled town would be nearly the centre of the whole mass of buildings

them once, at least, in their lives, the *habal-es-sine;* "ulcer," or "ringworm of Aleppo." It is, at first, an inflammation of the skin, subsequently becomes an ulcer, continues for a year, and generally leaves a scar for life. It usually fixes in the face, and an Aleppine is known all over the East by the mark left by this disorder, the cause of which is unknown, but suspected to be owing to some quality of the water.

Aleppo appears to have risen to importance on the destruction of Palmyra. Like the latter, it was a convenient emporium for the trade between Europe and the East, so long as it was carried on over land. The productions of Persia and India came to it in caravans from Bagdad and Bussora to be shipped at Iskenderoun and Latakia for the different ports of Europe. Aleppo communicated also with Arabia and Egypt, by way of Damascus; with Asia Minor, by Tarsus; and with Armenia, by Diarbekir. It rose to great wealth and consequence under the Greek sovereigns of Syria, and into still greater under the early Roman emperors. In 638, A. D. it resisted the arms of the Arabs for several months; but being finally taken, it became of as much importance under the Saracens, as it had before been under the Romans or Greeks. In the 10th century, it was reunited to the empire of Constantinople, by the arms of Zimisces; but it soon after fell into the hands of the Seljukian Turks, under whose sway it remained during the time of the Crusades. It suffered considerably during the irruptions of the Mongols, in the 13th century, and again, by the wars of Tamerlane, or Timur Bec, in the 15th. Selim I. annexed it, in 1516, to the Turkish empire, of which it continued a part till 1832, when it opened its gates to Ibrahim Pacha, without a summons. Its political revolutions, with the exception of its two captures by the Tartars, affected its prosperity only temporarily and in a slight degree; but the discovery of a passage to India by the Cape of Good Hope struck a deadly blow at its greatness. Since that event it has continued to decline, and the earthquake of 1822, together with the wars which have distracted Syria, by causing extensive emigrations, have reduced it to comparative insignificance. Its capabilities are however very great, and under judicious treatment it is more than probable it would speedily regain a considerable share of its former prosperity. It is the most convenient centre for the trade between Persia and the interior of Arabia, on the one hand, and Asia Minor and Armenia on the other; it is, beyond all comparison, the cleanest and most agreeable town in Syria; and still, even amid its ruins, better built than almost any other between the Black Sea and the Euphrates; its inhabitants, a great proportion of whom are sheriffs (descendants of the Prophet), are the mildest and most tolerant among the professors of Mohammedanism. These circumstances have made it the resort of strangers, and they are not likely, in peaceable times, to have less influence in future.

Aleppo formerly possessed several manufactures, and before the earthquake, it was said to contain 12,000 artizans, chiefly weavers of gold and silver lace, silk and cotton goods, shawls, &c. These works are now languishing, but they still exist, and, with the pistachio nuts, form the chief part of its remaining trade. Its imports are goats' hair, from Asia Minor; gall nuts, from Kurdistan; and Indian goods, such as shawls and muslins. From Europe, it receives cotton stuffs, cloth, sugar, dye stuffs, &c.; W. I. coffee, though a prohibited article, is also introduced, and is cheaper than that of Mocha.

About 20 miles N. W. of Aleppo, is the convent (in ruins) of St. Simon Stylites, where some fragments of the pillar on which that famous ascetic passed so many years are still exhibited. The ruins of the convent attest its former magnificence, and a great number of deserted villages, in this direction, evince the former populousness of the neighbourhood. — (*Olivier, Voy. dans l'Em. Oth.* iv. 169—209. ; *Russell, Nat. Hist. of Alep.* 77. *et passim. Volney,* ii. 124—130. ; *Robinson,* ii. 250—266. ; *Browne,* 384—388.)

ALESEINA, a town of Russia in Europe, gov. Toula cap. district, on the Oka, 34 m. N. W. Toula. Pop. 2,300. It has several breweries; and manufactures hats, soap, &c.

ALESSANDRIA, or ALEXANDRIA, an important town and fortress of the Sardinian states, prov. of the same name, in a marshy country on the Tanaro, near where it is joined by the Bormida, 47 m. E.S.E. Turin, lat. 44° 55′ N., long. 8° 36′ E. Pop. 36,000. It has a very strong citadel, and was surrounded by Napoleon with extensive fortifications, which have been demolished since his downfall. It is well built; has a cathedral, numerous churches, palaces, and hospitals; a handsome town-house, with a gymnasium, theatre, public library, and large barracks. It has manufactures of silk, cloth, and linen, and some trade. The latter is promoted by its two fairs, held the one at the end of April, and the other on the 1st of October; they are both well attended, not only by Italians, but also by French and Swiss. Alessandria was founded in the 12th century, and has frequently been taken and retaken. It has always been reckoned one of the bulwarks of Italy on the side of France. The village and battle-field of Marengo lie a little to the E. of the town.

ALEUTAN, or ALEUTIAN ISLANDS, a chain of islands in the N. Pacific ocean, stretching from the peninsula of Kamtschatka, in Asia, to Cape Alaska, in N. America, comprised in the Russian government of Irkutzk. They are very numerous, occupying a circular arc, extending from 165° to 195° E. long., whose chord is in 55° N. lat., and above 600 m. in length. Apparently, this insular chain consists of the summits of a range of submarine mountains. In 1795, a volcanic island rose from the sea, in the middle of the line, which, in 1807, was found to be enlarged to about 20 m. in circuit, and lava was then flowing down its sides. There are always amongst them several volcanoes in activity, and some, known to have emitted flames, are now quiescent. Earthquakes are common, and sometimes so violent as to throw down the huts of the inhabitants. Behring's island, Attoo, and Oonalashka, are the largest, the first being 104 m. in length, but many are only inconsiderable rocks. They are intersected by channels, various alike in width, and in the safety of navigation. All exhibit a barren aspect; high and conical mountains, covered with snow during a great portion of the year, being the most prominent features. Vegetation scanty; there are no trees nor any plants surpassing the dimensions of low shrubs and bushes. But abundance of fine grass is produced in the more sheltered vallies, and different roots, either indigenous or introduced recently. The seas abound in fish, and the feathered tribes are numerous. The hunting the sea otter, whose skin affords a fur of the finest quality, was, formerly, carried on to a great extent: they were wont to be caught in thousands; but their indiscriminate destruction has greatly reduced the number of those now taken. The seal is particularly valuable, affording the inhabitants a constant supply both of food and clothing; the thin membrane of the entrails is also converted into a substitute for glass. Foxes are the principal quadrupeds. The natives are of middle size, of a dark brown complexion, resembling an intermediate race between the Mongol Tartars and N. Americans. Their features, which are strongly marked, have an agreeable and benevolent expression. Hair strong and wiry; beard scanty; eyes black. They are not deficient in capacity, and the different works of both sexes testify their ingenuity. They are indolent, peaceable, and extremely hospitable; but stubborn, and revengeful. Tattooing, which was common among the females, is on the decline, but they practise a hideous mode of disfiguring themselves, by cutting an aperture in the under lip, to which various trinkets are suspended. These deformities, however, are less common than when the islands were discovered, the more youthful females having learned that they are no recommendations in the eyes of their Russian visiters. A man takes as many wives as he can maintain; they are obtained by purchase, and may be returned to their relations; or the same woman may have two husbands at once; and it is not uncommon for men to exchange their wives with each other. Their subsistence is principally obtained by fishing and hunting. Their dwellings are spacious excavations in the earth, roofed over with turf, as many as 50 or even 150 individuals sometimes residing in the different divisions. Only a few of the islands are inhabited; but in former times the population is said to have been more considerable. Its decrease is ascribed to the exactions of the Russian American Company, who have factories in the islands. Its present amount has been variously estimated, at from a few hundreds to 6,000. The islands were partially discovered by Behring, in 1741.

ALEXANDRETTA. See Iskenderoon.

ALEXANDRIA, (Arab. *Iskendiryyeh*), a celebrated city and sea-port of Egypt, so called from Alexander the Great; by whom it was either founded, or raised from obscurity 332 years B. C., about 14 m. W. S. W. of the Canopic, or most W. mouth of the Nile, on the ridge of land between the sea and the bed of the old lake Mareotis, lat. of lighthouse 31° 11′ 31″ N., long. 29° 51′ 30″ E. Its situation was admirably chosen, and does honour to the discernment of its illustrious founder. Previously to the discovery of the route to India, by the Cape of Good Hope, Egypt was the principal centre of the commerce between the E. and W. worlds; and it so happens that Alexandria is the only port on its N. coast that has deep water, and is accessible at all seasons. It has not, it is true, any natural communication

with the Nile, but this defect was obviated in antiquity by cutting a canal from the city to the river. After Alexandria came into the possession of the Saracens, this canal was allowed to fall into disrepair: and it was not to be supposed that any attempt would be made to re-open it, while Egypt continued subject to the Turks and Mamelukes. But Mehemet Ali, the late ruler of Egypt, being anxious to acquire a navy, and to revive the commerce of the country, early perceived the importance of Alexandria, both as a station for his fleet, and a centre of commerce. In furtherance of his views he greatly improved, beautified, and strengthened the city, and restored the ancient communication with the Nile by means of the Mahmoudieh canal from Alexandria to Fouah, a distance of 48 m., opened in 1819. It is to be regretted that its construction is in several respects defective; but it is notwithstanding of great advantage. Alexandria is built partly on a peninsula, consisting of the island of Pharos, so famous in antiquity for the lighthouse or pharos, whence it has derived its name, and partly on the isthmus by which that island is now connected with the mainland. The principal public buildings, as the palace of the Pacha, the arsenal, the hospital, &c., are on the peninsula, and the town principally on the isthmus. The ancient city was situated on the mainland opposite the modern town; and the vast extent of its ruins would sufficiently evince, were there no other evidences, its wealth and greatness.

Alexandria has two ports. That on the W. side of the city, called the old port, the *Eunostos* of the ancients, is the largest and by far the best. The entrance to it is narrow and rather difficult; but when in, ships may anchor off the town in from 22 to 40 feet water, and there is good anchorage in deep water all along the shore. The new harbour, or that on the E. side of the town, is very inferior, being comparatively limited, having a foul and rocky bottom, and being exposed to the N. winds.

The change in the appearance of Alexandria during the last twenty years has been quite extraordinary.— "J'allai," says Marshal Marmont, "visiter l'arsenal et l'escadre. J'étais extrèmement impatient de voir cette création étonante, et, pour aussi dire, incompréhensible. En 1828, il n'existait sur la presqu'ile d'Alexandrie qu'une plage aride et deserte. Je la trouvai, en 1834, couverte par un arsenal complet, bâti sur la plus grande échelle; par des cales de vaisseaux, de atteliers de tous les genres, des magasins pour tous les approvisionnements, une corderie de mille quarante pieds de longueur (dimension égale à celle de la corderie de Toulon). J'y trouvai rassemblés des ouvriers nombreux, habiles dans tous les métiers qui se rattachent au service de la marine, et qui tous étaient Egyptiens; tout cela organisé, en mouvement, en plein service. Et de cet arsenal, dont les fondations datent de six ans, il est sorti dix vaisseaux de ligne de cent canons, dont sept étaient armés, avaient déjà navigué, et trois étaient sur le chantier, prêts à être lancés à l'eau. Je ne parle pas des frégates de divers rangs, des corvettes et des bricks, qui portent la flotte à plus de trente bâtiments armés. Ces prodigieux résultats ont été obtenus avec cette promptitude si grande, dans un pays où il n'y a ni bois, ni fer, ni cuivre, ni ouvriers, ni matelots, ni officiers de marine; aucun des éléments, enfin, qui peuvent servir à la création d'une escadre. Je ne crois pas que l'histoire du monde entière ait jamais présenté dans aucun temps rien de pareil."

A dry dock was constructed in the course of 1837. Naval and military hospitals have been established, the former under the direction of an English, the latter of a French doctor. A quarantine board exists under the direction of the consular body, to which the Pacha has confided this branch of service, and connected with which a large and commodious lazaretto has lately been erected outside the walls. Vessels arriving from any of the infected ports of the Levant, are subjected to quarantine, the same as in Europe; there is also a school for the marine, and a board composed of the admirals and higher officers of the fleet, for examining into the merits of candidates, maintaining the discipline and regulating every matter connected with that branch of service. The French system has been adopted in every department of the service, and to the French the Pacha was chiefly indebted for the advances he made.

On the peninsula has been erected the *Schuna*, or range of warehouses for the reception of the surplus produce of Egypt, and hither it all comes, with the exception of that exported from Suez, and Cosseir, for the maintenance of the army and fleet in the Red Sea. According to the late Pacha's monopolizing system, the whole produce of the country came into his hands, at prices fixed by himself, without the option of resorting to other markets being allowed to the grower. And not only did this apply to the produce of Egypt, but to that of the adjacent countries, wherever the Pacha's influence extended, embracing the coffee of Mocha, the gums and drugs of Arabia, the tobacco of Syria, elephants' teeth, feathers from the interior, &c., all of which were purchased for him in the first instance, the prohibition of trading in them applying to every one, and carrying with it the risk of confiscation, if contravened; — the whole of this produce, native as well as exotic, being collected in Alexandria was sold by public auction, in the same way exactly as auctions are conducted in Europe, the upset price being fixed according to the latest report of the markets, the merchant having the privilege of examining the article in the Schuna before the sale, and being required to pay in cash the price at which it was knocked down to him within a limited number of days when delivery took place. The principal articles thus disposed of were cotton, which was by far the largest, rice, opium, indigo, gums, coffee, senna, hemp, linseed, and the *comestibili* of the country, wheat, barley, beans, lentils, &c. But this system is now much modified. During the ascendancy of Mehemet Ali, every other branch of industry was sacrificed to the raising of cotton; but since his demise a more rational system would appear to be followed. At all events the exports of corn and beans have greatly increased within the last few years, and in 1847, 1848, and 1849 we brought considerable supplies from Alexandria. The greater part by far of the trade of the port is carried on with England, but she has also a considerable trade with Marseilles, Trieste, Constantinople, Leghorn, the Isles of the Archipelago, &c.

According to the report of the Alexandrian custom-house, it appears that during the year 1847, the total value of the exports from Egypt to all parts was 2,434,249*l.* stg., and of imports from all parts 1,393,406*l.* stg., the exports thus apparently exceeding the imports by upwards of 1,000,000*l.* st. though we may be quite certain that such was not really the case.

England had, as usual, by far the greatest share both of the exports and imports; the total value of exports to her being 1,099,657*l.* stg., and of imports from her 457,904*l.* stg.

The exports from Egypt to Great Britain, besides minor articles, were,

			Value.
35,440	bales	cotton	£144,072
70,000	—	flax	106,600
6,200	—	wool	7,500
467,000	qrs.	beans	398,000
220,000	—	wheat	255,017
77,000	—	barley	43,000
73,350	—	Indian corn	50,000
31,250	—	linseed	38,000
23,000	—	lentils	22,000
10,800	—	chick peas	8,570
4,200	—	peas	3,400
2,270	—	millet	1,500
415	—	lupins	277
626	cwt.	senna	1,252
940	—	mother of pearl	676
650	—	natron	390
7,044	lbs.	opium	2,000

The imports from Great Britain included the following items, viz. cotton manufactures of the value of 231,000*l.* stg.; indigo, 44,000*l.*; iron, 31,000*l.*; machinery, 17,000*l.*; hardware, 16,000*l.*; pitch, 6,170*l.*; cochineal, 4,210*l.*; lead ore, 4,173*l.*; coals, 5,900 tons, besides the quantities imported for the use of the Peninsular and Oriental Steam Company and of the East India Company's steamers at Suez.

1504 vessels left the port of Alexandria with cargoes in 1847, of which 433 were English.

In 1848 the results were nearly similar. And it appears from our custom-house accounts that in 1849 we imported from Alexandria 129,954 qrs. wheat, 247,594 qrs. beans, 13,151 qrs. Indian corn, with smaller quantities of other grain.

There is no doubt that the population has trebled or quadrupled since the opening of the Mahmoudieh canal, and it is still on the increase. It may amount in all, to from 50,000 to 60,000 ex. troops. A good deal of this increase has taken place at the expense of Rosetta, which has latterly very much declined. The population is of a mixed character, consisting, besides the native Turks and Arabs, of Armenians, Greeks, Smyrniotes, Syrians, Moghrebins, or men from the Barbary states, Maltese, Jews, and Europeans of almost every nation, in such numbers, that it may be questioned, whether the strangers, in a commotion, would not be more than a match for the natives. The English have numerous commercial houses; as have also the French, Italians, and Greeks. Amateur

French and Italian theatres exist, the performances in which rival those of the Académie Royale and San Carlos; balls and routes are given in the most approved style of fashion; a commercial journal has been established in the Italian language, which however does not treat of politics; French *modistes*, tradesmen in all departments, and shops displaying every article of furniture, and of male and female attire, from the Parisian bonnet of the latest fashion to the very humblest article of dress, all conspire, in conjunction with the style of the buildings, and pretty equal balance of hat and turban, to take away from this place the appearance of an Oriental city; and it is only after leaving it, and pursuing his way to Cairo, that the stranger truly feels that he is in the East. Here also exist Catholic and Greek convents, where divine service is performed on Sundays and holydays to the people of those persuasions: the Armenians, Syrian Christians, and Jews have also places of worship, Protestants alone being without a temple. There is little intercourse between the natives and Franks, except in the way of business. They occupy distinct quarters of the city, the former secluding their families, and maintaining all the reserve of Oriental life, the siesta, pipe, and coffee filling up three fourths of their time; the latter adhering to the customs of their own country, in dress, furniture, the use of carriages and horses, and indeed in all things but the siesta, the pipe, and immuring themselves during the heat of the day, wherein they imitate the Orientals. Latterly also, after the example of some of the higher Turks, several of the richer Frank merchants have obtained grants of land from the Pacha, on the banks of the canal, and built houses and made gardens, which serve to beautify and give interest to the neighbourhood.

The Turkish quarter of the city consists of a number of narrow, irregular, tortuous, filthy and ill-built streets and bazars, with hardly any good houses but those of the Pacha's officers, and without a single public building, mosque, or other object worthy the least attention, the bazars being mean, and but very indifferently provided. The Frank quarter, on the other hand, presents several streets of well built substantial houses, with good shops; in particular the square, which is the residence of the consuls and principal merchants, called the Piazza Grande, that may well bear comparison, for the size and style of its buildings, with some of the best streets of Paris or London. Ibrahim Pacha owned the greater part of these houses, which he built on speculation, and for which he drew rents, varying from 200*l*. to 240*l*. per annum. The whole town is built of stone and brick, dug up from the foundations of the ancient city.

During part of the year Alexandria is supplied with water from the canal; and during the other portion, from the cisterns of the ancient city (the only portion of its public works that has been spared) which, at the period of the inundation, when the canal is full, are thence filled, and to which recourse is only had, when the water of the canal, by being stagnant, becomes unfit for use. As the inundation advances, the old stagnant water is run off into the sea, and the canal, being filled brim full with fresh, is shut up at both ends, and so remains till the following year, serving in the mean time for navigation, for the use of man and beast, and for the irrigation of those small portions of land on its banks, that have been reclaimed from the desert, and brought into cultivation. The climate of Alexandria is considered very salubrious, the heats of summer, which rarely exceed 85° Fahr., being tempered by the Etesian, or N.W. winds, which prevail for nine months of the year. In winter, a good deal of rain falls, which however is confined to the coast, and is probably the cause, coupled with the wretched habitations and misery of the poorer classes, why the plague so often makes its appearance here. Were the labouring classes better clad, housed, and fed, there is little doubt that this scourge would soon be no longer heard of.

The municipal government of the city is entrusted to the governor, who has under him a commandant de place, and an officer, called the Bashaga or chief police magistrate, whose duty it is to see that order and quiet are maintained. The city is besides divided into quarters, over each of which a sheikh presides, who is responsible to the governor for the peace of his district: and, moreover, each trade and profession has its sheikh, whose duty it is to collect the taxes, and to see the good behaviour of the members. Guard-houses are also distributed all over the city, and the military are instructed to take all riotous and disorderly parties into custody, the officer of the guard, if the offender be a native, having authority to inflict summary punishment by the bastinado; but if a Frank, he must send him to his own consul, to be punished according to the laws of his own country. The system works so well, that a more orderly place, or one freer from riot or crime, is rarely to be seen: indeed, when crime is committed, it is usually by Frank upon Frank; and then, from defects in the consular system, it almost always escapes detection. Besides the Bashaga, or police court, there is the Meh-kemeh, or Kadi's court, where all civil questions between natives are determined; and a commercial court with Frank judges, but presided over by a Turk, for deciding questions between the Franks and natives, where the latter are defendants: the Franks themselves, besides exemption from all taxes and burdens of every sort, being amenable only when defendants to their own consular courts, and to the laws of their respective countries. These immunities have been secured to the Franks by convention with the Porte, and are rigidly insisted upon here as well as in every other part of the Turkish empire. The garrison usually consists of about 3,500 men, besides the topjees or gunners, who man the forts.

Alexandria, as every one knows, has recently acquired an unusual degree of importance from her having become the central and principal station in the overland route to India. Her port is now regularly and frequently visited by steamers from England, Marseilles, and other places. Her hotels and streets are crowded with passengers going to or returning from India, Ceylon, the Eastern Archipelago, Australia, &c. She has, in consequence, become the centre of a considerable transit trade; and the influx of so many visitors has not only added greatly to her wealth, but it has at the same time given a powerful stimulus to industry and civilisation in all parts of Egypt. We, indeed, have little doubt, that the extraordinary facilities afforded by this route for carrying on an intercourse with the East will be still farther improved; and that, at no very distant period, means will be found, either by opening a canal (as in antiquity), or by constructing a railway between the Red Sea and the Nile, to bring a large portion of the products as well as of the individuals passing between Europe and India into this their shortest, earliest, and most appropriate channel.

Sketch of History, &c. The Ptolemies, to whom Egypt fell on the demise of Alexander the Great, made Alexandria the metropolis of their empire; and it became, under their liberal and enlightened government, one of the greatest and most flourishing cities of antiquity. When it was annexed by Augustus to the empire of Rome, it is said to have occupied a circumference of 15 miles, and to have had 300,000 free inhabitants, besides slaves, who were probably quite as numerous. It was regularly and magnificently built; and was traversed by two great streets, each more than 100 feet across, and the larger extending more than 4 m. from E. to W. Under the Ptolemies and the Romans, Alexandria was the entrepôt of the principal trade of antiquity, being the market where the silks, spices, ivory, slaves, and other products of India, Arabia, and Ethiopia, and the corn of Egypt, were exchanged for the gold, silver, and other products of the W. world. The inhabitants were distinguished by their industry; either sex and every age were engaged in laborious occupations, and even the lame and the blind had employments suited to their condition. Among the principal manufactures were those of glass, linen, and papyrus, the paper of antiquity. Under the Roman emperors, Egypt became a principal granary for the supply of Italy; and its possession was reckoned of the utmost importance, and watched over with peculiar care. Various privileges and immunities were conferred upon Alexandria; many of her inhabitants were admitted to the rights of Roman citizens, and her wealth and prosperity continued undiminished.

But Alexandria was still more distinguished by her eminence in literature and philosophy than by her commerce and riches. The foundation of her pre-eminence in this respect was laid by the Ptolemies, who founded the museum and library (*elegantiæ regum curæque egregium opus.* Livy,) that afterwards became so famous, at the same time that they gave the most munificent encouragement to literature and learned men. This patronage being continued by the emperors, Alexandria was, for several centuries, a distinguished seat of science, literature and philosophy. Generally, however, her literati were more distinguished for learning and research than for original genius. She produced a host of grammarians and critics; and the names of Euclid, Apollonius of Perga, Ptolemy, Eratosthenes, Nicomachus, Herophilus, Zopyrus, &c., are but a few of those most distinguished in the schools of geometry, astronomy, geography and medicine, that flourished in Alexandria. But her philosophy was the most striking feature of Alexandria, in a literary point of view. The influx of doctrines from the E. and W. schools produced a singular conflict of systems; which ended in an attempt

of the philosophers Ammonius, Plotinus, and Porphyry, to establish an eclectic or universal system by selecting and blending doctrines taken from the principal existing systems, particularly from those of Pythagoras and Plato. Christianity was not exempted from the influence of this spirit; and on its introduction, it was strangely alloyed with Platonism; and principles for expounding of its doctrines were laid down that would now be with difficulty admitted.

The schools of geometry, astronomy, physic, and other branches of science, maintained their reputation till A. D. 640, when, after a siege of 14 months, Alexandria was taken by Amrou, general of the caliph Omar. The conquerors were astonished by the greatness of the prize; and Amrou, in acquainting the caliph with its capture, said, "We have taken the great city of the West. It is impossible for me to enumerate the variety of its riches and beauty; and I shall content myself with observing, that it contains 4,000 palaces, 4,000 baths, 400 theatres or places of amusement, 12,000 shops for the sale of vegetable food, and 40,000 tributary Jews. The town has been subdued by force of arms, without treaty or capitulation."

It was on this occasion that the famous library is said to have been destroyed, conformably to the fanatical decision of the caliph, that "if the writings of the Greeks agreed with the book of God, they were useless, and need not be preserved; if they disagreed, they were pernicious and ought to be destroyed." This barbarous judgment being carried into effect, the books and manuscripts were distributed among the 4,000 baths belonging to the city; and so prodigious was their number, that six months are said to have been required for their consumption! Such is the tale that has so often excited the indignation and regret of scholars and the admirers of ancient genius. But Gibbon has shown that it has no good foundation: it rests on the solitary statement of Abulpharagius, who wrote six centuries after the event, and is not noticed by those more ancient annalists, who have particularly described the siege and capture of the city. It is, besides, repugnant to the character of the caliph and his general, and to the policy of the Mohammedans. Even if it did occur, the loss has been much exaggerated. Great part of the library of the Ptolemies was accidentally consumed by the fire which took place during the attack on the city, by Cæsar; and either the whole, or the principal part of the library subsequently collected was destroyed A. D. 390, when the temple of Serapis, the most magnificent structure of the city, was demolished by the enthusiastic zeal of the Christians.

It would be useless to pursue farther the history of Alexandria. It continued progressively to decline till, in 1497, its ruin was consummated by the discovery of the passage to India by the Cape of Good Hope. But there can be no doubt, as previously stated, that it is destined to recover a large portion of its ancient importance. It has necessarily become the centre of the communications carried on by steam between Europe and India; and will, most probably, again become one of the principal emporiums of the East.

The cisterns which, as already seen, are still in pretty good preservation, are the principal monuments of the ancient city that have outlived the injuries of time, and the ravages of barbarians. The catacombs are also comparatively entire. The magnificent column, improperly called Pompey's Pillar, seems to have been erected in the reign of Diocletian: its shaft consists of a single block of granite, 68 feet in height. Two obelisks, vulgarly called Cleopatra's needles, of which only one is erect, are said to have formed the entrance to the palace of the Cæsars. (For farther particulars, see *Dict. Géographique*, art. "Alexandria;" *Voyage du Marechal Marmont*, tom. iii. passim; *Matter sur l'Ecole d'Alexandrie*, passim; *Gibbon*, caps. 16. 28. and 51.; and private information from residents in Egypt.)

ALEXANDRIA, a city and port of entry of the United States, dist. Columbia, on the W. bank of the Potomac, 6 m. S. Washington. Lat. 38° 49′ N. long., 77° 18′ W. Pop. in 1830, 8,221. It is well built, the streets crossing each other, at right angles, and it has commodious harbour with deep water, the largest ships coming close to the wharfs. But notwithstanding these advantages it has been, unlike most other American cities, nearly stationary for some years past. It is expected that the opening of the canal from Washington to the Ohio, will add materially to the trade and importance of Alexandria. —(*Encyclopædia Americana*.)

ALEXANDROVSK, a town of Russia in Europe, gov. Ekaterinoslaff, cap. district on the Dnieper at the bottom of the cataracts, 140 m. N.E. Cherson. Pop. 3,400. It is fortified; and displays considerable activity from its being the place where merchandise conveyed from Ekaterinoslaff by waggon, to avoid the cataracts in the river, is again shipped.

ALFARO, a town of Spain, prov. Soria, on the banks of the Alhama, close to its junction with the Ebro, 12 m. W. by N. Tudela. There is a military road between this place and Logroño. Pop. 6,450.

ALFELD, a town of Hanover, prov. Hildesheim, at the conflux of the Leine and Warne. Pop. 2,300. It has a normal school and 3 hospitals.

ALFRETON, a par. and m. town of England, co. Derby, hund. Scarsdale, 16 m. N.N.E. Derby. Pop. 5,691. The inhabitants of the town are principally employed in the manufacture of stockings and earthenware, and in the adjoining collieries.

ALGARINEJO, a town of Spain, prov. Granada, close to the frontiers of Cordoba, near the right bank of the Genil, in a country whose abundant and fertilising streams fall into that river. Pasturage and tillage form the chief business of the population. Pop. 3876.

ALGARROBO, a town of Spain, prov. Granada, 2 m. from the Med. Sea, in the midst of a country particularly rich in lemons, oranges, figs, and other fruits belonging to the south of Spain, 16½ m. E. Malaya, and 38 m. S.S.W. Granada. Pop. 3,500.

ALGARVE, the most S. prov. of Portugal, which see.

ALGECIRAS, the *Carteia* of Roman Geography, a town of Spain, prov. Cadiz, on the W. side of the bay of Gibraltar, opposite to the celebrated rock and peninsula of that name, from which it is distant about 7 m. by water, and 17 m. by land. Lat. 36° 8′ N., long. 5° 31′ 7″ W. Pop 4,500. It has a good harbour and some trade in the export of coal. It was built by the Moors, and taken from them after a two years' siege, in 1344.

ALGHERI, or ALGHERO, a town and sea-port of the island of Sardinia on its W. coast, 15 m. S.S.W. Sassari. lat. 40° 25′ 50″ N., long. 8° 16′ 45″ E. Pop. 6,700. It is built on a low rocky point, jutting out from a sandy beach, in the shape of a parallelogram with stout walls flanked by bastions and towers: the walls are in good repair; but being commanded by two heights it could not oppose any vigorous attack from the land side. To the S.W. of the town there is tolerable summer anchorage in from 10 to 15 fathoms, good holding-ground. Though narrow, the streets are clean and well paved. It is the seat of a bishopric, has a cathedral and 12 churches and convents, with public schools which carry their scholars through a course of philosophy; and a surgical institution. It has a small theatre. The town was long occupied by the Spaniards, and their language and manners still prevail. The country round is well cultivated, producing wine, butter, cheese, &c. In addition to these the exports consist of wool, skins, tobacco, rags, anchovies, coral, and bones. — (*Smyth's Sardinia*, p. 280.)

ALGIERS, now frequently called ALGERIA, a country of N. Africa, and till recently the most powerful of the Barbary states, comprising the *Numidia* Proper of the ancients, or the Numidia of the *Massyli* and the *Numidia Massasyli*, afterwards called *Mauritania Cæsariensis*, with some portion of the region S. of the greater Atlas anciently inhabited by the Getulæ and Garamantes. It has been since 1830 in possession of the French; but for more than three centuries previously it formed a subordinate part of the Turkish empire, and was during that period the seat of an extensive system of piracy and Christian slavery.

Situation, Extent, Boundaries. — Algiers lies between 1° 48′ W. and 9° 16′ E. long.; its greatest N. lat. is 37° 5′. It is bounded N. by the Mediterranean, W. by Fez (Morocco), and E. by Tunis; its S. boundary is doubtful, but it extends beyond the greater Atlas range to the confines of the desert of Sahara: it is above 500 m. in length; its breadth, which is greater in the E. than in the W., varies from about 40 to about 200 m. The pop. in 1847 was estimated at about 2,800,000, whereof about 200,000, inc. 97,760 troops, were French. It used to be divided into 4 provinces: 1. Algiers (*Al Jezair*), including the capital, and a small surrounding territory; 2. Titteri, to the S. of Algiers; 3. Oran, or Tlemsen, to the W.; and 4. Constantine, to the E. of that city. But these provinces are generally understood to include only the *Tell*, or land N. of the greater Atlas, excluding the territories of Zaab or Wad-reag, S. of that range; for though the villagers in the latter either paid the taxes imposed by the Turks, or gave other tokens of submission to them, the greater portion

of the population was independent. — (*Shaw*, p. 3. 4to ed.)

Mountains. — Algiers is mostly mountainous: the little Atlas, which runs along the coast parallel to the greater Atlas, varies from 3,000 to 4,000 ft. in height; its loftiest point is S. of Chiffa; opposite to Cape Matifou its elevation is little more than 2,000 ft. The abrupt mountains of Titteri, belonging to the greater Atlas, reach in some points to an elevation of 9,000 ft., and send off three principal ridges: N. W. towards Cape Ivy; N. towards Algiers; and N. E. towards Bugia. Many of these mountains are remarkable; as Wannashrees (*Zalacus*), prov. Oran, very lofty, and Jurjura, S. E. of Algiers, both capped with snow during winter; the Titteri Dosh, or rock of Titteri, is also a remarkable ridge of rugged precipices. The Jibbel Auress (*M. Audus* of Ptolemy) S. part prov. Constantine, is not, as the name would imply, a single mountain, but an extensive tract, 120 m. in circuit, of mountainous or rather hilly ground. It is interspersed with several fine vallies; and both its lower and upper parts are extremely fertile, it being, in fact, the garden of the prov. — (*Shaw*, pp. 26. 36. 56.)

Plains. — The principal is that of Metidjah, immediately S. of Algiers, 50 m. by 20; fertile, well watered, and covered with an abundant vegetation, but in parts marshy and unhealthy. In the W. prov. are several plains, especially that through which the Shelliff runs; and another S. W. of Oran, sandy and saltish, dry in summer but inundated in winter. In the S. prov. are the rich plains of Hamza, watered by the Nasava. Many luxuriant plains are found in the E. prov., as those of Sateef, Majanah, and that skirting most part of the E. coast, which is, however, in many parts marshy. — (*Shaw*, pp. 24. 37. 44. 47. 50. 53.)

The Rivers are separated by the greater Atlas range into those which run N. and S. Of the former, or those which discharge themselves into the Mediterranean, the principal is the Shelliff (an. *Chinalaph*), which rises S. of the Wannashree M., and after a tortuous course of 200 m., during which it passes through the Titteri Gawle or lake, falls into the sea under Cape Jibbel Iddis. In the rainy season it overflows its banks, and interrupts the communication between Algiers and Oran. The Wad-el-Kebeer (an. *Ampsaga*), which falls into the sea N. of Constantine, in 6° E. long., is the second in magnitude; the others are the Seibous, or river of Bona, the Booberac, Yissa, Zowah, Wad-y-Zaine, &c. The large rivers, the Adjedi and Abiad, run S. E., and empty themselves into the *Melgigg*; and several rivers of inferior dimensions empty themselves into the *Shott*. These are two very extensive salt marshes; the former on the S. the latter on the N. side of the greater Atlas; they consist partly of a light oozy soil, as dangerous as quicksands to travellers. — The lakes are those of Titteri; two near Oran, which dry in summer, and from which salt is collected; some salt marshes near Cape Matifou, and others along the coast from Bona to the borders of Tunis. (*Rozet*, p. 19.; *Shaw*, p. 55.)

Climate — Of the Tell, i. e. between lat. 34° and 37°, is generally wholesome and temperate. Shaw states that for twelve years during his experience it only froze twice at Algiers; yet the heat was never oppressive unless during S. winds. The mean temperature of the year at Algiers is 70° F., in July and August about 86° F.; but ranging occasionally during the prevalence of the khamsin, simoom, or hot wind from the Sahara, as high as 110°, or even more. Luckily, however, the latter seldom or never continues for more than 5 or 6 days at a ti
occurs except in August or Septen
the temperature is usually fron
The heat is mitigated by the N
with the E. prevail during summ
equinoxes violent S. W. winds
winds are common from Novem
which time storms and showers o
frequent; but in summer thes
dry weather; the E. and S. winc
and quite unlike what they are
site European coasts. The barom
from 29 and 1-10th to 30 and 4-1
are about 50 wet days during the
March, along the coast and on t
The quantity of rain varies gre
years; but, at Algiers, it may ave
28 inches: little falls during sum
abundant, and the air on the coa
the end of December the trees lo
but by the middle of February ve
in full activity, and the fruit is
(*Shaw*, pp. 133—136.; *Rozet*, i.
D'Avizac, art. "Alger.") The
very clear and the country healt
the marshy districts.

Geology and Minerals. — The
consist in part of granite, but cl
and micaceous schist. Traverti
the coast; near Oran a greyish
volcanic rocks; in the interior a
often alternates with a schistous m
dary deposits consist in many
formation and calcareous strata,
organic and no vegetable rem
the lime contains bivalve but no
The tertiary deposits are mostly
the Metidjah of a yellowish grey
times a blue clay enclosing a la
and a little iron, in other parts sa
impregnated with salt. All the
has a tertiary clay deposit. T
appears to be the richest in mi
extremely abundant, in spring
both the E. and W. frontiers; ne
the Titteri Dosh mountains, th
Shott marshes, &c. The salt p
occupy a space of 6 m. circ., form
winter which dry in summer, wh
tities of salt are collected. Nit
found pure, is very plentiful in th
Getulia, &c. Iron is most abund
found in various places; and t
very rich lead mines, the ore o
Wannashrees being said to yield
pure metal. There are also fullers
clay, talc, pyrites, &c. Diamo
what was reckoned the apocrypha
Pliny, *Hist. Nat.*, lib. 37. § 4.) l
in the sands of the Wad-el-Kar
by Constantine, mixed with smal
gold dust, silver, tin, and antimon
and cold springs are exceedingly
so, in fact, than those of fresh wat
however, are by no means rare, a
where be found by digging thro
flaky soft stone lying at different d
Algiers and Bona immediately b
face of the ground. — (*D'Avizac*,

Vegetation in the N. parts of A
the same as in the S. parts of Sp
Italy, and the rest of the Mediter
The mountains of the little Atl
with thick forests, in which are
ferent varieties of oak, the Aleppo
olive, the shumac tree (*Rhus coti*
butus, cypress, myrtles, &c. S.

Atlas are found the date-bearing palm, and other trees belonging to a warmer climate.

Animals. — Lions of great size and strength, panthers, hyænas, and leopards, inhabit the mountainous recesses of the greater Atlas, but are never seen near Algiers: wild boars, wolves, and jackals are more common, and there are a few bears. Wild cats, monkeys, porcupines, and hedge-hogs are more or less abundant; as well as antelopes and other species of deer, hares, gennets, jerboas, rats, mice, &c. The useful animals are horses, asses, black cattle, sheep, camels, dromedaries, &c. Ostriches are found in the desert on the confines of Morocco; there are also vultures and other large birds of prey; bitterns, curlews, lapwings, plovers, pigeons, and snipes; with great plenty of game and small birds. Some serpents of the Coluber race are met with; and lizards, chamelions, and other amphibia. Tunny and other sea fish abound on the coasts; barbel, perch, eels, &c. are found in the fresh waters, and even in the warm saline streams; conger at the mouths of the rivers; and lobsters and many other crustacea along the shores. Among the insect tribe are scorpions, tarantulas, &c. Locusts seldom commit the same devastations here as in Egypt and Syria. Coral, which is very abundant on the coasts, forms an important article of produce and industry: it is of a larger sort, but less vivid in its colour than that of Sicily. (*Rozet*, vol. i. p. 218.; *Shaw*, p. 192.; *Campbell, Letters from the South.*)

People. — There are nine distinct races of inhabitants; viz. 1st, Berbers or Kabyles, who, however, call themselves *Mazigh* (noble) or *Mazerg* (free); they constitute about half the entire population, and are the lineal descendants of the aboriginal inhabitants of the country. They are principally found in the mountain districts; and their lands are occasionally well cultivated and irrigated. 2d, Biskeris or Mozabs, supposed to be the descendants of the Getulæ, living principally S. of the greater Atlas, and comparatively industrious. 3d, Moors; a mixed race, descended from the Mauritanians, Berbers, Carthaginians, Romans, Vandals, and Arabs; they constitute the bulk of the population of the towns and villages. 4th, Arabs, consisting of three tribes: the first, supposed to have descended from the ancient Amalekites, is nearly extinct; the second consists of cultivators of the soil, and is fixed to certain spots; the third, or wandering Arabs, are principally herdsmen and shepherds dwelling in tents. 5th, Negroes, called *Abyd* (slaves) or *Soudan* (black); originally brought thither from the interior, and sold as slaves. 6th, Jews, who form a third part of the inhabitants of Algiers, and a fourth part of those of Oran. 7th, Turks, now very few, nor ever very numerous, although long the dominant race: they were a heterogeneous body, composed of genuine Turks, Greeks, Circassians, Albanians, Corsicans, Maltese, and renegades of all nations; mounted, and forming a militia similar to the Mamelukes. On the conquest of Algiers, in 1830, by the French, the Turks being permitted to withdraw, evacuated the country to the number of about 20,000. 8th, Kolouglis, or descendants of Turks by Moorish mothers; their name literally signifying "sons of soldiers." Although possessed of influence, they did not formerly enjoy the same rights and consideration as their fathers. 9th, Europeans, who may of course be subdivided into various nations, but are mostly French. Amongst the Kabyles of the Auress are a tribe distinguished by a fair complexion, blue eyes, and light hair, believed to be descendants of the Vandals. Traces of the Huns, Suevi, and other Gothic nations have been also found. (For further information respecting the different native races, see Arabia, Barbary, Morocco, &c.)

Scenery. — Proceeding from W. to E. a rich champaign country stretches for some distance inland S. of Arzew, bounded towards the sea by steep rocks and precipices; many fertile plains are irrigated by the Sigg river (or *Sikk*, a drain or trench), its waters being diverted by numerous canals for that purpose. Behind Masagran, and near the Shelliff, as far as the sea, is a tract studded with orchards, gardens, and country houses. The country round Shershell is of the most exuberant fertility, possessing large tracts of arable land, and the mountains covered to their summits with plantations of fruit trees, and affording delightful and extensive prospects. The inland parts of the W. province present alternately fertile valleys and high ranges of rocky mountains. "If we conceive," says Shaw, "a number of hills, usually of the perpendicular height of 400, 500, or 600 yards, with an easy ascent, and several groves of fruit and forest trees rising up in a succession of ranges one behind another, and if to this prospect we here and there add a rocky precipice of a superior eminence and difficult access, and place upon the side or summit of it a mud-walled Dashkerah, or village of the Kabyles, — we shall then have a just idea of the atlas bounding the Tell." The verge of the Sahara beyond this presents nothing but scattered villages, and plantations of dates. The plain of Metidjah, adjoining the capital, contains many farms and country houses, producing in perfection flax, henna, roots, pot-herbs, rice, fruit, and corn of all kinds; it is adorned besides with multitudes of oleanders, geraniums, passion flowers, and other luxuriant shrubs. The S. province has the same general character as that of Oran. The Titteri Dosh, 20 m. S. of Medeah, is a towering range of bleak precipices. The Jurjura, S. E. of Algiers, is a similar tract. The sea coast of the E. province as far as the river Zhoore is mountainous, and called by the Arabs El-Adwah (the Lofty); thence to the Seibous it is hilly; and from the latter to the border mostly level, and sometimes covered with forests. Some distance to the S. are the *M. Thambes* of Ptolemy. The Seibous in some parts wanders through beautiful valleys, clothed with olive trees, lentisks, and a fine turf. The country about the source of the Zenati is broken and irregular, and appears to be volcanic; that to the N. and N. W. of Constantine, from which that city is chiefly supplied, is watered by the Rusuli, which is "bordered by a few villas and numerous gardens, rich in every variety of vegetable and fruit trees, with extensive groves of pomegranate, olive, fig, orange, and citron," and bounded by bold ranges of hills; its fruit is esteemed over the whole province. In the road from Algiers to Constantine, between the plains of Hamza and Majanah, a deep narrow pass, called *Beeban* (the Gates), which a few men might defend against an army, leads through a mountain ridge; and a little farther E. the road is carried by a dangerous track over the crest of a high mountain. S. of Seteef are many rich plains. The territory around Tifesh is the most fruitful in Numidia, and the W. province the finest of the regency. The villages of Zaab, are collections of dirty hovels, surrounded by date plantations; Wad-reag, a similar country, has 25 villages. To the W. extends the vast region of Blaid-el-Jerride, "a dry country," abounding in dates. (*Shaw*, pp. 14—68.; *Sir*

G. Temple, Extracts in the *Geograph. Journal*, 1838, part ii.)

Antiquities. — Most of the cities and towns bear names little altered from those given them by the Romans. Many ruins remain; those of Tipasa (Tifessad), 13 m. E. of Shershell, stretch for two miles along the coast: on the brink of the Shelliff, in about the same lat., there are several classical remains, Corinthian capitals, &c., probably the ruins of the Colonia Augusta of Pliny. About 14 m. E. of Algiers are the ruins of Rusucurium. At Maliana, N. of the Shelliff, a stone, inserted in a modern wall, bears an inscription, whence it has been inferred that it was the place where Pompey's grandson and great grandson were buried. (See *Martial, Epig.* lib. v. Ep. 75.) Near Bona are the ruins of *Hippo Regius*, and many towns can boast of ancient relics in tolerable preservation. The province of Constantine especially abounds with them, and with Roman roads; and even the remote district of Wad-reag has numerous remains of Roman masonry. Near the capital is a collection of unhewn stones, somewhat similar to those of Stonehenge, which the French call Druidic, but others believe to be Phœnician. There are few Christian remains, their buildings having been destroyed by the zeal of the Saracens. (*Shaw*, pp. 21—67.; *Sir G. Temple*, Extracts.)

Agriculture. — Much of the land is uncultivated and waste; but the fertility for which it was so famous in antiquity —

> Non quicquid Libycis terit,
> Fervens area messibus, —

still continues unimpaired; and requires merely the substitution of regular government for lawless violence, and of industrious colonists for roving herdsmen, to render it once more the granary of Europe. The land in many parts, owing to the quantity of salt with which it is impregnated, is so rich as to require no manure but burnt weeds. But in a dry climate like this every thing depends on the command of water; and the necessity under which the native inhabitants were placed of providing this indispensable element for their lands, had so far countervailed their indolence and want of science as to make them pretty expert in the art of irrigation. The French were not, at first, sufficiently alive to the vital importance of this; and some of the Arab works for irrigating were in consequence neglected, to the great injury of the province. The land is usually ploughed and sown in October, or (if with barley) in November; by the aid of April rains a good crop is thought secure, and the harvest takes place in the end of May, or the beginning of June, yielding at an average 8 or 12 for 1. The species of corn mostly grown are the *Triticum durum* (hard wheat), and *Hordeum vulgare* (common barley). Maize is not much cultivated, except in the W. province; white millet for fattening cattle is planted there; rice chiefly in the prov. of Oran. Oats not being grown, horses are fed wholly upon barley and straw. The plough used round Algiers is the same as that of Spain and Provence; but in general is not shod with iron. It is drawn by cows and asses, very rarely by horses; yet with such imperfect ploughing the crops are generally excellent. When reaped, the grain is trodden out by cattle or horses; and after being cleaned by throwing it up against the wind, is deposited in subterraneous caves or magazines. The pulse crops are beans, lentils, kidney beans, pease, and garvanços (cicer pea); turnips, carrots, cabbages, &c. are good and plentiful. Endive, cress, spinach, and artichokes are in season from October to June; after which come calabashes, mallows, tomatas, and water-melons. Potatoes are frequently grown, but do not arrive at a large size, and are of inferior quality. The date is the principal fruit, and is by far the most valuable product of the country S. of the greater Atlas. It is propagated chiefly by young shoots, and yields fruit in its 6th or 7th year; it attains maturity at about its 30th year, and is in full vigour for 60 or 70 more, after which it gradually declines, till it becomes extinct when about 200 years old! (*Shaw*, p. 142.) Truly, therefore, might Palladius say, *Cui placet curas agere sæculorum de palmis cogitet conserendis.* (*Oct.* 12.) During its maturity it yields annually from 15 to 22 clusters of dates, each weighing from 15 to 20 lbs. The date-palm (φοινιξ) when it dies is always succeeded by others from shoots or kernels; whence may probably have originated the fable or allegory of the bird Phœnix. The lotus or *seedra* bears a berry sold all over the S. district. Most of the fruit trees common to Europe are found in Algiers; but the fruits are inferior, excepting nectarines, peaches, and pomegranates; there are no hazel nuts, filberts, strawberries, gooseberries, or currants. — The vine is cultivated with much advantage; the grapes ripen by the end of July, and are eaten both fresh and dry by the natives, who seldom make wine; though this, no doubt, will be attempted, and most likely with success, by the French. Oil of a very inferior quality, and always acrid, is obtained from the olive. Melons and Indian figs are largely grown, and form a considerable part of the food of the Arabs. In some grounds near Algiers the sugar-cane is cultivated. Cotton and indigo have been tried, and the climate suits them well; coffee has also been tried, but is not found to succeed.

Cattle constitute the principal wealth of the natives. Sheep are of two kinds: one small, with a thick large tail; the other of a much larger size, chiefly found in the country of the Melano-Getulæ. Sheep of the fine Tunisian breed are not met with. Goats pretty abundant; pigs few, round-bodied, short-legged, and generally black Cattle usually black; their milk is inferior to that of European cattle; that of sheep and goats is mostly used in the making of cheese, butter, &c. The Arabs seldom diminish their flocks by killing them for food, but live on their milk, wool, &c.; no animals are castrated. The common beasts of burthen are camels, dromedaries, asses, and mules. Dr. Shaw speaks of a singular cross breed between an ass and a cow, called *kumrah*, having a sleeker skin than its sire, no horns, but the dam's head and tail; but Rozet says that he had not been able to find any trace of any such animal. Horses are not of the pure Arab breed, nor altogether well shaped, being lanky and round-shouldered; head small, and not ill formed; ears erect; and they are hardy, fleet, spirited, and docile: those of Oran are accounted the best. They are used only for riding, and like the camels are reared and live in the tents with their owners. (*Shaw*, pp. 2—65. 166—170.; *Rozet*, pp. 204—261.; *Campbell's Letters from S.*)

Trades and Manufactures. — Almost all the trades of Europe are followed in the towns; but conducted in a very inferior manner, as well because of the indolence as of the ignorance of the natives. The Jews are the most industrious, and monopolise the greater part of the external trade, with the higher branches of art, being the chief jewellers, watchmakers, tailors, &c. The Arabs are merchants, tanners, and carpenters; the Ne-

goes masons, bricklayers, and other artificers; the Kabyles extract iron, lead, and copper from their mountains, and manufacture gunpowder, said to be superior to that made at Algiers. The chief manufactures are coarse linen, woollen, and silk stuffs, the first two forming the greater part of the dress of the population, leather, saddles, bridles, carpets, fire-arms, steel and other metal articles, pottery, gunpowder, but very inferior to that of Europe. Women only are employed in the linen and coarse woollen manufactures, as well as in the slavish occupation of grinding corn. European goods are much in request, and are bartered in the S. for gold dust, ostrich feathers, &c.

Trade. — Previously to the occupation of Algiers by the French, the established rates of duty were 5 and 10 per cent. on imported articles, according to the stipulations in the treaties with the countries of which they were the produce. But these general rules were entirely disregarded in practice; and, in point of fact, little or no trade could be carried on except by those who obtained licences to that effect from government, which were either sold to the highest bidder, or to those who had most interest with the Divan.

Such is the inexhaustible fertility of the soil, that notwithstanding the low state of agriculture, corn and animal products have generally formed a principal part of the exports, and Marseilles and other towns in the S. of France, with Genoa, &c. in Italy, used to derive a considerable part of their supplies of corn and butcher's meat from Algiers. Exclusive of these, the principal articles of export were coral, hides, wool, wax, oil, leather, gums, ostrich feathers, dates, kermes, &c. But since the occupation of Algiers by the French, the exportation of corn has almost entirely ceased; and besides the supplies obtained in the country large quantities have been imported for the use of the French troops.

At present (1850) the exports from Algiers are quite trifling. The total value of those to France in 1848, which comprise by far the greater part of their entire amount, was only 3,808,224 fr., of which copper and copper ores made nearly a half. The value of the leeches exported was estimated at 62,404 fr.

In addition to corn, or rather flour, the principal articles of importation are cotton, woollen, silk, and linen stuffs, but particularly the first; wines and spirits, sugar and coffee, arms, hardware, cutlery, &c. The total value of the imports from France, in 1848, was 53,535,890 fr., about a half being supposed to be on account of the army.

Such are the commercial advantages reaped by France from the possession of Algiers. And if we add that it requires for its defence an army of from 60,000 to 100,000 men; and that, while its revenue in 1844 did not exceed 17,700,000 fr., its expenses amounted to 78,100,000 fr., it will not excite surprise that considerable doubts have been expressed, even in the Chamber of Deputies, in regard to the policy of continuing to hold the country.

No duties are charged on French commodities, nor on foreign commodities required for the subsistence of the inhabitants, or to be used in agriculture or building. On other articles the duties vary from a fifth to a fourth part of those in the French tariff: articles prohibited in France are charged with an *ad valorem* duty of 15 per cent. A tonnage duty of 2 fr. is charged on foreign ships.

The employment of shipping corresponds with the amount of trade; and the proportion of both in the hands of the French is increasing. A regular intercourse is kept up by means of steam packets between Marseilles and Algiers.

The barbarians by whom this fine country has been so long laid waste, while they neglected all the old Roman roads, constructed none themselves; so that the communication between different parts was very difficult, and produce could only be conveyed on the backs of mules and camels. The French have already directed their attention to the repair of the old and the opening of new roads; measures indispensable alike for their own security and the development of the resources of the country. (*Tableau de la Situation, &c.* pp. 329—357.)

The weights, measures, and money in use are,

Weights.—The Onquyah (4 grammes); Rotl a thary = 16 onquyah; Cantar = 100 rothl.

Measures of Capacity. — *Liquid*: Hollah, (16·66 litres) = about 17 pints. *Dry*: Psa (48 litres) = 51 3-7th pints. *Of length*: Dzerd a Torky (640 millemetres) = 1.099 feet Eng.; Dzerd à Raby (480 millemetres) = 1.574 feet long.

Money is as follows: *Gold*, Sequin = 8s. 6½d. *Silver*, Monzonnah = 7-10ths of 1d.; Real Boudjoux = 24 monzonnah. *Copper*, Durhem Segar 1-29th of a monz.

French money is now, however, in frequent use, and Spanish dollars worth about 3s. 4d.

Revenues. — It is impossible precisely to ascertain the amount of revenues at the disposal of the dey of Algiers previously to the French conquest; but it would seem, according to the best attainable information, that it may be fairly estimated at about 3,000,000 fr., or 120,000*l.*, including therein 550,000 fr., or 22,000*l.* of tribute paid by Naples, Portugal, &c. for exemption from piracy; but it is probable that the taxes paid by the people amounted to at least three or four times as much. The taxes were of various kinds: the principal was the tithe (*aschr*) of all crops; and there were also poll taxes on the Jews, with taxes on professions, trades, &c.; and the government derived a considerable sum from the monopoly of wool, leather, salt, and wax. These taxes have been partly retained by the French; but the more oppressive, with the monopolies, have been abolished. A considerable revenue has been latterly derived from the sale of the public lands and other property belonging to the state, which are beginning to be extensively purchased and occupied by Europeans. The revenue from all sources amounted, as previously stated, in 1844 to 17,700,000 fr.; but it has since been considerably increased.

The tribute of the Arabs was better collected by the Turks than might have been expected; but it was otherwise with the Kabyles. No sooner had the latter got intimation of the approach of Turkish troops to enforce payment than they hastily decamped, carrying with them their cattle and families to fastnesses in the mountains; so that the tribute was seldom paid unless the dey's troops succeeded in capturing some stragglers from the main body, or some stray cattle, which were usually ransomed.

The Coral Fishery is prosecuted from the middle of April till the end of July. Ten years being generally allowed for the growth of the coral, different spots are annually chosen for the fishery. Foreigners are allowed to fish on paying a rent to government. In 1836, there were 245 boats engaged in the fishery, principally at Bona, the revenue accruing on which to the French was 242,222 fr. (10,084*l.*) The value of the coral exported in 1837 was 1,163,513 fr. (*Tableau, &c.* pp. 337. 353.)

The Government is at present administered by the commander-in-chief of the French forces in Algiers, who is governor-general, and responsible to the French cabinet; there is besides a civil intendant. Previously to 1830 the government was vested in a dey, or pacha, being the officer at the head of the Turkish soldiery in the regency. This officer, who exercised absolute power, was appointed for life, but was rarely permitted

to die in office. He was chosen out of, or rather rose from, the army; and in the words of Dr. Shaw, "any bold and aspiring soldier, though taken yesterday from the plough, might be considered as heir apparent to the throne; and with this farther advantage, that he lay under no necessity to wait till sickness or old age had removed the present ruler: it was enough if he could protect himself with the same scimitar which he had the hardihood to sheathe in the breast of his predecessor." (*Shaw*, p. 248.) The dey notified his accession by an embassy to the grand seignior; by whom it was uniformly confirmed. But he did this merely as an act of deference to the sultan as the chief of Islamism, and not as recognizing in him any real supremacy. The dey received no orders from the Porte; but acted, in all respects, as an independent prince. He presided in the Divan, Dowanee, or council of state, consisting of sixty old officers and other high functionaries, and which nominally formed the government; but though formally convened every Saturday, this body did little but agree to the measures previously decided upon by the dey and his favourites. Their ordinances began with "We superior and inferior members of the mighty and invincible militia of Algiers, and of the whole regency, have hereby resolved," &c. Each of the three provinces, exclusive of Algiers, into which the regency was divided, was governed by a *bey*, nominated by the dey, and responsible to him.

Except in the towns, where they were absolute masters, and in their immediate vicinity, the Turks had but a very limited authority over the rural population. The Arabs and Kabyles affected an almost entire independence, obeying only their sheikhs, and frequently committing hostilities on each other. This state of things has hitherto been but little changed under the French; and it is easy to see that the growth of a regular and efficient system of government can only be gradual, and must principally depend on the spread of agriculture, or on the more extensive occupation of the country by a settled population.

Military and Naval Force. — Under the Turks the dey maintained about 10,000 regular infantry and 6,000 cavalry; but in case of need he could bring into the field a considerable body of irregular troops, bound to serve, like the European forces of the middle ages, for a certain number of days at their own cost. The cavalry was recruited chiefly among the Arabs and Berbers. The naval force, so long an object of terror to the Christian powers, was never very formidable. In 1816, when it was nearly annihilated by Lord Exmouth, it consisted of 4 frigates of from 40 to 50 guns, 1 of 38 guns, 4 corvettes, 12 brigs and goelettes, and 30 gun-boats. In 1824 their corsairs had again begun to infest the seas; and in 1830, on the capture of Algiers, the French found a large frigate in dock, and two others in the port, 2 corvettes, 8 or 10 brigs, several xebecks, and 32 gun-boats. (*Rozet*, iii. pp. 362—380.) The French troops in Algiers in 1847 amounted to 97,760, exclusive of nearly 7,000 native troops. This, however, was a larger force than had been embodied in most previous years; though, considering the extent of the country and the predatory warlike habits of the natives, it does not appear likely that it can be advantageously reduced.

Justice has been continued by the French, except in political cases, much on the same footing as under the Turkish dominion; being administered by the rabbins amongst the Jews, and by cadis and other officers, according to the Mussulman law, among the Turks, Moors, Arabs, &c. In Algiers, questions among Europeans are decided by a civil court, and a correctional and criminal court. The civil court finally decides upon all cases in which the sum in dispute is under 12,000 fr.; when the sum exceeds this limit, an appeal may be made to the royal court of Aix in France. At Oran and Bona there are French judges, who decide cases under appeal to the courts of Algiers. In their procedure no departure from the French code is permitted.

Religion. — That of the French, and consequently now of the state, is Roman Catholic; but the great bulk of the people profess Mohammedanism. The Negroes, however, are mostly addicted to fétichism; and the creed of the Berbers is scarcely known, as they suffer no strangers to witness their rites: they pay great reverence to their marabouts or *mourabeys*, persons who practise a rigid and austere life, and who sometimes affect to perform miracles. They regard them as inspired, and honour their tombs. This custom has crept in amongst the Jews, who venerate the sepulchres of their rabbins, and convert them into synagogues. Since the French occupation a good many mosques have been converted into Christian churches.

Morals are at an extremely low ebb; the inhabitants, particularly the Moors, being in general grossly sensual, debauched, and corrupt. Public women are numerous, and syphilitic diseases common, and endemic. Drunkenness is not very frequent amongst the natives; but the French have lost large numbers of men from excess.

Public Instruction. — The Moors and other inhabitants of the towns can for the most part read the Koran and write, which, however, comprise the whole of their instruction; few understand arithmetic, or go beyond the first two rules; and this limited instruction, it will be observed, is enjoyed by the male sex only, women being brought up in the most complete state of ignorance. The Moors often transact business by placing their fingers on different parts of each other's hands, without speaking; each finger and joint denoting a different number. Few books except the Koran, and some encomiastic commentaries upon it, are ever seen or sought after. The education of children in the Koran goes on for three or four years, when their tuition ceases. The French have established schools of mutual instruction in all the principal towns, which are chiefly superintended by Jews, and tolerably well attended. In 1845, there were 3,327 pupils at the government schools in Algiers, Oran, Bona, &c; of these a considerable number were Europeans, who were mostly instructed in Arabic. The native schools in Algiers are badly attended partly by Moors and partly by Jews. Hitherto very little progress seems to have been made in diffusing a knowledge of French among the Arabic population. (*Tableau de la Situation, &c.* p. 254.)

Arts and Sciences. — The Arabs of Algiers, though descended from the people who gave algebra to Europe, and preserved medicine during the dark ages, have no notion either of arithmetic, or of the correct measurement of time or distance. Their medicine, too, is in the rudest state, and few diseases occur that do not, under their treatment, become either chronic or mortal. Their remedies consist chiefly of superstitious practices, as pilgrimages, &c.; or inert decoctions, as that of mallows. They are accustomed, in cases of rheumatism and pleurisy, to

puncture with a red-hot iron; to dress wounds with hot butter, and sometimes with pepper, salt, and brandy; and on the field of battle to thrust wool into them. When amputation is resorted to, it is performed by the stroke of an ataghan, and followed by the application of hot pitch. Hence, notwithstanding their aversion to change, we need not wonder that latterly the French army surgeons have been in great request by the natives. Hospitals have been established in the principal towns, and vaccination has been introduced. (*Shaw*, p. 196—199.; *Campbell*, Let. 20.)

Buildings, Furniture, &c.—The Berbers or Kabyles live in cabins (*gurbies*) made of the branches of trees plastered with mud and straw, with a low door and narrow glazed holes serving for windows; these huts are collected together in small groups or *dashkras*. The Moors, Jews, Negroes, and most others, except the Arabs, live in houses built on a uniform model, which from the earliest times has not varied. An open court-yard forms the centre, around which are various apartments, opening upon galleries supported by light pilasters: the roofs are flat, surrounded by a battlement breast high, and built with a composition of sand, wood ashes, and lime, mixed with oil and water, called *terrace;* whence our word. The rooms are floored and cisterns are made of this composition. Water-courses are composed of tow and lime only, mixed with oil; this mixture, as well as the former, soon acquiring the hardness and imperviousness of stone. In most habitations there is in each apartment a raised platform for sleeping on, the bed being composed of junk, matting, sheep-skins, or more costly material, according to circumstances. The other furniture consists, among the nomadic tribes, of two large stones for grinding corn, wrought by women; a few articles of pottery and bronze, and a rude frame for weaving. The better classes have cushions and carpets to their rooms, the lower part of their walls being adorned with coloured hangings, and the upper part painted and decorated with fret work. The tents of the Arabs (the *magalia* of the ancients) are sometimes called *khymas*, from the shelter they afford; and sometimes *beet-el-shaar*, or houses of hair, from the webs of goats' hair of which they are made. They are constructed at this moment precisely in the way described by Livy (lib. xxix. § 31.), Sallust (*Bell. Jug.* § 21.), Virgil, &c. They are of an oblong shape, not unlike the bottom of a ship turned upwards, and are easily set up and taken down. (*Shaw*, pp. 206—222.)

Dress, Food, &c. — The dress of the Berbers is very rude and coarse; that of the other classes varies greatly; but it is common with both sexes to wear abroad a *kaik*, or toga, and a *bernous*, which covers the head and shoulders: the faces of the women are very much concealed. Vegetables form the chief diet of all classes, not a fourth part of the animal food being consumed by them that is consumed by an equal population in Europe. Bread, couscouson (a kind of Irish stew), legumes, potatoes, tomatas, and other vegetables, dressed with spices, oil, butter, or aromatic herbs; Indian figs, raisins, melons, and other fruits; with water, sherbet, and coffee, — form the main articles of consumption. (See Arabia and Barbary.)

Amusements. — Drinking coffee and smoking tobacco constitute never-failing amusements. Almost all the male inhabitants of the towns have a pipe attached to the button of their vest; and the more indolent and opulent will sit for days in cafés, unmindful of their families, smoking incessantly, or playing at chess. In the country, fowling, hawking, and hunting the wild boar and lion are actively pursued. Theatres are now opened in the principal towns.

The Language is mostly Arabic, but mixed with Moorish and Phœnician words. The Kabyles have a peculiar language, so very poor that it is without conjunctions or abstract terms, and is indebted to the Arabic for these, and for all terms of religion, science, &c. In conversing with Europeans a *lingua Franca* is made use of; a mixture of Spanish, Italian, French, Portuguese, &c. (See Barbary.)

History. — This country formed part of the Roman empire; but during the reign of Valentinian III. Count Boniface, the governor of Africa, having revolted, called in the Vandals to his assistance. The latter having taken possession of the country, held it till they were expelled by Belisarius, A. D. 534, who restored Africa to the E. Empire. It was overrun and conquered by the Saracens in the 7th century; and was soon after divided into as many kingdoms as there are now provinces. Ferdinand of Spain having driven the Saracens from Europe, followed them into Africa, and in 1504 and 1509 took possession of Oran, Bugia, Algiers, and other places. The natives, wishing to throw off the Spanish yoke, had recourse to the famous corsairs, the brothers Aroudj and Khayr-ed-Dyn, better known by the names of Barbarossa I. and II., who had distinguished themselves by the boldness and success of their enterprises against the Christians. The brothers speedily succeeded in expelling the Spaniards from all their possessions in Africa, with the exception of Oran, which they held to the end of the 18th century. Algiers became the centre of the new power founded by the Barbarossas; the survivor of whom obtained, in 1520, from Sultan Selim, the title of Dey, and a reinforcement of 2,000 troops. Since then it has been governed nearly in the manner described above; and has, with few interruptions, carried on almost incessant hostilities against the powers of Christendom, capturing their ships and reducing their subjects to slavery. Attempts have been made at different periods to abate this nuisance. In 1541, the emperor Charles V., who had sucessfully achieved a similar enterprise at Tunis, arrived with a powerful fleet and army in the vicinity of Algiers; but the fleet having been immediately overtaken and nearly destroyed by a dreadful storm, the troops, without provisions or shelter, underwent the greatest privations; and the emperor was compelled forthwith to reimbark such of them as had escaped the fury of the elements and the sword of the Turks. (*Robertson's Charles V.*, cap. 6.) This great disaster seems for a lengthened period to have discouraged all attempts at capturing Algiers. France, however, as well as England and other powers, repeatedly chastised the insolence of its banditti by bombarding the town; but in general the European powers preferred negotiating treaties with the dey, and purchasing an exemption from the attacks of the Algerine cruisers, to making any vigorous or well-combined effort for their effectual suppression. In 1815, the Americans captured an Algerine frigate; and the dey consented to renounce all claim to tribute from them, and to pay them 60,000 dollars as an indemnification for their losses. But the most effectual chastisement they ever received was inflicted so late as 1816 by the British under Lord Exmouth; when Algiers was bombarded, the fleet in the harbour destroyed, and the dey compelled to conclude a treaty, by which he set the Christian slaves at

liberty, and engaged to cease in future reducing Christian captives to that ignominious condition. But it is exceedingly doubtful whether these stipulations would have been better observed than others of the same kind previously entered into by his predecessors.

The last of the Algerine deys got entangled in altercations with the French government. Provoked by the discussions that had taken place, and the claims that had been put forward, he had the temerity to strike the French consul on the latter paying him a visit of ceremony. Redress was, of course, demanded for this gross insult; but instead of complying with any such demand, the dey took and demolished the French post at La Calle. This was equivalent to a declaration of war; and France determined on being avenged. In this view, she fitted out a powerful armament, including a land force of nearly 38,000 men, with a formidable train of artillery, under the command of General Bourmont. The armament arrived on the Algerine coast on the 13th of June, 1830; and having effected a disembarkation on the following day, Algiers capitulated, after a feeble resistance, on the 5th of July. The dey was allowed to retire with his personal property unmolested to Italy, and his troops to wherever they chose.

The French found in the treasury of the dey gold and silver, coined and uncoined, of the value of 47,639,011 fr., exclusive of stores of various kinds valued at 7,080,926 fr.

The towns of Oran and Bona soon after submitted, and the bey of Titteri was also reduced to obedience. But the bey of Oran, or Tlemsen, carried on for a lengthened period a series of contests and negotiations with the French, which were terminated in 1837 by the treaty of Tafna; by which he agreed to abandon the maritime parts of the province, and to recognize the supremacy of the French in Africa. The bey of Constantine was less easily dealt with. Trusting to the strength of his principal city, its distance from Bona, the nearest port, and the badness of the roads, he braved the hostility of the French. In November, 1836, a force of 8,000 men, under Marshal Clausel, advanced against Constantine. But the expedition, having been too long delayed, encountered the greatest difficulties on its march, from the severity of the weather, and the impracticable nature of the country; so that when it arrived before Constantine, it was unable to undertake the siege of the place, and with difficulty effected a retreat. To wipe off this disgrace a powerful army left Bona in the following autumn for the attack of Constantine, before which it arrived on the 6th of October. The Arabs made a vigorous resistance; but breaches having been effected in the walls, the city was carried by storm on the 13th. The French commander-in-chief, General Damremont, was killed during the siege.

The occupation of Algiers by the French has excited some jealousy in this country, but without any reason. Such a conquest must undoubtedly weaken, instead of increasing, the power of France. But though in this respect it were otherwise, the benefits which it cannot fail in the end to confer on humanity are so great and obvious as to outweigh all other considerations. The French, ignorant of some of the peculiarities of Mohammedan law, and especially of the practice of bequeathing property in trust for individuals to the church, appear to have committed some injustice. But abuses of this sort will speedily disappear; and it is impossible to overrate the advantages that must result from the introduction of European laws, arts, and sciences into this part of Africa. Its wealth, population, and influence in antiquity show what it may become. But it were idle to expect that it should ever make any improvement so long as it was domineered over by a brutal soldiery, or till it was placed under an enlightened government, capable of enforcing order, and of making its regulations and itself be respected. It were, in fact, much to be wished that all N. Africa were taken possession of and occupied by the European powers. It would be impossible for them to extend their empire in this quarter without putting down intolerance, barbarism, and ignorance, and establishing in their stead liberality, civilization, and science. (The best authorities in relation to Algiers, are the excellent work published by the Minister of War, in Paris, entitled *Tableau de la Situation des Etablissements Français dans l'Algerie*, Paris, 1838; and Dr. Shaw's learned and invaluable Travels.)

Algiers (Arab. *Al Jezeire el gazie*, Algiers the warlike), a city and sea-port of N. Africa, cap. of the above country, on the Mediterranean coast, on the W. side of a bay about 11 m. in width and 6 deep, lat. of light-house 36° 47′ 20″ N., long. 3° 4′ 32″ E. It is built on the face of a pretty steep hill, the houses rising above each other so that there is hardly one of them which does not command a view of the sea. The summit of the hill is crowned by the *Kasba* or citadel, 700 feet above the level of the bay. The town is nearly 2 miles in circ., being surrounded by thick and high walls, flanked with towers and bastions. The fortifications towards the sea are comparatively strong; but those on the land side, though greatly improved by the French, are incapable of any very vigorous defence, being commanded by the adjoining heights. Algiers had, previously to the French invasion, 5 gates, 2 on the sea, and 3 on the land side; about 160 streets, 5 squares, 2 palaces, 4 large and 30 small mosques (some of which are now converted into Christian churches), 2 large and 12 small synagogues, many buildings for the military, and about 10,000 private houses. The pop. was formerly estimated at from 110,000 to 180,000; but it is probable that the lowest of these numbers was beyond the mark. It appears from a census taken in 1847, that the pop. of the city and commune amounted at that date, inc. garrison, to 97.389, of whom 72,393 were French and other Europeans, the residue being Moors, Kabyles, Jews, &c. A considerable emigration of Turks and others took place after the occupation of the city by the French; and the above statement shows that the emigrants have not again returned. The city has a very imposing appearance from the sea, looking like a succession of terraces, the houses, which are all whitened, giving it a brilliant aspect; but, on entering, the illusion vanishes: the streets are filthy, dark, crooked, and so narrow that, until latterly, the widest was but 12 feet across. The French have, however, taken down many buildings to enlarge the streets, amongst others the principal mosque, in the view of making the *Place du Gouvernement*, in the centre of the city, a large and handsome square in the European style. The houses have flat roofs, that command a fine view; they vary from two to three stories in height, and have a quadrangle in their centre, into which the windows uniformly open. The streets have, in consequence, a gloomy appearance; and they are farther darkened by the successive stories of the houses projecting over each other, and by

their being frequently propped up by timbers across from one to another. The "*islands*" whence Algiers derives its name, are two rocky ledges opposite its N. E. quarter, which have been united, strongly fortified, and connected with the main land by a mole; another mole, stretching S. W. from these islands, and furnished with two tiers of cannon, incloses the harbour, which is rather small, and incapable of accommodating any vessel larger than a middle-sized frigate. A light-house is erected on one of the islands at the junction of the two moles. The *Kasba* or citadel is surrounded by strong walls, and its fortifications have been repaired and strengthened by the French. It is, in fact, a little town in itself. It was here that the French found the treasure belonging to the dey referred to in the previous article. The mosques are octagon buildings, with a dome and minarets, often elegant, and adorned with marble colonnades. There are numerous public and private fountains, and baths of all kinds; for though formerly destitute of water, Algiers is now well supplied with that important element, which is brought to the town by aqueducts constructed in the last century, and which, previously to the French occupation, were kept in repair by funds set apart for that purpose. Many shops have been opened by Europeans; they consist of recesses in the sides of the houses, about 7 ft. by 4; but business is mostly transacted in the bazars, which, with barbers' shops and cafés, are the chief places of resort for the natives. Algiers is now the residence of the governor-general of the French possessions in Africa, and of the principal government functionaries and courts of justice. It was created the seat of a bishopric in 1838; is strongly garrisoned; and has a regular intercourse by steam packets with Marseilles. The manufactures are chiefly those of silk stuffs, girdles, purses, clocks, jewellery, woollen cloths, *kaiks*, *bernous*, sandals, harness, carpets, junk, bronze utensils, &c. The markets are well provided with meat, vegetables, and fruit; provisions generally cheap, excepting bread, which is dear: there were no ovens, and only handmills for grinding corn, before the occupation by the French. European manners, habits, and dresses are common; as many hats are seen as turbans; cigars replace pipes, shops bazars; grand hotels, cafés, billiard tables, eating houses, *cabinets littéraires* have been set up, and a circus, cosmorama, and opera established. The streets have all received French names. In 1837 there were at Algiers 223 fine days, 63 on which it rained, and 69 during which the sky was covered with clouds. There arrived at Algiers in 1837, 905 vessels of the burden of 74,762 tons. Of these 29 vessels, tonnage 6,363, were from England; and 25 vessels, tonnage 4,581, from British possessions in the Mediterranean. The environs of Algiers are very beautiful, and for some miles round interspersed with great numbers of elegant villas. There are 2 small suburbs, those of Bab-el-Oued and Bab-a-Zoun; the former to the N., the latter to the S. of the city. About a mile S. of the Kasba is the *Sultan Kalessi*, or fort of the emperor, an irregular polygon without fosse or counterscarp, about ½ m. in circumference. It stands on the spot where Charles V. encamped, A. D. 1541, and completely commands the town; but is itself commanded by Mount Boujereah. The ancient city of Rustonium, the capital of Juba, was situated not far from Algiers, to the W. of Torretta Cica; some ruins of this city still exist. Algiers was founded A. D. 935. For some notice of its history, see the previous article. (See *Tableau de la Situation, &c.*; *Rozet*, iii. pp. 14—88.; *Shaw's Travels*, pp. 33—35.)

ALGOA BAY. See PORT ELIZABETH.

ALHAMBRA. See GRANADA.

ALHANDRA, a town of Portugal, prov. Estremadura, on the Tagus, 18 m. N. N. E. Lisbon. Pop. 1,600.

ALICANT, (an. *Lucentum*), a sea-port town of Spain in Valencia, cap. prov. same name, on the Mediterranean, lat. 38° 20′ 41″ N., long. 0° 30′ W. Pop. about 14,000, having declined from 21,5 0 in 1810. It is situated between mountains at the bottom of a spacious bay, having Cape la Huerta at its N. E. extremity, and Isla Plana on the S. Large vessels anchor from ¼ to 1 m. from shore, and small craft lie alongside the pier, which, though incomplete, is about 320 yards in length. Alicant is defended by a castle on a rock about 400 feet high. Streets narrow and crooked; but when visited by Mr. Townsend they were well paved and clean. None of its churches, convents, or other public buildings deserves notice. It has a school of navigation, and has, or at all events had, an institution for providing for orphans, deserted children, and the sons of soldiers. We are not aware whether the "House of Mercy," founded in 1786, and intended to assist in the suppression of mendicity, still exists. (*Townsend*, iii. p. 184.) The trade of Alicant, though still considerable, has fallen much off, partly in consequence of the emancipation of America, but more through the influence of oppressive duties and the disturbed state of the country. Its exports consist principally of wine, almonds (10,000 cwt.), barilla (50,000 to 90,000 cwt.), olives and olive oil, brandy, figs, salt, esparto-rush, wool, silk, linen, &c. The imports consist principally of linens, salted-fish, corn, cotton and cotton stuffs, colonial produce, timber, &c. (Besides *Townsend*, see *Inglis's Spain*, ii. 304.; *Communications from British Consul*, &c.)

ALICATA, or LICATA, a sea-port town on the S. coast of Sicily, Val di Girgenti, at the mouth of the Salso, lat. 37° 4′ 25″ N., long. 13° 55′ 40″ E. Pop. 13,465. It is built partly on the beach and partly on the slope of some hills. Its walls have gone to decay, and neither of its two castles is of any considerable strength. It is a poor-looking place, but exports considerable quantities of corn, with sulphur and soda, pistachio nuts, almonds, maccaroni, &c. The port is shallow, so that large vessels must load in the offing, or road, about a mile S. W. of the town, where they are exposed to the southerly winds. (*Swinburne's Two Sicilies*, ii. p. 297, 4to ed.; *Smyth's Sicily*, p. 199.)

ALICUDI, the most W. of the Lipari islands, 56 m. E. N. E. Palermo. Pop. 260. It is about 6 m. in circ., rises abruptly from the sea, with irregular ravines and precipitous hills. It is cultivated, wherever there is any soil, with singular and laborious industry, and produces most excellent wheat, barilla, flax, capers, &c. The people are said to be exceedingly healthy; it has only two unsafe landing-places, and is rarely visited by strangers. (*Smyth's Sicily*, p. 277.)

ALIGHUR, a strong fort of Hindostan, in the district of the same name, between the Ganges and the Jumna, 53 m. N. Agra, lat. 27° 56′ N., long. 77° 59′ E. It was taken by storm in 803; and was soon after made the head-quarters of a civil establishment for the collection of the revenue, and the administration of justice. The N. portion of the district of Alighur is a desolate tract, overspread with low jungle; but the S. portion is fertile and highly cultivated. The natives, though turbulent, are superior to the Bengalese, and other tribes more to the East.

ALKMAAR, a town of N. Holland, cap. arrond. and cant., on the great ship canal from Amsterdam to the Helder, 20 m. N. N. W., the former, lat. 52° 38′ N., long. 4° 44′ 45″ E. Pop. 9,500. It is strongly fortified and well built; there are many fine canals, shaded with trees, and the whole town has a strikingly clean and comfortable appearance. The *Hôtel de Ville* and the arsenal are the only public buildings that deserve notice. It is the seat of a court of primary jurisdiction, and has a college, physical society, theatre, concert hall, &c. Vast quantities of excellent butter and cheese are produced in the surrounding meadows. Exclusive of butter, about 40,000 tons of cheese are said to be annually disposed of in its markets. It also manufactures canvass, and has a considerable trade in cattle, corn, tulips, &c. Its commerce has been materially facilitated by the construction of the great canal. Without the town is a fine promenade, similar to those at the Hague and at Haarlem. In 1573, Alkmaar was invested by the Spaniards; but having been repulsed with great loss, in an attempt to take the town by storm, they abandoned the siege. In 1799, the Anglo-Russian army, under the Duke of York, advanced from the Helder as far as Alkmaar. (*Dict. Géographique*; *Murray's Hand-book, &c.*)

ALLAHABAD, an extensive and populous prov. or soubah of Hindostan proper, between the 24th and 26th deg. N. lat., and 79th and 83d E. long. It is bounded on the N. by Oude and Agra, S. by Gundwana, E. by Bahar

and Gundwana, and W. by Malwah and Agra. It is about 270 m. in length by about 120 in breadth.

It is divided into the following zillahs or districts, viz.: 1. Allahabad; 2. Benares; 3. Mirzapoor; 4. Juanpoor; 5. The Rewah territory; 6. Bundelcund; 7. Cawnpoor; 8. Manicpoor territory. It is watered by the Ganges, Jumna, and other great rivers. Adjacent to the former, the country is flat and very productive, but in the S. W., in the Bundelcund district, it forms an elevated table-land, diversified with high hills containing the celebrated diamond mines of Poonah. The flat country is extremely sultry, and subject to the hot winds, from which the more elevated region is exempted. In the hilly country, where the rivers are less numerous than in the plains, the periodical rains and well-water are chiefly relied on for agricultural purposes. On the whole, however, Allahabad is one of the richest provinces of Hindostan. The principal articles of export, are sugar, cotton, indigo, cotton cloths, opium, saltpetre, diamonds, &c.; and, in addition, it produces all kinds of grain and a vast variety of fruits.

The chief towns are Allahabad, Benares, Callinger, Chatterpore, Chunar, Ghazypore, Juanpore, and Mirzapore. The whole of this extensive province is now subject to the British government; the Benares district having been ceded in 1775; Allahabad and the adjacent territory in 1801; and the districts of Bundelcund in 1803. Seven-eights of the inhabitants are supposed to be Hindoos, the remainder Mohammedans.

Allahabad, an ancient city of Hindostan, cap. of the above prov. and district, near the confluence of the Ganges and Jumna, being by the course of the river 820 m. from the sea, but the distance in a direct line from Calcutta is only 475 m.; from Benares, 75 m.; and from Agra, 280 m., lat. 25° 27′ N., long. 81° 50′ E. At a short distance from the city, at the junction of the rivers, is situated the fortress, founded by the emperor Acbar, in 1583; but much improved since it came into the possession of the British. It is lofty and extensive, completely commanding the navigation of both rivers. On the sea side it is defended by the old walls; but on the land side it is regularly and strongly fortified. It could not be taken by a European army, except by a regular siege; and to a native army it would be all but impregnable: and hence it has been selected as the grand military depôt of the upper provinces.

Being situated at the point of union of two great navigable rivers, Allahabad would seem to be in one of the finest positions in India for being the seat of an extensive commerce. And if we suppose with D'Anville and Dr. Robertson, that it occupies the site of the ancient Palibothra, it certainly ranked among the first commercial cities of antiquity.* But in modern times it does not appear to have ever attained to the magnitude or importance that might have been anticipated. Formerly, however, it was both more populous and flourishing than at present. A considerable cotton manufacture is said to have been driven from the town, by the exactions of the native officers of the Oude government. According to Hamilton, the pop. amounted, in 1803, to about 20,000, exclusive of the military; and there is no room for thinking that it has been materially increased in the interval. The houses are of mud, raised on the foundations of more substantial brick edifices that have fallen into decay. Heber says, it has a desolate, ruinous appearance, and that it has obtained among the natives, the name of *Fakeerabad*, (beggar abode!) It is the permanent station of a high court of justice. — *Sudder Mofussil*, commission: and has a school formed, in 1825, for the education of the natives. Allahabad has been in possession of the British since 1765.

Besides the Ganges and Jumna, the Hindoos believe that another river, the Sereswati, joins the other two from below ground. In consequence of this extraordinary junction, Allahabad is reckoned peculiarly holy, and is annually visited by many thousands of pilgrims, who come from all parts of Hindostan to bathe and purify themselves in the sacred stream: in some years their numbers have amounted to nearly 220,000, each of them paying a small tax to government: — "When," says Mr. Hamilton, "a pilgrim arrives, he sits down on the bank of the river, and has his head and body shaved, so that each hair may fall into the water, the sacred writings promising him one million of years' residence in heaven for every hair so deposited. After shaving, he bathes; and the same day, or the next, performs the obsequies of his deceased ancestors. The tax accruing to government for permission to bathe, is 3 rupees each person; but a much greater expense is incurred in charity and gifts to the Brahmen, who are seen sitting by the river-side. Many persons renounce life at this holy confluence, by going in a boat, after performance of certain solemnities, to the exact spot where the three rivers unite, where the devotee plunges into the stream, with three pots of water tied to his body. Occasionally, also, some lose their lives by the eagerness of these devotees to rush in and bathe at the most sanctified spot, at a precise period of the moon, when the immersion possesses the highest efficacy. The Bengalese usually perform the pilgrimages of Gaya, Benares, and Allahabad in one journey, and thereby acquire great merit in the estimation of their countrymen." (*Hamilton's Gazetteer; Heber*, i. pp. 441—445.)

Allahabad (District of), consists of the territory immediately adjacent to the city of Allahabad. In 1815, it contained 1,655,106 begahs † of cultivated land, assessed at 279,324*l*. a year of *jumma*, or land revenue. At the same time it contained 395,012 begahs of land, fit for cultivation, and 1,109,777 waste. It is watered by the great rivers Ganges and Jumna, and, when well cultivated, is remarkably fertile. Wheat is the principal crop; but the culture of cotton and indigo has greatly increased—and that of opium has also been introduced. A considerable quantity of cotton cloths, and chintzes, were formerly produced; but this branch of industry is now nearly annihilated in consequence of the native manufactures being undersold by the British. This district suffered considerably from the jumma, or land revenue, having been fixed at too high a rate, when the perpetual assessment was introduced. It has been the theatre of a considerable number of gang robberies; but these have been either wholly suppressed, or greatly diminished in consequence of the introduction of a more efficient police. (*Parl. Papers*, No. 753. iii. Sess. 1832, p. 69, &c.; *Hamilton's Gazetteer.*)

ALLAN (BRIDGE OF), a neat village of Scotland, on the Allan, 3 m. N. W. Stirling. It is a good deal resorted to in summer by visiters, on account of a mineral spring in the vicinity.

ALLAUCH, a town of France, dep. *Bouches du Rhone*, 5 m. E. N. E. Marseilles. Pop. 3,869. It is built on the declivity of a hill, and is very ancient.

ALLEGHANY, or APPALACHIAN MOUNTAINS, a chain of mountains, in the U. States of N. America, running in a N. E. and S. W. direction from the N. parts of Alabama and Georgia, to the state of Maine, a distance of about 1,200 m. It consists of a number of ridges, having a mean breadth of about 100 m. and a mean elevation of from 2,500 to 3,000 feet. Their highest summits are in N. Hampshire, where they attain to an elevation of between 6,000 and 7,000 feet. They are almost every where clothed with forests and interspersed with delightful vallies. Their steepest side is towards the E., where granite, gneiss, and other primitive rocks are to be seen. On the W. they slope down by a gentle declivity continued to the Mississippi. Iron and lead are both met with, the former in great abundance, in various parts of the range; and the considerable quantities of gold that have been found in the streams in the upper parts of N. Carolina and Georgia, show that it also is among the products of the Alleghanies. But coal seems to be by far the most important of their mineral riches. Vast, and all but inexhaustible beds of bituminous and of anthracite or stone coal, are found in different parts of the chain, and are already very extensively wrought. The quantities of anthracite brought to Philadelphia, partly for the supply of the city, and partly for shipment to other places, have wonderfully increased during the last dozen years. Salt springs are abundant all along the W. slope of the Alleghanies, and from some of them large supplies of salt are procured. This mountain system is crossed by the Hudson river, and is the only instance known, except that of the St. Lawrence, of the ocean tides passing through a primitive mountain chain, and carrying depth for the largest vessels. It is also crossed by several canals and railways. (*Darby's View of the United States*, passim; *Maclure's Geology, &c.*)

ALLEN (BOG OF), the name usually given to the extensive tracts of morass situated in Kildare, and King's and Queen's counties, and the adjoining counties of Ireland. These do not however form, as is commonly supposed, one great morass, but a number of contiguous morasses separated by ridges of dry ground. Though flat the bog has a mean elevation of about 250 feet above the level of the sea, and gives birth to some of the principal Irish rivers, as the Barrow, flowing S., and the Boyne E.

ALLEN (LOUGH), a lake, co. Leitrim, Ireland, about 10 m. in length, and from 4 to 5 in width. This lake is generally supposed to be the source of the Shannon, and it has perhaps the best title to that distinction. It is elevated 144 feet above the level of high water-mark at Limerick; and the Shannon has been rendered navigable as far as the Lough.

ALLENDORF, a town of Hesse Cassel, on the Werra, 23 m. E. S. E. Cassel. Pop. 3,500. There is in the vicinity a considerable salt-work.

* Major Rennell denies this, and contends that Patna occupies the site of Palibothra. (*Memoirs of a Map of Hindostan*. 3d ed. p. 49.) But the reasoning of Dr. Robertson, founded on the statements of Strabo and Arrian, seem to prove conclusively the identity of Palibothra and Allahabad. (*Disquisition on Ancient India*, note xiii.)

† A begah varies in size, but is generally about one-third of an acre.

ALLEVARD, a town of France, dep. Isère, cap. cant., 21 m. N. E. Grenoble. Pop. 2,599. There are valuable iron and copper mines in its vicinity, and founderies where iron of an excellent description is prepared for conversion into steel, and also for being cast into cannon. In the neighbourhood are the ruins of the castle of Bayard, the birth-place of the famous knight of that name — the *chevalier sans peur et sans reproche*.

ALLIER, a dep. almost in the centre of France, so called from the river Allier, one of the principal affluents of the Loire, which traverses it from S. to N., between 45° 54′, and 46° 47′ N. lat., and 2° 16′ and 3° 57′ E. long. Area, 723,981 hect., whereof about 468,000 are cultivated land, 70,000 meadows, 18,000 vineyards, 64,000 woods, 24,700 heaths, moors, &c. Pop. 309,270. Exclusive of the Allier, it is bounded E. by the Loire, and is traversed by the Cher, and other lesser rivers, &c. The ponds and smaller lakes are so numerous, that they are said to have an injurious influence over the climate. Surface undulating, and in parts hilly; soil generally fertile, producing a surplus of corn and wine for exportation, with great numbers of cattle, sheep, and excellent horses. A good deal of the timber in the forests is oak, suitable for ship-building. Agriculture in this, as in many other departments of France, is in a very backward state. The peasantry are small proprietors, and wedded to the practices of their forefathers. *En vain leur indiquerait-on de nouveaux procédés agricoles, ils cultivent comme faisaient leurs pères. Une aveugle routine sert de bornes à leur étroite intelligence.* There are valuable mines of coal, iron, and antimony; and quarries of marble and granite. Among the manufacturing establishments may be mentioned the glass-works of Sourigny and Commentry, which employ about 800 work-people; the iron works of Tronçais, which employ above 500 ditto, and furnish annually above 500,000 kilogs. of iron; and there are also manufactories of cutlery, earthenware, cloth, and paper, with spinning-mills, and numerous breweries, rope-walks, &c. It is divided into 4 electoral arrond.; returns 4 m. to the Ch. of Deputies; and had, in 1838, 1,617 electors. Public revenue, in 1831, 6,444,045 fr. Chief towns, Moulins, Montluçon, Gannat, La Palisse, &c. (*Hugo. France Pittoresque*, art. *Allier; French Official Tables*.)

ALLOA, a sea-port and m. town of Scotland, co. Clackmannan, on the Forth, at the point where it ceases to be a river, and becomes a frith, 25 m. W. N. W. Edinburgh. Pop. of town, in 1841, 5,434: of parish and town, 6,508. It is irregularly built; but has recently been much improved. A church, opened in 1819, has a spire 200 feet in height. The harbour is excellent; vessels of large burden lying close to the quays; there is also a dry dock and two yards for ship-building. The trade of the town is considerable, and it has about 16,000 tons of shipping. There are very extensive collieries, distilleries, and iron-works in the neighbourhood, the produce of which is principally shipped here: and in the town and its vicinity are extensive breweries, which produce ale rivalling that of Edinburgh, with iron founderies, woollen manufactories, glass-works, tile and brick-works, &c. The justice of peace, and sheriff courts for the co. are held here. In a park adjoining the town, are the ruins of a seat of the Earl of Mar, part of which consists of a tower of the 13th century, 90 feet in height.

ALLOWAY KIRK: the church (Scottice, Kirk) of a parish, on the coast of Ayrshire, long united with that of Ayr, near the mouth of the Doon, on the road from Ayr to Maybole, about 3 m. S. from the former. The Kirk has been for a lengthened period in ruins, but being prominently brought forward in Burns's inimitable tale of Tam O Shanter, and having in its immediate vicinity the poet's birth-place, and the monument erected to his memory, it has become an object of great interest. Though roofless, the walls are in pretty good preservation; and the feelings with which they are now associated will protect them from depredation. The church-yard, which is still used as a burying-ground, contains the graves of Burns's father and mother; and, such is the *prestige* with which it has been invested, that latterly it has become a favourite place of interment. Between Alloway Kirk and Ayr, but much nearer the former than the latter, is the cottage in which Burns was born (on the 25th of February, 1759), a one-story house, of humble appearance, with a thatched roof, and long used as an inn. About ½ m. on the other side of the Kirk, are the "Auld brig o' Doon," and the new bridge — the latter about 100 yards below the former, and built since the time of Burns; and on the summit of the acclivity of the E. bank of the river, about half way between the old and new bridges, is the monument of the poet. This elegant structure was finished in 1823, at an expense of about 2,000*l.* It is built in imitation of the monument of Lysicrates at Athens, and consists of a triangular basement, on which rises a peristyle, of 9 Corinthian columns, 30 feet in height, supporting a cupola, surmounted by a gilt tripod. It is above 60 feet in height; is built of fine white freestone, and has a chaste, classical appearance. Independently of the peculiar associations connected with the place, the scenery around is equal in richness and variety to any in Scotland. The celebrated statues of Tam O'Shanter and Souter Johnnie are appropriately placed in a grotto within the grounds attached to the monument. (*New Statistical Account of Scotland*, art. *Ayr; Chambers's Land of Burns, &c.*)

ALMADA, a town of Portugal, prov. Estremadura, on the Tagus, opposite to Lisbon. Pop. 4,000. There is an old castle on a rock, an hospital, a Latin school, with large magazine for wine.

ALMADEN, a town of Spain, prov. La Mancha, on its S. W. frontier, in the Sierra Morena, 57 miles W. S. W. Ciudad Real. Pop. 6,000. Within a short distance of this town is a famous mine, whence quicksilver is obtained to the extent of from 30,000 to 40,000 quintals a year. This mine is very ancient, and is believed, indeed, to have been wrought previously to, and by the Romans. But the statements of Pliny, which are alike curious and instructive (*Hist. Nat Lib.* xxxiii. 7.), apply distinctly to Sisapo in Bætica, that is, to *Almaden de la Plata*, 27 m. N. N W. Seville, where there is still a productive mine; and there are mines of the same sort, though of very inferior consequence, in other parts of Spain.

The inhab. of Almaden are almost wholly engaged in the mines, or in the subsidiary employments connected with them. Formerly, the mines were principally wrought by convicts; but that system has been relinquished for a good many years past, and they are now wholly wrought by free labourers. Working in the mines is still, despite the meritorious efforts made for its improvement, very unhealthy; but it is less so in winter and spring than in summer and autumn; and during the latter the mines are comparatively deserted, the miners being then mostly engaged in agricultural pursuits. The mines are wrought on account of government, who dispose of the produce by contract to the highest bidder. The total exports of quicksilver from Spain in 1848, of which by far the largest portion was from Almaden and its vicinity, amounted to 48,868 quintals, the nett revenue from the same, in 1849, being estimated at 26,614,667 reals. The village of Almadenejos, about 5 m. S. E Almaden has about 1500 inhab., who are wholly engaged in the mines. We have gleaned these facts from different official documents. The account of Almaden in Miñano was antiquated at the period (1826) when it was published, and is now quite useless.

ALMAGRO, a town of Spain, prov. La Mancha, 12 m. E.S.E. Ciudad Real. Pop. 11,000. It has an important manufacture of blondes. The country round is celebrated for its mules and asses, for which there is annually a large fair.

ALMANZA, a town of Spain, prov. Murcia, 56 m. N.W. Alicant. Pop. 7,000. It is well built, has broad streets, linen fabrics, and a great annual fair. In the neighbourhood of this town, on the 25th April, 1707, the French, under the Duke of Berwick, gained a complete victory over the allied forces in the interest of the archduke Charles. The latter lost 5,000 men killed on the field, and nearly 10,000 taken prisoners.

ALMEIDA, a fortified town of Portugal, prov. Beira, 24. m. W. by N. Ciudad Rodrigo. Pop. 6,000. From its position on the frontier of the kingdom, it has always been deemed a military post of the greatest importance. In 1762, it was taken by the Spaniards, after a long siege. In 1810, it was taken by the French under Massena, who abandoned it in the following year, after blowing up the fortifications.

ALMERIA (an. *Murgis*), a sea-port town of Spain, Granada, near the mouth of the river, and at the bottom of the gulph of the same name, lat. 36° 51′ 29″ N., long. 2° 32′ W. Pop. 19,000 It is the seat of a bishop, and has fabrics of soda and salt-petre, and of cordage and other articles made of the esparto rush. The harbour is large, well sheltered, and is protected by a castle; the water is so deep, that large vessels anchor half a mile from shore, in from 9 to 14 fathoms, and smaller vessels anchor, close in shore, in from 5 to 9 fathoms. The ancient sovereigns of Granada considered this as the most important town of their dominions, as well on account of the fertility of the surrounding country, as of its manufactures and commerce. But it is now much fallen off.

ALMONBURY, a pa. and township of England, W.R. co. York, wap. of Agbrigg, divided by the Colne from the pa. of Huddersfield. The pa. is very extensive, containing 30,140 acres, with a pop. of 37,315. It contains several villages, of which Almonbury, 1¾ m. S. E. Huddersfield, is the principal. Pop. of Almonbury township 7,086, mostly engaged in the manufacture of woollens and cottons, especially the former. (*See* HUDDERSFIELD.)

ALMORA, a town of Hindostan, cap. Kumaon, in the N. E. part of India, 90 m. N. by E. Bareilly; lat. 29° 35′ N., long. 79° 40′ E. It stands on a ridge 5,337 feet above the level of the sea, and is compactly built. The houses of stone, and slated, are generally two and some three stories high; the ground-floor being occupied as shops. The old Gorkha citadel stands on a commanding

point of the ridge at the E. extremity of the town, and several martello towers have been erected on peaks to the eastward. This place was acquired by the British in 1815. The surrounding country is remarkably bleak and naked. (*Hamilton's E. I. Gazetteer.*)

ALMUNECAR, a sea-port town of Spain, Granada, lat. 36° 44′ N., long. 3° 45′ W. Pop. 5,400. The town is of Arabic orgin, its name signifying a "place of banishment." It has a ruined castle, ruined walls, and narrow streets. The surrounding country, though unsuited to corn, produces figs, raisins, the sugar-cane, cotton, &c. The anchorage is fit only for small vessels, and should not be used by them except in cases of emergency, as the E. winds common on this coast are dangerous. (Miñano.)

ALNMOUTH, a village of England, in Northumberland, at the mouth of the Alne, 5¼ m. E. S. E. Alnwick. It exports considerable quantities of corn and other produce.

ALNWICK, a town of England, cap. co. Northumberland, on a declivity near the river Alne, 275 m. N. by W. London. Pop. of town, in 1841, 4,945, of township 6,626. It has a spacious square, where a weekly market is held, and a town-house, where the co. courts meet and the members for the co. are elected; the assizes, however, are not held here, but at Newcastle. Alnwick was formerly fortified, and vestiges of its walls and gates still remain. At the N. entrance to the town stands Alnwick Castle, once a principal stronghold of the kingdom on the side of Scotland, and now a magnificent baronial residence of the Dukes of Northumberland. It underwent, not many years ago, a complete repair and renovation, executed in good taste. At the entrance to the town, a column is erected in honour of one of the Dukes of Northumberland. A cross, called Malcolm's Cross, stands on the spot where Malcolm III., king of Scotland, is said to have been killed, in 1093, by a soldier, who came to offer him the keys of the castle on the point of a spear. (See *Haile's Annals of Scotland*, anno 1093, and *Dr. Percy's note* on the same subject.)

ALOST (Flem. *Aalst*), a town of Belgium, prov. East Flanders, on the Dender, about half way between Brussels and Ghent. Pop. 15,000. It is surrounded by walls, and is clean and well built; the parish church, the largest in the country, is not finished; it has a college, and several other educational establishments; a town-house, remarkable for its antiquity, with manufactures of linen, cotton, lace, hats, &c., print-works, and dye-works, breweries and distilleries, tanneries, soap-works, iron and copper founderies, and potteries. Vessels of small size come up to town by the river; and it has a considerable commerce in the produce of its manufactures, and in hops of an excellent quality, grown in the neighbourhood, rape oil, &c. At Alost is the tomb of the celebrated Thierry Martens, the friend of Erasmus, who introduced the art of printing into Belgium. (*Vander Maelen, Dict. Geog. Flandre Orientale*, p. 3.)

ALPHEN, a town of the Netherlands, prov. S. Holland, cap. cant. on the Rhine, 7½ m. E. Leyden. Pop. 2,200. It has manufactures of earthenware and pipes.

ALPNACH, a village of Switzerland, cant. Unterwald, on the S. W. arm of the lake of Lucerne. Pop. 1,300. A very singular road, called the *Slide* of *Alpnach*, is constructed in the immediate vicinity of this town, for conveying trees from Mount Pilatus to the lake, from which they are forwarded to Holland, &c. (See *App.* to *Inglis's Switzerland.*)

ALPS (THE), constitute (Caucasus excepted) the most extensive and at the same time the highest mountain system of Europe. They extend from the banks of the Rhone in France on the W., to the rivers Verbas and Narenta on the E.; of which the former falls into the Save, a confluent of the Danube, and the latter into the Adriatic. Hence they stretch between the 5th and 18th degree E. long., forming a vast semicircular bulwark which encompasses, on the N., Italy and the Adriatic Sea. The extremities of this semicircle approach 43° N. lat., but the great body of the range occupies the space between the 46th and 48th degrees N. lat.

The Alps are closely united to two other mountain ranges; on the W. to the Apennines, which traverse Italy in its whole length; and on the E. to the Balkhan, which covers Turkey and Greece with its numerous ramifications. The boundary line between the Apennines and the Alps is difficult to determine. It seems to be most expedient to suppose that the Alps begin on the W. side of the great road over the Bochetta pass (2,550 ft. above the level of the sea), which leads from Genoa to Novi in Piedmont. That portion of the range which begins at this road and extends E. to the sources of the Tinea, a tributary of the Var, is called the *Maritime Alps*, and does not contain any very high summits; but it is extremely steep, and is traversed only by one road practicable for carriages. This road connects the town of Nice with the town of Coni in Piedmont, and traverses three ridges by the *cols* or mountain passes of Brous Brovis, and de Tende. The last col is in the main ridge of the range, and rises to 6,159 feet above the level of the sea.

Between the plain of the Po and the valley of the Rhone, the mountain mass lies in its greatest extent S. and N., reaching from the shore of the Mediterranean, or from nearly 43°, to the lake of Geneva, or to nearly 46° 30′ N. lat. Its length is here, consequently, about 230 m., and its width averages about 100 m. The watershed, between the rivers falling into the Po, and those emptying themselves into the Rhone, does not traverse the middle of the mountain region, but is found at about 30 miles from its E. border. On it rise some very high summits. The most remarkable are, Monte Viso, 13,599 feet above the sea, on whose E. declivities the Po takes its origin; Mount Genévre attains 11,784, Mount Cenis 11,795, and Mount Iseran 13,272 ft. above the sea. Farther N. is the immense mass of rocks that constitute Mont Blanc, whose highest point, the *Bosse de Dromedaire*, in lat. 45° 50′ N. long. 6° 51′ E., 15,739 ft. above the sea, is the highest elevation to which the Alps attain. The valleys, both to the E. and W., branch off at right angles from the watershed. Those to the east are short, straight, and deep, and terminate in the plain of the Po; those to the west are of much greater length, and rather winding. On this side, especially in the dep. *des Hautes Alpes*, between the upper branches of the rivers Isere and Durance, are placed a considerable number of very high summits; Mont Loucyra attains 14,451 ft., Mont Loupilla 14,144 ft., Mont Pelioux de Vallouise 14,119 feet, and at least twelve others rise above 11,000 feet. The peculiar disposition of the valleys in this portion of the Alps has rendered the communication between France and Italy comparatively easy. The roads follow the valleys up to the watershed, and have then only to traverse one high ridge. Three great carriage roads lead over it. The farthest to the S. is the road of Mount Genévre, which ascends from the banks of the Rhone along the valley of the Durance to Briançon and traverses the ridge N. of Mount Genévre, where it attains 6,119 ft. above the sea; whence its descends in the valley of the river Dora to Susa. The second is the road of Mount Cenis, which on the side of France may be said to begin at Grenoble. It ascends first the valley of the Isere, and afterwards of the Arc, a tributary of the former, and traverses the ridge N. of Mount Cenis, where it is 6,772 ft. above the sea; and then descends, like the former, along the Dora to Susa. The latter is by far the most used of all the roads over the Alps; and it is stated that annually from 16,000 to 17,000 carriages of all kinds, and from 45,000 to 50,000 horses and mules, pass along it. The third carriage road is that of the Little S. Bernhard, which ascends the valley of the Isere, passes the ridge between Mount Iseran and Mont Blanc, and descends in the valley of the Dora Baltea to Aosta. It attains in its highest point to an elevation of 7,015 ft. above the sea; and it is most commonly supposed that it was by it that Hannibal penetrated into Italy. This portion

of the Alps comprehends what commonly are called the Cottian, Graian, and partly the Pennine Alps, together with those of Dauphiné and Savoy.

At Mont Blanc the direction of the range is changed. It runs hence E. N. E., and the N. ridges continue in that direction to their termination in the neighbourhood of Vienna. With the change of direction a change in the disposition of the valleys is observed. The range is divided into two or more ridges, running nearly parallel, and including extensive longitudinal valleys. From the ridges enclosing these longitudinal valleys short transverse valleys descend S. and N. to the plains which bound the mountain range. This disposition of the ranges renders the communication between Italy on one side, and Switzerland and Germany on the other, much more difficult than the communication between Italy and France; for the roads must either traverse two or more ridges, or great deflections must be made to avoid one of them.

E. of Mont Blanc the range is divided into two high ridges, which enclose the valley of Valaise, and unite about 8° 30′ E. long., at the sources of the Rhone. The southernmost of these ranges, which is immediately connected with Mont Blanc, contains nearly in its middle Mount Rosa, the second highest summit of the Alps, being 15,210 ft. above the sea. W. of it stands Mount Cervin, or Matterhorn, the third highest summit, rising to 14,836 ft. Then follow Mount Combin, which has 14,124 ft., and Mount Velan, which attains 11,040 ft. E. of Mount Rosa, and near it, is the Cima de Saci, 13,740 ft. high. This chain comprises the greater part of the Pennine and a portion of the Lepontine Alps, but is commonly called the Alps of Valaise. In the chain which encloses the valley of Valaise on the N. the greatest European glacier is found, not far W. of the source of the Rhone. Here a great part of the chain rises above the line of congelation, and is always covered with ice. It is stated to have an area of 200 sq. m. Many high summits rise out of it in the form of pyramids; and as the snow does not adhere to their steep sides, they form a sublime contrast with the sea of ice that surrounds them. The most famous of these summits are the Finsteraarhorn, 14,026 ft.; the Monch (Monk), 13,507 ft.; the Jungfrau (Virgin), 13,672 ft.; the Schrekhorn, 13,454 ft.; the Vischerhorner in Grindelwald, 13,333 ft.; and the Eiger, 13,032 ft. high. The glaciers of Grindelwald and Lauterbrunnen, which attract so many travellers, are only small detached portions of this immense glacier. W. of the great glacier the chain still contains many summits rising to 11,000, and even to 12,000 ft. of elevation; as the Altels, the Blümlisalp, and others. It may be considered as terminating on the W. with the Diablerets, or Teufels-hörner, which attains about 10,000 ft. of elevation. W. of them the mountains are of moderate height, and towards the lake of Geneva they sink into elevated hills. This chain goes commonly by the name of Alps of Bern (Berner Alpen).

The depression of this chain at its western extremity has afforded an opportunity of establishing a carriage communication between Geneva and Bern in Switzerland, and Milan in Lombardy. The road runs along the shores of the lake of Geneva, and enters at its eastern extremity the valley of the Rhone or of Valaise. It then ascends the valley as far as the town of Brigg, and passes thence over the S. range by the pass of the Simplon to Domo d'Ossola and the shores of the Lago Maggiore. The highest point of this road is 6,585 ft., the town of Brigg 2,325, and Domo d'Ossola 1,003 ft. above the sea. This road, made by order of Napoleon, partly at the expense of France, and partly of the then kingdom of Italy, is a noble work. It is about 26½ ft. wide, rising 1¼ inch each yard. In some places it is tunnelled to a considerable distance through the solid rock. It is the only carriage road over this range; but another road, used only by mules, has obtained celebrity by Napoleon having passed it in 1800, previously to his famous Italian campaign. This is the road of the Great S. Bernhard; it begins at Martigny on the Rhone, ascends the vale of the small river Drance to its source, where it passes over the chain near the celebrated Hospice at an elevation of 8,173 ft. above the sea, and descends hence to Aosta on the Dora Baltea.

E. of the sources of the Rhone is the only place in the Alps running W. and E. where the range is not divided by longitudinal valleys, but is intersected by the two transverse valleys of the Reuss and Tessino. Hence there has existed time immemorial a line of communication in this point between Switzerland and Italy. This is the road of the S. Gothard, uniting Zurich and Lucerne with Milan, running first along the shores of the lake of the four cantons (or of Lucerne) to Altorf, and afterwards in the valley of the upper Reuss to Andermatt. It passes the ridge at an elevation of 6,808 ft., descends to Aviolo on the Tessino in Val Leventina, and runs in this valley to the Lago Maggiore, and thence to Milan. This much frequented road has only in modern times been rendered practicable for carriages, on account of the poverty of the small cantons which it traverses.

That portion of the mountain system which lies between Mont Blanc and the road of the S. Gothard is less broad than any other part. It probably does not measure more than 80 m. across in a straight line; but its valleys, both to the S. and the N., but especially the latter, known by the name of Highlands of Bern (Berner Oberland), are considered as exhibiting the richest mountain scenery in the Alps.

E. of the road over the S. Gothard pass, the mountain system widens considerably; so that between 9° and 13° E. long., its average breadth may be estimated at between 120 and 130 miles. But at the same time the high summits are less numerous, a few only attaining 12,000 ft., though a great number still exceed 10,000 ft., and pass the line of congelation. The height of the mountain passes shows evidently that the elevation of the whole mountain mass has rather increased than decreased, at least W. of the pass over the Brenner.

That portion of the range which approaches the pass of the S. Gothard is called the Rhaetian Alps, or the Alps of the Grisons. It is divided into four ridges, which enclose three longitudinal valleys; those of the Upper Rhine, of the Inn and Mera, and of the Adda. The central valley is divided by a high transverse ridge into two, of which the W. or shorter, called the Vale of Bregaglia, is drained by the river Mera, which runs W., and falls into the lake of Como, or rather of Mesola; and the E. and much longer by the Inn, which falls into the Danube. The valley of the Upper Rhine, extending first E. N. E., turns afterwards suddenly N., and affords two openings towards the low country; one to the lake of Constance, and the other to

the lake of Wallstadt. Thus the town of Chur or Coire, situated where the Rhine turns N., has an easy communication both with Germany and Switzerland. Though a small place, by far the greater part of the commercial intercourse between Bavaria, Wirtemberg, Baden, and Switzerland on one side, and Italy on the other, is carried on by the road passing through it. The canton of the Grisons, sensible of the advantage accruing from this commercial intercourse, has constructed three excellent roads over the range, which divides the affluents of the Rhine from those descending into the plain of the Po. A road runs from Coire along the Rhine to the place where the Vorder Rhein and Hinter Rhein join, and thence ascends in the valley of the latter to the village of Splüghen in the Rheinwald. At this place the road divides in two. One continues to ascend the valley of the Hinter Rhein to a village called also Hinterrhein, and passes thence over the high mountain ridge to S. Bernardino; it is called the road of S. Bernardino. From this village it descends in the Val Misocco or Miso along the river Moosa, which opens near Bellinzona into the small plain surrounding the N. extremity of the Lago Maggiore. This road, which rises to 7,015 ft. above the sea, has been made in modern times to avoid the heavy duties which the Austrian government laid on the foreign commodities passing through its territories; for from Bellinzona they now can pass to Turin and Genoa without traversing any portion of the Austrian dominions. The other road leaves the Rhinwald at the village of Splüghen, and directly passes over the mountain ridge to Val Giacomo, which opens into Val Bregaglia near Chiavenna. The highest part of this road between Splüghen and Isola is 6,946 ft. above the sea. Another road runs from Coire nearly directly S. over some mountains of moderate height, till it enters the valley of Oberhalbstein, which it ascends nearly to its upper extremity, where it divides into two branches, of which the E. passes Mount Julier at an elevation of 7,285 ft.; it leads to the valley of Engadien, and is not a commercial line of communication. The W. road passes over the Maloga and descends into Val Bregaglia, where it continues to the town of Chiavenna. It rises to 8,250 ft. above the sea, and though practicable only for small carts, is much used.

The next road farther E. is rather a military than a commercial line, and was recently made by the Austrian government to open a carriage communication between the newly acquired Valteline and Tyrol. It begins at Innsbruck, ascends along the Inn as far as Finstermünz, near the boundary line between Tyrol and Switzerland; turns then southward, and passes the watershed of the Alps between Nanders and Reshen, where its highest point is about 4,500 ft. above the sea. Then it descends along the valley of the Adige to Glurns; but a few miles S. of this it leaves the valley, and turning S.W. traverses a very lofty lateral chain of the Alps, which at the place where it is crossed by the road is called Monte Stelvio. It then rises to the height of 9,177 ft., being the highest elevation of any carriage road in Europe. From this point it descends rapidly into the valley of the Adda to Bormio and Sondrio, and thence to Milan. It is commonly 16 ft. wide, and has been made at a vast expense, and with great skill.

This road encircles on three sides an extensive mountain region, filled up by snow mountains and glaciers, occupying the greater part of the country between Innsbruck and Glurns, and displaying the wildest scenery of the Alps. Eternal snow covers here a space not much less in extent than that which surrounds the Finsteraarhorn and Virgin, and it is likewise overtopped by numerous steep summits of a pyramidical form, many of them rising to more than 10,000 ft. above the sea; as the Gebatch Ferner 12,288 ft., the Wildspitz Ferner 12,364 ft., the Glockthurm 11,284 ft., and others. Where the road traverses Monte Stelvio it passes near another mountain group, less in extent, but rising to a greater elevation. In it is Mount Ortelor or Orteler, the highest summit in Tyrol, 12,851 ft. above the sea; and near the latter Mount Hoch Ishernowald 12,422 ft., and Mount Zebru 12,281 ft. high.

To the E., but at some distance from these mountain masses, is the road over the Brenner, which may be considered as the E. boundary line of the Rhaetian Alps. This road begins at Innsbruck, ascends the valley of the small river Sill, and passes thence over the watershed between the Inn and the Adige, where, N. of Storzing, it attains the elevation of 4,659 ft. It then descends in the valley of the Eisack from Brixen to Bolzano or Botzen, and thence to Roveredo and Verona. It is one of the most frequented commercial roads over the Alps.

This road may be considered as separating the W. from the E. Alps. The latter are distinguished from the former by being more distinctly divided by longitudinal valleys running W. and E.; by the greater number of separate ridges; their greater width and lesser elevation; the number of snow-topped mountains being comparatively few, and none of them occurring E. of 14° E. long. The northern half of this mountain region is known by the name of the Noric Alps; and the southern by those of Carinthian, Crainian or Julian, and Dinarian Alps.

Not far distant from, and nearly parallel with, the N. border of this mountain region, extends a very long longitudinal valley from 11° to 15° E. long.; but it is divided by two transverse ridges into three valleys, in which flow the rivers Inn, the Upper Salzach and the Upper Ens, all of them running E. To the S. of the valley of the Salzach is placed the highest part of the Noric Alps. Many summits rise above the snow line, and between them are many extensive glaciers. The highest summits are the Gross Glockner, 12,567 ft.; the Gross Wiesbach or Krummhorn, 11,844; and the Ankogel, 11,873 ft. above the sea. The longitudinal valley south of this range is divided by a transverse ridge into two valleys, of which the W. is drained by the Eisach, which runs W. and falls into the Adige. The E. valley is drained by the Drave, running E., and one of the largest tributaries of the Danube. The mountain chain dividing these from the plain of Lombardy is much less elevated, rising only in a few summits to above 8,000 ft., and none of them exceeding 9,000 ft. above the sea. Only the Terglou, which rises near 14° E. long., at the sources of the Save, attains a height of 9,884 ft., and is by many considered as the most E. snow mountain of the S. range of the Alps.

E. of 14° E. long. the Alps are divided into 5 ridges by 4 longitudinal valleys, all of them opening to the E. These valleys are traversed by the rivers Ens, Muhr, Drave, and Save. The Muhr suddenly turns S., and running through a wide and open transverse valley empties itself into the Drave. The ranges enclosing these valleys on their N. and S. sides gradually decrease in height as they advance towards the

E.; so that when arrived at 16° they may rather be termed hills than mountains, except the ridge which divides the valley of the Drave from that of the Save, which preserves its mountainous aspect beyond 18° E. long.; where, at the confluence of the Drave with the Danube, it sinks into low hills, but rises again into mountains towards the confluence of the Danube and of the Save, where it takes the name of Sirmian Mountains, or Fruzka Gora. This latter group may be considered as the most E. offset of the Alps, but rises hardly to more than 3,000 ft.

The range which divides the valleys of the Muhr and of the Ens turns S., and continues for a distance in that direction, forming the E. boundary of the transverse valley of the Muhr; but on the boundary line between Styria and Hungary, it subsides into low hills, which are followed by flat high ground, connecting the Alps with the forest of Bakony. This name is given to a low mountain range which separates the two plains of Hungary from one another, terminating where the Danube suddenly turns southward, and which may also be considered as one of the E. offsets of the Alps.

The most N. ridge of the Noric Alps, which skirts the valleys of the Salzach and Ens on the N., is broken through by these rivers where they turn N. to run to their recipient, the Danube. This ridge may be considered to terminate with the Schnieberg, near Neustadt, rising 6,882 ft. above the sea. This ridge sends numerous lateral branches to the N., which terminate close to, or at a short distance from, the Danube, between Linz and Vienna. But they rarely attain the height of 4,000 or 5,000 ft.

Through this part of the Alps lie the roads by which the towns of Linz and Vienna communicate with Italy and Triest and Fiume. There are especially two great roads, with different branches; having, as central points, the towns of Villach on the Drave in Carinthia, and of Laybach on the Save in Carniola. The first, uniting Linz on the Danube with Italy and Triest, runs in the beginning mostly along the banks of the river Traun, in a W.S.W. direction, to the town of Salzburg on the Salzbach: it then follows the valley of the last-mentioned river up to the place where it is divided by a transverse ridge from that of the Ens, and then passes over that ridge to Radstadt. Hence it directly ascends the elevated range which separates the valley of the Ens from that of the Muhr, and is known by the name of the Tanern. The highest point of this road, at Hirschwand, rises to 5,290 ft. above the sea. From S. Michael, in the valley of the Muhr, the road ascends again to pass over the third range, which divides the valley of the Muhr from that of the Drave. This chain, however, is much lower. The road leads to Spital on the Drave, and thence follows the banks of the river to Villach. From Villach it ascends the valley of the Gail, a tributary of the Drave, to Tarvis, where the roads leading to Italy and Triest separate. The road to Italy turns W., traverses the most S. ridge by the pass of Ponteba, 2,572 ft. above the sea, and descends through the valley of the Tella to Treviso and Venice. The road to Triest runs from Tarvis S., attains its highest point at the pass of Predil (3,840 feet high), and descends thence in the valley of the Isonzo to Goerz or Goriza, whence it turns S. to Veith and Triest. This road is connected with that over the Brenner by a transverse road, uniting the valley of the Drave with that of the Eisach. It ascends along the Drave from Villach to Spital and Lienz, passes over the transverse bridge separating the valleys by the pass of Innich, and descends the Eisach in the wide valley of Puster to Brixen, where it joins the road over the Brenner.

The road between Vienna and the towns on the Adriatic runs in the beginning along the E. skirts of the Alps to Neustadt on the Leitha, whence it ascends the ridge called the Sömmering, on whose summit it is 3,337 ft. above the sea. Hence it descends along the small river Mürz to Bruck on the Muhr. Along the last-named river it passes through Grätz to Marburg on the Drave. It then traverses the range separating the Drave and Save, passing through Wendish, Teistritz, Cilli, and the Trojana pass to Laybach. Between this place and Triest is the mountainous country called the Adelsberg and Karst. Near Adelsberg the road rises 2,271 ft. above the sea; it thence descends to Senosetsh, and passing over the Karst arrives at Triest. From the pass of Adelsberg a road branches off to Fiume.

Two carriage roads unite this road with that which connects Linz with Italy. The most N. runs in the valley of the Muhr westward, beginning at Bruck, and traversing Leoben, Indenburg, and Muran; at St. Michael it joins the other road. The S. runs in the valley of the Drave, between Marburg and Villach, and traverses Klagenfurt.

The Dinarian Alps, which may be considered as the link connecting the mountain system with the Balkhan mountains, occupy the country between the Gulph of Quarnero or Fiume and the rivers Verbas or Verbriza and Narenta in Turkey, and have obtained their name from Mount Dinara, their highest summit (near 44° N. lat.), which rises to 6,046 ft. above the sea. The principal ridge runs nearly parallel to the Adriatic, at a distance of about 30 miles more or less, and forms at the same time the watershed between the rivers falling into the Adriatic or joining the Save. Lower ridges, mostly parallel to the principal ridge, fill the country between it and the sea; but those branching off towards the Save run nearly S. and N. Opposite the Gulph of Quarnero, the higher mountains cover only a space of less than 80 miles from W. to E.; and as here the fertile plains of Hungary approach nearest the sea, the Austrian government, desirous of devising some means by which the abundant produce of that country could be brought to the markets of the commercial world, made in the last century two roads over the numerous ridges which traverse the country. They are known by the names of the Caroline and Josephine roads; the former rising at one point to 4,576 ft. above the sea. But the lines were not judiciously chosen. They run over a succession of steep acclivities and declivities; and as they traverse a country destitute of water, they could only be used by light carriages and mules. But in the beginning of this century a company of private individuals constructed another and very superior road, on which all steep slopes have been avoided; so that it is practicable for carriages conveying the most bulky commodities from the interior of Hungary to the coast. This road begins on the coast at Fiume, ascends directly the mountains, passes through Kumenjak and Skerbuteryak, and terminates at Carlstadt on the Culpa, where this river begins to be navigable.

On three sides the Alps are surrounded by plains. On the S. by that of Lombardy, on the N. by those of Switzerland and Bavaria, and on the E. by the great plain of Hungary. The plain of Lombardy is less elevated than those of Switzerland and Bavaria; for the Lago Mag-

giore is only 805 ft., and the lake of Como 697 ft.; whilst the lakes of Geneva, Zurich, and Constance are respectively 1,307, 1,310, 1,304 ft. above the sea. The highest ranges of the mountains are much nearer to the plain of Lombardy than to the plains on the N.; and their descent is much steeper towards Italy than towards Switzerland or Germany. The mean elevation of the great plain of Hungary is only 300 ft. above the sea; and in it terminate the E. extremities of the ranges, which no where rise to a great height.

The central ridges of the Alps are composed of primitive rocks, especially of granite and gneiss, and are distinguished by their pointed peaks. On the N. side of this formation extends a slate formation of considerable width. This does not appear to accompany the range on the S., except along the E. Alps, where it has been observed to extend from Brixen on the Eisach to Marburg on the Drave, skirting that river on the S. Beyond the slate formation, the chalk occupies a considerable space. It is found to occupy the greatest extent on the S. E. of the mountain system, the whole Julian Alps being composed of it. On the opposite or N. W. side, the sandstone formation extends from the lake of Geneva as far as the S. boundary of Bavaria. The chalk formation is distinguished by its summits, which do not rise in pointed peaks, but form either cones or cupolas.

All those parts of the numerous ridges which rise above the line of congelation are of course covered with snow all the year round. In many places the snow occupies a considerable space on the upper parts and summits of the rocky masses, and from these "eternal reservoirs" of snow the *glaciers* are derived. The sides of the rocky mass are usually furrowed by long narrow valleys; and in these masses of snow, descending from the upper parts under the form of ice, extend the farther downward the greater the mass and height of the snow from which they are derived. These accumulations of snow and ice form glaciers, many of which are from 15 to 20 m. long. Near the upper part, or at their origin, they are generally narrow, sometimes not much more than 100 yards across; but as the valleys grow wider as they proceed downward, the glaciers also extend in width, taking the shape of a fan, and in some places are 2 miles across. The thickness of the ice masses varies from 100 to, perhaps, 600 feet. Though the snow line in the Alps is found at an elevation of about 8,000 ft. above the level of the sea, some of the glaciers descend so far downward that their lower extremity is not more than 3,500 ft. above it. The ice of the glaciers does not resemble that, with which our rivers are covered in winter. It consists of a great number of crystals measuring from half an inch to 2 inches in length, and somewhat less in width, united by having been pressed strongly together. It is difficult to remove one of these crystals without breaking it; but when the first has been removed, the others may be easily taken up. The surface of the glaciers is very various, and depends on the degree of inclination with which the valley descends. Where the descent is gradual, the surface of the glacier is nearly level, and offers few crevices; but where the declivity is rapid and uneven, the glacier is rent with numerous chasms, and covered with elevations, rising from 100 to 200 feet, having the aspect of a sea agitated by a hurricane. The chasms are frequently many feet wide, and more than 100 deep. Their formation, which never takes place in winter, but is frequent during summer, is accompanied with a loud noise resembling thunder, and a shock which makes the adjacent mountains tremble. These chasms are subject to change every day, and almost every hour, and it is this circumstance that renders the ascent of the glaciers so dangerous to travellers. Sometimes there are found in the glaciers pyramids of ice of a considerable elevation and a regular form, on the tops of which are placed large pieces of rocks. At the lower extremity of the glaciers is an excavation in the form of a grotto, frequently 100 feet high and from 60 to 80 wide, whence issues a small river, bringing down a bluish water. Though every single crystal of the ice of the glaciers seems perfectly white, the whole mass is of a blue colour, passing through every shade from the most feeble sky-blue to that of the lapis lazuli; it is most pure and beautiful in the lower parts of the chasms. The glaciers impart one of the greatest charms to the scenery of the Alps, by the beauty of their colour, and their contrast with the surrounding country, their lower extremities being commonly contiguous to meadows covered with the finest grass and the most beautiful flowers, and the declivities of the mountains which enclose them exhibiting large tracts clothed with magnificent trees, especially firs.

Avalanches are more frequent in the Alps than in most other mountains, because of the steepness of their declivities. The most common consist of masses of snow, which, commencing their descent at the higher parts of the mountains, and increasing in magnitude and velocity as they roll down to the valleys, overwhelm, in their headlong career, men and cattle, destroy villages and forests, and dam up and obstruct the course of rivers. Four kinds of avalanches may, however, be distinguished. 1. The *drift* avalanche takes place when the upper parts of the mountains have been covered by a heavy fall of snow during a calm, followed by a strong wind before the mass has acquired consistency. An immense mass of loose snow is then suddenly brought by the wind into the valleys, where it frequently covers villages; but in general these avalanches do not occasion much damage, unless when they cause a compression of the air. This sort of avalanche usually occurs in the beginning of winter. 2. The *rolling* avalanches; these bring down great masses of compact snow, especially towards the end of the winter, when it begins to thaw. In their progress, they are increased by all the snow they meet in their descent; their impetus and mass being frequently such as to overwhelm and beat down every thing, rocks not even excepted, that may interrupt their course. These, the most destructive of the avalanches, cause great loss of life and property. 3. The *sliding* avalanches are masses of snow descending slowly along the surface of a not very steep declivity. They take place in spring, when a long thaw has dissolved that portion of the snow which lies immediately on the rocks, and thus loosened the bond with which the whole mass is united to its base. They carry before them every thing that is too weak to withstand their pressure. They sometimes occasion considerable loss, but not frequently. 4. The *ice* or *glacier* avalanches are formed by larger or smaller pieces of ice, detached from a glacier by the summer's heat. They are precipitated downwards with a noise like thunder. When seen from a distance, they resemble the cataract of a powerful river. As they generally descend into uninhabited places, they seldom do much damage.

The rolling and sliding avalanches expose travellers to the greatest dangers they have to incur in traversing the Alps. There are, in fact,

certain localities on the most frequented roads to which they descend annually, and which are consequently very dangerous. To obviate the risk of accidents from this cause, in the construction of new roads, as of those of the Simplon and over Monte Stelvio, care has been taken at such places to excavate the mountain to a certain depth, and to cover over the road with strongly built arches, which effectually provide for the safety of the traveller. A few places on the roads are also rendered unsafe by less or greater pieces of rock which descend with fearful velocity from the steep declivities of the mountains. This usually happens when, after some days' continued rain, a strong wind arises and shakes the higher portion of the mountains. Luckily, however, such places are not frequent. Travellers on the glaciers run the risk of falling into chasms, or of finding the ice under their feet suddenly opening in the progress of the formation of a new chasm.

The scenery of the Alps owes a part of its numerous charms to the great number of extensive lakes, of which nearly every one is distinguished by some peculiar beauties. Most of them have an easy access, being situated on or near the outskirts of the range, as the lakes of Geneva, Constance, and Zurich; or partly within and partly without the range, as the lake of the Four Cantons, and the Lago Maggiore and that of Como, and the beautiful lakes in Austria. Innumerable are the small lakes which occur on or near the summits of the high ridges and glaciers. Most of the rivers and torrents have their sources in such lakes.

The chalk formation of the Julian Alps offers the most interesting natural phenomena. It consists of a fine-grained, much-decomposed primitive chalk, which is rent by a great number of transverse crevices and precipices, and frequently forms deep depressions in the fashion of funnels. In it occur numerous caverns and subterraneous galleries of great extent, in which everywhere the finest and most fantastic stalactites are formed. More than a thousand such caverns are already known, and many have never been visited. The most remarkable are those of Adelsberg (which see), Magdalen in its neighbourhood, Zirknitz, &c. Numerous too are the rivers and torrents which suddenly disappear underground, precipitating themselves into a large chasm, and re-appearing after a subterraneous course of many miles. Here are also many intermittent wells, which, at certain seasons, emit large quantities of water, and at others are dry. Several of them feed the lake of Zirknitz, which has acquired celebrity for being for several months quite dry, and for several others filled with water; so that it serves each year successively for tillage, pasturage, hunting, and fishing!

The Alps are not rich in metals, except iron. Some mines of gold and silver occur on the S. as well as on the N. declivity, especially in the Austrian dominions; but their produce is inconsiderable. Others of copper and lead are more productive; but they too are comparatively poor, except the Bleiberg (lead mountain) of Carinthia, which furnishes some of the best lead in Europe. The quicksilver mines of Idria, N. N. E. of Triest, are reckoned among the richest of the globe. The iron mines of Styria, Carinthia, and Carniola are very productive, and their produce hardly inferior to any of Europe. Rock-salt occurs only in a very few places in the W. Alps; but on the N. side of the E. Alps are very rich layers of that mineral, running, as it seems, in a continuous line from the banks of the Inn at Halle to those of the Enns in Austria. They are worked with great industry at different places.

Vegetation covers the greater part of the Alps. The larger valleys, none of which rise to 5,000 ft. above the sea, contain some tracts fit for agricultural purposes. They consist generally of uneven ground, extending on both sides a river. Behind it the mountains rise with a steep and commonly inaccessible ascent; which is covered with high trees: in the lower parts with oak, beech, elm, &c.; and in the upper region with fir, pine, larch, and the *Pinus Cembra*. Near the region of the pastures the trees dwindle down to low bushes. The pasture region, which occupies the next place, offers commonly a plain strongly inclined towards the valley, and is in general of considerable width. It is called in Switzerland *the Alps*. Here are found the huts or *sennes* of the herdsmen, inhabited only in summer, when the cattle are brought to these pastures. The upper part of the range is occupied by bare rocks, many of which rise above the line of congelation. This line occurs in the Alps between 8,000 and 9,000 ft. above the sea, and is lower on the N. than on the S. declivity.

Corn is grown on the N. side, not above 3,800 or 4,000 ft.; but on the S. it succeeds 1,500 ft. higher. The highest place at which barley ripens is Skala in the Engadin, 5,950 ft. above the sea. High trees are found in some places not above 4,500 ft., at others they ascend the declivities even to 7,000 ft. and more. Oak is found up to 4,000 ft., elm to 4,300, ash somewhat higher, beech to 5,000, fir to 5,300, mountain ash to 5,600, birch to 5,700, pines to 6,500, and larch to 7,000 or 7,300 ft. above the sea. Where the high trees begin to cease, the mountains are covered with bushes and the Alpine rose (*Rhododendron ferrugineum* and *hirsutum*).

The inhabitants of those ranges of the Alps which extend from the Mediterranean to the lake of Geneva are mostly of French origin, speaking a corrupt dialect of the French language. In the remainder of the mountain system the population is of Teutonic origin, only a few of the more open valleys terminating in the plain of Lombardy, speaking a dialect of the Italian language. The most E. extremity of the whole range, between the rivers Muhr and Save and the Julian Alps, is partly inhabited by a population of Slavonian origin, called the Wendes or Slovenzi. As the tracts of land fit for agricultural purposes are of comparatively small extent, the rearing of cattle and the making of butter and cheese constitute the principal employment. Many of the inhabitants migrate, at certain seasons, to the neighbouring countries in search of work. Some of them return annually, some after the lapse of some years. Besides the dairy, the mines give employment to a number of inhabitants; but this is only the case in the E. Alps of Styria, Carinthia, and Carniola, where rich mines of iron and extensive layers of salt are found. In these districts, also, are some manufactures of hardware and iron utensils. In the other parts of the range manufacturing industry is almost unknown; but near its outskirts on the N. side it has in later times become so diffused, that it hardly yields to any other part of the continent. The inhabitants of the mountains are distinguished by their love of liberty, their opposition to every kind of oppression, the frankness of their behaviour, their adherence to their old manners and dress, and their fidelity and honesty.

The Alps did not become well known till the reign of Augustus. That emperor finally

subdued the numerous and savage clans which inhabited the Alpine valleys, and cleared the passes of the banditti by which they were infested. He improved the old roads, constructed new ones, and succeeded in establishing free and easy communications across the mountains. The chain was then divided into separate portions, which have preserved their boundaries and denominations nearly to the present day.

See for information on the Alps, *Saussure, Voyage dans les Alpes*, 1779; *König's Reise in den Alpen*, 1814; *Wyss, Reise in das Berner Oberland*, 1816 and 1817; *Reise in wenig besuchte Alpengegenden von Kirzel Escher*, 1829; *Bemerkungen of einer Alpenreise über den Susten, Gotthard, Bernardin, Oberalp, Turka und Grimsel von Kastenhofer*, 1830. Travellers will find much useful and interesting information with respect to the Alps in *Ebel's Manuel du Voyageur en Suisse*, 1817.

ALPS (LOWER), *Basses Alpes*, a frontier dep. in the S. E. of France, having E. the Sardinian states, S. the dep. of the Var, W. dep. Vaucluse, and N. the depts. Drome and Hautes Alpes. Area, 682,643 hectares Pop. 159,045. This dep. derives its name from its being principally occupied by the W. slope of the Alps. Its aspect is highly varied and picturesque: presenting a succession of high rugged mountains, crowned with eternal snow, vast sombre forests, and low, rich, smiling valleys. The mountains, hills, &c., occupy about half the surface, and the woods about a sixth part; the extent of cultivated land is estimated at 155,000 hect. of meadows at nearly 18,000, and vineyards at 14,000 do. The principal river is that of the Durance, which traverses the dep. from N. to S.; it is also in part intersected, and in part bounded by the Verdon, and is watered by many mountain streams, the inundations of which often occasion great mischief. The climate varies, of course, with the elevation and exposure of the soil. There is a good deal of spade husbandry; and mules and asses are used in preference to either horses or oxen. Produce of corn crops insufficient for the consumption. Potatoes extensively cultivated. Olive, fig, and mulberry trees are all cultivated in the lower and warmer districts, and dried and other fruits make a considerable article of export. The lower mountains afford excellent sheep pasture. They belong partly to individuals, and partly to communes; and besides the stationary sheep, or those that belong to the dep., about 400,000 head are annually brought from the adjoining depts. of the Var and the *Bouches du Rhone*, to be depastured for about 4 months in summer on the mountains referred to. They pay at the rate of from 1 fr. to 1 fr. 25 cent. per head; and both their size, and the quality of their flesh and wool, are said to be materially improved by the change. The shepherds never quit their charge either by night or by day. Besides the sheep belonging to the dep., the breed of which has been materially improved, it has a great number of goats; and the rearing of bees is also much attended to. There are mines, but not very productive, of iron, lead, copper, and coal. Manufactures have not made much progress; but there are several silk filatures and silk looms, with manufactures of cloth, hats, earthenware, tanneries, &c. Great numbers of the poorer classes leave their homes for a portion of the year, to seek employment in the neighbouring depts. It has two electoral colleges, which return 2 m. to the Ch. of Deputies; and had, in 1838, 527 electors. Public revenue in 1831, 2,628,917 fr. Principal towns Digne, Sisteron, Barcellonete, in the picturesque valley of the same name, Forcalquier, &c.

ALPS (UPPER), *Hautes Alpes*, a frontier dep. in the S. E. of France, on the N. side of the dep. of the *Basses Alpes*, and having on the E. the Sardinian States. Area, 553,264 hect. Pop. 131,162. This dep. differs in few respects from that just described, except that it is more mountainous and less fruitful. Some of the mountains rank, in fact, among the highest in the immense chain of which they form a part. Mont Pelioux, the most elevated, rises 14,120 ft. above the level of the sea, and Mont Olan 13,461 do. The *mean* elevation of the mountains may be taken at about 9,000 feet; and the elevation of the highest *cols* or passes from one valley to another sometimes exceeds 7,000 feet. There are several glaciers in the N. part of the dep. Agriculture similar to that of the Basses Alpes. Only 97,500 hect. of surface is cultivated; 77,000, hect. are occupied by woods and forests, and about 24,000 by meadows, the irrigation of which is an object of great importance. The valleys principally lie alongside the rivers Durance, Briuch, Drac, &c. Inhabitants poor and laborious; it is even said, that women are sometimes seen yoked, *avec des anes*, to the plough! *Greniers d'abondance* are established in different communes, which make loans of seed and necessaries to poor families. There are mines of iron, lead, &c. Manufactures principally confined to coarse cloth, linen, stockings, hats, &c., required for the use of the inhabitants. The cheese and butter of the Briançonnais are highly esteemed. Bread made of potatoes is extensively used. Families using rye bread commonly bake it only once a year; it keeps for 15 or 18 months; is hard, and has to be broken to pieces by a hatchet. Between 4,000 and 5,000 of the peasants leave the dep. every year in the beginning of October, and return early in June. It is estimated that at an average about a fifth part of those that emigrate never return, and that those who do, bring back with them about 200 fr. a piece; the emigrants principally take to the trades of pedlars, showmen, &c. It has 2 electoral colleges, which return 2 m. to the Ch. of Deputies; and had, in 1838, 412 electors. Public revenue, in 1831, 2,307,152 fr. Principal towns Gap, Briançon, and Embrun. (For this and the prev. dep. see *Hugo*, arts. *Basses et Hautes Alpes*; the authorities there referred to; and the *French Official Tables*.)

ALRESFORD, a market town and two parishes of England; co. Hants, hund. Alton. The town is situated on the Itchin, at no great distance from its source, 57½ m. S. W. by W. London. It was formerly a place of much more importance than at present, and sent a member to the H. of C. Pop. of town and parishes, 1896.

ALSACE, a ci-devant prov. of France, forming the depts. of the Upper and Lower Rhine.

ALSEN, a Danish island in the Baltic, separated by a very narrow channel from Sleswick, and by the Little Belt from Funen. Shape irregular, being about 20 m. long, and from 3 to 8 in breadth. Pop. 15,200. Surface pleasantly diversified with wood and open fields. All the country houses are surrounded by fruit-trees, and large quantities of fruit are annually exported. Principal towns Norborg and Sonderborg. Christian II., deposed by the states of Denmark in 1523, was confined for nearly 17 years in a tower (since demolished) in the castle of Sonderborg.

ALSFELD, a walled town of Hesse Darmstadt, cap. bailiwick, on its N. frontier on the Schwalm. Pop. 3,019. It has manufactures of rateens, flannels, and linen, with considerable bleach-fields and print-works.

ALSLEBEN, a walled town and castle of Prussian Saxony, reg. Merseburg, on the Saale. Pop. 1,700. The castle is the property of the Duke of Anhalt Dessau, to whom the town belongs.

ALTAI MOUNTAINS (THE), a very extensive mountain range in Asia, extending from the eastern banks of the Irtish, a tributary of the Oby (80° E. long.), to the shores of the Pacific, at the S. extremity of the Sea of Okhotzk, opposite the island of Tarakai (142° E. long.). Its length, therefore, is little short of 2,500 m. The several chains which compose this mountain system are chiefly found between 48° and 52° N. lat., but some detached ridges advance to 45° and 57° N. lat. The breadth of the whole system is probably no where less than 350 m., and at some places it widens to 700 m. and upwards. It is, however, not possible to determine it with any degree of exactness, since only the N. declivities of the range have been visited by travellers, the S. declivities lying within the territories of the Chinese empire being inaccessible to Europeans.

The most westerly portion of the system, between the river Irtish and the river Tshulyshman, the upper branch of the Oby, is properly called the Altai Mountains, which name has been afterwards used to indicate the whole system. This portion bears also the name of the Ore Altai, because it contains numerous veins of the precious metals. It consists of several ridges, which mostly run W.N.W. and E.S.E. These ridges advance their W. extremities close to the banks of the Irtish, where they are 500 or 600 ft. high, but at a distance of about 15 or 20 miles from the river they attain from 3,000 to 5,000 ft., which elevation may be considered as the mean height of the greatest part of the ranges; only where they approach the lake Teletzkoi and the river Tshulyshman they rise still higher, even to 10,000 ft., and this part is always covered with snow. It is called Altai Bielhi, and is, so far as is known, the highest portion of the system.

Between the Tshulyshman and the great lake of Baikal, the mountains appear to form two great chains, running E. and W.; of which the S., which falls within the Chinese empire, and is called the Tangnu Oola, or Tangnu Shan, seems to be the principal range. It is divided from the N. chain by a long valley, in which run the Kemtshick from W. to E., and the Ta-kem from E to W.; after their junction the river is called Yenesei, and breaks through the N. chain. The portion of the latter situated W. of the Yenesei river is called the Sayanskian range, but the E. chain bears the name of Ergik Targak Taiga. Both chains unite about 100° E. long., at a considerable distance W. of the lake Baikal, at the sources of the Selenga, the most considerable

river which empties itself into the lake. The united chain is here called Goorbi Uhden Dsong, which name it preserves to 108° E. long., running in general E. On the E. side of the meridian of 108° E. long. and the river Selenga, the direction of the mountain chains composing the Altai system is changed; they run N. E., and form a very extensive mountain region E. of the lake Baikal. This region is called the Baikalian or Daurian Mountains; but the highest chain belonging to it, and lying within the Chinese empire, bears the name of the Great Khing-Khan. The most easterly portion of the Altai Mountains, between 122° and 142° E. long., lies again nearly due W. and E.; but here it advances to 56° N. lat., and is called by the Russians Yablonoi Kherbet, and by the Chinese Khing-Khan Tugurik.

The *Aldan* Mountains may be considered as a continuation of this latter chain. They separate from it at the sources of the river Aldan, a tributary of the Lena, enclose the valley in which it runs on either side, and continue on the E. side along the shores of the Sea of Okhotsk up to the bay of Pershina, the most northerly corner of that sea. From this bay one branch runs N.E., and terminates at Behring's Straits with the East Cape and the Cape of Tshukotshoi-Noss. Another branch turns abruptly S., and traverses the peninsula of Kamtshatka, terminating at Cape Lopatka. The highest summit of the Aldan Mountains, adjacent to the road connecting Yakutsk with Okhotsk, was found by Erman to be 4,055 ft. above the sea. But the chain traversing the peninsula of Kamtshatka contains several volcanoes, some of which rise to a great elevation. Erman measured three of them. The highest peak of the volcano of Shivélutsk (56° 40′ 32″ N. lat.) rises to 10,591 ft., the volcano of Kliutshevsk (56° 4′ N. lat.) 15,825 ft., and that of Tolbatshinsk 8,346 feet above the sea. If the Aldan Mountains and the range traversing Kamtshatka be considered as a continuation of the Altai chain, more than 1,500 miles must be added to its length.

The country extending N. of the Altai Mountains to the shores of the Polar Sea is one continuous plain, sometimes of an undulating surface, but mostly exhibiting immense flat lowlands, called, as others of a similar description, *steppes*. This plain, at the foot of the range, is hardly more than 500 ft. above the sea, to which it gradually slopes down. On the other hand, the countries lying S. of the Altai Mountains constitute a portion of the great elevated table-land of Upper Asia. Their surface is much more uneven, being traversed in many parts by ridges of rocks and hills, whilst others present themselves as immense plains covered with sand. The mean elevation of these countries seems to be from 2,000 to 3,000 feet above the level of the sea.

Roads.—Two roads lead over the Altai, and one over the Aldan Mountains. That most to the W. is the great road of Kiachta, by which the commerce between Russia and China is carried on. It begins at Irkutzk, the capital of East Siberia, situated on the Lower Angara, not far from the point where it issues from the lake Baikal. From this town, which is 1,440 ft. above the sea level, goods are carried in summer by water, and in winter over the ice of the lake, to Udinsk, and hence to Seleginsk, where they are landed, and transported to Kiachta, the Russian commercial establishment, and exchanged with the goods brought by the Chinese to Maimatshin. The Chinese bring the goods to Urga, the provincial capital of the adjacent country; and in advancing farther S. they attain the highest point of the range S. of Urga, on the mountain Dshirgalanta, S. of the river Tola, where it rises to 5,055 feet above the sea. They afterwards descend to the table-land, and traverse the great desert of Cobi, or rather Gobi, sometimes called Shamo. The other great road leads from Udinsk, on the river Selenga, to the mining district of Nertshinsk. From Udinsk it runs E. in the valley of the river Uda, a tributary of the Selenga, somewhat more than 250 m.; then it traverses the highest part of the range near 112° E. long., and descends into the valley of the Ingoda, in which it continues to Gorodisktshenk, where the Ingoda unites with the Onon, and forms the Shilka river. On the banks of the last-mentioned river it continues to Nertchinsk. The great road over the Aldan Mountains connects Yakutsk with Okhotzk. Yakutsk is only 287 feet above the level of the Polar Sea. Between this place and the river Aldan the road rises gradually, and attains at Nokhinsk on the heights forming the W. bank of the Aldan river 751 feet. In the valley of the Aldan it descends to 424 feet above the sea. E. of this river the road rises to 1,531 feet at Garnastakh, and in the mountain pass six miles W. from Khuinia to 2,619. It continues nearly on this level for several miles, and then descends with a rather steep declivity towards the Sea of Okhotsk. This latter place is only 3 feet above the sea.

Mines.—The Altai Mountains are rich in metals, especially in gold, silver, copper, and lead. The mines from which these metals are extracted have been worked on a large scale at some unknown period, and by an unknown nation. In the middle of last century the Russians, following the traces of the ancient mines, began to work them; but only at the W. extremity of the mountain system, between the Irtish and the Oby, and again on the banks of the Shilka river, east of the lake Baikal. The first mines are comprised in the mining district of Barnaul, and the second in that of Nertchinsk.

Latterly, however, the mines have been comparatively abandoned, and the attention of all parties is now directed to the washing of the *detritus*, or sand, earth, and gravel, found in the vallies and in the beds of the various affluents of the Irtish, Oby, Yenissei, and other great rivers that have their sources in the N. slope of the mountains. These efforts have had the most extraordinary success; and the country of which Barnaul on the Oby (in about lat. 48° N., long. 83° E.), and Krasnojarsk on the Yenissei (lat. 56° 1′ N., long. 92° 57′ 15″ E.) are the capitals, is at present (1850) by far the most important and valuable of the auriferous regions of the Old World. The district, of which Nertchinsk, to the E. of Lake Baikal, is the capital, is also, though in a very inferior degree, productive of gold. We subjoin an account of the produce of the Siberian Gold-Washings since 1837.

	Poods.		Pood.
1837 - - -	132·97	1842 - - -	615·93
1838 - - -	193·16	1843 - - -	981·00
1839 - - -	183·20	1844 - - -	1,031·52
1840 - - -	249·41	1845 - - -	1,043·80
1841 - - -	350·39	1846 - - -	1,362·88

The pood is equal to 43·87 lbs. Troy. Hence the quantity raised in 1846 was equal to 59,801 lbs. Troy, which, at 46*l.* 14*s.* 6*d.* the lb., makes the sum of 2,794,196*l.* 14*s.* 6*d.* And this being the amount officially reported, or on which duty was paid, 1-5th part may, probably, be added to it for that which was smuggled, making the total value of the gold raised in 1846, 3,353,036*l.* And the produce has, we understand, progressively increased in the following years. (*See* RUSSIA.) By far the greater portion of the gold is raised by private adventurers.

As the existing detritus must be enriched by all the gold brought down from the mountains during a long course of ages, the probability is that the washings will in the end become less productive. But such is the extent of the auriferous region that it has hitherto been only imperfectly explored, much less exhausted. Silver, copper, and other valuable products, are also found in this region. They are, however, of trivial importance, as compared with the supplies of gold.

The other principal sources of the supply of gold in Russia are the mines and washings in the Oural. The entire produce of the different sources in 1847 amounted to 1,780·943 poods.

At Kolywano Woskresensk are extensive polishing works, where granite, porphyry, jasper, agate, and marble are worked into tables, vases, chimney-pieces, basins, columns, &c. The material is brought from the river Korgon, and the workmen are employed at the expense of government.

ALTAMURA, a town of Naples, prov. Tera di Bari, at the foot of the Apennines, 29 m. S. W. Bari. Pop. 16,000. It is surrounded by walls, has a magnificent cathedral founded by Frederic II., an hospital and a lyceum, and is one of the handsomest best built towns in the province. Having taken part with the republican party in 1799, it was taken by the royalists, and given up to military execution; but it has since recovered its former prosperity. Altamura is supposed to be founded on or near the site of the ancient *Lupazia*. This opinion is strengthened by the number of Grecian vases, of the most beautiful forms and workmanship, and other antiquities, that have been found in excavations in the town and its vicinity. The surrounding country is fertile, being especially distinguished by the excellence of its pastures.

ALTAVILLA, a town of Naples, prov. Principato Ultra, cap. cant, 7 m. N. Avellino. Pop. 2,600. This also is the name of a town in the prov. Principato Citra, S. Campagna. Pop. 2,400.

ALTDORF, a town of the grand duchy of Baden; on the great road from Bale to Frankfort. Pop. 1,200. It is the property of Baron Turkheim, who has here a fine castle, and a valuable botanical garden.

ALTDORF, a town of Bavaria, circ. Rezat, 13 m. S. E. Nuremberg. Pop. 2,000. All sorts of wooden toys are manufactured here, and are exported to all parts of Europe and to S. America. There are also considerable breweries. The surrounding country is beautiful and fertile.

ALTEA, a town of Spain, Valencia, near the sea, 30 m. N. E. Alicant. Pop. 4,800. It has glass-works; and, the contiguous territory produces cotton, wine, flax, silk, and honey.

ALTENA, a town of Prussian Westphalia, cap. circ. same name, on the Senne. Pop. 4,000, principally employed in wire-drawing and in the manufacture of needles, pins, thimbles, &c.

ALTENAU, a mining town of Hanover, prov. Grubenhagen, Hartz mountains, about 1,500 feet above the level

of the sea. Pop. 1,200. There are in the vicinity mines of silver, copper, and iron.

ALTENBERG, a town of the kingdom of Saxony in the Erzgebirge mountains, 22 m. S. Dresden. Pop. 1,400. It manufactures lace, the surrounding mountains abound in tin, and are covered with forests.

ALTENBRUCK, a town of Hanover, on the Werne, near where it falls into the æstuary of the Elbe, a little above Cuxhaven. Pop. 2,400. It has some trade in corn and cattle.

ALTENBURG, a principality in the duchy of Saxe Gotha, divided into two principal parts by the lordship of Gera, and possessing several detached portions in other states. Area, 495 sq. m. Pop. in 1832, 113,677. The W. part, watered by the Saale, is hilly and woody; while the E. part, watered by the Pleisse, is flat and fertile. The inhab. who are descendants of the Wendes, are industrious and are almost all Lutherans.

ALTENBURG, the cap. of the above principality, 24 m. S.S.E. Leipsic, near the Pleisse. Lat. 50° 50′ N., long. 22° 27′ E. Pop. 12,629. It is well built; has a gymnasium with a considerable library, a foundation for noble ladies, an orphan asylum, and a theatre; with manufactures of wool, tobacco, sealing-wax, gloves, and an extensive trade in wood, corn and cattle.

ALTENBURG, a town of Hungary, 29 m. S. S. E. Knoxburg, in an island of the Fritha, at the point where it unites with the right arm of the Danube. It has a gymnasium, and an old castle, now used as a corn magazine. It was burnt by the Turks in 1683.

ALTENKIRCHEN, a town of the Prussian States, prov. Rhine, cap. circ., on the Wied, 16 m. N. Coblentz. Pop. 1,150. It has some fabrics of linen and cotton, and a forge. The vicinity of this town, was, in 1796, the theatre of some obstinate conflicts between the French and Austrians; in one of which, on the 21st September, the brave General Marceau was killed.

> Brief, brave, and glorious was his young career;
> His mourners were two hosts, his friends and foes.—BYRON.

ALTENSTEIG, a town of Wirtemberg, circ. Black Forest, 5 m. W. N. W. Nagold. Pop. 1,700. It is built on the declivity of a steep hill, at the summit of which is an old castle.

ALTER-DO-CHAO, a town of Portugal, prov. Alentejo, on the Avis, 14 m. W. S. W. Portalagre. Pop. 2,000. It is surrounded by walls.

ALTKIRCH, a town of France, dep. Haut Rhin, cap. arrond., 34 m. S. Colmar. Pop. 3,028. It is situated on a hill, at the bottom of which is the Ill; has some tanneries, and a cattle fair once a month.

ALTOMONTE, a town of Naples, prov. Calabria Citra, 24 m. N. N. W. Cossenza. Pop. 2,100. It is situated on an eminence, has good air, with mines of iron and silver, and a brine spring in the vicinity.

ALTON, a town of the U. States, Illinois, on the Missisippi, a little above its confluence with the Missouri. This town was founded so late as 1818, and in 1832 it contained only two or three dozen houses. But the public attention having been then directed to its advantageous situation for commerce and navigation, it has since advanced with extraordinary rapidity; and at present (1838) it has probably from 3,500 to 4,000 inhab.! There can be little doubt that it is destined to become an important commercial emporium. (*Illinois in* 1837, p. 113.)

ALTON, a m. town and parish of England, co. Hants, hund. Alton, on the Wye, 47 m. S. W. by S. London. It is a neat town, with manufactures of druggets and worsteds. Pop. 2,742.

ALTONA, or ALTENA, a considerable city of Denmark, in Holstein, on the Elbe, 2 m. W. Hamburg. Pop. 26,400. It is well built, is a free port, and enjoys various privileges: it having been a favourite object with the Danish government to attract to it some portion of the wealth and commerce of Hamburg. But in this they have had but little success. Altona has, however, a good deal of trade; ship-building is also carried on to a considerable extent; and there are manufactures of cotton, silk, leather articles, &c., with sugar-houses, breweries, and distilleries. There is here a superior academy or college, a public library, a mint, an orphan-house, with numerous churches, &c. The inhabitants are mostly Lutherans. Altona was burned by the Swedes in 1713, under circumstances of great barbarity.

ALTORF, or ALTDORF, a town of Switzerland, cap. cant. Uri, delightfully situated in a narrow valley surrounded by lofty mountains, near the S. E. extremity of the lake of Lucerne, at the N. extremity of the pass over Mount St. Gothard, lat. 46° 55′ 10″ N., long. 8° 37′ 47″ E. Pop. circa 1700. It suffered severely from a fire in 1799, but has since been rebuilt on an improved plan. It has a handsome parish church, a town-house, and a Capuchin convent, with a library attached. Altorf is intimately associated with the true or fabulous history of William Tell. He is said to have been born in Burglen, a village close by; and an old tower, in the town of Altorf, covered with paintings in honour of Tell, is said to mark the spot whence he shot the apple off his son's head. (*Ebel, Manuel de Voyageur en Suisse; Inglis's Switzerland*, p. 105, &c.)

ALTRINGHAM, a town of England, co. Chester, 8 m. Manchester. Pop. 2,708. It is a neat thriving town, with factories for the spinning of cotton, linen yarn, &c.

ALTSOHL, a free town of Hungary, at the confluence of the Szlatina with the Gran, lat. 48° 34′ 55″ N., long. 19° 7′ 20″ E. Pop. 2,000. It is old, and is entirely occupied by Slavonians. On a hill in the neighbourhood are the ruins of a castle, said to have been a favourite residence of Mathias I.

ALTSTETTEN, a town of Switzerland, cant. St. Gall, 9 m. S. from the embouchure of the Rhine in the Lake of Constance. Pop. 1,800. It is situated on the declivity of a mountain in a beautiful country, surrounded with corn-fields and vineyards; has a fine church which serves both for Catholics and Protestants, a public library, a muslin manufactory, and three fairs annually.

ALTURA, a town of Spain, Valencia, 3 m. N. W. Segorbe. Pop. 3,000. It has distilleries, potteries, and a paper-mill. The country round produces a great deal of wine.

ALVA, a village and parish of Scotland, co. Stirling. 7 m. N. E. Stirling. Pop 1,300. The Devon iron company has considerable works here.

ALVARADO, a small town of Mexico, near the mouth of the river of the same name, 40 m. S. S. E. Vera Cruz, lat. 18° 34′ 18″ N., long. 65° 39′ 15″ W. The bar at the mouth of the river, about 1½ m. below the town, renders it inaccessible for vessels drawing above 10 or 12 feet water; large ships being in consequence obliged to anchor in the roads, exposed to all the fury of the N. winds, which often blow with much violence. During the period that the castle of St. Juan D'Ulloa continued in possession of the Spaniards, after Vera Cruz had thrown off their yoke, the trade of the latter was principally carried on through Alvarado; but upon the reduction of the castle by the patriots, it speedily reverted to its old channel.

ALVINCZ, a town of Transylvania, on the Maros, opposite Roberick, 7 m. S. W. Karlsburg. Pop. 3,300, almost all Magyars and Bulgarians.

ALVITO, a town of Naples, prov. Terra-di-Lavore, 6½ m. S. E. Sora. Pop. 2,300. It is built on the declivity of a hill, in a healthy situation; has an hospital, and several *monts-de-piété* for the marriage of young girls.

ALWUR, a large town of Hindostan, prov. Delhi, cap. dominions of the Macherry Raja, 90 m. S. S. W. Delhi, lat. 27° 44′ N., long. 76° 32′ E. It is situated at the base of a steep hill, and is strongly fortified. On the summit of the hill, about 1200 feet high, is a fortress containing several tanks.

ALYTH, a town and parish of Scotland, co. Perth, 12 m. W. Forfar. Pop. 2,888. The soil is fertile, and the town, which is finely situated, carries on some branches of the linen manufacture.

ALZEY, a walled town of Hesse Darmstadt, on the Selz, 18 m. S. S. W. Mayence. Pop. 3,200. It has manufactures of linen and stockings, and tanneries.

ALZIRA. See ALCIRA.

ALZONNE, a town of France, dep. Aude, at the confluence of the Lampy and the Fresquel. near the canal of Languedoc, 12 miles W. N. W. Carcassonne. Pop. 1,644. It has manufactures of fine cloth, caps, &c.

AMAK, a small Danish island, on which a part of Copenhagen is built. It is principally laid out in gardens and pleasure-grounds.

AMALPHI, a city and sea-port of Naples, 9 m. W. S. W. Salerno. Pop. 3,500.* This city attained during the early part of the middle ages to great distinction as an independent maritime republic; and was the first Italian state that traded with Egypt and the shores of the Mediterranean. In the zenith of her prosperity, in the 11th century, Amalphi is said to have contained 50,000 citizens; and her wealth, and the skill and intrepidity of her mariners were then unequalled. But after being reduced by the Normans, she was taken and sacked by the Pisans, in 1130; and from this period she rapidly declined, and not long after fell into obscurity. A unique copy of Justinian's Pandects, said to have been found by the Pisans among the spoils of this city, was believed, though, as Savigny has shown, without much foundation, to have led to the revival of the study of the civil law; and Amalphi is also famous for having been the birth-place of Flavio Gioja, supposed by some to have been the inventor of the mariner's compass, but who it is certain was only its improver. (*Gibbon's Decline and Fall*, cap. 56. *Rampoldi, Corografia dell' Italia*.)

AMAND-LES-EAUX (ST.), a town of France, dep.

* Rampoldi says 11,000; but we have no doubt that this is very far beyond the mark. Most authors set down the population at from 2,500 to 3,500; and the amount given to it by Rampoldi seems quite inconsistent with the accounts as to the decay of the place.

du Nord, cap. cant., on the Scarpe, 7½ m. N. W. Valenciennes. Pop. 8,966. This town is celebrated for its mineral waters, whence its name; it is very ancient, has a communal college, and the ruins of a celebrated abbey, destroyed at the revolution. It is situated in a rich well cultivated country, where the flax is produced (*lin ramé*) of which the finest laces are made. These are manufactured in the town, with woollen stockings, cotton coverlets, soap, linseed oil, chiccory, &c. It has also distilleries, tanneries, and a great fair held on the 31st May.

AMAND-MONT-ROND (ST.), a town of France, dep. Cher, cap. arond., at the confluence of the Marmande with the Cher, and at one of the extremities of the canal, joining the Cher and Loire. Pop. 7,382. It is well built, has a *tribunal de première instance*, a commercial college, and a theatre. It manufactures wooden clogs and leather; and there are forges, cannon founderies, and porcelain manufactures in the neighbourhood. It is the most commercial town of the dep.; the exports consist principally of the produce of the surrounding country, viz., timber, staves, iron, wine, chesnuts, cattle, leather, hemp, wool, goatskins, &c.

AMAND (ST.), the name of several small villages in different parts of France.

AMANTEA, a sea-port town of Naples, prov. Calabria Ultra, cap. cant., 14 m. S.W. Cosenza. Pop. 7,000. It is encircled by walls; has an old castle, 4 parish churches, some convents, and a school for *belles-lettres*. There are hot springs in its vicinity; and its territory has the appearance of a continued olive wood. It is supposed to occupy the site of the ancient *Nepezia*. It was taken by the French in 1806, after an obstinate defence.

AMARANTE, an ancient town of Portugal, prov. Minho, on the Tamega, 35 miles N. E. Oporto. Pop. 5,000. It is situated in an agreeable valley, is well built, has a fine bridge, an hospital, an hospicio, two churches, and a Latin school.

AMARUPURA (vulg. *Ummerapura*), a city, and formerly the cap. of the Birman empire, on a peninsula between the Irawadi on the one hand, and a deep and extensive lake on the other, 6 m. N.E. Ava, lat. 21° 55′ N., long. 96° 7′ E. In 1800, the pop. was estimated by Captain Cox at 175,000; but the seat of government having been transferred to Ava in 1819, it has since rapidly declined, and is now an inconsiderable place. It has a fort, which the Birmese look upon as impregnable; but which a well-served battery would breach in a few hours. The circumstance of most of the houses consisting of wood and bamboos, accounts for the rapid decay of the place since 1819. Near the city is a temple, much frequented by devotees, containing the celebrated bronze statue of Guadma, brought from Arracan in 1784. (*Hamilton's E. I. Gazetteer; Crawford's Ava*, p. 274.)

AMASIEH (an. *Amasia*), an ancient city of Asiatic Turkey, cap. sanjiack of same name, in the E. part of Natolia, on the Jekil Ermak, lat. 40° 33′ N., long. 36° 26′ E. The situation is peculiar, being difficult of access, and having a citadel on a sharp-pointed rock, connected with the hills whereon the town stands. Outside the walls are some curious caverns; and in the upper part of the town, are to be seen the ruins of a temple, a fountain, and aqueducts, mentioned by Strabo. Most of the houses are of wood, but many are of stone, and all are covered with tiles. Streets narrow and filthy. The mosque of Sultan Bayazid is a fine edifice, with two lofty minarets of hewn stone. Great quantities of silk and wine are produced in the surrounding country, and some branches of the silk manufacture are carried on in the town, which has a considerable trade. There is a great discrepancy in the accounts of the population. According to Fontanier, it has 10,000 houses; whence the population might be estimated at 50,000 or 60,000; but others do not estimate it nearly so high. Strabo, the most celebrated geographer of antiquity, belonged to Amasia, and has left a very minute description of this his native city.

AMASREH, a sea-port town of Asiatic Turkey, Natolia, on the Black Sea, lat. 41° 45′ 27″ N., long. 32° 21′ E. It is built on the declivity of a hill, on a peninsula between two ports; but its proper roadstead is on the E. side of the isthmus, at a short distance from land, in 3 or 4 fathoms. Its commerce is inconsiderable. There are in the town the ruins of a temple of Neptune, and some other antiquities.

AMATRICE, a town of Naples, prov. Abruzzo Ultra II., cap. cant., on a pleasant hill, near the source of the Tronto, 22 m. N. Aquila. Pop. 5,000. It has 5 parish churches, 2 *monts-de-piété*, a school of *belles-lettres*, and a manufacture of counterpanes.

AMAXICHI, a sea-port town, cap. Santa Maura, one of the Ionian islands, near its N. E. extremity, on a bay of the narrow strait separating the island from the opposite coast of Albania, lat. (castle) 38° 50′ 15″ N., long. 20° 43′ E. Pop. 6,000? The access to the town by sea is defended on the N. by the strong castle of Santa Maura, dist. about 1½ m., and on the S. by Fort Alexander, on the narrowest part of the strait. The town is meanly built. Owing, probably, to the prevalence of earthquakes, most part of the houses are of wood, and only one story high; but those in the principal street are somewhat superior. It is the residence of the governor, and of a Greek bishop. Extensive salt marshes, or rather lagoons, lie between the town and the castle of Santa Maura, the communication with the latter being kept up by a causeway supported on low arches. The harbour, though improved by the construction of an extensive mole, is fit only for small craft. In summer, the town, owing to the neighbouring marshes, is unhealthy.

AMAZON, MARANON, or ORELLANA, the principal river of S. America, and perhaps the largest in the world. It is formed by the united waters of the Tunguragua and Ucayale; it being doubtful which of these should be considered as the main stream, though the precedence has generally been given to the first. The Tunguragua takes its rise from the lake of Llauricocha, in Peru, in 10° 30′ S. lat., within 60 m. of the Pacific Ocean, while the Ucayale is formed by the junction of the Apurimac and Paro, the source of the former being near Arequipa, in about the 16th deg. of S. lat. Both rivers follow at first a northerly course, inclining to the W., the Tunguragua till it reaches Jaen, in about 5½° S. lat. and 78° W. long., and the Ucayale till it unites with the other at St. Miguel Yarrupa, in about 4½° S. lat., and 72½° W. long. The course of the river is thence generally from W. to E. till it falls into the Atlantic, almost under the equator, in about 51° W. long. Taking the Apurimac for its source, and following its windings, its course may be stated at above 4,700 m. It is studded with innumerable islands, many of which are from 10 to 15 m. in circ., and some much more. Its mouth, which is 180 m. in width, has the large island of Caviana in its centre, and marking its extreme limit. The rise and fall of the tide is distinctly felt at Obidos, 400 m. inland. At its mouth, two days before and after full moon, the phenomenon of the *bore* occurs in a very formidable shape; the water from the ocean rushing into the river, with a prodigious force and noise, in two, three, and sometimes four successive waves, each presenting a perpendicular front, from 10 to 15 feet in height! No small vessel can encounter it without certain destruction.

Of the rivers which fall into the Amazon, after the junction of its two great branches, from the N., those most important are, the Napo, Putumayo, Yapura, and Rio Negro, the latter having a course of from 1,400 to 1,500 m. To the S the principal tributaries are the Yavari, Yutay or Yotan, Yurua, Madeira, Topajos, and Xingu. Of these the Madeira is by far the largest, and would any where, except in America, be reckoned a river of the first magnitude. Its course may be estimated at about 1800 m.

The Amazon, and its tributaries, afford perhaps the greatest extent of inland navigation of any river system in the world. Its amount may be moderately estimated at from 40,000 to 50,000 m. The Amazon itself is navigable to the E. part of the Andes, 2,000 m. in a direct line from the sea. The navigation to the Pongo de Manseriche, in about 76½° W. long., is not interrupted by a single cataract or rapid. Its channel is deep; and it may be navigated by vessels of almost any burden, up to the junction of its two great arms. During the swell in the rainy season the current is rapid; but at other times it may be stemmed not by steam only, but by the aid of the E. breeze which blows perenially against the current. At Jaen, in 78° W. long., the level of the stream is only 1,240 feet above that of its æstuary at Caviana, so that its descent is not at an average rate of a foot every 2 m.; and during the latter part of its course it is much less.

At present the vast and fertile country traversed by the Amazon, and its affluents, is nearly in a state of nature, being mostly covered with immense forests, affording cover to wild beasts, and all descriptions of reptiles. During the period of the inundation, a great extent of the low country, on both sides the river, is laid under water. There can, however, be little doubt that, at some future period, all its immense basis, comprising above 2,400,000 sq. m. will be occupied by civilised nations. The Amazon will then be one of the most important and valuable, as well as extensive channels of communication in the world.

A communication exists between the waters of the Amazon, and those of the Orinoco. In fact, Humboldt passed by water from the Rio Negro, the principal N. affluent of the former, into the Cassiquiari, an affluent of the latter, and thence into the main stream of the Orinoco.

The mouth of the Amazon was discovered in 1500, by Vincent Yanez Pinçon; but very little was known respecting the river, till 1539, when Francis D'Orellana, a Spanish adventurer, having embarked on the Rio Napo, one of its remote tributaries, and following the current, was carried down the stream to its embouchure. Orellana having reported that armed women were met with

on its banks, it thence obtained its popular name of Amazon, though it be still sometimes called Orellana, from its explorer. The origin of the term Maranon is not certainly known. According to Condamine, it is the name of a Spanish officer, who visited the river previously to Orellana; but this is very doubtful, and the more probable opinion seems to be, that it is derived from an Indian nation of that name, which had inhabited some part of its banks. The Amazon was first accurately described by M. de la Condamine, who having embarked upon it, in 1743, near Jaen, and followed its current to its mouth, gave an interesting account of the expedition, with a map of the river, in his *Voyage de la Rivière des Amazones*, Paris, 1745. See also *Humboldt's Travels; Journal of Geographical Society*, ii. p. 650.; *Encyc. Britannica*, art. *America*, &c.

AMBAZAC, a town of France, dep. Haute Vienne, cap. cant., 12 m. N. N. W. Limoges. Pop. 2,736

AMBEER, a town of Hindostan, the ancient cap. of the Jeypoor territory, 5 m. N. by E. Jeypoor, lat. 26° 57′ N., long. 75° 40′ E. The town, romantically situated on the margin of a lake, is now in ruins. In its vicinity is a fine old fortified palace, and a large castle. The former has a noble hall of audience, and many beautiful apartments, enjoying from their windows, balconies, &c., one of the most striking prospects that can be conceived. (*Heber*, ii. p. 416.)

AMBELAKIA, a town of Turkey in Europe, sanjiack Tricala, or Thessaly, on the W. declivity of Mount Ossa, near the Peneus, 15 m. N.N.E. Larissa. This place was distinguished, during the latter part of the last and the first part of the present century, by the industry of its inhabitants, and the skill and success with which they carried on the business of spinning and dyeing cotton yarn. The towns-people, who were wholly Greeks, formed a sort of independent community, and either defended themselves from the exaction of the Turks, or were neglected by the latter. At first individuals carried on business on their own account, on the principle of free competition; but thinking that their profits would be increased by carrying it on in common, they formed themselves into an association on a joint stock principle. For a while this succeeded perfectly well; but, in the end, the parties quarrelled among themselves, and the fruits of their industry were swallowed up in expensive and protracted litigation. At length the staple trade of the place was totally annihilated by the importation of cheaper yarn from England; the produce of our spinning mills having not merely superseded the hand-spun yarn of Ambelakia in foreign markets, but in those of Turkey itself. The town and surrounding country have since become comparatively poor and depopulated. In the acmé of its prosperity it might have 7,000 inhab. (*Urquhart's Spirit of the East*, ii. p. 14, &c.)

AMBERG, a town of Bavaria, circ. Regen, on the Vils, by which it is intersected, 31 m. N. N. W. Ratisbon. Pop. 8,000. It was formerly the capital of the Upper Palatinate; streets wide and clean; and though the houses be mostly of wood, it is pretty well built. It is encircled by a double wall, flanked with numerous towers. Principal public buildings the electoral, now royal castle, arsenal, mint, salt-warehouse, town-house, church of St. Martin, &c. It has a lyceum, a gymnasium, a seminary for the education of teachers, some well endowed hospitals, a convent for noble ladies, a public library, theatre, and house of correction. It is an entrepôt for salt, and has manufactures of fire-arms, tobacco, earthenware, &c. There are mines of coal, and iron, with iron-works, forges, &c., and the principal glass-works in Bavaria in its vicinity: its territory is also very productive of hops. It is the seat of a tribunal of appeal, a commissariat of police, a president and a chamber of finances.

AMBERIEU, a town of France, dep. Ain, cap. cant. Pop. 2,800.

AMBERT, a town of France, dep. Puy de Dome, cap. arrond., on the Dore, 36 m. S. E. Clermont. Pop. 8,016. The town is pretty well built; but the streets are narrow and crooked, and the houses, being principally constructed of granite, from the adjoining mountains, have a gloomy, dismal-looking appearance. Ambert, and the arrondissement of which it is the capital, are distinguished by their industry. The town is especially celebrated for its paper for printing and engraving, in the manufacture of which it employed, in 1834, 102 machines (*cuves*), each of which required the assistance of 10 persons, and consumed annually about 23,000 kilog. of rags, and produced 11,000 kilog of paper. Workmen employed in the paper trade, earn about 1 fr. 60 cent. a day, and women from 50 to 55 cent. A combination has existed among the work-people in this trade since the 15th century, and they are said sometimes to give the law to their masters. There are also in the town very extensive manufactures of ribands, lace, woollen cloths for the marines, called *étamines à pavillon*, serge, linens, pins, &c. The value of the linen annually produced in the arrondissement is reckoned at 900,000 fr.; 2,350 work-people are employed in the manufacture of lace, besides those in the riband and other trades. The trade of the town is very considerable. It is the principal market for the famous cheese *dites d'Auvergne*. (*Hugo, France Pittoresque*, tom. ii. p. 8.)

AMBLETEUSE, a small decayed sea-port town of France, dep. *Pas de Calais*, 6 m. N. Boulogne. Pop. 581. It was formerly a sea-port of considerable importance; and both Louis XIV. and Napoleon endeavoured, by improving its harbour, to regain for it some portion of its ancient consequence. But, owing to the accumulation of sand, their efforts have had no permanent influence, and the town is almost deserted. James II. landed here after his abdication of the English throne, in 1689.

AMBOISE, (an. *Ambacia*), a town and castle of France, dep. Indre et Loire, cap. cant., on the left bank of the Loire, 15 m. E. Tours. Pop. 4,695. The castle occupies the summit of a rock, about 90 feet in height. The town *singulièrement triste et laide*, lies principally between the bottom of the castle rock and the river; but it has suburbs on an island in the river, and on its right bank. The castle, which is of vast extent, was commenced under Hugh Capet, and finished under Charles VII.; it was a favourite residence of Louis XI., and in it Charles VIII. was born in 1470, and expired in 1498. It is also famous in French history as the birth-place of the conspiracy, *dite d'Amboise*, against the Guises, concerted in 1560. It suffered much during the religious wars, and was partly demolished during the revolutionary phrenzy. The remaining portion is now converted into a depôt for the flints for the use of the French army, brought from the quarry of Meusne, near St. Aignan. The views from its towers and battlements are superb.

A manufacture of files, graters, and cemented steel, established at Amboise in 1780, continues to flourish, and employed, in 1835, about 160 workmen. It consumes annually above 200,000 kilog. of fine steel, its products being estimated at 200,000 packets of files, *dites d'Allemagne*, 50,000 dozens do. after the English fashion, 2,000 packets do., *dites de Nuremberg*, and 6,000 *carreaux*. The manufacture is under the able direction of M. St. Bris. There is also in the town a manufacture of arms, with tanneries, &c. A handsome wooden bridge, with stone piers, erected in 1822, connects the town with its suburb on the opposite side of the river. (*Hugo, France Pittoresque*, ii. p. 104, &c.)

AMBOOR, a town of Hindostan, in the Carnatic, district S. Arcot, 108 m. W.S.W. Madras, lat. 12° 50′ N., long. 78° 46′ E. It is neat and regularly built; the inhab., who are industrious, prepare a considerable quantity of castor oil for exportation. To the left of the town is a lofty isolated mountain, that was formerly surmounted by an all but impregnable fort; but its upper works have been destroyed since it came into the possession of the British, and the tower is used as a place of confinement for malefactors.

AMBOYNA (*Ambun*, Malay), an island of the E. Archipelago, in its third or E. division (*Crawfurd*), belonging to the Dutch. It lies in 3° 40′ S. lat.; between 128° and 129° E. long. S. W. of Ceram, is 32 m. in length, and 10 in breadth; area 424 sq. m., pop. 45,000 (*Cannabich*, 1837). Its shape is irregular, being indented by a long bay (Binnen), which divides it into two very unequal portions, connected by a narrow isthmus. Surface mountainous. It is watered by numerous rivulets, and overgrown everywhere by trees and underwood, interspersed with clove plantations; its soil, a rich red loam, is of a darker colour in the vallies, and sometimes mixed with sand; climate healthy, the average heat of the year 82° Fah., the lowest temperature 72° F. The monsoons occur regularly, but their effects are quite the reverse of those experienced in Borneo, and the W. division of this Archipelago; the E. monsoon bringing rains, and tempests, and the W. dry weather. The Dutch appropriated this island to the culture of the clove, for the production of which it is especially calculated; and to secure to it a monopoly of this valuable product, barbarously compel the destruction of the trees in the other islands subject to their power. The clove (*gomode*, Tidor lang.) thrives best in a dark loamy soil, but not very near the sea, on hills, on sandy or hard clay soil, or on sedgy grounds, and requires much care in its culture. The plant resembles a large pear tree, from 20 to 40 feet in height. In the Moluccas it bears at 7 or 8 years, in Amboyna not till 10 or 12 years old; about one-third of the trees are infertile, the rest may continue to bear fruit for 70 years. The crops are gathered in Oct. and Nov., they are very unequal in different years, but the produce of each tree may average from 2 or 3 to 5lbs.; the total annual produce is said formerly to have been 650,000 lbs. (*Hamilton*.) Sago forms the chief nourishment of the inhabitants, and very superior indigo, but inferior coffee, are also grown. Sago trees are 7 years in arriving at full growth, and last

about 30; but they are generally cut down when about 30 years of age. When in full vigour, they yield from 42 to 46 lbs. of sago a year. The wild animals of Amboyna, are deer and wild hogs: there are no beasts of prey, but a multitude of birds and serpents. Buffaloes, cows, sheep, goats, and horses, were brought thither by the Portuguese, but cattle are rare. The inhabitants are of four distinct races, viz.:—1. Horaforas, the aborigines, who are in a savage state and live in the forests, whither they were driven by, 2. Malays, who compose the bulk of the population: 3. Chinese, who are the principal merchants: 4. Europeans, mostly Dutch. The Malays are indolent, effeminate, and fond of imitating the Dutch; they are expert fishers, in canoes from 10 to 20 feet long; in war they use *korokores*, 80 to 100 feet in length, and capable of containing 80 men. Their houses are of wood, roofed with palm-leaves, and are mostly of but one story, on account of the prevalence of earthquakes. The prevailing religion is Mohammedanism, introduced A.D. 1515; but some of the Amboynese are Christians, and bear Portuguese names. The government is dependent on that of Batavia; its seat is at Fort Victoria; the public revenues are derived from a monopoly of arrack, custom-house and port duties, taxes on merchandise, and licences to keep an inn, and kill pigs. The exports consist of cloves, and other natural produce; the imports chiefly opium, and a few European and Indian goods. (*Crawfurd, Indian Archipel.*, iii. pp. 495—503.; *Hamilton, E. I. Gazetteer.*)

History.—Amboyna was first discovered by the Portuguese in 1515. It was taken by the Dutch in 1607, and by the English in 1615. The latter, who were soon after expelled by the Dutch, retained a factory in the island, till 1622. The destruction of this establishment by the Dutch, and the cruelties inflicted on the unhappy persons found in it, afforded a theme for lengthened negotiations, and for much declamatory invective. At length, under the vigorous administration of Cromwell, the Dutch were compelled to make some compensation to the descendants of those who suffered in the "Amboyna massacre." In 1796, the island was captured by the British, who restored it at the peace of Amiens. They recaptured it 1810, and held it till 1814, when it reverted once more to the Dutch.

AMBOYNA. The principal town in the above island, and the second in importance belonging to the Dutch in the E. Archipelago, on the S. E. side of the bay of Binnen, near Fort Victoria, in 3° 40′ S. lat., and 128° 15′ E. long. Pop. 7,000. It is regularly built; the streets, though not paved, are broad, and intersected by many rivulets; the houses, excepting the town-house, which has two stories, are all of only one story, constructed of wood and roofed with palm leaves. A long esplanade, reaching as far as the fort, is bounded by a handsome range of houses, and a double row of nutmeg trees; there are 2 Christian churches, an hospital, a fine garden, and menagerie, and several good bazars and markets. Fort Victoria is an irregular hexagon, surrounded by a ditch, but as it is entirely commanded by two neighbouring heights, its best defence is in the difficulty of anchorage in the contiguous bay. (See *Hamilton, E. I. Gazetteer*, p. 26.; *Cannabich Lehrbuch*, p. 843.)

AMBRIERES, a town of France, dep. Mayenne, cap. cant., 7 m. N. Mayenne. Pop. 2,434.

AMBROIX (ST.), a town of France, dep. Gard, cap. cant., 11 m. N. N. E. Allais. Pop. 3,107. It manufactures coarse silk stockings, and has tanneries, and nail works.

AMELIA (an. *Ameria*), a city of the Papal States, deleg. Spoleto, 23 m. S.W. Spoleto. Pop. 5,000. It stands on a small hill, is the seat of a bishopric founded in 1344, and has a cathedral, 3 churches, and some convents.

Ameria was one of the most considerable and ancient cities of Umbria. The famous comedian, Sextus Roscius, was a native of Ameria, which is frequently referred to by Cicero in his speech in defence of Roscius. It is said to have been founded 1045 years B.C., and became a colony under Augustus. (*Cramer's An. Italy*, i. 273.)

AMELIA, an island on the N. E. coast of Florida, from which it is separated by a narrow channel, 40 m. N. St. Augustine, between St. Mary's and Nassau rivers. It is 20 m. in length by 2 in breadth, is fertile, and its chief town, Fernandina, has a good harbour.

AMERICA, or the New World of the W. hemisphere, one of the great divisions of the globe, surpassing all the others in magnitude, with the exception of Asia, to which, however, it is but little inferior. This vast continent stretches N. and S. a distance of above 9,000 m., or from about the 72d degree of N. lat. to Cape Horn, in about 56° S. lat. It is very irregularly shaped, being divided by the Gulph of Mexico and the Carribean Sea into the two enormous peninsulas of N. and S. America, united by the Isthmus of Darien, or Panama, not more than 28 m. across. Where broadest, N. America, excluding Greenland, is not less than 3,500 m. across, and S. America not less than 3,200 m. The estimates that have been formed of the area of America differ widely. Balbi supposes it to amount to 11,146,000 sq. m. of 60 m. to a deg., equal to 14,790,000 sq. Eng. m. of 69·15 to a deg. The following estimate, which is that given in the article *America*, in the new edition of the *Encyclopædia Britannica*, does not differ materially from Balbi's; and the ability with which the article referred to is written, renders its statements of the highest authority:—

	sq. Eng. m.
N. America - - -	7,400,000
S. America - - -	6,500,000
Islands - - - -	150,000
Greenland and the islands connected with it N. of Hudson's Straits	900,000
Total -	14,950,000

This vast continent lies between the Atlantic and Pacific oceans, the former separating it from Europe and Africa, and the latter from Asia and Australia. All the distinguishing features of the American continent seem to be formed on the most gigantic scale. The chain of the Andes, which runs from one end of S. America to the other, and is prolonged under different names through the whole extent of N. America, is, in point of length, unequalled by any mountain chain in the old world; and is far superior, in respect of altitude, to the Alps and every other mountain system with which we are acquainted, the Himmalaya only excepted. The plains, rivers, bays, lakes, cataracts, and forests of America are of unrivalled extent and grandeur. Her mineral riches seem also to be superior to those of every other continent; and she possesses every variety of climate, from the extreme heat of the torrid zone to the eternal winter of the arctic circle. It is singular, however, that while inanimate and vegetable nature are developed on so grand a scale in the new world, the animal kingdom should be comparatively deficient. The native American is probably inferior even to the negro. Of the lower animals, neither the elephant, camel, nor lion is found in America; and it was originally destitute of the horse, the ox, and the sheep, all of which were carried thither by Spanish, British, and other European settlers.

N. America is more indented than any other of the great divisions of the globe, with immense gulphs and arms of the sea. One of the principal of these, in the N. E. part of the continent, consists of what Balbi has not unaptly called the sea of the Esquimaux, from its coasts being every where occupied with tribes belonging to that peculiar race. It consists of two great divisions, Davis's Straits and Baffin's Bay, separating Greenland from the rest of the continent; and Hudson's Bay, lying more to the S. and W., but connected with the former by numerous channels, some of which have only been recently discovered. The navigation of these seas and inlets, even at the most favourable seasons, is extremely difficult, from their being constantly encumbered with ice; and it is only during a short period of the year that it can be attempted. The next great inlet of the sea on the American coast is the Gulph of St. Lawrence, so called from the great river of that name which falls into its S. W. extremity. Passing over the numerous inlets and noble bays on the coast of the United States, we come to the Gulph of Mexico and the Carribean Sea.

This vast mediterranean is separated from the Atlantic by the peninsula of Florida, and the Greater and Lesser Antilles, or the West Indian islands. The latter are, as it were, a continuation of Florida; and are, it is probable, the only remaining points of what was once a broad belt of land, which has been broken to pieces and partly submerged in some of those tremendous convulsions to which the earth has been subject. But, however this may be, this great inland sea is divided into two portions by the peninsula of Yucatan and Cape St. Antonio, at the W. extremity of the island of Cuba, which approach within a comparatively short distance of each other; that to the N. being called the Gulph of Mexico, and that to the S. the Carribean Sea, or the sea of the Antilles. The Isthmus of Panama is at the extreme S. limit of the latter, in about the 8th degree of N. latitude. It is believed that it would be by no means difficult to cut a canal across this isthmus, and consequently to unite the Atlantic and Pacific oceans. The Gulph of California, separating the peninsula of that name from the main land, is the most important inlet of the sea on the W. coast of North America.

S. America bears a striking resemblance in the form of its coasts to Africa. It is much more compact than N. America, and is comparatively little indented by arms of the sea. The great rivers, Amazon, La Plata, Para, Orinoco, &c., may, however, be looked upon as a species of inland seas; and are, in some respects, more serviceable than the latter. The W. coast of America, from the proximity of the Andes, has but few gulphs; and is, in great part, all but destitute of harbours. The S. extremity of S. America, or the country of Tierra del Fuego, is properly an archipelago, being separated from the continent by the narrow and winding strait of Magellan, or Magalhaens.

Mountains.—Humboldt has shown that all the high elevations of the New World belong to that great chain which, under different denominations, extends from one of its extremities to the other, along its western coast, over a space of no less than 10,000 m.! The American mountains may, however, be divided into *eight* systems, or principal groups, three of which belong to S., and three to N. America; and one each to the West Indian and Arctic archipelagos.

1st. Of these systems, that of the Andes, or Peruvian system, from the highest mountains being, with one exception, in the country known by the name of Peru, is the most gigantic. This vast chain of mountains commences at Cape Horn, in about the 56th deg. of S. lat., and following pretty closely the line of the W. coast of the continent, to which it forms as it were a huge bulwark, stretches N. to the Bay of Panama, in about the 9th deg. of N. lat. But at Popayan, in about 2½° N lat., the chain is divided into three great ridges, of which the most westerly takes the direction above mentioned, while that farthest to the E. follows a N. E. direction, terminating a little to the E. of lake Matacaybo. The name *cordillera*, sometimes given to the entire chain, belongs properly only to the highest ridge. In parts the chain consists of only one ridge, and in others of 2 or 3, enclosing very extensive Alpine valleys many thousand feet above the level of the sea. Next to the Himmalaya, the Andes has the highest elevation of any mountain system; its mean height may be taken at from 10,000 to 12,000 ft. Chimborazo, near Quito, 21,424 ft. above the sea, was formerly supposed to be its culminating point; but it is surpassed in altitude by Aconcagua, in the Chilian Andes, lat. 32½ S. long. 70° W., which certainly rises to above 23,300 ft., or to more than 7,500 ft. above the height of Mont Blanc. (*See* ANDES.) — 2d. The system of La Parime, or Guyana, embraces the mountains scattered over the immense island formed by the Orinoco, Cassiquiari, Rio Negro, and Amazon. It consists of an irregular group of mountains, separated from each other by plains, savannas, and immense forests. The Sierra de Parime may be regarded as its principal chain. The Peak of Duida, 8,280 ft. in height, is the culminating point of the chain and of the whole system. 3d. The Brazilian system, embracing the mountains that lie between the Amazon, Paraguay, and Rio de la Plata. The Sierra de Espinhazo is its most elevated chain. It traverses, under different denominations, the provinces of Bahia, Minas-Geraës, Rio de Janeiro, San Paulo, and the northern extremity of the province of San Pedro. Its culminating points are Itambe and the Sierra da Piedade, nearly 6,000 ft. high, in the province of Minas-Geraës.—4th. In N. America, the principal mountain system is that of the Mexican Alps, and Rocky Mountains, which may be regarded as a continuation of the Andes. In Mexico, it is divided into three distinct ridges; within which, between the parallels of 19° and 24° N. lat., are immense plateaus elevated to the height of between 6,000 and 9,000 ft. The central cordillera of Mexico stretches N. 10° W. from the 25th to the 38th deg. lat., separating the waters of the Rio del Norte, flowing S. E. from those of the Colorado, flowing S. W. The highest peaks in the ridge in Mexico are the volcanoes of Pocatepetl, 17,717 ft., and Orizaba, 17,374 ft. From about the 38th deg. the ridge, which then begins to be called the Rocky Mountains, stretches N. 28° W., till it terminates near the mouth of the Mackenzie River, on the Arctic Sea, in about the 69th deg. of lat. and 138th deg. of W. long. Some peaks in this chain, between 52° and 53°, are said to be nearly 16,000 ft. above the level of the sea; and others between 37° and 39°, have been ascertained to be from 10,000 to 12,000 ft. in height. We have no accurate information respecting the height of the passes of the Rocky Mountains, nor of the altitude of their base above the sea; but on their E. side is a very extensive tract, dry, sandy, and almost a desert. 5th. Parallel to the Rocky Mountains, and at no great distance from the sea, a chain of mountains runs N. from the peninsula of California, till it is lost in Russian America. This chain, which has been called by Humboldt the Californian Maritime Alps, increases in altitude as it gets further N. Mount Hood, near the 45th deg., on the S. side of the Columbia or Oregon river, is said to be about 16,000 ft. high; and Mount St. Helen's, about a degree further N. on the N. side of the Columbia, has an elevation of 14,000 ft. Mount Fairweather, in the 59th deg., is also 14,000 ft. high, and Mount St. Elias, the loftiest in the chain, attains to an elevation of nearly 17,000 ft. The last two are volcanoes. Between the Rocky Mountains and the Maritime Alps, is an extensive prairie tract, 700 m. in length, by from 100 to 200 m. in breadth. The Rocky Mountains and the Maritime Alps are connected by a ridge in about the 42d deg. lat., dividing the waters which flow N. to the Columbia from those which flow S. to the Colorado. — 6th. The mountains E. of the Mississippi do not at all approach the Rocky Mountains in magnitude. They are included in what is called the Alleghany or Appalachian system, extending in a N. E. by N. direction

from Alabama, on the N. confines of Georgia, to the banks of the St. Lawrence, being about 1,200 m. in length, with a mean breadth of 100 m. The White Mountains of New Hampshire, 7,300 feet above the level of the sea, are the highest in this range, which is crossed by the tidal waters of the Hudson river. The immense valley of the Mississippi lies between the Rocky and the Alleghany chains. — 7th. Balbi proposes to embrace, under the denomination of Arctic system, all the mountains that are already, or that may hereafter be discovered within the Arctic archipelago. The culminating points of that system, in so far as they are at present known, are the Corn du Cerf, in Greenland, the height of which has been much exaggerated, but which is probably above 8,000 ft., and the Aeraefi Taekull, in Iceland, 6,649 ft. — 8th. The system of the Antilles embraces the mountains in the archipelago of that name. Its culminating points are, the Anton-Sepo, in Hayti, nearly 9,000 ft. in height; and the Sierra de Cobre, in Cuba, the most elevated summits of which attain about the same height.

Plateaus. — America has a great variety of plateaus, some remarkable for their prodigious elevation, and others for their immense extent. Under the former are included the plateau of Titicaca, divided between Bolivia and Peru, comprising an area of about 18,000 sq. m., with a mean elevation of above 13,000 ft. The populous and well cultivated plateau of Quito is elevated about 9,600 ft.; and the extensive plateau or table land of Anahuac, in Mexico, from 6,000 to 9,000 ft. Among the latter, or those principally remarkable for their extent, may be mentioned the central plateau of S. America, embracing the vast province of Matto Grosso, with parts of Goyas and San Paulo, in Brazil, the whole of Paraguay, Chaco in the confederation of the Rio de la Plata, and a part of the lands of the Chiquitos and Moxes in Bolivia. Its elevation varies from about 750 to 1280 feet.

Volcanoes. — America has a great number of volcanoes, and some of the most elevated volcanic mountains in the world. The departments of the Æquator and of Cauca in Columbia, the states of Nicaragua, San Salvador, and Guatemala in central America, Chili, Russian America, and Iceland in Danish America, contain a great number of volcanoes. The most remarkable volcanic mountains are, Cotopaxi, Sanguay, and Pichincha in the Columbian department of the Æquator; Pasto, Sotara, and Purace, in that of Cauca; Guagua-Plitina, or the volcano of Arequipa, and Sehama in Peru; the volcanoes of Copiapo, Chilan, Antoco, and Peteroa, in Chili; those of Socomusco, Guatemala, or Fuego, Agua, Pacaya, San Salvador, Granada, and Telica, near St. Leon, of Nicaragua, in central America; Popocatapetl, or the volcano of Puebla, Citlatepetl, or the volcano of Orizaba, the volcano of Colima, and that of Xorullo, in the Mexican confederation; St. Elias, and Fairweather, in the Californian Alps; the two volcanoes of the peninsula of Alashka, and those of the Aleutian islands; with Hekla, and others in Iceland.

Plains. — In no other part of the world are the plains so vast. The immense space from the outlet of the Mackenzie River to the Delta of the Mississippi, and between the central chain of the Mexican system and Rocky Mountains, and the Alleghany, forms the largest plain, not of America only, but of the world; it embraces the basins of the Mississippi, the St. Lawrence, Churchill or Nelson, almost the whole basin of the Missouri, nearly the whole basins of the Suskatchawan and Mackenzie River, and the entire basin of the Coppermine River. Four fifths of that portion of this vast plain, which lies beyond the 50th deg. of lat., is a bleak and barren waste overspread with innumerable lakes, and bearing a striking resemblance to N. Asia; but its more southerly portion, or that lying W. of the Alleghany chain, and N. from the Gulph of Mexico, differs widely in character from the other, being well wooded and fertile on the E. side, bare but not infertile in the middle, and becoming almost a desert in the extreme W. The second great plain of the New Continent is that of the Amazon: it embraces the whole central part of S. America, comprising more than half Brazil, with south west Columbia, the eastern part of the republic of Peru, and the northern part of Bolivia; its limits are nearly identical with those of the middle and lower parts of the immense basin of the Amazon and Tocantin. The plain of the Rio de la Plata extends between the Andes and their principal branches, and the mountains of Brazil, to the Atlantic Ocean and the Straits of Magellan. It embraces the south-west part of Brazil, Paraguay, the country of the Chiquitos, Chaco, with the greater part of the confederation of the Rio de la Plata, the state of Uruguay, and Patagonia. A large portion of it is known by the name of the *Pampas* of Buenos Ayres, or Rio de la Plata. The plain of the Orinoco, embracing the Llanos of New Granada and Venezuela in Columbia, extends from Caqueta to the mouth of the Orinoco, along the Guaviare, Meta, and lower Orinoco. In some of the flat parts of America large tracts of territory are met with, which, in respect of aridity of soil, and of the sand by which they are covered, may be compared to the deserts of Asia and Africa. The most remarkable and most extensive of these tracts, are the Desert of Pernambuco, occupying a great part of the N.E. plateau of Brazil; the desert of Atacama, extending with some interruptions along the coast of the Pacific from Tarapaca in Peru, to Copiapo in Chili; and the Desert of Nuttal, at the E. foot of the Rocky mountains, between the Upper Arkansas and Paduka, forming part of the central plain of N. America.

The Rivers of America are on a much larger scale than those of any other portion of the globe, affording facilities of internal communication of vast importance, and quite unequalled any where else. The principal are the Amazon, Mississippi, Plata, St. Lawrence, and Orinoco. The Amazon flows E. through the broadest part of S. America, having its *embouchure* under the equator. Its entire course is estimated at about 4,700 m., and it has several tributaries, larger than the Wolga or the Danube. Uninterrupted by either rocks or shallows, it is navigable for vessels of considerable burden to the E. foot of the Andes, a distance, in a direct line, of above 2,000 m. from the sea; and though civilisation has as yet made little or no progress in the vast and fertile regions through which it flows, there can be no doubt that it is destined to become as it were a great highway for many powerful nations; and and to have its banks thickly set with populous towns and emporiums.

The Mississippi, taken in connexion with the Missouri, the largest and most important stream, flows from N. to S., falling into the Gulph of Mexico, about 100 m. below New Orleans. Its course, including windings, exceeds 4,200 m.; many of its tributaries, as the Arkansas, Red River, Ohio, &c., are of great magnitude; and it drains one of the largest and finest basins

in the world. It is navigable for about 1,700 m. in a direct line from its mouth; and though civilisation has only begun to strike its roots and scatter its seeds in the wide regions through which it flows, it is already a well frequented channel of communication. But the boldest flights of imagination can hardly figure what the Mississippi will be, when the rich and fruitful countries on its banks, and those of its affluents, are all fully peopled, and making use of its waters to send abroad their surplus products, and to import those of other countries and climates.

The Plata, which runs S. with a slight inclination to the E., is the grand channel of communication to a very large portion of S. America. Its course may be estimated at about 2,500 m.; and its basin is inferior only to that of the Amazon or the Mississippi.

The St. Lawrence, with its connected lakes, or rather great inland seas, is the grand outlet of the largest freshwater system in the world. Including the lakes, its course exceeds 2,000 m. It is remarkable for the equality of its current, which is nearly uniform throughout the year.

The Orinoco has a course of about 1800 m., and carries to the sea an immense body of water. There is a water communication between one of its affluents, the Cassiquiari, and the Rio Negro, an affluent of the Amazon.

Owing to the circumstance of the Andes, and of their prolongation in N. America, being generally within a comparatively short distance of the W. coast, there is not, in most parts, room in the intervening space for the formation of any very great river. Hence, notwithstanding the prodigious length of the W. coast, it only receives two large rivers, and these not of the first class; the Rio Colorado, falling into the bottom of the Gulph of California, and the Columbia or Oregon. Their corse may be estimated at about 1,100 m. each.

The Mackenzie is the only great river flowing into the Arctic sea. It has a N.N.W. course; it is connected by a series of lakes and tributary streams with lake Superior, and consequently with the St. Lawrence.

Lakes. — No part of the world has so many lakes as N. America, especially that portion between 42° and 67° lat., which might be justly called the lake region. It presents not only the greatest masses of fresh water on the surface of the globe, but so many smaller lakes and morasses, that their enumeration is almost impossible. These lakes form a most important feature in the physical geography of the new world. In the rainy season, several of them overflow their banks; and temporary communications are then established between rivers whose embouchures are frequently at immense distances from each other. Some of these communications are permanent; as, for instance, that of the Mississippi or Churchill with the Mackenzie River. The great lakes of N. America are, Lake Superior, Michigan, Huron, St. Clair, Erie, and Ontario. These, which are all connected together, discharge their superfluous waters by the St. Lawrence, and form that vast reservoir of fresh water, sometimes called the sea of Canada. (See the titles for a full description of these lakes.) The next in size and importance are Lakes Winnipeg, Athabasco, Great Slave Lake, and Great Bear Lake, stretching N.N.W. from Lake Superior to near the mouth of the Mackenzie River, and forming as it were a continuation of the Canadian lakes. There are some considerable lakes in the Mexican states; and the comparatively small lakes of Tezeaco, Xochimilco, &c., in the valley of Mexico, are remarkable for their elevated situation, their vicinity to the capital, and the superb works undertaken to prevent the damage caused by their frequent overflowing. Lake Nicaragua, in central America, is remarkable for its size, the beauty of its scenery, its volcanoes, and from its forming the basis of the works projected for uniting the Atlantic and Pacific oceans. The limited size of the principal lakes of S. America, strikingly contrasts with the dimensions of those of N. America. The lake of Titicaca, the largest and most celebrated of the S. American lakes, is situated near the N.W. frontier of Bolivia, or Upper Peru, in an Alpine valley surrounded by ridges of the Andes. It covers an area of above 4,000 sq. m., and is elevated 12,795 feet above the level of the sea! Manco Capac made his first appearence on the banks of this lake. The basins of the Rio Colorado, or Mendoza, and Rio Negro, present several very extensive lakes; but these are really rather vast morasses, than lakes properly so called.

Islands. — A multitude of islands belong to America. We shall briefly notice the principal, in the order of the seas in which they are situated. In the Atlantic Ocean are, the archipelago of St. Lawrence or of Newfoundland, at the mouth of the Gulph of St. Lawrence: its principal islands are Newfoundland, Anticosti, Prince Edward's Island, and Cape Breton. The great Columbian archipelago, or Antilles, commonly called the West Indies, comprises a great number of islands and secondary groups, lying between the peninsula of Florida and the delta of the Orinoco. Its chief islands are, Cuba, Hayti, or St. Domingo, Jamaica, and Porto-Rico, called the greater Antilles; St. Cruz, Antigua, Guadaloupe, Martinico, St. Lucia, Barbadoes, St. Vincent, Tobago, Trinidad, and several others, called the smaller Antilles. The Lucayos, or Bahama Islands, a vast secondary group, are situated to the N. of Cuba. Towards the southern extremity of the New Continent, are the Falkland or Malouine Islands, which have no fixed inhabitants; in the southern ocean is the archipelago of Magellan and Tierra del Fuego, the most southerly inhabited part of the world. By its position, at the extremity of America, it belongs as much to the ocean, to which we have assigned it, as to either the Atlantic or Pacific Ocean.

The Antarctic archipelago, or Antarctic lands, under which denomination we include all the islands situated beyond 56° S. lat., next claims attention. The greater part of these islands have been recently discovered; they are all uninhabited, are mostly covered with ice, and are important only to whale and seal fishers. The most remarkable islands and groups are, the Island of St. Peter, called by Cook, S. Georgia; the archipelago of Sandwich, the Orkneys, S. Shetland, Trinity Island, the small islands of Alexander I. and Peter I.; being at present the most southerly of the known parts of the world. The Pacific Ocean has also a multitude of islands, lying in groups, of which we can only notice the following: the archipelago of Madre de Dios, on the W. coast of Patagonia; the Campana and Madre de Dios are the largest of these islands: the archipelago of Chiloe, situated to the S. of Chili, to which it belongs, and of which Chiloe Island is the largest: the archipelago of Gallopagos, situated under the equator, about 500 m. W. from the coast of Columbia, but which has no stationary inhabitants: the archipelago of Quadra and Vancouver, comprising a

great number of islands, and that of King George III., on the N. W. coast of N. America, with the Aleutian Archipelago in Russian America. In Behring's sea, are the group of Pribylof and Nounivok, belonging to Russia. The Arctic Ocean presents a vast number of islands, the majority of which, previously to the late voyage of discovery, were regarded as parts of the American continent. Balbi proposes to give to these islands the general denomination of Arctic lands or Arctic archipelago, and to subdivide them as follows: E. or Danish Arctic lands, comprising the great group of Greenland and Iceland, belonging to Denmark, and Jan Mayen's Island, without stationary inhabitants; the W. or English Arctic lands, extending to the W. and N. of Baffin's and Hudson's bays, the principal groups of which are, N. Devon, N. Georgia, with the islands Cornwallis, Melville, &c.; and the archipelago of Baffin — Parry, with the islands Cockburn, Southampton, New Galloway, &c.

The Climate of America is nearly as celebrated for the predominance of cold, as that of Africa for the predominance of heat. With the exception of the limited space along its W. shore, between the Andes in the S., and the Maritime Alps in the N., the temperature of the New World, in the same latitude, is every where inferior to that of the old. Countries which, from their geographical position, we should suppose would be mild and temperate, are exposed to long and severe winters, during which they are wholly covered with snow; and in point of fact, the entire continent of N. America above the 50th degree of lat. is all but uninhabitable. Even in the 45th parallel, on the N. side of the Canadian lakes, frost is continuous for more than six months. Occasional frosts occur as low down the Atlantic coast as the confines of Florida, near the 30th deg. of lat., in the parallel of Morocco, Cairo, and Suez. This predominance of cold is no doubt ascribable to a great variety of causes; among the most prominent of which may be placed the extraordinary elevation of the soil. Not only is the continent traversed from one extremity to the other by immense chains of mountains covered with perpetual snow, but in many parts, as in Mexico and Columbia, very extensive plains are found at an elevation of from 6,000 to 10,000 feet above the level of the sea! Thus the plain of Quito, immediately under the equator, has an elevation of above 9,600 feet, and its mean temperature is said not to exceed 53° Fahr. In some parts, where the plateaus rise rapidly, there is often, within a few leagues, an extraordinary change of temperature. At Vera Cruz and Guayaquil, for example, on the borders of the plains of Mexico and Quito, and nearly on a level with the sea, the heat is often quite oppressive. These different climates have different vegetable productions. "Hence the traveller journeying down the deep descent of one of these magnificent ravines (leading from the plateau of Mexico), through forests of birches, oaks, and pines, finds himself suddenly on the level shores of the Rio Alvarado, surrounded by palms, and has an opportunity of seeing the animal products of the N. and S. of the Alpine regions and tropics, nay of the E. and W. hemispheres, mingled together. Wolves of northern aspect dwelling in the vicinity of monkeys; humming birds returning periodically from the borders of the frozen zone, with the N. bunting and soft-feathered titmice, to nestle near parrots; and our common European whistling ducks and teal, swimming in lakes which swarm with sirens and Brazilian parras and boatbills.' — (See Richardson's Zoology of N. America, in the *Sixth Report of the British Association*, p. 135.)

In addition to its vast mountain chains, and the prodigious elevation of many of its plateaus, the lower temperature of America may be partly ascribed to the great indentation of the sea between N. and S. America, and the want of extensive sandy deserts in the tropical regions, easily impregnated with heat. The place of the latter in the African continent is here occupied by vast forests, traversed in all directions by immense rivers. The forests, however, are not confined to the tropical regions; they extend over the greater portion of the continent, powerfully diminishing the influence of the solar rays upon the earth, and greatly increasing its moisture. A strong and abundant vegetation, the result of its greater humidity, is, in fact, the distinguishing characteristic of the New World.

We may add, with respect to N. America, that while but a very small portion of it is within the torrid zone, it reaches far within the Arctic circle, where it also attains to a great breadth. The N. W. wind prevails during winter. This wind, sweeping over a desolate country, overspread with marshes, forests, frozen lakes, and mountains, buried under eternal snows, contracts an intense degree of cold, and in its progress southward, passing over a wilderness, where the ground is shaded by forests from the solar rays, its original character is in no respect changed. It slowly yields to the dominion of the climate, and retains its temperature long after it has penetrated into the regions of heat. Throughout N. America the N. wind is accordingly felt to be keen and piercing. It increases the rigour of the seasons in the more northerly regions, and extends the influence of winter far into those latitudes, which, in the other hemisphere, are blessed with perpetual spring. The countries lying within the tropics are exposed to the inroads of the northern blasts; and the great heats felt at Vera Cruz and Havannah are often suddenly reduced by strata of cold air brought by the N. winds from Hudson's Bay. These winds blow from October to March, frequently bursting forth in tremendous hurricanes, and cooling the air to such a degree, that at Havannah the centigrade thermometer falls to 0, or 32° Fah., and at Vera Cruz it falls to 16°, or to 60° Fah. At Zacatecas, within the tropic of Cancer, it frequently froze hard in the winter of 1825; and in the city of Mexico the thermometer has been known, though rarely, from the same cause, to fall below the freezing point. To the prevalence of these N. winds, therefore, combined with the extraordinary elevation of the ground, and the uncultivated state of the country, overspread with vast forests, the greater cold of N. America seems chiefly ascribable. In S. America nearly the same causes operate. The country is even more desolate; the climate is more inclined to moisture; and liable beyond the 40th parallel, to dreadful tempests; while immense mountain ranges, rising far above the limit of perpetual snow, aid these effects, and greatly increase the rigour of the seasons. To these causes may be added the form of the American continent, which being greatly contracted in breadth as it approaches the S., is, in consequence, exposed on every side, except towards the N., to the surrounding oceanic winds. To the S. of Cape Horn is the great Antarctic Ocean, where cold prevails even to a much greater degree than in the N., so that the winds coming from those inhospitable seas bring to

the American continent all the unmitigated rigour of the polar regions. *The Andes and maritime Alps protect the strip of territory between them and the Pacific Ocean from the freezing influence of the N. W. wind; and to this its greater mildness is partly, at least, if not wholly, owing.

Minerals. — The mineral riches of America are probably superior to those of any of the other great divisions of the globe. The discovery of the mines of Mexico and Peru effected an entire revolution in the value of the precious metals; and they have since continued to be the grand sources whence supplies of gold and silver have principally been derived. The annual produce of the American mines, at the commencement of the present century, was estimated by M. Humboldt as follows: —

Divisions.	Gold.		Silver.		Value of both in dolls.
	Marcs.	Kilogs.	Marcs.	Kilogs.	
New Spain -	7,000	1,609	2,338,220	537,512	23,000,000
Peru - -	3,100	782	611,090	140,478	6,240,000
Chili - -	12,212	2,807	29,700	6,827	2,060,000
Buenos Ayres	2,200	506	481,830	110,764	4,850,000
New Granada	20,505	4,714	- -	- -	8,990,000
Brazil -	29,900	6,873	- -	- -	4,360,000
Total -	75,217	17,291	3,460,810	795,581	43,500,000

This sum of 43,500,000 dollars amounts, at 4*s*. and 3*d*. a dollar, to 9,213,750*l*.

This produce continued to increase down to 1810, when it was estimated by Mr. Jacob, author of an Inquiry into the Consumption of the precious metals, at 47,061,000 doll. But the revolutionary struggles which began in the last-mentioned year to agitate Mexico, Peru, and the rest of S. America, speedily occasioned the abandonment of some of the most productive mines, and an extraordinary falling off in the supply of the precious metals. According to Jacob their average annual produce in America, from 1810 to 1829, did not exceed 4,036 000*l*. a year, or less than half its amount at the commencement of the century; and though this statement has been suspected of being somewhat under the mark, we incline to think it was not far from correct. (*Jacob*, ii. 267.) The failure of the companies formed in this country in 1826 for working the American mines, the instability of the revolutionary governments, and the insecurity that has prevailed down to the present time in most of the old Spanish territories, have proved serious obstacles to the successful prosecution of mining operations. Latterly, however, the supplies of bullion from Mexico, and still more from Chili and Peru, appear again to be on the increase. The coinage of gold and silver in the Mexican mints only in 1848 amounted to very near 4,000,000*l*. (3,901,351*l*.) And if to this sum we add the supplies from the various provinces of S. America, the total produce of the New World (ex. California) can hardly, perhaps, be reckoned at less than 6,000,000*l*. or 6,500,000*l*. And there wants nothing but tranquillity and security to enable it to be increased to an indefinite extent.

But to the supplies from Mexico and S. America we have now to add those from California; and despite the exaggerated statements in regard to the latter, there can be no doubt that the sand, earth, and gravel in the valleys of the Sacramento and other rivers of that country, are richly impregnated with gold, and that large quantities have been already obtained from thence. But we are too near the period when the washings in these valleys began to be prosecuted with any degree of vigour, to enable any precise or accurate estimate to be formed of their produce. On the whole, however, we believe that the entire produce of the mines and washings of the New World is larger at present (1850) than at any former period; and that its increase may be reasonably anticipated. Besides gold and silver, most other metals are found in less or greater abundance in America. Chili and Cuba have some of the richest copper mines in the world; lead is found in the greatest plenty in different parts of the U. States, particularly at Galena, Dubuque, and other points on the Upper Mississippi, and in Mexico, &c. Iron is extremely abundant in the U. States, and in many other parts of the continent; salt also is very widely diffused; and coal, including anthracite, is found in vast and indeed all but inexhaustible deposits in different parts of the U. States, in British America, and in Chili. Europe may now be said to be wholly dependent on Brazil for supplies of diamonds, which seem to be more abundant there than anywhere else.

Vegetation. — Stretching, as America does, from the eternal snows of the Arctic to those of the Antarctic circle, and possessing soils of every elevation and quality, her vegetable products are necessarily of the most diversified description. Owing to the prevalent humidity and coolness of the climate, and the richness of the soil, her forests and pastures are unrivalled for extent, luxuriance, and magnificence The forests consist generally of very heavy timber, including many species of pines and larches unknown in Europe, with an endless variety of oaks, maples, cypresses, tulip trees, mahogany trees, logwood, Brazil-wood, &c. &c. The Old World is indebted to the New for some of its most useful and widely diffused vegetable productions. Potatoes, though probably not introduced into Europe for more than a century after the discovery of America, already form a most important part of the food of most European nations; and tobacco, though it also be of American origin, has been diffused from one extremity of the Old World to the other, and is, perhaps, the most universally esteemed of all luxuries. We also owe to America maize, or Indian corn, millet, cocoa, vanilla, pimento, copaiba, cinchona or bark, so important in medicine, jalap, sassafras, nux vomica, &c. The *Cactus cochinilifer*, which furnishes the cochineal, is also peculiar to America. On the other hand, America is indebted to the Old World for a great variety of cereal grasses, trees, and fruits. At the head of the former may be placed wheat, barley, oats, and rice, all of which succeed admirably well in large portions of America. It seems pretty well established that the sugar-cane is indigenous to some of the W. Indian islands; but it is abundantly certain, not merely that the art of making sugar, but that the cane, now most generally cultivated in the islands and in continental America, was brought to them either from the E. Indies or from Madeira. America is also indebted to the Old World for the coffee plant, now one of her staple products; and for oranges, lemons, peaches, and most descriptions of fruit-trees. New York apples, though now very superior to any produced in this country, are derived from plants carried from England. The vine has been raised in America; but either the soil or climate is not suitable for it, or, which is perhaps most probable, sufficient care has not been bestowed on the manufacture of the wine. The tea-plant has been tried in Brazil; but, owing to the dearness of labour, there is no chance of its being profitably cultivated there, or any where else in America.

The Zoology of America differs in many im-

portant respects from that of the Old World. Of about 1,350 mammals that have been described and classified, America possesses about 540; but, with few exceptions, she is singularly ill provided with the useful animals. As already stated, neither the horse, ox, sheep, nor hog, were found in America on her discovery by Columbus; and the want of them must, no doubt, have been a considerable obstacle to the advancement of the natives in the career of civilisation. The elephant and the camel are also unknown in America; but she was not entirely destitute of useful animals. In Peru they had the llama, guanaco, paco, and vicunna, animals that bear a considerable resemblance to each other, if they be not of the same species. The first has a considerable analogy to the camel, though it be neither so large nor strong, and wants the hump. It was, and still is, employed to carry loads, and being docile and sure-footed, makes its way over the most dangerous paths. Its pace is slow, seldom exceeding 12 or 15 m. a day, and it usually carries about 80 lbs. Its wool, or rather hair, which is generally, but not always, white, is spun and made into articles of clothing. The guanacos and pacos are not so serviceable as beasts of burden as the llamas, and are comparatively little used. The vicunna, the smallest of them all, inhabits the least accessible parts of the Andes; it is chiefly prized on account of its wool, which is of a very superior quality. The flesh of these animals, though dry and coarse, is used as food. They are almost the only animals that the native inhabitants of America had been able to subdue, and to render subservient to their purposes. The bison, or American ox (*Bos americanus*), the largest native quadruped of the New World, is principally found on the prairie lands of the Rocky Mountains in N. America. It is rarely, if ever, seen to the S. of the Mississippi; and it is doubtful whether it was ever found on the Atlantic coast. The *Bos moschatus*, or musk ox, is found only in the most N. parts of America to the W. of Hudson's Bay, from 66° to 73° N. lat. Its horns, which cover all the forehead, are often of great weight. The Rocky Mountain goat, remarkable for the fineness of its wool, inhabits the Rocky Mountains from Mexico to the extremity of the range. Several species of deer are found both in N. and S. America. The rein-deer is the most northerly ruminating animal, being found in Greenland and the remotest of the Arctic islands. On the W. coast it descends as low as the Columbia river.

America possesses several peculiar species of the genus *Canis*, or dog. The physiognomy of the American wolf, when contrasted with that of its European namesake, is very distinct. There is a great variety of foxes. The fur of the *Canis lagopus*, or arctic fox, and of some other varieties of the same genus, is of considerable value. The best known variety of the American dog is the *Canis familiaris*, found in Newfoundland. This animal is now very common in England, and is deservedly a great favourite. It is strong and active, has long fine glossy hair, a curved bushy tail, and webbed toes, by means of which it swims admirably well. The colour of the back and sides is generally black, with a white belly and legs, and frequently a white spot at the tip of the tail. It is naturally fitted, by its thick covering of hair, for a cold climate, and is more active and in better health in this country in winter than in summer.

The beaver (*Castor*) is more abundant perhaps in the N. W. parts of N. America than in any other part of the world. But the great demand for, and high price of its fur, has led to a great diminution of its numbers, and to its nearly total extirpation in the more accessible parts of the country. The coypou, known in commerce by the name of neutra, and the chinchilla, are found in S. America. They yield a highly esteemed fur, and immense quantities of their skins are now imported.

America has but few beasts of prey. The most formidable, the *Felis onca*, or jaguar, is found only in S. America. It is larger and stronger than the panther; but is inferior in size and ferocity to the Bengal tiger, with which it is generally compared. The *Felis discolor*, or puma, is found in both S. and N. America: though denominated the American lion, it is neither so large nor fierce as the jaguar. A number of bears, some of them of the largest and most formidable description, are found in Arctic America: two are peculiar to it.

Tropical America has a great variety of apes, but none of them approach so nearly to the human form as the orang outang, or chimpanzee, and none of them have the ferocity of the baboon. Many, however, have prehensile tails, endowed with so great delicacy of touch that they have been compared to the trunk of the elephant. This fits them admirably for travelling from tree to tree.

The vampyre bat, frequent in S. America, is very dangerous. It attacks the larger animals, and even man himself, when asleep; and as its bite is not sufficiently painful to awaken the victim, the bleeding it occasions sometimes proves fatal.

America is infested by an immense number of reptiles. Of these pests the rattle-snake is one of the most common, and also the most dangerous: but there are others little less venomous. The true *boa constrictor* is found of an enormous size in the marshes and swamps of tropical America. Centipeds, sometimes a yard in length, with enormous spiders, scorpions, &c., abound in these regions. According to Humboldt, the white ants and termites are even more destructive here than their congeners in the Old World.

The birds of America are exceedingly numerous. The condor, which inhabits the most inaccessible parts of the Andes, though of less dimensions than was formerly supposed, is the largest and most powerful of all the feathered tribes. There are also a great many eagles, vultures, falcons, and other birds of prey. A species of ostrich, but smaller than the African, inhabits the Pampas; and the woods of both Americas are the resort of vast flocks of wild turkeys, pigeons, &c.

The waters of America are well supplied with fish; and the rivers in the tropical regions produce also enormous lizards and alligators. In the lakes of the Caraccas is found the electric eel.

Nothing, however, is so worthy of remark, in relation to the zoology of America, as the wonderful increase of the horses and cattle carried there from Europe. Had we not been fully aware of all the circumstances in regard to their immigration, it would certainly have been supposed that they were indigenous to America, and that it, in fact, was their native country They here rove about in immense herds in a state of pristine freedom; and so numerous have they become that the slaughter of oxen, not for the carcass, but merely for the hide, is the principal business of many extensive provinces. (See Pampas.) In a single year above 800,000 hides have been exported from Brazil only, exclusive

of those exported from Buenos Ayres, Montevideo, and other ports! In consequence, too, of the extraordinary increase of horses, the mode of existence of the natives in several parts has been wholly changed; they have become expert horsemen, and pass a considerable part of their time on horseback, approaching in this respect to the Tartars and Arabs of the ancient world. Sheep have not succeeded so well in America as cattle and horses; and their wool, in most parts, is generally of an inferior description.

Races of Men. — The native inhabitants of America differ in physical form, in language, and perhaps in intellectual character, from every other variety of the human race. Probably, however, the general agreement which exists among themselves is even more remarkable than their disagreement from other races. The *Red* men, as the Americans call themselves, in contradistinction to the European and African races, (that is, to the *Whites* and *Blacks*, the only two they have any knowledge of,) exhibit surprisingly little difference, although extending over 70° on the N. side, and 54° on the S. side, of the equator. Heat or cold, drought or moisture, elevation or depression of surface, have certainly no effect in the production, even of the small variations occasionally discoverable among them. "The Indians of New Spain," says Humboldt, "bear a close resemblance to those who inhabit Canada, Florida, Peru, and Brazil. Over 1,500,000 sq. leagues, from Cape Horn to the St. Laurence and Behring's Straits, we are struck at the first glance with the general resemblance in the features of the inhabitants. We think we perceive them all to be descended from the same stock, notwithstanding the prodigious diversity of their languages. In the portrait drawn by Volney of the Canadian Indians, we recognise the tribes scattered over the savannahs of the Apure and the Carony. The same style of features exists in both Americas." The general physical form is as follows:—Skin dark, having more or less of a red tinge, usually called copper-colour, but thought to be more correctly characterised by that of cinnamon; hair of the head black, coarse, lank, shining, long, but not very abundant: hair on other parts of the body very deficient. The beard is seldom altogether wanting, but it is so uniformly scanty, as often to present the appearance of its being so. Forehead long; eyes deep sunk, small, and black. Face broad across the cheeks, which are round and prominent; nose well raised, and round at the apex; mouth large, and lips thick; chest high, thighs massy, legs arched, feet large, hands and wrists small. The height is nearly the mean stature of the European race, but the body is usually more squat and thick set. The countenance is hard-favoured, and the look stern, yet with a certain sweetness in the expression of the mouth which is a contrast to the rest of the features. It will appear, from this statement, that the races which the American most nearly resembles, are the Mongul, Malayan, and Indo-Chinese. The features of the face are, however, more *amply* chiselled than in any of these; the frontal bone is more flattened than in any of them, and the stature is greater than it is, at least, in the Malayan race. Although in the tropical regions of America there are no black men, as in Africa or Asia, nor in its temperate regions, any whites, as in Europe, still varieties do exist in an inferior degree; which may be compared to those which exist among Europeans, and among Negroes. The most striking of these are found in the short, squat, and tallow-coloured Esquimaux, about the polar regions of the N., and the tall Patagonians towards the S., extremity of the continent. The first of these differ in no respect, as far as physical form is concerned, from the people of the same name in Asia and Europe. The Patagonians or Puelches, inhabiting the S. E. coast of the southern extremity of America, may be considered, after rejecting the exaggerations of early, and the contradictions of later travellers, as the tallest people in the world. If with us the medium height of the male sex may be estimated at 5 feet 8 inches, that of the Patagonians may be taken at six feet. Other races, remarkable for their great stature, also exist among the Americans; as the Caribees and Cherokees. But there are also races remarkable for their shortness, as the Peruvians, who are between the mean European standard and the Chaymas, whose average height, according to Humboldt, is five feet two inches, which makes them a full inch shorter than the Malayan race, yet much taller than the Esquimaux. Upon the whole, it may be remarked that the American race exhibits a wider difference in stature than any other family of mankind, while this difference, at the same time, would not seem to be productive of any essential variation in physical or intellectual capacity. In point of colour there exists also considerable variety; the brownish-red tinge for the most part prevails; but in some cases its intensity approaches to black, and in others to the fairness of a southern European. The probability is, after all, that the number of distinct races of men in America is at least as great as in other portions of the world, although their smaller numbers, and obscurity of the tribes make it more difficult to distinguish and class them. In this matter, languages, so useful a guide in Europe and Asia, have not, in America, on account of their multiplicity and intricacy, afforded as yet much assistance. The exceeding, and perhaps insurmountable difficulty of this branch of the inquiry may, indeed, be judged of when it is known that the number of distinct languages spoken by men whose numbers are not supposed to exceed 10,000,000 has been reckoned at no less than 438, and their dialects at 2,000! The intellectual powers of the American family, must, at first view at least, be considered as ranking it below all the other principal races of mankind. The Americans, when left undisturbed to the exercise of their native energies, had not tamed any of the useful animals, whether for food or labour, the llama and vicunna by one tribe excepted. The Peruvians used gold, found in its native state, and they appear, also, to have been able to smelt and harden copper—the utmost stretch of their ingenuity; but they knew nothing of the use of iron. The agriculture of the most civilised of the American tribes was of a rudeness and imperfection of which there can hardly be said to have been an example in the Old World. The Quichua, the most improved of their languages, had no words to express abstract or universal ideas, as *space*, *time*, *being*, *matter*, *substance*, &c., or even such as *justice*, *honour*, *gratitude*, *freedom*, &c. They had invented no species of writing, and the contrivances by which they attempted to depict and record their ideas are more rude than any thing handed down in the traditions of European and Asiatic nations. In all the respects now mentioned, the Americans evinced their inferiority to the nations of Europe and Asia, and, in all but the invention of a rude sort of hieroglyphics, to even the Negro nations of Africa. Nature had not, indeed, in many respects, been propi-

tious to them: she had denied them nearly all the domestic animals which have conduced materially to the civilisation of the inhabitants of the Old World; as the horse, ass, ox, camel, sheep, goat, hog, and most of our domestic poultry. But their want of ingenuity is sufficiently shown by their not availing themselves of such as they possessed; as the rein-deer, goose, duck, turkey, and other poultry, soon domesticated by the European settlers. For their want of ingenuity in not discovering the art of smelting iron, no plea can be shown; and, indeed, it might rationally be supposed that the paucity of useful animals for domestication would rather have had the effect of directing and concentrating their efforts in other quarters. Mere handfuls of Europeans, in comparatively rude ages, subdued the most numerous and warlike tribes of America, and these handfuls have now grown into the majority of the population.

Of the origin of the American race we are totally ignorant. Neither the evidence of physical form nor of arbitrary customs and institutions, which could spring only from a common source, or the testimony of language, connect them with any other race of men. The testimony of language on this subject is particularly clear. For example, incontestable evidence of a connection exists among the great majority of those insular languages which extend over at least 60° of latitude, and between Madagascar and Easter Island, over 200° of longitude; but the moment we quit the last named island, which is but 45° from the coast of America, all further trace of a Polynesian language ceases. We are not, indeed, unaware that the comparison of a great number of American with a great number of Asiatic lanuages has exhibited a small number of resemblances; but these we are disposed to consider as forced, fanciful, or accidental.

The moral character of the native Americans has been depicted under very different colours; but there can, we apprehend, be very little doubt that the bad features in it very decidedly predominate. Their capacity of enduring hardships and privations of all sorts, and even the most excruciating tortures without murmur or complaint, is well known; and is owing as much, perhaps, to physical causes, as to the training they undergo. They cannot be accused of ingratitude, or of a want of hospitality, but they are in the last degree vindictive, cruel, and treacherous. When not engaged in war, or hunting, or drinking, they sink into a state of torpor and apathy from which nothing can rouse them. They have all, or mostly all, an irrepressible rage for spirituous liquors; to obtain which they will sacrifice every thing, and which has been too readily ministered to by Europeans. The state in which we find women may generally be taken as pretty indicative of the character of a people: and tried by this test, the American Indians will be found to be almost at the bottom of the scale of civilisation. From the one end of the continent to the other, woman, with very few exceptions, is a slave; she has to perform all the laborious occupations of the tribe, and is, in fact, degraded almost to the level of a beast of burden. Polygamy is very generally practised; and it is only in some rare cases that chastity is held in any estimation. Their religion is a rude species of idolatry or féticism. Cannibalism has undoubtedly prevailed over the whole continent; and is not yet entirely extinct. The Mexicans, the most advanced of the native nations, delighted in blood, and were accustomed, when invaded by the Spaniards, annually to offer up thousands of human victims on the altars of their gods! Even the Peruvians, the least sanguinary of all the Americans, though Sabians, or worshippers of the heavenly bodies, did not scruple, on the death of their monarchs, to immolate hundreds of human victims on their tombs!

The natural inferiority of the native Americans, and their incapacity to attain to any thing like real civilisation, are strikingly evinced by the result of the continued efforts of the Jesuits in Paraguay for their improvement. So long as the Jesuits resided among them, and could direct their efforts, and compel them to be industrious, all went on very well, and the golden age seemed to be restored. But the entire system was forced and factitious. The moment the Jesuits withdrew, the fabric that had cost them so much pains and labour to raise, fell to pieces. Civilisation had taken no real root among the Americans; and they relapsed forthwith into the indolence, improvidence, and idolatry, that seem natural to the race.

"From the moment," says an able writer, "that the Europeans landed in the New World, benevolence has been at work to instruct some portions of these tribes in religion and the arts, and flattering accounts have been published from time to time of the success of those humane persons who dedicated their lives to the task. But, after three centuries of incessant exertion, what is the result? Is there one tribe that exhibits the steady industry, the provident habits, the spirit of improvement, and the rational views of religion, which are to be found in any parish of England? We cannot find that there is. Many tribes, living near the whites, have adopted their habits and ideas to a certain extent, but merely under the influence of imitation. While missionaries and teachers are among them, every thing wears a favourable aspect; but their civilisation is never self-sustained. It is created by the agency of men of higher natural endowments, and when they are removed it moulders away, because it has no foundation in their character. Many parties of Indians, remnants of tribes once powerful, have lived peaceably, on reserves of land, inclosed amidst the population of the United States, for more than a century. No situation can be imagined better fitted to promote their improvement; but in no one instance, so far as we know, have they melted into the mass of the white population, or risen to any thing near their level in knowledge and the useful arts. They live in huts in no material degree better than the wigwams of their wandering brethren. They are generally honest, but drunken, indolent, and ignorant, though teachers and missionaries are employed by the government to instruct them. Basket-making is almost the only trade they ply, and in their habits and character they may be aptly compared to the gypsies of Europe who exist in the midst of civilisation, without partaking of its spirit or its benefits. It should be observed that there is not the same reluctance in the whites to mingle their blood with the red men as with the blacks. Much has been recently said of the progress made by the Cherokees; but we suspect that what is witnessed there is but a flimsy veil of improvement, spread over habits which are essentially savage. We are convinced, in short, that the Indian is truly the man of the woods; and that, like the wild animals he lives upon, he is destined to disappear before the advancing tide of civilisation, which falls upon him like a blight, because it supplies new food to nourish his vices,

while it demands intellectual and moral faculties in which he is deficient, and renders useless those qualities which predominate in his character. We would not discourage the attempt to meliorate the lot of the Indians; but this will succeed best when it is grounded on a true knowledge of their natural capacities. Some of them are much more susceptible of moral and religious improvement than others; but to instruct and reclaim them effectually, our belief is that the system of the Jesuits is the only one that holds out a chance of success. They must not merely be taught and preached to, but they must be retained in a state of pupilage, trained to their duties, controlled and directed in all their proceedings by intellects superior to their own; and there are many tribes too ferocious and intractable for even this method of tuition. We do not maintain that the character of the Indian nations is indelible; but to effect any considerable change in it, the lapse of a longer period would be required than the existence of these tribes is likely to extend to. Neither do we think that there is any thing in the extinction of these people by natural means which humanity should mourn over. In every state of life man has but a brief span of existence allotted to him. Successive generations fall like the leaves of the forest; and it should be remembered that the extinction of a race of men by natural causes, means merely its non-renewal or the suspension of those circumstances which enabled it to continue its existence." (*Encyc. Britannica*, ii. p. 631.)

Population. — Besides the original inhabitants, vast numbers of Europeans, of all nations, have emigrated to America since its discovery by Columbus, tempted originally, for the most part, by the *auri sacra fames*. It was this same passion, taking it in its most literal and degrading sense, that has made them fill the Antilles, and part also of the continent, with millions of negroes brought from Africa, and reduced, with their descendants, to a state of slavery. But at a later period America furnished an asylum for the victims of political and religious persecution in the Old World; and for these many years she has offered an all but inexhaustible field for the profitable employment of its redundant capital, skill, and labour; and thousands upon thousands, who could hardly contrive to exist on this side the Atlantic, have attained, if not to opulence, at least to comfort and independence, in America. Hence she has long been, and still continues to be, the promised land of the poor but industrious man; and a city of refuge to all who happen to be discontented with the policy, or who have given offence to the rulers, of the Old World.

The estimates of the population of America at different periods have differed very widely, in consequence of the vague and defective nature of our information with respect to it. Humboldt estimated the population of America, including the Antilles, at 35,000,000. Balbi estimated it, for 1827, at 39,000,000; but we incline to think that this was below the mark even for the epoch to which it refers; and the population of the United States, British America, and Brazil, but especially the first two, has since increased prodigiously. At present (1845) we are well convinced that the population of America is not under, but probably above, 50,000,000.

Political Divisions. — It would be useless to attempt giving any detailed outline of the existing divisions between the different states among which America is at present parcelled out: for the chances are that they will be materially altered in the course of a few months. In fact, ever since the commencement of the revolutionary struggles in 1810, down to the present moment, every thing has been, in the greater part of America, in a state of transition. States have been formed, split into portions, and again consolidated. Hitherto, however, none of the new States formed out of the Old Spanish provinces seem to have acquired any considerable portion of stability, or to be in a condition successfully to oppose foreign invasion or domestic insurrection. No doubt a better order of things, and one more calculated to promote the improvement of those naturally fine countries, will be established; but, in the meantime, very little importance need be attached to the subsisting territorial arrangements.

The following account of the different American States, and of their extent and population in 1842, has been carefully compiled from the latest and best authorities.

Estimate of the Area and Population of the American States in 1842.

States.	Area in Eng. Sq. m.	Total Pop. 1842.	Whites and Europ. Creoles.	Indians and Free coloured Races.	Blacks and Indian Slaves.
North America:					
Hayti	28,300	935,000	28,000	490,000	495,000
Mexico	?	7,500,000	1,200,000 (1835)	5,800,000	
Central America	203,550	1,900,000	475,000	1,425,000	
United States	2,446,759	17,063,353	14,189,218	386,750	2,487,355
Texas	?	150,000	?	?	
South America:					
Aruucania	28,000	450,000	- -	450,000	
Argentine Republic	1,060,000	1,000,000	?	?	?
Bolivia	318,000	1,200,000	300,000	900,000	
Brazil	2,710,000	6,060,000	843,000	3,130,000	2,096,666
Chili	101,000	602,000	130,000	472,000	
Columbia:					
a. Æquator	?	550,000	?	?	
b. N. Granada	?	1,686,000	?	?	
c. Venezuela	?	829,000	?	?	
Paraguay	146,550	600,000	60,000	540,000	
N. Peru } S. Peru }	954,000	{ 831,000 } { 494,000 }	136,311	729,315	284,773
Uruguay	224,000	17[illegible],000	20,000	155,000	
Uncivilised States:					
Patagonia	411,300	150,000	- -	150,000	
Mosquito	124,990	300,000	- -	300,000	
European Colonies:					
1. British	565,000	2,550,000	1,730,000 (whites)	820,000	
2. Danish	170	46,000	6,000	3,000	38,000
3. French	125,112	280,000	95,000	- -	184,856
4. Dutch	10,6[illegible]6	85,000	5,800	7,000	72,200
5. Russian	490,350	50,000	870	49,130	
6. Swedish	43	8,000	1,992	580	5,428
7. Spanish	58,226	1,200,000	500,000	80,000	620,000
Independent Indians	2,000,000	1,200,000	- -	1,200,000	
		47,894,353			

Diseases of America. — The Anglo-American population is subject to the same diseases as the people of England; but suffers more from intermittent and remittent fevers. Yellow fever sometimes prevails epidemically as far north as New York and Philadelphia. Of 122,591 deaths occurring in New York in the 31 years 1805-35, 7,563 were ascribed to fevers of every type; 327 to intermittents; 1,480 to remittent and bilious fevers; 477 to yellow fever; not less than 3,368 deaths to dysentery; 1,606 to diarrhœa; 5,183 to cholera; and 4,670 to cholera infantum, a malady more prevalent in America than England. The mean duration of life in the English race has been inconsiderably affected by the climate of America. We have calculated the mortality of the cities of New York and Philadelphia, and it will be found to differ little from the mortality of English cities of the same extent.

The population of New York increased from 75,770 to 270,089 in the 30 years from 1805 to 1835; the mean population deduced from 7 quinquennial enumerations was 147,108; the total deaths in the 31 years 1805—1835 amounted to 122,501, exclusive of 6,925 still born.* The mean annual rate of mortality in New York was therefore 2·686 per cent., nearly 1 in 37.

The population of the city and suburbs of Philadelphia was 119,325 in 1820, and 167,811 in 1830; the deaths in the 10 years, 1821-30 amounted to 40,506, exclusive of 2,692 still-born. The mean annual rate of mortality was 2·663, nearly 1 in 38.†

Deadly epidemics decimate the Havannah, Vera Cruz, and other cities in tropical America. The yellow fever begins to prevail epidemically at Vera Cruz in May, when the mean temperature rises to 75°·2 of Fahrenheit's thermometer; it attains its maximum force in September and October. The disease is fatal to strangers, particularly to the inhabitants of the temperate and cold climates. In the intendency of Vera Cruz, the yellow fever, which rages in the capital, has never been able to ascend above the farm of Encero, which Humboldt found to be 3,044 feet above the level of the sea; and as the Mexican oaks do not flourish below this limit, it shows that the constant average temperature is of a true tropical character.‡ Humboldt also observes, that, while yellow fever rages at La Guayra, it never crosses the Cumbre and the Cerro de Avila.

The condition of the mothers, and the training of the children, exercise an influence upon the health and diseases of the native American tribes which cannot be overlooked. The women, though doomed to severe labour, are spared during the period of pregnancy. They seldom marry till they are about 20. Accouchements take place in private cabins, and the mother, after washing herself in cold water, returns in a few days to her usual employments. Sir W. Penn was assured, and correctly, that the American Indians plunge their infants into cold streams as soon as born, in all seasons of the year. This practice, which destroys the weaklier bodies, and strengthens the survivors, has been generally adopted by the savages of cold and temperate climates. It was common in Greece; and Virgil makes one of the early Italians say in the Æneid:—

> Durum a stirpe genus: natos ad flumina primum,
> Deferimus, sævoque gelu duramus et undis.

The Dorians and Pelasgians exposed their children; and Lycurgus regulated the practice by enacting that none but the infirm and diseased should be abandoned after a public examination. There are no deformed Indians or idiots; they are sacrificed, says an apologist of savages, by the severity of the Indian manners. To facilitate their transport from place to place, the children are tied to a board, where they lie upon their backs for 6, 10 or 18 months. By some tribes the heads are flattened by pressure. The child generally sucks its mother till it is 2 years old, and sometimes longer. The circulation of the blood is more languid in the Indians than in persons who are in the constant exercise of the habits of civilised life. Out of 8 North American Indians, whose pulses Rush examined at the wrists, he did not meet with one in whom the artery beat more than 60 strokes in a minute.

The diseases of the Indians vary with the climate and locality. In the north, however, fevers constitute the most striking diseases. Pleurisies, peripneumonies, and rheumatisms are common. Dysentery is an Indian disease. Great numbers perish of famine, and the innumerable diseases generated by famine. In the temperate zone, ague, remitting and malignant fevers assail them in the endless forests, and in the marshes, and effluvial atmosphere of the lakes and rivers. In the tropics, Humboldt says, they are exempt at Vera Cruz from the ravages of yellow fever, which proves so fatal on the coast and in the West Indies to Europeans. But thousands have been carried off in repeated epidemics, by a disease not very different from yellow fever, called *Matlazahuelt.* Small-pox, which is believed to have been introduced amongst them by the Spaniards, sometimes destroys half the heads of a tribe. Montezuma died of small-pox. It has been a generally received opinion that *lues venerea* was acquired from the inhabitants of Hispaniola (Hayti), and conveyed by the equipage of Columbus to Europe. The son of Columbus relates in his narrative that the islanders had a cutaneous affection, called *caracaracol*, which resembled a tetter (Tenia): the historian, Ferdinand Oviedo de Valdes, affirms that the Spaniards were infected with it by the Indian women, and communicated the disease to the Neapolitans in the expedition of Gonzalvo de Cordova. He ascribes its importation to the second expedition of Columbus. Various cutaneous affections had been described by earlier medical writers, confounded with leprosy, and attributed to impure intercourse; but, in 1493, syphilis appeared, with its striking and appalling symptoms, almost simultaneously all over Europe. Columbus disembarked from his first voyage, March 15., at Palos; and arrived at Seville in April. In the beginning of the summer, the disease was observed at Auvergne, in Lombardy, in the rest of Italy, and in Brunswick.‖ Could lues venerea have travelled at this telegraphic rate? A learned Spaniard justly remarks, that neither the classical writers, nor the satirists of the 14th century, alluded to the effects of syphilis: in the words of the licentiate of Villalobos, it was, taken in its entire character, *jamas vista en metro, ni en prosa, ni en ciencia, ni istoria.* It still, however, remains a problem whether the outbreak of the malady merely coincided with the return of Columbus, or was conveyed from America. Rush affirms that the disease called by the English, morbus Gallicus; by the French, mal de Naples; by the Portuguese, Spanish disease; by the Spaniards, Indian disease: — was communicated to the northern tribes of America by Europeans.

* Med. Review, Jan. 1839.
† Hazard's Register of Philadelphia, July 1831.
‡ Dr. Craigie, Practice of Physic, p. 223.
‖ Sprengel, Hist. de la Médecine, tom. ii. p. 429.

Violent deaths are common among the Indians. Their occupations expose them to accidents. They are engaged in an almost perpetual warfare; and entire tribes are sometimes exterminated. Their connexion with the European population has made them acquainted with spirituous liquors; and this has proved another prolific source of disorder.

Celsus says, *Medicina nunquam non est;* and this holds among the American Indians. Their medical treatment, for the infirmities to which they are subject, is simple, and often instructive. In fevers, they abstract all kinds of stimulating food; and allow their patients to drink plentifully of cold water. Sweating is a common remedy. The Indian mode of procuring this evacuation is as follows: — the patient is confined in a close tent, or wigwam, over a hole in the earth, in which a red hot stone is placed; a quantity of water is thrown upon this stone, which instantly involves the patient in a cloud of vapour and sweat; in this situation he rushes out and plunges himself into a river, from whence he retires to bed. If the remedy has been used with success, he rises from his bed in four and twenty hours perfectly recovered from his indisposition. This bath is used not only to cure fevers, but to remove that uneasiness which arises from fatigue of body; and used for this purpose it is an excellent remedy. They purge and vomit: ipecacuanha is one of the many roots they employ for the latter purpose. They confine bleeding to the parts affected. A piece of rotten wood is burnt upon the skin for the same purposes as the moxa. They attempt to staunch the flow of blood from wounds by plunging in cold water, and endeavour to restore drowned people by suspending them by the heels. They have a great many specifics of uncertain value. The Indians attend to the sick for a certain season, but abandon them if the disease be protracted. When the northern Indian is unable, from sickness, to continue his journey, he is left behind by his companions, and covered over with deer skins; he is supplied with water, food, fuel, if the place will afford it, and informed of the track which his companions intend to pursue. (*Hearne.*)

Some of the most important drugs in the Materia Medica are derived from America. Guaiacum was introduced, at an early period, as a specific for syphilis in the place of mercury, which it superseded for several years. It is now fallen into disuse. Not so the root of the American sarsaparilla, which is consumed in great quantities, although it is exceedingly expensive. It is found in the hedges and swamps of Virginia. There are several species; the best, according to Humboldt, grows on the borders of a lake, two days' journey from Esmeralda. The calumba root, jalap, copaiba, and ipecacuanha are derived from America. We are also indebted to the New World for Peruvian bark. These remedies are invaluable; they contributed, in the 17th century, with the introduction of syphilis, to destroy the blind adoration of Galen, and led to a revolution in medicine.

Discovery of America.— This is the most striking event in modern times, and has perhaps made the most important change in the condition of mankind. There is no rational ground for supposing that the ancients had the slightest idea of the existence of the American continent. The form of their vessels, flat-bottomed and impelled by oars, and their ignorance of the compass, allowed them to move only at a short distance from land. Their voyages, therefore, though in some instances extensive, were always along the coast of the great continents; nor is there the faintest record of any one having turned his daring keel into the vast abysses of ocean. Nothing could be less probable, than that tempest or accident should drive any of the few vessels which then navigated the exterior seas of Europe to so immense a distance, or, if driven, that they could ever have returned.

But if we listen to some learned moderns, America would appear the general refuge of all who felt themselves straitened in the old world. The Trojans, Syrians, Carthaginians, Canaanites, but above all the Jews, have been represented as the undoubted ancestors of its present people. These speculations proceed upon a total oblivion of the fact, that man has every where many things in common with his fellows. The division into tribes and respect for chiefs, the lamentations over dead relations, the love of ornament, are considered as habits which the Americans must have learned from the Jews. Garcia, observing that most of them honoured their parents, and considered theft and murder as crimes, thinks it clearly proved that they received the ten commandments from Moses. Others were obstinate, unbelieving, and ungrateful; sure signs of their belonging to the stiff-necked posterity of Abraham.* Attempts have been made to trace a similarity between the languages of the old world and of America, but certainly with most slender success. Barton has collected 55 similar sounds, which Professor Vater has raised to 104, and Malte-Brun to 120; but to produce this, it has been necessary to search through sixty languages in each world. These few, too, if we except the natural infantile sounds Ata, Baba, Papa, &c. are by no means striking; and it seems even singular, that chance should not have produced more coincidences. Attempts have been lately made to identify the style of Mexican architecture with that of ancient Egypt; but we can see no ground for this, unless in the dimensions of the former, and some forms which a regard for beauty or convenience might suggest to both.†

The Welsh have put in a claim to the discovery of America. In 1170, Madoc, a prince of North Wales, sailed in quest of maritime adventure, and, after a long voyage, reached a "faire and large country" filled with wonderful objects: he then returned and took with him ten vassals and a larger party. Thus far seems tolerably attested; but though affording a sufficient foundation for Mr. Southey's poem, the idea of the region arrived at being really America seems scarcely to merit refutation. The intimation, that he left Ireland far to the north, makes it not improbable that he might have reached some part of Spain, no inconsiderable achievement in that age for a Cymric chieftain.‡

The claim of discovery by the Northmen from Iceland has been much more generally received. The Scandinavian writers have supported it as a point of national honour; and the learned in the rest of Europe have generally acquiesced in their authority. They would not, we think, have done so had they perused the original narratives in Torfæus, and the Heimskringla, or Saga, of King Olaf Tryggeson. Biorn, an Icelander, in sailing across to Greenland, was overtaken by a tempest, and after being tossed about for

* Garcia, Origen de los Indios; Essai sur la question, Quand et comment l'Amérique a-t-il été peuplé? 5 tom. 12mo. 1757; Adair's History of the North American Indians, 4to.

† Vater Untersuchungen über den Americas Bevolherung, p. 47—55. 156—174. Malte-Brun, Geography, V.

‡ Powell's History of Wales, p. 196, &c. Hackluyt, III. 1.

several days, came in view of an unknown land. After navigating several days along the coast the wind became favourable, and in *four* days he reached his destination in Greenland. Can any one seriously suppose, that in this short passage he could have been driven upon Newfoundland, upwards of a thousand miles out of his way, or if driven, could thus directly and rapidly have retraced his course? Numerous voyages to and from this new country, named Vinland, are then related, with no mention of particular difficulty or danger. One of them is stated, without any surprise, to have been performed in *twenty-four hours;* a manifest impossibility under the Newfoundland supposition. As to the term *Vin*-land, very inappropriate even to Newfoundland, the Northmen probably, who could not be great connoisseurs on this subject, mistook for the grape one of those delicate berries which abound on the Arctic border. We are convinced then that Vinland was merely a southern part of Greenland; for the modern hypothesis, which places the colonies on the western coast, is by no means supported by good early authorities.*

Another alleged discovery of much celebrity stands on the report of the Zeni, Venetian noblemen of distinction. Towards the end of the fourteenth century, they visited and spent a considerable time in Friezland, an insular country in the north of Europe, which Forster has shown to agree not ill with Orkney, Shetland, and the Ferro islands. They there learned, that four fishing boats being driven more than a thousand miles to the westward, had reached a coast named by them East-out-land, where they found cultivation, large cities, castles, and a Latin library in possession of the king. Thence they sailed to a more southern country, named Drogio, inhabited by a rude people, ignorant of iron, waging furious wars, and devouring each other. Reports were then made of a more civilised people to the south-west, who abounded in gold and silver, and had splendid temples, in which human sacrifices were offered. Forster, Malte-Brun, and for some time geographers in general, considered that these countries were undoubtedly Newfoundland, New England, and Mexico. Mr. Murray was, we believe, the first to observe, that even the distance of 1000 miles by no means corresponded; that the castles, libraries, and populous cities on the savage coast of Newfoundland, were the reverse of credible, and that accounts of Mexico were little likely to have reached the Friesland fishermen. He argued therefore that, supposing the northern voyage correct, interpolation must have been practised in what related to America. This has been corroborated by the research of Mr. Biddle, who, on comparing different posthumous editions of Ramusio's work, found that the narrative had been altered in accordance with successive and corrected accounts of the new continent. He therefore rejects the whole as a forgery: we rather incline to think that the northern voyage may be genuine, while all that relates to America is undoubtedly interpolated.†

In the maps constructed during the fifteenth century, some curious features appear, which have been referred to a western world. In 1436, one formed at Venice by Andrea Bianco has in the north-west Atlantic, not very remote from Newfoundland, the word Stoka fixa (Stock fish). But it is to be observed that Iceland and the adjacent seas were then the seat of a great fishery, and the term may have been merely used to express the abundance of its finny tribes. Another remarkable object in this map, as well as in one long prior, and in a subsequent one by Martin Behaim, is a long range of territory west of the Canaries, named Antilia. It seems impossible to trace with certainty the origin of this term, which we strongly suspect to be a corruption of the Atlantis of Plato, and to have no other origin. The inhabitants of those islands are said to have confirmed the impression, by asserting that, in certain states of the atmosphere, they saw in mysterious distance a great unknown land; the work either of imagination or of some optical deception.‡ These ideas, however, rested on no solid basis, and the sound judgment of Columbus appears to have been in no degree influenced by them; it was not to Antilia, but to other regions, that he directed his voyage.

Perhaps no individual ever stood so much alone as this navigator, in making a discovery that changed the face of the world. He conceived the design, and struggling against the opposition made by his age, singly achieved it. Yet, like every other great revolution, it was doubtless prepared by previous circumstances. The progress of navigation and commerce, the enthusiasm excited by maritime discovery, its wide range along Africa and towards India, all tended to give this direction to his spirit of lofty and daring adventure. The invention of the compass, and improved celestial observations, rendered it no longer impossible to steer through an unknown ocean. Sound reasoning, aided by some errors, made him hope, by sailing westward, to reach, even at no very great distance, the coasts of Eastern Asia. Ptolemy, whose works were then the chief modern light, had, from errors of graduation, and exaggerated itineraries, carried Serica or China much too far east. Again, Cathay and Mangi, described in such splendid colours by Marco Polo, not being recognised as the same country, were supposed to be still further east than Serica; as was also, on better grounds, his Xipangu, or Japan. This last, therefore, seemed likely to be at no immense distance from the western coast of Europe.

Columbus, being firmly impressed with this opinion, and being supported by the judgment of learned friends, made the first offer to Genoa, his native country; but the citizens, unused to oceanic expeditions, at once rejected it. He then applied to Portugal with seemingly every chance of better success; and king John accordingly referred it successively to a special commission, and to the council of state. There was then, however, a powerful party opposed to maritime enterprises altogether, as wasting the national resources; while their opponents merely defended a prosecution of the sure and successful career, by which they had nearly rounded the southern point of Africa. The proposal was rejected, while John was persuaded to take the mean step of secretly sending a vessel on his own account, which, however, returned without any success. Columbus next repaired to Spain, then under the able sway of Ferdinand and Isabella. Here, however, cosmographical knowledge was much less advanced; the globular form of the earth was doubted by many, and even represented as against the authority of scripture and the fathers. Financial difficulties, caused by the war with the Moors, and the lofty demands of Columbus to have the offices of viceroy and high admiral made hereditary in his family, ope-

* Torfæus, Hist. Vinland. Antiq. ch. i. ii. v., p. 50. (Maps of Stephanus and Thorlaius), Heimskringla, edit. Peringskiold, I. 323—335.

† Ramusio, Navigazione e Viaggi, ii. 230. Memoirs of Sebastian Cabot, p. 326—332.

‡ Maritime and Inland Discovery (Cab. Cyclop.), i. 237, &c.

rated against him: and five years' solicitation was vainly employed. Proposals were then made by his brother Bartholomew to Henry VII. of England, who received them more favourably; but as Columbus was on the point of setting out for this country, Isabella was persuaded to recall him, and, after some further difficulties, she engaged in the undertaking with the utmost ardour, and even pledged part of her jewels to raise the necessary funds.

The expedition after all consisted but of three small vessels, and cost only 4,000*l*. Columbus sailed from the port of Palos on the 3d of August, 1492, and went by way of the Canaries. He encountered innumerable obstacles arising chiefly from the timid and mutinous temper of his seamen, and after exhausting every resource furnished by his extraordinary address and perseverance, had been obliged to promise to return in a few days, if still unsuccessful. Signs of land, however, became frequent, and on the night of the 11th of October a light was observed at some distance, and the joyful sound of land! land! burst from the ships. But having been often deceived before, they spent the night in a state of the utmost anxiety. As soon, however, as morning dawned, their doubts and fears were dispelled; and the natives of the Old and the New Worlds found themselves, for the first time, in sight of each other! The land on which Columbus made his descent, and which had a pleasant delightful aspect, was one of the Bahama Islands, called by the natives Guanahani, and by the Spaniards San Salvador. Having landed, and taken formal possession of the country for the crown of Spain, Columbus became satisfied, from the poverty of the natives, that this was not the rich country of which he was in search. He therefore immediately set sail, and, shaping his course a little more to the S., successively discovered the great islands of Cuba, and Hayti or Hispaniola. After various transactions with the natives of the latter, he erected a fort, and leaving there a detachment of his men, set out on his return to Spain, arriving, after being obliged to take refuge in the Azores, and in the Tagus, at Palos, on the 15th of March, 1493, having spent 7 months and 11 days in his memorable voyage. He brought with him pieces of gold, a party of natives, and specimens of the vegetable and animal productions of this new world. His arrival was hailed with an enthusiasm of wonder and admiration in Spain and in Europe, and he made his entrance into Barcelona almost in regal pomp.

Columbus found no longer any difficulty in equipping a new armament, to which volunteers flocked from every quarter. In September he set sail with 17 vessels, several of large burden, and having 1,500 persons on board. Though he found his colony involved in many troubles, he was not deterred from pushing his enterprises to the westward. Having fallen in with Cuba, he sailed along its southern coast, then steering to the left, lighted upon Jamaica. He was delighted with the rich verdure and picturesque aspect of these fine islands, which he firmly believed to be parts of the Asiatic continent. Having returned to Spain, he set out, in 1498, on a third voyage. Having first proceeded southward to the Cape de Verd Islands, and steering thence across the Atlantic, he came in view of the lofty mountains of Trinidad. Rounding that island into the Gulph of Paria, he saw the Orinoco rolling by many mouths its mighty stream into the ocean. This discovery highly gratified him, and was, indeed, the first time that any part of the S. American continent had been visited by Europeans. He sailed along the coast as far as Margarita, and thence to Hayti. In 1502 he undertook a fourth voyage, seeking to push westward till he should arrive at regions belonging to India. In this course he struck against the coast of Honduras; where, instead of turning to the right, which would have led him to Mexico, he took the left, or N. W. course, as most promising for his object. He reached the Gulph of Darien, but without seemingly gaining any intelligence of the south sea. He then returned to Spain, where, weighed down by hardships, and disgusted by the ingratitude of Ferdinand, he closed, in 1506, his unrivaled career.*

America had, in the interval, been explored from a different quarter. John Caboto, or Cabot, a Venetian, who had settled at Bristol, presented to Henry VII. a plan of western discovery. That monarch, who had nearly earned the glory of Columbus's voyage, gave his full sanction to the undertaking. The adventurer, it appears, was willing to defray the whole expense; but whatever regions might be discovered, he and his family were to rule them as lieutenants, and to enjoy the exclusive trade, paying, however, to the king 1-5th part of the profits. The patent was granted in 1495, but circumstances prevented him from sailing till 1497. Then proceeding due west, he arrived, on the 24th of June, at a land with an island adjacent, which appears to be Labrador and Newfoundland. This was the first discovery of the continent, since it was not till 1498 that Columbus reached the mouth of the Orinoco. Cabot brought home several of the natives, and, though the aspect of the coast was not very inviting, Henry was so much gratified that he next year granted a fresh patent, allowing him to take up any 6 ships within the realm, equip them at the royal expense, and receive on board any number of English subjects who might be pleased to accompany him. John, from some unknown cause, did not go out in person; but the expedition was led by his son Sebastian, who, though a youth, showed already the talents of a great navigator. According to the very imperfect accounts of his voyage, he had with him 300 men, and sailing by way of Iceland, reached the coast of Labrador in about lat. 66°. Discouraged by its bleak appearance he steered to the south, and continued in that direction till lat. 38°. There are reports of his having attempted to establish a colony, but without success.†

Meantime, in another quarter important discoveries were proceeding. Vincent Yanez Pinçon, in crossing the Atlantic from the Cape de Verd Islands, was assailed by a tempest, which drove him to the southward of the equator; and, after being bewildered for some time amid unknown seas, he came in January 1499, to the view of an unknown coast, which was that of Brazil, near Cape St. Augustin. Thence he coasted northward to the mouth of the Amazons, and viewed with astonishment the immense body of water poured by it into the ocean, justly inferring that it must have rolled through a continent of vast extent. Three months after, Alvarez Cabral, despatched to India to follow in the footsteps of Vasco de Gama, came upon a more southern part of the same coast, which he named Santa Cruz, and took possession of it in name of the king of Portugal.‡

America had thus been reached in three dif-

* Robertson's America, Book II.; Irving's Life of Columbus.
† Hackluyt, iii.; Memoir of Cabot, ch. 5—10.; Tytler's Northern Coasts Amer.
‡ Maritime and Inland Discovery, ii. 31, 32.

ferent and distant quarters, on a scale which conveyed a high idea of its greatness, but without at all ascertaining its outline and limits. There was still ample unexplored coast to leave room for the passage to India, which continued to be the grand object in the discoveries that immediately followed. We shall begin with those most important ones, made by way of the Gulph of Mexico. Even before the fourth voyage of Columbus, Alonzo de Ojeda, on learning the results of the third, set out from Spain in 1499, and following up the career of his predecessor, explored the coast from Margarita to Cape de Vela. He was accompanied as pilot by Amerigo Vespucci, a skilful navigator, who, returning to Europe, published a narrative of the voyage, representing himself as the first discoverer of the continent. The relation was read with extraordinary interest, and the public adopted the name of America, yielding him an honour undoubtedly due to Columbus. In 1500, Roderigo de Bastidas explored the coast from Cape Vela to the point reached by Columbus in his fourth voyage, thus connecting a vast extent of continent. Ojeda and Nicuessa obtained grants of different portions; but their colonies, conducted rashly and violently, were almost entirely destroyed. A remnant was assembled at Darien by Vasco Nugnez de Balboa, an officer of great enterprise, who, penetrating across the isthmus, came in view of the great southern ocean. Vast prospects were thus opened: but the court of Spain ungenerously transferred the chief command to Pedrarias Davila, who, actuated by mean jealousy, persecuted and put to death his predecessor, without himself achieving any thing of importance.

The discovery of the northern coast of the Gulph was begun by Ponce de Leon. This officer, while in command at Porto Rico, was misled by the illusory report of a fountain, in which whoever bathed was restored from the most decrepit old age to all the bloom and vigour of youth. In pursuit of this chimera, he beat about from coast to coast, plunging into every pool, of course without success. In the course of his search, he came in view of an unknown coast, which he named Florida. Sailing along to a considerable extent, and turning the southern point, he ascertained it to be part of the continent, and the Spaniards long continued thus to name and to claim as their own the whole territory to Canada inclusive, though they were ultimately unable to maintain more than this southern extremity.

The main direction was still towards the west. In 1517, Cordoba from Cuba sailed along the coast of Yucatan, and collected some intelligence of the wealth and civilization of Mexico. He was followed next year by Juan de Grizalva, who, in the same direction, traced the entire coast of Mexico as far as Panuco. The fertile shores, well built towns, and abundance of gold, inspired the most flattering ideas of this coast, which was immediately dignified with the title of New Spain. In 1519, Garay, governor of Jamaica, sent four ships under Pineda, who, beginning at Florida, traversed the whole coast as far as Vera Cruz. The entire survey of the Gulph of Mexico was thus completed.*

Velasquez, governor of Cuba, on receiving the flattering accounts brought by Grizalva, determined to lose no time in fitting out an armament for the conquest of New Spain. Jealousy, however, deterred him from employing the original discoverer; and he gave the command to Hernan Cortes, a personal favourite, but who possessed every quality fitting him for such an undertaking. In March, 1519, he landed at Vera Cruz, and having burned his ships, marched into the interior with about 500 men. With this small force, seconded by his own superior sagacity and daring, Cortes subverted the empire of Mexico, put its sovereigns to death, and annexed it to the Spanish crown. Having reached the South Sea, he employed Alvarado to march along its coasts, which he did for the space of 400 miles, till he reached Guatemala. Nunez de Guzman afterwards penetrated the northern provinces to New Galicia, now Guadalaxara and Zacatecas. Cortes himself, having equipped a fleet in 1536, discovered the peninsula of California, with its deep gulph, commonly named in that age the Vermilion Sea. †

The discovery by Balboa of the South Sea remained long without any result, through the weakness or disunion of the officers employed. The most tempting accounts were however received of the wealth of Peru, and the abundance of its precious metals. In 1531, Pizarro, a daring adventurer, who had sailed with Ojeda, after one unsuccessful attempt, succeeded in assembling a band of brave and fierce followers, with whom he sailed to attack that great country. By a union of boldness and treachery, he seized the empire and treasure of the Inca; and Peru became an appendage of the Spanish crown. Almagro, the companion and rival of Pizarro, pushed southward into Chili, but he met there with great difficulties, and was recalled by the affairs of Peru. Pedro de Valdivia, however, having the government of that country conferred upon him, marched to the southern border of its fertile territory, as far as 40° S. Lat. Vadillo, in 1537, made a march from Darien to Peru, through the fine countries of New Granada and Quito. Expeditions to conquer the latter were undertaken by Benalcazar and Alvarado, who, after contending for its possession, agreed to divide it between them. In 1540, Gonzalez Pizarro, brother to the conqueror, undertook an expedition through the Andes to the west of Quito, in hopes of discovering a country said to abound in fine cinnamon. After numberless hardships, he came to the banks of the great river Amazon. Having followed its course for some distance, he employed Orellana, one of his officers, to descend the stream in a light bark to search for provisions. Orellana, inspired by a spirit of adventure, continued his voyage, and traced the whole of its immense course down to the ocean.

While the above-mentioned events were in progress, discovery proceeded, though in a less brilliant train, along the eastern coast. In 1514, Juan Diaz de Solis, a skilful mariner, was sent to sail round America, and reach the opposite side of the isthmus of Darien. Solis, beginning with St. Augustine, the limit of Pinçon's discovery, surveyed the whole coast of Brazil, and then came to the grand opening of the Rio de la Plata. But, having incautiously ventured on shore with a small party, he was surprised by the natives, and, with several of his party, experienced the dreadful fate which awaits those captured by the cannibal tribes of this continent. The remaining crews, on witnessing this catastrophe, were struck with dismay, and immediately returned home. Three years after, Fernando Magalhaens, or Magellan, a Portuguese, discontented with his treatment in his

* Oviedo. Robertson. Marit. and Inl. Discov. B. iv. ch. iii. iv.; Bancroft's Hist. United States, ch. ii.

† Cortese Relationi, Ramusio III. Robertson.

native country, offered his services to Charles V. The immediate object was to reach the Moluccas from the west, and thus, according to the papal grant, establish a claim to those islands, which were then much valued. A fleet of five sail being equipped, he sailed in September 1519, and having proceeded along the coast of Brazil, reached Port St. Julian, where he wintered. In October 1520, he entered the strait bearing his name, and after a few weeks' navigation, saw the great Pacific opening before him. He stretched directly across, and came to the Philippines, where he was killed in a contest with the natives; but his vessel had the honour of being the first that circumnavigated the globe. In 1526, Sebastian Cabot was sent out to the La Plata, where he ascended the Parana and the Paraguay, and, notwithstanding the opposition of the Portuguese, established two or three forts. In 1535, Juan de Mendoza, an opulent Spaniard, founded the city of Buenos Ayres, and in 1537 Juan de Ayolas penetrated across the Andes to Peru. Thus the great outlines of Southern America were traced in every direction.*

Discovery in the north did not proceed with the same rapid steps. We have already noticed the important voyages made by the Cabots. This excited the rivalry of the Portuguese, and in 1500 Gaspar de Cortereal, a nobleman of that nation, set sail and surveyed a considerable extent of the coast of Labrador. He carried off about 50 of the natives, to employ them as slaves; but the enmity of the people, thus justly roused, probably led to the fatal result of his next voyage, from which he never returned. His brother Michael, sailing in search of him in the following year, met the same fate, which was shared also by another expedition sent in 1503.

The reign of Henry VIII. was unfavourable to nautical enterprise. The discovery of the Cabots was not followed up, and Sebastian sought the service of Spain. He was sent out, however, in 1517, as pilot to an expedition commanded by Sir Thomas Pert, which, it appears, actually entered Hudson's Bay; but the commander then lost courage and returned, to Cabot's great indignation. This discovery attracted little notice, and was soon forgotten.

France now entered on the career of American discovery. In 1524 Francis I. employed Giovanni Verazzano, a Florentine navigator, who sailed along and described the coast from Carolina to Newfoundland. Unhappily, in a subsequent voyage, he fell into the hands of the natives, and suffered a cruel death. Ten years after Jacques Cartier, a seaman of St. Malo, performed several voyages, in which he entered the Gulph of St. Lawrence, and ascended the river as high as Montreal. Attempts were then made to colonize these countries, for some time without success: however, in 1604, De Montz founded the colony of Acadia, and Champlain, in 1608, that of Canada. The latter, engaging in warlike expeditions, penetrated southward to the lake bearing his name, and westward beyond Lake Huron.†

The Spaniards, meantime, as already observed, had, under the title of Florida, claimed nearly all North America; nor were they wanting in vigorous efforts to make good their title. In 1520, Lucas Vasquez de Ayllon discovered and attempted to form a settlement on South Carolina; but having begun by entrapping and carrying off a number of the inhabitants, he excited such a fierce enmity that many of the settlers were killed, and the rest returned to Hispaniola. In 1524, Estevan Gomez sailed as far as the latitude of New York, whence he brought off a cargo of slaves. A more important expedition was undertaken in 1528 by Narvaez, the rival of Cortes, and sent to supersede him, but who had been vanquished and made prisoner. He now sought to indemnify himself by a kingdom in Florida. He landed with a force of about 600 men, and advanced about 800 miles into the interior, baffling all attempts to oppose his progress. The natives, however, irritated by his violent and domineering conduct, posted themselves in the woods, and harassed him by constant attacks and surprises. The Spaniards, completely exhausted, and in extreme want, were obliged to seek the nearest coast. Unable to reach their ships, they constructed frail barks, which, on coming out to the open sea, were wrecked, and almost the whole number perished. Alvaro Nugnez the treasurer being cast ashore, contrived, by conciliating the Indians, acting as a merchant and physician, and even pretending to work miracles, to make his way to Mexico, after a seven years' pilgrimage. The land route was thus traced between that country and Florida.

This catastrophe did not prevent another attempt. Fernando di Soto had been an associate of Pizarro in the conquest of Peru, where he distinguished himself by the capture of Cuzco, and other exploits. He returned to Spain with a high name and a princely fortune; but instead of sitting down to enjoy these, he resolved to make them instruments for conquering an empire for himself. His reputation attracted many of the most distinguished Spanish youths as volunteers; and in May 1528 he landed in Florida, with a more powerful armament than those which had conquered Mexico and Peru. The exploits of Soto surpassed, in daring valour and brilliant achievement, those of Cortes and Pizarro; but his fortune was far different. There was here no great empire, no central point to strike at. He struggled on amid a succession of fierce and petty tribes, whom he always vanquished, but who rose around and behind him, and never left to his troops more than the ground which they covered. He was lured on by reports and specimens of the gold formation of North Carolina; but arriving there, in a most exhausted state, and finding only ridges of naked hills, he turned back. He afterwards pushed far to the westward, crossed the Missisipi in about lat. 35°, and proceeded northward to near the present site of New Madrid. Finding no report of gold, or rich kingdoms, he made a dash at the extreme west, passed the heads of the White River, then descended the Washita and Red River to the Mississippi. Here, overpowered by fatigue and disappointment, he sunk into the grave. The miserable remnant of his men, anxious to conceal his death from the Indians, carried the body at dead of night into the middle of the river, and sunk it beneath the waters, afterwards, putting together some rude barks, they made their escape to Mexico.‡

The wanderings of Alvaro had attracted the attention of the Spaniards to the regions immediately north of Mexico. A friar, Marco di Nizza, set out with a party to explore them, returned with a romantic account of a city, named Cevola, having 20,000 splendid houses, and its most common utensils of gold, silver,

* Herrera. Robertson. Marit. and Inl. Dis., B. IV. ch. vi. vii.
† Ramusio, III. Mem. Cabot, ch. xiii. Champlain, Voyages.
‡ Alvaro Naufragios in Barcia Historiaderes, tom. ii. Vega, Florida. Bancroft, i. 41, &c.

and the richest jewels. Mendoza, the viceroy, hoping to emulate the glory of Cortes, fitted out two large expeditions, one to proceed by land under Vasquez Coronado, the other by sea under Fernando Alarchon. Coronado, after a most arduous march through rugged and desolate mountains, reached the plain of Cevola, and, notwithstanding a most desperate resistance, forced an entry, but found a mere village of 400 houses, with nothing at all splendid; the jewels were only pebbles and rock-crystal. In hopes of achieving something, he marched 300 leagues to the coast, where he found a city of somewhat greater consequence, named Quivira, which cannot now be identified. Alarchon, unable even to join his associate, returned equally disappointed. Cabrillo, a Portuguese seaman, was then employed by Mendoza to explore the coast. He reached as high as 44° N. lat. but brought back a gloomy account of the aspect of the region, and the difficulties of navigating this northern sea.*

The zeal of Spain now slackened; but, in 1579, Drake, in his expedition round the world, traced the north-western coast as high as lat. 48°. There is a narrative by a Spaniard named Juan de Fuca, who boasts that, in 1596, he reached a similar latitude; and his report, long discredited, has been confirmed, in a great measure, by the discovery of a strait closely answering his description, and now bearing his name. In 1596 and 1602 the Conde de Montercy employed Sebastian Viscayno, who did not, however, reach so far as Cabrillo. There is also a narrative by De Fonte, who boasted that, in 1640, he had reached the latitude of 53°, where he found numerous islands separated by narrow straits, which he named the Archipelago of St. Lazare, and within them a large lake named Belle. This account is generally branded as fictitious; yet we cannot but observe, that it strikingly agrees with the numerous chain of islands found by Vancouver in the same latitude, while Lake Belle may be the interior sea between them and the main.†

The power of Spain having declined, she was unable to maintain the vast pretensions she had advanced in relation to Florida. Britain, now become a much more formidable maritime power, established colonies in Virginia and New England in defiance of Spain. In doing so, although there was not room for great discoveries, she acquired a far more accurate knowledge of this long range of coast. The expectation was still entertained that some of its openings might lead into the South Sea, and this was even viewed by the Virginia company as one of their leading objects. But the laborious survey of Chesapeake Bay, by Smith, in 1608, nearly put an end to these hopes.

The British, however, made indefatigable efforts to discover a passage to India by the north. Sir Martin Frobisher, in 1576, found means to equip 2 slender barks of 25 tons for this arduous attempt. Passing the southern extremity of Greenland, he reached the coast north of Hudson's Strait; but, after sailing about for some time without perceiving any opening, and the season being advanced, he returned. One of the party brought home a shining black stone, which some ignorant persons pronounced an ore of gold. The utmost enthusiasm was thus kindled, and a larger expedition was easily fitted out next year. Frobisher then discovered the straits bearing his name, leading into Hudson's Bay; but he was arrested in them by the ice; he carried home, however, a store of the black stone. The hopes of the nation were higher than ever, and the queen sent him back with 15 ships, a strong fort in frame-work, and 100 men to form a colony. In approaching the place, however, he was attacked by so furious a tempest, with islands of ice driving against the vessels, that he had the utmost difficulty in saving and bringing them home. These disasters, and the discovery that the appearances of gold were illusory, caused a suspension of this series of enterprize.

In 1585, a number of leading merchants fitted out 2 vessels under John Davis. Steering farther N. than Frobisher, he crossed from Greenland the straits bearing his name, and came upon the American land in about 66° N. He sailed somewhat farther N., and surveyed different parts of the coast, but was obliged by the lateness of the season to return. His report, however, being favourable, he was sent out again next year. Though much retarded by the encounter of a huge field of ice, he reached his former station, and steered thence S. E. till he came to Labrador, having passed numerous islands, as appeared to him, but probably the coasts bordering on the sounds and inlets leading into Hudson's Bay. Being assailed by tempests, he returned to England, still giving such favourable hopes that, though many of the adventurers held back, Mr. Sanderson, his zealous patron, procured for him a smaller armament. He pushed to the yet unattained point of 72° 12′ N., on West Greenland; thence he steered 40 leagues across, but was arrested by the fixed field of ice in the middle of the bay. He vainly attempted to round it, and was pushed southward to his former station on the American coast. He penetrated 60 leagues up Cumberland Strait; then being obliged to return, he observed, without entering, the entrance of Hudson's Bay. He returned home as sanguine as ever, but the perseverance of the merchants was exhausted.‡

The Muscovy and Levant companies, in 1602, sent out John Weymouth; but the mutinous spirit of his crew prevented his achieving any thing. They employed, in 1606, John Knight, who was surprised and killed in Labrador by the natives. In 1607, Sir Dudley Digges, Sir John Westenholme, and other gentlemen fitted out Henry Hudson, a celebrated navigator, who had already made three arctic voyages. Though furnished only with one ship of 55 tons, he penetrated, after many difficulties, into the bay, or rather inland sea, which bears his name. He surveyed a considerable extent of its eastern shore; but as November had arrived, was obliged to winter there. Much hardship being endured till spring, a mutiny arose among his crew, who exposed Hudson and his friends to perish on this inhospitable shore, and, with thinned numbers, made their way to Ireland.

Notwithstanding these melancholy circumstances, a great opening had thus been traced, and, in 1612, the Company sent out Sir Thomas Button, accompanied by Bylot, one of Hudson's companions. Sir Thomas having entered the bay, steered directly across through such an extent of open sea, as made him hope that he was now in the Pacific; when he suddenly saw himself arrested by a long line of coast, to which he gave the name of Hope checked. He wintered in Nelson's River, sailed up Roe's Welcome, surveyed various points on Southampton Island, and returned to England. After a fruitless attempt by Gibbons, Bylot and Baffin were sent,

* Ramusio, vol. iii. p. 297, &c. Venegas Calafornia.
† Torquemada, Monarquia Indiana, book v. Murray, Discov. Amer. vol. ii. p. 87, &c.
‡ Hackluyt, iii. 54—114.

in 1615; but they were arrested by the eastern coast of Southampton Island. In 1616, they went to try the more patent route of Davis's Straits. They made then the complete circuit of that great inland sea, which has since been named Baffin's Bay; but returned with the conviction that it was enclosed by land on every side, and afforded no hope of a passage. The search in this direction was discontinued; but, in 1631, Fox was sent out by the king, and James by the Bristol merchants, to try again the route of Hudson's Bay. Fox, after vainly attempting a western route, sailed up the channel bearing his name, the most direct route to the strait of the Fury and Hecla, but stopped much short of that point. James stood to the southward, and being entangled in the eastern coasts of the gulph, was obliged to winter there, when his crew suffered the utmost extremity of cold.*

The north-western coast of America, notwithstanding the Spanish discoveries, remained still almost unknown. But after Russia had overrun Siberia, and reached the shores of the eastern ocean, her active rulers felt an interest respecting the opposite continent. It was even doubted, whether it was separated from that of Asia; but this, in 1728, was nearly ascertained by Behring, who reached the eastern extremity of the latter continent, on the straits which bear his name. He saw the land thence stretching N. W., but did not discover any part of America. A few years after, Krnpishef, a Kossac, from Kamtschatka, descried, and sailed along it for two days. In 1741, Behring and Tchirikoff were sent thither to make a careful survey. They were separated: the former reached the coast, and landed about the latitude of 58°. He could not accomplish his object of surveying it to 65°, and being obliged to winter on one of the Aleutian islands, suffered severe hardships, to which he fell a sacrifice. Tchirikoff came in view of it in about lat 55°; but being unable to land, and having lost two boats in attempting to communicate with the natives, he returned to Kamtschatka. On this voyage the Russians found their claims to the American coast N. of 55°; and their traders soon established along it a chain of settlements with a view to collecting furs and skins of the sea-otter. †

Capt. Cook employed his last voyage in examining the north-west boundaries of America, and in attempting to effect a north-west passage. He traced the coast from 50° northwards, till he came to Cape Prince of Wales, the western limit of the continent: then steered north-east till, in about 70°, he was arrested by an unbroken chain of ice islands. He returned, naming the adjacent promontory Icy Cape; and King and Clerke next season in vain attempted to penetrate further. The information obtained in this voyage induced many English ships to resort to this coast with a view to the capture of the sea-otter, for whose rich skin there is a regular demand in the China market. Dixon and Meares, in this pursuit, explored Nootka and the adjacent coasts. The Spaniards attempted to oppose this trade, and even captured the Argonaut, a British vessel; but were obliged to withdraw their opposition. They now sent several expeditions, particularly one under Ayala and Maurelle; but these could make no discovery which had not been anticipated. In 1791-2, Vancouver was employed in making a careful survey of these coasts, in the hope of finding a passage into the Atlantic, through one of their numerous bays; but this he proved to be impracticable. Broughton, under his direction, ascended the Columbia for about 90 miles. Capt. Gray, employed by the United States, had before been at its mouth, and given it its name; but he is said never to have entered the actual channel of the river.

Meantime some straggling attempts after the passage were made from the Atlantic. In 1668, the Hudson's Bay Company was formed, and undertook to make exertions for this object. There is however no record of any till 1721, when Knight, governor of one of their forts, prevailed on them to supply him with the materials for a voyage. Unfortunately, being obliged to winter on Marble Island, he and his whole crew fell a sacrifice to sickness and famine. In 1741, Mr. Dobbs, a gentleman of influence, and imbued with the the most ardent zeal on this subject, prevailed on the Admiralty to send out Capt. Middleton with the Furnace bomb-ketch. That officer, in 1742, sailed to the head of Sir Thomas Roe's Welcome, where he found on one side Repulse Bay, on the other a frozen strait between Southampton Island and the mainland. Having also looked up Wager inlet, he pronounced a passage in this direction impossible. Dobbs and others loudly accused him of carelessness and even treachery, and kindled such a spirit that 10,000*l.* was raised by subscription, and parliament voted a bounty of 20,000*l.* to the subscribers in the event of their success. Two vessels were sent out under Captains Morr and Smith, who however merely examined the Wager inlet, ascertaining that there was no passage, and then returned.

Maritime expeditions were now suspended, but some important discoveries were made by land. Ever since Baffin's last voyage, the impression had prevailed that North America stretched indefinitely towards the pole. But in 1769, Mr. Hearne, sent by the Hudson's Bay Company, descended Coppermine River, and found it to terminate in a sea at about 65° N. lat. In 1789, Sir Alexander Mackenzie, an agent of the North West Fur Company, descended, much farther westward, the great river bearing his name, and came to what he termed a lake, but which, from its having tides and containing whales, was very decidedly judged to be also a sea. There was thus found great room to suppose that, in a latitude between 60° and 70°, America was bounded by a great Arctic ocean: while from these observations combined with those of Cook, the estimate of its breadth was greatly enlarged.

These considerations produced little influence, till, after the peace of 1815, when the energies called forth during the late war sought a different direction. Sir John Barrow proved that the impression against the existence of a passage, derived from former failures, rested on very slight grounds. Under his auspices, Capt. Ross was sent out in 1818, with the Isabella and Alexander, to make a more full trial in Baffin's Bay. He sailed entirely round it, but returned decidedly reporting that navigator's opinion to be correct, and that it afforded no western passage. Lieut. Parry of the Alexander, however, and other officers, were of opinion that the spacious opening of Lancaster Sound had been quitted without due examination, and afforded a favourable promise. He was therefore sent out next year, and though he did not reach the sound till August, found all his expectations fulfilled. The ships, during the first day after

* Purchas, iii. 596. 716. Narratives of Fox and James Barrow's Arctic Voyages.

† Muller. Cox. Burney.

entering the sound, had an unobstructed run of upwards of a hundred miles. After sailing a little farther, he was arrested by ice, and obliged to turn southward along the eastern shore of Prince Regent's Inlet. Being arrested there, he returned northwards, and was gratified to find the passage to the west become quite clear. He run along it to beyond 110° W. long. thus entitling the crew to a royal bounty of 5,000*l*. He was then obliged to make arrangements for spending the winter, during which, notwithstanding the most rigorous cold, the health and spirits of the crew were surprisingly preserved. He was defeated in his attempt next year to penetrate farther west, and obliged to return.

Capt. Parry was again sent out the following year; but it was now resolved to try the channel by the northern head of Hudson's Bay, which Middleton was considered as having by no means completely explored. He found no reason to doubt the accuracy of that navigator; but by pushing up the Fox Channel, he arrived at a strait, named after his vessels the Fury and Hecla, which was ascertained to afford a passage into the Polar sea. It was so blocked up with ice, however, that his utmost efforts, during two successive seasons, could not force a passage. Having returned to England, he was sent out a third time, in 1824, to endeavour to penetrate through Prince Regent's Inlet into the open sea, of which he had now fully ascertained the existence. The season however being peculiarly rigorous, it was not till next summer that he reached the western coast; and the Fury, being then squeezed between two masses of ice, sustained so severe an injury, that it became necessary to abandon her, and give up all attempts to proceed farther.

Other means were at the same time resorted to for exploring the northern boundary of America. Lieut. Franklin and Dr. Richardson undertook to proceed to the mouth of the Coppermine River, and thence attempt to trace the whole coast, from the strait of the Fury and Hecla to the Icy Cape of Cook. They sailed from England in May, 1820; were obliged to winter on the Athabasca Lake, and in July, 1821, embarked on the Arctic Ocean. They turned to the eastward, but were forced to take a very circuitous course through deep sounds and inlets, particularly the great one named Coronation Gulph. Hence on reaching Point Turnagain in 109° 25′ W. long., though the sea continued open, they found it necessary to return, from the exhausted state of the equipment. The party, being obliged to travel by land over a range of naked territory broken by lakes and rivers, endured the utmost extremes of human misery, and several perished before they could reach Fort Enterprise on the Coppermine. They returned, however, with unbroken spirits and determination, and government liberally furnished the means of renewing their efforts. At the same time, Capt. Beechey was sent by way of the Pacific Ocean to follow in the steps of Cook, and meet them from the westward. Franklin's new expedition set sail in 1825, wintered on Great Bear Lake, and early next year were at the mouth of the Mackenzie, whence they now proposed to begin their survey. From this point Capt. Franklin proceeded W.; Dr. Richardson E. The former explored a considerable extent of coast bordered by ranges of the Rocky Mountains; but, after passing Foggy Island, in long. 147° W., the obstacles became so serious as made it necessary to turn back. Meantime, however Capt. Beechey had passed Behring's Straits; and, though the ship could not be navigated beyond the Icy Cape of Cook, Mr. Elson, in a boat, reached 156° 21′ W. long., where a cape stretched into lat. 71° 23′ N. The expeditions were thus within 9 short deg. of long. from each other; of which had they been aware, they would at every cost have pushed through. Dr. Richardson succeeded in exploring the whole coast between the Mackenzie and the Coppermine, connecting his discoveries with those of the former voyage, and leaving unknown only two comparatively small portions between Franklin's extreme points and those reached by Beechey on one side, and Parry on the other.

Capt. Ross, regretting the mistake by which he had failed to discover the entrance into the Polar Sea, anxiously sought the means of retrieving this error. These were furnished by a public-spirited friend, Sir Felix Booth, and the resources of steam navigation were called forth. They were not of much avail; but Capt. Ross, through many difficulties, made his way into Prince Regent's Inlet, and reached considerably farther than Parry on its eastern limit. He thrice wintered there, and explored a great extent of the adjacent coasts. He found himself on what appeared a peninsula, named Boothia, reaching to 74° N. lat., and connected with the continent by a narrow isthmus. A considerable extent of the American coast to the westward was also explored, but without reaching Franklin's Turnagain. Commander Ross is considered as having ascertained the site of the magnetic pole on the western coast of Boothia. Capt. Ross, in attempting to reach home, was obliged to spend another winter near the northern point of the peninsula. His arrival, in 1833, occasioned a joyful surprise, as the most melancholy forebodings had prevailed as to his fate.

During the alarm felt at his long absence, an expedition to discover and release him was fitted out, partly by government and partly by private subscription. It was entrusted to Capt. Back, a companion of Franklin, with the hope that he might also make some further discoveries. Having left England in February, 1833, he wintered at the eastern end of Great Slave Lake, and next summer descended a river named the Thlew-ee-chop. It terminated in a spacious bay, at the end of which the coasts appeared to stretch, one S.E., the other due W. From Cape Ogle, where this last direction began, was seen on the E. an apparently boundless expanse of sea. By the observations then made it appeared probable, that Boothia did not form part of the American continent; but was connected with a more southerly peninsula which, along with it, formed one great island.

In 1838, the public were surprised by the intelligence, that one of the blanks still left in American geography had been filled up. The Hudson's Bay Company, now certainly an active and liberal body, determined to explore what was yet unknown in their own territory. Under the intelligent direction of Mr. Simpson, the resident governor, Messrs. Dease and Simpson, in the summer of 1837, went over the intermediate space between the points reached by Franklin and Beechey. It was found to run in a nearly direct line, presenting no remarkable feature except the efflux of two large rivers. The same gentlemen were employed, in 1838, to explore from Cape Turnagain to the strait of the Fury and Hecla; a more difficult task.

The first important steps in the discovery of

the interior of N. America, were made by the French from Canada, under the government of Count Frontenac. Under his auspices, Joylet and Father Marquette, in two Indian bark canoes, undertook to explore the vast regions on the Mississippi. Lake Michigan then formed the extreme boundary of European knowledge. From it, ascending the Fox river and descending the Onisconsin, they reached the central stream, and were astonished at its grandeur, and the majestic forests on its banks. In proceeding downwards, the first people they met were the Illinois, who received them hospitably. Afterwards they were struck by the influx of the mighty stream, deeply tinged with mud, of the Missouri (named by them Peketanani). Under the name of Ouabiskgou, they describe the united stream of the Wabash and Ohio. They came next to the Akamseas (at the mouth of the Arkansas), but perceiving now that the river must terminate, not, as had been supposed, in the Gulph of California, but in that of Mexico, they were afraid of the Spaniards, and returned.

When the two travellers arrived at Quebec, there happened to be in that city an enterprising young Frenchman, of some birth and fortune, named Sieur de la Salle, who conceived an enthusiastic desire to prosecute this career of discovery. Through influence at court, he procured ample means. After some time spent in erecting forts upon the lakes, he reached the Mississippi by a new route, ascending the Miami and descending the Illinois. On reaching the Arkansas, he hesitated not to prosecute his voyage, and passed along the territory of the Taencas, Natches, and Quinipissas. Soon after, by the vast breadth to which the waters expanded, their brackish taste, and the shells on the shore, he discovered, with exultation, that he was at the mouth of the Mississippi. He hastened back by the same route to Canada, and thence to France, where he was received with the highest distinction, created governor of the region he had traversed, and sent out with four ships and 280 men. He went by the W. Indies; but unfortunately he could not distinguish the entrance of the river, and, while searching for it, a mutiny arose among his men, in which he was killed.

About this time Hennepin also attempted to reach the source of the Mississippi; but, after passing the Falls of St. Anthony, he was taken prisoner by the Indians, detained long in captivity, and thought himself happy in making his escape. Some time after, Baron Lahontan reported his having ascended a great tributary, which he calls Long, but which appears to be the St. Peter's. He met some members of a distant tribe, who described a chain of high mountains lying to the westward, beyond which was a great salt lake, a term which the Indians often apply to the sea. These correct statements seem to absolve the baron's reports from the suspicion of fiction, which has been sometimes attached to them.

The English colonies on the Atlantic had made a great advance in population and wealth, before they attempted to penetrate across the Alleghany. An opinion had indeed long prevailed, that this range formed an insurmountable barrier. In 1714, however, Spottiswoode, governor of Virginia, sent a party, who made their way into the western territory. It was still some time before the colonists made any attempts to settle there, and when they did, they were vigorously opposed by the French, who, in virtue of the settlement of Canada and the discovery of the Mississippi, claimed the whole region. They drove out a company who attempted an establishment on the Ohio, and erected, on the present site of Pittsburg, Fort Duquesne, which struck a general alarm through the provinces. The conquest of Canada, and the peace of Paris, in 1763, removed this opposition. Still the settlement was made, not by any combined or official movement, but by Boone, and other daring adventurers, who maintained a series of bloody struggles with the natives, by whom the English were kept in perpetual alarm. It was not till some years after the war of independence, that Kentucky was received into the union, and that the great tide of emigration began, which has covered the valley of the Mississippi with so many populous and flourishing states.*

The Americans having in 1804 purchased Louisiana from Napoleon, claimed under that vague title the whole region to and beyond the Mississippi, and commenced operations for exploring that vast territory. An expedition was arranged by Mr. Jefferson, then president, and was led by Captains Lewis and Clarke, the former of whom was his private secretary. On the 16th May, 1804, they began their voyage on the Missouri. They passed its great tributary the Osage, inhabited by a numerous people of that name; then the Kansas, more than half its own breadth; lastly, the large and rapid stream of the Platte. Having ascended 1600 miles, and reached the foot of the Rocky Mountains, they found the season too far advanced for crossing that great chain. They, therefore, built a fort named Mandan, where they spent the winter. Early in April, they were again in movement, and in nineteen days came to the influx of the Yellowstone, almost equal to the main stream. They next reached two great branches or forks, without knowing very well which to take, but chose the southern and largest, and were assured of being right when they saw the great falls of which they had been apprised, and which formed a most magnificent spectacle. They ascended, till they could bestride this mighty river, and found the spring head whence it welled, about 3,000 m. above its confluence with the Mississippi.

Having now reached the crest of the great rocky chain, the travellers descended rapidly, though not without difficulties, from the ruggedness of the road and the want of provisions. They at length, however, embarked on the southern branch of the Columbia, which they named Lewis, and after passing its falls saw it spread into a wide channel, and ultimately open into a bay, where they exultingly heard the sound of breakers from the Pacific. They wintered at the mouth of the river, and hastened back by the same route in the following spring. They were not, however, the first who had crossed the entire breadth of the continent. This had been effected in 1792 by Sir Alexander M'Kenzie, in a more northerly quarter; and in 1803, the agents of the Montreal Company had crossed the mountains, and formed trading posts on the northern branches of the Columbia.†

The American government sent, in 1805, another expedition under Major Pike, to trace the yet unknown head of the Mississippi. It was found in a direction almost due north, not rising from any great natural range, but in a flat marshy region, and passing through a number of little lakes, the chief of which, named Leech and Red Cedar, contend for the honour

* Flint, Indian Wars of the West. Cincin., 1833.

† See Journal of D. W. Harmon (Andover, 1820).

of giving birth to this leading American water. Its length too proved to be at the mutual junction little less than half the Missouri, which therefore ought properly to rank as the main stream. Pike, on his return, was sent to explore the course and origin of the Arkansas and Red Rivers. The former he found very broad, flowing through a country richly stocked with game, and having its source in the Rocky Mountains. He first conveyed an idea of the loftiness of that chain, which he compared, though with exaggeration, to the Cordilleras. He attempted then to descend the Red River, but entered by mistake on the Rio del Norte, and proceeding into the Mexican territory was made prisoner by the Spaniards, but well treated and soon released. About the same time, Mr. Dunbar and Dr. Hunter, from Natches, sailed to a considerable height up the Red River and its tributary the Washita, surveying the fertile country on their banks.

After a long suspension, the American government, in 1819, recommenced this career. Major Long and Dr. James were sent to explore more precisely the western territory, southward of the Missouri. They discovered with regret that a great sandy desert extends for a breadth of about 400 miles eastward from the rocky mountains. That chain was carefully examined, and its highest peak found not much to exceed 12,000 feet. Seeking to descend the Red River, by a fresh fatality they mistook for it the Canadian, the longest tributary of the Arkansas, by whose channel they regained the Mississippi. Meantime General Cass was employed in a more careful examination of this last river, tracing in his way the southern shore of Lake Superior. Major Long, on his return, ascended St. Peter's River, already visited by Larhontan and Carver. He found, rising from conterminous sources, the northern Red River, which flows into the British territory, and ends in Lake Winnipeg. These successive expeditions conveyed to the United States government a pretty correct idea of the interior of their vast territory, including those parts of the continent which had hitherto been most imperfectly known.

AMERKOTE, a town and fort of India, territory of Sinde, in the desert, 85 m. E. Hyderabad, lat. 25° 20′ N., long. 69° 49′ E. The emperor Acbar was born here in 1541.

AMERSFORT, a town of the Netherlands, prov. Utrecht, on the Eem, which becomes navigable at this point, 12 m. E.N.E. Utretcht. Pop., in 1830, 11,782. It is well built and well fortified; has a court of original jurisdiction, a college, a commission of agriculture, with manufactures of fustians, dimities, bombazeens, &c. It is the mart for the corn and tobacco cultivated in the contiguous territory; and has a considerable transit trade in produce from Germany, embarked here in flat-bottomed boats from Amsterdam. The distinguished statesman and grand pensionary, Barneveldt, sacrificed in 1617 to the fanaticism of the people and the hatred of Prince Maurice, was a native of Amersfort.

AMERSHAM, a bor. and pa. of England, co. Buckingham, near the Colne, 26 m. W. N. W. London. Pop. of parish, 2,816. The town consists of one long street crossed by a shorter one, having the church at the point of intersection. The living is a rectory and one of the best in the county. There is a free-school, to which are attached three exhibitions at Corpus Christi college, Oxford, with almshouses, and three charities. A good deal of black lace is manufactured, and the market is well attended. Previously to the Reform Act, by which it was disfranchised, this borough sent 2 members to the H. of C., the right of voting being in the inhabitants paying *scot and lot*; but these being all tenants of the lord of the manor, it was in fact a nomination borough.

AMESBURY, or **AMBRESBURY**, a m. town and par. of England, co. Wilts. The town is situated on the Avon, 7½ m. N. Salisbury. Though inconsiderable, it is noted for the ruins of an abbey, the vicinity of Stonehenge, and for having been the birth-place of Addison. The parish comprises 6,060 acres, with a pop. of 944.

AMHARA, a division of Abyssinia, which see.

AMHERST, a sea-port town of the Brit. prov. of Martaban, India beyond the Ganges, and the chief British military and commercial station in the provinces E. the Than-lweng river, on a point of land in the N.E. angle of the Gulph of Martaban, facing the mouth of the Than-lweng and the isle of Balu to the N. Lat. 16° 4′ 48″ N., long. 97° 35′ 24″ E. Pop. in 1827, 1,600; now (1838) probably 5,000. It was founded in 1826, after the restoration of the town of Martaban to the Birmese, in the view of serving as a military post, and a commercial establishment, and as an asylum for such refugees as might choose to emigrate from the Birmese dominions. The apex of the promontory, which is the highest spot in the town, is occupied by the church, governor's house, court of justice, fortifications and other public buildings; on the higher ground around it are the European and Chinese quarters; and the lowest are by choice inhabited by the natives. The military cantonments are about 1½ m. distant, in a dry, level, and elevated spot. The harbour is spacious and secure, with 3 fath. water at low neap tides; rise and fall above 19 ft., with a flow of 6 m. an hour, and perfectly still for 2 hours both before and after high water. Ships may lie within 100 yards of the shore. Mangrove and a kind of oak are abundant here, and there are teak forests at no great disance. Good water is found everywhere 6 feet below the surface. (*Hamilton, E. I. Gazetteer*, p. 47.)

AMHERST, a town of the U. States, Hampshire, co. Massachusets, 82 m. W. Boston. Pop. 2, 631. A college was established here in 1821, which, in 1836 had 9 professors and 252 students. The expenses of a student are reckoned at from 90 to 120 dollars a year, including board and college fees. Amherst is the name of some other places in the U. States.

AMHERSTBURGH, a town of Upper Canada, on Détroit R., 3 m. above its embouchure in Lake Erie, and 14 m. below Détroit. It was founded during the administration of Lord Amherst, and was named after his lordship.

AMIENS (an. *Samarobriva*), a city of France, cap. dep. Somme, on the river of that name, 72 m. N. Paris, lat. 49° 53′ 41″ N., long. 2° 18′ 11″ E. Pop. 32,391. Amiens has a citadel constructed by Henry IV. It is well built; streets for the most part straight and clean; and it has some fine squares and promenades. The old Gothic cathedral, in excellent preservation, is one of the finest in Europe. It is 366 feet in length and 132 in height. Among the other public buildings may be specified, the Royal College, theatre, Hôtel de Ville, corn-market, courts of justice, barracks, seminary of St. Acheul, château d'Eu, &c. It is the seat of a bishop, has a *cour royale*, a court of assizes, a commercial tribunal, a custom-house, a public library containing above 40,000 vols., an academy, an academy of sciences and belles-lettres, a free school of design, a botanical garden, &c.: manufactures very considerable. They consist principally of kerseymeres, cassimeres, merinos, serges, &c. made partly of home, and partly of German and Spanish wool. The linen trade is also considerable; but it is now surpassed by that of cotton. There are annually produced about 60,000 pieces of cotton velvet, the aggregate value of which is estimated at about 8,000,000 fr.; and about 400 looms are occupied in the production of velvets, *dites d'Utrecht*. There are also several mills for the spinning of cotton and flax; with dye and bleach-works; manufactures of machinery, beet-root sugar, and chemical products; tanneries, soap-works, paper-mills, &c. The *patés de Canard* made here, are highly esteemed. Flat-bottomed vessels, drawing from 40 to 50 tons, come up the river to the town, which is the centre of a very considerable trade, as well in its own productions as in those of the surrounding country. Amiens is very ancient, being supposed to have existed anterior to the invasion of Belgium by the Romans. It is known in diplomatic history from the circumstance of a definitive treaty of peace between England and the French republic having been signed in it on the 25th March, 1802. It is the birth-place of Peter the Hermit, the apostle of the first crusade; of Ducange, author of the *Glossarium ad Scriptores mediæ et infimæ Latinitatis*, a work of wonderful research and labour; and of Delambre, the late learned author of the most accurate though not the most eloquent history of astronomy. (*Hugo, France Pittoresque*, art. *Somme*, &c.)

AMJIRA, a town in Malwa.

AMLWCH, a sea-port town of N. Wales, N. shore of the island of Anglesea, which has risen from the state of an inconsiderable fishing village, in consequence of the discovery of the famous copper mines in the adjoining Pary's Mountain, in 1768, to be a town with about 6,000 inhab. It has a pretty good port, excavated from the solid rock. During the flourishing period of the mines, they produced above 3,000 tons a year of pure metal; but they have been gradually declining for these several years past, and do not now produce above 700 tons a year. It is not therefore probable that Amlwch, which depended

almost entirely upon the mines, is destined to make much further progress. It is united with Beaumaris, Holyhead, and Llangefni in returning a m. to the H. of C. Pop. of parish, 6,285.

AMMAN, (the *Rabbah* of the Scriptures, and *Philadelphia* of the Greeks,) a city of Syria E. of the Jordan, deserted and in ruins; lat. 32° 8′ N., long. 36° 8′ E.; 25 m. N. E. Dead Sea, and 30 m. E. Richa (an. *Jericho*).

The remains of Amman are very extensive, but none of them seem to be older than the æra of the Greek power in Syria. They consist of theatres, temples, and colonnades, of great beauty and high finish, some of them being in very perfect preservation. A great number of private houses still remain, but there is not a single inhabitant.

This is one of the most ancient cities mentioned in Jewish history. It was the capital of the Ammonites, a people undisturbed by the Israelitish settlement in Palestine, and with whom the Jews lived in a state of suspicious truce till the æra of Jephethah, about 1161 B. C. Thenceforward the two nations were in almost constant hostility, generally to the disadvantage of the Ammonites; and in 1035, B.C., David took their capital. But notwithstanding this untoward event, and the unsuccessful war they waged against Jehosaphat (B. C. 896), and Jotham (B. C. 760), they continued to be a powerful people, and about 600 years B. C. supplied Nebuchadnezzar with a strong auxiliary force to assist in the destruction of their old enemies. Amman was subsequently included in the Assyrian and Persian empires; and after the battle of Issus (B. C. 333), it passed, with the rest of Syria and Palestine, into the hands of the Greeks. In 218 B. C. Palestine was the scene of war between Antiochus the great and Ptolemy Philopater; the former of whom utterly destroyed Amman. Having been rebuilt by Ptolemy Philadelphus, it received from him its Greek appellation of Philadelphia. It became a Roman town in the last century B. C., and remained such till the conquest of Palestine by the Saracens, A. D. 638. Under the Christian emperors of the East, Amman appears to have been a bishop's see, but it was declining before its capture by the Arabs, and Abul-Feda, in the early part of the 14th century, describes it as already deserted.

The ruins of Amman stand on the banks of a brook, which issuing from a large pond at the S.W. corner of the town, flows (partly under ground) over a flinty bed into the Zerka (an. *Jabbock*) an affluent of the Jordan. The water of this stream is excellent, a circumstance which renders the spot a desirable halting-place for caravans, the drivers of which use the ancient temples and buildings as shelter for their beasts, literally fulfilling the denunciation of Ezekiel, " I will make Rabbah of the Ammonites a stable for camels and a couching place for flocks." (*Numbers to Chronicles, passim; Polybius*, lib. v. cap. 5. and 6.; *Robinson*, ii. 172—175.)

AMMERSCHWIHR, a town of France, dep. Haut Rhin, 4 m. N. W. Colmar. Pop. 2,136.

AMOL, a city of Persia, prov. Mazunderan, on the Herauz, about 12 m. above where it falls into the southern part of the Caspian Sea, lat. 36° 30′ N., long. 52° 22′ 55″ E. Pop. differs at different seasons; but in winter, when greatest, is estimated, by Mr. Frazer, at from 35,000 to 40,000. The principal object worth notice is a mausoleum erected by Shah Abbas over the remains of a former distinguished sovereign of Saree and Amol, who died in 1378. This magnificent structure has however been injured by an earthquake, and is rapidly decaying. There is a bridge of 12 arches over the Herauz, and there are in the vicinity of the town many mounds and other remains of Persian antiquities. The bazars are extensive, and well supplied with certain articles; but it has little trade or industry. Mr. Fraser could not find tea either here or at Balfroosh, and the inhabitants had never heard of coffee. *Chillaw* and *mas*, that is plain boiled rice and sour curds, is the common food of the people, some of whom season it with a little salt fish. (*Fraser's Southern Banks of the Caspian Sea*, &c. p.101.)

AMOOR, or AMUR, a large river of E. Asia which has its sources in Mongolia. It is formed by the junction of two great rivers, the Onon or Chilka, which rises nearly under the 110 deg. of E. long. and the 50 deg. of N. lat., and the Kerlon or Argoun, which rises nearly under the same meridian, but about 2½ deg. more to the S. The latter river traverses the great lake of Koulon, and, issuing from it, and pursuing a N. E. course, forms, for a considerable distance, the line of demarcation between the Russian and Chinese empires. The Kerlon and Onon unite near the fort of Ruklanova, in about the 120th deg. E. long. The combined river having taken the name of Amoor, flows E. and S. E., till, at its most S. point, it is joined by its large tributary, the Songari, flowing N. E.: the Amoor, having suddenly taken the same direction, preserves it during the remainder of its course, till it falls into the arm of the sea opposite the N. end of the island of Saghalien, or Tchoka, in about the 53d deg. of lat. and the 140th deg. of long. The entire course of the river, to the source of either of its principal branches, may be estimated, inclusive of its windings, at about 2,200 m.; but the distance in a direct line from its sources to its embouchure does not exceed 1400 m. In the lower part of its course it flows through a comparatively rich well cultivated country; but the country round its sources, and the upper part of its course W. of the Kingan Yalo mountains, being contiguous to the great desert of Shamo or Gobi, has the same characteristics. The Russian fort of Nertschinsk stands on the Nertscha, near where it falls into the Chilka. (*Ritter's Erdkunde Von Asien; Arrowsmith's Map of Asia; Cochrane's Travels.*)

AMORBACH, a town of Bavaria, 24 m. S. Aschaffenburg, with a castle, formerly a very rich abbey.

AMORGO (an. *Amorgos*), an island of the Grecian Archipelago, about 36 m. in circumference, lying S. E. from Naxia, in about 36° 50′ N. lat., and under the 26th deg. of E. long. Pop. estimated at between 2,000 and 3,000. It is in part mountainous and rocky; but, in antiquity, it was noted for its fertility, and it is said by Tournefort to be well cultivated, and to produce more corn and wine than the inhabitants can consume. It contains a town of the same name. Port St. Anna, on the N. shore of the island, is an excellent harbour, with good anchoring ground in from 18 to 20 fathoms. Simonides, famous in antiquity for his iambics, was a native of Amorgos. (*Tournefort, Voyage au Levant*, i. p. 232.)

AMORGO POULO, an uninhabited islet, 6 m. W. Amorgo.

AMOUR (ST.) a town of France, dep. Jura, cap. cant. 9 m. S.W. Lons-le-Saulnier. Pop. 2,631. It has a forge, a nailwork, a considerable marble work, tanneries, &c.

AMOY, a sea-port town of China, prov. Fokien, with a commodious and secure harbour, lat. 24° 10′ N., long. 118° 10′ E. Though situated in one of the least fertile districts of the empire, the merchants of Amoy carry on a very extensive intercourse with Formosa, whence they import provisions, with the other Chinese ports to the N. and S., and with Siam, Java, Singapore, the Soo-loo islands, &c. This port was open to Europeans till 1734, when all trade with them was suppressed. It was visited by the ship Amherst, in 1832; but the authorities prevented that commercial intercourse from taking place to which the people seemed to be extremely well disposed. (See *Report of the Voyage of the Ship Amherst.*)

AMPFING, a village of Bavaria, 6 m. W. by N. Muhldorf. A great battle was fought in the vicinity of this village, on the 28th September 1322, between Louis Duke of Bavaria, emperor of Germany, and Frederick archduke of Austria, when the latter was entirely defeated and made prisoner. (Pfeffel, anno 1322.) It was from this point also that Moreau commenced his famous retreat in 1800.

AMPLEPUIS, a town of France, dep. Rhone, 19 m. W.S.W. Villefranche. Pop. 4,881. It has manufactures of linen and cotton, particularly the latter.

AMPTHILL, a m. town and p. of England, co. Bedford, h. Redbornstoke, 45½ m. N. W. London. Pop. 1,688. It is neatly built, has a charity school for 13 poor children, and an hospital for 10 poor men and women. Ampthill Park, a magnificent mansion, the property of Lord Holland, is situated a little to the W. of the town.

AMPURIAS, a town and castle of Spain, N. E. part of Catalonia, on the Llobregat, near the sea, 24 m. N. E. Gerona. Pop. 2,200.

AMRAN, a walled city of Arabia, in the Djebel, or mountain land of Yemen, being the chief town of a district of the same name, lat. 15° 32′ N., long. 43° 38′ E., 25 m. N.W. Sanaa, and 104 N. E. Hodeida. Pop. unknown, but may probably amount to from 1,500 to 2,000. It stands near a mountain, in a fertile country, in the centre of the coffee lands, the dep. to which it gives name being a part of Haschid-u-Bekel, one of the most noted divisions of Yemen for the growth of coffee. Amran is not, however, politically united with the state of Haschid-u-Bekel, but is under the government of the Iman of Yemen Proper. (*Niebuhr, Des. de l'Ar.* par. ii. pp. 127—220.)

AMRETSIR or UMRITSIR (*Pool of Immortality*), a town of India, the holy city of the Seikh nation, 44 m. E. Lahore, lat. 31° 33′ N., long. 74° 48′ E. Pop. not stated. It is an open town, about 8 m. in circ.; streets narrow; houses lofty, and built of burnt bricks, but the apartments are small. Manufactures inconsiderable; but being situated on the high road between Cabool and Delhi, and Cachmere and the Deccan, it enjoys an extensive trade, and is the residence of several rich merchants and bankers. It is defended by a fort built by the present Seikh ruler, Runjeet Singh, who has also united it to the Ravee by a canal 34 m. in length.*

The town derives its entire celebrity from its being the

* This is Hamilton's statement. Captain Burnes says, it was made by one of the emperors of Hindostan, and that it is 80 m. in length. (*Travels to Bokhara*, &c. vol. i. p. 150. 12mo. ed.)

principal seat of the Seikh religion. Amretsir, or the Pool of Immortality, is a basin 135 paces square, built of brick, in the midst of which is a temple, covered with "burnished gold" (*Burnes*), dedicated to the warrior saint, Gooroo Govind Singh, the principal founder of the religion and power of the Seikhs. Within this temple is preserved, under a silken canopy, the *Grinth Sahib*, or sacred book of the Seikhs, being a code of laws and ordinances, principally compiled by the above saint. The temple is attended by a numerous body of priests, who are supported by the voluntary offerings of the devotees, by whom it is frequented. Immersion in the sacred pool is believed by the Seikhs, and many tribes of Hindoos, to purify from all sin. (*Hamilton's East India Gazetteer; Burnes, &c.*)

AMSTERDAM, or AMSTELDAMME (dam of the Amstel), a famous marit. and commercial city of Holland, cap. prov. N. Holland, and of a district and cant. of the same name, on the S. bank of the Y., an inlet or arm of the Zuyder Zee, where it is joined by the Amstel, lat. 52° 22′ 17″ N., long. 4° 53′ 15″ E. Being situated in a marsh, its buildings are all founded on piles driven from 40 to 50 feet into a soil consisting of alluvial deposits, peat, clay, and sand. The canals by which it is everywhere intersected, and along which all heavy burdens are conveyed, are said to divide it into 90 islands, and are crossed by about 290 bridges, partly wood and partly stone. Its form is that of a crescent or half moon, the horns on either side projecting into the Y, and inclosing the port. On the land side it is surrounded by walls having 26 bastions and a wide ditch; but its ramparts have been planted with trees, and converted into public walks and boulevards; the only defence of the town consisting in the facility with which the surrounding country might be laid under water. It is from 8 to 9 m. in cir., and covers a space of about 900 acres. The Amstel, which runs through the city, divides it into two nearly equal portions; that to the E. of the river being termed the old, and that to the W. the new city. In the centre and oldest portion of the city, on both sides the Amstel, is a cluster of irregular streets and canals; but the streets and canals round this central nucleus are mostly regular, and parallel to each other. Three of these streets, the Heeren, Keysers, and Princen Gracht, are not easily to be matched in any other city of Europe for their length, width, and the grandeur and elegance of their buildings. They are each about 2 m. long, about 220 feet broad; and following the direction of the outer wall of the city, which is that of a polygonal crescent, have all the lines perfectly straight between the angular points. The houses are large and well built; a canal, crossed by numerous stone bridges and bordered with trees, runs down the middle of each of these streets, the spaces on both sides being well paved and lighted, as is indeed the case with all the other streets. The principal shops are in the Kalvers Straat, the Nieuwendyk, and the Warmois Straat. The quarter occupied by the Jews is the dirtiest part of the town. Many artisans and others belonging to the poorer classes inhabit cellars under the houses of the more opulent; and a great many reside constantly on the water, in comfortable apartments built on the upper decks of their trading vessels, more particularly those employed in inland navigation. The houses, which are all of brick, are generally 4 or 5 stories high, and have their gables to the street. Many of them are constructed in an elegant style; and some of them are splendidly fitted up.

Of the public buildings, the palace, formerly the stadt-house (town-house), is the most magnificent. It stands in an open space or square called the Damm. This fine structure, regarded by the Dutch as the eighth wonder of the world, is erected on a foundation of 13,659 piles; it is 282 feet in length, 235 in depth, and 116 high, exclusive of the cupola, which is 41 feet higher, and from the top of which there is an excellent view of this singular city. With the exception of the ground floor, which is of brick, it is built of freestone. The ball-room, represented as one of the finest in Europe, is said to be 120 feet long, 55 in width, and 90 in height. The foundations of the stadt-house were laid in 1648, and it was finished in the short space of 7 years. Among the other public buildings are, the exchange, founded in 1608, and capable of accommodating 4,500 persons; the *hôtel de ville*, formerly the admiralty; the museum, containing an excellent collection of about 500 pictures, including several master-pieces, principally of the Dutch and Flemish schools; the arsenal, built on the island of Kattenburg; the buildings of the society of *Felix Meritis*, having a superb concert hall, &c. Of the churches, that most worthy of attention, the New Church, was begun in 1408. It contains some fine monuments, particularly one in honour of the brave admiral De Ruyter. The painted glass windows of the Old Church, dedicated to St. Nicholas, are amongst the finest in Europe. There are in all about 50 places of worship, among which are several synagogues, the Jews being supposed to amount to about 16,000. The principal bridge over the Amstel, near where it enters the city, is 610 feet in length by 64 in breadth, with 11 arches, through which large ships pass. The barracks, built by the French, three weigh-houses, and two ancient towers, called herring towers, deserve to be noticed. In 1822 the warehouses originally built for the East India Company, being heavily laden with corn, their foundations gave way, and they sunk half way down in the earth.

Among the literary institutions is the Athenæum, or college, with 10 or 12 professors, a good library, an anatomical theatre, and a botanical garden. In 1836 it had 33 students of law, 25 of theology, 25 of medicine, &c. There are here also a school of navigation; a royal academy of the fine arts, founded in 1817, with 6 professors; the Amsterdam Institute, or Society of *Felix Meritis;* a society of Public Utility, founded on an extensive scale, in 1787, &c. Schools of the best description, for the gratuitous education of the poor, are found in every part of the town; and instruction may be said to be universally diffused. There are three theatres. The workhouses, hospitals, infirmaries, the house of correction or rasp-house, the orphan-house, the establishment for widows, the lunatic asylum, with the numerous other charitable establishments, may be cited as models of good order, cleanliness, and economy. The hospital for the old and indigent of both sexes on the quay of the Amstel, is admirably contrived for the comfort and convenience of its inmates. The building is 260 feet long, by 230 deep, and 3 stories high. It has galleries and a garden where its occupiers enjoy the fresh air. There is here, and in other Dutch towns, a class of provident institutions or asylums, which admit aged persons of both sexes on payment of a comparatively small sum. Masters and mistresses frequently reward old and faithful servants, by paying for their admission into one of these excellent institutions.

The mouths of the canals opening into the Y and of the Amstel are provided with strong floodgates; and on the side of the town nearest the sea a new dyke has recently been constructed to guard against inundations. The harbour is

spacious and secure; the largest ships coming close to the quays and warehouses. It has recently been much improved by the formation of docks and basins. At the point where the Y joins the Zuyder Zee there is a bar, called the Pampus, which cannot be crossed by large ships unless previously lightened. To obviate the inconveniences arising from this circumstance, and the dangers and delays occasioned by the shallowness and difficulty of navigating the Zuyder Zee, a ship canal has been constructed from Amsterdam to the Helder. This noble work is about 50½ m. in length; and being 20 feet 9 inches deep, admits large ships. Its level is that of the highest tides, the only locks it requires being one at each end; but it has too sluices in the intermediate space. It was begun in 1819, and finished in 1825, at an expense of about 1,000,000*l*. The dues are moderate; and it has been of the greatest service to Amsterdam, by giving it, as it were, a deep-water harbour on the most accessible part of the Dutch coast.

The manufactures of Amsterdam, besides various branches of those of wool, linen, cotton, and silk, comprise sail-cloth, refineries of sugar, borax, sal-ammoniac, sulphur, &c.; with distilleries and breweries, tanneries, tobacco manufactories, iron-founderies, rope-walks, smaltz-works, gas-works, soap-works, oil mills, &c. Ship-building is extensively carried on. The art of cutting diamonds and other stones for the lapidaries has here attained to great perfection: there are at present (1838) 5 principal, besides several smaller establishments devoted to this business, being mostly carried on by Jews. Jewellery, gold lace, &c. are also largely produced. But Amsterdam is far more distinguished as a trading than as a manufacturing city. Throughout the 17th century, and the first half of the 18th, she was what London is at present, the metropolis of the commercial world. Gradually, however, partly in consequence of the oppressiveness of the public burdens, but more, perhaps, of the growth of commerce and navigation in England and other countries, she lost the greater part of the carrying trade, which she had nearly engrossed, at the same time that her fisheries and foreign trade progressively fell off. During the subjugation of Holland by France, her colonies fell into the hands of England, her ships disappeared from the sea, and the trade of Amsterdam was almost annihilated. But notwithstanding these untoward events, and the exactions to which she was repeatedly subjected, she preserved her industry and a vast amount of capital; and no sooner had peace been restored and Holland had recovered a portion of her colonies, than the commerce of Amsterdam began rapidly to increase; and though still far short of its ancient importance, it is now of very considerable extent and value.

The imports principally consist of sugar, coffee, spices, tobacco, cotton, tea, indigo, cochineal, wine and brandy, wool, grain of all sorts, timber, pitch and tar, hemp and flax, iron, hides, linen, cotton and woollen stuffs, hardware, rock-salt, tin plates, coal, dried fish, &c. The exports consist partly of the produce of Holland, partly of the produce of her possessions in the East and West Indies and other tropical countries, and partly of commodities brought to Amsterdam as to a convenient *entrepôt* from different parts of Europe. Of the first class are cheese and butter (very important articles); madder; clover, rape, hemp and flax seeds; rape and linseed oils, Dutch linen, &c. Geneva is principally exported from Schiedam and Rotterdam; oak bark principally from the latter. Of the second class are spices; Mocha and Java coffee; sugar of Java, Brazil, and Cuba; cochineal, indigo, cotton, tea, tobacco, and all sorts of eastern and colonial products. And of the third class, all kinds of grain; linens from Germany; timber and all sorts of Baltic produce; Spanish, German, and English wools; French, Rhenish, and Hungarian wines, brandy, &c. The trade of Amsterdam may, indeed, be said to comprise every article that enters into the commerce of Europe. The total value of the imports and exports are respectively estimated at about 3,500,000*l*. or 4,000,000*l*. From 220 to 230 large ships belong to Amsterdam, employed in the trade to the E. and W. Indies, the Baltic, &c. There is little coasting trade; the communication with most other Dutch towns being principally kept up by canals. The total number of ships of all sorts entering the port amounts, at an average, to about 2,200 a year.

The merchants of Amsterdam were formerly most extensive dealers in bills of exchange, and in all sorts of funded property and government securities; but London is now, in this respect, far superior to her old rival: the latter, however, still enjoys a large share of the exchange business of the Continent, and many of her capitalists are large holders of foreign securities.

The old bank of Amsterdam, founded in 1609, and so celebrated among the monied institutions of the 18th century, ceased to exist in 1796, on the invasion of Holland by the French. The present bank of the Netherlands was established in 1814. Insurance business is extensively carried on.

The city is supposed to contain above 28,000 houses. In 1785 the pop. is said to have amounted to 235,000. It had declined in 1814, the epoch of its greatest depression, to 180,000; and it amounted, in 1841, to 211,349. Notwithstanding the city is surrounded on all sides with water, and that the greatest care and attention are required to prevent its being submerged, it labours under a total want of spring water. The water in the river and canals being filthy, brackish, and totally unfit for use, the inhabitants are partly supplied by rain water carefully collected in tanks, and partly by water brought in a peculiar description of barges from the Vecht, 6 or 7 m. distant. It is curious that despite this want of good potable water, the humidity of the atmosphere, and the effluvia generated in warm weather from the water of the canals, the town is free from epidemic disorders, and the inhabitants healthy and robust. Most probably this is owing in a considerable degree to the comfortable mode of living of the bulk of the people; the prevalence of cleanliness, in which the Dutch are superior to all other nations; and the absence of extreme poverty and destitution.

The toleration that prevails at Amsterdam, does equal honour to the people and the government. There is here every variety of sects; but they are distinguished by nothing so much as by their abstinence from theological discussions, and by their apparent respect for the opinions of others. "It must not, however, be inferred that the toleration existing here and in the rest of Holland — a toleration perfect in *fact* as well as in law — has its origin in any degree of apathy with respect to religion, or in any irreligious tendencies on the part of the people; such a conclusion would be utterly erroneous. Generally speaking, the Hollanders, whatever may be their particular religious profession, are firm believers, and devoted to the practice of piety. This virtue

pervades all classes of society in Amsterdam." Hence, notwithstanding the defects of its climate and situation, Amsterdam is a most desirable place to many persons. For ages it has been a "city of refuge" to the oppressed and persecuted of all nations; and therein lies one of the main causes of its wealth and prosperity.

The city police is well regulated, and robbery and housebreaking are of rare occurrence. A drunk person, or one in rags, is a very unusual sight. No loose women are permitted to infest the streets; which are, also, quite free from beggars. The disgusting dens of profligacy, known by the name of *spiel* houses or *musicos*, still exist; but they are frequented by few, except the dregs of the populace.

In every part of Holland, but no where more than at Amsterdam, do we find proofs of the astonishing power of ingenuity, industry, and perseverance. This great city is not merely built in a marsh, but is constantly exposed to the risk of being overwhelmed by the influence of high tides and storms. But this danger has been effectually provided against; and the waters by which the city is all but surrounded, and which penetrate every one of its streets, are under complete controul, and made to contribute to the comfort and accommodation of the inhabitants. The works necessary for the public safety and protection require, however, to be watched over with unceasing vigilance; and a large annual expenditure is incurred in keeping them in good repair, and in dredging and clearing the port and canals.

It is a curious fact, that notwithstanding the superabundance of water, there is not, owing to the flatness of the soil, a single water mill in Holland. There are, however, immense numbers of wind mills, employed frequently to pump up water from the low grounds, as well as to grind corn, crush seeds, &c. There is a large wind mill on every one of the bastions by which Amsterdam is surrounded.

Amsterdam has been sometimes called the Venice of the North; and in respect of situation, number of canals, and the magnificence of the public and private edifices, it certainly bears a very striking resemblance to the Venice of the South. But each of these great cities has, notwithstanding, a perfectly original and distinctive character.

In the 12th century, Amsterdam was only a small fishing village; in 1482, it was fortified. At the outset of the revolutionary struggle with Spain, the Duke of Alva having expelled the Protestants from the city, and committed the government to zealous Catholics, it supported for a lengthened period the cause of the Spaniards; and it was not till 1578 that it joined the confederation. From this epoch it began rapidly to increase. The most complete toleration being granted to all sects, it became an asylum for those driven by persecution from the other towns of the Low Countries and elsewhere. The closing up of the Scheldt, in 1648, transferred the greater part of the trade of Antwerp to Amsterdam, and raised the latter to the highest pitch of prosperity. (*Dict. Géographique*, art. *Amsterdam*; *Balbi*, 2d ed.; *Barrow's Family Tour through S. Holland, &c.* pp. 92—133.; *Murray's Handbook for N. Europe*; *M'Culloch's Commercial Dictionary*; *Chamber's Edinburgh Journal for* 1338, &c.)

AMSTERDAM ISLAND, a small but remarkable island in the S. Indian Ocean, lat. 37° 47′ S., long. 76° 54′ E., being 4½ m. in length, by 2½ in breadth, and 700 feet high. It is obviously of volcanic formation. A large portion is occupied by what has undoubtedly been a magnificent crater; but the sea having made an irruption into one of its sides, it is now converted into a circular harbour, the only accessible one in the island. The surface is every where light and spongy, and in parts burning hot. There are several hot springs, having temperatures varying from 80° Fah. to the boiling point; with the exception of a single chalybeate spring, having a temperature of 112°, all the springs in the island are brackish. Some of the hot springs are so near the water's edge, that it is no exaggeration to affirm that fish taken with the one hand may be boiled with the other! The surrounding seas swarm with various species of fish, particularly with crayfish. No trees or other fruit-bearing plant, nor quadrupeds, nor land-birds, are found on this island; but it is resorted to by vast numbers of sea-birds. Seals and sea lions abound on its shores and in the adjoining sea, which makes it be occasionally visited by ships engaged in the seal fishery. It was discovered by a Dutch navigator, Van Vlaming, in 1696, and was visited by Mr. Barrow in 1793. (See *the Voyage of the latter to Cochin China*; *and the Philosophical Transactions*, vol. xx.)

AMSTERDAM, NEW, a town and harbour of S. America, English Guiana, near the m. of the Berbice river. Pop. 1,600. Being founded by the Dutch, it is built in their fashion, and intersected by numerous canals. The private houses are mostly of wood, covered with bamboo leaves, but the government offices are of brick, and handsomely built. The entrance to the river, in lat. 6° 20′ N., long. 57° 11′ W., is defended by three forts. There are only 7 feet water on the bar at low ebb. The canals being filled and emptied by the flow and ebb of the tide, all impurities are swept off, and the health of the town is preserved notwithstanding the heat of the climate. (*American Coast Pilot*.)

AMTZELL, a village of Wirtemberg, circ. Danube. Pop. 2,130.

ANACAPRI, a town in the N.W. corner of the island of Capri, in the Gulph of Naples, on the N. side of Mount Solaro, nearly 2,000 feet above the level of the sea. Pop. 1,800. The ascent to it is very steep, and is effected by a stair of 552 steps, called *la scalinata*. It has a church, a convent, and a castle in the neighbourhood: there are also two ancient towers, and the remains of some edifices, ascribed to Tiberius. The prospect from the castle is extensive, and singularly rich and beautiful, commanding the Tyrrhenian sea, the Gulph of Naples, Vesuvius, &c. The inhabitants are said to be much attached to the situation; and some, it is affirmed, have never descended *la scalinata*.

ANAGNI, a town of the Papal States, 38 m. E. by S. Rome. Pop. 5,500. It stands on a hill, and has a very fine prospect: but its interior is mean and miserable. It is the seat of a bishopric, founded in 487.

ANAM or **AN-NAM** (Empire of), a country of Asia, occupying the E. portion of the great E. peninsula of S. Asia, or India beyond the Ganges, comprising Cochin China and Tonquin (to which only the name of An-nam properly belongs), with the E. and S. part of Cambodja, and many small islands in the Chinese Sea. It lies between 8° 45′ and 23° 22′ N. lat., and 105° to 109° E. long.; having N. the Chinese provinces of Quang-tong, Quang-si, and Yun-nan; W. Laos and Siam, and in the rest of its extent, the ocean. It is 965 m. in length, varying in width from 415 m. to 60 m. Area, probably about 98,000 sq. m. (*Crawfurd.*) Pop. variously estimated at from 5 to 15 or 20 millions! The lowest estimate, which is that of Mr. Crawfurd, is probably the most accurate.

The country is subdivided as follows: —

Provinces.	Chief cities.
1. *Cochin China* (called Dang-traoing, or Central country).	
Bue-thuen, Nha-trang, Phu-yen, Qui-nhon, Quang-ai, Quang-nan, Hué,	Hué, the capital (pop. 60,000, *Crawfurd*), Turon, Fai-fo.
2. *Tonquin*. (Dong-kiub, External country.)	
Ke-cho, Ting-long, Wai-tak, Sang-sai, King-pak, Sing-kwang, Hing-wha, Ko-ping, Leong-san, Ching-wha, La-nam 1st, La-nam 2nd, Hai-yong, Aw-kwong, Man-ning-chao.	*Ke-cho*, (Cachao), 150,000 inhabitants. *Hean*, 20,000 inhabitants.
3. *Cambodja* (called Ko-men by the natives).	
Ya-teng, Ping-fong, Po-nan, Win-cheng, Ho-san, Teng-chong.	Sai-gon, 180,000.

(*Crawfurd, Journal of an Embassy*, &c., 4to. Lond. 1828, p. 456. 458. 464.; *Chapman's Voyage*, &c. in *the Asiatic Journal*, vol. xix. (1825) p. 122.; *Balbi. Adrien, Abrégé de Géographie*, 3 edit. 8vo. Paris, 1837-8, p. 768, 769.)

Mountains. — The principal chain, an offset from the Himalaya range, runs through the central and southern parts of the country, forming the W. boundary of Cochin China, and the E. one of Laos and Camboja, and terminates at Cape St. James, in lat. 10° 16′ N. Between this range and the sea, Cochin China consists of a succession of others, gradually decreasing in height as they approach

the shore, and inclosing a great number of fertile valleys. These mountains have not been measured by Europeans. The summits of the principal chain are acuminated, sterile, and most probably granitic; but their steep sides are clothed with extensive forests, and the inferior ranges are often cultivated nearly to their tops. (*White's Voyage to Cochin China*, p. 72.; *Finlayson's Mission to Siam and Hué*, p. 325.)

Plains. — Tonquin and Cambodja are both immense alluvial basins of great fertility, and traversed by large rivers: in addition to these, there are a few small flats around the mouths of the rivers in the central provinces. The plain from the mouth of the Oubequemme to Cape St. James is but little above the level of the sea, and subject to inundation at every spring tide.

Rivers. — The Menam-kong, or river of Cambodja, is one of the largest in Asia; it rises in the Chinese province of Yun-nan, is joined by some large streams from Tibet, and, running nearly due S. through the centre of Laos and Cambodja, forms, for some distance, the W. boundary of the Anamese dominions, and discharges itself in lat. 9° 35′ and 10° 15′ by two principal mouths (the farthest N. being called the Japanese river, the S. one the Oubequemme), and by many smaller ones. The Sang-koi (*Balbi*) or river of Tonquin, has a shorter course; it rises in the mountains of Yun-nan, runs mostly S. E. through Tonquin, passing by Ke-cho, and falls into the Gulph of Tonquin by two principal mouths, between 20° and 21° N. lat. Both these rivers, as well as that of Sai-gon (which is ¾ of a mile in width near that city), have deltas at their mouths: they are navigable generally for large ships; but owing to sand banks at both its mouths, it is reported that the Tonquin river is available to none above 200 tons burthen, though Crawfurd doubts this statement as respects the N. mouth. (*Crawfurd, Journal*, &c., pp. 459—462.) There are several other considerable rivers in Tonquin; as the Li-Sing-Kiang: along the Cochin Chinese coast they are all much smaller, and with a shorter course; the river of Hué (on which the capital is situated) is one of the most considerable, has a fine æstuary, and is navigable by vessels of 200 tons burthen. (*White, Voyage*, p. 185—231.)

Lakes — Harbours. — Europeans have described no lakes of any magnitude; but the shores of Cochin China abound with some of the finest harbours in the world. From Cape St. James to the Bay of Turon, there are no less than nine of these, safe and accessible with every wind: that of Turon, in the opinion of Mr. Crawfurd and others (though not in that of M. de Bougainville), is not surpassed by any in the East.

Coast and Shores. — The coast here is generally bold, and presents many promontories, like that of C. St. James, which is 300 feet in height; the precipices occasionally alternating with a narrow sandy beach. The anchorages are every where good; but at no great distance from the shores, sand-banks and rocky islands are often very prevalent.

Geology and Minerals. — The primitive rocks, of which the principal mountain chain is almost wholly composed, are granite and syenite; the lower hills contain quartz, marble, and mountain limestone. In the S. provinces, the granite is seamed in every direction; on the rounded sides of the hills it alternates with syenite, and both rocks are penetrated by veins of iron ore: near Hué, all the hills are granitic, and their peaks in the highest degree sharp, rugged, and uncovered. There is a great diversity of upper soils in the valleys; some being dry, friable, and sandy; others of a stiff clay. The soils of the central provinces are however mostly sandy: those of Tonquin and Cambodja are, as already stated, alluvial. Around their shores there are extensive and fertile mud-flats.

Tonquin is the only part of the empire rich in metals; it produces large quantities of gold, silver, copper, and iron: with the latter it supplies all the country except the most S. part. Its mines are worked by Chinese, and about 100 piculs (or 17,800 lbs. Troy) of silver are produced yearly. Cochin China has no metallic wealth: silver only is said to be found at Cape Avarella; Cambodja is poor in metals. It produces iron, but in inadequate quantity for its own use, and it is therefore imported from the neighbouring countries to the W. of it: the central provinces yield salt. (See *Crawfurd*, p. 472.; *Finlayson*, pp. 294. 339—351.; *Asiatic Journal*, vol. xix. p. 124.)

Climate — Is generally fine and healthy, the heat being tempered in the maritime districts by the sea breezes; in the winter it is even cool in Cochin China, but in Tonquin the heats of summer are excessive, and the cold of winter proportionally severe. At Hué, M. Chaigneau, who resided there for some time, reports that the greatest heat of summer was 103°, and of the cold of winter 57° F. During the wet season of August, Mr. Crawfurd found that the thermometer in the shade ranged in one day from 79° to 82° F. at Sai-gon. In the S. the seasons follow the same order as in Malabar, Bengal, and Siam; viz. the rains prevail with the S. W. monsoon from May or the beginning of June, to September: the same takes place in Tonquin. But in Cochin China, between 11° and 18° N. lat., the rains set in with the N. E. monsoon, and last from October till March; the high mountain range protecting this country from wet weather by intercepting the clouds at the converse season of the year. The general height of the barometer at Hué is 29.85′. Immense inundations last sometimes for 3 or 4 days at a time: Tonquin is subject to heavy fogs and violent hurricanes. (See *Crawfurd*, p. 470.; *Chapman's Voyage, in the Asiatic Journal*, vol. iv. p. 125.)

Vegetable Products. — The forests of Cochin China produce a variety of scented woods, as sandal, rose, eagle-wood, &c. The true cinnamon (*Laurus cinnamomum*) is indigenous to this country, and valued by the Chinese more than that produced in any other: it is found wild chiefly in dry and sandy soils. The banks of the Sai-gon, and the other large rivers are thickly covered with jungle; amongst which are teak, iron-wood (*Syderoxylon*), a kind of Callophyllum, as straight as a Norway fir and well adapted for ships' masts, mangrove, &c. In the forests of Cochin China, cedars, walnut, peltry, cocoa, areca, betel, bamboo, rattan, ebonies, and most of the products of British India. Cambodja yields gamboge, the finest cardamoms, aniseed, areca, indigo, &c.; the central provinces, pepper and two sorts of sugar cane; Tonquin, many kinds of varnish trees, areca palms, &c. Cotton, rice, and the mulberry tree are almost universal. Amongst the fruit are oranges of a blood-red pulp and delicious flavour, bananas, figs, pomegranates, pine-apples, guavas, mangoes, shaddocks, lemons, limes, plantain, yam, &c. Ginger, and spices of various sorts, are also indigenous. An inferior sort of tea, with a leaf twice or thrice as large as that of Bohea, grows wild in the hilly parts of Quang-ai, and is sold at from 6 to 20 quans (300 to 1,000 cents.) the picul (133⅓ lbs.). (*Crawfurd, Journ.*, pp. 474—478.; *Barrow, Voyage, &c.*, pp. 341—346.; *Asiatic Journ.*, xix. pp. 123, 124.; *White, Voyage*, p. 150. 209, 210.)

The cocoa-nut tree, next to the bamboo, is the most useful of any. The trunk is used for house and ship building; the husk produces cordage and cables superior to any other; the leaves are used for roofing, and for making paper, and wicker work; the oil for lamps and painting; the shell for cups, &c.; and the nut furnishes both food and drink.

Scenery. — The interior of Cambodja has been little explored by Europeans, but its surface is believed to be covered, in great part, with extensive forests. The banks of the river Sai-gon are covered with mangrove trees, and no cultivation appears until within from 20 to 30 m. of that city. *Bin-thuon*, the most S. prov. of Cochin China, extends to about 12° N. lat., and is most remarkable for its aloes. *Nha-trang*, which succeeds it, is an elevated and ill-cultivated region, but produces silk. *Phu-yen*, which reaches as far as lat. 14°, is the richest and the most highly cultivated and peopled province of all: it is full of fruitful valleys and gently undulating hills, on which rice is grown in terraces, almost to their summits, and bounded W. by lofty mountains, crowned with towers and pagodas, or having their pinnacles enveloped in fleecy clouds. *Qui-nhon*, is a province of great extent, and well cultivated: *Quang-ai* and *Quang-nan*, extending from 14½° N. to nearly 17°, are almost exclusively the countries of the sugar cane and the tea tree. The banks of the river of Hué, though beautiful, are more indebted to art than to nature; they abound in ornamental gardens, laid out amongst groves of cocoa, areca, banana, and bamboo, and rows of hibiscus. At Turon, and in most of the N. of Cochin China, there is a degree of sterility not met with in the S.; but the whole country is apparently inferior in fertility to that of Siam. Tonquin has been very imperfectly examined by Europeans, but is the most populous province; therefore, most probably, of superior fertility and cultivation. (*Crawfurd, Journ.*, pp. 460, 461.; *Finlayson*, pp. 299. 349.; *White, Voyage*, p. 74.; *Arrowsmith's London Atlas*.)

Animals. — The elephant, rhinoceros, tiger, leopard, buffalo, bear, horse, deer, goat, &c., are natives of Anam. There are no jackals nor foxes; nor hares, but a profusion of other kinds of game. Great numbers of monkeys and baboons are found in the woods: one large and powerful species seems to be peculiar to Cochin China; the dog and cat, which are also natives, are domesticated: elephants are used in war. Peacocks, parrots, and a variety of birds of the richest plumage, inhabit the forests; curlews, plovers, &c. the shores; and aquatic birds of all descriptions, the rivers. Alligators inhabit the larger rivers; the *cobra-de-capello*, and several other large and venomous serpents, infest the country. The seas abound with an inexhaustible supply of fish, and afford subsistence to a large portion of the population; amongst the species are, the flying fish, scorpion fish (remarkably and beautifully variegated), mango fish of Bengal, &c., with soles, mullets, and many

others familiar to us: shrimps and crawfish are very fine; and mollusca, in large quantities, are taken for food. Mosquitoes and other insects abound in great quantities. (*Crawfurd, Journ.*, pp. 478, 479.; *Barrow, Voyage*, p. 312.; *Finlayson*, p. 411.; *White, Voyage*, pp. 68—191. 257—311.; *M. de Bougainville, Journal de la Navigation autour la Globe*, 2 vols. 4to., Paris, 1837, vol. i. p. 263.)

The People consist of several races: — 1. the *Cochin Chinese*, and *Tonquinese*, who are similar in person, and most of their habits and customs, to the Chinese; 2. the *Cambodjans*, in physical qualities, manners, &c., more resembling the Siamese; 3. the *Moï race*, inhabiting the mountainous country between Cochin China and Cambodja; believed by some to have been the aborigines, said to be black like the Caffres, and in a savage state. Besides the native races, there are 25,000 Chinese, who work the mines and trade in metals in Tonquin, and many others who are settled in the commercial towns, but mostly in the N. provinces; the other strangers are chiefly Malays, about 5,000 in the S. parts of Cambodja, and Portuguese. (See *Crawfurd*, pp. 464—470.; *Asiatic Journ.*, iv. 340.).

Physical Qualities. — According to Mr. Finlayson, the majority of the inhabitants are of Malay origin.* He observes, "that the men average 5 feet 2¼ inches in height, which is below the ordinary standard of the Malays and Siamese; they are less bulky and clumsy than the latter, but of a somewhat squat figure. Their upper extremities are long, their lower ones short and stout; they are not fat; their muscular system is large and well developed. Head and face both nearly round; the longitudinal and transverse diameters of each being nearly equal; forehead short and broad, cheek-bones wide, but not particularly salient, chin large and broad; but the coronoid process of the lower jaw has not the fulness apparent in the Malays and Siamese, and the affinity in this respect to the Tartar race is still less. Eyes rounder and smaller than those of the Chinese and Siamese, more lively and intensely black; lips moderately thick; hair on the scalp copious, black, and coarse; beard grisly and thin, and no hair on the cheeks. The colour of the skin is olive, and very often, especially in the females (who are sometimes really handsome), the complexion is no darker than that of the inhabitants of the S. of Europe." (See *Finlayson*, pp. 298. 374—378.) They are intelligent — without much originality or invention; but exhibiting a very great aptitude for imitation. Of their disposition, such conflicting statements have been made by those who have experienced either a handsome or an unhandsome reception from them, that it is difficult to come to any conclusion. They are sprightly, animated, good-humoured, and altogether destitute of the solemn reserve of the Chinese; always laughing and chattering, volatile, capricious and changeable, vain, and endued with considerable national pride. Crawfurd and Finlayson say that they are mild, docile, and inoffensive; (no travellers have accused them of ferocity;) affable, kind, and attentive to strangers; and the lower orders not rapacious, although a despotic, illiberal, and avaricious government has unquestionably made all within the influence of the court the most arrant thieves. In their manners and behaviour, the Anamese are polite and graceful; but punctilious and ceremonious. (*Ibid.* pp. 296—299. 374. 383, 384.; *Crawfurd*, pp. 481. 498, 499.; *White, Voyage*, p. 269.; *Barrow, Voyage*, p. 297.)

Occupations, &c.—Agriculture—Rice. — Rice, which is here the "staff of life," forms the main article of culture. There are six different sorts grown; two on the uplands, used for confectionery, and yielding only one crop annually; the other sorts yield from two to five crops a year; but generally two, one in April, and another in October; or three, where the inundations have been profuse. Maize, cotton, yams, sweet potatoes, pulse, and fruit, are the other articles of general culture.

Sugar. — The sugar-cane is cultivated by the Cochin Chinese only, and a very inferior, dark, clayey produce obtained. Most of the cinnamon that is exported is cultivated; tobacco, capsicum, pepper of a very good quality in the central provinces, are other chief objects of tillage: no coffee is grown, except in a few gardens near Hué.

Silk. — Raw silk is produced in large quantities in Tonquin and Cochin China. The ground is but indifferently tilled; near Saï-gon, it is in many small patches of about half an acre, the rice grounds being bounded by ditches. Agricultural labour is almost wholly performed by women; they guide the plough, which is drawn by a buffalo, plant the rice, build and repair the cottages, &c., and are entrusted with all the household concerns. Their pay, as well as that of labourers of the other sex, is 1 *mas* a day with food, or 2 *mas* without it. (*Barrow*, pp. 301. 315, 316.; *White, Voyage*, p. 198—202.; *Crawfurd*, pp. 474—476. 522.; *Finlayson*, p. 284—326.)

Cattle Breeding. — The buffalo is domesticated, and is useful in agriculture; the ox is of a small reddish-brown kind, but not used as food, beef not being commonly eaten: a small species of goat is kept; but sheep are very rare and extremely inferior. The hog is a very favourite animal; the breed is the Chinese, and remarkably fine: at Hué, hogs are always stall-fed, and seldom suffered to roam at large. The horse, of an inferior breed, is used only for riding, being unfit for cavalry service: there are neither asses nor mules.

Poultry. — Poultry, in large numbers, are kept every where; those at Saï-gon are said to be amongst the finest in India; geese are not so common as ducks or fowls; the game cocks are trained for fighting. (See *Crawfurd*, pp. 478, 479.; *Barrow*, p. 310.; *White*, pp. 250—256.)

Food, &c. — The diet of the people is to European ideas often gross and disgusting in a high degree. Rice, legumes, and fish, form the chief part of their food; but dogs and alligators' flesh, rats, mice, worms, frogs and other reptiles, maggots, entrails, and putrid meats, are among their favourite dishes. Pork, boiled ducks, and fowls, boiled and stewed yams, and sweet potatoes, sugar-cane, fruit, and much confectionery, compose great part of the rest, and tea, and rice-whiskey (of which a great deal is drunk), compose their usual beverages; fish-pickle is their favourite condiment, into which nearly every morsel they eat is plunged; elephants' flesh is eaten only by the sovereign and nobility. Milk is not used at all, and eggs are not valued until they are rotten, or nearly hatched. They take two meals a day; one at 9 or 10 o'clock in the morning, the other at sunset. These they take in the open air, generally in front of their houses, and eat with chop-sticks tipped with ivory or metal, porcupine quills, and a pottery spoon.

Habits. — The tobacco that is grown is all used in the country; all the men smoke, and, as well as the women, chew betel and areca, which either they or their attendants (if rich) always carry with them in boxes or large purses for the express purpose. In their persons they are extremely dirty, notwithstanding their frequent ablution: their under garments are never washed nor changed until they drop to pieces; their nails are never cut; their length being an indication of rank.

Diseases. — The country they inhabit is healthy enough; but their habits engender leprosy, scurvy, erysipelas, and scrofula; the diseases owing to the climate are mostly of a febrile and intermittent character. (See *Barrow*, pp. 287—316.; *White*, p. 206—227. 295.; *Finlayson*, p. 300.; *Crawfurd*, pp. 487, 488.; *White*, pp. 88. 84—86. 300.; *Bougainville*, vol. i. pp. 261, 262.)

Arts and Manufactures — House-building. — The inferior dwellings consist of mud walls, thatched or covered with bamboo leaves; the better sort of houses are of wood or brick, and tiled, but the bricks are only baked in the sun, and glazed windows are unknown. The huts of the peasantry near Saï-gon consist of wattled floors, raised about 3 or 4 feet above the ground, and contain two or three compartments, one of which is a common room; in the others the family sleep on mats on a kind of raised platform, ranged around the walls. A superior residence, visited by Mr. White, was 30 feet in length by 25 feet broad, consisting of one story, the sides of wood and bamboo frame-work. The roof of bamboo leaves projected 10 feet, and screens of matting were attached to the eaves. Under this verandah was the general parlour; inside the walls a corridor ran all round the building, inclosing a stack of dormitories in the centre; at one extremity of the house was a large kitchen, furnished with a huge wooden pestle and mortar for grinding rice, several small fire-places of rough stones, and a small platform where meals were taken. The ordinary furniture of a cottage consists of a coloured matting for the floor, an earthen stove, an iron rice-pot, and some very rude porcelain and other earthenware articles. (See *Barrow*, pp. 310—316.; *White*, pp. 177—233.; *Finlayson*, pp. 300—350.)

Ship-building. — The art in which, above all others, the Cochin-Chinese excel is that of ship-building. Their vessels, the construction of which, were it not for their rude materials, would not disgrace Europe, are built of from 5 to 100 tons burthen, but mostly between 16 and 30 tons; sharp at either end, and the deck 1-3d longer than the keel. Their bottoms mostly consist of wicker work, covered on the outside by a coating, ½ inch thick, of *galgal*, a close and durable mixture of pitch, oil, lime, &c. The sides and deck are bound together with cross-bulk heads, and as the larger vessels usually belong to a joint-stock company of merchants, there are as many separate holds as owners. The fishing boats and others, 50 feet in length, are made of 5 long planks extending from stem to stern, their edges morticed, tightened with wooden pins, and bound together by twisted bamboo fibres: at each end they are raised much higher, and painted, gilded, and ornamented with figures of dragons and serpents. They

* Mr. Finlayson was a *surgeon*, who accompanied Mr. Crawfurd in his embassy in 1822, and, as an anatomist, his opinion is deserving of the greatest attention.

often carry a covered cabin, built like a house upon the deck; from one to three sails of matting, which in the N. provinces are often square and more like those of Europe; a wooden anchor with one fluke, shrouds and cables of rattan, and cordage of *coir*. During the unfavourable monsoon, the boats are taken to pieces, and the larger vessels drawn up on shore to some distance. The mode of rowing, is by pushing, and not pulling, the oars against the water (*White*, p. 209.): when there are many rowers, they push in regular succession, beginning with the one at the stern. The government rowers, who are selected from the army, are paid but 1 quan per month; the boats that ply for hire are chiefly conducted by women; but the very unfair and ungallant custom prevails, that the men pay no fare, they being all supposed on government service. They have no wheeled carriages; but people of distinction are carried in a palanquin, formed of a cotton net hammock, with a mattress and pillows inside, covered by a large varnished canopy, in form like a tortoiseshell; the whole slung upon a long pole, and carried on the shoulders of two, four, or six men. (See *White*, pp. 213—255. 319.; *Barrow*, p. 317.; *Finlayson*, p. 314—409.)

In most manufactures, the Anamese are very far behind, and are superseded by the Chinese, from whom they derive most of their useful articles. Sword-handles with very good filagree work, boxes of lacquered ware, inlaid with pearl or gold, purses, matting, baskets, coarse silk, and very durable cotton stuffs, bells, cannon, iron nails, scissors of a rude kind, varnish, &c., they can make; but they cannot temper iron or steel, print calico, or make a matchlock, and depend for all their arms on European nations. (*Crawfurd*, p. 482.; *Finlayson*, *Mission*; *White*, p. 261.; *Barrow*, p. 317.)

Trade. — The Chinese are the butchers, tailors, confectioners, bankers, money-changers, and pedlars of the empire, and are met with in all the towns with an elastic pole across their shoulder, and at either end, a basket containing their wares. In the bazars, gilt paper, fans, porcelain, drugs, and other China produce, tools, necessaries of life, and the other articles yielded by the country, are sold. Provisions are cheap. Mr. White found that, at Sai-gon, pork was 3 cents per lb.; beef, 4 c. (Americ.); fowls, 50 cents per dozen; a fine deer, 1½ dollar; rice, a dollar a picul (133 lbs. Eng.); shaddocks and lemons, 50 c. per hundred; oranges, 30 c. per hund. Tea of Hué is sold in boats on the rivers, as well as varnish, which, with other combustible matters, is not allowed to be kept on shore, and the varnish merchants live constantly in their covered houses, built on bamboo rafts. The foreign trade is comparatively trifling, and almost wholly with the Chinese; very little with the Siamese or Europeans. (*Finlayson*, p. 371.; *White*, pp. 212—227. 259—261.; *Crawfurd*, p. 510.)

Exports. — From 20,000 to 60,000 piculs of sugar; 250,000 to 300,000 lbs. of true cinnamon not freed from its epidermis, at 50 to 60 quans per picul; 3,000 piculs of aniseed from Cambodja; raw silk at 3½ to 5 quans the catty (2¾ lb.), 200 piculs from Fai-fo, 60 p. from Hué, and 1,000 p. from Cachao annually; cottons superior to those of Bengal; areca, spices, cardamoms from Cambodja, hogs' lard, scented woods, rice, edible birds' nests, and mollusca, and the precious metals, are exported to China; gamboge, red dying wood from Tonquin, ivory, pearl, horns, hides, gum-lac, gold-dust, and other metals in smaller quantities to other parts of the world. When Barrow wrote, sugar at Turon fetched 8 dollars, pepper of Cochin China, 6 to 8 doll., and rice half a dollar the picul of 133⅓ lbs. British manufactures then sold usually at 20 to 30 per cent. profit, and were paid in silver ingots. Ke-cho was formerly the centre of the Eastern trade, and at the end of the 17th century the English and Dutch had factories there, whence they exported largely.

Imports. — The imports are chiefly manufactured silks, porcelain, drugs, a great quantity of gilt paper, and fine teas for the upper classes, with household, &c. utensils from China; spices, sandal-wood, and tin, from Malay; opium (which is however prohibited) from India, 150 chests annually, 2-3ds of which are consumed in Tonquin; cottons from Canton and Sincapore (but none of a variety of colours in the same piece, nor chintzes); British woollens, chiefly scarlet, some yellow or green, and all coarse; a few serges, and camlets, iron and arms from Europe; but altogether amounting to very little. The China trade is chiefly in Ke-cho, Sai-gon, Hué, and Fai-fo, but the whole scarcely amounts to 20,000 tons annually, being little more than half the Chinese trade with the single city of Bangkok in Siam.

Canals. — The transport of goods between Ke-cho and Hué is facilitated by a canal, 180 miles in length, 20 yards in breadth, and almost straight; said to be constructed by the reigning monarch in 1812: near Hué it is used for irrigation as well as conveyance. (*Crawfurd*, pp. 473—477.; *Asiatic Journal*, xix. (1825), pp. 124—126.; *Barrow*, p. 340.; *Finlayson*, p. 404.; *White*, p. 510.)

Weights, &c. — The picul is about 133⅓ lbs. Eng., and divides into 100 catties, each equal to 1 and 1-3d lb. Eng. A bag of rice weighs 50 catties.

Money. — The current coin is the sepeck, cast at Ke-cho, of a compound brittle metal, called *tu-tenague*, the base of which is zinc. It is about the size of a shilling, and pierced with a square hole; by which they are strung in numbers together, and as they are the only coin used, they form a very bulky and inconvenient medium. Accounts are thus reckoned: — 60 sepecks = 1 mass (5 cents), 10 mas = 1 quan (50 cents.) the two latter units are imaginary. A Spanish dollar is valued at 1½ quan; an ingot of silver, at from 27 to 28 quans; there are also gold ingots of the same and of double value, but the currency is subject to very capricious and roguish changes. (See *White*, *Voyage*, pp. 257—259.; *Crawfurd*; *Chapman's Voyage in Asiatic Journal*, iii. (1817), 543.)

Public Revenues are derived from, 1. a capitation tax of 1 and 1-10th quan, paid by every male above 19 years of age: 2. a land-tax; 3. the crown lands, which are farmed by different villages; 4. various contributions, imposts on foreign trade, &c. These imposts are small, and there is none on exported sugar: those in the service of the government are exempted from them. The king has monopolies of gold dust, ivory, and rhinoceros' horns. (See *Crawfurd*, p. 490.; *White*, pp. 250—257.)

Government is an hereditary military despotism, in which, however, primogeniture is more attended to than legitimacy. The sovereign has the title of Emperor. The central administration under him is conducted by six Mandarins, ministers who have charge of the archives, religion, justice, war, finance, and woods and forests. Besides these, the viceroys of Tonquin and Cambodja, and the *Mandarin of Elephants*, who is prime minister, and minister of foreign affairs, have seats in the supreme council. Each province is divided into 3 departments, called *Hu-yen*; each dep. into 3 or 4 districts, called *Tou*. The provincial governments are under a viceroy of the 1st class of Mandarins (or military class), who has 2 civil Mandarins under him; each *hu-yen* is governed by 2, and each *tou* by one civil Mandarin: the villages are governed by officers elected by the peasantry, who are answerable for the taxes of their constituents.

Ranks, &c. — All rank is official, and, although in part hereditary, descends a step in each succeeding generation. Each functionary has power to inflict punishment on all inferior to him in rank, and unlimited obedience to this power is displayed amongst all classes. (See *Crawfurd*, p. 490.; *Finlayson*, p. 381.; *White*, pp. 264—279.; *Asiatic Journal*, xix., p. 126.)

Army. — The royal guard consists of 30,000 men and 800 elephants, besides the provincial troops, the number of which varies. All males are liable to serve, and 1 out of 3 is generally a soldier. There is continually a levy of those between 17 and 20; and those who are obliged to serve, cannot leave the army till age or infirmity compel them. They are in active service for three successive years, and then have leave of absence for the three next, which they spend with their families, employing themselves in the tillage of a small allotment of land, granted by government to each. The standing army was formerly 150,000 men; but when Crawfurd visited the country, it was only between 40,000 and 50,000 men. Finlayson says, "they are robust, smart-looking troops, clothed in British scarlet woollens, sometimes turned up with blue or yellow, and wear a conical helmet of basket-work, lacquered and gilt: their other arms are swords, muskets with bayonets, shields, and long spears, decorated with a tuft of red horse hair. Their cartouche boxes, and other accoutrements, bear a similarity to those of Europe, the defensive arts of which, discipline, &c., were introduced by the French during the last century, who once supplied them with 10,000 stand of arms. Much progress was made in military affairs by the Cochin Chinese, and the late king cast a number of cannon. Hué, Sai-gon, and some other cities, are strongly fortified (*Crawfurd*, pp. 491, 492, &c.; *Finlayson*, p. 343, 344.; *White*, p. 269.)

Navy — consists of about 200 gun-boats, carrying from 16 to 22 guns, 100 large galleys of from 50 to 70 oars, with several small swivel pieces, and a 12 or 24 pounder at the prow, and 500 smaller galleys somewhat similarly armed. The seamen are classed in regiments the same as land troops, 6 of which are on duty at the capital, and 1 at each of the other principal forts. (*Crawfurd*, p. 492.)

Religion — of the mass of the people is a species of Buddhism; the upper orders follow the religion of Confucius. Christianity was introduced in 1624 by the Portuguese Jesuits; and there are about 425,000 Christians in the empire (*Crawfurd*), viz.: 300,000 in Tonquin, 100,000 in Cochin-China, and about 25,000 in Cambodja; but they are the most abject of the population, and possess no political weight whatever. The religion of the Anamese does not affect their morals or mode of life. Its ceremonies seem to consist in offering first fruits, accented

woods, &c., to idols, in burning great quantities of gilt paper at certain times, sticking inscriptions on posts, trees, and houses, and carrying about phylacteries, and other sacred objects. The Cochin Chinese are very superstitious, and endeavour to appease the evil spirit more than they venerate the beneficent one. They have pagodas, and a *pantheon*; but their idols and temples are most commonly an image of the Chinese god Fo, inclosed in a small house of wicker work, hung up in a tree, or elevated on four long posts, and approached by a ladder. Their priests are few, and but little respected by a people who treat many of their gods with contempt. In Chiampa (*Tsiampa*), the S. part of Cochin China, Indian and not Chinese gods are the objects of worship. (*Barrow*, pp. 328—331.; *Crawfurd*, pp. 467—469. 499.; *Finlayson*, p. 390.; *White*, pp. 50. 212. 275—277.)

Morals — Mr. White observes, that theft is universal, and murders not uncommon. All travellers agree in the want of chastity amongst unmarried females; their open prostitution neither degrades them in public opinion, nor prevents their becoming married, after which, however, a strict watch is kept over them. (*White*, p. 281, 282.; *Finlayson*, p. 300.)

Jurisprudence. — The police of the villages and the laws are administered by the village chiefs already spoken of; in the towns, one of the principal inhabitants of each street is chosen by the rest as *head of the street*, and is answerable for the good behaviour of all the rest over whom he is an arbitrator. In capital cases, judgment rests with the governors of the *hu-yen*, or there may be appeal from them to those of the province, and ultimately to the royal council; where all the evidence is scrupulously re-adduced. The judges write and seal their individual opinions separately, and the emperor himself determines on the case. No distinction is made between natives and foreigners, the latter being under the protection of the minister of strangers. The several chiefs give audience and receive petitions every day; but presents to each are necessary to obtain a hearing. (See *Crawfurd*, p. 498.; *White*, p. 282.)

Punishments. — The bamboo is constantly at work, and the *cangue*, or yoke, for other minor crimes, which is composed of two pieces of wood 10 feet long, fastened across by two others, and worn somewhat tightly round the neck. All capital crimes, as murder, robbery, sometimes corruption (excepting adultery), are punished by decapitation: the criminals are brought into the bazar, or public place, and placed in rows, each opposite a placard, declaring the nature of his crime; then, with one blow of a two-handed sabre, their heads are successively struck off. Parties convicted of adultery are tied together and thrown into the sea. (See *White*, pp. 44. 281.; *Crawfurd*, p. 498.)

Customs, &c. — Polygamy is allowed; the first wife is the chief, the others being mostly of inferior rank; the children of all are, however, equally legitimate. The richer classes marry at 15, the poorer at 20 or 30 years of age, or when they can afford to buy a woman from her friends; but women cannot be married against their own consent. Marriage is but a verbal contract, ratified by exchanging presents before witnesses, and dissolved as readily by merely breaking a pair of chop-sticks, or porcupine quills, before a third party. The remains of the dead are often laid out with much pomp under a pavilion covered with silks, and surrounded with tables of the choicest fruits, areca, &c., and a band of music for 15 days. White garments are worn, and much gilt paper is burnt at these times. No native nor foreigner, if married there, is allowed to quit the country. (*Crawfurd*, pp. 460—500.; *White*, pp. 282—300.; *Asiatic Journal*, iv. p. 15.)

Amusements, Public Taste, &c. — The Anamese are very fond of dramatic representations, which are performed in pavilions for several days together with little intermission, and to which no entrance-money is required, the actors depending on voluntary contributions. The plays consist of historical operatic pieces, or of a light and comic dialogue, interspersed with cheerful airs, each concluding with a common chorus. Their dancing and music is in exact time, the latter not destitute of melody, nor unlike some Scotch airs. The instruments in use are gongs, drums, violins, flutes, guitars, and trumpets sufficiently harsh and grating; but the applause is always in proportion to the noise made. They have some notion of sculpture, the best specimens of which are seen on tombs. They are fond of shuttlecock and football, cock and quail fighting, the tricks of jugglers, &c.; and the upper ranks of elephant, tiger, or buffalo hunting, and fire-works, cards, dice, &c., without, however, being addicted to gambling. (See *Barrow*, pp. 295—300.; *White*, pp. 301, 302. 320.)

Dress — Is the same as that of the Chinese before the Tartar conquest, consisting of loose trousers, tied round the waist with a sash; several loose frocks of different lengths, the upper one the shortest, and having long loose sleeves, a small close collar, and 5 buttons and loops; a broad basket-work hat, or a turban of crape; slippers by which the feet are not cramped like those of the Chinese; hair long, and turned up in a knot on the top of the head. The dress of both sexes is alike, only in that of the women the frocks are longer, and they wear bracelets and armlets of pearl or ivory, earrings, and other ornaments. Dress is an object of great attention with all classes. (*Crawfurd*, p. 415.; *Barrow*, pp. 301—309.; *White*, p. 268.; *Finlayson*, p. 378.)

Language. — The language of the Cochin Chinese, like their dress, &c., has been derived from that of China: it is monosyllabic, destitute of inflexions, its written character like the former, although it possesses several elements, as the B. D. and R, which the Chinese are unable to pronounce. The Cambodjans speak a different language, and the people of Tsiampa another distinct from both. Literature is confined to Chinese books, chiefly on medicine, and the works of Confucius. (*Crawfurd*, p. 464. 467. 484.; *Barrow*, p. 326.)

History. — In 234 B.C., this country was conquered by the Chinese, who held it till A.D. 263. In 1406 it was re-conquered by the Chinese, who abandoned it again in 1428. In 1471, Cochin China was completely subjected by Tonquin; but in 1553, threw off the yoke, and, until 1748, was governed by both a nominal and real sovereign, the latter of whom was a military commander and regent. The nominal sovereigns then obtained the mastery, and ruled in the midst of anarchy till 1774, when, in the reign of Caung-shung, the revolution of Nhac (*Yinyac*) and his brothers overturned their power. Bishop Adran, a French missionary, the tutor of the late king's son, obtained for him the alliance of Louis XVI., and, with the aid of a few of his countrymen, was the main cause of the restoration of his pupil Gia-long to the throne of his ancestors, on which he was firmly seated in 1802. Adran reformed the jurisprudence, commenced public works, surveyed the coasts, promoted trade, established naval arsenals, and new disciplined the king's army: but dying soon after, many of his wholesome reforms sank into disuse. Gia-long died in 1819, and was succeeded by an illegitimate son, who was invested, in 1821, by the court of Peking with the empire of Tonquin and Cochin China. (*Crawfurd*, pp. 505—510.; *White*, pp. 84—94.)

ANAPA, a sea-port town and fortress of European Russia, Circassia, on the N.E. coast of the Black Sea, 47 m. S. E. Yenikale, lat. 44° 54′ 52″, long. 37° 16′ 21″ E. Pop. ex. of military, 3,000. The fortress, constructed by the Turks in 1784, was taken by the Russians in 1791, and in 1807, and finally in 1828, since which it has been definitively ceded to them. The houses are mostly mere cabins, built of wood and mud. The inhabitants consist of Circassians, Turks, Tartars, Greeks, Jews, Armenians, Russians, &c. The port, or rather road, is nearly open, with bad holding ground, and so shallow as to admit only ships of small burden. Anapa is at present principally important as a military post; but were tranquillity restored in Circassia, it would most likely become the seat of a considerable commerce. The exports are grain, tallow, and butter, hides, peltries, wax, &c. (*Klaproth, Tableau du Caucase*, p. 160.; *Spencer's Circassia*, i. 256.)

ANCENIS, a town of France, dep. Loire Inférieure, on the Loire, 21 m. E. N. E. Nantes. Pop. 3,667. It is well built, has a handsome college, an hospital, and barracks. There are coal and iron mines in the neighbourhood; and it has a good deal of trade in wine, vinegar, brandy, timber, &c. Its port serves as an entrepôt and station for the vessels navigating the Loire. The town is commanded by a Gothic castle placed on a steep hill.

ANCERVILLE, a town of France, dep. Meuse, 11 m. S. S. W. Bar-le-Duc. Pop. 2,211.

ANCHOLME (ISLE OF), see LINCOLNSHIRE.

ANCIAONS, a town of Portugal, prov. Tras-os-Montes, 12 m. W. Torre de Moncorvo. Pop. 1,900. It is encircled by walls, and has a castle and mineral springs.

ANCONA, a marit. city of Italy, the third in the Papal States, cap. leg. same name, on the Adriatic, 17½ m. S. E. Sinigaglia, 15 m. N. N. W. Loreto, and 188 m. N. E. Rome, lat. 43° 37′ 42″ N., long. 13° 30′ 35″ E. Pop. 24,000, of whom many are Jews, Greeks, and Mohammedans. It is the seat of a civil tribunal, of a tribunal of original jurisdiction, and of a bishopric; is built amphitheatre-wise, on a sloping ground, declining to the sea, between two hills, on one of which stands its cathedral, on the other its citadel; streets narrow, dirty, and irregular; but many houses spacious and elegant; quay, fine; port formed by a mole 2,000 ft. in length, 100 do. in breadth, and 65 above the sea, having at its extremity a lighthouse, with a handsome revolving light. The mole being hooked at the extremity, vessels may lie immediately within the harbour in from 7 to 8 fathoms; but it shoals rapidly, and vessels drawing more than 15 or 16 ft. water should anchor within a short distance of the entry. There is good anchorage ground about ¼ m. without the mole, in 10 and 12 fathoms. On the mole stands a noble ancient triumphal arch, in honour of the

Emperor Trajan, who improved and embellished the town and port; it is formed of large blocks of white marble; and it has also another arch in honour of Pope Benedict XIV. The cathedral, situated on a bold promontory on the site of an ancient temple of Venus, has a curious porch, supported by two lions of Egyptian granite; a very ancient altar, and many fine marble pillars. There are 10 other churches, containing many good paintings; 15 convents, a college, and two hospitals. The palace of the delegate, the exchange, the town-house, and the fortifications, particularly the citadel, are also worthy of notice.

Its manufactures, chiefly in the hands of the Jews, consist principally of wax, tallow, silk hats, and paper. The harbour is well adapted for building and repairing ships, and is frequented by those of all nations. It was made a free port by Clement XII., and has a more considerable trade than any other town on the W. coast of the Adriatic, Venice excepted. Outside the harbour is a fine lazzaretto, on an artificial island, communicating with the town by a bridge. The market-place is spacious, and the town is well furnished with cheap and good provisions. The women are said to be remarkable for their beauty. Thomson (*Two Journeys in Italy, &c.*) observes, "It was an amusing scene to pace along the wharfs, to listen to the strain of the tiny mandoline, or the deeper tones of the guitar, joined to the patriotic song of some poor Greek, or the more refined Italian ditty; while a medley group were sometimes seen collected in a Greek mystica, or an Italian feluca, dancing, whirling, and stamping to the music of some half dozen voices, or the tinkling of the Spanish guitar."

Ancona is said, by Strabo, to have been founded by a colony of Syracusans in the time of Dionysius. The Romans established themselves in it, B. C. 268. Being justly regarded as a naval station of great importance, Trajan expended large sums upon it, and built the mole. A.D. 592, it was occupied by the Lombards; in 839 it was sacked by the Mussulmans; and it afterwards formed an independent republic till 1532, when Bernardino Barba, under pretext of defending it against the Turks (having built the citadel which entirely commands the town), placed it in the hands of the Pope. In 1799 it was taken by the French, and in 1809 formed the chief city of the dep. of the Metauro. In 1814, it was restored to the Papal see. In Feb., 1832, a detachment of French troops landed unexpectedly, and took possession of the citadel; which the French government announced its resolution to retain so long as any Austrian troops remained within the Papal territories; the latter, however, having been withdrawn, the French evacuated the town in the course of 1839. (*Rampoldi Corografia dell' Italia*, vol. i. p. 80.; *Forsyth's Italy*, 1816.; *Thomson's Two Journeys in Italy, &c.* Lond. 1835, pp. 239 to 253.)

ANCY-LE-FRANC, a town of France, dep. Yonne, cap. cant. on the canal of Burgundy, 10 m. S.E. Tonnerre. Pop. 1,413. It is neat and well built, but is chiefly remarkable for the magnificent castle in its vicinity, built after the designs of Primaticcio, belonging to the descendants of Louvois, minister of Louis XIV. It is surrounded by a beautiful park, and has fine gardens. (*Hugo*, art. *Yonne*.

ANDAD KHAN, a town of Independent Tartary, Khanat of Khokan, on the Sihoun (*Jaxartes*), 55 m. E. Khokan, lat. 41° 20′ N., long. 71° 27′ E. It is surrounded by gardens, and is a place of considerable size and antiquity.

ANDALUSIA, (so called, either from the Vandals who settled here in the fifth cent., or from an Arabic word, signifying *Land of the West*, the most S. division of Spain, comprising the four Moorish kingdoms of Seville, Cordova, Jaen, and Granada, between 36° 0′ and 38° 38′ N. lat., and 1° 37′ and 7° 24′ W. long., having N. Estremadura and La Mancha; E. Murcia; W. Portugal; and S. the Atlantic Ocean, the Str. of Gibraltar, and the Mediterranean: length, E. to W., about 350 m.; greatest breadth nearly 200 m.: area, 27,153 sq. m. Pop. about 2,400,000. It is at present divided into eight provinces, viz.—Seville, Cadiz, Cordova, Granada, Jaen, Malaga, Almeria, and Huelva. Its chief cities are Seville, Cadiz, Cordova, Jaen, Almeria, Granada, Malaga, Huelva, and Gibraltar. Two ranges of mountains traverse it from E. to W.: the most S. of these ranges is the loftiest, and has several points covered with perpetual snow; the highest, Mulahacen, being 11,678 ft. above the level of the sea. The Sierra Morena belongs to the N. chain, and forms part of the N. boundary of the district. Between these two ranges flows the Guadalquivir, by far the largest of the Andalusian rivers, and swelled by numerous streams from the lateral vallies opening into its basin. There are numerous small lakes. On the coast, the climate is hot and oppressive; but N. of the Sierra Nevada, the temperature is more equable, and cooler, although it never freezes. The primitive rocks of the high S. mountains are chiefly mica-slate, gneiss, and clay-slate, covered in some parts by black-transition limestone, containing sulphuret of lead. Serpentine marble, and alabaster, are found in Granada; and there are numerous mines, that either produce, or have produced, gold, silver, copper, antimony, mercury, iron, lead, vitriol, coal, and sulphur; but, with the exception of the lead mines of Adra, near Malaga, they are at present mostly in a neglected state. The vegetation partakes of the European and African characters: mastic, olive, myrtle, palms, bananas, &c., abound in the central parts of the country, but on the S. shores those common to Europe almost wholly disappear, and the sugar-cane and cotton are cultivated. Wheat, barley, fruits of all sorts, and wines, are abundantly produced; the chief wines are those of Xeres (sherry), Pajarete, Malaga, Montilla, &c.: silk is also an article of considerable culture. There are many rich pasture-lands; and the cattle and horses, especially the latter, are renowned as amongst the best in Spain. The wolf and boar are the only formidable wild animals; there is plenty of game, an abundance of fish, and none of the most venomous reptiles: the cochineal insect is successfully cultivated near Cadiz. Most part of the country is parcelled out into vast estates, belonging to grandees, the church, and corporations. Agriculture is in a very backward state. The greater part of the country is appropriated to pasture, the traveller often journeying many miles without seeing a single house, or any symptoms of cultivation; and, notwithstanding the fertility of the soil, there is annually a considerable importation of corn from the opposite coast of Africa, Sicily, and the Black Sea. The occupiers of the land mostly live together in towns and villages; their rents are usually paid on the *métayer* principle, and they are at once ignorant and poor; the inhabitants of the mountainous and less fertile districts are, as might be expected, the most industrious. The chief manufactures are those of woollens, silk, and leather; and but for oppressive customs laws, there would be a considerable trade both with other parts of Spain and foreign countries. Cadiz is the chief port.

The Andalusians are a mixed race, descended from Africans, Carthaginians, Romans, Goths, Vandals, and Moors. They retain much resemblance, both in person and manners, to the latter; although light hair, eyes and complexions, are by no means unfrequent. When they have any motive to exertion, they are not deficient in industry, and are intelligent and imaginative. Andalusia has produced many good poets and distinguished men in all ages: — Trajan, the Senecas, and Silius Italicus were natives of this prov. with Murillo, the painter, and some of the best lyric authors of modern Spain. (*Minano. Townsend's Spain*, ii. 238.: *Malte-Brun, &c.*; and *see* SPAIN.)

ANDAMAN ISLANDS, a lengthened narrow group of islands, none of which are of any very considerable magnitude, in the E. part of the Bay of Bengal, stretching N. and S., between 10° 30′ and 13° 40′ N. lat., under about 92° 50′ E. long. They are within the full sweep of the S. W. monsoon, and are washed for eight months a year by incessant rains. They produce many large trees, that might furnish timber and planks for the construction of ships, and for the finest cabinet work. The quadrupeds are but few, consisting principally of a diminutive breed of swine and rats. Among the birds is the swallow, that produces the edible nests so highly esteemed in China. Fish are generally plentiful, but occasionally scarce. The inhabitants, who are not supposed to exceed 2,500 or 3,000 in number, seem to be a peculiar race in the lowest state of barbarism. They seldom exceed 5 feet in height, have protuberant bellies, limbs disproportionally slender, skin a deep sooty black, hair woolly, nose flat, lips thick, eyes small and red, their countenances exhibiting the extreme of wretchedness — a mixture of famine and ferocity. They go quite naked, and are insensible to shame from exposure. They have made no effort to cultivate the ground, and are found only on the sea-coast, depending principally for subsistence on fishing. Their implements are of the rudest texture; but they use them with great dexterity, particularly in spearing and capturing fish. They have no utensil that will resist fire, and dress their food by throwing it on the live embers, and devouring it half broiled. Their habitations display little more ingenuity than the dens of wild beasts. Being much incommoded by insects, their first occupation in the morning is to plaster their bodies all over with mud, which, hardening in the sun, forms an impenetrable armour. They paint their woolly heads with red ochre and water, and, when completely dressed, have a most hideous appearance. They have an intense hatred of strangers, with whom they cannot be persuaded to hold any intercourse. They are supposed to worship the sun and moon; and during storms and tempests, endeavour to avert the wrath of the dæmon by whom they suppose them to be produced. Their language is peculiar, and is not known to have the slightest affinity to any spoken in India, or in any of

the Indian islands. They have been said to be *anthropophagists*, but this is doubtful. Some have supposed them to be a race of degenerate negroes; but this is a matter as to which it is impossible to arrive at any definite conclusion.

A British settlement was established at Port Cornwallis, on the largest of the islands, near the N. E. extremity of the group, in 1793. The harbour is excellent; and the settlement was designed for the reception of convicts from Bengal, and for the security of shipping during the monsoons; but the situation turned out so very unhealthy, as to occasion its abandonment in 1796. Since then they have been but seldom visited, except in 1824 and 1825, when some of the ships, on their way to Rangoon, touched at the islands. On one of these occasions, the natives attacked a party watering with the utmost fury; and were not repulsed without great loss on their side, and after they had killed one soldier, and wounded three others. (The above particulars have been selected from the excellent account of these islands, given by *Symes, Embassy to Ava*, pp. 127—138. 4to. ed.; see also *Hamilton's Gazetteer*.)

ANDELYS (LES), two towns of France, within a very short distance of each other, dep. Eure, cap. arrond. one on the Seine, and the other a little inland, 10 or 11 m. E. Louviers. Pop. 5,085. The greater Andely is ill built, with narrow crooked streets; but it has a fine collegiate church. The lesser Andely has to boast of the magnificent ruins of the château Gaillard. There are manufactures of fine cloth, kerseymeres, rateens, cotton yarns, and paper, with tanneries, &c. Nicholas Poussin, the famous painter, was born in the hamlet of Villers, near the greater Andely, in 1594; and a monument has been erected to his memory in that town.

ANDENNES, a town of Belgium, prov. Namur on the Meuse, 13 m. E. N. E. Namur. Pop. 4,203. There are manufactures of earthenware and porcelain, and of pipes formed of the clay found in the neighbourhood.

ANDERLECHT, a neat well-built town of Belgium, near Brussels, of which it is in fact a suburb. (*See* BRUSSELS.)

ANDERNACH (the *Antunacum* of the Romans), a town of the Prussian prov. of Lower Rhine, on the left bank of the Rhine, 10 m. N. W. Coblentz. Pop. 3,000. It is situated in a volcanic country, its massive towers, turrets, and ruined walls, being admirably suited to the sombre scenery by which it is surrounded. Streets narrow and ill paved, and the houses gloomy, old, and out of repair. There is a fine old archway, supposed to be Roman, forming the gate of the town on the side next Coblentz; and below it, in a line towards the river, are the ruins of an extensive palace, or castle, supposed to have been built by the Goths soon after the expulsion of the Romans. It exports two singular productions, viz. mill-stones made of porous lava, and large quantities of pounded *tufa*, denominated *trass*, a cement which, when mixed with water, becomes as hard as stone. The former are in great demand in most parts of Europe; the latter is principally used by the Dutch in the construction of their dykes, but is also exported to other countries. Immense rafts of timber from the German forests, destined for the Low Countries, are formed near Andernach. (*Barrow's Tour through Holland*, &c.; and *Schreiber's Rhine*.)

ANDES (THE), an immense mountain range, runs along the whole W. coast of S. America, covering with its chains, declivities, and valleys about a sixth part of that continent. The *Cordillera*, a name sometimes given to this chain, is properly applicable only to the innermost and and highest ridge of the mass.

Cape Horn, on Cape Horn Island, in about 56° S. lat., may be considered as the S. extremity of the Andes. The most N. chain of the mountains is the Paramo* de las Rosas, which extends to the E. of Lake Maracaybo, and terminates at about 9° N. lat. The whole system is thus found to extend lengthwise over 65 deg. of lat. Its width varies very much; in some parts it occupies only between 30 or 40 miles across, in others it covers with its branches and valleys a country extending 500 miles and upwards from E. to W.

Beginning our survey of this mountain system at its southern extremity, we find that it commences at the Cape of Good Success, on the W. shores of the Straits of Le Maire, in about 70° W. long. Even the high rocky mass which constitutes the island of Staaten Land, and extends more than a degree farther E., may be considered as a continuation of this range, from which it is separated only by the Straits of Le Maire, between 30 and 40 m. across. From the Cape of Good Success the range runs W. along the S. shores of King Charles's Southland, the most extensive of the islands constituting the S. Archipelago of America, commonly called Tierra del Fuego. It covers about a third part of the surface of that island, as well as the whole of the islands lying S. of it; as Navarin, Hoste, Wollaston, Hermit, and Cape Horn. Towards the Straits of Le Maire, the range consists of rocky hills, of no great elevation; but farther W. they rise to an altitude of 2,000 or 3,000 ft. Cape Horn itself is a conspicuous rock, with a steep ascent, upwards of 3,000 ft. high. Mount Sarmiento, near Magdalen Channel, is the highest summit, and rises about 6,000. ft. above the sea.

In the W. part of King Charles's Southland, the range extends over the whole district S. and W. of Admiralty Bay. Farther W. it changes its direction, running in a N. W. direction as far as the Frith of Sausalid (Ancon Sinsalida of the Spaniards), 52° S. lat., and 73° W. long. This part of the range, whose mean width may be about 100 or 120 miles, is longitudinally divided by that portion of the Strait of Magalhaens which extends from Cape Froward to Cape Victoria. Two transverse channels divide the S. portion into two islands. The E. or Magdalen Channel, separates Clarence Island from King Charles's Southland; and the W. extends between Clarence Island and South Desolation; the latter bears the name of Barbara Channel. That part of the range which lies to the N. E. of the strait is intersected by two deep transverse inlets. The south-eastern, called Jerome Channel, terminates on the E. in two large lagoons, called Otway and Skrying Waters, which are both situated on the eastern side of the Andes in the plains of Patagonia. By this extensive inlet Brunswick Peninsula is divided from King William's Land. The N. W. transverse inlet bears the name of Smyth's Channel, and divides first King William's Land from Queen Adelaide's Archipelago, and afterwards joins the Frith of Sinsalid, which likewise penetrates through the whole chain of the Andes, and terminates with its numerous branches in the plains of Patagonia. South of this frith the mountains rise somewhat higher than on King Charles's Southland, but their mean elevation does not exceed 4000 ft. above the sea.

The mountain range south of the Frith of Sinsalid may be called the *Magalhaens Andes*, extending principally on both sides the strait bearing that name. It consists of islands and peninsulas intersected by deep but narrow arms of the sea. The summits of the mountains are covered with eternal snow, the snow line occurring in these countries at about 3,500 feet above the sea. The lower parts of the mountains and the steep and rocky shores of the islands are partly covered with evergreen woods; except towards the ocean, where they present the aspect of bare black rocks.

At the Frith of Sinsalid begins the uninterrupted chain of the Andes. At this place it again changes its direction, running due N. with slight bends as far north as the Bight of Arica (18° S. lat.). It comprehends the Patagonian Andes between 52° and 42°, the southern Chilean Andes between 42° and 35°, and the northern Chilean and Atacamean Andes between 35° and 20° S. lat.

The *Patagonian* Andes extend from the Frith of Sinsalid to the N. corner of the Gulph of Ancud, opposite the island of Chiloe. They are only known from the side of the ocean, whence they rise to a considerable height with an extremely steep ascent. It would seem as if the range in this part had once occupied a much greater breadth, and that by some extraordinary convulsion the whole of the western declivity, with the summits of the range, had been broken down and buried in the ocean, so that only the eastern declivity has remained standing. The numerous and rocky islands which skirt this shore in all its extent, except at the protruded cape of Tres Montes, appear to support such a supposition. The eastern declivity of the range has not been examined; but what we know of it seems to be sufficient to warrant the supposition that in this part the Andes occupy a width of only from 30 to 40 miles. The mean height of the Patagonian Andes may be estimated at about 5,000 or 6,000 ft. None of its summits which have been measured exceed 9,000 ft. But snow mountains, and even glaciers, are stated to be frequent. The lower part of the declivity is covered with trees and shrubs, the upper part bare, as also those portions of the shore which are exposed to the immediate effects of the gales blowing from the Pacific.

The *Southern Chilean* Andes extend from the most

* *Paramo*, rendered *desert* in the dictionaries, signifies in S. America neither a desert nor a heath, but like the Peruvian word *puna* denotes a mountainous place covered with stunted trees, exposed to the winds, and in which a damp cold perpetually prevails. Under the torrid zone the *paramos* are generally from 10,000 to 12,000 feet high. They are, in fact, the lower summits of the cordilleras. Snow often falls in them, but it remains only a few hours. In this respect they are distinguished from the *nevados*, which enter the limits of perpetual snow. The paramos are almost constantly enveloped in a cold thick fog; so that, when a thick small rain falls, accompanied with a depression of the temperature, they say at Bogota, or at Mexico, *cae un paramito*. Hence has been formed the provincial word *emparamarse*, to be as cold as if one were on a *paramo*. (*Humboldt, Pers. Nat.* ii. p. 252.; *Modern Traveller*, xxvii. p. 14.)

N. corner of the Gulph of Ancud (42° S. lat.) to the lofty summit of Aconcagua, in about 32¾° S. lat. and 70° W. long. Towards the S. extremity the Andes keep for some extent a distance of about 150 miles from the shores of the Pacific, the greatest which they attain in their whole course; but towards the N. they gradually approach it to within about 100 miles. Between the Andes and the shore are extensive plains, from 1,200 to 2,000 ft. above the sea; and from these plains the mountains rise with an extremely steep acclivity to the mean elevation of 13,000 or 14,000 ft. above the sea. Some summits attain 15,000 and even 15,500 ft. Though our knowledge respecting this part of the Andes be very scanty, it would seem that they form one extensive mass from 60 to 80 miles across, which, however, in its upper part is furrowed by a longitudinal valley, divided by short transverse ridges into several shorter valleys. This great mass of rocks is mostly clothed with forest trees and a rich vegetation; but in the interior it presents only bare rocks, nearly without plants of any description.

Three passes are known to traverse the Chilean Andes. That farthest S. skirts the high volcano of *Antuco*, between 37° and 36° S. lat., leading from the small town of Tucapel to the great plains E. of the Andes. It is also used by the aborigines inhabiting these plains, who bring to Chile salt and some commodities. The second road traverses the *Pass del Planchon*, which crosses the mountain ridges near 35° S. lat., beginning on the west at the village of Curico and leading to the territory of the Pehuenches, who occupy the E. declivity of the Andes, and thence to Mendoza. It is said to be the lowest of the mountain passes of the Andes, vegetation ascending up to the highest part of the road; it is farther stated to be more gentle in its ascents and descents. Yet it is little used, except by persons trading with the Indians in the Pampas. The third pass is that of *Portillo*, which at first runs along the river Maypo. S. of Santiago, the capital of Chile, and afterwards crosses the two ridges of the Andes which enclose the valley of Tunuyan. On the W. ridge the road rises to 14,362, on the E. to 13,210 feet above the level of the sea. From the latter it descends to the plains, and leads to Mendoza. It is the nearest way between the last-mentioned town and Santiago, the capital of Chile, and is therefore sometimes, but not frequently, used.

There is some doubt as to the exact height of the summit of Aconcagua; but it certainly exceeds 23,300 ft.; and is, therefore, entitled to be regarded as the culminating point in this vast chain. N. of this summit the Andes, which farther S. form only one enormous mass of rocks, divide into two masses, which enclose long and wide valleys considerably lower than the surrounding ridges. The first valley of this description is that of Uspallata, which extends about 180 or 200 miles S. and N. It is traversed by two rivers; the Rio de Mendoza, which flows S.; and the Rio de S. Juan, which runs N. The watershed between them lies N. of 32° S. lat. This valley is about 15 miles in width, and presents an undulating surface. It is about 6,000 ft. above the level of the sea. The range E. of it, called the Paramillo de Uspallata, seems not to exceed 10,000 ft; but the W. or principal range attains 14,000 ft. and upwards. The former is about 25, and the latter more than 70 miles across. The E. range has two narrow breaks, by which the two rivers of the valley find their way to the plains extending E.

Over these two ranges, and through the valley of Uspallata, lies the most frequented mountain road crossing the Andes. On the west it begins at the town of Santa Rosa, in the valley of the Quillota river (2,614 ft. above the sea); it next follows the bed of that river for a great distance, and then crosses the high range nearly at equal distances from the mountain summits of Tupungato and Aconcagua (between 33° and 32° S. lat.). The Cumbre or highest point is 12,454 feet above the Pacific. Hence the road descends along the Rio de Mendoza into the valley of Uspallata, passes the Paramillo range, and enters the plains near Villa Viciosa, whence it runs along the last-mentioned mountain chain to Mendoza (2,608 ft. above the sea); from Mendoza it leads over the Pampas to Buenos Ayres. Though much frequented, it cannot be passed by carriages, and only mules are used for the transport of commodities, and by passengers. In winter (from June to September) the passage is very dangerous, on account of the heavy falls of snow, which cause frequent losses of life and property. The pass is by some named that of the Cumbre, and by others of Uspallata.

N. of the valley of Uspallata the Andes continue to form two ranges, including extensive longitudinal valleys. The first in order is that of Agualasta, of which we know only that its soil is sterile, but its mountains rich in metallic ores. Then follows the valley of Andalgala, which is entirely unknown. The latter extends to 23° S. lat. A great number of mountain passes are stated to exist over the W. range enclosing these valleys, which would indicate that the mean elevation of the Andes is here much less than in other parts. But none of these passes seems to be much used, nor has any of them been visited by European travellers. It is, however, known that towards the Pacific this range does not descend with a short and rapid declivity, as in the S. Chilean Andes, but by table lands in the form of terraces, which near the principal chain are 5,000 feet and more above the sea, but lower by degrees as they approach the ocean, where they still form a shore from 300 to 500 feet high. Being furrowed by deep water-courses, these table-lands, when seen from the banks of rivers, appear frequently like mountains of considerable height.

From their farthest S. point as far as the N. point of the valley of Upsallata, the Andes do not send out lateral branches. But from the E. range, including the valleys of Agualasta and Andalgala, several ranges branch off into the E. plains, and extend in a S. and E. direction to a distance of from 200 to 250 m. By these lateral chains the countries extending E. of the Andes, between 33° and 23° S. lat., are rendered hilly, and in some districts even mountainous. In the S. districts the height of the ranges is not considerable, but farther to the N. it increases greatly; and the chain, which branches off at the N. end of the valley of Andalgala, and forms at present the boundary between the republics of Buenos Ayres and Bolivia, may attain a height of 10,000 ft. above the sea. It terminates at no great distance from the point where the Rio Grande enters the Rio Vermejo.

Between 23° and 20° S. lat. the principal range of the Andes seems to constitute a single chain, rising to a mean height of above 15,000 feet. In it stands the Nevado de Chorolque, which is stated to rise 16,548 ft. above the sea. From this chain several lower and narrow ridges run E. 120 or 150 m. The S. districts of Bolivia are in consequence rendered a succession of valleys and mountains. However, these ridges do not attain a great elevation over the plains on which they rise. A road traverses the principal chain; it begins on the coast of the Pacific at Cobija, or Puerto de la Mar, the principal harbour of Bolivia, passes over the high Andes of Lipes near the volcano of Atacama, and descends to Tupisa; hence it runs to Potosi and Chuquisaca. This road is not much used, on account of the sterility of the surrounding country, and the difficulty of procuring provender for the mules and other animals of burden. In some parts water too is extremely scarce.

Near 20° S. lat. is the mountain knot of Porco. Here begin the *Bolivian Andes*, which extend to 14° S. lat., and may be considered as constituting the central portion of the whole mountain system. In no other part do the mountains generally attain an equal height, nor do they cover so great a surface. The chain, which previously formed one great undivided ridge, here diverges into two smaller ridges, the one to the E. being denominated the Cordillera de Ancuma, and that to the W. the Cordillera de los Andes, or of the coast. They unite again in about 14° or 14½° S. lat., enclosing between them the great Alpine valley, sometimes called Titicaca, from the famous lake of that name, and sometimes Desaguadero from the river which flows from it. This immense basin is about 335 m. in length from N. to S.; its breadth, which is different at different places, may be estimated at about 55 m. at a medium, making its area about 18,425 sq. m., of which the lake is reckoned at about 4,000 sq. m. The latter is at the prodigious elevation of 12,847 ft. above the level of the sea; and the mean height of the mountains by which it is surrounded cannot be less than 14,000 ft. The highest summits on each side ascend far above the line of perpetual snow. The Cerro da Potosi, near the S. extremity of the range, attains to an elevation of 16,152 ft.; and farther to the N. Illimani and the Nevado de Zorata in the E. chain rise respectively to the height of 21,140 and 21,286 ft. But the peaks in the W. chain are still higher, Sahama, in lat. 18° 8′ S. being 22,350 ft. above the sea, Parinacota 22,030 do., and the volcano of Arequipa 20,320 do. These and other altitudes have been determined by Mr Pentland. South of 17° S. lat., the two ranges run nearly due S. and N., but N. of that parallel S. S. E. and N. N. W. At their N. extremity (14° S. lat.) they are united by a transverse range, which extends N. N. E. and S. S. W. It has several summits covered with perpetual snow, but their elevation has not been ascertained.

The plateau or valley of Titicaca, does not present a level plain; those portions of it which are continuous to the ranges being covered with mountains, or rather hills, rising several hundred and sometimes even a thousand feet above their bases. But the internal districts preserve notwithstanding a sufficiently level surface. The Desaguadero, which issues from the S. extremity of the lake of Titicaca, flows S. till about 19½° S. lat., when it is lost in a small lake. The former lake is famous in the history of Peru, for being the scene of the miraculous appearance of Manco Capac, the founder of the Inca dynasty. He is said to have inhabited the largest of its many islands, which was, therefore, held in peculiar veneration. Succeeding Incas erected on it a magnificent temple, which became to the Peruvians what the temple at Mecca is

or rather was, to the Mohammedan world; for it was incumbent on all Peruvians to visit it, and to bring with them rich offerings. Hence its wealth became immense. It is stated that when the Spaniards took possession of the country, the natives, to disappoint the avarice of the conquerors, and prevent the pollution of the temple, threw its treasures into the lake and rased the fabric to the foundation. Some ancient ruins are still to be found on the borders of the lake, and Mr. Prescott supposes it to have been the seat of civilisation anterior to the æra of the Incas. — (*Hist. of Peru*, I. 11th ed. 1848.) The storms that rush from the mountains render the navigation of this lake peculiarly dangerous. Its waters are said to be bitter or brackish; but they are drunk by the cattle in the vicinity, and they are well stocked with trout and other fish.

The ranges enclosing the alpine valley of Titicaca are traversed by several mountain roads, of which the following are the most frequented:—That through the pass of *Potosi*, traversing the Puerto between the Cerro of Potosi and that of Huayna Potosi: it leads from Potosi to Oruro, and rises in its highest point to 14,320 feet. The road over the pass of *Condor Pacheta*, between Oruro and Cochabamba, rises in its highest part to 13,960 ft. above the sea. The road through the pass of *Parauni*, leading from La Paz to the countries east of the ridges, rises to 15,226 feet. The most used road is over the western range, and that through the pass of *Las Gualillas*, leading from Arica on the coast, and Tacna, to La Paz, in the valley of Titicaca; it traverses the range at 17° 50′ S. lat., S. of the Nevado de Chipicani, where it rises to 14,890 ft. Farther N. (16° 2′ S. lat.) is another road, which connecting Arequipa with Puno, attains in the pass of *Altos de Toledo* an elevation of 15,528 feet above the sea.

Several lateral ridges run off from this great mass of rocks to the E.; but none of them seems to be distinguished by its height or extent, except the Sierra de Santa Cruz, which detaches itself from the principal range about 17° 10′ S. lat., and terminates near the banks of the Rio Guapai or Rio Grande, within a few leagues of the town of S. Cruz de la Serra. It extends about 200 miles, and is of considerable elevation in its western part, where it forms the Nevado de Tinaica, near Cochabamba; farther east it becomes gradually lower.

The *Peruvian Andes* occupy the next place, extending from 14° to 6° S. lat. Between these latitudes they measure from 400 to 450 m. in width, and their area does not probably fall short of 200,000 sq. m. On their borders extend two ranges; of which the E., separating the mountain region from the great plains extending south of the Amazon, branches off from the E. extremity of the Andes of Vilcanota in a N. direction. It divides the affluents of the Ucayale from those of the Yavari, and terminates near 7° S. lat., about 160 m. from the Amazon. We know very little of this range, but it does not seem to rise any where to a great height; probably none of its summits exceed 10,000 ft. above the sea.

The W. range of the Peruvian Andes, which, with its W. declivities, approaches the Pacific Ocean to a distance of 30 miles or less, must be considered as the principal chain, on account of its height and breadth, and because it forms with the N. parts of the Andes an uninterrupted chain. It may be said to commence near the Nevado de Chuquebamba, where the Andes of Vilcanota join the W. range of the valley of Titicaca. It is remarkable that the Peruvian Andes seem to be rather a continuation of the Andes of Vilcanota than of the great W. chain; for near 16° S. lat. and between 71° and 75° W. long. the Peruvian Andes extend in a direction E. and W., whilst three degrees farther S. the Bolivian Andes run S. and N. In this portion of the Andes are some very high summits. Besides the Nevado de Chuquebamba, already noticed, are the Cerro de Huando and the Cerro de Parinacocha, whose elevation, however, has not been determined. Near 75° W. long. the principal chain of the Andes declines to N. W., and runs in that direction to the neighbourhood of Cape Parina, the most W. extremity of S. America. In the S. portion of this chain several summits rise above the snow line, but the elevation of none of them has been determined. The best known are, the Toldo de la Nieve, seen from Lima, to the S. E. of which it is situated; the Altunchagua, near 10° S. lat.; and the Nevado de Hauylillas, 7° 50′ S. lat. But between the last-named snow peak and Mount Chimborazo, in the Andes of Ecuador, or Æquator (2° S. lat.), there is no summit which attains the snow line.

The country lying between the two outer ranges of the Peruvian Andes presents a continual succession of high ridges and long valleys, here and there intermixed with plains of moderate extent. It forms the best portion of the republic of Peru. The most remarkable district seems to be the plain of Bombon, near 11° S. lat., which is 12,300 feet above the level of the sea, and extends about 18 miles in width from E. to W., and 40 or 50 from S. to N. A great part of this elevated plain, which is enclosed by two ridges of mountains, and on which the argiferous Cerro of Pasco is situated, is covered with swamps. The water running off from them, and from the elevated ground, which frequently is covered with snow, is collected in several lakes, of which three are especially noticed, as giving birth to three considerable rivers. The farthest N. is the Lake of Llauricocha, from which the Amazon rises; the farthest S. is called the Lake of Quiluacocha, which gives birth to the Sanja or Mataro, one of the principal branches of the Ucayale. Between these lakes is that of Chiquiacola, whence the Rio Huallaga issues. The plain of Bombon is farther to be considered as a mountain knot, from which different ranges branch off in different directions. Besides the principal range of the Peruvian Andes, which lies contiguous to it on the W., two mountain chains run off from it to the N., and one to the S. The most W. of the two N. chains runs nearly parallel to the principal range of the Peruvian Andes, and forms the E. boundary of the valley of the Maranon or Upper Amazon. It rises to a great elevation, but does not enter the snow line. One of its farthest N. branches extends close to the banks of the Amazon, where it forms the famous Pongo (cataract) of Manseriche. A lateral ridge of this chain, branching off from it at about 7°, runs E., and terminates on the banks of the Rio Huallaga, where that river forms its great cataract, or *pongo*. The farthest E. of the N. chains separates the valley of the Huallaga from the *pampas* of S. Sagramento, traversed by the Rio Ucayale. It is towards its beginning in the mountain knot of Bombon of great height, but lowers considerably farther N., terminating between 6° and 7° S. lat. at the Pongo of the Huallaga. The S. chain, issuing from the plain of Bombon, runs S. S. E., nearly parallel to the principal range of the Andes, and encloses the rich valley of the Rio Sanja. It terminates in the most S. bend of that river, about 13° S. lat. and 74° W. long.; and nearly opposite another range of high mountains, which issue from the Andes of Vilcanota, and run N., separating the valley of the Rio Apurimac from that of the Rio Quillabamba or river of Cuzco. The valleys enclosed by these several chains of mountains seem to have a mean elevation of from 3,000 to 5,000 feet above the sea.

The roads traversing the Peruvian Andes are very imperfectly known. That most to the S. leads from Arequipa (near 16° 30′ S. lat.) on the coast to Cuzco in the valley of the Quillabamba, and traverses very high ranges of mountains. Another road leads from Lima to the town of Tarma, in the valley of the Sanja, and thence to Guancavelica, Huamanga, and Cuzco. It rises on the principal chain at the Portacuelo de Tucto to 15,760 feet above the sea. Farther north is the road passing over the plain of Bombon to the Cerro de Pasco. It traverses on the principal range two mountain passes; of which the W., called Alto de Tacaibamba, attains an elevation of 15,135, and the E. or Alto de Lachagual, 15,480 feet above the sea. Another road connects the town of Truxillo with the valley of the Maranon. It traverses the great range near the Nevado de Guaylillas, and leads to Huamachuco and Caxamarquilla; but we are not acquainted with its particulars.

The *Andes of Ecuador*, or the *Æquator*, extend to the N. of the Peruvian Andes. Their commencement may be fixed opposite the Punta de Aguja (6° S. lat.), and the place where the Maranon changes its N. N. W. course into a N. N. E. In the same parallel the chain also changes its direction. It runs between 6° S. lat. and the equator, nearly due north. This portion of the mountain system closely resembles the Chilean Andes. It constitutes one enormous mass of high rocks, of about 80 or 100 miles in width, overtopped longitudinally by a double series of very elevated summits, so that between them a succession of high valleys is formed. These Andes are also distinguished from those between 33° and 6° S. lat. by their not sending off to the E. lateral branches. Their eastern declivities are supported by short contreforts, which probably no where extend beyond 50 miles into the E. plains.

It is remarkable that the elevated valleys occupying the middle of the range rise in elevation as they advance farther N. That portion of the range which lies between 5½° and 3½° S. lat. is occupied by an extensive mountain knot, the Andes of Loxa, which, however, at no place attains the snow line. Then follows the longitudinal valley of Cuença, which extends from 3° 15′ to 2° 30′, and rises to about 7,800 feet above the sea. On this side no snow mountains occur. The mountains of Assuay, which form the N. boundary of the valley of Cuença, extending between the two outer ranges, rise to 15,500 feet above the sea, and enter the snow line; but they are narrow, occupying only about 3 min. of lat. (between 2° 27′ and 2° 30′). To the N. of them extends the longitudinal valley of Alausi and Hambato, which extends between 2° 27′ and 40′ S. lat., and rises to about 7,920 feet above the sea. The summits of the ranges which enclose it on the E. and W. rise to a great elevation. On the

western range stands the famous Chimborazo, rising 21,420 ft. above the level of the sea. It was until lately considered as the highest summit of the Andes; but it is now known that Aconcagua, and the high peaks of the Bolivian Andes, Parinacota, and Sahama, rise considerably higher. On the E. range stand the volcanoes of Sangay, Collanes, and Llanganate. On the N. the valley of Alausi and Hambato is bounded by a narrow transverse ridge, the Alto de Chisinche, which hardly rises 300 ft. above the adjacent level ground. But at its extremities, and precisely on the lateral ranges, rise two very high summits; on the E. the volcano of Cotopaxi, attaining 18,880 ft.; and on the W. the Yliniza, attaining 17,376 ft. above the sea.

The valley of Quito extends from 40′ S. lat. to 20′ N. lat., and has an elevation of 9,600 ft. above the sea. It likewise is skirted by very high summits, on the E. by Antisana, which attains 19,136 ft. and by Cayambe Urcu, which attains 19,535 ft. above the sea. The summit of the latter mountain is traversed by the Equator. On the W. range the highest summits are the Pichincha, rising to 15,936 feet, and the Cotocache, 16,448 ft. above the sea.

The three longitudinal valleys of Quito, Alausi, Hambato, and Cuença, being only separated from each other by very narrow transverse ridges, may be considered as one valley, extending 240 miles in length, with a mean breadth of from 12 to 16 miles. They form the most populous and richest portion of the republic of Æquator.

The northern boundary of the valley of Quito is formed by a transverse ridge between the Nevado of Cotocache and the volcano of Imbabura (21′ N. lat.). To the N. of it lie the *Andes of los Pastos*, an extensive mountain region, which extend to 1° 13′ N. lat., and is crowned by several high summits and volcanoes; as the volcanoes of Cumbal, Chiles, and Pasto. The narrow valleys which lie between the different ridges by which it is traversed are, at a medium, 10,000 feet above the sea.

This portion of the Andes is directed from S. W. to N. E., and may be considered as the centre of the N. Andes; for it is here that the chain begins to divide into two principal branches; the western of which is called Cordillera de la Costa or de Sindagua, whilst the E. bears the name of Andes de los Pastos.

The Andes of Sindagua have a break at about 1° 20′ N. lat., by which the Rio de las Patias carries off the waters descending from the Andes de los Pastos and those which collect in the valley of Almaguer. This valley extends between 1° 13′ and 1° 56′ N. Its surface is very uneven, and its mean elevation may be about 6,900 feet above the sea. In the mountains which extend to the E. of it is a large alpine lake, the Cianega de Sebondoy, in which the Rio Putumaya or Ica, a large tributary of the Amazon, takes its origin. This E. chain expands considerably to the N. of 1° 56′ N. lat., so as to form a mountain knot, which receives the name of Paramo de las Papas. A little farther north (2° 5′ N. lat.) the knot divides into two chains of mountains, which advancing N. enclose the valley of the Rio Magdalena, as we shall see afterwards. From the mountain knot of the Paramo de las Papas a transverse ridge branches off westward, uniting the eastern chain of the Andes with the cordillera of Sindagua, and separating the valley of Almaguer from the great valley of the Cauca. Near the place where this transverse range leaves the mountain knot of los Pastos is the volcano de Puracé, 14,544 feet above the sea. This volcano may be considered as the most N. point of the Andes of Æquator, comprising those of Quito and of los Pastos.

The countries lying on both declivities and at the foot of the Andes of the Æquator are very thinly inhabited, and almost entirely by aboriginal nations, unacquainted with civilization and commerce. But the elevated valleys lying between the two ranges are comparatively well peopled, partly by the descendants of Europeans, and partly by Indians who have made some progress in civilization, and are acquainted with the advantages of commerce. Hence the great commercial road which traverses this portion of the Andes runs longitudinally over the internal valleys, beginning on the north at Popayan (2° 26′ 17″ N. lat.) in the valley of the Cauca, and terminating at Truxillo (8° 5′ 40″ S. lat.) on the Pacific. From Popayan (5,724 ft. above the sea) it ascends the Alto de Roble (6,176 ft.), and then the Alto de Quilquase (6,416 ft.). Hence it descends to the Rio de Guachicon (3,042 ft.), whence it rises again by degrees to the town of Almaguer (7,440 ft.) in the valley of Almaguer. It next enters the mountains of los Pastos, passing over the Paramo de Puruguay (9,408) to the village of Pasto (8,578 ft.). S. of this it descends to the Rio de Guaitara (5,456 ft.), and again ascends a steep declivity to the village of Guachugal (10,320 ft.), whence it passes to the village of Tulian (10,112 ft.). Having traversed the Paramo de Bolliche (11,504 ft.), and the Alto de Pucara (10,400 ft.), it descends by a steep declivity to the river Chota, which is passed at the Ponte de Chota (5,280 ft.), and hence it leads upward to the town of Quito (9,536 ft.).

From Quito the road runs over the plain to the Alto de Chisinche, which has a little more than 10,000 feet of elevation. It next passes through the valley by Hambato (8,864 ft.), Riobamba Nueva (9,472 ft.), Guamote (10,224 ft.), and Alausi (7,984 ft.). Between the last-mentioned place and the town of Cuença is the famous and dangerous pass over the Paramo de Assuay, which in its highest point, the Ladera de Cadlud, rises to 15,536 ft., and is above the snow line. More or fewer lives are annually lost on this *paramo*. Cuença is 8,640 ft. above the sea. Leaving this town the road descends to the Rio de Saraguru (7,376 ft.), and again rises to the Alto de Pulla (10,000 ft.), whence it passes to Loxa (6,768 ft.).

From Loxa the road passes to the W. declivity of the Andes, where it traverses Ayavaca (8,992 ft.) and Olleros (4,768 ft.), whence it repasses the range by the Paramo de Guamani (10,960 ft.), and enters the valley of the Maranon. In this it traverses Guancabamba (6,360 ft.), Zulaca (4,352 ft.), the Paramo de Yamoca (8,768 ft.), the Passo de Pucura (3,552 ft.), Montan (8,560), and Caxamarca (9,200 ft.). From the last-mentioned place it again passes the Andes to Guangamarca (8,000 ft.), and runs hence to Cascas (4,384 ft.) and Los Mokinos (608), terminating at Truxillo (200 ft. above the sea). Thus this long road runs continually over mountains in traversing 9½° of lat.

From Guayaquil a road leads to Quito. From the first-mentioned place it runs through the low grounds skirting the Rio de Guayaquil to Caracol, and then along the banks of the Rio Ojibar to Caluma, where the ascent of the mountains commences. The acclivity is extremely steep between Caluma and Chimbo, which is situated on an elevated country S. of the Chimborazo. From Chimbo the road leads to Mocha and Hombato, where it joins the great mountain road.

There exists a road between Quito and the harbour of Carondelet over the Pass de Malbucha, but we are not acquainted with the particulars relating to it.

We observed above, that at about 1° 20′ N. lat. the Andes of Sindagua branch off from the mountain knot of los Pastos. The E. range divides again at about 2° 5′ N. lat. in two high mountain ranges. Thus we find N. of the latter parallel the Andes divided into three distinct chains, which enclose the valleys of the rivers Magdalena and Cauca. These chains are called the E., Central, and W. Andes.

The *Eastern Andes* of New Granada run between 2° 5′ and 5° 30′ N. lat., nearly parallel with the central range N. N. E.; but N. of 5° 30′ they incline farther E., running due N. E. Though none of its summits, except the Nevado de Chita (5° 50′ N. lat.) and the Nevado de Mucuchues (8° 12′) enter the line of perpetual congelation, its mean height is commonly above the region of trees; and the *paramos*, which extend on its summits, have a scanty vegetation, and rise to an elevation of between 12,000 and 14,000 ft. Las Rosas, the most N. of these paramos, terminates near 9° N. lat., and may be considered as the most N. extremity of the Andes; for the hilly country lying farther N. about the towns of Tucuyo and Barquisimento is not known to contain summits exceeding 4,000 or 5,000 ft. in elevation, and on that account alone cannot be considered as a continuation of the gigantic mountain system of the Andes.

The eastern declivity of this range is so precipitous that it affords no space for agriculture, and can only be ascended with great difficulty; but on its W. declivity recline several extensive table-lands, exhibiting a more or less level surface, and rising to an elevation of from 6,000 to 9,000 ft. above the sea. Such are the rich and fertile plains of Bogota, with those of Tunja, Socorro, Sogamozzo, and Pamplona. These table-lands terminate rather abruptly, and at a little distance from the banks of the Rio Magdalena. The river Funzha, or Rio de Bogota, when issuing from the plain, precipitates itself at Tequendama, at two bounds, down a perpendicular height of 650 feet. In no other cataract is there so great a mass of water precipitated from so great a height; and the solitude of the place, the luxuriance of the vegetation, and the dreadful roar, present a scene of unrivalled sublimity.

The E. Andes are twice traversed by the road leading from Bogota to Carracas. From the capital of New Granada it runs over the table-land of Bogota and Tunja to the sources of the Teguia, a tributary of the Sogamozzo, where it passes over the Paramo de Almocadero, on the summit of which it attains an elevation of 12,850 ft. above the sea. It then descends towards the E. plain; before attaining which, it again ascends the range to the town of Pampluna, which probably is not less than 9,000 ft. high. To the N. of this it traverses the upper part of the range, and passes to Rosario de Cucuta. From the last-named place the road is made over the high grounds which skirt the N.W. declivity of the chain, passing through Merida, Mendoza, and Truxillo, to Tocuyo.

From Tocuyo it traverses the hilly region by which the Sierra de la Costa is united to the Andes, passing through Barquisimento, S. Carlos, Valentia, and Victoria, to Caraccas.

The *Central Andes* of New Granada run N., with a slight declination to the E., and form between their commencement and 5° 15′ one great mass of rocks, about 40 or 50 miles in breadth, whose sides are only furrowed by ravines, but not intersected by valleys. Its mean height seems to be rather greater than that of the E. Andes, and it contains several summits which exceed the snow line. The most remarkable of them are from S. to N.; the Nevados de Huila, de Baraguan, de Tolima (which attains 18,336 ft.), and de Herveo. In the vicinity of the latter (5° 15′) the range expands to about double its width, separating at the same time into several ridges, so as to form a mountain knot, with intervening valleys. This mountain region, known under the name of Sierra de Antioquia, forms in its upper valleys a high country, from 6,000 to 7,000 ft. above the sea, on which the ridges rise 2,000 ft. and more. It approaches very close to the Rio Cauca, so as to skirt its bed for about 150 miles. Opposite to the high banks formed by these ridges other mountains, belonging to the W. Andes, approach as near to the river, which runs for nearly 150 miles in an immense cleft, over a rocky and rugged bottom, and forms a series of cataracts and rapids between Salto de S. Antonio and Bocca del Espirito Santo. In all this space the river is quite unfit for navigation, and travelling by land is in this country very fatiguing, and not without danger. The ridges which issue from the mountain knot of the Sierra de Antioquia approach the Rio Magdalena to a distance of a few miles, and terminate not far from the place where that river joins the Rio Cauca, about 9° 30′.

That portion of the Central Andes which forms one undivided mass is crossed by two roads; one leading from Bogota to Popayan, and the other to Cartago. The first runs after descending from the elevated plain of Bogota to the banks of the Rio Magdalena, in the valley of this river to the S. as far as the town of La Plata, whence it turns W., and crosses the range over the Paramo de las Guanacas, on which it rises to 14,705 ft. above the sea. It then descends into the valley of the Cauca to the town of Popayan. The road between Bogota and Cartago descends from the plain of Bogota (8,736 ft.), crosses the Rio Magdalena at the pass de Guayacana (1,200 ft.), passes through the town of Ibague (4,480 ft.), and crosses the range by the famous mountain pass of Quindiu, between the Nevados of Baraguan and Tolima; at its highest point, the Garito del Paramo, it attains an elevation of 11,504 ft. above the level of the sea. It descends afterwards to the town of Cartago in the valley of the Cauca (3,152 feet).

The *W. Andes* of New Granada are the same range, which farther S. is called Sierra de la Costa or de Sindagua. It lowers considerably in advancing to the N., so that between 2° 30′ and 5° N. lat. its mean elevation does not exceed 5,000 or 6,000 ft. above the sea, or from 2,000 to 3,000 ft. above the valley of the Cauca; nor is its breadth considerable, probably not more than from 15 to 20 miles, but it rises with a very precipitous declivity. N. of 5° the range is higher, and its breadth more considerable. Its highest summit is the Torra del Choco, S. E. of Novita, which, however, is far from attaining the snow line, and probably does not rise to much more than 10,000 feet. N. of this summit the range approaches close to the Rio Cauca, forming its high banks between the Salto de S. Antonio and the Bocca del Espirito Santo, and constituting with the opposite ranges of the Central Andes, as it were, one mountain knot. The Western Andes send from this point a range towards the Caribbean Sea, which skirts the Rio Cauca on the W., extending to the N. of 8° N. lat., and contains the Alto de Viento, a summit which attains more than 9,000 ft. of elevation.

From the W Andes a ridge branches off near 6° N lat. It runs to the W., and separates the sources of the Rio de S. Juan, which falls into the Pacific, from those of the Atrato, which runs to the Carribbean Sea. This range soon turns to the N. N. W., and advances in that direction between the Rio Atrato and the Pacific. Its elevation seems not to be considerable at the beginning, and it grows lower as it advances farther N. It seems to disappear entirely between 7° and 8°, opposite to the harbour of Cupica on the Pacific; for no mountain range is found on the isthmus of Panama, where it is narrowest.

Six roads are said to cross the W. Andes; but they can only be used with great difficulty, on account of the extreme steepness of the ridge. They are commonly impracticable for mules, and travellers as well as goods are brought over on the backs of Indians. The roads most used are that of Las Juntas, which leads from Cali in the valley of the Cauca to Buenaventura, a harbour on the Pacific; the road of S. Augustin, connecting Cartago with Novita; and that of Verras, by which the town of Citara in the valley of the Atrato communicates with Antioquia on the banks of the Cauca.

The Geology of the Andes is very imperfectly known. Only a small portion of their immense extent has been visited by scientific travellers; and the information obtained from them teaches only a few isolated facts, which do not justify general conclusions. We are, however, informed, that the most frequent of the primitive rocks of the Alps—granite and gneiss—are by no means frequent in the Andes, which are composed mostly of porphyry and mica-slate. Porphyry is by far the most widely extended of the unstratified rocks of the Andes, and occurs through the whole range at all elevations, and frequently the highest summits are composed of it. Next to porphyry and mica-slate, trachyte and basalt are most frequently met with.

Volcanoes are frequent in certain portions of the range. Capt. B. Hall observed a phenomenon, which induced him to think that a volcano exists on one of the larger islands N. of Cape Horn, and that the observed phenomenon was produced by an eruption; but Capt. King, who surveyed these islands about 10 years ago, seems not to have found a volcano in Tierra del Fuego, nor in any other portion of the range south of 46° S. lat. But farther N. they occur in great numbers. Four volcanoes are visible from the island of Chiloe; they lie on the opposite coast, between 46° and 42° S. lat. Still more numerous are the volcanoes in the Chilean Andes, not less than 19 being known to be there in a state of activity. The most N. is that of Coquimbo, somewhat to the S. of 30° S. lat. But between this volcano and that of Atacama (between 21° and 22° S. lat.) no volcano is stated to exist, that of Copiapò, which appears on our maps, being unknown in the country. Farther N. the volcanic mountains occur only in the W. range of the Bolivian Andes; none of the high summits of the E. range having ever been known to have made an eruption, or emitted smoke. It is not known whether volcanoes exist in the Andes between 14° and 5° S. lat.; but it is certain that in this part of the range they are not numerous, as no mention of them has been made by travellers. That portion of the Andes in which volcanic agency is most active lies between 3½° S. lat. and 2° N. lat. The number of summits whose eruptions are recorded is here very considerable; and Humboldt is inclined to think that the valleys N. of the Pass of Assuay are to be considered as being placed on an extensive volcanic basis, and that most of the numerous summits surrounding them have once served, and may again serve, as channels for the subterranean fire communicating with the atmosphere. The farthest N. of these volcanoes is that of Puracé, in the neighbourhood of Popayan, where the Andes begin to divide into three ranges; which seem to be, in their present state, quite exempt from volcanic agency, none of their summits having ever made an eruption.

No portion of the globe is subject to such frequent and frightful earthquakes as the countries embosomed within the range of the Andes, and those lying between them and the Pacific Ocean. The towns of Bogota, Quito, Riobamba, Callao, Copiapo, Valparaiso, Concepcion, and others, have at different times been more or less destroyed by their agency; and some more than once.

Line of perpetual Congelation. — The observations made by Humboldt in the Andes induced him to fix the snow line near the equator, at an elevation of 15,750 ft.; and he thought that, near

the tropic, it would be found at about 14,000 ft., or somewhat higher: But Mr. Pentland found it near 17° S. lat., at nearly 17,000 ft.; and later observations fix it near 12° S. lat., at about 16,400 ft. above the level of the sea. It is farther remarkable, that though a great number of summits rise above the snow line, glaciers are of rare occurrence in the Andes. This is partly to be attributed to the relative position of their summits which generally form a continuous line, without having other summits on their sides; and partly to the considerable distance which every where is found to intervene between two summits. It is only in the narrow ravines by which some of the sides of the giant summits are furrowed, that glaciers of small extent are met with.

Vegetation of the Andes. — The different plants and trees peculiar to the different regions of the globe appear in regular succession, as we ascend from the level of the ocean to the heights of the Andes. In the lower grounds, between the tropics, from the level of the sea to the height of from 3,000 to 5,000 feet, cassava, cacao, maize, plantains, indigo, sugar, cotton, and coffee are cultivated. Indigo and cacao, the plantain or the banana tree, and the cassava root require great heat to be brought to maturity, generally a climate of which the mean temperature is 75°. But cotton and coffee will grow at a considerable elevation, and sugar is cultivated with success in the temperate parts of Quito. Maize is cultivated in the same climate as the banana; but its cultivation extends over a much wider sphere, as it arrives at maturity at an elevation of 6,000 ft. above the sea. The low country within the tropics is also the region of oranges, pine-apples, and the most delicious fruits. Between the altitudes of 6,000 ft. and 9,000 ft. lies the climate best suited for the culture of all kinds of European grain. Wheat, under the equator, will seldom form an ear below an elevation of 4,500 ft., or ripen if above that of 10,000 ft. At the same time it must be observed, that the European colonists have not sufficiently varied their agricultural experiments to ascertain exactly the minimum of height at which European cerealia would come to maturity in the equinoctial regions of America. Humboldt mentions that in the Caraccas he saw fine harvests of wheat near Victoria, in the latitude of 10° 13′ N., at the height of 1,640 and 1,900 ft., and at Cuba wheat flourishes at a still smaller elevation. Rye and barley, especially the latter, resist cold better than wheat; they are accordingly cultivated at a greater elevation. Barley yields abundant harvests at heights where the thermometer rarely keeps up during the day above 57° Fah. Within the limits in which European grain flourishes is to be found the oak, which from an elevation of 9,200 ft. never descends, near the equator, below that of 5,500 ft., though it is met with in the parallel of Mexico at the height of only 2,620 ft. Beyond the limit of 9,000 ft. large trees of every kind begin to disappear, though some dwarfish pines are to be found at the height of 13,000 ft., nearly 2,000 ft. from the line of perpetual snow. The grasses clothe the ground at an elevation of from 13,500 ft. to 15,100 ft.; and from this to the regions of ice and snow, the only plants visible are the lichen, which covers the face of the rocks, and seems even to penetrate under the snow.

In districts as elevated as the valley of Titicaca, agriculture is confined to potatoes, onions, and capsicum, and to the grain called *quinoa* (*Chenopedium quinoa*, Lin.); barley and rye are only cultivated as fodder. On the plain of Bogota a farinaceous root, called *aracacha*, is cultivated, and lately some attempts have been made to introduce its culture in England. Trees are found to ascend to 12,000 ft. or 14,000 ft. on the declivities of the mountains; but their summits, which commonly form plains of some extent, are nearly bare of vegetation, nourishing only two or three kinds of low plants.

Among the vegetable productions of the Andes, none has obtained greater celebrity than the *cinchona*, or Jesuits' bark, which is now known to grow not only on different parts of the Andes, but also on the other high mountains of S. America. The best bark, however, is collected on the Andes between 5° N. lat. and 5° S. lat., where the trees grow at an elevation of from 10,000 to 14,000 ft. above the sea.

Zoology of the Andes.—This we are very imperfectly acquainted with. The most remarkable genus is that which comprehends the guanacos, llamas, and vicunas, of which the llamas are used as animals of burden; but they are slow, making only about 12 miles a day, and carrying about 70 lbs. of burthen. The vicunas give a very valuable kind of wool. Among birds, the *condors* have always attracted the attention of travellers, on account of their enormous size. They are a species of vulture.

Mineral Wealth. — If the high table-land of Anahuac in Mexico be excepted, no mountain range can vie with the Andes in mineral riches, especially in the precious metals. Many of the rivers descending from the Andes between the tropics contain small particles of gold in their sand. The particles of gold deposited in the alluvial soil skirting the beds of some of these rivers have attracted the attention of Europeans, and at some places the soil is carefully washed. The alluvial soils richest in gold are those lying to the W. of the Central Andes of New Granada, on both sides of the Rio Cauca; as also in the provinces of Barbacoas and Choco along the Pacific. In the latter districts platina also occurs; and, till within these few years, when it has been found in the Ural mountains, these were considered as the only places in which it was to be met with. Alluvial soils rich in gold are also found along the rivers which descend from the range of the Bolivian Andes, between 14° and 17° S. lat.; and here too considerable quanties of gold are extracted. The annual produce of the *lavaderos* and gold mines of the Andes is stated by Humboldt to have amounted, in the beginning of the 19th century, to 283,429 oz.; equal, at 4*l.* per oz., to 1,133,716*l.*

Silver occurs in many places of the range between 33° and the equator; but it is commonly found at an elevation where vegetation nearly ceases, which renders the working of the mines very expensive, and frequently disappoints the otherwise well-founded expectations of the undertakers. The number of mines which have been worked and abandoned is very great; many of them, however, are still worked. The most celebrated silver mines are those of Potosi and Pasco. The former are in the Cerro de Potosi (19° 36′ S. lat.), which rises to 16,037 ft. above the sea. This mountain is perforated in all directions; and it is said, though the statement be probably exaggerated, that there are no fewer than 5,000 excavations in it. The Cerro de Pasco is a hill, rising on the high plain of Bombon (about 11° S. lat.). It has been worked for more than two centuries, and may now be considered as the richest silver mine of America; unless, which is doubtful, it be sur-

passed by the silver mines discovered in N. Chili in 1830, about 30 or 40 m. S. of the town of Copiapo, where silver ore is said to be very abundant, and so rich as to yield 40 or even 70 ounces in each *cargo*. At the beginning of the present century, the annual produce of the silver mines of the Andes was stated by Humboldt to amount to 691,492 lbs. troy; which, if we take the silver at 5 shillings the ounce, gives a sum of 2,074,476*l*. It is not easy to estimate its amount at present; but probably it is not much fallen off.

Mercury or quicksilver occurs in many places N. of 14° S. lat., and S. of the equator; but since the destruction of the mines of Guancavelica, we are not sure whether it be any where worked. These, which were extremely rich, yielding from 4,000 to 6,000 cwt. a year, were unluckily ruined in 1789, through the ignorance and mismanagement of a superintendent.

Copper seems to occur very frequently S. of 14° S. lat. Large masses of nearly pure copper are stated to exist on the surface of the S. extremity of the valley of Titicaca, but the expense of bringing them down to the coast is at present so great that they cannot be turned to advantage. In the N. provinces of Chili several mines are worked with advantage. Miers estimated the quantity of copper exported from these countries in 1824 at 40,000 cwt.; in 1829, it rose to 60,000, and has since materially increased. It is mostly exported to China, India, and the U. States.

Ores of lead, tin, and iron are said to exist in various parts; but they are not worked.

Population of the Andes. — It is a characteristic feature of S. America, that its extensive plains, which comprise more than three fourths of its surface, are very thinly inhabited; nor does it appear likely that large portions of them should ever be brought to such a state of cultivation as to maintain a dense population. At present, far the greater number of the inhabitants are met with on the table lands, and in the valleys of the Andes. It has been doubted whether the whole population of S. America exceeds 12,000,000; but this, we have little doubt, is below the mark. We are inclined to think that the inhabitants of the Andes, including the coast of the Pacific, amount to more than 6,000,000. This coast is favoured with an excellent climate, and that portion of it which lies between 40° and 30° S. lat. has in general a good soil; but between 30° and 5° S. lat. it is a complete desert — a circumstance mainly attributable to the entire want of rain, a single drop never refreshing its arid soil. In this respect it forms a singular contrast with the coast extending between the equator and the Isthmus of Panama, where hardly a day passes without rain, and where at certain seasons it pours down in such abundance as to change all the lower lands into swamps, and to render the country extremely unhealthy. The whole coast along the Pacific does not probably contain 1½ million inhabitants; so that more than 4½ millions live within the mountain system.

The state of these countries seems to have been little different at the time when America was discovered. In the Andes only was found a government regularly arranged, and a nation which had made a considerable progress in civilisation, and which chiefly subsisted by the produce of its agriculture. Here only the Spaniards were able to conquer the country; in the other parts of America they established colonies, and tried by various means to subject the savage nations in their neighbourhood: these attempts succeeded in some instances, and in others not.

The population of the Andes is composed of the descendants of the Spaniards, and of the ancient Peruvians. Negroes have also been introduced in the N. districts, and are pretty numerous in the valleys of the Rio Magdalena and Rio Cauca; they are also found on the coast in the provinces of Barbacoas and Choco, and, in small numbers, on the remainder of the coast as far S. as Arica. (13° S. lat.) The whites constitute the great bulk of the population in the valleys of the Rio Magdalena and Cauca; in the latter no aborigines are met with. But on the high valleys of Æquator, on the plain of Bombon, on the table land of Titicaca, and in the valleys which extend to the E. of the great chain of the Andes, the ancient Peruvians are by far the most numerous class of inhabitants, the whites being there probably much less than a fourth part of the population. The Peruvians belong to the copper-coloured race spread nearly over the whole American continent. They speak different languages; but the Quichua, sometimes called the language of the Incas, is understood or spoken by most of them. Travellers in general admit their frugality and industry in agriculture, working the mines, and some branches of manufacturing industry; but they are altogether deficient in that activity, spirit of enterprise, and desire to excel by which Europeans are distinguished.

Travelling in the Andes. — The improvement of the countries embosomed within the Andes is much retarded by the want of easy communication. Sometimes the intercourse between places in the immediate vicinity of each other is interrupted by *quebradas*, or rents, generally narrow, sometimes of a vast depth, and with nearly perpendicular sides. The famous natural bridge of Icononzo, in Columbia, leads over a small quebrada; it is elevated about 312 feet above the torrent that flows in the bottom of the chasm. Most of the torrents that are passed in travelling over the Cordilleras are fordable; though their impetuosity is such when swoln by the rains as to detain travellers for several days. But when they are too deep to be forded, or the banks too inaccessible, suspension bridges are thrown over them, of a singular make; but which, notwithstanding their apparently dangerous and fragile construction, are found to answer the purposes required. Where the river is narrow, with high banks, they are constructed of wood, and consist of 4 long beams laid close together over the precipice, and forming a path of about a yard and a half in breadth, being just sufficient for a man to pass over on horseback. These bridges have become so familiar to the natives that they pass them without apprehension. Where the breadth of the river will not admit of a beam being laid across, ropes constructed of *bejucos*, a species of thin elastic cane, of the length required are thrown over. Six of these ropes are stretched from one side of the river to the other; two, intended to serve as parapets, being considerably higher than the other four; and the latter being covered with sticks laid in a transverse direction, the bridge is passed by men, while the mules, being divested of their burdens, are made to swim across. All travellers have spoken of the extreme danger of passing these rope bridges, which look like ribands suspended above a crevice or impetuous torrent. But this danger, according to Humboldt, is not very great when a single person passes over the bridge as quickly as possible, with his body leaning forward. But the oscillations of the ropes become very great when the traveller is conducted by an Indian

who walks quicker than himself; or when, frightened by the view of the water seen through the interstices of the bamboos, he has the imprudence to stop in the middle of the bridge, and lay hold of the ropes that serve as a rail. Some of the rivers of the higher Andes are passed by means an invention or bridge denominated a *tarabita*. It conveys not only the passengers, but also their cattle and burdens; and is used to pass those torrents whose rapidity and the large stones continually rolling down, render it impossible for mules to swim across. It consists of a strong rope of bejuco, extended across the river, on each bank of which it is fastened to stout posts. On one side is a kind of wheel or winch to straiten or slack the rope to the degree required. From this rope hangs a kind of movable leathern hammock, capable of holding a man, to which a rope is fastened for drawing it to the side intended. For carrying over mules two ropes are necessary, and these much thicker and slacker. The creature being suspended from them, and secured by girths round the belly, neck, and legs, is shoved off, and dragged to the opposite bank. Some of these bejuco bridges are of great length, and elevated to a great height above the torrent.

A bridge of this sort was constructed by the 5th Inca over the Desaguadeso, or river that issues from lake Titicaca, where it is more than 200 feet in width; and, on account of its utility, is still kept up. Sometimes, instead of being made of bejucos or osiers, these suspension bridges are made of twisted strands or thongs of bullock's hide. Mr. Miers passed along one of this sort in Chili, 225 feet in length, by 6 feet wide! It conveyed over loaded mules, and was perfectly secure. (*Ulloa, Voyage en Amerique*, i. 358.; *Miers, Chili*, i. 335.; *Humboldt's Researches*, ii. 72.)

The ruggedness of the roads in the less frequented parts of the Andes, can hardly be described. In many places the ground is so narrow, that the mules employed in travelling have scarcely room to set their feet, and in others it is a continued series of precipices. These paths are full of holes, from two to three feet deep, in which the mules set their feet, and draw their bellies and their riders' legs along the ground. The holes serve as steps, without which the precipices would be in a great measure impracticable; but, should the creature happen to set its foot between two of these holes, or not place it right, the rider falls; and if on the side of the precipice, inevitably perishes. This danger is even greater where the holes are wanting. The tracks are extremely steep and slippery, and in general chalky and wet; and where their are no holes to serve as steps, Indians are obliged to go before with small spades to dig little trenches across the path. In descending those places where there are no holes or trenches, and which are sometimes many hundred yards deep, the instinct of the mules accustomed to pass them is admirable. They are sensible of the caution requisite in the descent. On coming to the top of an eminence, they stop; and having placed their fore feet close together, as if in a posture of stopping themselves, they also put their hind feet together, but a little forwards, as if going to lie down. In this attitude, having, as it were, taken a survey of the road, they slide down with the swiftness of a meteor. The rider has only to keep himself fast in the saddle, without checking his beast; for the least motion is sufficient to disorder the equilibrium of the mule, in which case they must both unavoidably perish. The address of these creatures is here truly wonderful; for in this so rapid motion, when they seem to have lost all command of themselves, they follow exactly the different windings of the path, as if they had previously reconnoitred and settled in their minds the route they were to follow, and taken every precaution for their safety. There would otherwise, indeed, be no possibility of travelling over places where the safety of the rider depends on the experience and address of his beast.

The valleys of the Cordilleras, which are deeper and narrower than those of the Alps and Pyrenees, and present scenes of the wildest aspect, give rise also to several other peculiarities in the mode of travelling. In many parts, owing to the humidity of the climate, and the declivity of the ground, the streamlets which flow down the mountains have hollowed out gullies from about 20 to 25 feet in depth. The pathway which runs along those crevices is frequently not above a foot or a foot and a half in breadth, and has the appearance of a gallery dug and left open to the sky. In some places the opening above is covered by the thick vegetation which grows out from both sides of the crevice, so that the traveller is forced to grope his way in darkness. The oxen, which are the beasts of burden commonly made use of in this country, can scarcely force their way through these galleries, some of which are more than a mile in length; and if the traveller should happen to meet them in one of the passages, he has no means of avoiding them but by climbing the earthen wall which borders the crevice, and keeping himself suspended by laying hold of the roots which penetrate to this depth from the surface of the ground. "In many of the passes of the Andes," says Humboldt, "such is the state of the roads that the usual mode of travelling for persons in easy circumstances is in a chair strapped to the back of one of the native porters (cargueros), or men of burden, who live by letting out their backs and loins to travellers. They talk in this country of going on a man's back (andar en cargueros), as we mention going on horseback. No humiliating idea is annexed to the trade of cargueros; and the men who follow this occupation are not Indians, but mulattoes, and sometimes even whites. It is often curious to hear these men, with scarcely any covering, and following an employment which we should consider so disgraceful, quarrelling in the midst of a forest, because one has refused the other, who pretends to have a whiter skin, the pompous title of Don or Su Merced. The usual load of a carguero is six or seven arrobas; those who are very strong carry as much as nine arrobas. When we reflect on the enormous fatigue to which these miserable men are exposed, journeying eight or nine hours a day over a mountainous country; when we know that their backs are sometimes as raw as those of beasts of burden; that travellers have often the cruelty to leave them in a forest when they fall sick; that they earn, by a journey from Ibague to Cartago, only 12 or 14 piasters in from 15 to 25 days; we are at a loss to conceive how this employment of a carguero should be eagerly embraced by all the robust young men who live at the foot of the mountains. The taste for a wandering life, the idea of a certain independence amid forests, leads them to prefer it to the sedentary and monotonous labour of cities. The passage of the mountain of Quindiu is not the only part of South America which is traversed on the backs of men. The whole of the

province of Antioquia is surrounded by mountains so difficult to pass, that they who dislike entrusting themselves to the skill of a bearer, and are not strong enough to travel on foot from Santa Fe de Antioquia to Bocca de Nares or Rio Samana, must relinquish all thoughts of leaving the country. The number of young men who undertake the employments of beasts of burden at Choco, Ibague, and Medellin, is so considerable, that we sometimes meet a file of fifty or sixty. A few years ago, when a project was formed to make the passage from Nares to Antioquia passable for mules, the cargueros presented formal remonstrances against mending the road, and the government was weak enough to yield to their clamours. The person carried in a chair by a carguero, must remain several hours motionless, and leaning backwards. The least motion is sufficient to throw down the carrier; and his fall would be so much the more dangerous, as the carguero, too confident in his own skill, chooses the most rapid declivities, or crosses a torrent on a narrow and slippery trunk of a tree. These accidents are, however, rare; and those which happen must be attributed to the imprudence of travellers, who, frightened at a false step of the carguero, leap down from their chairs." (*Researches*, i. 69.)

In order to protect travellers, when they are sojourning in this desert country, from the inclemency of the weather, the cargueros provide themselves with several hundred leaves of a plant of the banana species, which they pluck in the mountains before they begin their journey. These leaves, which are membranous and silky, are of an oval form, 2 feet long, and 16 in. in breadth. When the travellers reach a spot in the midst of the forests where the ground is dry, and where they propose to pass the night, the cargueros lop a few branches from the trees, with which they make a tent. In a few minutes this slight timber-work is divided into squares by the stalks of some climbing plant, or by the threads of the agave. The banana leaves having in the mean time been unrolled, are now spread over the above work, so as to cover it like the tiles of a house. These huts, thus hastily built, are cool and commodious; and Humboldt mentions that he passed several days in the valley of Boquia under one of those leafy tents, which was perfectly dry, though exposed to violent and incessant rains.

No doubt the access to the Andes will, in the course of time, be facilitated by the establishment of steam packets on the Amazon and its tributaries. That this has not been attempted ere now is, we apprehend, a consequence rather of the revolutionary anarchical state in which the country has been plunged since the overthrow of the Spanish government, than of any natural difficulties in the way of such navigation. Anarchy, however, must in the end exhaust itself; and either a free government or a despotism be established in its stead. And it is hardly possible to suppose that any regular government, whatever may be its character, should be established for any considerable period without turning its attention to the means of developing the extraordinary resources of these fine countries: and of these none can be either so effectual, or so obviously indispensable, as the opening of improved communications with the coast, and with the great navigable rivers of the interior.

ANDLAU, a town of France, dep. Bas Rhin, arrond. Schelestat, on the Andlau, 10 m. N. N. W. Schelestat. Pop. 2,257.

ANDORRE (REPUBLIC OF), a small independent state on the S. declivity of the Pyrenees, between the dep. of Ariége in France, and the district of Urgel in Spain. It stretches from N. to S. about 36 m., and from E. to W. about 30, comprising three mountain valleys, and the basin formed by their union. These valleys are among the wildest and most picturesque in the Pyrenees, and the mountains, with their immense peaks, by which they are enclosed, among the highest and least accessible. It is watered by several small rivers; the largest of which, the Embalin, having received the others, falls into the Segre, an affluent of the Ebro. Pop. from 7,000 to 8,000, divided among six communes. Andorre, the principal town, has about 2,000 inhab. It has but little arable land, but a considerable extent of excellent pasture grounds, sheltered by vast forests of fir. The inhab. depend principally on their flocks and iron mines, the produce of the latter finding a ready market in Spain. This little state, though connected in some degree with both its powerful neighbours, has preserved its independence for about 1000 years. The government is composed of a council of 24 members, chosen for life, each commune electing four. The council elect two Syndics (*Hugo*), who enjoy considerable authority, convoking the assemblies, and carrying on the government when they are not sitting. It is to Charlemagne that Andorre owes its independence. In 1790, that prince having marched against the Moors of Spain, and defeated them in the neighbouring valley of Carol, the Andorrians are said to have rendered themselves so useful to the French army, supplying them with provisions, and taking care of their wounded, that the Emperor, by way of recompence, made them independent of the neighbouring princes, and permitted them to be governed by their own laws. After him Louis le Debonnaire ceded to the Bishop of Urgel a part of the rights over Andorre which Charlemagne had reserved to himself and his successors. In virtue of this grant, the Bishop acquired right to a part of the tithes of the six communes, and a spiritual jurisdiction over the country, which he still exercises.

In 1793, the rights exercised by the sovereigns of France in Andorre being considered as feudal, were abandoned, and the republic was for a time completely separated from that country; but notwithstanding this temporary independence, the Andorrians continued to preserve their attachment to France. They resisted the violation of their territory by the Spaniards, and furnished to the French armies, during the late war, guides and assistance of every kind. At the same time they anxiously solicited the establishment of the ancient order of things; and Napoleon yielded to their wish. By a decree of the 20th of March, 1806, Andorre was declared to be a republic connected with France; its viguier, or criminal judge, was to be a Frenchman, of the dep. of Ariége; and it was allowed to import certain quantities of certain specified articles, free of duty, on payment of the trifling sum of 960 fr. a year. Except, therefore, as regards the spiritual jurisdiction of the Bishop of Urgel, which cannot be said to interfere with its independence any more than the Pope's ecclesiastical authority over Catholic countries can with theirs, Andorre is altogether independent of Spain; and, as regards France, the annual payment it makes to her is not a tribute, but an inadequate compensation for a valuable privilege; and there being little crime in Andorre, the appointment of a Frenchman for criminal judge was more with a view to deter French criminals from taking refuge in this neutral territory, than to assert any superiority. Andorre may, therefore, be justly considered as the oldest free republic in existence. The people all belong to the church of Rome, and are very religious. Their clergy, and the more wealthy of the inhabitants, are educated at Toulouse or Barcelona. Each curé, in addition to his pastoral duties, has charge of a school, where the poor are instructed gratuitously; but this does not give him much extra trouble, few of the peasants thinking it necessary to send their children to school to acquire what, in their land of shepherds and labourers, they imagine can be of little consequence in their future lives. Hence the great majority of the people can neither read nor write.

The Andorrians are simple and severe in their manners, the vices and corruptions of cities not having hitherto found their way into their valleys. They live as their forefathers lived a thousand years before them: the little they know concerning the luxuries, arts, and civilisation of other countries inspiring them rather with fear than envy. Their wealth consists in their sheep or cattle, or in the share they may have in iron forges, only a very few of their number being the proprietors of any land beyond the garden which surrounds their cottage. Each family acknowledges a chief, who succeeds by right of primogeniture. These chiefs, or eldest sons, choose their wives from families of equal consideration with their own, reprobating *mesalliances*, and looking little to fortune, which besides is always very small upon both sides. They never leave the paternal roof until they marry; and

if they marry an heiress they join her name to their own; unless married, they are not admitted to any share in the management of public affairs.

When there are only daughters in a family, the eldest, who is heiress of the entire property, and succeeds as an eldest son would do, is always married to a cadet of another family, who adopts her name, and is domiciliated in her family. By this arrangement, the principal Andorrian houses have continued for centuries without any change in their fortunes, *ni plus riche, ni plus pauvre*. The poorest inhabitants are not so badly off as in most other countries; their wants are few and easily supplied, the opulent families taking care of those who are not; and the latter honouring and respecting their benefactors.

The Andorrians are in general strong and well proportioned; the greater part of the diseases proceeding from the moral affections are unknown, as well as those originating in vice and corruption. The costume of the men, composed of coarse brown cloth made from the wool of their own sheep, resembles that worn by the peasants of Bigorre, with this difference, that the Andorrians wear the flowing red cap of the Catalans. There would seem to be but little gallantry among these mountaineers, for the women are not admitted to any of the assemblies where public affairs are considered; nor even to the masses performed upon the reception of the bishop or judge. Crime of every kind is rare, and punishments, though mild, are effectual. There are no law-suits relative to paternal successions; and should disputes of any kind arise, they are at once referred to the Syndics, whose decision is never controverted. The men are all liable to serve in the militia, should they be required; and every head of a family is obliged to have in his possession at all times a musket, and a certain quantity of powder and ball.

Commerce of every kind is free; but, with the exception of iron, of which it has some mines and forges, its manufactures are all of the coarsest and rudest kind.—(For further particulars, see the art. on *Andorre*, in *Hugo, France Pittoresque*, art. *Ariége; Mr. Murray's Summer in the Pyrenees*, &c.)

ANDOVER, a borough and m. town of England, co. Hants, near the Anton, on the great road from London to Salisbury, being 63 m. W. S. W. of the former, and 17 N. E. of the latter. The Parl. borough and subordinate district, which last includes 10,780 acres, has 4,953 inhab., of which the borough may have about 4,000. It is compactly built, extending on either side about one-third of a mile from the market place, in the centre of which is a modern town hall, supported on arches, under which are held the markets. The church, an old Gothic building, is on the N. side of the town. There is an hospital for 6 poor men, a free school founded in 1569, and a charity school for 30 boys. Some trade is carried on in malting, and the manufacture of silk; but its principal support is derived from its being a considerable thoroughfare, and the only market for the surrounding country. It is in a thriving condition; and contains several good shops and respectable private houses. The great annual fair of Wey hill (which see) is held within a short distance. There is a canal from the town to Southampton. It returns 2 members to the H. of C. From 1689, down to the passing of the Reform Act, the right of voting was in the bailiff and corporation. No. of 10*l*. houses, 325; Parl. constituency, 1836-37, 229. (*Parl. and Municipal Boundary Reports*.)

ANDOVER, a town of the U. States, Massachusets, co. Essex, 20 m. N. Boston. Pop. 4,530. It is finely situated, and has some manufactures; but it is chiefly distinguished for its literary institutions, particularly its theological academy, founded in 1807, and liberally endowed. The course of education is completed in 3 years; it had in 1835-36, 152 students, and a library of above 13,000 vols. There is also a very flourishing academy, founded in 1778.

ANDRACIO, or ANDRACY, a town of Spain, on the S. W. coast of the island of Majorca. Pop. 3,500. It is situated at a little distance from the sea, but it has a small port accessible to vessels drawing little water. Its territory is productive of olives.

ANDRE (ST.), the name of various small towns and villages in different parts of France.

ANDRE, or ENDRE, (ST.), a town of Hungary, on the right bank of the Danube, opposite to the island of the same name, 111 m. N. Buda. Pop. 8,000. It has 1 Catholic and 7 Greek churches. The hills in the vicinity produce excellent wines, and the island in the river is celebrated for its fertility.

ANDRE' D'APCHON (ST.), a village of France, dep. Loire, 8 m. W. Roanne. Pop. 1,740.

ANDRE'-DE-CUBSAC (ST.), a town of France, dep. Gironde, cap. cant. 12 m. N. N. E. Bordeaux. Pop. 3,329. It is situated at a little distance from the Dordogne; but it has a port, Cubsac, on that river. The high road from Bordeaux to Paris crosses the Dordogne at this point, passengers and carriages being conveyed across in a large ferry boat of a new construction.

ANDRE' DE SANGONIS (ST.), a town of France, dep. Herault, 19 m. W. by N. Montpellier. Pop. 2,150.

ANDRE' DE VALBORGNE (ST.), a town of France, dep. Gard, cap. cant. 42 m. N. W. Nismes. Pop. 1,720.

ANDREA (ST.), a village of Naples, prov. Principato Ultra, 3 m. S. E. Conza. Pop. 2,200.

ANDREASBERG, a town of Hanover, principality of Grubenhagen, in a district which has mines of iron, cobalt, copper, and silver. Pop. 3,400. It has a college, a council of mines, and manufactures of lace and thread.

ANDREW'S (ST.), an ancient and celebrated city and seaport of Scotland, co. Fife, finely situated on a low eminence on the German Ocean, 31 m. N.E. Edinburgh, lat. 56° 20′ N., long. 2° 50′ W. Pop. 3,767. It chiefly consists of three principal streets, leading in a W. direction from the cathedral, is in general well built, and has been much improved during the present century. St. Andrew's was long the metropolitan see of Scotland; and is highly interesting from its numerous remains of other ages, and the historical associations connected with it, many highly important events having occurred within its precincts. Its splendid cathedral, founded in 1160, and completed in 1318, was reduced to a ruin in 1559 by the barbarous zeal of the reformers. The castle, long the residence of its archbishops, and a place of considerable strength, stood on a precipice overhanging the sea. The famous Cardinal Beaton was assassinated in it in 1546, in revenge of the share he had in bringing Wishart, a preacher of the reformed doctrines, to the stake in the previous year. Its picturesque ruins now serve as a landmark for ships. There are also, among others, the ruins of a chapel, and a square tower 108 feet high, called the chapel and tower of St. Rule or St. Regulus, supposed to be the most ancient of the existing fabrics. The priory of St. Andrew's was one of the best endowed in Scotland; and part of a gigantic wall, intended to enclose the grounds of the priory, 870 feet long, 22 high, and 4 thick, with 14 turrets, erected by Prior Hepburn in 1516, is still in good preservation, and is not one of the least interesting relics of bygone times. The parish church, founded in the 12th century, but rebuilt in 1797, has a monument to Archbishop Sharpe, assassinated in 1679. The university of St. Andrew's, the most ancient in Scotland, and now the principal support of the city, was founded in 1410, by Bishop Wardlaw, and confirmed by a papal bull dated the following year. It originally consisted of three colleges, St. Salvador's, St. Leonard's, and St. Mary's; of which the two former were united in 1747, when the buildings of St. Leonard's were pulled down. The two colleges are in different parts of the town, and their professors and discipline are quite distinct. The United College consists of a quadrangular edifice, in which some excellent rooms were recently erected at the expense of government. This institution is appropriated to the study of languages, philosophy, and science, and St. Mary's to that of theology. The chapel of the United College, founded by Bishop Kennedy in 1458, is a fine specimen of the light Gothic; but though used as the college chapel, and as a parish church, it is in a very bad state of repair. It has a tomb of the founder; on opening which, in 1683, six silver maces were found, of which three were sent to the other Scotch universities, and three retained in the college. St. Mary's college is a handsome stone structure. A library contiguous to the latter, and containing 45,000 volumes, is common to both colleges; and until the privilege was commuted, in 1836, for 456*l*. a year, it was entitled to a copy of every work entered at Stationers' Hall. The United College and St. Mary's have together eleven professors; each college has a principal, and the university is presided over by a lord-rector and a chancellor. The endowments are considerable, each professor receiving at an average about 230*l*. a year, exclusive of fees from pupils. The average number of the latter during the ten years ending with 1838-39 has been 172, of whom 42 have belonged to the theological college of St. Mary, and the remaining 130 to the United College. The fee for attending one of the literary classes is 3*l*. 3*s*.; students in the theological classes pay no fees —with the exception of a fee of 5*s*. on matriculating, which is common to both establishments. The United College has 21 bursaries, of the gross annual value of about 800*l*., and St. Mary's, 7 bursaries, of the gross annual value of 200*l*. Recently a very large addition has been made to the facilities for education already enjoyed by St. Andrew's, through the liberality of Dr. Bell, of Madras, who bequeathed the sum of 45,000*l*. three per cent. stock for the erection of a seminary on a comprehensive plan in this his native city. A fine building for this school has been erected at a little distance from St. Mary's college. The number of teachers in the *Madras College* (the name given to Dr. Bell's establishment) is *nine*, exclusive of assistants. This seminary affords instruction gratis to the poor; and the fees are very low even to the rich, being only 7*s*. 6*d*. per quarter for Latin and Greek; the same for German and French; the same

for mathematics, and the same for drawing: 5s. per quarter for geography: 3s. for writing: 2s. 6d. for arithmetic: and 2s. for English. Students may attend one or more classes, and pay accordingly. The average number of pupils at this seminary has been about 800, but it is rapidly increasing. Of this number above a half are strangers, attracted to the city by the deservedly high character of this excellent institution, the best probably of its kind in the empire. The harbour, partly formed by two piers, is on the E. side of the town, extending about 400 yards inland; but it dries at low water, and the access to it being difficult, it is little frequented by shipping. The society of St. Andrew's is comparatively good; the advantages afforded for education, and the cheapness of living, having attracted to it a considerable number of genteel families, whose circumstances may not be sufficiently prosperous to permit of their residing at Edinburgh or other expensive towns. It has no manufactures worth notice, unless it be that of *golf-balls*, or balls for playing the game of golf, which employs about 6 or 7 men, who produce annually about 1100 dozen balls, of which about 800 dozen are sent to other places, the rest being consumed in St. Andrew's, which has been long famous for this game. A good workman makes 8 or 9 balls a day. St. Andrew's unites with the two Anstruthers, Crail, Cupar, Kilrenny, and Pittenweem in returning a member to the H. of C. No. of 10*l.* houses, 313: constituency in 1838, 250.

ANDRIA, a town of Naples, prov. Terra di Bari, cap. cant., 9 m. S. Barletta. Pop. 13,500. It stands in a plain on the edge of the enclosed country, and its environs are far from unpleasant. It is the seat of a bishopric, has a superb cathedral, a royal college, and 3 *monts-de-piété* It was founded in 1046 by Peter count of Trani, and acquired its name from the *antra*, or caverns occupied by its first settlers.—(*Swinburne's Two Sicilies*, i. p. 399.; *Dict. Geog.*)

ANDRO, or ANDROS, an island of the Grecian Archipelago, lying to the S. of Negropont, and immediately to the N. of Tino, from which it is separated by a very narrow channel. It extends about 27 m. in a N. W. and S. E. direction; but its breadth does not exceed 7 or 8 m. Though mountainous, it has several extensive, fertile, and well watered valleys, and a number of villages. The pop. has been estimated at from 13,000 to 16,000. Wine is the principal article, the annual product amounting to 800,000 gals.; exclusive of which there is a considerable export of silk, oil, oranges, citrons, &c. The corn raised in the island generally suffices for the consumption of the inhabitants. Andro, or Castro, the capital, a considerable town, with about 5,000 inhab., is situated on the E. coast of the island; its port, which is defended by a castle, is too shallow to admit any but the smallest description of vessels. Port Gaurio, or Gabrio, on the W. side, is a much better harbour. The Andrians took the part of the Persians on the latter invading Greece, for which they were afterwards chastised by Themistocles. (*Tournefort, Voyage du Levant*, i. p. 347.; *Consular Return*.)

ANDROS ISLANDS, or ISLES DEL ESPIRITU SANTO, a group of islands among the Bahamas, which extend about 120 m. from N. to S., lat. 24° to 25° 20′ N., long. 77° to 78° W.

ANDUJAR, a town of Spain, Andalusia, on the Guadalquiver, in a plain at the foot of the Sierra Morena, 20 m. N. W. Jaen, lat. 38° 1′ 32″ N., long. 3° 59′ 33″ W. Pop. nearly 14,000. Mr. Townsend says, that, in 1786, it contained 6,800 families; which, if accurate, would show a great decline in the interval. (*Travels in Spain*, ii. p. 257.) It is supposed to be built of the ruins of the ancient *Forum Julianum*; it is defended by an old castle, and has numerous churches and convents, a theatre, and an old bridge of 15 arches over the river. Its environs are fruitful, and the inhabitants are mostly employed in agriculture; but there are tanneries, and manufactories of wine and water coolers, made of a peculiar species of white clay found in the neighbourhood.

ANDUZE, a town of France, dep. Gard, cap. cant., on the Gardon, 26 m. N. W. Nismes. Pop. 5,403, mostly Protestants. It is ill built, but agreeably situated at the foot of the Cevennes, between rocks and hills planted with vines and olives. It has a tribunal of commerce, with manufactures of hats, silk, hosiery, cloth, earthenware, and glue, a silk filature, and tannery.

ANET, a handsome town, dep. Eure et Loire, cap. cant., 9 m. N. N. E. Dreux. Pop. 1,423. It is principally celebrated for the ruins of its fine castle, built by Henry II. for Diana of Poitiers, and destroyed during the revolutionary phrenzy in 1792. There are in its environs forges and paper-mills.

ANET, a village of Switzerland, cant. Berne, on a hill, 17 m. W. by N. Berne. Pop. 2,400. Roman antiquities are found in the neighbourhood.

ANGELO (ST.), the name of several towns in Italy, of which the principal are St. Angelo in the Lombardo Venetian kingdom, prov. Lodi, 7 m. S. W. Lodi. Pop. 6,000. ST. ANGELO in the same kingdom, prov. Padua, 11 m. N. E. Padua. And ST. ANGELO, in Naples, *principato citra*, 16 m. S. S. E. Campagna. Pop. 2,500

ANGELO DE LOMBARDI (ST.), a town of Naples, *Principato Ultra*, 48 m. E. Naples. Pop. 6,000. It is the seat of a bishopric, has a college, and two parish churches. In 1664 it was almost entirely destroyed by an earthquake

ANGERBURG, a town of Prussia, prov. E. Prussia, cap. circ., on the Angerap, 60 m. S. E. Konigsberg. Pop. 3,000. It has a castle and manufactures of woollen stuffs and leather. The Angerap falls, a little to the S. of the town, into the large, irregularly shaped, shallow lake of Mauer, celebrated for the abundance and excellence of its eels.

ANGERMUNDE, a town of the Prussian States, prov. Brandenburg, reg. Potsdam, cap. circ., on the lake Munde, 43 m. N. N. E. Berlin. Pop. 3,800. It has manufactures of hats, woollen stuffs, tobacco, &c.

ANGERS, (the *Juliomagus* of Cæsar, afterwards *Andegavia*, and hence *Angers*,) a very ancient city of France, dep. Maine et Loire, of which it is the capital, on the Mayenne, which divides it into two portions, near its confluence with the Loire and the Sarthe, lat. 47° 28′ 9″ N., long. 0° 33′ W. Pop. 29,066. The town is surrounded by massive walls, built in 1214 by John king of England. Speaking generally, it is ill built, and is mean looking; houses partly of wood and partly of slate, streets narrow and crooked; but since 1814 it has been in several respects improved, and some good streets have been opened. Principal objects of attraction, cathedral and castle. The first begun in 1225, and of large dimensions, has its front ornamented by two symmetrical spires, each 225 feet high. It contains the monument of Margaret of Anjou, daughter of René king of Sicily, and wife of Henry VI. of England. The old castle, the former residence of the dukes of Anjou, stands on a rock having the river at its foot: its plan is that of a vast parallelogram, surrounded by high massive walls, defended by deep fosses cut out of the rock, and by 18 towers; but these, with one exception, have now been reduced to the height of the walls. The castle serves at present as a prison for the city, and a powder magazine: on the side next the river it is becoming ruinous. Angers is the seat of a royal court for the depts. of Maine et Loire, Sarthe, and Mayenne; has a tribunal of original jurisdiction, an academy, a royal college, a school for deaf and dumb, a secondary school of medicine, &c. It has also a school of arts and trades, being, with the exception of that at Chalons-sur-Marne, the only school of the kind in France. Of the pupils, 450, nominated by the minister of commerce and public works, receive their instruction wholly or partly at the expense of the state. The other pupils pay 500 fr. a year. Each department is entitled to send 3 pupils to this school—the instruction of one to be entirely gratuitous, the others paying one a fourth part and one a half of the ordinary pupils. It has also a school of design; an agricultural society; a public library, containing 25,000 volumes; a museum with about 600 pictures, many of them good; a botanical garden; a cabinet of natural history; a theatre, &c. There is a royal manufacture of sail-cloth, a cotton mill, with manufactures of linen, serges, handkerchiefs, hosiery, starch, &c., a sugar refinery, a wax refinery, and tanneries. The town has two mean bridges, and it labours under a deficiency of water, that of the Mayenne not bei g fit for use. Mr. Inglis describes Angers as a place where provisions of all sorts, including fruit, vegetables, and wine, are extremely cheap, and states that for 10*l.* a year a very commodious house may be had. But there are no villas in the vicinity, and the town is itself far from agreeable. Previously to the revolution Angers was the seat of a university, founded in 1246: it had also a celebrated academy of *belles lettres*; and such was the fame of its riding-school, that it was attended by Peter the Great. It suffered severely during the wars of La Vendée; but, as previously stated, since the peace of 1815 it has been comparatively prosperous, and various improvements have been effected. Angers has produced several distinguished persons, among whom may be specified Bodin, the author of the work *De la République*, published in 1576, Menage, and Bernier, the famous traveller.

The slate quarries in the vicinity of Angers, whence the town is built, and which also supply large quantities of roofing slates to other depts., are immense excavations; but for details with respect to them, see the art. MAINE ET LOIRE. (*Hugo, France Pittoresque*, art. *Maine et Loire*; *Inglis's Switzerland*, p. 346, &c.)

ANGERVILLE, a village of France, dep. Seine et Oise, 33 m. S. Versailles. Pop. 1,526.

ANGHIARI, a town of Italy, prov. Arezzo, near the Tiber, 18 m. E. Arezzo, Tuscany. Pop. 3,000. It is celebrated for the victory obtained near it in 1440 by the Florentines under Piccinini over the forces of the Duke of Milan. This also is the name of a village of the Veronese, and of a decayed city on the banks of the Lago Maggiore.

ANGLES, a town of France, dep. Tarn, cap. cant. 16 m. E. S. E. Castres. Pop. 2,870. This is the name of several small villages in other parts of France.

ANGLESEY (the *Mona* of Tacitus), an island and co. of N. Wales in the Irish Sea, separated from the mainland of Britain by the Menai Strait. It is of a triangular form, extending, Holyhead included, about 27 m. from E. to W. by about 20 from N. to S.; area, 173,440 acres; surface gently undulating; climate, temperate, but liable to fogs; there is in most parts a great deficiency of wood, and it has generally a bare uninviting aspect.

Since 1768 Anglesey has been famed for its mineral riches, the celebrated copper mines in the Parys mountain having been discovered in the course of that year; but they have now greatly declined. (See *Amlwch*.) Lead ore and asbestos have also been found; and coal is wrought to some extent at Maltraeth. Soil various but principally a fine loamy sand, which, when properly cultivated, is highly productive. Agriculture is not, however, in an advanced state. So late as 1810 it was no uncommon thing to take five white crops in succession, most of which were so poor as hardly to pay their expense; but an improved system is being gradually introduced. The stiff loams, of which the extent is considerable, are usually manured with a sort of shelly sand. Principal crops, oats, barley, wheat, and potatoes, the latter being grown more extensively than in any other part of N. Wales. Grazing is the principal object of the farmer's attention. About 5,500 head of cattle are annually sent from the island to the mainland, exclusive of considerable numbers of sheep. Average rent of land, in 1810, 7*s*. 6*d*. an acre. Manufactures unimportant, consisting merely of some of the coarser descriptions of woollens. Chief towns, Beaumaris, Holyhead, Amlwch, Llanerchymidd, and Llangefni. It is divided into 3 cantreds, 6 comots, or hundreds, and 73 parishes. The pop., which in 1776 amounted to 19,780, had increased in 1831 to 48,325. It returns a m. to the H. of C. for the co., and one for the boroughs of Beaumaris, Holyhead, &c. Co. constituency in 1836-37, 1439.

Anglesey seems to have been a principal seat of the Druids. The Romans, under Suetonius Paulinus, having taken it after a fanatical resistance, A. D. 61, cut down the groves of the Druids. *sævis superstitionibus sacri*, and seem to have exterminated both the priests and their religion. (*Tacit. Annal.*, lib. 14. § 30.) It was subjugated along with the rest of Wales, by Edward I. and was incorporated with England and made a county by Henry VIII. The two most important events in its recent history are the discovery of the Parys mines, in 1768, and the building of the Menai bridge in 1825. (See *Davies' N. Wales, passim; Beauties of England and Wales*, art. *Anglesey*, &c.)

ANGLET, a town of France, dep. Basses Pyrénées, near Bayonne, famed for its excellent white wine. Pop. 2,944.

ANGOLA, DONGO, or AMBONDE, a kingdom of the W. coast of Africa, extending from 8° 20′ to 9° 15′ S. lat., and from 14° to 18° or 19° E. long. On the N. it is separated from Congo by the Danda; on the S. the Coanza divides it from the districts of Quassima and Libolo; on the W. it has the Atlantic Ocean; and on the E. it is joined by the territories of Genga and Dala Quieuca (the W. portion of the Malemba of the Jesuits), and the powerful interior kingdom of Matamba. It is rectangular shaped, lies nearly parallel to the equator, being about 350 m. in length from E. to W., 50 or 60 m. in width from N. to S.; containing an area of probably not less than 18,000 or 20,000 sq. m. (*Blaeu. Geog.* ix. 129.; *Barbot's Voy. to Congo*, 515.; *Lebat*, i. 59.; *Bowditch, Map of Congo, Angola, and Benguela; Acc. of Discov.*, 22. 143.)

This country is properly a part of Congo, from which, however, it has been politically separated since the middle of the 16th century, when a chief, whose name or *title* was *Angola*, made himself independent of the king of Congo, and gave its present designation to his new kingdom, the native name of which was Dongo, or Ambonde. (*Lebat*, ii. 427.; *Barbot*, 520.) It is very powerful among the neighbouring states, the paramount authority of its monarch being acknowledged by several districts, some of them greatly exceeding itself in extent.

Physical Character. — Angola is extremely mountainous, with no plains, except upon the sea-shore, and some small plateaus on the sides and in the gorges of mountains. The land appears, however, to be making advances on the sea, and forming islands, which are wholly of an alluvial and level character; such is the isle of Loanda, lying a short mile from the coast, and forming with the Cabo Palmarcinho one of the most convenient harbours on the W. coast of Africa. The cape itself is also a plain of the same nature, and very evidently in a state of progress westward. (*Pigafetta, Del Regno di Congo*, 10.; *Merolla, Viaggio del Congo*, 70.; *Barbot*, 521.; *Lebat*, i. 60.)

The country is extremely well watered (as, indeed, is the whole of Congo); the principal streams are the Coanza, Benga, and Danda, which run nearly parallel to each other, and to the equator; the first and last forming the S. and N. boundary of the country.

Soil, Climate, &c. — The worst soil in Angola is that upon the coast, and the more recently formed islands, which is sandy, but by no means desert; for, at any time, by digging to the depth of a foot, or less, an abundant supply of good water may be procured. It is, however, a remarkable fact, that at the ebb tide these temporary wells are always found rather brackish, while at the flood their contents are perfectly sweet. (*Pigafetta*, 10.; *Lebat*, i. 89.) The mountain sides, and the valleys of the rivers, present all the richness of soil common in equatorial countries which are well irrigated, though the useful productions of the land are said to be chiefly owing to the agricultural labours of the Portuguese. (*Barbot*, 516.) The climate is excepted by Adams (*Remarks*, 200.) from the general charge of malignity towards Europeans under which the rest of tropical Africa labours; and Pigafetta expressly states that the "habitation is excellent, the air beyond all credit temperate." *La stanza vi è bonissima, l'ære oltre ad ogni credenza temperato.* (p. 6.) He adds also, what would imply that the mountains are of no great height, that the heat on their summits is not less than that in the plains. Situated so near the equator, Angola might be expected to have 2 dry and 2 rainy seasons in each year; but this does not appear to be the case; and, indeed, the accounts of travellers on this point are sufficiently conflicting. Pigafetta says (p. 7.), that the rainy season is from April till August; Lebat (i. 107.), that it occupies November, December, and sometimes January. Barbot (522) leaves it uncertain, but makes the dry season extend from May to September; though he remarks that this period is not without an intermixture of pleasant showers; and to add to the uncertainty on this point, Degrandpré (*Voyage à la Côte d'Or d'Afrique*, i. 4.) says, that rain *seldom* falls, and *never* abundantly; that the showers are irregular, and that *no one time is more subject to them than another!* * The same author remarks, that the abundant dews are fully sufficient for the development of vegetation, and in this he is borne out by all the other authorities. The trade wind blows steadily from S.W. to S., the sea breezes commonly from W.S.W., and the land wind from E. by N. Angola is, however, sufficiently remote from the internal deserts to prevent the ill effects that might be otherwise feared from this breeze. Tornadoes are not unfrequent; and at such times the wind shifts violently to all points of the compass, settling, finally, into the direction of the trade. (*Barbot*, 522.; *Pigafetta*, 7.) Gold and silver have been discovered in the mountains near the coast; but no gold dust is found, though it appears to have existed formerly. Iron is produced plentifully through the energy of the Portuguese; and copper is said, but upon no clear evidence, to exist in the interior. (*Degrandpré*, i. 38.; *Bowditch*, 19.) Lead, sulphur, and petroleum are among the mineral treasures; but there is no mention of precious stones. The natives are reasonably good miners, under European direction; and it is asserted that the subterraneous exhalations produce as sensible a difference in *their colour*, as the same cause is known, in many cases, to effect in that of Europeans. (*Lebat*, i. 95.)

Vegetation has the magnificence observable in all well-watered tropical regions. A species of the Ficus, called by the natives Ensada, and possessing the property of dropping its branches to the ground, where they take root, and germinate like a new plant, is very abundant. Some of these trees, resembling small thickets more than individual plants, extend to more than 1,000 paces in circumference, and are said on good authority to be capable of sheltering 3,000 men! The ensada is an extremely useful plant; the fruit, which resembles an ordinary fig, is an important article of food; its outer bark assists in the construction of huts and boats, and an inner coating, being washed and beaten, is manufactured into cloth. (*Barbot*, 521.) The date, and every other species of palm, the citron, orange, lemon, anana, guava, banana, cocoa, tamarind, mangrove, and every fruit and forest tree common to the equinoxial regions, grow here spontaneously, and reward the least expense of labour with the most abundant return. The same remark holds good with regard to yams, potatoes, and the whole race of roots; and though the climate be too hot for the production of European grain, yet 4 species of wheat, Turkish, Sarasin, Massingo, and Luno, are raised in great abundance. Pulses of all kinds are likewise plentiful; and the sugar-cane, pepper-vine, and a plant called mandioca, of which a very good bread is made, absolutely

* If this be accurate, the discrepancies of the other authorities may arise from their observations having been made in different years; though it must be remarked that Lebat asserts 10 or 12 days to be the utmost difference ever observed in the recurrence of the rainy seasons. (i. 105.)

struggle with man for the possession of the soil. Many trees produce fine gums or resins; and, in a word, there is scarcely a vegetable production which Angola does not, or under reasonable care might not be made to produce. (*Lebat*, i. 112—152.; *Barbot*, 516; *Degrandpré*, i. 5—14.) The woods and mountains shelter lions, tigers, leopards, hyænas, and wolves; of smaller wild animals, there are foxes, wild cats, &c. Of the useful animals, there are hares, rabbits, all the species of antelopes, stags, goats, and hogs of the Chinese variety. The sheep, cow, horse, and ass are strangers to the country, and known only as importations from Europe; but the zebra, elephant, and rhinoceros traverse the woods, and the hippopotamus is found in the rivers. The civet cat is also a native of this country, which likewise abounds in monkeys of all kinds, among which is the chimpanzee, the most intelligent of the tribe. A species of wild dog is said to be found in the woods.

To enumerate the birds of this part of Africa, would be to give a list of almost interminable length; all that are found in other tropical regions, and some that are peculiar, flourish here. The fisher and the sergo, or honey bird, are among the latter, and with whole hosts of pelicans, and nearly every variety of parrot, constitute the chief characteristic of Angolian ornithology. Reptiles numerous, consisting of centipedes, scorpions, and exceedingly venomous serpents. Some of the lizard tribe, as the cameleon, are less dangerous than these; but the rivers swarm with two or three species of crocodiles, which make fishing dangerous, and bathing all but fatal. Life is as abundant in the waters as on the land; and besides the usual tenants of the deep, as whales, sharks, dolphins, mackarel, oysters, crabs, &c., the coasts and rivers possess an endless list of creatures, the very names of which are unknown in Europe. Insects are as numerous, beautiful, and destructive as in other tropical climates; and among the last-named class, the termites or white ant stands pre-eminent. (*Lebat*, i. 152—206.; *Degrandpré*, i. 14—38.; *Barbot*, 516—518.).

Population, Customs, &c. — The population is dense for a barbarous country, the monarch being called Incue, from the great number of subjects under his command. (*Barbot*, 520.) It is not, however, easy to assign the amount, but it may perhaps be taken at between 2,000,000 and 3,000,000. The capital city, St. Paul, or Loanda, contains 8,000. (*Bowditch*, 8.) The natives have few of the negro peculiarities in form or feature: they are of ordinary stature, well limbed, and, but for their colour, very like the Portuguese, by whom they are surrounded. Blue eyes and red hair are not uncommon among them. (*Pigafetta*, 6.) Society is divided into 4 classes, 2 free and 2 slaves; the first 2 consisting of nobles and husbandmen or artificers; the others of slaves, native born, and those acquired by war or foreign purchase. Marriage is an extremely simple ceremony, a mere agreement between the husband and the father of the woman. The appearance of the first tooth in children is an important epoch; the infant being then carried from house to house, and gifts extorted from friends and strangers. For the rest, they do not differ much from other negroes. Dancing is a favourite diversion, and a religious rite; and, like other African people, their ceremonies are defiled with blood and cruelty. Money is of several kinds: *marked cloths*, the shell of a small fish called simbo, a red wood brought from Malemba, and iron, which last was introduced by the Portuguese. The year is divided into 12 months, and the week into 4 days, of which the last is observed as a sabbath. (*Lebat*, i. 170. 373. &c.; *Barbot*, 518.; *Merolla*, 367. &c.; *Bowditch*, 20. &c.) The country is parcelled out into an immense number of little lordships, each under a magistrate called a sova. It would appear that the king is able to control the petty despotism of these governors; for they have neither wealth nor any other distinction, except the personal respect paid to them, which is, however, very profound, to distinguish them from any other freemen. (*Barbot*, 520.) The religion of the bulk of the people is Feticism, differing in nothing from that on the coast of Guinea (*See* ASHANTEE); but there are many Christian families among the natives, and at one time the Jesuits had converted nearly the whole population, and established a regular form of church government. (*Pigafetta and Merolla, passim*; *Barbot*, 521.; *Lebat*, ii. 244. *et seq.*) But the effect of their labours has now nearly vanished and the negroes have relapsed into the idolatrous rites of their ancestors. (*Degrandpré*, i. 47.; *Bowditch*, 112.) The language is less barbarous, and more uniform, on this coast than in most other parts of Africa; the whole of Congo, that is the country between the Coanza and the Zaire, speak a dialect of the same tongue (*Merolla, passim*; *Barbot*, 512.), which, according to Degrandpré (i. 86.), is extremely musical and flexible; not particularly sonorous, but very agreeable; with a perfect syntax, and bearing in some points a resemblance to the Latin. He imagines that this fact may prove a guide to the obscure history of these countries: may it not, however, be owing solely to the long intercourse which has existed between the natives and the Christian priests from Portugal and Italy?

Trade, &c. — The Portuguese established a factory on this coast in 1485 (*Merolla*, 76); and their power has been constantly extending to the present time. Two of their establishments are 700 m. inland; but it is not to be supposed that they possess a sovereignty over the whole country to this extent. Their posts, called fairs, or *faieria*, are little more than entrepôts for trade; though the residents exercise a political power in their immediate neighbourhood. These establishments have, it is said, excited a spirit of manufacture and commerce among the negroes; but we doubt much whether this has been the case in any considerable degree; and whatever beneficial influence they might otherwise have had, has been countervailed and nullified by the support given by the Portuguese authorities to the slave trade. In fact, Angola has been for a lengthened series of years the great mart whence slaves have been obtained for Brazil; and though their importation into the latter be now, in appearance at least, prohibited, it is believed that they are still conveyed in great numbers to that country. Bowditch gives the following account of the trade of Angola in 1803: —

Exports from Angola to Lisbon, 1803.

		Reis.
171	Quintals of Ivory, 1st quality - -	1,770,000
77	- - 2d quality - -	462,000
41	- - 3d quality - -	164,000
289	Quintals - - -	2,336,000

No account is taken of the gold, iron, or other commodities exported; but in 1804, the amount of ivory was much greater, namely, in gross —

750¾ Quintals - - - 4,779,000 R.

Imports from Lisbon to Angola, 1803.

	Reis.
Provisions - - -	18,889,769
Woollen Goods - - -	87,174,602
Linens - - -	24,474,860
Portuguese Manufactures - -	36,882,655
Drugs - - - - -	1,572,120
Asiatic Manufactures - -	240,878,320
Metals - - - -	23,665,115
Sundries - - - -	45,425,69€
	R. 480,789,012

In 1804, the gross imports amounted to 410,128,585 reis; but in this there is no account of drugs or Asiatic manufactures. (*Bowditch*, 9. *et seq.* 146—153.)

ANGORA, or ENGOURI, the ancient *Ancyra*, a city almost in the centre of Natolia, near the N. E. source of the Sakariah, or *Sangarius*, lat. 40° 29′ N., long. 33° 18′ E. After undergoing various revolutions, it fell under the dominion of the Romans; and being embellished and otherwise favoured by Augustus, the inhabitants erected to his honour the celebrated *Monumentum Ancyranum*, a temple of white marble, on the walls of which an account of the principal events in the life of Augustus was inscribed. The ruins of this edifice still remain. Notwithstanding the demise of its powerful patron, Ancyra continued to flourish. It was here that St. Paul preached to the Galatians; and when the Christian religion spread itself over the world, it was advanced to the dignity of an apostolic see. It came into the possession of the Turks in 1359. The great battle between the Turkish sultan Bajazet, or Bayazid, and the famous Tartar conqueror Tamerlane, or Timur Bec, which ended in the total defeat and capture of the former, was fought in the vicinity of Ancyra in 1401. It continues to be one of the principal cities of Natolia; and is celebrated for manufactures of stuffs made of the silk-like wool of the *goat of Angora*, a variety peculiar to the country round the town. The population has been variously estimated at from 35,000 to 80,000. We incline to think that the first number is nearest the mark. (*Tournefort, Voyage du Levant*, ii. pp. 442. 464.; *Kinneir's Journey*, p. 63. &c.)

ANGOSTURA, a city of S. America, rep. of Venezuela, on the S. bank of the Orinoco, about 240 m. above its embouchure, and about 190 feet above the level of the sea, lat. 8° 8′ 10″ N., long. 63° 55′ 20″ W. It was founded in 1588. Owing to its situation in a fertile country, on a great navigable river, and its command of a very extensive inland navigation, Angostura is favourably situated for commerce, which it carried on to a very considerable extent previously to the revolutionary struggles. These, however, have diminished its commerce, wealth, and population. The last, which in 1807 was estimated at about 8,500, does not now, perhaps,

exceed 3,500. It has a large hall, where meetings of Congress have been held; with an hospital and a college; and is defended by a fort on the opposite bank of the river. Though low, and subject to inundation, the climate is temperate and not unhealthy.

ANGOULEME (an. *Iculisma*), a city of France, dep. Charente, of which it is the capital, on a plateau elevated 221 feet above the river Charente, lat. 45° 38′ 57″ N., long. 0° 9′ 18″ E. Pop. 16,530. The old town, which occupies the summit of the plateau, has narrow, crooked streets, and is *triste et laide*. In its centre stands the old castle in ruins. The walls, with which the city was formerly surrounded, have been mostly demolished, and the ramparts converted into public walks. The new town, built on a declivity to the S. of the old town, has broad straight streets, good houses, and is rapidly increasing. There are also several suburbs, of which Houmeau is the most important. Its port is the entrepôt of the commerce of Angoulême: cathedral ancient, but neither large nor beautiful; and, with the exception of the fine bridge over the Charente, and an obelisk erected in honour of the present Duchesse d'Angoulême, the other public buildings deserve no particular notice. The *Place d'Artois* is a fine promenade, and, from its elevated position, commands a view of the valley of the Angulenne and the surrounding country. Angoulême is the seat of a court of assizes, and of a tribunal of original jurisdiction; and has a royal college; a society of agriculture, arts, and commerce, which publishes memoirs once a month; a public library, with 16,000 volumes; a cabinet of natural history; a school of midwifery; a foundling hospital, and various other hospitals; a theatre, &c. It had also a royal marine school, the buildings of which are on a large scale: this institution was, however, closed in 1830; but it is expected that it will be re-opened. Angoulême is celebrated for the extensive paper manufactures in its vicinity: it has also fabrics of serges and coarse stuffs, and earthenware; with extensive distilleries, which produce excellent brandy; tanneries, a cannon foundry, a manufacture of arms, a sugar refinery, &c. The *pâtés de perdrix aux truffes d'Angoulême* are sent to all parts of Europe.

Angoulême is very ancient, being noticed by Ausonius, who flourished in the 3d century. Balzac was a native of the town and so also was the detestable regicide; Ravaillac, the assassin of Henry IV. In the vcinity are the ruins of the famous abbey *de la Couronne*, founded in 1122, long the ornament of the Angoumois. This venerable and magnificent structure, after escaping the revolutionary phrensy, was demolished in 1808. The fountain of Trouve, a few miles from Angoulême, is, next to that of Vaucluse, the most celebrated in France. (*Hugo, France Pittoresque*, art. *Charente*, &c.)

ANGOUMOIS, the name of a district in France previously to the revolution, nearly but not exactly coinciding with the dep. Charente. It formed, in connexion with the district of Saintonge, one of the provinces into which France was formerly divided.

ANGRA, a town and seaport of the island of Terceira, one of the Azores, being the cap. of the archipelago, and the residence of the governor, at the bottom of a deep bay or creek, lat. 38° 38′ 33″ N., long. 27° 12′ 33″ W. Pop. variously estimated at from 10,000 to 15,000. It is beautifully situated on a hill, rising gradually from the sea. The streets are broad and regular, and the houses, generally of 3 stories, though gloomy, are well built. It is well supplied with water, but the streets, as well as the inhabitants, are notwithstanding excessively filthy. There are a great number of churches, and it formerly also had various monasteries and convents; but the latter have been dissolved, and the buildings applied to other uses. As a port, Angra has nothing to boast of: it is open to all winds from the S.S.W. by the S. to the E. The swell from the S.W. in particular, which sets round Mount Brazil, on the W. side of the bay, is tremendous. In the bad weather months, large vessels anchor in the mouth of the bay, abreast of St. Antonio, in 28 and 30 fathoms, to be ready instantly to put to sea in the event of storms setting in, the coast affording no shelter. The town is defended on the W. by the citadel at the foot of Mount Brazil, and on the opposite side of the bay by the fort of St. Sebastian, the distance between them being about ¾ m. (*Boid's Azores*, p. 210.; *Purdy's Sailing Directions for the Atlantic*, p. 230.)

ANGRA, a seaport town of Brazil, prov. Rio Janeiro, bears S. W., distant 78 m. from the city of that name. Its port admits large ships; it is fortified by 2 redoubts, and has some commerce.

ANGUILLA, or SNAKE ISLAND, so called from its tortuous figure, an island belonging to the British in the W. Indies, being the most northerly of the Caribbee islands, and separated by a narrow channel from St. Martins; lat. 18° 8′ N., long. 63° 12′ E. It is from 25 to 30 m. in length, by about 6 m. in breadth. Pop. about 3,000, of whom about 2,400 are blacks. Surface flat; soil chalky, and not very productive; and there is a deficiency both of wood and water; climate healthy. By far the largest portion is uncultivated. It produces some sugar and cotton, with maize and provisions of various kinds. A salt lake in the middle of the island furnishes (or at all events did furnish) a considerable supply of salt. It has no good harbour. The town, an inconsiderable place, stands near the N. E. extremity of the island. The colonists elect their chief magistrate, subject to the approval of our governor of Antigua. (*Edwards*, ed. 1819.; and *Official Returns*.)

ANGUILLA, one of the Bahama islands, about 20 m. long, and 5 broad; lat. 23° 36′ N., long. 79° 20′ W.

ANGUILLARA, a town of Austrian Italy, on the Adige, 23 m. S. Padua. Pop. 2,300. This also is the name of a town of nearly equal size in the Papal states, on the S. side of the lake Bracciano, 16 m. N. N. W. Rome.

ANGUS, see FORFAR.

ANHALT, a country of Germany, almost surrounded by the Prussian dominions, having Brandenburg on the N., Prussian Saxony on the E. and S., the county of Mansfeldt on the S. W., and Brunswick and the Prussian circ. of Magdeburg on the N. W. Its greatest length is 60 m., and its breadth varies from 12 to 16. Principal river the Elbe, by which it is intersected. Area, 1,018 sq. m. Pop. 146,233. It is mostly flat, and is very fertile and well cultivated. It is divided into the three duchies of Anhalt-Bernburg having an area of 329 sq. m., and a pop. (in 1833) of 45,135; Anhalt-Cœthen, area 318 sq. m., pop. (in 1833) 40,153; and Anhalt-Dessau, area 360½ sq. m., pop. (in 1837) 60,945. The consent of the states is necessary to the imposition of any new tax. Inhab. mostly Protestants and very industrious. The entire principality furnishes 1,224 men to the army of the confederation. Principal towns, Dessau, Zerbst, Coethen, and Bernburg.

ANHOLT, a small Danish island in the Cattegat, nearly halfway between Lessoe and Zealand. A light-house, having the lantern elevated 112 feet above the level of the sea, has been erected on its most easterly promontory, in lat. 56° 44′ 20″ N., long. 11° 38′ 51″ E.

ANIANE, a town of France, dep. Herault, cap. cant., 16 m. W. by N. Montpellier. Pop. 2,650.

ANIMALLY or ANIMALAYA, a town of Hindostan, prov. Coimbetoor, on the Alima, lat. 10° 31′ N., long. 77° 1′ E. In 1800 it contained 400 houses.

ANJAR, a town of Hindostan, prov. Cutch, cap. district of same name, ceded in 1816 to the British, near the N. E. shore of the Gulph, lat. 23° 3′ N., long. 70° 11′ E. It is fortified, but not strongly. In 1819 nearly half the town was destroyed by an earthquake, but only 165 persons lost their lives. The pop. was estimated in the following year at 10,000. (*Hamilton's E. I. Gazetteer*.)

ANJENGO, a seaport town of S. Hindostan, prov. Travancore, 18 m. N. N. W. Cape Comorin, lat. 8° 37′ N., long. 76° 53′ E. The E. I. Company had a factory here from 1684 to 1813, when it was abolished. The best coir cables on the Malabar coast are made here and at Cochin; and pepper, coarse piece-goods, drugs, &c. are exported.

ANJOU, an ancient prov. and gov. of France, now distributed among the depts. of Maine et Loire, Loire Inférieure, Vendée, Indre et Loire, Sarthe, Ille et Vilaine, Mayenne, and Deux Sèvres.

ANKLAM, a town of the Prussian States, prov. Pomerania, cap. circ. on the navigable river Peene, about 7 m. from where it falls into the strait separating the isle of Usedom from the continent. Pop. 7,000. It was founded in 1188; has a college and 3 hospitals, with manufactures of cloth, linen, &c., and carries on a considerable trade in ship-building and shipping.

ANKOBER, a town of Abyssinia, cap. prov. Efat.

ANKOI, or ANDKHO, a town of Bokhara, 75 m. W. Balkh, lat. 36° 48′ N., long. 66° E. Mayendorff says that it has nearly 4,000 houses, which would infer a pop. of at least from 25,000 to 30,000, consisting principally of Arabs. A small river flows past the town; but as it dries in summer, the inhab. are obliged to supply themselves with water from wells. (*Voyage à Boukhara*, p. 143.)

ANNABERG (ST.), a town of Saxony, circle Erzgebirge, 8 m. S. W. Marienburg. Pop. 5,500. It is well built, has three churches, two hospitals, and a gymnasium, with manufactures of lace and ribands. In its vicinity are mines of iron, tin, cobalt, and silver.

ANNAH, a town of Asiatic Turkey, cap. Sanjiack, on the Euphrates, 160 m. N. W. Bagdad, lat. 34° 10′ N., long. 41° 47′ E. It is finely situated on the route of the caravans that cross the desert of Mesopotamia. It was surprised in 1807 by the Wahabites, who, after committing all sorts of excesses, set it on fire. The pop. does not probably exceed from 3,000 to 4,000. The environs are very fertile.

ANNAMABOE, a seaport town on the Gold Coast of Africa, formerly prov. Fanti, empire of the Ashantees, lat. 5° 5′ N., long. 1° 15′ E., one of the principal marts for slaves. It was burnt by the Ashantees in 1808. Pop. probably from 3,000 to 4,000.

ANNAMOOKO, one of the Friendly Islands (which see).

ANNAN, a borough, sea-port, m. town, and p. of Scotland, co. Dumfries. The town is situated on the E. side of the river Annan, which is here crossed by a fine bridge of 3 arches, erected in 1824, about 1½ m. above its confluence with the Solway Frith, 67 m. S. Edinburgh. Pop. 5,033. It is clean, well-built, neat, and thriving; has a handsome new church and spire; a good natural harbour, which has been much improved by an embankment constructed at the expense of Mr. Irving of Newton; and an academy well attended. There is here a cotton manufactory, which, in 1837, employed from 120 to 140 hands. Ship-building is also carried on to a considerable extent; but the principal trade of the town consists in the curing of bacon and hams for the Newcastle and London markets, and in the shipping of corn, fat cattle, and sheep, by steam, for Liverpool. In 1837 there belonged to the town 34 vessels, of the burden of 1639 tons. Annan unites with Dumfries, Kirkcudbright, Lochmaben, and Sanquhar, in returning a member to the H. of C. 10*l*. houses in 1831, 152; constituency in 1837, 179. (*Boundary Report*, p. 137.; *New Statistical Ac. of Scotland*, art. *Annan*.)

Annan, the river on which the above town is built. It rises on the S. side of Hartfell, a mountain on the confines of the cos. Dumfries and Peebles, near Moffat, and after pursuing a S. course of about 36 m. in a direct line, unites with the Solway Frith, 1½ m. below Annan, to which it is navigable. It has near its mouth salmon fisheries, which let in 1837 for about 550*l*. a-year.

ANNANDALE, the name given to the valley or low grounds traversed lengthwise by the river Annan.

ANNAPOLIS, a town of Nova Scotia, on the S. side of the river of the same name, near where it falls into its estuary or basin, on the S. W. side of the bay of Fundy, lat. 44° 47′ N., long. 65° 50′ W. The harbour is spacious and secure. This is the oldest European settlement in N. America, having been founded in 1604. It was called Fort Royal by the French; but, on their ceding the prov. to England in the reign of Queen Anne, it received its present name in honour of her Majesty. Notwithstanding it was the cap. of the prov. till the foundation of Halifax in 1750, and its fine harbour, it never attained to any considerable magnitude. At present it does not contain above 50 or 60 houses, shops, &c., and the fortifications and government buildings are going to ruin. (*M'Gregor's British America*, i. p. 360.)

Annapolis, a city and port of entry of the U. States, cap. Maryland, on the Severn, 2 m. from its mouth, 28 m. S. S. E., Baltimore. Pop. 2,623. It is a handsome healthy town, with a statehouse, a theatre, &c. The proximity and more advantageous situation of Baltimore as a place of trade, have occasioned the slow growth of Annapolis.

ANNECY, a town of the Sardinian states, cap. prov. Genevois, at the northern extremity of the lake of the same name, 22 m. S. Geneva. Pop. 5,700. It is pleasantly situated among hills and mountains; and is thriving and industrious, having establishments for the spinning of cotton and silk, with manufactures of earthenware and glass, vitriol, straw hats, white iron and steel, &c. It is the seat of a bishopric, and is very ancient.

ANNET, one of the Scilly islands, about 1 m. from that of St. Agnes.

ANNONAY, a town of France, dep. Ardèche, being, though not the cap., the principal town of the dep., at the confluence of the Cance and the Deume, 7 m. from the Rhone. Pop. 7,689. It is a thriving improving town, agreeably situated on the elevated uneven ground between the two rivers, with suburbs on the opposite banks; being well, though irregularly built. The only public building worth notice, is an obelisk in honour of the celebrated æronaut Montgolfier, a native of the place. Annonay is principally distinguished by its manufactures, particularly by that of paper, long reckoned the best in France; and hence the recommendation, so frequently seen in French catalogues, of books being printed on *papier fin d'Annonay*. (See Ardeche.) It has also manufactures of cloth, woollen stockings, and gloves; establishments for the spinning of cotton and silk, part of the latter of a peculiarly fine quality, being employed in the manufacture of tulles and blondes; with dye-works, tanneries, &c. The town is proprietor of a large nursery; and in its vicinity is the first suspension bridge constructed in France.

ANOPSHEHR, a town of Hindostan, prov. Agra, on the W. side of the Ganges, 58 m. E. S. E. Delhi, lat. 28° 27′ N., long. 78° 8′ E. It is surrounded by a strong mud wall, and is thickly inhabited. (*Hamilton's E. I. Gazetteer*.)

ANSPACH, or ANSBACH, a town of Bavaria, cap. circ. Rezat, on the Rezat, 24 m. S. W. by W. Nuremburg, lat. 49° 14′ 20″ N., long. 10° 30′ 15″ E. Pop. 16,500. It is surrounded by walls, and has 4 gates; is the seat of the provincial authorities and of a court of appeal. The objects most deserving of attention are the castle and gardens that formerly belonged to the Margraves of Anspach; the church of St. John, with the tombs of the princes. It has a gymnasium, an hospital, an orphan hospital, a library of 16,000 vols. with a cabinet of medals, &c.; and manufactures of woollen and cotton stuffs, earthenware, white lead, and playing cards.

ANSTRUTHER (EASTER and WESTER), two inconsiderable royal burghs and sea-ports of Scotland, co. Fife, on the N. shore of the Frith of Forth. Pop. of both boroughs, with their parishes, in 1831, 1,437; Parl. const. in 1837, 63. They unite with Crail, Pittenweem, and Kilrenny, in returning a m. to the H. of C.

ANTALOW, a considerable town of Abyssinia, cap. prov. Enderta, 85 m. S. S. E. Axum. Pop. probably about 6,000.

ANTEQUERA, a large town of Spain, Andalusia, 30 m. N. N. W. Malaga, lat. 37° 9′ N., long. 4° 32′ W. Pop. 20,150. It is built partly on a hill, and partly on a plain; has an old castle built by the Moors, several churches and convents, with establishments for the spinning of silk and cotton, and fabrics of paper, morocco leather, and soap. There are in its neighbourhood quarries of marble of different colours, and plaster, a salt lake, and a mineral spring. It was taken by assault from the Moors, by Ferdinand, afterwards king of Arragon, in 1410.

ANTHEME (ST.), a town of France, dep. Puy de Dome, cap. cant. on the Ance, 9 m. E. Ambert. Pop. 3,201.

ANTHONY (ST.), FALLS OF, in the Mississippi, about 2,000 m. above its embouchure, lat. 44° 50′ N. Here the river descends about 74 feet, viz. 16 feet of perpendicular fall, and 58 more of rapids.

Anthony (St.), a cape on the coast of S. America, Argentine republic, being the S. extremity of the æstuary of the La Plata, lat. 36° 15′ 19″ S., long. 56° 37′ W.

ANTIBES (an. *Antipolis*), a sea-port town of France, dep. Var, cap. cant. on the Mediterranean, 22 m. E. N. E. Frejus, lat. 43° 34′ 40″ N., long. 7° 7′ 50″ E. Pop. 5,939. Being an important station on the side of Italy, Antibes is pretty strongly fortified. It is the seat of a tribunal of commerce, and of a school of navigation. The port, which is circular, of considerable size, and easy access, is formed by a mole projecting from the town, the distance from its extremity to the point on which Fort Carré is built being only about 150 fathoms. In most parts the port is shallow; but within and near the mole there are from 15 to 18 feet water. The inhabitants are principally employed in the fishing and curing of sardines and anchovies.

Antibes is very ancient, having been founded by a colony from Marseilles, 340 years B.C. It was afterwards occupied by the Romans, by whom it was fortified and embellished. Having been destroyed by the Saracens towards the end of the 9th century, it continued in a comparatively neglected state, till it was again fortified by Francis I. and Henry IV. It was unsuccessfully besieged by the English and Imperialists in 1746. (*Hugo, France Pittoresque*, art. *Var*.)

ANTICOSTI, a large island in the mouth of the St Lawrence, between 49° and 50° N. lat., and 61° 43′ and 64° 35′ W. long. It has an unfavourable soil, is without a single good harbour, and is uninhabited, with the exception of the attendants on the light-houses, one of which has been erected on its E. point; and another either has been or is about to be erected on its W. extremity.

ANTIGUA, an island belonging to Great Britain, in the West Indies, being one of those denominated the Windward Islands. It was called by the natives Xaymaca, but Columbus gave it the name of Santa Maria de la Antigua. It is about 25 m. N. E. Montserrat, and 40 m. N. Guadaloupe. It is oval-shaped, being 20 m. in its greatest length, and contains about 108 sq. m., or nearly 70,000 acres. The pop. has decreased since 1774, when it had 2,590 whites, and 37,808 slaves. In 1837, the people of colour and whites together were only about 2,000; and the blacks, all of whom were enfranchised in 1834, about 33,000. It has little of the mountainous character of the neighbouring islands, the greatest elevation being only 1,210 feet. On approaching it from the sea, instead of mountains clothed with rich foliage and luxuriant vegetation, a barren rugged coast, almost destitute of verdure, presents itself. A few miles, however, from the shore, the prospect is more pleasing, the country being agreeably diversified with hill and dale; and when not parched by the droughts, to which it is subject, green fields of canes, clumps of feathery bamboos, flowers of dazzling brilliancy, and verdant cliffs hung with beautiful varieties of intertropical plants, enchant the voyager. The island has neither fountain nor river, and but a few scanty springs among the hills. Rain water, preserved in tanks, is substituted, and it is found particularly light and pleasant to the palate. The soil in the high lands is a reddish clay on a substratum of marl; that in the lowlands, a rich dark mould on a substratum of clay. The climate is remarkable for its want of moisture, though the average

fall of rain be 45 inches. The dew is scanty, and the rainy season very uncertain, but it may be said generally to extend from June to the end of the year. The alternations of temperature are very slight, the thermometer seldom ranging more than 4° in 24 hours. The deaths among the white troops for the last 20 years, according to Captain Tulloch's tables, was 40·6 per 1000 of mean strength. Among the black troops, 28·9. The sugar cane is the principal article of cultivation; but sufficient ground provisions are also procured in favourable seasons for the supply of the inhabitants. The crops vary considerably. In the years 1770, 1773, 1778, there was no produce of any kind, the canes and ground provisions being destroyed by drought, and the inhab. would have perished, but for the importation of flour and corn-meal from America. The total value of imports in 1833 was 170,334*l.* ster., the principal of which were grain, meal, and flour, cotton manufactures, linens, woollens, and fish. In 1834, the value of the imports was 176,076*l.* There would seem to have been a very considerable falling off in the exports of produce from Antigua since 1834, in consequence, partly perhaps, of deficient harvests, but more, as we apprehend, of the emancipation of the slaves. The principal imports into the United Kingdom from Antigua in the under-mentioned years, have been —

	Sugar.	Rum.	Molasses.
1845 —	210,013 cwts.	16,120 gals.	100,934 cwts.
1846 —	102,644 —	4,110 —	46,205 —
1847 —	240,259 —	60,394 —	105,683 —
1848 —	161,891 —	40,958 —	63,287 —

The shipping entered inwards in 1833, was 33,654 tons, employing 2,370 men; outwards, 32,002 tons, and 2,183 men. The legislature is composed of a governor, a council of 12, and an assembly of 25 members. The courts of equity and law are the same as in Great Britain. The governor for the time being acts as chancellor of the court of equity, and suitors have a right of appeal from his decrees to the king in council, on giving security for costs. The militia consists of 89 officers, and 993 rank and file. There are 10 public or free schools, and 4 private, 15 infant, and many Sunday schools, giving instruction, in all, to nearly 1,000 children. The manners, customs, and habits of the people differ in no degree from those of the other West Indian Islands. The revenue, in 1831, was 16,097*l.*, the expenditure 15,708*l.* The island contains 6 towns and villages, viz. St. John's, Parham, Falmouth, Willoughby Bay, Old Road, and James Fort. St. John's the capital, on the N.W. side of the island, lat. 18° 22′ N., long. 64° 42′ W., is regularly built, partly on a high rock, connected with the mainland by a causeway, which is, however, submerged at high water. In the harbour, there is sufficient depth of water for merchant vessels, and perfect security in all winds. English Harbour, on the S. side of the island, is however the best harbour in Antigua, and is indeed one of the best in the West Indies. It has water for ships of any size, and is well sheltered in all weathers. It has a dock-yard, a naval hospital, and every convenience for careening and repairing ships. (*Blunt's American Navigator*, p. 402.) Antigua is the oldest W. I. colony, after St. Kitt's and Barbadoes, in possession of the English, having been acquired in 1632. Its planters have been remarkable for their leniency to the slaves, who were finally enfranchised in 1834. The amount awarded to Antigua out of the 20,000,000*l.* granted for the freedom of the slaves, was 425,866*l.* 7*s.* 0¼*d.*, those of Anguilla included. The average value of each slave was reckoned at 14*l.* 12*s.* 3*d.* (*Edward's; Parl. Papers, &c.*)

ANTILLES, see West Indies.

ANTIOCH (vulg. *Antakia*) (*Antioch*), properly Antiocheia (*Αντιοχεια*), a famous city of Syria, and once the residence of its sovereigns, on the left bank of the Aasy (*Orontes*), 20 m. above its mouth; 53 m. E. Aleppo, and 29 m. S. Iskenderoun, in lat. 36° 12′ N., long. 36° 15′ E. The population, which at its most flourishing epoch probably amounted to 400,000, is now reduced to from 6,000, to 10,000, of whom about a tenth part may be Christians, and about the same proportion Jews.

Modern Antioch does not cover more than a sixth part of the area of the ancient city, the walls of which, though ruinous, may still be distinctly traced throughout their whole circuit. The Bab-Boulous (Gate of St. Paul), the entrance from the E., is now ½ m. from the nearest houses; and, in every other direction except the W., the buildings have similarly receded from their old limits. Volney describes it as a wretched collection of huts, built of mud and straw, with narrow and miry streets, and exhibiting every appearance of misery and desolation. Kinneir, however, says that "the houses are in the Turkish fashion, small, but neatly built of hewn stone." But though this be the case with some of them, the majority are constructed of slight materials; and, unlike the houses of other Syrian or rather Eastern towns, have sloping roofs covered with thin tiles. There are 10 or 12 mean and unimportant mosques, with low minarets; but in this city, so famous in the annals of Christianity, there is not at present a single Christian church! The baths and bazars are numerous, but neither exhibit any thing remarkable. It has manufactures of coarse pottery, cotton stuffs, leather, &c.; but the greater part of the inhabitants are engaged in the cultivation and manufacture of silk.

All traces of its famous theatres, its circus, and its magnificent baths, have irretrievably perished. For about ½ m. on the E. of the town, a part of the ancient pavement still exists; and on the S. are the ruins of an aqueduct, which conveyed a supply of water from the foot of the Djebel Okrah (an. *Mt. Cassius*). The old walls are, however, interesting monuments. The situation of the ancient city was most delightful. It occupied the summits and slopes of two considerable hills, and the plain between them and the river. Over these hills and across this plain, the walls were built nearly in a rectangular form, inclosing a space of several m. in circumference. They are of various ages, part being, apparently, as old as the first foundation of the town, part referable to the æra of Roman power, and part the work of the crusaders. They are carried over the beds of mountain torrents, and down the sides of almost perpendicular precipices, filling up the intervening gorges and ravines, so that they vary from 20 or 30 feet in height to upwards of 70. The oldest portion of the walls is also the most perfect; it stands upon a rock, and, having been originally well built, has resisted the influence of time and the shocks of earthquakes. There are two bridges, one of 5 arches with piers, cut out of the rock, across a ravine; and one of inferior dimensions, across the Orontes. In the sides of the mountains to the S. E. of the town are numerous excavations, apparently intended for cemeteries or catacombs, some of which are now used as places of worship by the Christian population.

The ancient Syrian name of Antioch is said to have been Riblath; but being enlarged and beautified by Seleucus Nicator, he gave it, B. C. 301, after his father, the name of Antioch. It became at once the capital of the Macedonian kingdom of Syria, and continued for nearly 2½ centuries to be the residence of the monarchs of the Seleuceidan dynasty. About 65 years B.C., the conquests of Pompey brought Antioch, with the whole of Syria, under the control of Rome. At this æra it consisted of 4 distinct towns, each having separate fortifications, the whole being surrounded by a common wall; hence it was sometimes called Tetrapolis. Under the Romans, Antioch continued to advance in importance: it was the centre of an extensive commerce, the residence of the governor of Syria, the frequent resort of the emperors, and the most celebrated town of the empire (the capital only excepted) for the amusements of the circus and the theatre. It is intimately connected with the early history of Christianity, the doctrines of which were planted in it by Paul and Barnabas; and in it, also, the term *Christian* had its origin as a distinctive appellation. (Acts, xi. 26.) It has suffered severely on many occasions from earthquakes. One of the most celebrated and disastrous of these calamities occurred A. D. 115. The emperor Trajan, who had just concluded his victorious Parthian campaign, being then in the city, it was crowded with troops and strangers from all parts of the ancient world. The shocks are said to have continued for a lengthened period, and to have been most severe; the emperor himself narrowly escaped with some bruises; and many thousands of individuals were buried in the ruins of the city. (*Ancient Univer. Hist.* xv. 138. 8vo. ed.) It again suffered severely from similar catastrophes in the years 340, 394, 396, 458, 526, and 588; the last destroying, it is said (but such statements are almost always much exaggerated), above 60,000 persons. Notwithstanding these repeated inflictions, and its devastation by Chosroes the Persian in 548, it revived again and again, and continued to be the "Queen of the East," and a place of great importance, till 638, when it fell under the power of the Saracens. In 1098, it was taken by the crusaders, and continued to be the capital of a Christian principality till 1269, when it was taken by the Egyptian sultan, by whom it was partially demolished. It was added to the Ottoman empire, by Selim I., in 1516; but its commercial importance had already vanished; and it has continued, under the barbarous sway of the Turks, to decline till it has reached its present state of comparative insignificance.

The valley of the Orontes spreads, in the neighbourhood of Antioch, into a fertile plain, 10 miles in length, and 5 or 6 in width; the town and river, occupying the extreme edge, being close to the bounding mountains on the S. E. The soil is excellent, consisting of a rich alluvial deposit, producing figs, olives, vines, and mulberries in great abundance. The deserted spaces within the old walls are one continued garden; but in general the country is ill-cultivated, being abandoned to the Turkmans and other wandering tribes. Pliny speaks of a part of Antioch lying on the right bank of the river

(*Hist. Nat.* v. 21.) This must have been a suburb, and probably, as in the case of Aleppo, as extensive as the town within the walls; but no vestiges of it now remain.

Modern critics and travellers differ in opinion as to the site of the grove, and village of Daphne, and temple of Apollo, in the immediate vicinity of Antioch. Gibbon has given the following description of this long-famous seat of religion and pleasure. "At the distance of 5 m. from Antioch, the Macedonian kings of Syria had consecrated to Apollo one of the most elegant places of devotion in the pagan world. A magnificent temple rose in honour of the God of light; and his colossal figure almost filled the capacious sanctuary, which was enriched with gold and gems, and adorned by the skill of the Grecian artists. The deity was represented in a bending attitude, with a golden cup in his hand, pouring out a libation on the earth, as if he supplicated the venerable mother to give to his arms the cold and beauteous Daphne; for the spot was ennobled by fiction, and the fancy of the Syrian poets had transplanted the amorous tale from the banks of the Peneus to those of the Orontes. The ancient rites of Greece were imitated by the royal colony of Antioch. A stream of prophecy, which rivalled the truth and reputation of the Delphic Oracle, flowed from the Castalian fountain of Daphne. In the adjacent fields, a stadium was built by a special privilege which had been purchased from Elis: the Olympic games were celebrated at the expense of the city; and a revenue of 30,000*l.* sterling was annually applied to the public pleasures. The perpetual resort of pilgrims and spectators insensibly formed, in the neighbourhood of the temple, the stately and populous village of Daphne, which emulated the splendour, without acquiring the title, of a provincial city. The temple and the village were deeply bosomed in a thick grove of laurels and cypresses, which reached as far as a circumference of 10 m., and formed in the most sultry summers a cool and impenetrable shade. A thousand streams of the purest water springing from every hill, preserved the verdure of the earth and the temperature of the air; the senses were gratified with harmonious sounds and aromatic odours; and the peaceful grove was consecrated to health and joy, to luxury and love. The vigorous youth pursued, like Apollo, the object of his desire, and the blushing maid was warned by the fate of Daphne to shun the folly of unseasonable coyness. The soldiers and the philosophers wisely avoided the temptation of this sensual paradise, where pleasure, assuming the character of religion, imperceptibly dissolved the firmness of manly virtue. But the groves of Daphne continued for many ages to enjoy the veneration of natives and strangers; the privileges of the holy ground were enlarged by the munificence of succeeding emperors; and every generation added new ornaments to the splendour of the temple." — (*Calmet, Dictionnaire de la Bible*, art. *Antioche*; *Decline and Fall*, cap. 23.; *Volney*, ii. 130.; *Browne*, 390—392.; *Kinneir*, pp. 149—161.; *Robinson*, ii. 273—277.)

ANTIPAROS (an. *Oliaros*), a small island of the Grecian Archipelago, group of the Cyclades, between Paros and Siphanto, 1½ m. W. of the former, and 16 m. E. of the latter. It is about 7 m. in length from N. to S. by about 3 m. breadth, its highest point being in lat. 36° 59′ 40″ N., long. 25° 3′ 60″ E. It consists of a mass of marble covered with a moderately fertile soil; and, exclusive of some cotton and wine, it produces barley enough to suffice for its inhab., consisting of some 60 or 70 families who live in a miserable village about 1 m. from the shore, and are partially employed in fishing. Though hardly worthy of notice in other respects, this island is famous for an immense subterranean cavern or grotto. Its entrance is on the side of a hill under a low arch. The passage thence to the cavern is long, narrow, and in parts precipitous. "The mode of descent is by ropes, which are either held by the natives, or joined to a cable fastened at the entrance round a stalactite pillar. In this manner we reached the spacious chambers of this truly enchanted grotto. The roof, the floor, the sides of a whole series of magnificent caverns, are entirely invested with a dazzling incrustation, as white as snow. Columns, some of which were 25 feet in length, pended in fine icicle forms above our heads; fortunately, some of them are so far above the reach of the numerous travellers who during many ages have visited this place, that no one has been able to injure or remove them. Others extend from the roof to the floor, with diameters equal to the mast of a first rate ship of the line. The last chamber into which we descended surprised us more by the grandeur of its exhibition than any other. Probably there are other chambers still unexplored." (*Clarke's Travels*, vi. p 125. 8vo ed.)

The æra of the discovery of this cavern in modern times is not ascertained; but it was first made fully known by the visit paid to it by M. Nointel, ambassador from France to the Porte, who descended into it with a cortège of no fewer than 500 individuals, at Christmas, 1673. On this occasion it was brilliantly illuminated. His excellency and suite remained in it for three entire days, and celebrated high mass at midnight on Christmas in this most magnificent of subterranean temples. It was also visited by the learned and excellent traveller, M. Tournefort, who supposed that he saw in it conclusive proofs of his singular theory as to the vegetation of stones. (*Tournefort, Voyage du Levant*, i. pp. 185—195. 4to ed.) It has since been repeatedly visited by other travellers; and it is said that the smoke from the numerous torches that have thus necessarily been carried within its recesses, have somewhat impaired its otherwise unrivalled splendour and brilliancy.

ANTIVARI, a town of Turkey in Europe, 19 m. W. Scutari, within a short distance of the sea, lat. 42° 15′ 20″ N., long. 19° 4′ 15″ E. Pop. 3,500. It is defended by a castle on a steep rock, is the residence of a Greek archbishop, and the entrepôt of the merchandise of the valley of Drin.

ANTOING, a market town of Belgium, prov. Hainault, 4 m. S. E. Tournay. Pop. 1,951.

ANTONIN (ST.), a town of France, dep. Tarn et Garonne, cap. cant., in a spacious valley at the confluence of the Aveyron and the Bonnette, 22 m. E. N. E. Montauban. Pop. 5,455. The waters of the Bonnette being charged with the refuse of various tanneries established on its banks, render the town at times unhealthy. It has fabrics of serges and other woollen stuffs, paper, &c.; and a considerable commerce is carried on in leather, prunes, and juniper.

ANTONIO (ST.), a city of Mexico, cap. prov. Texas, situated near the source of the river of this name. Pop. 2,000. Long. 101° W., lat 29° 50′ N.

ANTRAIGUES, a town of France, dep. Ardèche, cap. cant., 11 m. W. Privas. Pop. 2,029.

ANTRAIN, a town of France, dep. Ille et Vilaine, cap. cant. on the Couesnon, 14 m. S. E. Dol. Pop. 1,651.

ANTRIM, a marit. co. Ireland, prov. Ulster; its greatest length being about 55 m., and its greatest breadth about 32 m.; having N. and E. the Irish Sea, S. Lough Neagh and Down, and W. Londonderry, from which it is separated for the greater part by the Bann. It contains 758,866 imp. acres, of which 225,970 are mountain and bog, and 49,790 water, being part of Lough Neagh which lies principally within this county. The N. and E. districts are mountainous, and there are some high rugged grounds in other places, while the flat ground along Lough Neagh is in many places boggy Still, however, there is a large extent of fertile ground. Property in very great estates; but large portions of some of them are leased for ever. Farms small: agriculture in most respects similar to that of Down (which see): average rent of land, 15*s*. an acre. The country round Belfast has more of an improved appearance, and the people are more orderly and industrious than any where else in Ireland. Linen manufacture universally diffused: the manufacture of cotton has also been successfully introduced, with some others of inferior importance. A coal mine is wrought at Ballycastle; but not extensively, the coal being of bad quality. Besides the Bann and the Laggan, which form part of its S. boundary, it is watered by many smaller streams, but none of them are navigable. The N. coast is remarkable for its basaltic columns, which are particularly conspicuous at the far-famed Giant's Causeway (which see). The lofty promontories of Bengore and Fairhead are also, in a great measure, composed of these columns. There are considerable salmon fisheries on the coast. Carrickfergus is the county town; but the principal towns are Belfast, Lisburn, Antrim, and Larne. Pop. in 1821, 262,860; in 1831, 316,909: it contains 8 baronies and 77 parishes; and returns 5 m. to the H. of C., viz. 2 for the co., 2 for Belfast, and 1 for Carrickfergus. Parl. constituency of co., 1836-37, 3,496.

ANTRIM, an inland town of Ireland, cap. co. Antrim, prov. Ulster, on the Six-mile-water near its embouchure in Lough Neagh, 94 m. N. Dublin. Its ancient name was Entrium, or Entrum-neagh, and it is supposed to owe its origin to a religious house founded by a disciple of St. Patrick. It suffered much in the wars with the Danes and with the first English settlers; and in 1641 was burnt by the Scotch, under Munroe. In 1798 it was the scene of a sanguinary conflict between the King's troops and the insurgents, in which the former were victorious, but with the loss of Lord O'Neil, who commanded a regiment of militia. Pop., including that of the suburb of Parkgate, amounted in 1821 to 2,485, and in 1831 to 2,655, being half the pop. of the par. of same name in which it is situated. In 1834 the pop. of the par. was 5,543; of which 750 were of the E. church, 1,252 R. Catholics, and 3,541 Prot. dis. The town, lying in the bosom of a fertile valley, consists of two main streets, with several branches. Houses substantially built of stone, several exhibiting proofs of considerable antiquity. Its public buildings are the par. church, an ancient edifice, but lately repaired; a spacious R. C. chapel; two places of worship for Presbyterians; two for Methodists;

and one for the Society of Friends. There are schools for boys and girls, under the endowment of Erasmus Smith; and several private schools, in all of which nearly 700 children receive instruction; also a mendicity society, and a savings' bank. Previously to the Union the borough sent 2 m. to the Irish parl. The court-house, in the centre of the town, is used for holding general sessions of the peace in April and October, and petty sessions on alternate Tuesdays. The court-leet and court of record of the manor of Moylenny, — within which the town is, and at which the seneschal, appointed by the Marquis of Donegal, presides, — are also held here; the latter court decides pleas of debt to the amount of 20*l*. Part of the market-house is used as a bridewell. Close to the town is the residence of Viscount Ferrard, and about ½ m. distant is a perfect pillar-tower, 95 feet high, with a conical roof. The manufactures are those of linen, cotton, and hosiery. There are several bleach-greens in the neighbourhood; and two paper-mills, one of which first introduced into Ireland the process of making paper in webs like cloth, instead of separate sheets. There are also several flour and meal mills, and a brewery. 8,445 bushels of malt were manufactured here in 1836. Most of the grain is sent to Belfast, its conveyance being facilitated by the contiguity of Lough Neagh, where a small quay has been erected at the mouth of the Six-mile-water. Markets are held on Tuesdays for grain, and on Thursdays for general purposes; and fairs on Jan. 1, May 12, Aug. 1, and Nov. 12. No tolls are now levied. A branch of the Ulster bank was opened in 1836. The post-office revenue increased from 348*l*. in 1830, to 432*l*. in 1836. Two *caravans* and three cars convey passengers between Antrim and Belfast three times a week. The average number carried is 15 each trip. (*Stat. Survey; Railway Report.*)

ANTWERP (Ger. *Antwerpen*, Fr. *Anvers*), a marit. city of Belgium, cap. prov. and arrond. of same name, on the N. bank of the Scheldt, 26 m. N. Brussels, 32 m. E. Ghent; lat. 51° 13′ 16″ N., long. 4° 24′ 10″ E. It is in the shape of a bow, the arch being formed by the walls and the chord by the river, and is well fortified. A strong pentagonal citadel, built by the Duke of Alva, in 1567, and improved by the French, stands on the S. side of the town, which is farther defended by various forts on both sides the river. Though much declined from its former prosperity, Antwerp is a well-built fine old city, and is in various respects highly interesting. The principal street, Place de Meer, rivals any in Europe. It is about the width of Portland Place, but the variety and richness of the architecture render it far more magnificent. The older and narrower streets, bordered by lofty houses with their gables to the street, are singularly picturesque. Altogether it is supposed to contain about 11,200 houses, mostly built of stone; and had in 1846 a pop. of 88,487. The great boast of Antwerp is its cathedral, a superb Gothic structure, begun early in the 15th and not finished till the 16th century. Its spire, of the most beautiful and delicate workmanship, is said by Schreiber and others to be 466 feet high; but according to a statement in the Penny Cyclopædia this is 100 feet too much, the height being there affirmed to be only 366 feet! The interior corresponds in grandeur with the exterior, and it contains two famous pictures of Rubens; one of which, the Descent from the Cross, is generally regarded as his *chef-d'œuvre*. Of the other churches that of St. James, which contains the tomb of Rubens, St. Andrew, and St. Paul, are the most celebrated. All of them are adorned with fine paintings. The Bourse, or exchange, is one of the finest buildings of its class in Europe: it is said to have served as a model for the London exchange, burnt down in 1837. The *Hôtel de Ville*, a marble structure, rebuilt in 1581 after being destroyed by fire, is a magnificent fabric. The convent of the Recollets has been converted into a museum, in which is a superb collection of paintings, including many that were formerly scattered among the different churches and convents. It comprises some of the choicest specimens of the masters of the Flemish school; as Rubens, Van Dyke, Jordaens, Van Vien, Martin de Vos, &c. Antwerp has a theatre; an academy of painting (St. Luke's), which originated in the 16th century; a royal academy of the fine arts, established in 1817; an academy of sciences; an Athenæum, or college; Latin, medical, and naval schools; a gallery of sculpture; a public library with 15,000 vols.; a botanical garden; with various learned societies, and many good private collections of works of art. Its charitable institutions include several hospitals, asylums, and workhouses. It is the seat of the courts of assize for the province; of a tribunal of original jurisdiction, a commercial tribunal, &c. The people have every appearance of being in comfortable circumstances, and are quiet and orderly. The upper classes speak French, and the lower Flemish.

The manufactures are very various, and are of considerable importance and value. They comprise fabrics of silk and cotton stockings, thread and tape, linen, calico printing, &c. Embroidery, bleaching, and ship-building are extensively carried on. The business of sugar-refining employed, in 1834, from 500 to 600 individuals, and consumed about 6 millions kilogs. of raw sugar. The lapidaries of Antwerp are very skilful in the cutting of diamonds and other precious stones. Of 54 mills for various purposes, within the city in 1834, only *one* was wrought by steam, two by wind, and one by water, the rest being moved by horses! In this respect there is certainly much room for improvement.

The depth of water in the river opposite to the city is from 32 to 40 feet at ebb tide, with a rise at springs of from 12 to 14 feet; and as this depth is increased towards the sea, Antwerp is a peculiarly eligible situation for the formation of dock-yards and the building of large ships. Its capability in this respect did not escape the observation of Napoleon, who endeavoured to raise it to the first rank as a naval arsenal. His plans in furtherance of this object were judiciously devised on a very grand scale, and were zealously prosecuted. Two large basins, capable of admitting ships of the line, were excavated on the N. side of the town; one comprising an area of 17, and the other of 7 Eng. acres. Attached to these was an extensive dock-yard, with careening and repairing docks, storehouses, &c. all planned and executed in the best and most approved manner, and at an immense expense. On the downfall of Napoleon the dock-yard, with its fortifications, &c., was completely destroyed; and it was even debated whether the two great basins should share the same fate! Luckily, however, they were preserved; and being converted into commercial docks, are of the most signal service to the trade and navigation of the city. The fleet and naval stores in the arsenal, when it surrendered to the allied forces in 1814, were divided; two thirds being assigned to France, and one third to the King of the Netherlands.

Her fine river, and the numerous canals with which it is united, give Antwerp great advantages as a commercial emporium; and during the early part of the 16th century she was one of the first trading cities of Europe. Owing, however, to the ascendency and jealousy of the Dutch, and the supineness of her rulers, her foreign trade was nearly annihilated during the 17th and 18th centuries. But the navigation of the Scheldt, which had been formally closed by the treaty of Westphalia, was re-opened on

the occupation of Belgium by the French, and since the peace of 1815 the trade of the town has rapidly increased; and the probability seems to be, looking at the natural advantages of her situation, that it will go on increasing. The greater part by far of the foreign trade of Belgium centres here. The imports consist principally of coffee (16,000 tons), sugar (18,000 tons), cotton, tobacco, and all sorts of colonial produce; with cotton stuffs, wine, hardware, ashes, coal, hides, pepper, indigo and other dye-stuffs, &c. The timber used in ship-building is mostly brought by water from the interior. The exports consist chiefly of corn, linseed, flax, bark and madder, linen, lace, carpets, tallow, hops, &c.

The increase in the trade of Antwerp is evinced by the fact, that while only 681 ships arrived at the port in 1824, and 800 in 1825, there arrived in 1836 1,245 ships of the burden of 176,079 tons, and in 1837 1,426 ships of the burden of 225,030 tons. In 1836, 59 ships belonged to the port of the burden of 8,754 tons. In 1837, 6 new vessels were launched.

The railway from Brussels to Antwerp, 28½ m. in length, was opened throughout the whole distance in 1836. It has been signally successful; and will, no doubt, be of great advantage to both cities.

Antwerp has produced many distinguished men, being the birthplace of the painters Teniers, Van Dyke, Jordaens, and Crayer; the geographer Ortelius, the admirable engraver Edelink, &c.*

Antwerp is very ancient. Lodovico Guicciardini, in his *Descrizione di Paesi Bassi*, describes it in 1560 as a city of vast wealth and the most extensive commerce; adding, that it was no uncommon thing for 500 ships to enter and leave its port in a single day! And making every allowance for the exaggeration obvious in this statement, there is no doubt that it then enjoyed a more extensive foreign trade than any other city in the N. of Europe. But this prosperity was destined to be of short duration. In 1576 it was sacked and partly burned by the Spaniards. In 1585, it was invested by the famous Alexander Farnese, prince of Parma, who took it after a lengthened and memorable siege. After its capture the greater part of its merchants and principal people emigrated to Amsterdam and other towns in the United Provinces, carrying with them their capital, skill, and connections. The ruin of its trade dates from this epoch, and was consummated by the Dutch obtaining the command of the river, and by the stipulation in the treaty of Westphalia by which, as already seen, it was regularly closed. In 1794 it fell into the hands of the French, who made it the capital of the department of Deux Nethes, and held it till 1814. On the revolt of the Belgian provinces in 1830, the Dutch garrison continued to hold the citadel for the King of the Netherlands: and the latter having refused to make it be evacuated, agreeably to the determination of the great powers, a French army of 65,000 men, under Marshal Gerard, entered Belgium in November, 1832, to compel its evacuation. The details of the siege are well known. The trenches were opened on the 29th November; and after an obstinate, but not a skilful or energetic defence, the citadel surrendered on the 24th of December. (*Vandermaelen, Dict. Géog. de la Prov. d'Anvers*, pp. 4—20.; *Barrow's Family Tour in S. Holland, &c.* pp. 11—41.; *Murray's Handbook*; and *Private Information.*)

* It is stated in various publications that Rubens was a native of Antwerp; but in point of fact he was born at Cologne, on the 29th June, 1577, and was 10 years old when, on the death of his father, his mother, a native of Antwerp, carried him to that city.—(*Biographie Universelle*, art. *Rubens*.)

ANWEILER, a town of Bavaria, circ. of the Rhine, on the Queich, 7 m. W. Landau. Pop. 2,000. It has tanneries, and distilleries of Kirschwasser. Its castle, now in ruins, built by the emperor Frederic, was long the depôt of the jewels of the crown.

ANZIN, a village of France, dep. du Nord, in the immediate vicinity of Valenciennes. Pop. 4,182. This is the seat of the richest coal mines in France. They have been wrought since 1734, and some of the pits are as much as 1,500 feet in depth. The mines of Anzin, Vieux Condé, Furnes, &c., are said to employ in all above 4,000 work-people, and to furnish annually nearly 3,000,000 hectolitres of coal. The cost of its production is estimated at 65 cent. the hectolitre; and it is stated that a company at Anzin, for working the mines, clears annually nearly 3,000,000 fr. profit, in consequence of the increased production and price of coal caused by the high duties on foreign coal. (*Hugo, France Pittoresque*, art. *Nord.*)

AOSTA, a town of the Sardinian States, cap. prov. same name, at the confluence of the Butera with the Dora, at the opening of the two valleys of the Great and Little St. Bernard, 49 m. N. N. W. Turin. Pop. 7,000. It has straight broad streets; and many of the houses having gardens attached to them, it covers a large extent of ground. It is the seat of a council of justice, and of a bishopric; but is principally distinguished by its ruins of edifices constructed by the Romans, among which are a triumphal arch, a superb gate with 3 arches, the remains of an amphitheatre, &c. It received different names from the Romans, being sometimes called *Civitas Augusti*, *Augusta Prætoria Juliæ*, and *Augusta Salassiorum*; the latter from its having been the capital of the Salassii, subdued by Terentius Varro.

APENNINES, the name given to the mountain system which traverses the whole length of Italy.

> Umbrosis mediam qua collibus Apenninus
> Erigit Italiam, nullo qua vertice tellus
> Altius intumuit, propiusque accessit Olympo.
> Mons inter geminas medius se porrigit undas,
> Inferni superique maris: collesque coercent,
> Hinc Tyrrhena vado frangentes æquora Pisæ,
> Hinc Dalmaticis obnoxia fluctibus Ancon.
>
> *Lucan.* lib. i.

At its W. extremity this range is so closely connected with the Alps, that it may be considered as an extensive offset of that great system. It is difficult to determine where the Alps terminate and the Apennines begin: some think that the road over the Col di Tende (7° 40′ E. long.) forms the boundary; others assign for it that road which begins on the N. at Alessandria, runs in the valley of the Bormida to Acqui, Spigno, &c., and terminates on the coast at Savona, rising at its highest point to 4460 f. above the sea; others think that the sea Alps extend to the road which leads from Novi on the N. over the Pass of the Bocchetta (2550 f.) to Genoa on the coast.

The *Northern* Apennines extend from the Pass of the Bocchetta E., with a slight declination to the S. through three degrees of longitude (9° and 12°) to Monte Falterona, lying E. of Florence.

The *Central* Apennines extend from Monte Falterona S. E., with some bends to either side, as far as Monte Velino, or nearly two degrees of latitude (44° and 42°).

The *Southern* Apennines, beginning at Monte Velino, run E. S. E. between 42° and 41° N. lat. South of the last-mentioned parallel, between the towns of Conza, Acerenza, and Verosa, and at the sources of the Brandano, they divide into two branches; of which the E., extending first E. and then S. E., terminates at Capo de Leuca, opposite Corfu. The W. range runs between 41° and 39° N. lat., nearly S. S. E., and between 39° and 38° S. S. W., and terminates with the Capo dell' Armi on the S. extremity of the Straits of Messina.

The *Northern* Apennines, which, near the Pass of the Bocchetta, are of moderate height and breadth, occupy farther E. a greater space and rise to a higher elevation. The highest summits are between 10° and 11° E. long., where Monte Pellegrino rises to 5,161 f. and Monte Cimone to 6,975 f. Their northern declivity towards the plain of the Po is gradual and gentle; but towards the S. they lower with an abrupt and steep descent. On the S. they send off some lateral ranges, among which that which is called the Alpi Apnani is the most remarkable, and highest. It leaves the main range W. of Monte Pellegrino, and is separated from it by a considerable depression. It extends southward, and terminates at a short distance from the sea, near the towns of Massa and Carrara. It forms a mass of finely crystallised limestone nearly thirty miles long, and scarcely ever at a less elevation than 4,000 feet above the sea, rising often much higher, as in the Panni della Croce, at the S. extremity, 6,102 f., the Pizzo d'Ucello, at the N. W. end, 6,147 f., and Monte Sairo, near Carrara, 5,540 f. On the slope of the last-mentioned mountain the quarries are worked, from which, nearly for 2000 years, the finest marble has been extracted.

Besides the road over the Bocchetta, the N. Apennines are traversed by three roads; one begins at Parma, runs over the plain to Fornovo, and then in the valley of the Taro to the upper part of the range, which it crosses by the Pass of Cento Croci; it afterwards descends to Pontremoli, and then, mostly in the valley of the Magra, to the Gulph of Spezia. Farther E. is the road between Modena and Pistoja; it runs through Pavallo, Pieve Pelago, on the west of Monte Cimone, and traverses the range by the Pass of Fimalbo. The third road unites Bologna with Florence; it runs from Bologna over the plain of Lombardy to Lojano, crosses the range by the Pass of Pietra Mala, at an elevation of 3,284 feet, and descends into the valley of the Sieve, whence it passes over a lateral ridge of moderate elevation to Fiesole and Florence.

The *Central* Apennines may be divided into two parts. Between Monte Falterona (S. of 44°) and Monte Sibilla (S. of 43°) their general direction is S.E., and though their upper declivity is very steep, they do not seem to rise to a great elevation, one of the highest summits, Cima de Vernina, hardly exceeding 4,000 feet. Between Monte Sibilla and Monte Velino (N. of 40° lat.) the Apennines attain their greatest elevation. Monte Sibilla rises to 7,212 feet, and Monte Velino to 8,183 feet. Nearly at equal distance from either, and near the source of the Velino, two lateral ranges branch off, which are overtopped by high summits; on that which runs to the S.E., towards the Adriatic Sea, is the Gran Sasso d'Italia, whose summit, the Monte Corno, attains 9,521 feet above the sea, and is the highest in the range. On the W. lateral range is the Terminello Grande, 7,034 feet above the sea. Numerous are the lateral ridges which branch off from the Central Apennines. Those running towards the Adriatic Sea, form nearly right angles with the principal range, preserve for some distance a considerable elevation, and lower afterwards rapidly but gradually. They terminate with hills, at no great distance from the shore. The lateral ridges, which traverse the much more extensive country between the Apennines and the Mediterranean, run mostly parallel to the principal range, so that nearly all the rivers of this region run in valleys extending S.E. or N.W., and form as it were terraces of different elevation, by which the country gradually lowers towards the sea. In these lateral ridges some summits attain a considerable elevation, as Monte Amiata, W. of Radicofani (S. of 43° N. lat.) which rises to 5,794 feet.

Two roads traverse the N. portion of the Central Apennines. The northern begins on the side of the Adriatic at Fossombrone, on the Metauro; runs S. to Cagli, and passes over the range between this place and Sigillo, whence it continues to Nocera and Foligno, and hence by Spoleto, Terni, and Narni, to Rome. The S. road begins at Ancona, runs S. to Loreto, and hence W. to Tolentino and Belforte; between the last-mentioned place and Foligno, it passes the range at some distance N. of Monte Sibilla. Only one road traverses the southern higher part of the Central Apennines. It begins on the N. at Terni, on the Nera, a tributary of the Tiber, passes hence to Rieti and Civita Ducale, on the Velino, whence it traverses the range by a long mountain-pass, which terminates near Aquila, on the Aterno, and thence the road continues to Sulmona.

The undivided portion of the S. Apennines resembles, in part, the Central Apennines: its offsets, towards the Adriatic, run off at nearly right angles; but on the W. it has a lateral ridge, which runs parallel to it for a distance of more than 50 miles; and between it and the principal range extends a longitudinal valley, drained by the Volturno, and its tributary, the Calore: after these rivers have united, they break through the lateral range, and enter into the plain of Terra di Lavoro. The principal range contains some high summits, as Monte Meta 7,264 f., Monte Miletto 6,720 f. above the sea. The highest part, however, seems to be the Matere, an enormous mass of chalk rocks, 40 m. in circ., situated at the sources of the Biferno, nearly in 41½° N. lat. On some of its summits snow is stated to be found the whole year.

Near the sources of the river Calore a lateral branch runs off nearly due W., which terminates with a high ridge on the peninsula S. of the Gulph of Naples. It contains the Monte S. Angelo di Castelamare, which rises to the height of 4,688 feet. The W. extremity of this ridge is the Punta della Campanella, opposite the rocky island of Capri. Monte Gargano, a promontory projecting into the Adriatic, is commonly considered as the E. extremity of another lateral ridge of the Apennines, but it is quite unconnected with that range, being separated from its nearest offset by a low plain, many miles in breadth.

This range is traversed by two roads: one runs from the town of Naples to Capua and Presenzano, and passes over the lateral ridge enclosing the valley of the Volturno to Venafro and Isernia. Between Isernia and Castel di Sangro it crosses the principal range of the Apennines, and from the last-mentioned place it continues to Sulmona and Chieti. The second road strikes off E. from Naples, and passes over the first range by the pass of Monte Virgine; it then descends into the valley of the river Calore, in which it traverses the towns of Avellino and Ariano. E. of the last-mentioned town is the principal range of the Apennines, over which the road passes to Ponte di Bovino, and then enters the great plain of Puglia (il Tavolieri della Puglia), and continues to Foggia, Bari, &c.

The most easterly ridge, arising from the bifurcation of the Apennines, preserves a considerable elevation as far as the town of Altamura; but E. of that it is continued only by a series of hills, called *Le Murgie*, which extend through the whole of the peninsula lying between the Adriatic and the Gulph of Taranto. They are interrupted in several places, and terminate at Capo di Leuca.

The other chain runs directly S., and approaches by degrees the shores of the Mediterranean Sea: on the E. side of the Gulph of Policastro it comes close to it, and continues to run along the sea as far as the Gulph of S. Eufemia, where it suddenly turns to the E., but soon again to the S., in which direction it skirts the eastern shores of Calabria, between the Gulph of Squillace and Capo Spartivento. In this chain are some elevated summits. Monte Pollino (near 40° N. lat.) rises to 7,067 feet above the sea, and Monte Alto, the highest summit of the great mountain mass, with which the Apennines terminate on the Straits of Messina, is 4,380 feet above the sea.

Geology.— The N. parts of the Apennines are, in general, composed of sandstone and chalk. The former is known in Toscana by the name of *macigno*, or *pietra serena*, and several high mountains are composed of it: others consist of chalk, and others of macigno and chalk together. In the S. ranges the chalk formation predominates, especially on the W. side; on the E. declivity sandstone occurs in a few places. A great portion of the hilly districts, which extend to the W. of the range, and intersect the plains along the Mediterranean, is composed of lava and other volcanic productions. This region extends from Monte Vesuvius on the S., to the river Ombrone, in Tuscany, on the N. Near this river is Monte Amiata and Monte Radicofani (3,060 feet high), both volcanic mountains. A volcanic country encloses the lakes of Bolsena and Bracciano, and the rocky masses near Viterbo are also of volcanic origin. S. of the Tiber other volcanic rocks of considerable extent and elevation form the mountains near Albano: here Monte Cavo rises to 3,110 feet above the sea. The country round Rome is overspread with volcanic matter; and the Seven Hills themselves are partly composed of it. A third volcanic region occurs N. of Capua, near Teano, where several heights rise to a considerable elevation, especially Monte St. Croce. Mount Vesuvius and the volcanic country round the town of Naples, constitute the most southerly region of the volcanic tract which skirts the W. side of the Apennines. On the E. side of the Apennines, only a single extinct volcano has been found;—it is Monte Vulture, near Melfi, not far from the place where the bifurcation of the range takes place.

The lower declivities of the principal range, and a great part of the lateral ranges, where they do not rise above an elevation of 3,000 feet, are commonly clothed with woods, especially evergreen oak and chesnut. The upper parts of the principal range have, in general, an arid soil, or are formed of bare rocks, of fantastic forms, and destitute of vegetation, except a few stunted bushes. The whole range is poor in metals, none of them occurring, except iron ore in a few places, and of bad quality. But in many places excellent marble is met with, and in a few it is worked.

The higher parts of the Apennines begin to be covered with snow in October, and they are not entirely free from it before June. It is deserving of remark, that the quantity of rain falling in the countries E. of the range is much less than that with which those on the W. are favoured. In the plain of Puglia the rain amounts only to about 19 inches annually, whilst in that of Terra di Lavoro it is 27 inches.

The countries lying W. of the range are subject to frequent earthquakes, and even some parts of the range itself are visited by them. An earthquake in the country lying about Mount Matese occurred in 1805, by which 3,274 persons lost their lives, and 1,513 were wounded.

APENRADE, a sea-port town of Denmark, at the bottom of a bay of the same name, on the E. coast of Sleswick, opposite to the N. end of the island of Alsen, lat. 55° 2′ 57″ N., long. 9° 26′ 38″ E. Pop. 3,800. It is the cap. of a bailiwick. Its port is shallow, and not very safe; but it has notwithstanding a considerable trade in the export of agricultural produce, with distilleries, breweries, tanneries, &c.

APOLDA, a town of Saxony, circle of Weimar-Jena,

2½ m. N. E. Weimar. Pop. 3,300. It has a castle, a college, with a bell-foundry, fabrics of cloth and cassimere, and distilleries. Its fairs, 4 annually, are well attended.

APPELDOORN, a town of the Netherlands, prov. Gueldenland, 17 m. N. Arnheim. Pop. 3,000.

APPENZELL (CANTON OF), a canton in the N. E. part of Switzerland, the 13th in the Confederation. It is completely inclosed within the territory of St. Gall, and is shaped somewhat like a ham, the knuckle end stretching N. E.-ward; area, 153 sq. m. (7·2 Germ.). Pop. 49,876; being next to that of Geneva the most thickly peopled of the cantons. Its surface consists chiefly of mountain ranges; those of the S. belonging to the higher Alps; the principal of which, the Hoch Sentis, is 8,109 ft. high, but having its summit covered with perpetual snow: most of the others belong to the Lower or Fore-Alps (see SWITZERLAND), which inclose numerous small valleys. It is watered by several rivulets, the chief of which is the Sitter, running through its centre; there are also several small mountain lakes. The prevailing geological formations are calcareous; but pudding-stone and sandy or clay soils are likewise found. Climate cold and variable, but not unhealthy. The mineral riches of the canton consist of peat and coal: salt, chalybeate, and sulphurous springs are met with, some of which, as those of Weissbad near Appenzell, and Waldstatt near Herisan, are used as baths. Its forests, mostly of pine and fir, originally extended over the whole surrounding country; but their extent has been greatly diminished with the increase of population and cultivation; and wild animals, game, fish, &c., have become proportionally rare. Before the Reformation, the whole canton was under one government; but at that epoch, part of the inhab. having embraced the Protestant faith, while the other part continued Catholics, violent disputes were kindled between them, which, after much contest, were at length settled by a singular compromise. By an agreement in 1597, the canton was divided into two portions—*Rhodes Interior* and *Rhodes Exterior*. It was stipulated that the former should be appropriated to the Catholics, and the latter to the Protestants. Accordingly, the two parties separated, and formed two independent democratical republics, having each a distinct system of government, police, and finance. Exterior or Outer Rhodes comprises about two-thirds of the whole canton (its N. and W. parts), and has 40,080 inhab., engaged chiefly in manufactures; Inner Rhodes has 9,796 inh., principally agriculturists. Both republics have but one vote in the Swiss diet, and send their deputy by turns. Except in a few districts at the N. E. extremity, Appenzell produces neither corn nor wine; but the mountains abound with rich pastures, and cattle-breeding forms the chief occupation of the Inner Rhodes. 15,000 cows and oxen, 600 sheep, and 2,000 goats are fed there annually, it being a practice to purchase them when lean, and sell them again when fattened: cheese, beer, and a liqueur made from a fine kind of black cherry, are the other products of the agricultural districts. The manufactures of the Outer Rhodes are cotton and linen goods, and embroidery: there are about 10,000 looms, by means of which are woven an average of the same number of pieces of cloth 16 Fr. ells in length. Machinery has not been introduced: weavers work from 13 to 14 hours a day. They are dispersed over the country, and combine with their business as manufacturers that of small farmers, being, in each case, assisted by their families.

The houses are distinguished by neatness, convenience, and cleanliness; and being surrounded with gardens and hedges, and thickly scattered over the country, give it somewhat of an English aspect. Weavers generally earn from 2 to 5 florins (3*s*. 8*d*. to 9*s*. 2*d*.) per week.

Outer Rhodes has communal and lesser councils, and a grand council, composed of the principal magistrates of each commune, which assembles twice a year, and exercises the executive power. The grand council proposes the laws, and submits them for approval to the *landesgemeinde*, or general assembly of all the males of the republic above 16 years of age, who meet *armed* on the last Sunday in April, in the open air, and either sanction, or put their *veto* on the laws proposed. Bankrupts, paupers, &c., are precluded from voting; and penalties are imposed on others who do not attend. The government of the Inner Rhodes is similar, except that the clergy take more part in it, and that none under 18 years of age have the right of voting in the general assembly. Public schools are universally established; in which, after the rudiments of education, arithmetic, drawing, and singing are taught. Music is very generally cultivated. Savings' banks and poor-houses are established in every parish, and there are numerous orphan asylums and other charitable institutions. Appenzell furnishes 972 men to the federal army, and contributes 9,220 Swiss francs a year to the funds of the union: the expenses of the canton are very trifling, as the services of the magistrates, &c., are gratuitous. The tax on salt is the only indirect one; the poor are not taxed at all. The Appenzellers of the Outer Rhodes are of German, those of the Inner Rhodes chiefly of more southern lineage; all, however, are lively, intelligent, and exhibit much mechanical ingenuity, and, with few exceptions, are said to be moral, well-behaved, prudent, and simple in their mode of life.

In the 7th or 8th century, the Frankish kings bestowed this country on the abbots of St. Gall, and it remained subject to them until 1401, when the inhabitants revolted, and, with the assistance of their neighbours of Glarus and Schwytz, achieved their liberty, defeating the Austrians and the forces of the abbot in several engagements. In 1513 it was admitted into the confederation, with the history of which it is subsequently connected.—(*Coxe's Switzerland*, Letter 4.; *Picot*, *Statistique de la Suisse*, 1830; *Helvetic Almanack; Bowring's Report*, *&c*., pp. 21—27.)

APPENZELL, a town of Switzerland; cant. Appenzell, cap. Inner Rhodes, and seat of its executive council, in a pleasant valley on the left bank of the Sitter, 9 m. S. St. Gall. Pop. 1,400. It is dirty and ill-built; has a Gothic church, built in 1069, which contains various banners taken in former wars by the Appenzellers; two convents; a council house; and two bridges over the Sitter. The annual general assembly of the republic is held here. About 2½ m. S. are the baths of Weissbad.

APPIN, an extensive district of Scotland, co. Argyle, which see.

APPLEBY, a borough, m. town, and par. of England, co. Westmoreland, of which it is the cap., 230 m. N. N. W. London, 28 m. S. S. E. Carlisle. Pop. of town, 837, of par. 1459. It stands principally on the left bank of the river, on the slope of a hill, and consists chiefly of one broad street, having the castle at the upper end, and the parish church at the lower. The former, the property of the earls of Thanet, is very ancient, part being either of Saxon or early Norman architecture; but it was mostly rebuilt in 1686. The church was rebuilt in 1655, by Lady Pembroke, a great benefactress of the town, from whom the castle descended to the Thanet family, and has a fine monument to her ladyship. There is a good market-house erected in 1811; and a town-hall and gaol on the right bank of the river, which is here crossed by an old stone bridge. Appleby has a grammar school, founded in the reign of Elizabeth, open to all children belonging to the town on payment of a fee of 10*s*. a year, and having attached to it 5 scholarships at Queen's college Oxford, and a right to participate in as many exhibitions in the same college. It has also an almshouse, founded by Lady Pembroke, for 13 poor widows. Previously to the passing of the Reform Act, when it was disfranchised, Appleby returned 2 m. to the H. of C.; but they were in reality the nominees of the Thanet and Lonsdale families. The town is without manufactures, but has a good market.

APRICENA, a town of Naples, prov. Capitanata, 7 m. N.N.E. St. Severo. Pop. 3,000.

APT (an. *Apta Julia*), a town of France, dep. Vaucluse, cap. arrond., on the Calavon, 29 m. E. S. E. Avignon, lat. 43° 2′ 29″ N., long. 5° 23′ 52″ E. Pop. 5,958. It is situated in a spacious valley, surrounded by hills, covered with vines and olives. The walls, originally constructed by the Romans, and repaired by the comtes de Provence, still partially exist. The older streets are narrow, crooked, and the houses mean; but the more modern streets are broad and straight, and the houses comparatively good. Principal public building, cathedral, of great antiquity, and remarkable for its subterranean chapels, &c. A bridge over the Cavalon, of a single arch, is said to be *étonnante par sa hardiesse*. There are establishments for the spinning of cotton and silk, with fabrics of cloth, hosiery, cotton-stuffs, hats, and earthenware; the latter, and the *confitures* made here, being highly esteemed. Several remains of Roman works are found in the town and its vicinity. (*Hugo*, art. *Vaucluse*, &c.)

APULIA, PUGLIA, or APUGLIA, a portion of S. Italy, lying between 39° 45′ and 41° 46′ N. lat., and 14° 57′ and 18° 34′ E. long., comprising the S. E. provinces of the k. of Naples; viz., Capitanata, Bari, and Otranto; having N. W. the prov. Sannio, N. E. the Adriatic, S. E. the Ionian Sea, S.W. and W. the Gulph of Taranto and the provs. of Basilicata and Principata Ultra. Area, 8,092 sq. m. Pop. (1833), 1,079,700. It has, at its S. extremity, the sub-peninsula of Otranto, which forms the heel of the fancied Italian boot; and on its N. E. shore the promontory of Gargano. Although it has 440 m. of coast, it is singularly deficient in bays and harbours, and the shores are low; forming in both respects a great contrast to the S. W. shores of Naples.

Puglia presents also a striking contrast to Calabria, and the S. W. prov. of Naples, in being almost wholly a plain country, and indeed containing by far the most considerable extent of level lands of any tract of the same size S. of the Po. It is divided into *Puglia piana*, and *Puglia montana*; the latter is composed of the Apennine chain, 155 m. in length, which, emerging from

Basilicata, runs through the Terra di Bari and Otranto to the extremity of the latter, and of the Garganese, and other branches chiefly in the N. and W. of Capitanata. The mountains of Bari and Otranto are much less elevated than the Apennines in any other region. The plains in the N. are pretty well watered while those of the central and S. parts are remarkably destitute of water, forming another contrast to the sub-peninsula of Calabria on the opposite side of the Gulph of Taranto. Chief rivers, Candelaro, with its tributary streams, Radicosa, Triolo, Salsola, and Colone; and the Cervaro, both of which run into the Lagune Pantano Salso; the Fortore, Carapella, and Ofanto, which discharge themselves into the Adriatic, all in the prov. of Capitanata; the latter river is the only one not dried up during summer. On its banks near Canne, was fought the famous battle of Cannæ (see CANNÆ). Thence to C. St. Maria di Leuca, a tract 160 m. in length, there are only a few insignificant streams. There are no lakes, but several lagunes of some size, along the shore round and near M. Gargano, as those of Lesina, (14 m. long, and 3 m. broad), Varano, Pantano Salso, and Salpi; and a few smaller ones near Taranto.

Apulia is divided into the following provinces: —

Capitanata. Area, 3,714 sq. m. Pop. 296,793. Ch. towns, Foggia 20,687 inh., Manfredonia, M. St. Angelo, Termoli, Viesti, Ascoli.

Terra di Bari. Area, 1,712 sq. m. Pop. 425,706. Ch. towns, Bari, 18,937 inh., Barletta, 17,695 inh., Monopoli, 15,535 inh., Trani, 13,787, Bitonto.

Terra d'Otranto. Area, 2,666 sq. m. Pop. 357,205. Ch. towns, Lecce, 14,081 inh., Taranto, 14,111 inh., Gallipoli, Brindisi, Otranto.

Aspect, and Agriculture. — Much of the land is uncultivated and abandoned to wandering herds of oxen and buffaloes: in other parts, a good deal of corn of different kinds is grown; but maize does not generally flourish, owing to the dryness of the soil. Corn and wool are the chief products of Capitanata, which also produces plenty of wine and oil. In the neighbourhood of Lucera (says *Craven*, 1821), of 27,000 versaras of land (the versara = 3 acres), 1,800 were sown with corn; 3,000 with barley; 2,500 with oats; 800 with beans; 5,500 fallow; 700 covered with olives, vines, and fruit-gardens; the rest in pasture. In this prov. lands are let in large tracts, and a *casale* or large house established upon each farm, in which the *agente* and labourers reside. There are also extensive *tavoliere* or pasture lands belonging to the crown, capable of feeding as many as 1,200,000 sheep. The centre of Capitanata has a sandy soil, and consists chiefly of pasture. From Foggia to Manfredonia, this tract abounds with thistles, asphodels, wild artichokes, and giant-fennel, of the stalks of which latter, chair-bottoms and bee-hives are made. On the banks of the Cervaro, the mountains are clothed with fine woods, and thickets of flowering shrubs; near Bovino the plain is wooded with low stunted oaks; a forest of oak, manna and other ash, pitch-pine, chestnut, and evergreens (but none of them large), adorns M. Gargano; the country is well cultivated at its foot. Capitanata produces excellent vegetables, wine, and fruit of all sorts, liquorice and tobacco. A great deal of wine is produced in the Terra di Bari; the vines are cut low, but not staked as in France; it is fertile in corn, oil, saffron, almonds, tobacco, mulberry-trees, liquorice, and capers, generally without manure, though in some parts the soil is but indifferent. Its sheep (all of a dark colour) furnish the best wool in Apuglia; goats and swine are kept in large numbers. This prov. yields also, annually, 1,660,000 *moggie* of salt, and 12,000 cwts of nitre. The T. d'Otranto "would be one of the richest provinces in Italy, were it not for its wretched administration." (*Rampoldi*.) Its tobacco is as good as that of Seville, but only a given quantity is allowed to be cultivated. It yields wine, olives, cotton (good and abundant), wheat sufficient for the inhab.; the arable lands are well cultivated, but there are no artificial pastures, and much of the land lies waste. The chief natural disadvantage it labours under, is the want of water, and the rain that falls is therefore carefully preserved in subterraneous cisterns.

The hilly parts of Apuglia feed many flocks, and produce an abundance of corn, oil, cotton, and flax; which latter is exported to Venice, Germany, and Switzerland. The shore is generally sandy, uncultivated, and covered with bushes, wild prunes, myrtles, ericæ, &c., that serve as food for oxen and buffaloes. The whole country, in Bari and Otranto, abounds with aromatic plants; and both the wines, and flesh of some of the animals, as the buffaloes, have an aromatic flavour. Puglia is famous for its deer and other game; the sportsmen run down hares with greyhounds, and pursue the wild-boar with lurchers and mastiffs, riding armed with a lance and brace of pistols. The shores about Taranto furnish large quantities of shell-fish. The viper, asp, a species of large black snake, the tarantula, &c., infest this part of Italy.

The dyeing of wool is an important branch of industry at Taranto; the internal commerce of Apuglia, of which Foggia is the head-quarter, consists chiefly in the sale of wool, cheese (from sheep's milk), and corn.

The country is quite healthy, the people industrious, peaceable, and handsome. Many of them in various districts are Greeks or Albanians; these being, in the Terra d'Otranto, ½ of the whole: they preserve their original customs, dress, and religion, and occupy themselves in cotton-weaving. Brigandage is prevalent about Bovino, and on the borders of Sannio, but not in other parts.

This territory was originally called Daunia, Iapygia, Peucetia, and Messapia, and formed part of Magna Græcia. Having fallen under the Roman dominion, Augustus made it the 3d prov. of Italy, under the name of Apulia. After the fall of the empire in the W., it was occupied successively by Odoacer, Theodoric, and the Greek emperors, till, in the 8th century, it was wrested from the latter by the Arabs; and from them in turn by the Normans, in the 11th century; Robert Guiscard styling himself first Count or Duke of Apuglia. It continued in the possession of his successors till the death of Manfred, at the battle of Benevento, in 1282, when it fell under the dominion of Charles of Anjou, as well as the rest of the Neapolitan territory. Its subsequent history belongs to that of Naples. (*Rampoldi, Corografia dell' Italia; Swinburne's Travels in the Two Sicilies; Craven, Tour in the S. Prov. of Naples; Weimar Almanack*, 1838.)

· APURE, a river of S. America, Colombia, one of the principal tributaries of the Orinoco, which see.

AQUAMABOE, a territory of W. Africa, part of the state of Dahomey, which see.

AQUAPIM, a territory of W. Africa, part of the empire of Ashantee, which see.

AQUILA, a city of the Neapolitan States, cap. prov. Abruzzo Ultra, on a hill at the foot of which flows the Alterno, lat. 42° 27′ N., long. 13° 28′ E. Pop. (1832), 9,194: viz. 4,511 males, 4,683 females.* It is surrounded by walls, and ranks as a fortified place of the 4th class; is pretty well built; has a cathedral, and various churches, convents, and hospitals; is the seat of a bishopric, of a civil and criminal court, a chamber of finances, &c. A royal college, established at Sulmona in 1807, was transferred thither in 1816: it was soon after raised to the rank of a lyceum, differing little from a university, and is attended by about 400 pupils. There is also a secondary school, established in 1768, and various other seminaries. A handsome new theatre, built on the model of that of Vicenza, was opened in 1832. Excellent water, conveyed from the Monte San Giuliano, about 3 miles distant, by an aqueduct, constructed at a great expense, during the flourishing period of the city, is liberally distributed to some fine public fountains, as well as private houses. The town has manufactures of linen and wax; and a considerable trade in saffron raised in its neighbourhood.

Aquila was founded in 1240; and rose in no long time to be one of the richest, most populous, and powerful cities in the kingdom. But the combined influence of misgovernment, pestilence, war, and earthquakes, from the latter of which it suffered severely in 1703 and 1706, have reduced it to its present state of decadence. Latterly, however, it has been improving. (*Del Re Descrizione delle Due Sicilie*, ii. pp. 115—300.)

AQUILEIA, a small town of Austrian Italy, near the bottom of the Adriatic, 18 m. S. S. W. Gorizia, lat. 45° 45′ 32″ N., long. 13° 23′ E. Pop. circa 1,500. It is surrounded by a wall and a fosse, and is connected by a canal with the port of Grado, the residence of a few fishermen. This is all that now remains of one of the principal cities of ancient Italy — its chief bulwark on its N. E. frontier, and the great emporium of its trade with the nations of Illyria and Pannonia! Ausonius assigned to it the ninth place among the great cities of the empire: —

> Nona inter claras, Aquileia cieberis, urbes,
> Itala ad Illyricos objecta colonia montes,
> Mœnibus et portu celeberrima.
>
> *Claræ Urbes*, 7.

Aquileia withstood a siege by Maximinus; and in 452 it opposed a vigorous and gallant resistance to Attila; but that ferocious barbarian having carried it by assault, razed it to the ground, the destruction being so complete, that the succeeding generation could scarcely discover its site! The unhealthiness of its situation has caused the miscarriage of the attempts that have been made for its restoration. In 1751, two archbishoprics were formed out of the patriarchate of Aquileia. (*Cramer's Ancient Italy*, i. p. 129.; *Gibbon*, cap. 35.)

ARABIA, an extensive peninsula, comprising the

* The population is generally set down in late works at between 13,000 and 14,000. This, however, is an error, and no doubt refers not to the town but to the *circondario* (arrondissement), which contains a considerable extent of country, and some small towns. Its population in 1832 was 14,639.

S.W. portion of the Asiatic continent, situated between the rest of Asia and Africa, and between 12° 22′ and 33° 45′ N. lat., and 32° 50′ and 58° 42′ E. long. It is bounded on the S. and E. by that part of the Indian Ocean called the Arabian Sea; on the N.E. by the Gulphs of Oman and Persia; and on the W. the Arabic Gulph, or Red Sea, forms its boundary from the Straits of Bab-el-Mandeb to the Isthmus of Suez. The N. limit is less clearly defined; the desert in which Arabia terminates in this direction being conterminous with that of Syria, and no well-defined line of demarcation existing between them. The most natural boundary on this side appears to be a line drawn from the head of the Persian Gulph to the most westerly point of that of Suez, coinciding very nearly with the 30th parallel of N. lat.; but it is usual to include in this country a considerable part of Irak Arabi, and the desert plains S. and E. of Syria and Palestine; and under this view, the N. boundary follows very nearly the course of the Euphrates. The countries contiguous to Arabia are, on the N. the Asiatic provinces of the Turkish Empire; on the W. Egypt and Abyssinia; on the S. Adel, the most easterly portion of Africa; and on the N.E. Persia. On the E., except along the Persian Gulph, the nearest land is Hindostan. Its *greatest* length from Suez to Cape Ras-al-Hhad is 1,690 m., and its *greatest* width from the Straits of Bab-el-Mandeb to the town of Keham on the Euphrates 1400 m. Its area, measured on *D'Anville*'s map, is about 1,100,000 sq. m. (Compare *D'Anville, Carte d'Asie*, with *Travels of Ali Bey*, ii. p. 9.; *Map of the Coast of Arabia*, same work, ii. p. 27.)

Divisions, Ancient and Modern. — From the earliest period of authentic history, Arabia has been the connecting link between the E. and the W. world. It was the mart whence the Phœnicians drew the supplies of gold and silver, gems and pearls, spices and perfumes, with which they furnished the countries of Europe. And even before this more extensive intercourse existed — before Phœnicia was a nation, or her "traffickers princes," the Arabian caravan was seen upon the Nile, and on the borders of Palestine, laden with the most rare and precious products. (Genesis, ch. xxxvii.) That these were only partially, if at all, native products of Arabia, is sufficiently proved; but the W. nations, who received them from Arabia, looked at first no farther for their origin. Exaggerated notions were formed of the beauty of a land whence such precious luxuries were procured, and the term Ευδαιμων, *Felix*, or the Happy, became connected with its name. But when, in the course of time, the Greeks first, and then the Romans, came to this fancied paradise, they found the soil, wherever they essayed to enter the country, a burning sand or an unfruitful rock. The possibility of an erroneous theory was, however, seldom admitted by ancient inquirers. Arabia was still believed to be the Happy or Fortunate, but its blissful regions were supposed to be separated from the less favoured portions of the earth by an absolutely sterile zone or belt. All the country E. of Egypt had, indeed, been known, time immemorial, by the common name *Arabia*; and this designation being still retained, the inhospitable tracts upon the N. and W. received the distinctive epithet of Ερημος, *Deserta*, or the Desert. (*Herodotus, Thalia*, §§ 107—113.; *Diodorus Siculus*, lib. ii. pp. 159—167., lib. iii. pp. 211—216.; *Strabo*, lib. xvi. pp. 767—781.; *Pliny. Nat. Hist.*, lib. v. § 11.)

Ptolemy subsequently added a third division to Arabia, including the country between the Red and Dead Seas, and between Palestine and the Euphrates: in other words, he gave to his Arabia the N. limit which, since his time, it has generally been considered as retaining. To this new district he gave the name of *Arabia Petræa*, from Petra, a town on the lesser Jordan, south of the Dead Sea, and the capital of the Nabatheans. (See PETRA.) This division of the country by the Greco-Roman geographers was universally adopted, not only by their contemporaries, but by all the western nations in the middle ages. On the revival of learning, the great work of Ptolemy was taken as the text-book of geography, and his arrangements were universally adopted. Even Gibbon was deceived by them. "It is singular enough," he remarks, "that a country whose language and inhabitants have ever been the same, should scarcely retain a vestige of its old geography." (*Dec. and Fall*, v. chap. 50.) But he forgot that this "old geography" was the invention of foreign nations, possessing neither political power nor influence over the wandering Arab tribes, in almost total ignorance of the settled portion of the Arab people, and, consequently, without the means of making their divisions known among the natives, still less of causing them to be adopted. The fact remarked by Gibbon of the identity of the people and language in ancient and modern times, leads, indeed, irresistibly to the conclusion that an "*old geography*," of which the natives retain neither vestige nor recollection, never had an existence among them, and that the ancient *Arabic* divisions of this country are as identical as the people and the language with those existing in the present day. These native divisions are the following: —

1. *Bar-el-tour-Sinai* (the Desert of Mount Sinai), nearly identical with the *Arabia Petræa* of Ptolemy. It comprises the small peninsula between the Gulphs of Suez and Akabah, and the country northward as far as the Dead Sea. This is the region so celebrated in Sacred History as the scene of the wanderings of the Jewish people; but, though it may be gathered from the Mosaic account that it was then the residence of several warlike nations, it is, at present, nearly uninhabited. (*Niebuhr*, par. ii. p. 345.)

2. *El-Hedjaz*, or the *Land of Pilgrimage*, occupies a considerable portion of the coast of the Red Sea. Its boundaries are E. *Nedsjed*, W. the *Red Sea*, S. *Yemen*, and N. *Bar-el-tour-Sinai* and *Nedsjed*. This district acknowledges a sort of doubtful authority in the grand Signior as protector of the holy cities (Mecca and Medina); but those cities, and the whole southern part of Hedjaz, called *Beled-el-Haram* (Holy or Forbidden Land) were, till within these few years, under the government of the sheriff of Mecca. The sheriff's power has, however, of late been much shaken; first by the Wahabees, a fanatical sect of Nedsjed, and more recently by Mehemet Ali, Pacha of Egypt. (*Niebuhr*, par. ii. p. 302.; *Ali Bey*, ii. pp. 29, et seq.; *Burckhardt's Travels in Arabia*, passim.)

3. *Nedsjed* constitutes the central part of the peninsula. It is the largest, but the least known, of all the divisions. It is bounded N. by the Syrian Desert, E. by *Lachsa*, S. by *Yemen*, and W. by *Hedjaz*. (*Niebuhr*, par. ii. p. 296.; *Burckhardt*, vol. ii. p. 396, et seq.)

4. *El-Hassa-Lachsa*, otherwise *Lachsa, Hadsjar*, or *Bahrein*, lies upon the Persian Gulph. Its boundaries are, towards the N. the country of *Irak Arabi*, W. *Nedsjed*, S. *Oman*, and E. the Persian Gulph. (*Niebuhr*, par. ii. p. 293.)

5. *Oman* is bounded N. by the Persian Gulph and *Lachsa*, E. by the Indian Ocean, W. and S. by vast sandy deserts (parts of *Nedsjed* and *Hadramaut*), in the midst of which it seems to rise like a little knot of mountains out of an extensive sea. (*Niebuhr*, par. ii. p. 255.)

6. *Hadramaut* forms the S.E. division of Arabia, and is bounded N. and N.E. by the Deserts of *Nedsjed* and *Oman*, S. and S.E. by the Indian Ocean, and W. by Yemen. (*Niebuhr*, par. ii. p. 245.)

7. *Yemen*, the southern part of the peninsula, has the Red Sea on its W. side, the Straits of Bab-el-Mandeb and the Indian Ocean on the S., *Hadramaut* on the E., and *Nedsjed* and *Hedjaz* N. (*Niebuhr*, par. ii. p. 160.)

Yemen and Hadramaut point out the situation, if not the extent, of the *Arabia Felix* of Strabo and Ptolemy. The inhabitants regard themselves as the chief of all the Arabian people, calling their country *Bellad-el-Ulm* or *Bellad-ed-Din*, "The birthplace of the sciences and of religion." (*Niebuhr*, par. ii. p. 247.) But the *Arabia Felix* of Greek geography seems to have extended much farther N., comprising the whole of Hedjaz and Oman, together with the greater part of Lachsa, and a very considerable portion of Nedsjed. (*Strabo*, lib. xvi. cap. 3. p. 765.; *Ptolemy*, lib. vi. cap. 7. p. 112.) The *Arabia Deserta* included the N. parts of Nedsjed and Lachsa. In Ptolemy's map this district is separated from the former by an imaginary range of mountains, running from the Persian Gulph to another range, equally imaginary, supposed to form the boundary between *Arabia Felix* and *Arabia Petræa*. The position of this last-mentioned province has been previously pointed out.

Physical Features of the Country, Mountains, and Plains. — The name (*Nedsjed*) of the central and largest division of Arabia signifies high or elevated ground; and the whole peninsula, as far as at present explored, consists of an elevated table-land, with a general inclination towards the N. and E.; and surrounded by a belt of low land, varying in width from one or two days' journey, to a single mile or less. (*Niebuhr*, par. ii. pp. 160. 296, &c.; *Burckhardt*, ii. p. 397, et seq.) This flat belt is called *Gaur* or *Tehama*, Arabic terms for a plain country; and the W. part of *Yemen*, on the Red Sea, has received the latter name as a distinctive appellation. A range of mountains, a continuation of the Syrian Lebanon, runs S. from the borders of the Dead Sea to Yemen; the face of which is much more steep and precipitous towards the W. than the E.; so that the great plain which commences immediately to the E. of these mountains is very considerably raised above the level of the sea. (*Burckhardt*, ii. p. 146.) The hills of Oman seem to form the E. shoulder of this table-land, and the plains of Lachsa the termination of its inclination towards the Persian Gulph. (*Niebuhr*, ii. pp. 255. 293.) This high plain is diversified with several considerable elevations, which cross its surface in every direction, shooting off like branches or spurs from the principal chain. Niebuhr

expressly states (ii. p. 296.) that the portion of this plain, more particularly known by the name of *Nedsjed*, is mountainous; and Burckhardt, in describing Derayeh, the capital of *Nedsjed-el-Ared*, says, that it is situated in a valley, the outlets of which are so narrow that only one camel can pass at a time. (*Travels*, ii. p 399.) The main chain, supporting this table-land on the W., increases in elevation as it extends towards the S.; and, although it has not been explored in the S.E. part of the peninsula, there can be little doubt that the same chain, after following the direction of the Red Sea to Yemen and Hadramaut, is continued in a line, parallel to the Indian Ocean, as far as Oman. Lord Valentia describes that part of the E. coast of Arabia, which he saw in his voyage from India to the Red Sea, as a sandy beach with a chain of mountains in the distance (*Voyages and Travels*, ii. p. 12.); and Niebuhr has no doubt that the hills of Oman form the N. termination of this chain (par. ii. p. 255.). The elevations of the land are rather in masses than in peaks, and the few great eminences of the latter kind, noticed by travellers, are referred to in terms which seem to imply that they are regarded as singularities. Thus, we are told that Mount Shahak is seen at a distance of two days' journey, rising like a tower in the midst of the plain, and that it forms a land-mark for the pilgrims travelling from Damascus to Mecca; but the notice which this mountain has attracted from all travellers along the Hadj road, leads to the inference that such land-marks are rare. (*Zach's Correspondence*, No. 18. p. 389.) Mounts Horeb and Sinai are, out of all comparison, the most celebrated in the world: they are connected with some of the most important events in sacred history; and are regarded with feelings of religious awe by Mohammedans as well as by Jews and Christians. The Sinai group is the last considerable elevation towards the N.W. of the mountains which support the table-land of the interior. This group fills the peninsula between the Gulphs of Suez and Akabah. Mount Arafat, an eminence extremely sacred in Mohammedan estimation, at a short distance from Mecca, rises from the plain country of the table-land to an elevation of 150 or 200 feet. It forms the centre of a natural solitude, being situated in a plain about three quarters of a league in diameter, and surrounded by barren mountains. The composition of the Arabian mountains, towards the N. and W., is limestone rock, with granite towards the summits; but in the higher parts of the country the bare granite rises uncovered from its very base. (See *Burckhardt*, *Ali Bey*, and *Niebuhr*, passim.)

The Gaur or Tehama, from its regular inclination towards the sea, and the nature of its soil — sand with saline incrustations (*Niebuhr*, par. ii. p. 161.; *Lord Valentia*, vol. ii. p. 359.)—seems to have been under water at a comparatively recent period. At Mocha the soil for 28 feet in depth is wholly composed of marine productions; and at Okelis, close to the Straits of Bab-el-Mandeb, where anciently there was a harbour, in which a fleet could lie, there is not, at present, much more than a foot of water. (*Lord Valentia*, vol. ii. p. 361.) The town of Musa, formerly on the coast, is now several miles inland. This fact was remarked even in Pliny's time. "Nowhere," says he, "has the earth gained more, nor in so short a time, from the water." (*Nat. Hist.*, lib. vi. § 27.)

Rivers and Lakes. — There are no rivers, in the strict acceptation of the term, in Arabia. The most important streams noted on D'Anville's map are the Astan and the Falg, both falling into the Persian Gulph; the Massora and the Poim emptying themselves into the Indian Ocean; a nameless stream, falling into the same ocean on the confines of Yemen and Hadramaut; and the Meidam and Zebid in the S. part of Yemen. But these and every other stream of running water *known* to exist in this country, have more or less the character of occasional torrents. Niebuhr remarks it as a singularity, that the Massora and another small stream in Oman continued to run throughout the year; and he states, that in the Tehama of Yemen there are no rivers that retain their water during the entire summer. (*Des. de l'Ar.*, par. ii. pp. 255. 161, &c.) The few perennial streams are all reduced to insignificance during the dry season; but, under the influence of the periodical rains, these and the others often swell to an immense size, and sometimes make new channels for themselves, changing, in this way, the appearance of the coast, and leading to contradictory statements as to the number and embouchures of the different streams. (*Valentia*, ii. p. 360.)

The arid sands of the Tehama, unfavourable to the formation of rivers, are, of course, equally hostile to the accumulation of water in lakes. In fact, the dryness of the Arabian soil is proverbial; but the interior is only very partially known; and in the table-land of Nedsjed lakes are supposed to exist, on the authority of Strabo, who affirms that he *saw them* (lib. xvi. p. 774.); and also on that of eastern geographers, cited by Malte-Brun (*Géographie Universelle*, viii. p. 246.).

Climate. — The Tropic of Cancer divides Arabia into two not very unequal parts. It lies, therefore, partly in the torrid, and partly in the S. part of the N. temperate zone; but so many modifying circumstances exert an influence over its climate, that the mere latitude of its several parts is, perhaps, the least important element in determining the temperature, humidity, and salubrity of its atmosphere. In general, the climate is very similar to that of N. Africa. Lying under the tropic, it has, of course, its succession of dry and rainy seasons; and on the mountains of Yemen the showers regularly fall from the middle of June till the end of September. During the early part of the season the rains are most abundant, and at this time the sky is sometimes, but very rarely, covered by clouds for 24 hours together. During the dry season a cloud is scarcely ever seen. In Oman the rainy season begins in November, and continues till the middle of February. In the plain country on the coast, and in the Tehama of Yemen (though so close to the mountainous regions of regular showers), a whole year frequently passes without a drop of rain. (*Niebuhr*, par. i. pp. 34, et seq.) In this respect is found striking physical resemblance between Africa and Arabia. In the latter, as in the former, the parched plains are denied the refreshment of falling showers, and owe what share of fertility they possess to the inundations consequent upon the saturation of the mountains.

The temperature of Arabia, like that of other countries, differs widely, according to the elevation of the surface, the nature of the soil, and the neighbourhood of the ocean. In general, the mountains of the S. Yemen and Hadramaut are the most habitable, and even the coolest parts of the peninsula; but the heat of the Tehama is excessive; and great extremes of temperature are experienced within very short distances. At Mocha, on the Red Sea, the thermometer rises in summer to 98° Fahr.; while at Saana, in the mountains, it never exceeds 85°, and in this district, *freezing* winter nights are not unfrequent. The inhabitants of Yemen live, consequently, under several different climates, and very different species of animals and vegetables flourish within its limits. (*Niebuhr*, par. i. p. 4.) From the borders of Hedjaz to the banks of the Euphrates the country is a vast plain, without the slightest elevation, and wholly destitute of rivers or permanent springs. The soil is one mass of moving sand, without the slightest trace of town or village; and the dreary monotony of the scene is broken only by the appearance of a few thorny shrubs, which, taking vigorous root in the sand, supply the patient camel with the only food which he can find in these deserts. (*Yooseph-el-Milky*, in *Zach's Correspondence*, No. 18.) This country, with the Desert of Syria, seems to have formed the *Arabia Deserta* of Strabo and Ptolemy.

Another plain, of the same kind, and most probably even more extensive, called the *Desert of Akhaf*, lies between Yemen and Hadramaut, on the S. and W., and between Nedsjed and Oman, on the N. and E. (*Niebuhr*, par. ii. pp. 245—255.) These vast sandy deserts increase very greatly the heat of the atmosphere in their neighbourhood. The wind blowing over them, about the summer solstice, becomes so dry, that paper and parchment exposed to its influence scorch and crack, as though placed in the mouth of an oven; and life, both animal and vegetable, perishes in the noxious blast. (*Ali Bey*, vol. ii. p. 46.) This is the wind known, in different and often very distant countries, by the names of the Simoom, Samiel, Sirocco, and Sorana; and which is always generated in every tropical country having extensive sandy deserts. Its grand seat is the vast desert of Sahara, in Africa; and next to it, perhaps, the deserts now mentioned. It comes from a different quarter in different parts of the peninsula, according to their position with respect to these deserts. Thus, at Mecca, the Simoom comes from the E.; in the neighbourhood of the Persian Gulph and the Euphrates, from the W.; in Yemen and Hadramaut, from the N. and N.E. The chain of hills seems to shelter the Tehama of the Hedjaz from the influence of the Simoom from the Arabian Desert, as the hottest wind known in this district comes from the African Deserts across the Red Sea, and is, consequently, very considerably cooled and mitigated in its violence.

It is only, however, during the intense summer heats that the Simoom is dreaded; and such is the general purity of the atmosphere, owing to the few exhalations from the dry soil, that both man and beast in Arabia are aware of the approach of the poisonous blast, from the sulphurous odour by which it is preceded. It is said, also, that the point of the heavens from which the Simoom is approaching is always marked by a peculiar colouring, easily distinguishable by an Arab eye. Thus forewarned, the Arab throws himself upon the ground, and the beasts hold down their heads; for it is found that this terrific blast has little or no power near the

earth, perhaps because, blowing in a horizontal direction, it is broken by the inequalities of the ground, and also, perhaps, because the few slight exhalations forced from the arid soil by the extreme heat, have power to counteract its virulence. Those who are rash enough to face it are suddenly suffocated; and in the deserts, where the Simoom blows long and strongly, whole caravans have been buried beneath the burning sands, which then rise in waves as high and strong as those of a stormy ocean. (*Niebuhr*, par. i. pp. 7, 8.)

Natural Productions. — The differences of soil and climate occasion much variety in the species and amount of the natural products of Arabia. Nothing can, perhaps, be more strongly contrasted than the vivid descriptions of the country by ancient and oriental writers, and the cold realities exhibited to the traveller or voyager who approaches its confines. Even on nearing the southern shore, the Arabia Felix, or terrestrial paradise of the ancients, the eye looks in vain for the beauty; nor is the smell gratified by the "Sabæan odours" which have been so vividly, but erroneously, described. A wide sandy beach, bounded in the distance by a range of mountains, dreary and unproductive, without a patch of verdure to relieve the eye, or a running stream to slake the thirst, or break the dull monotony of the view, constitutes the southern coast of Yemen. (*Valentia*, ii. p. 12.)

The fertile spots, however, like the oases of the African deserts, are so luxuriant and beautiful, as in some measure to warrant the hyperbolical praises bestowed on the peninsula. In consequence, too, of the various circumstances of elevation, aspect, temperature, and moisture, there is no country whose productions are more numerous and varied.

The sandy plains of the centre produce the same plants as N. Africa, — the mesanbryanthemum, aloe, euphorbium, stapela, and salsola; plants which answer a wise purpose in these wastes, by alleviating the thirst of the camel, during the painful journeys of the caravans.

The sea coast, consisting for the most part of arid sands, produces, in general, the same plants as the central deserts; but wherever the Tehama is watered by rivulets descending from the mountains, or wherever the soil is subjected to occasional inundations, a very different scene is presented. Under these circumstances, a vegetation, luxuriant and diversified, is produced, the effect of which is the more striking, from the desolation with which it is surrounded. The valleys, too, in the mountains, exposed to the influence of the regular rains, and consequently abounding in rivulets, are the seats of an abundant vegetation. In such districts, the tamarind, cotton tree, sugar-cane, banana, nutmeg, betel, and every variety of melons and pumpkins are indigenous; at all events they have grown there from the remotest antiquity (*Strabo*, lib. xvi. 16. cap. 3. pp. 704, et seq.; *Pliny*, *Nat. Hist.*, lib. xii. cap. 8. p. 362.; *Ib.* lib. xii. cap. 10. p. 363.; *Ib.* lib. xix. cap. i. p. 4.), and continue to flourish in greater luxuriance than in any other part of the world, except in the similar soil and under the similar climate of N. Africa. Arabia produces several kinds of hard wood, of which the agallochum seems to be the same with the sandal wood of the East India islands; and it may be regarded as the native home of the date tree, the cocoa, and the fan-leaved palm. Of other trees, there are the fig, orange, plantain, almond, apricot, acacia vera (producing the gum Arabic), quince, and vine. Among shrubs, the sensitive plant, castor-oil plant, and senna (both used in medicine); the globe amaranth, white lily, and pancratium (all distinguished for their fragrance); the aloe, styrax, and sesamum are very abundant. But, notwithstanding this variety of wood, although there are some groves or thickets on the mountain side, Arabia possesses no forest, properly so called. The reason of this is obvious: the fertile, irrigated spots, small in extent, and scattered here and there, are surrounded by the sandy plain or granite rock, and, consequently, the formation of extensive woods becomes a matter of impossibility. (*Niebuhr*, par. i. pp. 127—133.)

Of Arab trees, the most worthy of notice are the coffee tree, and the tree producing the balm of Mecca, called, by the natives, *Abu Scham* (that is, the *odoriferous tree*). Both are natives of Yemen, the coffee plantations being found chiefly on the W. slopes of the mountains, in that division of the peninsula. It is said that the Arabs have always prohibited the exportation of the coffee plant; but it is a well known fact that it was first introduced into the W. Indies from Arabia. The coffee of Yemen still, however, preserves its superiority, and fetches the highest price in the European markets. The balm of Mecca is the most fragrant and valuable of all the gum resins, but it is never met with pure out of Arabia, and there scarcely beyond the confines of Yemen. The merchants of Mocha convey it in great quantities to Medina, whence it is never exported for the purposes of external commerce till it have been considerably adulterated. (*Niebuhr*, par. i. p. 127.)

Among the natural productions is the singular substance called *Manna*, produced from a little thorny bush, which seems to be abundant in all the deserts and their neighbourhood, and exactly answers the description in Exodus xvi. and Numbers xi.

Wherever water is found, or can be procured, the labour of the Arabian agriculturist is well repaid. Maize, wheat, dhourrah, barley, and millet cover the mountain sides of Yemen and other fertile parts. Indigo, tobacco, *Uars*, a plant yielding a yellow dye; *Fuar*, an herb which produces a red colour; together with many species of garden fruits and vegetables, are cultivated; but, in order to insure success in the cultivation beyond the districts watered by the scanty rivulets and torrents, much labour is required. It is true that the agricultural implements are of a very simple and primitive construction, but it is not in the use of these that the great labour of Arabian agriculture exists. Channels and dykes have to be constructed to conduct the water to spots where none flows naturally, and to retain it there that it may fertilise them. Great reservoirs are formed, in which the abundant rains of the wet season are collected for future use. The coffee grounds and gardens on the mountain sides are supported by *walls*, to make their surface horizontal, and so prevent the escape of the moisture. Wells are dug at immense depths; and, in short, since it is upon the amount of irrigation that the productiveness of the soil depends, it is to the collection and just distribution of water that the cares of the cultivator are principally directed; and the nature of the Arabian climate and hydrography renders these cares in the highest degree laborious. (*Niebuhr*, par. i. pp. 134—142.)

The fame of Arabia as the land of incense and perfumes is of very old date. But it was long since suspected, and is now well known, that the frankincense, myrrh, and similar products with which it supplied the ancient world, were not all of its own growth, but were principally brought to its ports from Africa and various E. countries. (*Niebuhr*, par. i. p. 126.; *Valentia*, ii. p. 12.)

The camel is to the Arabian what the rein-deer is to the Laplander. It has been justly called the "Ship of the Desert;" and without it the Arab could never cross the seas of sand that fence his country. There are two species of this useful animal; that used in Arabia and N. Africa has only one hump, while that found in Persia and Bokhara has two. The latter is frequently called the Bactrian camel, and the Arabian species is sometimes called dromedary. This last name is, however, improperly applied, the Greek term *δρομας* (swift) being, most probably, unknown to the Arabians, while by the Greeks themselves it was applied to only one variety of the Arabian camel, distinguished by its greater speed from those best adapted to carrying burdens. (*Diodorus Siculus*, lib. iii. p. 125.) Arabia is generally regarded as the native country of the horse; and there are, perhaps, no breeds to be compared with those trained by the Bedouins of the desert. The horses are of two kinds: the one called *Kadeschi*, that is, of an unknown race, are used for the purposes of labour, reside in the towns, and are not more esteemed than the horses of Europe. But the true Arab steed, the horse of the desert, is said to be descended from the breed of Solomon: this kind is called *Kochlani*, or horses of an ascertained race; and it is pretended that their genealogy has been preserved in the country for 2,000 years. (*Niebuhr*, par. i. pp. 142—144.) Horses are, however, by no means so numerous as has been supposed. In the settled districts the most common beasts of burden are oxen and camels (*Niebuhr*, passim); and among the Bedouins the mare is rather a mark of distinction than a substantive part of her master's wealth. In many tribes (and those among the richest) not more than one mare to six or seven tents can be found; in some of the W. districts there are many encampments without a single horse or mare among them; and when, in 1815, the S. tribes united against Mehemet Ali, out of an army of 25,000 men not more than 500 horsemen could be mustered. The Arab tribes richest in horses live without the limits of the peninsula, in the fertile plains of Mesopotamia, and in the plain country of Syria. Burckhardt thinks that the number of horses in Arabia does not exceed 50,000. (*Notes on Bedouins*, pp. 40. 115, et seq. 246—249.)

The great cause of this scarcity is undoubtedly the difficulty of providing food for the animal, especially in the S. districts; but another cause, depending probably upon the first, is, that the Arabs almost uniformly ride their mares, and sell the horses to the town's-people. The horses that they reserve are merely for the purpose of breeding, and a gelding is rarely if ever seen in the desert. Although the Bedouin parts readily with the horses of his famous *Kochlani* breed, he rarely disposes of the mares until they become old, or are from some accident unfit for war; and even then he contracts with the buyer to receive the first filly foaled of any mare that he

may sell, or to receive back the mare, the buyer retaining the filly. Sometimes the first two, three, or even four fillies are thus reserved to the seller; and this, in Arab phraseology, is called selling a half, a third, or a fourth of the mare's belly. It is very rarely, indeed, that a Bedouin will part with a Kochlani mare except under such reservation of right in her future offspring. (*Burckhardt's Notes on the Bedouins*, pp. 117, 118, &c.) An Arab will sometimes take his mare a journey of several days, in order that she may breed by some celebrated horse; but, in general, the Bedouins are by no means so particular in this respect as Europeans, and consider the good qualities of the colt to depend rather upon the dam than the sire. They never, however, willingly mix the *Kochlani* with the *Kadeschi* breed; and if such mixture take place by accident, the colt is reckoned of the inferior race. In the towns, *Kadeschi* mares are coupled with *Kochlani* horses, but in this case, also, the offspring is accounted *Kadeschi*. (*Niebuhr*, par. i. p. 144.)

Kochlani horses are mostly small, seldom above 14 hands high, of a delicate but extremely graceful form, and have all some characteristic beauty which distinguishes their breed from every other. This breed is subdivided into almost innumerable families; for every mare distinguished for speed or beauty may give rise to a new breed called after her. They all, however, belong to five great divisions, named after the favourite mares of Mohammed, *Taneyse*, *Maneckeye*, *Koheyl*, *Taklawye*, and *Dujlfe*.

The colt, when foaled, is not suffered to fall to the ground, but is received into the arms of attendants, and attended for a while as though it were a human infant. Witnesses are assembled, before whom the genealogy of the colt is drawn out, and suspended to the animal's neck.

A colt is not mounted till it is two years old, but from this time the saddle is rarely off its back; it becomes the intimate companion of its master, sharing all his comforts (such as they are), and also all his privations. Pasture in the rainy season—barley and wheat when the plains are scorched by the tropical sun — date-paste, and dried clover when grain is scarce — form the variable diet of the Arab horse, in different districts and seasons. As long, too, as its master's camels can supply milk, it receives its share, and the Bedouin most commonly gives the fragments of his own meal to the mare on which he rides. It is, moreover, a common practice, more especially in Nedsjed, to give horses' flesh, both raw and cooked, particularly before the commencement of a fatiguing journey. Like their masters, the Arab horses live all the year in the open air. With little grooming and attention to their health, they are seldom ill. Being constantly in the society of their masters, they become gentle, docile, and intelligent in a high degree; they are ridden without bits — generally, too, without stirrups; and instances of vice or ill-temper are almost unknown among them. (*Niebuhr*, par. i. pp. 141—143.; *Burckhardt, Notes on Bedouins*, pp. 115—123. 246—256.)

The other domestic animals are oxen, generally of a humped kind, like those of Syria; sheep, one variety of which have extremely thick and broad tails; goats and asses, of which last there are two varieties — one not differing from those of Europe, the other large, courageous, and more desirable for a journey than even the horse. From these asses a breed of very valuable mules is procured. The buffalo, though common in Egypt, Syria, and on the banks of the Euphrates and Tigris, that is, all round the confines of Arabia, is not found within its limits; at least Niebuhr did not meet with it, and no other writer mentions the animal, except in one or two instances, when the humped Syrian ox seems to have been mistaken for the buffalo. The latter requires a moist pasture and a plentiful supply of water. Hence it is found on the banks of the Nile and the Orontes, though in the close neighbourhood of parched deserts; but the want of water in Arabia clearly renders that country unfit for its location.

Among the wild animals are the jackal, hyæna, several kinds of asses, the jerboa, wolf, fox, boar, and panther. Besides these, there are several kinds of antelopes; the goat runs wild among the mountains, and wild oxen and asses are to be met with in the plains. Domestic poultry is very plentiful in all the fertile districts, and the plains are filled with partridges, the woods with guinea fowl, and the mountain sides with pheasants. But the most celebrated bird is one of the thrush kind, called by the natives *Samar-mog*, which comes in flocks every year from Persia, and commits great devastation among the flights of locusts. For this important service it is held in a degree of respect, amounting almost to adoration. The ostrich wanders in the sandy deserts, and is called by the Arabs *Thar-edsjammel*, that is, camel bird. It is, certainly, a remarkable circumstance, that in a country lying on both sides the tropic there should be no great abundance of insects; yet this appears to be the case. Ali Bey, speaking of Hedjaz, says, "There are few flies, and no gnats or other insects." (*Travels*, ii. pp. 45. 118.) The locust is, however, one of the scourges of Arabia, though even this pest seems to be less destructive here than in the neighbouring countries of Syria and Persia. The esculent locust is sold in the markets, and is esteemed a great delicacy. (*Bochart, Hierozoicon*, par. i. lib. iv. cap. 6. p. 46.) These destructive ravagers come to Arabia from different quarters: a S.W. wind brings them from the Libyan desert to the shores of Yemen and Hedjaz; a N.W. wind hurls them upon Oman and Lachsa, from Persia and Mesopotamia; and a wind from the N.E. frequently overwhelms Nedsjed with this plague, from Syria. They seem, however, to be confined to their several localities, perhaps from inability to pass the interior deserts; for the W. flight, as it may be called, or that from the African shores, never passes the mountains of Yemen, and commonly retraces its route on the day following its first appearance. No part of the year seems to be peculiarly exposed to or exempted from this plague. Niebuhr noticed locust flights in the months of January, May, June, July, November, and December. In one of these, the Red Sea between Mocha and the opposite coast of Africa was covered with their dead bodies.

Of the reptile tribes, land and sea turtles are very numerous; there are also several species of serpents, one of which, very small, and covered with white blotches, is extremely venomous, its bite being instantly mortal. The guaril, a large lizard, is said by Bochart, on the authority of Karwyni and Abdollatif, two native writers, to be equal in size and strength to the crocodile. (*Hierozoicon*, par. i. lib. iv. cap. 3. p. 1070.) All the coasts abound in fish; reefs of coral and madrepore extend along the shores of the Red Sea, and the pearl oyster is abundant in the Persian Gulph. (*Niebuhr*, par. i. pp. 142—159.)

Minerals are scarce; but this may proceed from a want of industry or skill in working mines. The mountains, of an old formation, are precisely those in which the precious metals are found, and the unanimous voice of antiquity proclaims this country as the land of gold and gems, as well as of incense and perfumes. Niebuhr affirms, however, that no gold is found, and that only a small portion of silver is found mixed with lead in the mountains of Oman. There are some iron mines in the N. of Yemen, but the metal they yield is brittle and of little worth; and with regard to gems, it is now well known that the agate called *Mocha-stone* and the *Arabian cornelian* come from India; and there is nothing to contradict the presumption that the other gems for which Arabia was formerly distinguished, were derived from the same source. The onyx, however, is found in Yemen, and an inferior emerald. The other minerals are basalt, blue alabaster, several kinds of spars and selenite. (*Niebuhr*, par. i. pp. 123—125.)

Population, Manners, and Customs of Arabia. — The native Arab has always been an object of interest and curiosity to the rest of the world. Descended from the same stock with the Jews, he has preserved his race almost as unmixed, and traces up his genealogy to Abraham through Ishmael, with the same pride as his congenitor looks up to the same patriarch through his lawful but younger offspring Isaac. Through all the centuries which have passed over his head, he has preserved the character given to his infant ancestor in the wilderness. The desert has continued his home; he has been a man of war from his youth — "his hand against every man, and every man's hand against his."

The descendants of Ishmael were by no means, however, the first inhabitants of Arabia; and though the various eastern traditions on the subject are too numerous and too involved to be here stated, it seems pretty certain that the Arabs of the towns and those of the desert owed their origin to different ancestors — that the settled population on the coasts are descended from a more ancient, if not an aboriginal race, while the wild horseman and shepherd of the waste is the descendant of the discarded son of Abraham. Between these a marked and striking difference has existed throughout the historic period; and not only is this the case, but each class seems to have retained pretty nearly the same distinguishing features which marked it in the earliest times. The caravans from Mocha and Sanaa still convey the produce of the South to Turkey, Egypt, Syria, and Persia (*Niebuhr*, par. i. p. 126.) as they did 2,000 years ago (*Pliny, Nat. Hist.* lib. vi. cap. 28.), though the Arab merchant be not so important a character in this commercial age, as when it could be said of him that "he must, of necessity, be exceeding rich; for with him the Roman and the Parthian leave large sums of gold and silver for the products of his woods and seas, which he sells to them without buying any thing in return." (*Pliny*, l. vi. § 28.) The Bedouins, too, or *Scenitæ*, are described by Pliny as living in the *black hair-cloth* tents, under which they shelter themselves at present; and he expresses his astonishment at the fact, that, being so numerous a race, the half of them, at least, should live by plunder. (*Nat. Hist.*, l. vi. § 28.)

Though the younger race, the Bedouins account themselves the more noble; and the Arab is prouder of his rank than the native of any other country in the world. They have no titles of nobility, excepting such as refer to religious or political offices. The Bedouin has no idea of rank depending upon letters patent of a caliph or sultan; all men descended from the same ancestor are, in his estimation, equal in rank; and hence the preservation of their genealogies is a matter of extreme care. Among their great houses, those descended from the Prophet hold the first rank; then those whose ancestors diverged the latest from the common stock; the lowest place being seemingly assigned to those, who trace their genealogy to Acc, the second son of Adnam, thus diverging from the Prophet's stock in the first accredited generation. (*Sale*, *Introd. Koran*, p. 9.; *Niebuhr*, par. i. pp. 9, 10.)

According to Niebuhr, the Bedouins are, now, the only true Arabs,—the inhabitants of the cities and coasts being, in consequence of their commerce, so mixed with strangers, that they have lost much of their ancient manners and customs; whereas, the Bedouins (*les vrais Arabes*) have always looked more to their liberties than their ease or riches, and continue to live in separate tribes, under tents, preserving, in the present day, the same manners and customs which distinguished their forefathers in the most remote times. (Par. ii. p. 327.) Niebuhr enumerates above a hundred Bedouin tribes, each under its own particular sheikh or sheriff; these are not, however, all found within the limits of the peninsula, but extend over Syria, the plain country between the Euphrates and the Tigris, and even from the left bank of the latter river into Persia. There are, however, two classes of Bedouins; the *Ahl-el-Abaar* (true, noble Arabs) who live entirely by pasturage and plunder, and those tribes, who, finding any portion of the country fitted for agriculture, bestow their labour on the ground, an occupation which the true Bedouin considers far beneath him. This second class of Arabs is called *Mœdan*, and it seems to hold an intermediate place between the Noble-Shepherd (*Ahl-el-Abaar*) and the peasant of other countries. Mr. Buckingham, who remarks this distinction in their occupations, does not, however, use the terms Ahl-el-Abaar and Mœdan, to distinguish them, but calls the first race *Khyali*, the other *Fellaheen*. (*Travels*, p. 87.)

The Bedouin tribes who inhabit the open country between the Euphrates and Tigris, extend as far north as Orfa and Diarbekr. They are under the nominal sovereignty of the Turkish pachas of Bagdad, Moussul, and Orfa; their sheikhs frequently receive the *Tojk*, or horse's tail, from the grand signor; but it appears that the bestowal, and the acceptance of this mark of dignity is almost the only assertion on the one hand, or acknowledgment on the other, of supremacy or subordination that is ever attempted or conceded; except in occasional instances, when direct force has deposed a sheikh, and appointed another in his place, without, in the slightest degree changing the relative position of the tribe and its so-called sovereign pacha.

The Bedouins of the Syrian desert are rather more closely connected with the pachas of Syria, inasmuch as the necessity of protecting the trade between Aleppo and Damascus on the W., and Bagdad and Balsora on the E., has caused the employment of the various Arab tribes as a kind of irregular soldiery; and the bestowal of the rank of emir on the reigning sheikh of the most powerful tribe for the time being. This emir sheikh (in consideration of his rank) is obliged to conduct the caravans in safety through the desert, and to hold in check any or all of the other tribes. "We may easily judge," says Niebuhr (*Des. de l'Ar.* par. ii. p. 339.), "that this is not done for nothing." In fact, if it happen, as it not unfrequently does, that the pacha is unable to fulfil his engagements with the sheikh, he is compelled to cede to him such towns and villages as border on his encampment; and thus to make him, in effect, the master of the settled, as well as of the open country. The tribe of Aneze is the most considerable of all the Syrian Arabs. It has frequently been at war with the pachas of Damascus; and, at such times, the departure of the caravans from that city for Bagdad has been delayed; and the reason, openly assigned, that the Arabs of Syria were discontented with the pacha.

The Bedouins, within the peninsula, do not acknowledge a sovereignty of any kind, except in their native chiefs. They are very numerous in Nedsjed, and are scattered among the settled population in all the other provinces. The most powerful tribe of any in Arabia is, perhaps, that of Beni-Khaled; it inhabits that part of the desert which borders on the Persian Gulph, and has under its dominion not only many smaller tribes, but also most of the towns and villages of Lachsa. The reigning sheikh passes a portion of each year in these towns; but by far the greater part is spent in the open country, under tents.

The form of government among the Bedouins is strictly patriarchal, and their manner of living is that of the pastoral ages recorded in the Bible. The head of a tribe receives a submission from his subjects, similar to that which a father receives from his family; and, in the East, that submission is unbounded. There is, however, a check upon the abuse of power in the sovereign sheikh, which, though indirect, is by no means weak. Since every tribe consists of many branches, the various heads of these sub-tribes, as they may be called, form a powerful restraint upon the chief; and should he become unpopular, though direct opposition to his will is never attempted, the discontented branch not unfrequently leaves his encampment, and either forms itself into a new tribe, or, if not powerful enough for that, joins itself to the tents of some other powerful sheikh. Instances have been known in which a Bedouin chief has been entirely deserted, and thus the names of several tribes have vanished. As, however, the pride of tribe is strong in every Arab breast, this expedient is only resorted to in the last extreme: but the assumption of supremacy by some subordinate branch, is frequent enough to render the continuance of the sovereignty of the tribe of Montefidsj in the same family, since the days of Mohammed, a remarkable circumstance. The preservation of their herds being the first care of the Bedouins, a wandering life seems awarded to them by nature; the search for proper pasturage leads from place to place in their extensive country, according as the desert has become temporarily fruitful under the influence of the tropical rains, or has been burnt up by the continued action of a tropical sun. Accustomed to live in a clear air, their sight and smell become extremely fine, insomuch that, on arriving at a spot which affords nourishment, however scantily, to plants or herbage, they can at once determine at what depth water is to be found, and, consequently, whether it be worth the labour of digging for. Accustomed to privations, the Bedouin is temperate from habit as well as from disposition, and can almost emulate the endurance of his camels, which, in the burning desert, live five days without drink.

Robbery is an honourable occupation among these wanderers, but the Arab boasts of being the most refined and civilised of thieves. His robberies are never attended with violence, except in the case of violent opposition; and, as he considers his country as sacred ground, he regards the plunder of the pilgrim caravan as the mere levying of tribute, or payment, for permission to pass through it. If the right to this tribute be recognised, and the permission to pass through the country purchased, the bargain is never violated on the part of the Bedouin; strict faith being one of the best points of his character, as his deadly spirit of revenge is, perhaps, the worst. This spirit is very easily excited; and, once aroused, descends frequently from generation to generation: the duty of pursuing the quarrels of his father being regarded as a sacred part of the Arab's inheritance. According to the Koran (chap. ii. p. 20.), whoever sheds blood, owes blood to the family of the slain; but the same law allows, and even recommends, a commutation, by way of fine. If this be not accepted, retaliation is *allowed* to the injured family; but, as this usually exceeds the offence, new cause of hatred and revenge is given, till a single (perhaps accidental) murder *puts blood*, in Arab phraseology, between whole families for ever. But the irascibility of the Arab requires no such serious offence as the death of a relative to rouse it into action. A slighting expression, or an insulting sarcasm, is sometimes sufficient to put blood between two families. "Your turban is filthy," is frequently answered by a death-blow; and instances are on record where, for an offence as slight, the offender has been pursued for years, and fallen, perhaps in old age, at last, for the insult offered by him in his youth. Niebuhr reports, that a noble Arab being asked, scoffingly, if he were the father of the handsome wife of a person named, construed the question into a sneer upon his daughter's virtue. Being unarmed at the moment, the offender escaped; and the father spent years in vainly pursuing him, during which, however, he killed both the parents, and many relations of the scoffer, his slaves, his cattle, and reduced him to the verge of beggary. The offence was at last commuted by an enormous fine. (*Niebuhr*, par. i. pp. 27, 28.; *Burckhardt*, *Not. on Bed.*, pp. 84—89. 177. 184. 209.)

A relief to this dark shade in the Arab's character is found in his hospitality. In many of the towns where the population is most unmixed, houses of entertainment are kept at the public expense, or at that of some rich individual, where the traveller is fed and sheltered without charge. But, in the desert, hospitality is a part of the Bedouin's nature; and though the influence of foreign manners has, upon the Hadj roads, considerably dimmed the lustre of this virtue, yet even there a helpless, *solitary* traveller, is sure of finding relief, though the *assembled* Hadjis should crave in vain for assistance or mercy. In districts off the Hadj roads, that is, over much the greater portion of the desert, the Bedouin considers his property less as his own than as that of the

casual stranger he may meet; however hungry, he shares his last morsel with the wayfarer; and sacrifices which he would not make for himself or his family, are made unhesitatingly for the wants of his guest. The inhabitants of the towns have fewer points of interest than the Bedouins. Niebuhr (par. ii. p. 327.) says they have lost much of their distinctive character; and other travellers speak of them, as having superadded the vices of civilised society to those of a savage state. "Superstitious, yet irreligious; performing all the *rites* of their faith, yet living in the practice of every vice, natural and unnatural. Hypocrites by profession, preferring a lie to the truth; even when not urged by motives of interest, deceit forms a part of their education from youth. Their governments are systems of extortion and tyranny; their traders are fraudulent, corrupt, and dishonest overreachers; the individuals of their communities are sunk into the lowest state of ignorance and debauchery." Such is the character given of the town Arabs by Lord Valentia (ii. 354, 355.), and a similar picture is unwillingly exhibited by Niebuhr (par. ii. pp. 180—190.), Ali Bey, Burckhardt, and Buckingham, *passim*.

In prosperous times, the right of entertaining a guest is frequently disputed; and should a stranger reach the encampment unobserved, it is reckoned an affront if he pass the first tent on his right hand, and enter another.

In many tribes the women are permitted to drink coffee with strangers; and in some, towards the S., the wife entertains a guest in the absence of her husband, and does the honours of the tent. To tell an Arab that he neglects his guest, is the greatest insult that can be offered. (*Niebuhr*, par. i. pp. 41—43.; *Burckhardt's Not. on Bed.*, pp. 100—102. 192—199.)

The superiority of the Bedouins appears to be admitted by the town residents; for the descendants of Mohammed, resident at Mecca, send their male children, eight days after birth, to the tents of the neighbouring Bedouins, where they remain till they are 8 or 10, and frequently 14 or 15 years old. All sheriffs (descendants of the Prophet), from the sovereign downwards, have been thus bred; and, as they usually take wives from the tents where they have been educated, they preserve the race and many of the customs of the Bedouins, in the midst of the mixed population by which they are surrounded. This custom is very ancient among the pure Arabs. Mohammed, himself, was educated in the Bedouin tribe of Beni Saad. (*Burckhardt's Travels*, vol. ii. pp. 424—428.)

The Arabs are of a middle height, generally extremely thin, and when either very young, or far advanced in life, of a highly prepossessing appearance. The mild but expressive countenance of an Arab boy, and his dark, sparkling eye, are spoken of in terms of admiration by all travellers. As he reaches manhood, however, a very disadvantageous change takes place; his meagre figure becomes still more attenuated, and seems as though it were parched and shrivelled up. The very splendour of the eye, buried between high cheek bones, apparently destitute of every covering except the tightened skin, is then rather a deformity. But, in old age, the Arab is truly venerable. The fine dark eye contrasts admirably with the long white beard; and the emaciation which, in middle life, seems to intimate premature decay, assimilates well with the closing scenes of existence. There are exceptions, however, to this general description. The Aeneze Bedouins are generally short, well formed, and by no means so thin as the majority of their countrymen. The lower orders, in Mecca, are generally stout. The Arab women are stouter than the men, and larger limbed. The complexion of the Bedouins is tawny, but this is evidently the effect of their exposed life; an effect which the same exposure would produce upon the most N. people. At the time of birth the infant is fair, even of a livid whiteness; and Burckhardt, who, as a physician, saw the naked arms of a sheik's lady, states that her skin was as fair as that of any European. Lord Valentia makes the same remark regarding the wives and daughters of an Arab of Djidda. (iii. 308.) In the towns, the Arabs may be described as fair, especially in the mountain districts. But this remark must be understood as limited to those of pure descent: on the coasts, and in the towns of Mecca, Medina, &c., the prevailing colour is a sickly, yellowish brown, lighter or darker, according to the origin of the mother; who is, in many, perhaps in most cases, an Abyssinian slave. (*Niebuhr*, par. i. p. 41.; *Ali Bey*, vol. ii. pp. 103. 106.; *Burckhardt*, i. p. 322.; ii. p. 240.; *Notes on Bedouins*, p. 29.; *Valentia*, ii. p. 351.)

The Arabs, like other Eastern people, wear long dresses. A cotton shirt, over which the more wealthy wear a *kombar*, or long gown of silk or cotton stuff, and the poorer classes a woollen mantle, is the usual costume. The mantle is of various kinds: one, very thin, light, and white, is called *mesoumy;* a coarser and heavier kind, worn over the former, is called *abba*. In some cases, however, this last is a very splendid garment. It is usually striped white and brown, but the rich Arab frequently clothes himself in a black *abba*, interwoven with gold, in preference to the *kombar* or Turkish gown. The abba is not used in the W. districts, Yemen and Hedjaz. In the towns, large cotton drawers are worn by the men; but these rarely form a part of the Bedouin's dress, among whom any covering for the feet or legs is almost unknown. Though they walk and ride barefoot, they greatly value yellow boots and red shoes; but more as articles of ornament than use. A very rude kind of sandal is worn by the lower orders in the settled parts of the country, and the more wealthy inhabitants of the same districts use a slipper of yellow or red leather, sometimes very elaborately worked, brought from Egypt or Turkey. The head-dress is a turban, varying in form, size, and material, according to the taste or wealth of the wearer. Among those who would pass for men of superior learning and attainments, the turban is ridiculously large. The wealthy classes wear shawls, wrought with gold and silver, on their heads; and certain colours are restricted to certain families, as green to the descendants of Mohammed, black to the houses of Abbas, &c.

The women's dress is a gown or shift of most ample dimensions; which, in the tents, and among the middle and poorer classes in the towns, is of cotton; but the more wealthy of the townswomen use silk. Over this is worn a robe of Indian cotton; and this, with a handkerchief on the head, and sometimes very full trousers, completes the ordinary in-door dress of an Arab female. The women enjoy more liberty in Arabia than in any other Mohammedan country, but still the veil is indispensable in the streets. A cloak or scarf of blue and white striped linen is worn with much grace, the arrangement and placing of which is an important part of the tactics of Arab coquetry.

Rings, principally of silver, are worn in the ears and noses of the women; and tatooing of the face, arms, breast, and ankles is very common with both sexes; as is also painting, not to assist but to disguise nature, the face and hands being frequently daubed over with black, blue, and yellow, the first colour being esteemed a beauty on the *eyelids*, the last on the *teeth*. (*Niebuhr*, par. i. pp. 54—61.; *Burckhardt's Travels*, vol. i. pp. 334—340.; *Notes on Bedouins*, pp. 26—29. 131—133.; *Ali Bey*, vol. ii. pp. 105, 106.)

The Arabs are proverbially abstemious. Even the wealthy classes drink little else than water, and live principally (next to dates) upon a coarse bread made of dhourrah, steeped in camel's milk, and saturated with butter.

There is no want of animal food, but very little is consumed. The butchers in the towns on the Red Sea are foreigners, and depend entirely on the influx of strangers. Among the Bedouins, if a man of rank arrive at an encampment, a kid or lamb is killed, and being boiled is served up in a paste made of dried wheat, camel's milk, butter, and the fat of the animal. Sometimes, but very rarely, a camel is killed, and on such occasions the whole tribe meet together at the repast. In the S. districts, the Bedouins occasionally eat horse flesh. This is not, however, a matter of choice. It sometimes occurs, especially in the interior of the desert, or in times of scarcity, that not a single measure of corn can be found among a whole tribe. It is only under such circumstances of necessity that the Bedouin has recourse to a diet of milk and flesh alone; and there are many tribes (especially in the N. and near the larger towns) who, like the settled population, scarcely know the taste of animal food. Besides the *ayesh*, the dish already described, rice, boiled with camel's milk, is a common article of food, as also dhourrah bread, butter, and dates, blended together into a paste; there are also many preparations of various vegetables, among which the *kemmaye*, or desert plant, of the truffle kind, is a great favourite with the Bedouins; but wherever dates grow, or can be procured, that fruit constitutes the chief diet of both tent and town.

The date palm flourishes where most other vegetation withers, and is peculiarly abundant in the sands of Arabia. The fruit continues in season about two months, or from the end of June to the end of August; and, during this period, the new fruit forms a part, in some cases the whole, of the daily food of the Arabs. When the dates are fully ripe, they are gathered, pressed into a hard solid paste or cake. This paste, which is called *adjoue*, is in lumps of about 2 cwts. each. The *adjoue* forms a part of the daily food of all people for the remainder of the year; and thus the date palm is to Arabia what the bread corns are to European nations. *Adjoue* is an article both of export and import, considerable quantities being taken to Hindoostan, while the kind most esteemed in the Hedjas is imported from the Persian Gulph.

Arab cookery is extremely *friant*, more so than even the Italian; but no oil is used for culinary purposes, except in frying fish. Butter is their universal sauce, and of it the consumption is immense; their vege-

table dishes all float in butter; with it they work their *assîdé* into a proper consistency; dried corn, or bread crumbs, boiled in butter, is a common breakfast with all classes; and in the desert, the *kemmayes* are prepared for use in the same manner. In short, butter may be said to be to the Arab what the potato is to the Irishman: it forms an indispensable part of his diet; and, besides the various forms in which it is taken with other articles, it is a common practice with both Bedouins and townspeople to drink a coffee-cup full of butter every morning; the former, and the lower orders of the latter, adding another half cup, which — to the disgust of strangers — they *snuff* up their nostrils! Arab butter is made from the milk of sheep and goats, that of camel's not being used for that purpose. The home supply is not nearly sufficient for the consumption, and butter consequently forms an important article of importation. It is brought from the opposite coast of Africa, chiefly from Souakin, Massouah, and Upper Egypt. Sallads are unknown. Coffee is used to a great extent, though scarcely so much as might be expected; and tobacco is smoked universally by young and old.

The Arabs feed sitting, or, rather, reclining on the ground; they use neither knife nor fork, but divide and take up the food with their fingers. This practice, notwithstanding what has been said in its extenuation (see *Niebuhr*, par. i. p. 47.), is very disgusting to a European. The hands are carefully washed *before* eating; but (among the Bedouins, at least,) rarely after. The common hour of breakfast is 10 in the morning; of dinner, sunset: and at these two, which are the only meals, they eat heartily. The women feed apart from the men; and, in the desert, their repast consists of the remains of that of the men. (*Niebuhr*, par. i. pp. 45—52.; *Burckhardt's Notes on Bedouins*, pp. 32—36. 135—138.; *Travels*, i. pp. 47—56.; *Lord Valentia*, ii. p. 351.) The Arabs are healthy, and instances of longevity are more frequent among them than most E. nations. The diseases to which they are most subject are, an induration and obstruction of the stomach — said to be caused by the camel's milk which they drink, and leprosy. Like the Jews, they regard the latter as a visitation from heaven; and believe that, once confirmed in a family, it can never be eradicated: it is considered as disgraceful in the highest degree, and the unfortunate leper is completely shut out from society. The other diseases to which the Arabs are chiefly exposed are, the small-pox, fevers, ophthalmia, and worms. The method of treatment is, in all cases, extremely simple: but few internal medicines are administered, and those chiefly aperient simples. In slight cases of disorder, or, as a prevention, they rub the body with oil (sometimes of a very offensive kind) or butter. In severe cases they sear the parts affected with red-hot iron; and Niebuhr, who saw this severe remedy applied to a boy who complained of the cholic, remarks, that "if he did not complain again of his first suffering, it probably was because the remedy was so much more painful." Disorders of the teeth are very rare, and among the Bedouins unknown. The women suffer little in child-birth; and such is the general health of the people, that the profession of medicine is unprofitable, and at a low ebb. Some surgeons can set a limb, but these are principally Jews. Chronic disorders are but little known; and acute diseases either yield to the rough treatment, before described, or carry off the patient. As the Bedouin, from his mode of life, is more exposed to casualties than the townsman, instances of long life are less frequent in the desert than in the settled districts. (*Niebuhr*, par. i. pp. 114—122.; *Burckhardt, Notes on Bed.* pp. 52—56.; *Valentia*, ii. 350.) All household duties and menial offices devolve upon the women. This arrangement falls heavier on the Bedouin females than on those of the town, the latter having merely to attend their husbands within doors; and where slaves are kept, this is little more than superintendence. But the Bedouin women perform all the laborious out-door occupations, fetching water from the wells, driving the flocks to the pasture, and bringing them back to the tents at night; while the men, during their stay in the encampment, spend their entire time in utter listlessness, or, at best, in playing at a sort of draughts. This indolence within doors is a part of the Arab character. A merchant or shopkeeper in the towns, returning from his daily avocations, undresses himself, changes his shirt, and, with no other covering, sits for hours upon his carpet, in the projection of his latticed window. The women, according to Ali Bey, are also frequently seen at the front windows, unveiled; and sometimes entirely undressed (*Travels*, vol. ii. p. 105.): but the usual apartments of the females are in the back part of the house.

The parental character is highly respected; though the Arab children, both in the towns and in the desert, have more freedom than in any other E. country. The Bedouin child runs naked, in the open country, round his father's tent; and at Mecca, Djidda, and other towns, the children, even of the better classes, are allowed to play in the streets, as soon as they can walk, nearly in the same primitive state. But, within doors, the strictest decorum is observed, a boy never presuming to eat in his father's presence, unless expressly invited. It would seem, however, that this is little better than mere ceremony; for, when emancipated from his father's authority, the young Arab pays him little deference, and instances are not uncommon where the old man, having fallen into poverty, is left by his, perhaps wealthy, son, to struggle with distress, or to seek for assistance at the hands of strangers. An old Bedouin is sometimes supported by the charity of the whole tribe; and the daily quarrels between the father and his adult sons form one of the most revolting features in the Bedouin character. On the other hand, however, it should be stated that the Arab, young or old, invariably treats his *mother* with the most respectful attention. This fact is the more remarkable as contrasted with the little estimation in which the female parent is held in other E. countries; and as combined with the fact that, in Arabia, the facility of divorce (see *Laws, &c.*) tends naturally to loosen every tie that connects families. (*Niebuhr*, par. i. pp. 44, 45.; *Burkhardt's Travels*, i. p. 340.; *Notes on Bed.* pp. 65, 66. 199—203.) The Arab has a grave deportment, but a lively imagination: he is a stranger to gaiety, in the European sense of the word, but the silent reserve of most other E. nations is equally unknown: he delights in public meetings — especially on occasions of weddings, births, and the like; his language is animated and picturesque; he is intuitively a poet and orator, and is extravagantly fond of music. In a word, the demeanour of the Arab may be characterised as a serious cheerfulness, equally removed from boisterous mirth on the one hand, and dull apathy on the other. One of the chief amusements is listening to the recitations or songs of poets, by profession, who travel from town to town, or from encampment to encampment, after the fashion of the bards and minstrels of Gothic Europe, accompanying their verses, usually in praise of some native hero, with the *nebaba*, a kind of guitar. Niebuhr affirms, (*Voyage en Arabie*, ii. p. 134.) that it is reckoned scandalous in people of credit to practise music; and Burckhardt (*Notes on Bedouins*, p. 143.) states, that, in most districts, slaves only perform before company. This contempt for instrumental music does not, however, extend to vocal performances: songs, or chanted poems, form the great delight of the Arabs. Love odes, closely resembling the similar productions of the Trobadours and Provincials of the middle ages, are in every mouth. Dancing is reckoned disgraceful in a man, but a woman piques herself upon nothing more than skill in that art. Their ordinary amusements, beyond those now mentioned, are of a sedentary and indolent kind. The military, indeed, and the young Bedouins, practise the Djireed, and other warlike sports; but unless particularly excited, the Arab, both of the town and desert, employs his leisure in smoking, or in playing games of chance — of which chess, draughts, and cards are the principal. The cards in use are similar to those of the Chinese, which are much more numerous than those of Europe; and the games, also, are more intricate and involved. The Mohammedan law prohibits playing for money, but this prohibition is not always attended to. (*Niebuhr, Voyage en Arabie*, tom. i. pp. 141—152.; *Burckhardt, Notes on Bed.*, p. 202.; *Travels*, i. 377.; *Lord Valentia*, vol. ii. p. 308.) All public occasions are festivals to the Arabs. The poorest will make his marriage a gala day; but the greatest family festival is that of the circumcision of an infant: on such occasions the greatest efforts are made to give a handsome entertainment. In the desert it is usually so arranged that all who have families perform the ceremony on the same day, which is consequently one of great festivity. The religious festivals and the saints' days—which are very numerous — are also days of sport and rejoicing. On such occasions, the town Arabs affect great splendour in appearance, and a person would rather be thought a thief than allow one of his equals to exceed him in finery. The Bedouin, also, on such occasions, loads his wife with gold and silk, but seems little careful as to what appearance he may make. Ali Bey affirms that the people of Mecca are the dullest and most melancholy he ever saw; that their marriages and births are unaccompanied by rejoicings, and that the arrival of the Hadj is the only thing that rouses them from their lethargy; and that it is rather an incentive to avarice than pleasure. (*Ali Bey*, ii. pp. 103. 111.; *Burckhardt*, i. p. 338.; *Notes on Bed.*, pp. 50, 51. 147, 148.) Mohammed found the slave-trade so firmly established in Arabia, that he made no effort to abolish it; and throughout the peninsula there are a great number of black slaves, Africans, or the descendants of Africans, or mixed races, besides a great number of free blacks, the offspring of emancipated negroes. The great slave-dealers are the Yemen and Muscat merchants, who annually import fresh supplies from the coast of Africa. In the towns, especially those of the Hedjaz, every man,

almost, keeps an Abyssinian mistress, whom it is reckoned shameful to sell; and whom, if she bear him a child, he generally marries. This accounts for the swarthy complexion of the people of Hedjaz. The male slaves and the females, not Abyssinian, are usually employed in domestic duties. The Bedouins never cohabit with their female slaves; but after a few years service they give them their freedom, and marry them to some of their own complexion. The offspring of these marriages are free, so that a vast number of these black naturalised Arabs are spread over the country. The emancipated slave possesses all the rights of a free Arab, but no Bedouin, male or female, will intermarry with the race, so that they remain a distinct people, discriminated by their colour from all around them. They have, however, lost much of the negro appearance, especially the woolly hair and thick lip, but the form of the head still bears witness to their origin. Greek and Syrian slaves are found commonly enough in the bazars; but they are not regularly supplied. A native Arab is by birth a freeman; and though, in most cases, the condition of the mother fixes that of her offspring, there is no difference between a man's children by his Arab wives and those by his Abyssinian slave. Instances of harsh and cruel masters occur (*Ali Bey*, ii. p. 103.), but, generally, slaves are considered as part of the owner's family: the younger ones are instructed with their owner's children; from whom, indeed, they are distinguished only by a very slight difference of treatment, and the performance of some menial offices. They are protected by legal provisions; and upon a just ground of complaint against his master, the Cadi will order a slave to be sold. Servility is no bar to official dignities; indeed, the dolas, or governors of towns, are not unfrequently selected from slaves, for the express reason that they belong to that class; being supposed to be more strictly bound to their masters' interest than free Arabs of noble blood. (*Burckhardt*, i pp. 342, 343.; *Notes on Bed.*, 103, 104.; *Ali Bey*, ii. pp. 45. 103.; *Niebuhr, Des. de l'Ar.*, par. i. p. 91.; *Lord Valentia*, vol. iii. pp. 328, 329.)

Arabia, if united under one, or even a few governments, would possess many of the elements of political power. The nature of its soil and climate has always proved a formidable obstruction to foreign invaders, while the conquests of the immediate successors of Mohammed bear witness to the effect that the combined operation of its military energies is capable of producing. Split as the country is into some hundreds of petty sovereignties, this effect is little likely to be repeated. Though every Bedouin is by birth a soldier, dreams of conquest, beyond the plunder of a camp or caravan, rarely disturb his imagination; and though the princes of the settled districts surround themselves with regular troops, they employ them rather to avert internal treachery than to make any attempt at foreign aggrandisement. Still, however, the military power of the Arabs is considerable. In 1815, the princes opposed Mehemet Ali with an army of 25,000 men; and in 1803, the Wahabee chief marched against the same potentate at the head of 45,000. (*Burckhardt's Notes*, p. 248.; *Ali Bey, Travels*, vol. ii. p. 115.); and though unable to prevent the establishment of the Egyptian power in the Hedjaz, they delayed it for some years, during which they more than once defeated the troops of the Pacha, and failed at last; more, as it would appear, from want of concert in their operations than from want of force. It should be remarked, too, that Mehemet Ali seems fully satisfied with the possession of the sea ports of the Hedjaz, and the holy cities. During 24 years he has made no attempt to extend his conquests; but has sought to conciliate his neighbours, and his new subjects, by enacting laws equally favourable to both. The sultan sheriff of the Hedjaz, previously to the Egyptian conquest, maintained a guard of 1,000 men at Djidda, and probably 3,000 or 4,000 more in the other towns of the Hedjaz: this army is still maintained. The iman of Yemen has an army of 4,000 or 5,000 men, and the iman of Muscat, one of about 1,000. The smaller settled states have also their military forces, but no return of their amounts can be obtained. As before observed, every Bedouin is bred a soldier; but a very great difference exists between his sense of duty to his sheikh when called upon to attend him in a predatory expedition, and when called out for the purposes of national warfare — such, for instance, as a contest between two hostile and powerful tribes. On the latter occasions, the hostile sheikhs have sometimes marched each at the head of 5,000 men, while in the desultory plundering expeditions 50 or 60 men frequently compose the whole force. There is a great difference, too, in the conduct of the Bedouin in these cases. Those who have encountered him in his robber character, stigmatise him as cowardly; and it appears that if he fail to effect his purpose by surprise, he generally declines attacking even a far inferior force; but in his open contests with the foe of his tribe, no soldier is braver; though, even here, warfare is carried on at a less cost of human life than in most other countries. (*Burckhardt's Notes on Bed.*, pp. 76—84. 165—177.

The Bedouin attends his chief much in the fashion that the feudal vassal attended his liege lord during the middle ages in Europe. He arms, equips, and clothes himself; and trusts for pay to his share of booty. The Wahabee chief, who is essentially a Bedouin, has indeed kept on foot a large body of mercenary troops; but this system is in its infancy in the desert, and it is doubtful whether it will survive the present generation. The Wahabee power, since 1815, has evidently been on the decline. In the settled states, on the contrary, the soldiers are all mercenaries, their pay being, in general, 2½ dollars per month, in addition to food, arms, and clothing. This accounts for the different appearance made by an army of Bedouins, and one belonging to the states of Yemen, Muscat, Hedjaz, &c. The former present a motley appearance as to arms and equipment; the latter have the same arms and uniform. The Bedouins use long lances, sabres, and short crooked knives; and shorter lances, for the footmen. Clubs are very common, where lances (which are never of home manufacture) cannot be procured; and the Bedouins have several kinds, some wholly of wood, some laden with iron, and others wholly composed of the latter material. Matchlocks are in great request, but not very plentiful; though, when possessed of one, the Bedouin is an almost unerring marksman. He has not yet learned to use the musket, and if he get one, he converts it into a matchlock. The pistol is a favourite weapon.

The soldiers of the settled states are armed with matchlocks, and the long crooked knife, called *jambea*. The horsemen carry the long lance, but the shorter one is almost unknown out of the desert. The Arabs have no skill in working heavy artillery; cannon are never used in the field, and the few pieces mounted in the citadels are served by Turks.

A shield, 18 in. in diameter, covered with ox or hippopotamus hide, is a very common piece of defensive armour; in addition to which, coats of mail are worn whenever they can be procured. An iron cap, without a feather, iron gloves, and sometimes greaves for the legs, complete the costume of the mailed Arab. This mode of equipment is, however, chiefly confined to the Bedouins. Of all the arms in use, only the jambea, the clubs, and the target, are of home manufacture; the lances come from Syria and Persia, the sabres *professedly* from Damascus, the matchlock from Egypt, Turkey, and Europe, and the coats of mail, principally, from Syria.

It is a common practice for all Arabs, except merchants and learned professors, to go armed. The jambea is the usual weapon. (*Niebuhr*, par. ii. pp. 184—190.; *Burckhardt's Notes*, 30—32. 134, 135. 248.; *Travels*, vol. i. pp. 338, 339.; *Ali Bey*, ii. pp. 109—115.; *Lord Valentia*, ii. p. 348., iii. p. 329.)

Agriculture. — The nature of the soil restricts the pursuits of the agriculturist to particular localities, and his return varies materially in different parts of the peninsula. In Oman, the better sort of wheat, even when the season has been peculiarly rainy, will not return more than 10 for 1; nor the dhourrah (a coarse kind of barley) more than 12 for 1; while in the most fertile parts of Yemen, wheat is said to yield sometimes as much as 50 times the seed, and the return for the dhourrah, it is affirmed, amounts to 150, 200, and sometimes even 400 for 1. But statements like these, being liable to extreme exaggeration, must be received with considerable scepticism; though, as the dhourrah yields, in this district, 2 and even 3 crops in the year, the accounts of its extreme productiveness are not so very extravagant as, at first sight, they seem to be. (*Niebuhr, Des. de l'Ar.*, par. i. 135.)

The Tehama of Yemen, whenever its arid soil is naturally, or can be artificially irrigated, is plentifully sown with dhourrah. The plough is dragged in every direction over the field, till the earth is well broken and completely mixed. The sower follows the plough, and casts the seed into the furrow, as it is formed, the return of the plough covering the grain. In about 8 weeks the dhourrah is fit for the reaper; but as the farmer wishes the corn to be extremely ripe and dry before it is gathered, it remains standing a week or two longer, and then is pulled up by the roots. As, by this process, a considerable quantity of the dry seed is shed, the plough is again passed over the ground, and, in about 10 weeks, a second crop is produced, which, being gathered in the same way as the first, is, as before stated, not unfrequently followed by a third.

The plough is of the rudest description, and even this cannot be used on the mountain side; the latter being tilled by means of an iron hoe, or rather pickaxe. These, with tools of primitive construction for cutting channels in the fields and gardens, and for forming banks or dikes to preserve the water, complete the scanty list of agri-

cultural implements. When the corn is to be thrashed the Arabs place it in two rows, ear to ear: a large stone is then drawn over it by two oxen, so that the grain is rather crushed than beaten out of the husks. A *water-mill* would be an anomaly in a country where there are hardly any streams; but, with the exception of one or two, lately introduced into the Hedjaz by the Egyptians, there are no windmills in Arabia. The corn, when ready to be ground, is placed between two stones, of which the uppermost, if small, is turned by the hand; if large, it is worked by an ox or ass. (*Niebuhr*, par. ii. p. 180.)

But, notwithstanding this rude state of agriculture, such is the fertility of the S. parts of Arabia, that they not only supply corn for their own consumption, but for that of the greater part of the other districts, and of the wandering tribes of the desert. The Hedjaz is, however, almost wholly dependant on supplies from Egypt. (*Ld. Valentia*, iii. 325. et seq.; *Ali Bey*, ii. 46. 101, &c.; *Niebuhr*, par. ii. 302—307.)

With the exception of the Moedan tribes, none of the Bedouins meddle with tillage; while the business of the dairy and pasturage are almost equally unknown among the settled population. The Bedouin depends upon the Arab of the towns and villages for his corn and clothing; the latter upon the former for his cattle and part of his butter. In the division of rural labour, the pastoral portion thus falls to the Bedouin. He is a shepherd, though a warlike one; and now, as in the days of Abraham, he counts his wealth, not by his silver or gold (though of them he is by no means negligent), but by the number of his flocks and herds, and especially his camels. The same number of these animals, which would in one part of the desert constitute their proprietor a rich man, in another would mark him as comparatively poor. The tribes of poor Bedouins are those who inhabit the mountainous country, where the camels find little food, and are not very prolific. Among these, the possessor of 10 camels is reckoned wealthy, while in the plains of Nedsjed, some sheikhs have as many as 300, and no one with less than 30 or 40 is reckoned in easy circumstances. In the fertile parts of Nedsjed, are some of the best pastures in the world, and the camels bred there are preferred by the town Arabs. These plains also produce the finest horses, and with them the town population is supplied. The wealth of the Bedouin depends, however, upon many contingencies: not only is he liable to be stripped by some more powerful tribe, but disease among his herds, or profuse hospitality, frequently reduce him to poverty. His finest pastures also sometimes fail, depending as they do upon the rainy season, and being unprovided with independent means of irrigation. Should the rain fail, herbage also fails, and the Bedouin never looks for more than three or four successive years of plenty, and considers himself fortunate if he pass ten without encountering absolute famine. (*Burckhardt, Notes on the Bedouins and Wahabys*, pp. 39—42. 138—141. *Travels*, vol. ii. pp. 400—402.)

Manufactures. — These are at a lower ebb in Arabia than in perhaps any other semi-civilised country. Among the Bedouins, two or three blacksmiths, and a few saddlers, are the only artists: they are not members of the tribe for which they labour, but natives of the neighbouring towns and villages. The Bedouins regard them as an inferior race, and would feel degraded were any individual of their tribe to give his daughter in marriage to one of them. It is curious, however, that while they thus regard the service of their horses (their greatest pride) as a menial occupation, they should themselves unscrupulously perform other works, which appear to us quite of as low a character. The businesses of dyeing and tanning are performed wholly by the men. The Bedouin women weave the coverings of tents and the bags for holding provisions, of the hair of goats and camels, but the manufacture of tent-covers is confined to the mountainous regions, where goats abound, their hair being exclusively used for that purpose. (*Pliny, Nat. Hist.*, lib. vi. cap. 28. p. 142.) The Arab loom is a very primitive machine. Spinning is performed by the men, being the only domestic occupation which they do not spurn. (*Burckhardt's Notes on Bed.*, pp. 37—30. 134.)

These are all the arts or manufactures practised among the Bedouins; and the standard seems scarcely higher in the towns. It is true that gold and silver ornaments are manufactured in Yemen; but by Jews and Banian Indians. Even the money which is coined in that district (and there is none coined in any other), is the work of the former; and the only watchmaker who ever settled in the country, was a Turk. Of machinery, there is next to none. Some rude sorts of arms are made in Yemen, as the crooked knife *jambea*, and a very inferior matchlock. There are also, in Yemen, several looms for the manufacture of coarse linen; and this, like the hair and wool-weaving among the Bedouins, forms by far the most important of all their industrial occupations. Some woollen cloths are also woven; but this manufacture is much less extensive than the former. There is, or was, a glass-house at Mocha. (*Niebuhr*, par. ii. pp. 188—190.) In Djidda, out of 224 shops, Burckhardt enumerates only twelve in which any thing is *made*: the others are all places of sale, and chiefly for articles of food or luxury. The 12 manufacturers are, 4 tailors, 5 sandal-makers (all Egyptians), 2 turners, and 1 watch-maker; who, like his fellow craftsmen, formerly residing in Yemen, is a Turk. These, with a few blacksmiths, silversmiths, and carpenters (mostly Egyptians), constitute all the artisans of Djidda. (*Burckhardt's Travels*, vol. i. pp. 47—84.) In the holiest of the holy cities, Mecca, not a man can be found capable of forging a lock or key. The slippers and sandals in common use, are brought from Egypt and Constantinople; and the only attempts at manufactures are confined to the construction of rude matchlocks, *jambeas*, and lance-heads, together with vessels of copper and tin, in which the pilgrims carry away the water of the holy well, *zemzemi*. (*Burckhardt's Travels*, i. 343.; *Ali Bey*, ii. 99, 100.) In Oman, the only manufactures are sashes and turbans of silk or cotton, the *abba*, or Arab cloak of wool or camel's hair, a coarse kind of cotton canvass, arms of a very rude description, earthen jars, called *murtaban*, and gunpowder. (*Frazer's Journey into Khorasan*, p. 18.)

At Suez, Hodeida, Mocha, and Muscat, some of the vessels are constructed in which the Arabs carry on their coasting and Indian trade. Till within these few years, ship-building was carried on at Djidda also (*Ali Bey*, ii. 45.); but though it be still a very important shipping-station, no vessels of any kind are now built at it, and it is with difficulty that means are found of even repairing a ship or boat. (*Burckhardt's Travels*, i. 43.) The want of wood, in Arabia, lays the shipwright under peculiar disadvantages. The timber used in Suez is felled in the woods of Asia Minor, conveyed up the Nile to Cairo, and thence, overland, to its place of destination. When ships were built at Djidda, the timber came by the same route; and it may be presumed that its further transit, by the Red Sea, from Suez rendered it too costly. In Mocha and Hodeida a part of the timber is procured from the mountain-sides of Yemen, but the greater portion is imported from the coast of Africa. (*Burckhardt's Travels*, i. 42—49.)

The ships of the Arabs, excepting those of Muscat, which are of a very superior description, are extremely rude and simple. Those called dows are the largest, and are the only ones that perform the voyage to India. (*Burckhardt's Travels*, i. 43.)

The unskilfulness of the Arab seamen, with the clumsy nature of their dows, render shipwrecks of very frequent occurrence. Ali Bey was wrecked on his voyage from Suez to Djidda, and again on his return from Djidda to Suez (*Travels*, ii. 34. 164.); and he affirms, that not a year passes without several vessels being totally lost, and many more, more or less injured; so that ships are always being built or repaired, without increasing the actual number employed in the coasting trade (ii. 45.) That number is, however, considerable; the ships belonging to Djidda only amount to 250; and it is estimated that about as many belong respectively to Suez, Hodeida, and Mocha. (*Burckhardt's Travels*, i. 42.; *Ali Bey*, ii. 45.) Many of these ships are purchased at Bombay and Muscat; the vessels of the latter being very superior to those of the Red Sea, and their navigators much before the sailors of Yemen in energy and skill. (*See* MUSCAT.)

The best houses of the Arabs are built of stone, or, if upon the coast, of madrepore and coral. This latter material is of such a nature that it rapidly decomposes when exposed to the weather. In other parts they use a sun-burnt brick with little or no lime, so that constant care is necessary to prevent the introduction of moisture, the tropical rains bringing with them sure destruction to the neglected buildings of an Arab town, quickly reducing them to a heap of rubbish; and as the wooden materials very soon vanish in a country where wood is extremely scarce, the very ruins of many cities, formerly celebrated for their magnificence and grandeur, may now be sought for in vain. Even in towns that are populous, and stirring with activity, many houses are falling rapidly to decay; and while no part is old, many parts are dilapidated and ruinous: yet an Arab town, on the first approach to it, appears handsome and picturesque; the houses, like those all over the East, are flat-roofed, and among them rise, here and there, the dome-covered tombs, called *kobas*, which, with the tapering minarets of the mosques, give to the whole outline an air of variety and elegance. Every good house exhibits a series of gaudy lattices to its windows; and many of them are ornamented with fanciful designs in white stucco. Most of the gateways have pointed arches; and the general character of the ornamental architecture is not very dissimilar to the Gothic. The mosques are square buildings, or rather parallelograms, without much external beauty, except their tall and slender minarets, which always appear light and grace-

ful; but their interior frequently displays much skilful workmanship. The great mosque at Mecca contains more than 500 columns and pilasters of very great beauty. The houses of the poorer classes are of the most wretched description. Huts composed of wicker work or date-tree leaves, covered on the inside with mats, and, sometimes, on the outside with a little clay; huddled together, and hardly sufficient to afford a shelter from the weather. These circumstances, with the filth collected in the unpaved streets, and never removed, impress the mind of a European with a sense of utter desolation and misery.

No remains of the fine Saracenic architecture of the middle ages are found in Arabia; singular as it may appear, that a people who have left the traces of their skill in this art in every land, from Mesopotamia to Spain, should possess no trace of it in their native country. The perishable nature of building materials in Arabia *may* account for this fact, for even the holy mosque at Mecca has undergone so many repairs that it may be regarded as a modern structure; but it is much more probable that, while the Arab conquerors caught the love of arts and sciences from the enervated, but refined, nations subdued by them in their headlong career of conquest, those arts and sciences did not find their way into the peninsula, and that architecture, like the rest, never flourished within its limits.

The Arabs use no levels in their buildings, consequently their floors are very uneven; and, notwithstanding the heat of their climate, they have a very bad, or, rather, *no* idea of ventilation. The large ventilators, placed on the house-tops in Egypt, and which diffuse a current of air through all the lower apartments, are totally unknown. In many places the windows are composed of transparent stone, built into the walls, and, consequently, incapable of opening. (*Burckhardt's Travels*, i. 17—22. 153—155. 185—242.; ii. 150 329. &c.; *Ali Bey*, ii. 30. 42. 94—104. 161—174.; *Lord Valentia*, ii. 345—348.; *Fraser*, 7, 8.)

Commerce. — Owing to the situation of Arabia, nearly surrounded by the sea, and occupying, as it were, a central position between Europe, Asia, and Africa, it has always enjoyed a considerable trade, which, in later ages, has been materially promoted by the resort of pilgrims to the holy cities. The hadjis, indeed, are expressly authorised by the Prophet to combine commercial pursuits with the performance of a religious duty (*Koran*, chap. ii. *Sale*); and a great amount of business is, consequently, transacted at Mecca, during the period that the pilgrims remain in that city. With the exception of coffee, and a few other articles of inferior importance, Arabia has but little native produce to export. Its trade, therefore, is, and always has been, principally one of transit. Great quantities of commodities are annually brought to Djidda, Mecca, Muscat, and its other entrepôts, from Turkey, Persia, Africa, India, the Indian islands, Europe, &c., partly by caravans, but principally by ships: such parts of these as are not wanted for home consumption, being distributed among the pilgrims and merchants, are by them conveyed away by sea or land, as the case may be. The great centres of Arabian trade are Djidda, Mocha, and Muscat. The first is the port of Mecca, and also the principal channel through which the regular trade between the Hedjaz and Egypt is carried on; the former being principally dependent upon the latter for its supplies of corn. Since the zeal for pilgrimage has begun to abate in the Mohammedan world, the trade of Arabia has considerably decreased; but it is still carried on to a greater extent than would readily be supposed, considering the limited amount of its population and productions. Mocha is the principal seat of the coffee trade, though Loheia has of late years made some powerful attempts at rivalry; and Muscat has recently risen to very considerable eminence as a sea-port and seat of the carrying trade, particularly with India and the countries round the Persian Gulph. (*Burckhardt's Travels*, i. 29—81.; *Ali Bey*, ii. 101—107.; *Fraser*, 16.; *Lord Valentia*, ii. 370.; *Niebuhr*, par. ii. p. 193. See also, Djidda, Mocha, Muscat, &c.)

Laws, Crimes, and Punishments. The laws of Arabia are those of a primitive people under a patriarchal government. The civil laws, founded upon the Koran, are administered by cadis, distinguished by their experience in the customs of the nation, but to whom a knowledge of the arts of *reading* and *writing* is not always indispensable. It should be observed, however, that the Arab judges are of two kinds; the *Cadi-el-feriaa* (judge of customary law), and the *Cadi-el-sheryaa* (judge of written law), the latter being more common in what are called the Turkish towns (that is, in towns governed by Turkish law), than in those where the unmixed customs of Arabia exist. Written pleadings are not, however, unknown, even in pure Arab towns; but precedents (in some cases, perhaps, reduced to a rude form of codification) seem to form the principal, if not the only guide, to an Arab judge's decision. The sovereign, whether he be monarch of a state, or sheikh of a Bedouin tribe, is only president of the tribunal of justice; he cannot decide a case, either civil or criminal; every one must be referred to the proper tribunal; and the sovereign possesses no power of reversing its decision. But this protection from despotic power is, in the towns, merely apparent; for, as the sovereign names the cadis and dismisses them at pleasure, they regard themselves simply as his officers, and never dream of pronouncing a sentence of which he disapproves. Among the Bedouins, however, the office of cadi is elective, and the sheikh has no influence in the appointment. (*Niebuhr*, par. ii. pp. 180, &c.; *Burckhardt, Notes on Bed.*, pp. 68, &c.)

Capital punishments are very rare; being inflicted only for blasphemy, and conjugal infidelity in women. The blasphemer is hanged; the unchaste wife, if her guilt be unequivocally proved, has her throat cut; and, by an unheard of refinement of atrocity, her father or brother is compelled to be her executioner. This detestable barbarity is, however, rarely perpetrated; for the marriage tie being, on the part of the husband, of very easy dissolution, he generally prefers sending his offending spouse back to her family, merely assigning as a reason that she does not suit him. (*Niebuhr*, par. i. p. 21.; *Burkhardt, Notes on Bed.*, p. 63.) Corporal punishments are almost unknown. The immemorial usage is to award a pecuniary fine, whatever may be the nature of the crime. Every offence has its ascertained mulct, even to murder; but, in this case, the friends of the deceased are not compelled to take the compensation, being, by the law of *Thar*, or blood revenge, allowed to take the life of the homicide, or that of any of his relations within the fourth degree. If, however, the fine be accepted, the Koran expressly provides for the safety of the murderer. (*Koran*, chap. ii. p. 21.; *Niebuhr*, par. i. pp. 28—31.; *Burckhardt's Notes on Bed.*, pp. 84—89.) Insulting expressions, acts of violence, however slight, and the infliction of wounds, have each their respective tariff of fines; and it sometimes happens that, in the course of a quarrel, mutual offences having been committed, the cadi's sentence is a curious specimen of striking a balance. Burckhardt (*Notes on Bed.*, p. 71.) affords an instance of this. "Bokhyt called Djolan *a dog*. Djolan returned the insult by a blow upon Bokhyt's arm; then Bokhyt cut Djolan's shoulder with a knife. Bokhyt owes to Djolan, therefore,

For the insulting expression	-	1 sheep.
For wounding him in the shoulder	-	3 camels.
Djolan owes to Bokhyt,		
For the blow upon the arm	-	1 camel.

Remain due to Djolan, 2 camels and 1 sheep."

The killing of a watch-dog is paid for by placing in the earth a stick as long as the dog, from tail to snout, and this stick the offender is obliged to cover with wheat, as a satisfaction to the owner.

The decisions of the cadis are generally founded upon the amount of testimony before them; but, if there be no witnesses, the defendant is called upon to expurgate himself by oath. The judicial oaths vary in sanctity and solemnity; and if the accused swear, by the one proposed, to his innocence, he is considered as acquitted. An ordeal, not very dissimilar to that formerly prevailing in Europe, exists in Arabia. It consists of heating an iron spoon red-hot, and calling on the accused party to lick it. If he escape without injury, he is accounted innocent; if otherwise, guilty. Burckhardt is orthodox enough to declare, that persons have been known to lick the *beshaa* (red-hot spoon) 20 times, with perfect impunity! (*Not. on Bed.*, p. 69.)

Though robbers be accounted any thing but infamous, those detected in the fact are very severely punished. In this case, the robber is kept in close confinement (among the Bedouins, in a hole dug in the earth,) and very scantily fed, till he fix the terms of ransom with his captor, or till he contrive to make his escape. This is a strictly legal method of proceeding; the right of detention being lodged, by custom, in the person of the captor; and even the mode of treatment is so well ascertained, that it is scarcely ever departed from.

Among the Bedouins, the customs of *Wasy* and *Dakheil* have all the force of law in other countries; by the first, an Arab family binds itself to be the protector of another, and this obligation, once undertaken, descends through all the generations of both. There is no Arab, from the lowest to the highest, but has his *wasy*, or guardian; and the duty of protection inferred from this character, is among the most sacred recognised in Arabia.

By the law of *dakheil*, a person in actual danger, who can touch another, or even any thing with which that other is in contact, or can hit him by spitting or throwing a stone at him, at the same time exclaiming, *Ana dakheilak*, "I am thy protected," acquires a right to the protection which he seeks, and which is always accorded to the fullest extent. Even a detected thief, if he can touch any one in his captor's tent (except the captor himself), becomes safe; for which reason he is

bound hand and foot, and beaten, till he agrees to renounce the *dakheil* for that day. It is for this reason, too, that he is subsequently buried alive, as it were; for should he become the *dakheil* of any one, his right to freedom is immediately allowed, and he is treated, in every respect, like a newly arrived guest in the tent of his late enemy. There is only one offender to whom the privilege of *dakheil* is refused, namely, the thief released upon the responsibility of some third party, if he should, when at liberty, refuse to satisfy his bail. Under such circumstances, he is proclaimed *traitor*, and loses all the privilege in question; in fact, becomes outlawed. The *dakheil* does not apply to a homicide under the *thar*. (*Burckhardt, Notes on Bedouins*, pp. 74, 75. 89—100. 182.)

Though polygamy be allowed by the Mohammedan law, in practice it is by no means general. Few men, of moderate fortunes, have more than one wife; and many, even of the highest rank, similarly confine themselves. — (*Niebuhr*, par. i. p. 65.; *Burckhardt, Not. on Bed.*, p. 61.) On the other hand, the nature of the marriage ceremony, and the facility of divorce, renders changes of wives of very common occurrence. In the towns, an agreement before the cadi, in the desert, the slaughter of a lamb in the tent of the bride's father, completes the contract, which is broken quite as readily as it is formed. The husband having said, before witnesses, *ent talek* (thou art divorced), and sent the woman back to her family, both parties are considered free; the husband from the maintenance of his wife, the wife to form a new connection. In these cases, the woman's portion is returned; and, among the Bedouins, the husband adds to it a she-camel. The custom of divorce is, however, much more prevalent in the tents than in the towns. In the latter, it is always considered indecorous, and implying dishonour in the woman; but, in the desert, a wife may have been divorced 3 or 4 times, and yet be free from any stain or imputation on her character. Polygamy, however, is much more common in the towns than among the Bedouins.

If a man leave a widow, his brother generally offers to marry her; but this is entirely a law of custom, and not binding on either party. A man has, however, an exclusive right to the hand of his cousin; and, although he cannot be compelled to marry her, his renunciation of his right is necessary to enable her to marry another. Marriages are consummated at a very early age; it being reckoned discreditable in a man, and almost infamous in a woman, to lead a life of celibacy. (*Burckhardt's Notes on Bed.*, pp. 61—66.; *Niebuhr*, par. i. pp. 63—67.)

A curious custom, connected with the laws of marriage and divorce, prevails in the Hedjaz. No unmarried woman is, by the Mohammedan law, allowed to visit the holy temple; but as many rich old widows, or women whose husbands have died on the road, arrive with every hadj, a number of men are established at Djidda, and other frontier towns of the *Beled-el-Harem*, whose business it is to facilitate the progress of these widowed females through the sacred territory. The *muhallil* (as one of these men is called) marries the lady legally before the cadi, accompanies her to Mecca, Arrafat, and all the sacred places; and, on the termination of the pilgrimage, pronounces the *ent talek*, or sentence of divorce. Should he, however, refuse to do this, the law cannot compel him; but he would be prevented from any longer exercising his calling, which, though not very creditable, is so lucrative, that only two instances are recorded of such temporary marriages having become permanent. (*Burckhardt's Travels*, i. 359.)

The law of inheritance is very simple as regards property. The effects of a deceased father are shared among his children, the portion of a male being double that of a female. The succession to power is less clearly ascertained. If a sheikh or sovereign die, his successor is usually taken from *among* his sons; but it does not seem that any *one* has a well established right in preference to the others. In Yemen, it would appear that the iman is succeeded by his eldest living son, even to the exclusion of the children of an elder one deceased. (*Niebuhr*, par. ii. p. 179.; *Burckhardt, Notes on Bed.*, pp. 68. 75.; *Lord Valentia*, vol. ii. p. 380.)

Religion. — Antecedent to the earliest records, the city of Mecca had been sacred ground; and its holy temple, the *kaaba*, identified in the minds of the Arabs with every sacred feeling. The legends with respect to it, to which it is unnecessary more particularly to allude, show that the religion of the early Arabs was, to a considerable extent, mixed up with that of the Hebrews. They acknowledged one supreme God, regarding, however, the sun, moon, planets, and stars, as inferior and subordinate intelligences. This religion has been called SABIANISM, either from SABI, a supposed son of Seth, or, as is more probable, from the word SABA, signifying the Host of Heaven. The supreme God was called *Allah Taala* (Most High God), the subordinate deities, *Al-Ilahat* (the Powers). It was these titles (one particular, the other general) that led Herodotus to affirm that the Arabians worshipped only two gods, namely, *Urotalt* and *Alilat*; the former of whom he identifies with the Bacchus (Διονυσος) of the Greeks, the latter with Urania, the muse of astronomy. (*Herodotus, Thalia*, § 8.; *Al-Firawz, Shahrestan et aliis in Pococke*, pp. 110. 138. 143. 284.; *D'Herbelot*, pp. 725, 726, &c.) The Sabian religion can scarcely be deemed irrational, when professed by a rude people, inhabiting an open country, under a clear sky; who must have connected the changes of the seasons, and the returns of the periodic rains and droughts, that rendered their plains alternately fertile and sterile, with the revolutions of the heavenly bodies. But the Arabs also worshipped angels (*Koran*, chaps. liii. and lxxi.); and their images, which last they believed to be inspired by the supreme divinity with life and intelligence. This sort of idolatry having been once introduced, gradually spread; and in the 6th century, and long before, the number of these deities was very great, each tribe having chosen one to be its peculiar intercessor with the Supreme Being; and 360 were enshrined in the kaaba, as tutelary guardians of the days of the Arab year. (*Al-Janaub, Shahrestan et aliis in Pococke*, 90. et seq.; *Sale, Intro. Koran*, 14—22.; *Burckhardt's Travels*, i. p. 299, &c.)

The Arabs seem, indeed, to have admitted, without hesitation, all deities; and thus, in the 6th century, a figure of the Virgin Mary, with the infant Jesus, was sculptured on one of the principal pillars of the kaaba as an object of adoration. (*El Arraky*, quoted by *Burckhardt, Travels*, i. p. 300.) It is most probable that this indiscriminate adoption of the objects of veneration of all sects, was intended to render the sacred city sacred to all men, and thus to increase the resort of pilgrims.

After the destruction of Jerusalem, by Titus, A. D. 70, many Jews fled into Arabia. These exiles made many proselytes among the natives, whole tribes embracing the Hebrew faith; so that, in a century or two, the Jewish Arabs became a very powerful section of the whole people. A similar cause, the persecution early in the third century of the Christian æra, drove many Christians to Arabia, whose zeal, unchecked by former sufferings, led them to preach their doctrines in their new homes, and that with such success that in a short time they had made a very great progress in the country.

The faith of the Persian Magi, or the religion of Zoroaster, had, at a very early period, found its way into the peninsula; had been embraced with avidity by many tribes; and thus, in the middle of the 6th century, the population of Arabia was divided, perhaps not very unequally, into Sabians, Jews, Christians, and Magians (*Shahrestan et aliis in Pococke*, 140. et seq.; *Sale, Intro. Koran*, 21—24.)

Such was the state of religion in Arabia at the birth of Mohammed; an epoch which may be regarded as the commencement of one of the most extraordinary revolutions that history has to record. It occurred at Mecca in the month of May, A. D. 571, (*Dr. Prideaux, Hist. Moh.* 6.) or 570 (*Abul-Feda, Vit. Moh.* 49.). This founder of a new religion, and of a political power which, even in his lifetime, extended over his native country, and which, under his successors, threatened to embrace the empire of the world, traced his genealogy in a direct line through 11 descents from Koreish, the founder of the powerful tribe that bore his name. Koreish again, was affirmed to be the 10th in direct descent from Adnan; and Adnan, the 3d, 7th or 8th (which is doubtful) from Ishmael, the son of Abraham. (*Abul-Feda, Vit. Moh.*, cap. ii. pp. 6, 7.)

The future Prophet sprung, therefore, from the noblest tribe of the Ishmaelitish Arabs, and his grandfather was, at the time of his birth, sovereign of Mecca, and guardian of the kaaba; consequently, from the sacredness of his territory, and the holiness of his office, a prince of great power and influence. (*Abul-Feda*, cap. vi. p. 12. *Al-Firawz et aliis in Pococke*, p. 51.; *Ecchelensis Chron. or Hist. Ar.*, par. i. cap. iii. p. 139. et seq.)

Yet, notwithstanding his high connections, Mohammed's early life was passed in comparative poverty. His father, a younger son of the sovereign of Mecca, dying before Mohammed was 2 years old, the latter, and his mother, were left with no other provision than 5 camels, and a female slave. To his grandfather, Abdol-Motalleb, in the first instance, and subsequently to his uncle, Abu-Taleb, the future Prophet was, therefore, indebted for his infant protection; and this guardianship was exercised with the greatest kindness, the uncle especially (for Abdol-Motalleb died when Mohammed was only 8 years old), continuing the firm friend of his ward, throughout his life, and protecting him in the dangers and difficulties which beset his first attempts to disseminate his doctrines. Under the auspices of his uncle, Mohammed began life as a merchant, accompanying a trading caravan to Syria, in his 13th year. Subsequently, and at a very early age,

Abu-Taleb recommended him as a factor to Khadija, a rich widow, to whom his skill in commerce, or his other accomplishments, so far endeared him, that, in a short time, he exchanged the name of servant for that of husband; raising himself by this alliance to an equality with the richest, if not the most powerful men of Mecca. At the time of his marriage, he was 25, and his wife 40 years of age. (*Abul-Feda*, caps. iv. and v. pp. 10. and 12.). It would be useless now to attempt to discover the proximate cause that led Mohammed to attack a system of idolatry, of which his own family were at the head. It was not, however, as some have surmised, a sudden outbreak of enthusiasm; for, after his marriage, he continued to live in all the privacy compatible with the station of a rich and highly connected individual for 13 years. At the termination of this period, he withdrew from society, resorted to a cave in the neighbourhood of Mecca, where, for 2 years, he gave out that he was in daily communication with the Divinity. At the end of this time, being then 40 years of age, he assumed the character of a Prophet, sent by the Almighty to establish a new religion; or, if we may take his own words, to restore the ancient one, professed by Adam, Noah, Abraham, the Prophets, and Jesus Christ; by destroying the gross idolatries of his countrymen, and weeding out the corruptions and superstitions by which, as he alleged, the Jews and Christians had deformed the beautiful simplicity of the true faith. (*Abul-Feda*, cap. vii., pp. 14—17.; *Abul-Pharagius*, p. 102.; *El-Macin. Hist Sar.*, lib. i. cap. i. p. 13., &c.)

His first convert was his wife Khadija, of whose merits, in this and other instances, he always entertained the highest sense, uniformly speaking of her with an affection bordering upon reverence; and placing her, after her death, among the only *four* perfect women the world had ever seen. The other three were Miriam, the sister of Moses and Aaron, the Virgin Mary, and his own daughter Fatima. (*Abul-Feda*, caps. vii. & viii., pp. 16, 17.) The progress of the new sect was at first very slow. It is usually stated, that 9 converts only were made in the first 3 years: but this is scarcely consistent with the fact that, in the 4th, Mohammed felt himself strong enough to abandon his private preaching, and to proclaim his doctrines publicly. (*Abul-Feda*, cap. viii. p. 19.; *Koran*, cap. xxvi. & xxvii.; *Abul-Pharagius*, p. 102, &c.)

Nothing can well exceed the simplicity of the Mohammedan doctrines, as delivered by the founder and his immediate successors; and as they are embodied in the 114 chapters of the Koran: The unity of God; the divine mission of Mohammed; the stated observance of prayer; the giving of alms; the observance of an annual fast; and the pilgrimage to Mecca; comprise, under 5 heads, the principal points, whether doctrinal or practical, which were to be enforced. The resurrection of the body was proclaimed, and a future state, in which men will receive the reward of their good actions and obedience to the law of the Prophet, or be subjected to a *purifying* punishment for their evil deeds and infidelity. The *final* admission of all believers to a state of bliss, is an article of Mohammedan faith. (*Koran*, passim, especially chaps. ii. iii. iv. v. and cxii.; *Reland's Moham. Theol.*, p. 20., &c.) The supposed divine legation of Mohammed is the principal novelty introduced. The stated prayers were only adaptations of customs already existing among the Sabians, Jews, Christians, and Magians; the annual fast was a very ancient practice among the old Arabs; and the only change effected by Mohammed in its observance, was, by prohibiting the intercalation of a month in the lunar year, to make the sacred season fixed instead of ambulatory. (*Koran*, chap. ix.). The pilgrimage to Mecca was, as has been shown, a practice followed from the very earliest times; and the rewards and punishments in another life were adopted, but with much adulteration, from the Christian doctrines. The grossly sensual character of Mohammed's paradise, is, in fact, the great blemish in his religious system; and has had a most debasing and degrading influence over the countries where it has acquired an ascendancy.

The new religion being in most parts little more than an adaptation of various parts of the religions previously existing in Arabia, was well fitted to attract all by the respect it professed for the peculiar tenets of each, excepting the idolatrous worship of the Sabians. Accordingly, Mohammed was heard with patience by the people of Mecca, till he denounced the idols of the Kaaba. This, however, raised so strong a feeling against him, that his ruin was prevented, and his life preserved, only by the firm friendship of his uncle, Abu-Taleb, who, although unconvinced by the preaching of his nephew, protected him against his enemies. In the 6th year of his mission, the persecutions to which he was exposed became so severe, that many of his followers sought, by his permission, refuge in other lands, chiefly in Abyssinia; where they became the first instruments for planting the new faith in Africa. This event is called, by Eastern writers, THE FIRST HEJIRA or flight. (*Abul-Feda*, caps. ix. x. xi., pp. 21—27.; *Ebnol-Athir*, *Al-Firawz et aliis in Pococke*, p. 177, et seq.).

The protection of Abu-Taleb, though it preserved Mohammed from personal danger, could not prevent a very strong manifestation of hostility, in which Abu-Taleb himself and all his family were sharers. The other Koreishites bound themselves to hold no communion with the family of Hashem, the great grandfather of Mohammed; and to give the greater force to their act, it was reduced to writing, and laid up in the Kaaba. At the end of 3 years, however, Mohammed, having, no doubt, previously concerted his measures, proclaimed, that God had sent a worm to eat out every word in the parchment except his own holy name; and the writing being, on inspection, found to be destroyed, the league was put an end to; and Mohammed's reputation considerably increased. In the same year, being the 10th of his mission, Abu-Taleb and Khadija died; and their deaths were by far the greatest blow which Mohammed experienced during his career. In the Mussulman calendar, this year is commemorated as the *year of mourning*. (*Abul-Feda*, cap. x. xiv., pp. 26—29.; *El-Macin*, lib. i. cap. i. p. 4.). The death of Abu-Taleb removed the only check to the virulent enmity of the Koreishites; and a stranger having succeeded to the sovereignty of Mecca, after a troubled residence of 3 years — marked, however, by the accession of many proselytes—Mohammed, on the invitation of a deputation from Medina, fled to that city; and instantly, as if by magic, the proscribed and condemned exile became a powerful, and, as it soon appeared, an all-but-invincible monarch. The flight from Mecca to Medina, the second Hejira, or HEGIRA, *par excellence*, is the epoch from which the Mussulmans date their æra. It occurred in the 53d year of Mohammed's age, and 13th of his mission; and coincides with the 16th July, A.D. 622. (*Abul-Feda*, cap. xxi. xxiii., p. 40—50.; *Ebn Ishak, in Sale*, p. 48.; *El-Macin*, lib. i. cap. i. p. 4.; *D'Herbelot*, pp. 444, 445.) Down to this point, Mohammed had propagated his religion by means of persuasion only: throughout 85 chapters of the Koran, published at Mecca, there is nothing said of a compulsory power being given to the Prophet; on the contrary, he exhorts his disciples to bear with patience the evils inflicted by unbelievers, declaring he has no authority to compel any one to embrace his religion. (*See*, in particular, chaps. vii. to xxiii.; xxv. to xxxii., &c.) But his doctrines breathe a very different spirit after his establishment in regal and sacerdotal power at Medina. The 18 chapters of the Koran, published at that city, declare, that since man had perversely rejected the missions of Abraham, Moses, the Prophets, Christ, and even the mild pleadings of Mohammed himself, God had now commanded him to extirpate idolatry from the earth, and to bring all mankind into submission to his will. (*See*, in particular, chaps. iii. iv. v. viii. ix., &c.). The sword, however, was first drawn against Mohammed, and not by him. Abu-Sophian, the new sovereign of Mecca, led an army, of 900 or 1,000 men, against the supposititious Prophet, who, with a force of only 319 enthusiasts, met his enemies in the valley of Beder, near Medina, and gained a complete victory, with the loss of only 40 men; who were immediately canonised, as the first martyrs in the cause of God and his Prophet. (*Abul-Feda*, cap. xxvii., pp. 56—60.; *El-Macin*, lib. i. cap. i. p. 5.)

From this time the progress of Mohammed was, if not a continued triumph, — for he sustained some defeats, — an example of the most rapid success upon record. During the next six years he fought 27 battles, exclusive of those fought by his generals, in which he was not personally present; and, at the end of that period, he entered Mecca in triumph, on the 20th Ramadan, in the 8th Hejira, or December 31., A. D. 629. The conquest of Mecca may be regarded as the final establishment of Mohammedanism in Arabia. The few contests that followed were merely the last struggles of an expiring opposition; and were mostly terminated by Mohammed's generals, while the Prophet himself was employed in destroying the idols in and round the Kaaba, and in sending embassies, inviting the Arabs to embrace his faith; which invitations were now attended with complete success. The following year, the 9th Hejira, is called, by Eastern writers, the year of embassies: missions from all parts of Arabia poured in, bringing the adhesion of the various tribes to the now triumphant faith; and the victorious founder of the new religion made a solemn pilgrimage to the temple of the Kaaba, to return thanks to Heaven for his success, and the final overthrow of idolatry. (*Abul-Feda*, caps. xxviii.—lx. pp. 61—132.; *El-Macin*, lib. i. pp. 5—10.)

All Arabia was now united in one faith; but Mohammed did not live long to enjoy his triumph. Some years previously, or in the 7th Hejira, A.D. 628, he was poisoned by a Jewess of Chaibar, who, on his entering that town in triumph, offered him some eggs, previously drugged, professedly to test the reality of his divine knowledge. (*Abul-Feda*, cap. xlv. p. 92.) Henceforward his strength declined; but his death was caused by a

fever*, which having, at intervals, deprived him of his reason, terminated his existence in the space of 14 days, on the 12th of the 1st mouth, Rebizah, in the 11th Hejira (6th June, 632), in his 63d, or, according to some authorities, 65th year. He was buried at Medina; and the Mohammedan doctors differ as to which is the most sacred,— Mecca, which gave birth to their Apostle, or Medina, which received him in his flight, and contains his mortal remains. (*El-Macin*, lib. i. p. 10.; *Abul-Feda*, caps. lxi.—lxiv. pp. 133—142.; *Ockley's Hist. Sar.*, i. 1.)

During Khadija's life, Mohammed abstained entirely from the right of polygamy; after her death he took 9 wives, alleging, of course, that a special revelation authorised him in exceeding the number 4, to which his law restricted his followers! By Khadija, he had 4 sons, and as many daughters; and by an Egyptian concubine, he had a fifth son; all his other wives being barren. His 5 sons died in infancy; and of his daughters, Fatima only, who was married to her cousin Ali, survived her father. From Ali and Fatima a numerous and illustrious progeny descended, the ancestors of the numerous existing Sheriffs, or *Sons of the Prophet*. (*Abul-Feda*, caps. lxvii. lxviii., pp. 146—151.)

Mohammed died in the midst of preparations to carry his spiritual faith and temporal power into other countries. His death scarcely, however, suspended the completion of his great designs: a momentary state of confusion was followed by the election of Abu-Becre, father-in-law of Mohammed, to the office of supreme head of the Mussulman religion and power, under the title of "Khalif," or "Successor of the Prophet." Under his reign, and that of his two successors, the Arab arms were carried triumphantly into all the neighbouring countries; and, by the 20th year of the Hejira, or within less than 10 years from the death of Mohammed, the conquest of Syria, Persia, and Egypt, was completed. In the 13th year of the Hejira, Damascus was taken; in the 16th, Jerusalem; in the 17th, Antioch; in the 19th, Ispahan; and in the 20th, Alexandria. (*El-Macin*, lib. i. cap. ii. pp. 16—38.; *Abul-Pharagius*, pp. 108—117.; *Ockley*, i. pp. 1—391.)

The khalifate continued elective for 4 successive elections; the last, who held the power by public suffrage, being Ali, the cousin and son-in-law of Mohammed. This FIRST BELIEVER had been thus long passed by, in consequence of his refusing to hold as sacred any thing not contained in the Koran, or the immediate traditions of the Prophet. (*Abul-Pharagius*, p. 115.) From this circumstance arose the division of the Mohammedans into two great sects, the SONNITES and the SCHIITES. The latter, the disciples of Ali, whom they denominate the *vicar of God*, receiving only those doctrines which he admitted to be sacred; while their adversaries (the orthodox Mussulmans) hold, at least in *equal* reverence, the 7,275 *Sonna*, or oral laws, which, within the first 200 years of Mohammedanism, had grown into respect and veneration. (*D'Herbelot*, arts. *Bokhari*, *Hadith*, and *Sonnah*, pp. 208. 416. and 807.)

Ali fell by the hand of an assassin, after a troubled reign of 5 years; and Moawijah, son of Abu-Sophian, the greatest enemy of Mohammed, usurped the throne; and, what is more remarkable, had the power or art to make the khalifate hereditary in his own family. His descendants are called the Ommiyade race of khalifs, from Ommiyah, the grandfather of Abu Sophian; and they possessed the regal and sacerdotal power through 14 generations, and for nearly 100 years. (*El-Macin*, lib. i. caps. v. and vi. pp. 39—49.; *Abul-Pharagius*, pp. 117—133.; *Ockley*, ii. pp. 1—106.)

Under the sway of this family, the whole of Africa was subdued; and so far colonised by tribes of Bedouins, that it has ever since remained, in language, manners, and religion, essentially an Arab country. The Oxus (Jihon) was very early crossed; the shepherd tribes of Turks and Tartars brought under the triumphant faith of the Arabian prophet; and, within 80 years from Mohammed's death, the sceptre of his representative extended over all the countries between the Indus and the Atlantic, and (eastward of the Mediterranean) from the Indian Ocean to the Steppes of Central Asia. (*El-Macin*, lib. i. caps. vii.—xiii. pp. 49—77.; *Abul-Pharagius*, pp. 123—126.

Spain was the last and most remote of the conquests of the khalifs. It was subdued in the beginning of the 8th century; Roderic, the Gothic king, being defeated and slain in the battle of Xeres, July 19. A.D. 711. Subsequently to this, though the Arabs were for a short time masters of the S. of France, they made no further impression on Europe; and, in the year 732, they were completely defeated by Charles Martel, and driven beyond the Pyrenees, which barrier they never recrossed. (*Abul-Casim*, vol. i. chaps. iv.—ix. pp. 38—111.; *Roderic Ximenes*, *Hist. Ar.*, caps. xi.—xiv. pp. 10—13.)

The Ommiyade khalifs were, in the 132d Hejira (A.D. 750), superseded by the descendants of Abbas, one of the uncles of Mohammed. The Ommiyade dynasty had never received the cheerful submission of the Prophet's family; and, after a lengthened struggle, the last Ommiyade khalif was completely defeated in Mesopotamia, and again in Egypt, where he was slain. Abul-Abus-Saffa, and the princes, his descendants, are known in history as the Abbasside khalifs. (*El-Macin*, lib. i. cap. xxi.; lib. ii. cap. i. pp. 95—100.; *Abul-Pharagius*, pp. 137, 138.)

The seat of government had, in the meanwhile, been removed from Medina to Damascus, and from the latter to Bagdad. It was in this new seat of empire that the Arab claim to literary and scientific eminence was first raised. It was here that the splendid courts of Haroun-al-Raschid, and his sons, Al-Mansour and Motassem, were held. It was here that, under their patronage, the Greek sages and philosophers were translated, that the native Arab genius raised its head, and carried the sciences, physical and metaphysical, together with the useful arts, to a point of grandeur unknown in former times. The names alone of the Saracen philosophers, mathematicians, astronomers, physicians, botanists, chemists, and architects, who illustrated this period of Arab history, would fill a volume. Of chemistry, they may be called the *inventors*; and although, in astronomy, they did not presume to depart from the Ptolomean hypothesis, they carried out the views of the Alexandrian philosopher, and attained results marvellous for their accuracy, when the erroneous nature of the data on which they were founded is considered. To the astronomical tables of Bagdad, Cordova, and Samarcand, subsequent observers owe a large debt of gratitude; and many of the common terms in modern astronomy, and most of the names applied to the fixed stars, attest the source whence Europe drew the elements of astronomical science. The Arabs, if they did not invent, at least were the great improvers of algebra † (the name sufficiently attests its origin), which placed in the hands of the analyst an instrument of vast and apparently unlimited power. Perhaps, however, the most important invention we owe to the Arabs, is that of the arithmetical characters, now in common use, which banished at once and for ever the cumbrous and unwieldy notation of the Romans. In medicine, the Arabs were pre-eminently great: and the magnificent remains of their public and private buildings, in Syria, Egypt, and Spain, evince their skill in architecture. The Arab court of Bagdad was, in fact, the centre of the knowledge and refinement of the period in which it existed; and, by a singular contrast, that period corresponded with the darkest and most degraded portion of European history. (*Abul-Pharagius*, pp. 150. et seq.; *D'Herbelot*, pp. 430. 545, &c.)

The khalifate shared the fate of all gigantic empires, especially of such as rise suddenly to immense power. It fell by its own unwieldiness. Spain first, and then Egypt and Africa, effected their independence. The wild Turk and Tartar tribes, among whom the Mohammedan faith had been imperfectly introduced, became dangerous neighbours to their nominal sovereigns; and, in their decreasing power, the khalifs had recourse to the desperate expedient of forming from these wild warriors a body of mercenary troops to guard their frontiers, and protect their persons. The result was identical with that which attended a similar experiment among the Romans. In a few generations the servants became the masters; and though, as in the parallel case of Rome, the destruction of this overgrown empire occupied some centuries, yet piece by piece it crumbled away, till, in the 656th Hejira (A.D. 1258), a Tartar army, having captured Bagdad, put an end to the nominal existence of the khalifate; all real power having, long before, passed into the hands of the Turkish sultans of Asia-Minor. (*Abul-Feda*, *Annales Muslemici*, ii. pp. 173—259. 309. 405.; iii. 295—583. 633.; iv. 27. 315. 555.; v. 181—343; *Abul-Pharagius*, 138—174. 198—200. 318.; *El-Macin*, lib. ii. xxii. xxxi. 97—163.; lib. iii. xli. 214. et seq.)

The foreign conquests of the Arabs made no change in the political state of the peninsula. The heads of tribes still governed their subjects, as they had governed them from time immemorial; acknowledging, in the distant khalif, no more than a general head of the Arab people, and the sacred chief of the Prophet's faith. As the downfall of the khalifate was unattended by any shock to Mohammedanism, merely transferring the office of "Commander of the Faithful" from the khalif of Bagdad to the Turkish sultan, it may be easily imagined that the Arabs had little difficulty in changing the objects of their veneration. Their holy cities were visited

* The epilepsy, or falling sickness, to which he is said to have been subject, is nowhere so much as hinted at by the native writers. It is strongly insisted on by Prideaux (*Life of Mah.*, p. 20.), and by Hottinger (*Hist. Or.*, lib. i. cap. 2.): but their authorities are wholly Latin; namely Ximenes, Theophanus, Zonaras, &c.

† This science was, certainly, originally discovered by Diophantus of Alexandria, but its power, as an instrument of analysis, lay dormant and unknown, till developed by the ingenuity of the Arab mathematicians. The first systematic work on this subject came from the court of the Khalif Al-Mamoon, and from the pen of the Arab, Mohammed-Ben-Musa. (*Abul-Pharagius*, pp. 183—186.)

as before, and by larger caravans, as their faith was more diffused. Though they sent forth a host of conquerors, who subdued more countries in a shorter time than almost any by whom they had been preceded, their country escaped the fate of most victorious nations — that of being conquered in turn. Two revolutions only are recorded as having shaken Arabia, since the æra of Mohammed; and both of them, like his, were of native growth, and of a religious character.

A tribe of fanatics, under the influence of a leader named Earmath, attempted, in the 297th Hejira (A.D. 890), to effect a change in the ceremonial part of Mohammed's institutions, by rescinding the prohibition of wine, and preventing the pilgrimages to the holy cities: slaughter and desolation marked the progress of the sect for more than 60 years; but, finally, it vanished, leaving no record of its existence, but the memory of its cruelties and enormities. (*Abul-Feda, An. Mus.* ii. 267. et seq.; *D'Herbelot*, p. 256.)

The other revolution had its rise in the beginning of the last century. Addul-Waheb, a native of Nedsjed, proclaimed himself a prophet sent from God, to reform the abuses which, in the lapse of years, had crept into the pure doctrines of Mohammed. The Koran, in the creed of Waheb, is the only rule of life, and the Mussulman traditions are entirely rejected. God is to be worshipped in the strictest unity, and every species of adoration paid to Mohammed, or any other created being, is denounced as idolatrous. Simplicity, or rather asceticism, seems to be the distinguishing characteristic of the new sect; they acknowledge no saints — they bury their dead without pomp or ceremony — their clothes and houses are as plain as possible — their mosques have no ornaments whatever — and they interdict the use of coffee, tobacco, and opium.

The Wahabee doctrine, so called from its founder, found a protector in Ebn Saoud, a Bedouin sheikh of Nedsjed. The preacher was proclaimed supreme spiritual head, the soldier, prince, and general of the new worship; extermination was threatened to all opposers, and, for awhile, the progress of the Wahabees was a continued triumph. Mecca was subdued in 1802, Medina in 1804; and it seemed as though a repetition of Mohammed's victorious career were about to be enacted by the sons of the first establisher and supporter of the new sect. But in 1813, Mehemet Ali drove them from the Western coast, and restored the holy cities to the nominal protection of the Porte. Since that time, the progress of the Wahabees appears to be at a stand; and though they are still strong in Nedsjed, there is reason to believe that their power is on the decline, and that their numbers are decreasing. (*Niebuhr*, par. ii. pp. 298—302.; *Histoire des Wahabis*, par M. A. L., Paris, 1810, passim; *Burckhardt's Notes on Bedouins and Wah.*, passim.)

Schools and Education. — The learning which gave celebrity to the court of Bagdad in the middle ages, does not appear ever to have been naturalised in Arabia. Before the æra of Mohammed, ignorance (that is ignorance of written learning) was so far from being accounted disgraceful, that we learn from the Koran (chap. xxix.) that Mohammed, though of the royal house of Hedjaz, could neither read nor write; and in the present day, judges are frequently illiterate. (*Burckhardt's Notes on Bed.*, 68.) It cannot, therefore, be supposed that education in Arabia is either very good or widely diffused. According to Niebuhr (*Des de l'Ar.*, par. i. p. 91.) "the Arab princes by no means encourage science; and throughout the East, you meet few who merit the title of learned."

Public provision is however made for the education of youth; and a teacher for the children and young slaves is no uncommon part of the domestic establishment of distinguished families; so that, in the cities, the greater part of the population can read and write, — attainments which are also found commonly enough among the sheikhs of tribes in the neighbourhood of the settled districts.

To almost every mosque there is (or *was*) attached a school, where the poorer children may be taught gratuitously; besides which, there are in every great town more or fewer private establishments where the children of the middle classes are received. The education is of a limited kind, comprising little more than reading, writing, the simple rules of arithmetic, and the doctrines of the Mohammedan religion. School-houses, like the shops, are open to the street, so that the whole process of education is conducted in public; and to prevent the distraction incident to such a situation, the readers and repeaters speak in the highest possible key, and accompany their delivery with violent gesticulations.

Besides these, there are in many of the greater towns schools of a higher character; colleges, in fact, in which the higher sciences — mathematics, astronomy, astrology, and medicine are taught. In the Imanat of Yemen (which is but a small part of the district so called) there are two of these colleges. One of the chief studies in them is the ancient Arabic, now a dead language; for their learned men are expected to understand clearly, not only the Koran in its original tongue, but also all the ancient commentators, of whom the number is very considerable. Candidates for offices, civil or ecclesiastical, are said to undergo a very rigorous public examination as to their literary and scientific attainments; but this is mere pretence, the most illiterate persons being frequently appointed to the highest posts, while the best instructed get a precarious living as scribes, teachers, and public reciters or poets. Hence the wish to acquire a high degree of scholastic knowledge is very weak in the majority of Arabs; and the profession of teacher is far from respectable or lucrative. In many of the towns, the public schools are falling to decay; and those qualified to conduct them, prefer wandering over the country like the bards and troubadours of the middle ages, as poets and orators; in which characters, as the reciters or singers of the glories of the nation, they are welcomed and rewarded alike by the sheriffs and sheikhs. There is no public provision whatever for female education; and, among the Bedouins, whole tribes can neither read nor write. A very great obstacle to the advancement of education in Arabia is, the prejudice of the natives against printing. From the nature of the Arabic characters, interlacing each other, and frequently placed vertically, they appear handsomer, when well written, than when printed. There was not a few years ago, and perhaps there is not at present, a single printing-press in the country. (*Niebuhr*, par. i. pp. 91—96.; par. ii. p. 188.; *Ali Bey*, ii. 100.; *Burckhardt's Notes on Bed.*, 42, et seq.)

Political Divisions. — Sources of Revenue. — Without reckoning the Bedouin tribes, the number of which can hardly be ascertained, the settled parts of Arabia are divided into a great many independent governments: hence states, also, not unfrequently spring up. The political divisions of this country are therefore very uncertain, but at present they may be regarded as consisting of; 1st. 14 or 15 states, upon the S.S.W. coasts; 2d. A much greater number upon the shores of the Persian Gulph; 3d. The half-settled Bedouin tribes on the N. part of that Gulph; 4th. The dominions of the Wahabee chief, Abdallah, in Nedsjed; 5th. The Hedjaz and Bahr-el-tour-Sinai, on the W. and N.W. of all these. The last are the only parts that own a foreign master. The descendants of Mohammed continued to reign in the Hedjaz from his time down to a late epoch; acknowledging, however, the supremacy, first of the court of Bagdad, and afterwards of the Turkish Sultan, as head of the Mohammedan faith; ministers of the paramount power residing at the sanctuary in the holy cities. While the Turkish government retained its strength, this connection was acknowledged and respected in the Hedjaz; but in the latter part of last century, the sheriffs renounced their nominal allegiance, attacked the Turkish pachas, and finally expelled them. Scarcely, however, was this effected, when the Wahabees subdued the whole of the Holy Land, and held it till 1813-14; when Mehemet Ali, pacha of Egypt, nominally restored the Holy Cities to the protection of the Porte, but virtually made himself master of the Hedjaz; which he has since retained, and governed at discretion. The Desert of Sinai has always belonged, more or less, to Egypt. (*Burckhardt's Travels*, passim; *Notes on Wahabees*, 321—420.; *Lord Valentia*, iii. 325—327.)

Taxes in the settled portions of Arabia are pretty uniform. A tenth of the productions of the land is paid to the sovereign, and this not unfrequently in kind. (*Fraser*, p. 15.) In Yemen, however, this tax appears to be compounded for by the payment of a fixed sum annually (*Niebuhr*, par. ii. p. 183.); and with regard to the town population, this method must necessarily be general. The tithe upon land is the only legal fixed impost which the subjects of the native Arab princes are called upon to pay. But a far more productive source of revenue is found in the customs and duties upon merchandise. The iman of Muscat lays ½ per cent. upon all goods passing up the Persian Gulph, in Arab bottoms; and this small duty is so productive, that it yields from 110,000 to 160,000 dollars annually. (*Fraser*, p. 16.) In Yemen, the iman levies 3 per cent. upon the coffee carried from his dominions beyond the Straits of *Bab-el-Mandeb*, and 7 per cent. upon all that is sent up the Red Sea; and the sultan sheriff of Mecca — or rather his present master, Mehemet Ali, — takes 6 per cent. more in the port of Djidda. (*Lord Valentia*, ii. 368, 369.). The large quantities of goods that are constantly passing from India, Abyssinia, Egypt, Syria, &c., to all the trading towns of Arabia, have also their stated rates of duties; and the income derived from them is so great, that Mehemet Ali cheaply purchased his popularity in his new dominions by foregoing the settled tithe which had formerly been paid in them. One of his first acts was a declaration, that the inhabitants of the Hedjaz should be wholly free from taxes. (*Burckhardt's Notes on Bed.*, p. 306.) The city of Medina was said to be impost free, even before this period. (*Ali Bey*, ii. 127.)

Certain articles of commerce are monopolies in the hands of the governments; as salt in the Hedjaz, and the same article and sulphur, in Oman. (*Burckhardt's Travels*, i. p. 65.; *Fraser*, 16.) Besides which, the sovereign is frequently possessed of large landed property in private right, which he lets out precisely like any other landlord; and in certain cases, as in those of the Imans of Muscat and Yemen, he is also the most considerable merchant in his own dominions. (*Niebuhr*, par. ii. pp. 182—184.; *Fraser*, 16.)

These are all legitimate sources of revenue; but the evil in this and all other Mohammedan countries is, that the governments, being despotic, practise and tolerate all sorts of extortion. Before the conquest of the Hedjaz by the Egyptians, it was customary for the sultan sheriff of Mecca to fill the prisons with persons upon charges of disaffection to his person, that they might purchase their lives and liberties by large fines. (*Burckhardt's Travels*, i. p. 416.) In Yemen the dolas receive the taxes and customs of the towns, pay the troops, the judges, and other public functionaries, and transmit the balance to Sanaa, the seat of government. In this arrangement, the iman squeezes all he can from the dola; and the latter, whose nominal income is very trifling, resorts to any means, however infamous, of realising a large income for himself. The chief sufferers in these transactions are the Indian, and other foreign merchants. When Lord Valentia was at Mocha, the dola used to confine the Banians and Jews in a close room, and fumigate them with sulphur till they purchased their release at the price he chose to stipulate! (*Niebuhr*, par. ii. p. 183.; *Lord Valentia*, ii. p. 353.) The collection of the customs, too, is attended with considerable fraud; and it is in the power of the officer to favour his friends, and oppress strangers, without incurring any responsibility. These abuses have, however, been considerably modified in the Hedjaz since the establishment of the Egyptian power. (*Lord Valentia*, iii. p.325.; *Burckhardt's Travels*, i. pp. 89. 417.)

The Bedouins pay no taxes, except the tribute exacted by the Wahabee chief. The sheikhs derive no income from their tribes: their only source of revenue, beyond their private property, consists of the tribute collected from the villages in their neighbourhood, and from the caravans that cross the desert. Formerly, the Bedouins in the neighbourhood of Mecca paid a nominal impost to the sultan sheriff, but this was given up by Mehemet Ali. The Bedouin sheikhs have, however, few or none of those expenses to sustain which fall upon the sovereigns of the settled districts. The tribes are the sheikh's soldiers, and receive no pay; and the emoluments of the kadis depend upon the cases brought before them; being paid, according to the value of the property in dispute, by the party in whose favour they decide. (*Niebuhr*, par. ii. pp. 327—333.; *Burckhardt's Notes on Bedouins and Wahabees*, pp. 67—69. 306.

The tribute exacted by the Wahabee chief, wherever his power extends, consists of the *alms;* the giving of which is a fundamental law of the Mohammedan religion, but the payment of which had been always left to every man's conscience, till the Wahabee chiefs compelled their subjects and tributaries to deliver them for distribution into their hands. The Mohammedan law had minutely fixed the proportion of these alms to the property of the donor, and to that law the Wahabees have rigorously adhered. For 5 camels they exact 1 sheep for tribute; 200 camels pay 4 camels of 4 years old; and between these extremes the rates vary in every possible variety. For herds no tribute is exacted under 30 heads, for which a calf of 2 years is paid; 129 heads pay 4 oxen and 3 cows. For sheep, 1 is claimed for all numbers between 40 and 120; 3 for all between 120 and 400; for 400, 4 are taken, and after this, 1 sheep for every hundred in the flock. For all horses, above 5, a sequin per head is paid, or 2½ per cent. on the value of the beasts. For money, all sums above 200 *dirhems* (about 12l.) in silver, or 20 *misscals* (about 160l.) in gold, pay 2½ per cent. (*Burckhardt's Notes on Bed.*, p. 305.; *D'Ohsson, Tableau Général de l'Empire Othoman*, ii. 413—418.) The Wahabee chiefs divided this tribute into two parts; appropriating that derived from the Bedouins to their own use, and that from the towns to the public service. They have also introduced some changes in the collection of the tithe of produce, which have materially relieved the cultivator. Where water was abundant, they continued to draw the tenth; but where it is deficient, they have reduced the tax to a twentieth part. Merchants in the Wahabee country pay 2½ per cent. upon their property yearly, stating its amount upon oath. (*Burckhardt's Notes on Bed.*, p. 306.)

Arabia has been supposed to contain from 12,000,000 to 14,000,000 inhab., though this is probably beyond the mark. The nomadic habits of the greater part of its population, and the number of petty states into which the settled pop. is divided, and the little that is known with respect to most of them, renders it impossible to assign either their limits or their population. According to Balbi, the imanat of Yemen, or Yemen Proper, and the imanat of Muscat, on the coast of Omar, have respectively —

Imanat of Yemen.	Imanat of Muscat.
Superficial extent, 53,000 sq. m.	Superficial extent, 52,000 sq. m.
Pop., 2,500,000.	Pop., 1,600,000
Revenue, 495,000l. sterl.	Revenue, 165,000l. sterl.
Army, 5,000 men.	Army, 1,000 men.
	Navy, 1 ship, 3 frigates, 30 inferior vessels.
Density of pop., 47 per sq. m.	Density of pop., 31 per sq. m

The Hedjas has been very well surveyed, especially by Ali Bey and Burckhardt, but its varying population, owing to the influx and efflux of pilgrims, together with the crowd of traders who are constantly passing between its shores and distant countries, renders it difficult, if not impossible, to assign its real numbers with any tolerable accuracy. Probably, however, it is more densely peopled than either Yemen or Muscat.

The states of Yemen, as enumerated by Niebuhr, are the following: —

1. Yemen Proper.	8. Sahan.
2. Aden.	9. Nedsjiren.
3. Kankeban.	10. Kachran.
4. Haschid-u-Bekel.	11. Dsjof.
5. Abu-Arish.	12. South Khaulan.
6. Beled-el-Kobail.	13. Nehm.
7. North Khaulan.	14. Jaffa.

There are, also, a great many little states upon the Persian Gulph; and Hadramaut consists of insignificant sovereignties, mostly of not greater extent than a mile or two round the town where the chief resides. (*Niebuhr*, par. ii. pp. 160—245. 267—292, &c.)

ARABKIR, a town of Asiatic Turkey, pachalik of Sivar, cap. sanjiack, 7 m. N. Euphrates, and 60 m. N.N.E. Malattia, lat. 39° 5′ N., long. 39° E. It is said to be well built.

ARACAN, a country of Asia, called by the natives *Rakhaing*, extending along the W. coast of the great E. peninsula of S. Asia, acquired from the Birmese, by the British, in 1824. It lies between 15° 53′ (Cape Negrais) and 21° 30′ N. lat., and 92° 20′ and 94° 14′ E. long.; having N. the r. Nauf, which separates it from Chittagong, E. the Yeomandong mountains, dividing it from the Birmese dominions, and W. the Indian Ocean; the two latter boundaries meeting at an acute angle at Cape Negrais, its S. extremity: length, N. to S., about 500 m.; breadth, at its N. end, 90 m.; but thence southwards continually decreasing; area, 16,250 sq. geog. m. (*Pemberton*); pop. said to be about 230,000 only, whereas, in 1795, it was estimated, but probably much beyond the mark, at 2,600,000. (*Pemberton's Report on the E. Frontier of British India*, 8vo. Calcutta, 1835, pp. 83, 84.; *Captain Laws*, in the *Geographical Journal* i. 175.)

The Yeomandong, or Anoo-pectoo-moo, mountains are a branch from those that bound S. the vale of Assam; and form the E. boundary of both Aracan and Chittagong. Their heights vary from 2,000 to 8,000 feet; Table Mountain, in 21° N. lat., and 93° E. long., is 8,340 feet above the level of the sea. Near lat. 20° they take a sudden turn E. for about a degree; but in general their direction is N. to S.; they are covered with forests, and have numerous passes, the chief being those of Khyounzah and Goa in the Birmese, and Tongo, Talak, and Aeng, in the British dominions. They are, in almost every case, mere narrow footpaths. (*Ritter, Erdk.*, vol. i. p. 308.; *Pemberton*, p. 99.)

The country, generally, is diversified with hill and dale; but on the N. border and the sea-shore there are low and marshy tracts. The rivers run mostly in a S. W. direction, and are frequently navigable for trading vessels of some magnitude; the largest is the Aracan (properly Kuladyne), which rises in the Birmese dominions, near 23° N. lat., and discharges itself in 20° 15′ by several mouths; on one of its minor branches is situated the town of Aracan, accessible to vessels of 250 tons burthen. The other principal streams are the Nauf, Aeng, Miou, and Sandoway rivers, all in some degree navigable. (*Hamilton's Descr. of Hindostan*, vol. iv. p. 801.; *Pemberton*, pp. 7, 8.

The coast, in the central part of Aracan especially, contains many good harbours, is much indented by creeks, and studded with islands and rocks, which render the mouth of the Aracan river somewhat dangerous to approach in the S. W. monsoon: during the rest of the year, however, the water is smooth, and there are good anchorages all along the coast, in from 6 to 20 fathoms, with a muddy bottom. (*Geogr. Journal*, i. 175.; *Hamilton*, pp. 800, 801.)

The principal islands are Cheduba, Ramree, and Akyab, between the rivers Kuladyne and Mion. They are usually separated from the main land by narrow channels, and partake of the same natural aspect. (*Riter, Erdk.*, vol. iv. p. 308.)

The climate is decidedly unhealthy, except in a few spots, as Kyouk-Phyoo, on the N. side of Ramree, and

especially hostile to Europeans, who are attacked by intermittent fevers, and other effects of malaria. During the Birmese war the troops died in great numbers from these causes. The country is inundated by heavy rains during the S. W. monsoon, which begins in May and ends in October. In 1832, from June to October, 196 inches of rain had fallen; during the other portion of the year it is often enveloped in heavy fogs; and violent showers sometimes occur in December, February, and April. In 1832, the maximum height of the thermometer in July was 89° Fahr., in August 94°; the minimum in both months 77°. (*Ritter, Erdk.*, p. 317.; *Geogr. Journal*, i. 175.)

The abundance of forests which cover the mountains have hitherto been insurmountable obstacles towards any knowledge of their geology. The primitive rocks that have been seen are mostly slate. The lower hills consist chiefly of sandstone, with a stiff clay occasionally intermixed; on every part of the coast coral and shell-lime are abundant. A low alluvial soil extends over the whole of the country from the foot of the mountains to the sea.

Little systematic information has been collected as to the products of the country. Salt is largely produced in the creeks, &c.; its export has latterly increased very rapidly, and is now (1837) estimated at about 250,000 maunds. Gold and silver are said to be met with; jungles of mangrove crowd the banks of the rivers; firs are common N. of the Aracan river; teak, bamboo, *red jarul*, toon, &c. are found in the forests, and since the British occupation have been used for ship-building; the sugar-cane, cocoa, palm, indigo, cotton, rice, red pepper, cucumber, melon, plantain, mango, jacko, orange and other fruits, are indigenous: elephants, cattle, birds of many kinds, fish, silkworms, and bees are found in great plenty. (*Hamilton's Descr.*, vol. ii. p. 800.; *Ritter, Erdk.*, p. 319.; *Pemberton*, p. 14.)

About 11,677 doons, each doon 6·35 acres, or 115 sq. m., are cultivated with rice; miscellaneous culture occupies about 8 sq. m. more; there being thus not 1-133d part of the whole country brought into tillage: the lands round Aracan are the best. Next to rice, indigo and cotton are the chief objects of culture; the chief farmers are Mussulmans, the Mugh tribes subsisting generally by hunting and fishing. The houses are bamboo huts, raised on posts 4 feet from the ground, to preserve them during the inundations, built often in thick jungles, or along the sides of rivers, and surrounded by small patches of indigo, cotton, tobacco, and fruit; even in the principal towns the houses are not of a more substantial material. Since the British occupation, articles of civilised life have been largely introduced into the markets; the imports consist of Indian and European goods, and betel nut; the exports, of rice, paddy, wood, salt, oil, buffalo hides and horns, elephants' teeth, sugar, cotton, tobacco, silk, wax, &c. The exports from Akyab, the chief port, during 7 months of the year 1833, were of the value of 93,800 rupees: the chief trade is with Bengal and Chittagong. The public revenue, which has been progressively improving since the British occupation, amounted in 1836-37 to 525,000 rupees; but is as yet hardly sufficient to pay the government expenses. British Aracan extends as far S. as 17° 52′ N. lat., and is governed by three civil functionaries, one placed over each of the three provinces of Akyab, Ramree, and Sandoway; and all under the superintendence of the British governor at Chittagong. The troops employed by the government are only 8 companies of sepoys; viz., 2 at Akyab, 2 at Sandoway, and the other 4 at Kyouk Phyoo, the chief military station, and where also a part of the flotilla used in the late war is laid up. The inhab. are 1-10th Birmese, 3-10ths Mohammedans and Indians, and the remainder *Yekein* or *Yikein*, as they call themselves, the Mughs of the Europeans. The latter are of middle height, with a broad face, high and prominent cheek-bones, the nose flat, and the eyes like those of the Chinese: they are cunning, and addicted to stealing, but not to falsehood. Their language and religion resemble those of the Birmese; the latter, however (that of Boodh), they do not adhere to very strictly, since they do not abstain from animal food; Guadma is a celebrated idol amongst them, and they take as their vulgar æra the period at which he introduced Buddhism into Aracan; the present year, 1838, is with them 1200. There are 2 or 3 priests in every village, who occupy themselves chiefly in the tuition of the children in schools, which are voluntarily supported, and open to all. The Aracanese are by no means uneducated; almost all of them can read and write; the latter they practise with a chalk pencil on a paper made from the bark of a tree: their records are kept on palm-leaf, lacquered in japan or red upon a gilt ground. The people are fond of finery; the dress of the women is a red binder wrapt closely round them, over this a robe reaching to the knee, and the petticoat fastened loosely on one side all down, so that, in walking, the whole of one limb is exposed. Women are not kept secluded, but enjoy as much liberty as the other sex. Slavery in all its forms is tolerated. Marriages are arranged by the parents of the parties; solemnised by feasts, and ratified by the married couple eating out of one dish. If they separate at a future time at the wish of the husband, he must take upon himself all his wife's debts; if such a determination originate with the latter, she takes them upon herself, but can demand 25 rupees from her husband. If a man be in want of money, he may pawn his wife; but if she become pregnant in consequence, he can claim her again, and the contract to pay becomes null and void. The dead are either buried or burned.

This country has been very greatly improved since it came into the possesssion of the British, previously to which it was in the worst possible state. The bands of robbers by which it was infested have been extirpated; and the habits of the bulk of the people materially improved. With one exception, there was no instance of dacoity (robbery) in the principal district of the prov. of Akyab during the two years ending with 1837. (*Moulmein Chronicle.*) The introduction of tranquillity and commerce has awakened a spirit of industry, and rendered the people cultivators, salt-manufacturers, and traders. Akyab is daily becoming of more and more importance. (*Paton's Hist. and Statis. Sketch, Asiatic Researches*, vol. xvi.; *Pemberton; Ritter*, vol. iv. p. 325.; *Laws*, in the *Royal Geogr. Journal*, i. 177.)

Before 1783, Aracan was independent, though often ravaged by the Moghuls and Peguans: in that year it was conquered by the Birmese, and governed by their viceroys; whose oppressions depopulated the country, causing many of the inhabitants to fly to Chittagong and Tipperah, where they settled; and others to become jungle-robbers. A revolt broke out in 1811, and the violation of the British frontier by the Birmese, both then and subsequently, was the cause of the Birmese war of 1824; which ended in the cession of Aracan to the British.

ARACAN, a town and cap. of the above prov., on an inferior branch of the Kuladyne river, which is here crossed by several lofty wooden bridges, 50 m. N. E. Akyab, lat. 20° 44′ N., long. 93° 26′ E. Pop. (1835) from 8,000 to 10,000. It forms an irregular square, walled on all sides except the N.E., where it touches a shallow lake. As a fortress, however, it is worthless, being commanded by various hills in the neighbourhood. S. of the principal street which runs E. and W. are the ruins of an ancient palace and fort, the latter surrounded by a triple enclosure of stone patched up with brick. There are many pagodas, both in the town and on the heights around it. Next to Akyab it has the best market in the prov. for British manufactures and the silks of Pegu, and its river is navigable for boats at high tide; but its consequence has been gradually diminishing since Akyab began to rise into importance. Aracan was taken in 1783 by the Birmese, who captured much booty, including a large brazen image of Guadma, held in the highest veneration, and other idols. (*Pemberton's Report, &c.*, p. 89.; *Hamilton's Hindost.*, vol. ii. p. 804.)

ARAD, a town of the Austrian empire, on both sides of the Maros; that part which is on the N. bank, or Old Arad, being in Hungary, and the other, or New Arad, in the Bannat, 27 m. N. Temeswar, lat. 46° 9′ 56″ N., long. 21° 18′ 3″ E. Pop. of both parts near 18,000.

New Arad is strongly fortified; and Old Arad is the residence of a Greek bishop. The most opulent inhabitants are the Jews, who are also very numerous. "They are greatly favoured, being allowed exclusive monopolies of tobacco, corn, and other commodities." (*Walsh.*) The town is the entrepôt of the products of a large tract of country, which are here embarked on the Maros, and sent by the river to the Danube, and thence to Germany, Hungary, the Black Sea, &c. On a weekly market day, Dr. Walsh found the streets choked up with cars and carts, of which he was assured there were no fewer than 7,000 in the town! filled with produce, principally for shipment. On enquiry, he found the prices of different articles to be, wheat 9*s.* a quarter; wine 2½*d.* a bottle; delicious Hungarian wine at the tavern, 10*d.* per do.; beef, 1½*d.* per lb.; mutton, 1¼*d.* do., &c. (*Walsh's Journey from Constantinople to England*, p. 316.)

ARAFAT (MOUNT), a hill of Arabia, 15 m. S.E. of Mecca, consisting of a granite rock about 150 feet high, a principal object of the Mohammedan pilgrimages to that city.

ARAGON, one of the ancient divisions of Spain, formerly a separate kingdom, comprising the provs. of Zaragoza, Huesca, and Teruel, lying between 40° and 42° 55′ N. lat., and 46° E. and 2° 7′ W. long., having N. the Pyrenees, which divide it from France; E., Catalonia; S., Valencia; and W., Navarre and Castile: length, N. to S., 215 m.; breadth, 65 to 135 m.; area, 14,692 sq. m.; pop. (1833) 734,685. It is a basin every where surrounded, except on the E., by mountain-ranges; on the N. offsets from the Pyrenees extend into the prov. as far S. as lat. 42° 10′, inclosing many picturesque and fertile valleys; the Sierras Moncayo Cuença, Molina and

Albarracin separate it from Castile, and those of Morella from Valencia. Another distinct chain runs parallel to the latter through the S. part of Aragon, from N.W. to S.E.: between the Sierra and this chain is the valley of the Xiloca; and between this latter chain and the Pyrenees is the extensive plain intersected by the Ebro. This, which is not only the largest of the Aragonese rivers, but the largest river which has its embouchure on the east coast of Spain, runs through the prov. in a S. easterly direction, dividing it into two nearly equal parts. Exclusive of the Ebro, there are a great number of other rivers, mostly its affluents, having their sources in the mountain-ranges that bound on either side the central plain; as the Gallego, Cinca, and Segre, from the N., the Xiloca, Guerva, Aguas, S. Martin, Guadaloupe, and Algnas, from the S.: the Tagus and the Guadalaviar have, also, their origin in this region. Salt is every where abundant, and gold, silver, copper, iron, lead, nitre, alum, &c. are met with, but the mines are mostly neglected. The mine of rock salt at Remolinos, near Alagon, is, however, extensively wrought, furnishing supplies not only for the prov., but also for Catalonia and other parts of the kingdom. Climate temperate and warm in the valleys and plains, but on the Pyrenees the snow is often found 5 or 6 feet deep in June, and violent storms occur in winter. The country is, however, universally healthy. The soil of the plains is, in general, fertile, and well adapted to the growth of most products of temperate climates. Though agriculture be very defective, more corn and wine are produced than are required for home-consumption; and there are also large supplies of fine fruits, with legumes, flax, hemp, oil, saffron, liquorice, madder, esparto, barilla, &c. Previously to the late war with France, the stock of sheep in the prov. was supposed to exceed 2,000,000; and though it must have been much reduced during that contest, there was, according to Miñano, previously to the present civil war, an annual export of 250,000 arrobas of wool. Horned cattle are scarce. Wolves and bears are met with in the mountainous districts; game is plentiful, and the rivers abound with excellent fish, especially eels and trout. The manufactures are confined to common woollen and other cloths, cordage, and hempen articles, gunpowder, with soap, vinegar, brandy, paper, hats, earthen-ware, and leather. The manufacture of silk in the capital and other towns has greatly diminished. Aragon is divided into 13 districts or gobiernos: its chief cities are Zaragoza, Huesca, Calatayud, and Teruel. The first is an archbishopric: there are 6 bishoprics and 2 universities. Several roads cross the prov., passing to all the great towns; and the Imperial canal, from Tudela to Zaragoza, 10 ft. in depth and 70 ft. wide, commenced in 1529 by Charles V., and completed to its present extent in 1772, serves the double purpose of promoting trade and navigation. The Aragonese are strong, and well built; not so active as the Catalonians, but industrious, brave, and honest. They are intelligent, and desirous of knowledge, but proud, sullen, and extremely opposed to foreign interference with their government. The original harsh Aragonese dialect has now become intermixed with the Castilian. The male peasantry wear a waistcoat and a round jacket over it, drawn together by a thong, and a large round hat, or sometimes two, to work in during the heats of summer. The dress of the women is odd and grotesque; it consists partly of two woollen corsets, and three or four thick petticoats one over another, the whole weighing a quarter of a cwt. Under the Romans Aragon was included in Celtiberia; in A. D. 470 it was overrun by the Goths, and in 714 by the Moors. After the expulsion of the latter, it was governed by its own kings till the marriage of Ferdinand with Isabella of Castile in the 15th cent.

The gov. of Aragon, previously to the junction of its crown with that of Castile, and for some time afterwards, though monarchical in form, was in principle essentially republican. The kings, who were long elective, retained little more than the shadow of power; it being really vested in the cortes or parliament. This supreme assembly was composed of four different *arms* or members; the nobility of the first rank, the equestrian order or second rank, the representatives of cities and towns, and the ecclesiastics. No law could pass without the assent of every arm; and without permission of the cortes, no tax could be imposed, no war declared, no peace concluded, nor money coined or altered. The power of reviewing the proceedings of the inferior courts, the privilege of inspecting every department of administration, and the right of redressing all grievances, belonged to the cortes; to which, however, those aggrieved did not address themselves in the humble tone of supplicants, but demanded its interference as due to them as freemen. This sovereign court was held during several centuries every year; but from the beginning of the 14th cent. was convoked only once in two years: the session continued 40 days, and the king could neither prorogue nor dissolve the assembly, after it had met, without its own consent. Not satisfied with having erected such formidable barriers against the encroachments of the royal prerogative the Aragonese, by an institution peculiar to themselves, elected a *justiza*, or supreme judge, as the protector of the people and the controller of the prince. The person of the justiza was sacred, and his power and jurisdiction almost unbounded; he was the supreme interpreter of the laws, and not only inferior judges, but the kings themselves were bound to consult him in every difficult case, and to receive his responses with implicit deference. An appeal lay to him from the royal as well as the baronial judges, and even when no appeal was made, he could interpose by his own authority, prohibit the ordinary judge from proceeding, take immediate cognizance of the cause himself, and remove the party accused to the prison of the *manifestacion*, to which no person had access but by his permission. His power was exerted with no less vigour and effect in superintending the administration of government, than in regulating the course of justice. It was the prerogative of the justiza to inspect the conduct of the king. He reviewed all the royal proclamations and patents, and declared whether they were agreeable to law, and ought to be carried into execution. He, by his sole authority, could exclude any of the king's ministers from the conduct of affairs, and call them to answer for their mal-administration. He himself was accountable to the cortes only for the manner in which he discharged the duties of his high office, and performed functions of the greatest importance that could be committed to a subject. The Aragonese were so solicitous that their monarchs should know and feel their dependence on their subjects, that even in swearing allegiance to their sovereign, the justiza thus addressed him in their name, "We, who are each of us "as good, and who are altogether more powerful than "you, promise obedience to your government, if you "maintain our rights and liberties, but not otherwise." Conformably to this oath it was expressly declared in their constitution, that if the king should violate his compact with them, it was lawful for the Aragonese to disclaim him, and elect another sovereign, even though a heathen, in his room.

Aragon, while a separate kingdom, was the most powerful of the peninsular states. It comprised, exclusive of Aragon Proper, Navarre, Catalonia, Valencia, the Balearic isles, and Sardinia. The marriage of Ferdinand with the heiress of Castile, the conquest of Granada by their united forces, with the possessions they inherited or acquired in other parts of Europe and in the New World, by giving the sovereigns extrinsic, and as it were foreign resources, rendered them in a great measure independent of the supplies voted by the cortes, at the same time that it enabled them gradually to subvert their authority. The establishment of the Inquisition was also a great blow to the liberal institutions of Aragon and other parts of the Peninsula, which were finally suppressed during the reign of the bloody and tyrannical bigot Philip II. (*Miñano*, *Antillon*, *Schutz. Allg. Erdk.*, xviii. 314—317.; *Robertson, Hist. Charles* V *Introd.*, Sect. iii.)

ARAGONA, a town of Sicily, Val di Girgenti, 7 m. N. Girgenti, on a hill. Pop. 5,850. It is ill-built and dirty; but is worthy of notice for its castle (containing a fine gallery of pictures), its antiquities, and for having in its vicinity the mud volcano of Maccaluba. This consists of numerous little hillocks, with craters on a kind of truncated cone of argillaceous barren soil, ½ m. in circuit, elevated about 200 feet above the surrounding arid plain. These craters are continually in action, making a hollow rumbling noise, and throwing up a fine cold mud, mixed with water, a little petroleum and salt, and occasionally bubbles of air with a sulphurous taint. Sometimes reports like the discharge of artillery are heard, and slight local earthquakes, till an eruption takes place by the ejection of mud and stones to the height of from 30 to 60 feet, the ordinary height of the spouts being only from a few inches to 2 or 3 feet. (For a further account of this singular phenomenon, see *Smyth's Sicily*, p. 213.)

ARAICHE (EL), see LARACHE.

ARAL (SEA OF), an inland sea or lake of Asia, in independent Tartary, between 42° and 46° 12′ N. lat., and 56½° and 61° 15′ E. long., being about 300 m. in length from S.W. to N.E., and from about 100 to nearly 250 m. in breadth; so that, with the exception of the Caspian, it is by far the most extensive inland sea of the Old World. It has a great number of islands, particularly towards the S., and is generally so shallow, that it can be safely navigated only by flat-bottomed boats. Its waters are salt, and its coasts generally low and sandy, the country round consisting mostly of vast arid steppes. It is well supplied with fish, of which sturgeon are the most valuable; seals are also met with. The Sea of Aral receives, besides smaller streams, the waters of two great rivers, the Sir or Sihoun (the *Jaxartes* of the ancients), and the Amoo or Jihoun (the *Oxus* of the ancients). But, notwithstanding it has no outlet, the prevalent opinion is, that the supply of water brought to it, and also to the Caspian Sea, is unequal to what is carried off by evaporation, and that

their level and surface are being gradually diminished. The extraordinary difference between the level of the Caspian and the Sea of Aral, and the level of the Black Sea (see CASPIAN SEA), as well as the nature of the soil in their vicinity, the traditional and historical statements with respect to their boundaries, and the opinions of the most eminent naturalists, all lead to the belief that they once extended over a much larger tract of country, and most probably made part of one great inland sea. (For further details, see CASPIAN SEA.)

ARAMON, a town of France, dep. Gard, cap. cant. on the Rhone, 16 m. E. Nismes. Pop. 2,502.

ARANDA DE DUERO, a town of Spain, on the Duero, 48 m. S. Burgos. Pop. 3,500.

ARANJUEZ. (*Ara Jovis.*) A town of Spain, new Castile, in a fertile and well-watered valley on the left bank of the Tagus, immediately above where it is joined by the Xarama, 28 m. S. S. E. Madrid, and 22 m. E. N. E. Toledo; lat. 40° 1′ N., long. 3° 37′ 30″ W. Pop. 4,500, unless the court be there, when it used to amount to 8,000, or 10,000. It derives its entire celebrity from its royal palace, commenced by Philip II., and enlarged and embellished by several of his successors, particularly Charles IV., who added the fine gardens and groves along the banks of the Tagus, and a small but elegant pleasure house, the *Casa del Labrador*. The palace is a handsome square building, with a fine marble staircase, containing many fine sculptures, and (as well as the church and monasteries of the town) paintings of the Spanish and Italian masters, especially of Raphael Mengs. The town is built after the Dutch model; having broad and well-paved streets, houses uniform and painted, fine promenades, a square adorned with many handsome edifices, &c. The court used to occupy this palace from Easter till the end of June; but in July and August the situation is accounted unhealthy.

These statements apply, however, rather to the former than the present state of Aranjuez. The palace and gardens suffered severely during the late war with France. In 1808, the park and pleasure grounds were split into patches, and applied to agricultural purposes.

> Another age has seen the golden ear
> Imbrown the slope, and nod on the parterre,
> Deep harvests bury all that pride had plann'd,
> And laughing Ceres reassume the land.

At first the cultivators obtained very large returns, and the population of the town and its vicinity rapidly augmented. But this extraordinary productiveness, the result of the improved state of the lands, speedily disappeared under the scourge of continual cropping; and it is doubtful whether they yield more at this moment than they did previously to their being broken up. (*Miñano, Schutz*, &c.)

ARARAT (Turkish *Aghur Dagh*, Armenian *Macis*), a famous mountain of Armenia, on the confines of the Russian, Turkish, and Persian empires, its principal summit being about 35 m. S. Erivan, lat. 39° 30′ N., long. 44° 35′ E. Its base E. and N. E. is washed by the Araxes, from the low plain of which it rises most majestically to an immense height. It forms the termination in this direction of a range of mountains connected with the Caucasian chain; but these, though elevated, seem in comparison with Ararat so low, as to strengthen the impression of sublimity and greatness made by contemplating it singly from the plains to the E. It consists of two enormous conical masses, one much higher than the other, but the lowest ascending far within the line of perpetual congelation. Repeated efforts had been made at different times to reach its summit, but this Herculean task was not effected till 1830, when Professor Parrot, of Dorpat, accomplished, by dint of extraordinary perseverance and energy, what had previously been reckoned all but impossible. He determined the altitude of the highest peak to be 16,200 French or 17,230 Eng. feet above the level of the sea, being about 4,760 feet higher than Mont Blanc. The summit is described as a circular plain of limited dimensions, united by a gentle descent to the less elevated peak towards the E. The whole of the upper region of the mountain, from the height of 12,750 feet, is covered with perpetual snow and ice; and not unfrequently avalanches precipitate themselves down its sides with tremendous noise and fury.

On one of the sides of the principal cone is a chasm or cleft of prodigious depth, having much the appearance of the crater of a volcano. Tournefort says, that its precipices are blackened as if by smoke, but that nothing issues from it except torrents of muddy water; but the mountain presents many appearances of volcanic action, and Dr. Reineggs affirms that he has seen fire and smoke issue from this chasm for three days together.

Ararat is not only an object of superior interest from its mass and height, but still more from the associations with which it is connected. It is believed to be the Ararat of Scripture, on whose summit the ark rested. (Genesis, viii. 4.) And certainly it would be difficult any where to find a mountain that seems better entitled to the honour of serving as a stepping stone "*à Noé pour descendre du ciel en terre avec le reste de toutes les créatures.*" (*Tournefort, Voyage du Levant*, ii. p. 360, &c.; *Missionary Researches in Armenia*, p. 267. and *Introd.*; *Kinneir's Persian Empire*, p. 326.)

ARAS (an. *Araxes*), a river of Asia which has its source in the mountain land of Armenia, 20 m. S. Erzeroum. It flows E. past the N. base of Mount Ararat, then S. E. to Curdasht, and N. E. to Djrat, where it falls into the Kur, 50 m. in a direct line from the embouchure of the latter in the Caspian Sea. Its entire course may be estimated at 420 m. Notwithstanding its rapid current, it is in many places fordable.

ARAUCANIA. The territory known under this name is situated to the S. of Chili, and comprises the country lying between 37° and 39° 50′ S. lat., and 70° and 75° 20′ W. long. On the N. it is bounded by the river Biobio, which divides it from Chili; on the S. by the Valdivia or Calacalla; on the E. by the Andes; and on the W. by the Pacific Ocean.

The Araucanians divide their country into four Butalmapus or tetrarchies, viz.: —

1. Langenmapu, *i. e.* the maritime country.
2. Lelpunmapu, *i. e.* the plain country.
3. Inapiremapu, *i. e.* the country at the foot of the Andes.
4. Piremapu, *i. e.* the Andes country.

Each tetrarchy is governed by a Toqui or tetrarch, and is subdivided into 9 Allaregues or provinces, at the head of each of which is an Apo-Ulmen. Each prov. is again subdivided into 9 Regues or districts, severally presided over by an Ulmen. This division existed before the arrival of the Spaniards, and is supposed to be of great antiquity.

The dignity of Apo-Ulmen and Ulmen are hereditary in the male line. In case, however, of failure, a successor is chosen by the people, and their choice is afterwards confirmed by the Toqui or generalissimo. The succession is thenceforward perpetuated in the family of the individual newly chosen. The ensign of an Apo-Ulmen is a staff, with a silver globe at one end, and a silver ring in the centre. That of an Ulmen resembles the foregoing, with the exception only of the ring, which is peculiar to the former. The ensign of the Toqui's authority is a battle-axe.

The form of government comprises a mixture of democracy and aristocracy.

The natives proper of Araucania belong to the race of the Moluches, and the name of Araucanians has been given them by the Spaniards. Their range of information is extremely limited, and though Spanish writers affirm that they have some notion of geometry, and are sufficiently acquainted with astronomy to distinguish the stars by particular names, the credibility of their account is much to be questioned.

The industry of the country is confined to a little agriculture. The Araucanians cultivate a few fruits, and make a kind of cider. Their principal wealth consists of their flocks and herds, and they possess a great number of horses of the Spanish breed, as well as oxen, guanacos, and vicuñas. The oxen and guanacos yield them a plentiful subsistence, and the wool of the vicuñas supplies them with various articles of clothing.

The Araucanians have a sort of criminal code, and the crimes which seem to be regarded as the most heinous by them, are murder, adultery, robbery, and witchcraft. The latter is visited with immediate death. (*Wimmer neustes Gemälde von Amerika*, vol. iv. p. 312.; *Wien*, 1833.) Their religion consists in the belief of the existence of a Supreme Being, besides that of many lesser deities, and also in the immortality of the soul. (*Stein's Handbuch der Geographie*, vol. iii. p. 752.; *Leipzig*, 1834.) The Araucanians maintain no standing force, but every male is inured to the use of arms, and being naturally a warlike people, it needs no compulsion to rally them in defence of their country. None of the aboriginal race of S. America have resisted with so much obstinacy and such determined bravery all the attempts of Europeans to reduce them to a state of subjection, and to the present time their efforts have been successful, and they remain independent. They are extremely proud of having maintained their independence, and call themselves the unconquered people. They have derived from the Spaniards the knowledge and the use of cavalry in battle, and their skill in this mode of warfare is scarcely to be surpassed.

The Araucanians inter their dead in square pits, with the body in a sitting posture, placing at the side of the deceased his arms and drinking-cup if a male, and her domestic implements if a female. In the grave they also place the skeleton of a horse, interred in honour of the deceased. (*Tableau civil et moral des Araucans*; *Annales des Voyages*, vol. xvi. p. 100.)

The clothing of the men consists of trowsers reaching to the ankle of woollen stuff, and a smock of the same materials, usually white, over which is thrown a piece of cloth 2 yds. wide, and 2¼ long, with a hole in the centre for the purpose of admitting the head. This garment is

styled a Poncho. Their hat is of a conical shape. The dress worn by the women is a long white tunic, and a black upper garment fastened round the hips with a girdle, together with a small mantle called an Ichilla. The favourite colour is blue, having a greenish hue. The latter wear no head-dress, and go bare-footed. They are fond of displaying a quantity of rings upon their fingers, and ornament their arms and necks with strings of beads. Every woman is obliged to present her husband annually with a Poncho of her own making, and daily with a dish cooked by herself. (*Wimmer*, vol. iv. p. 313.) Both the men and women are exceedingly hardy, and capable of enduring great fatigue. The children go naked till their 10th or 11th year.

A tribe, called Cunchi, inhabits the country between Valdivia and the Gulph of Guayatica; and another, known by the name of the Hinlichi, that between the archipelago of Chonos and the Gulph of Pennas.

The reader who may desire more extensive information upon the subject of the Araucanians, is referred to *Poeppig's Reise nach Chili und auf die Amazonenstroeme*, 2 vols., 4to. *Leipzig*, 1835–6. This intelligent traveller, who resided in these latitudes from 1827 to 1832 in pursuit of scientific knowledge, gives the most recent, and perhaps the only authentic account of this people, and his book is replete with information. The glowing pictures of the civilization of the Araucanians, drawn by Molina in his *Compendio de la Historia de Chili*, &c., and by other Spanish writers, who have hitherto been looked up to as authorities upon this subject, are clearly proved by Dr. Poeppig to be much exaggerated. The warlike deeds of the Araucanians have been made the subject of a poem by the celebrated Ercilla, the prince of Spanish epic poets. Although many of the descriptions contained in the Araucana may be considered as overcharged, they are nevertheless the result of the author's own observation, as he was an active party in the wars carried on between the Spaniards and this people.

ARAURE, a town of S. America, rep. Venezuela, dep. Orinoco, on the Acarigua, 65 m. N.E. Truxillo.

ARBE, or **ARBA**, a small island in the Gulph of Quarnero in the Adriatic, separated by the narrow channel of Morlacca from the coast of Croatia. Pop. 4,100. It produces corn, figs, and excellent wine; and has salt lakes. Its capital, of the same name, is situated on a bay on its S. coast.

ARBELA, or **ARBIL**, a town of Turkey in Asia, pachalick Bagdad, between the Greater and Lesser Zab, on the high road from Bagdad to Mozul, lat. 36° 11′ N., long 44° E. This was formerly a large city, the cap. of the prov. of Adiabene, and is renowned in history for the final and decisive victory obtained in its vicinity, anno 331 B. C., by Alexander the Great over Darius, which was speedily followed by the death of the latter, and the total subversion of the Persian empire. But, under its present barbarian masters, Arbela has sadly declined from its former greatness, and is now an inconsiderable mud town, with about 3,000 inhabitants. Part of it is built on an artificial mound, 150 feet in height, formerly surmounted by a castle. (*Niebuhr's Voyage in Arabia*, ii. p. 275.; *Kinneir's Persia*, p. 300.; *Rich's Travels*, ii. p. 16.)

ARBOGA, an inland town of Sweden, prefect. Westeras, on the navigable river Ulvison, which falls into the lake Maelar, near the point where the former is joined by the canal of Arboga, proceeding from Lake Hielmar, 160 m. W. Stockholm. Pop. 1,500. It is the entrepôt for the iron, copper, &c. of the surrounding country; has a considerable transit trade and has been the seat of several diets.

ARBOIS, a town of France, dep. Jura, cap. cant., on the Cuisance, half-way between Salins and Poligny. Pop. 7,131. It is a handsome, well-built town, situated in a valley surrounded by hills and vineyards, which produce excellent white wines. It has a royal college and a tribunal of original jurisdiction, with fabrics of earthenware, rape seed, oil, and paper; tanneries, and flatting mills. Pichegru was a native of this town; and after the Restoration of 1815, a bronze statue was erected to him in one of its squares. We have not learned whether it still exists.

ARCADIA, the classical name of central Peloponnesus, now an inl. nomarchy of mod. Greece, Morea, of which it occupies the high table-land, between lat. 37° 15′ and near 38° N., long. 21° 44′ to 22° 35′ E., having N. Achaia, E. Argolis, W. Elis, and S. Messenia and Laconia: length and breadth about 40 m. each. Area, 1,[illegible] sq. m. Pop. doubtful. It is intersected by hill-ridges in various directions, and on the N. a lofty mountain range renders its access difficult. It contains several plains of tolerable extent, as that of Tripolizza, 25 m. long, and from 1 to 8 m. broad, with those of Londari, Mantinea, Tegea, &c. Its chief streams are the Roufia (*Alpheus*) the largest river of the Morea, and its tributaries, the Dogana, Ladon, &c.: its lakes are insignificant in size, but the Stymphalus, of classic fame, is amongst them. Arcadia has many geographical features in common with Bœotia; it is copiously watered, but its valleys are often quite encased by hills, and having no good outlet, the waters are but partly carried off by subterraneous channels, leaving stagnant marshes, which deteriorate the air. Arcadia, from its elevation, is much colder than the rest of the Morea; its climate is even rigorous. Much of it is uncultivated or given up to pasture, cattle-feeding being by far the most important rural occupation, the Arcadian shepherds roving about with their flocks in families of 12 or 15 persons, living in tents, and changing their locality as fresh pastures are required. Some of the plains contain many vineyards; that of Heræa was said by Pliny and others to produce a wine that made "men mad, and women fruitful:" a sweetish red wine is still made at that place, with more flavour and body than almost any other in the Morea. The Arcadians are strong and laborious, but all the operations of agriculture devolve upon the women; the men devote themselves to tending cattle, or performing necessary journeys on business. The decline of the culture and population of Arcadia dates from a very remote period. Strabo refers it, or at least the conversion of the corn lands into pasture, to the æra of the foundation of Megalopolis, to settle in which city many of the smaller towns and villages were abandoned. Forests however have not apparently much increased; and that of Pelagus, in the plain of Pallantium (Tripolizza) has wholly disappeared. Arcadia presents, in many places, most beautiful scenery; as, for instance, the valley of Megalopolis. (See *Leake*, *Morea*.) The plane, fir, chestnut, oak, ilex, wild-pear, lentisk, &c., are the most common trees; deer and game are plentiful; wild boars, wolves, bears, &c., common only in the N. Arcadia, is divided into 4 eparchies: Tripolizza, Londari, Karitena, and Andruzzena, are its chief towns. It contains the remains of the cities of Phigaleia, Megalopolis, Pallantium, &c., besides many other interesting ruins. (*Leake*, *Trav. in Morea*, 1830.)

ARC-EN-BARROIS, a town of France, dep. Haute Marne, cap. cant. on the Aujon, 13 m. S. W. Chaumont. Pop. 1,526.

ARCHANGEL, or **ARKHANGHELSK**, a government of Russia in Europe, occupying the whole country from the Oural Mountains on the E. to the grand duchy of Finland on the W., and from the frontiers of Vologda and Olonetz on the S. to the Arctic Ocean and the White Sea on the N. It includes, also, Nova Zemlia, and some other large islands in the Arctic Sea. The estimates of the area differ considerably, but it is believed, exclusive of the islands, to exceed 250,000 sq. m., or more than double the size of Great Britain and Ireland! But the largest portion by far of this vast territory is condemned to perpetual sterility. The part of it within the Arctic circle consists principally of an almost boundless expanse of sandy and mossy plains, having ice, even in the middle of summer, always a little below the surface. The country on this side the Arctic circle consists, also, of immense plains, partly occupied with forests that cover more than half the entire extent of the prov.; partly, but in a very inferior degree, by low pasture grounds; and partly with lakes, morasses, &c. Principal towns, Archangel, Onega, Dwina, Mezeu, and Petchora. Pop. not ascertained exactly, but does not certainly exceed from 220,000 to 250,000. Owing to the severity and variableness of the climate, corn crops cannot be depended upon; and, in consequence, even in the southern districts, where the land is most fertile, they are but little attended to; though considerable quantities of hemp and flax are raised. The principal wealth of the government consists in its immense and apparently inexhaustible forests; but fishing and hunting are the chief employments. The rein-deer is the domestic animal of the Laplanders and Samoyedes, the former occupying the N. W. and the latter the N. E. parts of the government. Among the tribes now mentioned, dried fish occupies the place of bread; and in the more S. districts, the inner barks of trees, and certain species of moss, are intermixed with meal, or substituted for it in the making of bread. Horses and cattle diminutive, and but little attention is paid to their treatment. The district of Kholmogor, on the Dwina, a little below Archangel, where the pasture is exceedingly good, must, however, be excepted from this remark. A breed of Dutch cattle, imported into this district by Catherine II., and distributed amongst the inhabitants, still preserves its superiority; and the calves of these cattle, being well fed, furnish the delicate white veal so much esteemed at Petersburgh. (*Tooke's Russian Empire*, iii. p. 89.) Ship and boat building, and the preparation of pitch and tar, are carried on to a considerable extent. A good deal of coarse linen is made by the peasantry of Archangel, and of the contiguous districts; and they also manufacture a good deal of cordage and immense quantities of mats, with leather, tallow, turpentine, potash, &c. The population, though originally Finnish, is now essentially Russian. The Samoyedes, who are almost at the bottom of the scale of civilization, though spread over an immense surface, do not exceed 6,000 or 7,000 individuals. They are exempted from the Obrock and from compul-

sory military service, paying only the issaak or tribute imposed on Asiatics. The Laplanders, who are a little more advanced, do not amount to 2,000 individuals. They are subject to the capitation tax.

ARCHANGEL, the cap. of the above government, and the principal city and port of trade in the N. of Russia, on the right bank of the Dwina, about 34 m. above where it falls into the White Sea, lat. 64° 32′ 8″ N., long. 40° 33′ E. Pop. in 1830, including that of the small dependent village of Solembolsk, 24,339. It is almost entirely built of wood, and has been materially improved since the fire of 1793. The principal building is the Gostinoi dwor, or bâzar, for the exhibition and sale of merchandise, and its protection against fire. It is of stone, and of great extent. The marine hospital also deserves to be noticed. Archangel is the residence of a general and civil governor, and of an archbishop. There is an ecclesiastical seminary with 9 professors, a gymnasium, a school of commerce and navigation, and some other educational establishments. Notwithstanding its high N. latitude, and the lengthened period during which it is annually inaccessible, it has a pretty extensive commerce. It owes this to its situation on the Dwina, one of the most important rivers of Russia, and which has been united by canals with the Wolga on the one hand, and the Neva on the other. The greater part of the articles of export are brought by this channel, mostly from a considerable distance, some even from Siberia. The principal are corn, flax and hemp, timber, iron, linseed; vast quantities of mats, potash, tallow, tar, pitch, train-oil, canvass and coarse linen, furs, cordage, &c. The exports vary materially in different years, principally according to the demand for corn in this and other foreign countries. In 1831 their total value was 14,750,756 roubles; whereas in 1834, when little corn was exported, they only amounted to 8,464,626 roubles. The value of the imports, which consist principally of colonial produce, spices, salt, woollens, cottons, hardware, &c., is always much less than that of the exports. In 1831, it amounted to 1,155,872 roubles; and in 1834, to only 659,555 do. The exports being bulky articles, employ a great number of ships, varying from 300 to 500. The harbour is at the island of Solembolsk, about 1 m. below the town; and the ships are principally loaded direct from the prams, rafts, &c. that bring the produce down the river. There is a bar at the mouth of the river with from 13 to 14½ feet water; and vessels drawing more than this must, of course, partly load and unload by means of lighters in the roads. There is a government dockyard, with slips for building ships, about 12 miles below the town, where also are situated warehouses belonging to merchants of the city. A fishing company was established here in 1803. Exclusive of the ship and boat building, and the manufacture of cordage and canvass referred to in the preceding article, there is here a sugar refinery, several breweries, &c.

The entrance to the Dwina, where Archangel was soon after built, was discovered by the famous Richard Chancellour, the companion of Sir Hugh Willoughby in his voyage of discovery, in 1554; and from that period down to the foundation of Petersburg, it was the only port in the empire accessible to foreigners. (*Schnitzler, La Russie, &c.* p. 630.; *Oddy's European Commerce*, p. 94.; *Russian Official Accounts, &c.*)

ARCHIDONA, a town of Spain, 34 m. N. Malaga. Pop. 5,000.

ARCHIPELAGO, a term applied to such tracts of sea as are interspersed with numerous and contiguous islands; but it is especially applied to the islands in the Ægean Sea, or that part of the Mediterranean lying between Asia Minor and Greece.

ARCHIPELAGO (EASTERN). This, the most extensive archipelago with which we are acquainted, comprises a vast number of islands, some of which, as Borneo, Java, Sumatra, Celebes, &c. are of very large dimensions. It lies within the tropics between 95° and 135° E. long., and 11° S. and 19° N. lat., having N. W. and N. the Chinese Sea; N. E. and E. the Pacific; and S. and S.W. the Indian Ocean. It is divided by Mr. Crawfurd into the following 5 divisions, each distinguished by peculiarities of situation, climate, and products.

1st Div. From long. 95° to 116°, including Sumatra, Java, Bali, Lombok, Madura, Bangka, Billiton, the Malay penins. and the W. and larger portion of Borneo. The soil of this divis. is good, and suited to the production of most kinds of veg. food. Rice is the chief subsistence of the inhab., who are the most civilised of the archipelago.

2d Div. From long. 116° to 124°, includes Celebes, Sumbawa, Flores, Sandal-wood, Timor, and the E. part of Borneo to 3° N. lat. The soil is inferior to the former; rice is not so abundantly produced, and sago partly supplies its place.

3d Div. From long. 124° to 130°; lat. 10° S. to 2° N.: includes Ceram, Booro, Gillolo, Timor-lant, the Arooe I. and Papua. The climate differs from that of most of the other div.: the E. monsoon is rainy and boisterous, the W. dry and temperate; the plants and animals of the 1st and 2d div. disappear, and others take their place, peculiar to this region of the world, as the clove, nutmeg, &c. Very little rice is grown; sago forms the chief food: the natives are greatly inferior to those of all the other div. in civilisation.

4th Div. From long. 116° to 128°, and lat. 4° to 10° N. includes Mindanao, the Sooloo I., Palawan, and the N.E. part of Borneo. Products of all the former div. are found here; but the clove and nutmeg are very inferior. Rice is consumed, but sago is the principal article of food; the natives are above those of the 3d div. in civilisation.

5th Div. From 10° to 19° N. lat. includes the remainder of the Philippines, and is the only portion within the limits of the hurricanes. The soil is fertile in rice, tobacco, and the sugar-cane, but not in the pepper of the 1st, nor the fine spices of the 3d div. The manners, institutions, and language of the inhab. differ from those of all the other divisions.

The E. archip. is mountainous, and its princip. mountains, which are often isolated, have all a volcanic character. It is very generally covered with deep forests of stupendous trees. The number of grassy plains is very small, and there are no arid sandy deserts. It is distinguished from all other clusters of isl. by its periodical winds, and peculiar natural products, one of which, sago, "is such as man nowhere else subsists upon" as a chief article of food. Gold is found in almost every part, but especially in Borneo and Sumatra, the total yearly produce being estimated at 155,000 oz. Silver is believed to be native, tin is very plentiful in Bangka; and there are also iron and copper; diamonds are found in Borneo; sulphur pretty generally, and salt from springs, especially in Java. Palms, bamboos, and ratans are universal; the most remarkable of these trees is the sago palm (*Metroxylon sago*), one of the smallest of its tribe, seldom reaching to more than 30 f. in height, and growing only where the E. is the boisterous monsoon, a region extending W. to Celebes and Borneo, N. to Mindanao, S. to Timor, and E. to Papua: Ceram is its chief seat, and there large forests of it are found. The edible farina is the central pith, which varies considerably in different trees, as to the time required for its attaining proper maturity. At the age of perhaps 15 years the tree is cut down, and may yield 500 or 600 lbs. pith, but the average is about 300lbs.; this is ground into powder, clarified, and made into cakes, kept dry for use: it is eaten by the natives in the form of pottage. Sago grows well only in marshy places: "a good sago-plantation or forest is a bog knee-deep." A farina of an inferior kind is supplied by the *gomuti* (Borassus gomutus), another palm peculiar to this part of the world, which grows in the E. isl. in the valleys of hilly tracts, and yields also toddy, and a fibrous epidermis used in the cordage of the native shipping. Teak is abundant in Java, and the banana grows commonly in the greatest perfection; the orange and lemon tribe, shaddock, pomegranate, pine-apple, guava, tamarind, jack-fruit, mango, &c. are plentiful; and several fine fruits, as the *champandak*, *mangostein*, and *durian*, are confined to the archipelago. The latter is esteemed by the natives before all other fruits; it is as large as a pumpkin, its seeds being enveloped in a rich white pulp, the edible portion; and, although repulsive at first by a strong smell, a taste for it once acquired, is lasting. The copal tree is found in Palawan, and others yielding resins are plentiful; the palma christi, cocoa-nut, and sesamum yield oil, as well as a large and handsome tree called *kanari*, peculiar to the E. isl.; benzoin, catechu, camphor, olibanum, are the gums naturally produced, and the pterocarpus, yielding dragon's-blood, grows in Sumatra and Borneo. Ebony, toon, sandal-wood, in Timor and the adjacent isl., sapan-wood, lignum-aloes, &c. are found; and indigo, annotto, safflower, and turmeric in nearly all the isl. The clove and nutmeg flourish in Amboyna and the Moluccas, black pepper in Sumatra, and ginger and cassia pretty generally; cubebs, cajeput (*melaleuca cajuputi*), and sassafras, in various parts, areca in all, as well as the *anchar* or poison tree: the *chetik*, wrongly called *upas*, is confined to Java. The sugar-cane, cotton, tobacco, capsicums, onions, cucumbers, and the sweet potato in the W. are common articles of culture: many kinds of pulse are grown as articles of food; millet is but seldom cultivated, but maize, which is next in importance here to rice, flourishes every where. The natives generally are very fond of flowers; those of the archip. are mostly yellow or red; blue is rare amongst them; lotuses and other aquatic plants are profusely numerous. European flowers and other vegetables transplanted thither, in general soon lose their perfume and excellence; and the same is the case with those from America, which, like the pine-apple, &c., are treated with indifference by the natives. The buffalo and ox, being both of remarkably large and fine breeds, are used in agriculture; elephants are found in the Malay peninsula and Sumatra only.

The argus pheasant and bird of paradise are the most remarkable birds; the latter is exceedingly abundant in Papua, the Aroe, and other E. isl. The edible birds' nests, so much valued by the Chinese, are built in caves, most commonly on the sea-shore, by a species of swallow (*Hirundo esculenta*). Tortoises are numerous in the E.: the shores, especially in the W., profusely abound with fine fish, as the pomfret, calcap, soles, &c; the whale fishery of the S. seas is reputed worth upwards of 1,000,000*l*. per ann.; sharks, whose fins are important articles of export to China, pearl oysters, cowries or gigantic cockles, are common; and the *Holothuria*, or sea slug, is fished for on coral reefs from one end of the archipelago to the other. The lac insect exists in most of the forests, especially in Sumatra and the Malay penins.; and bees are very numerous in the E., but they have never been domesticated.

Native Tribes. — The inhab. are of two distinct races, differing widely in conformation; one having a fair or brown complexion, while the other is black. The former inhabit chiefly the W., the latter the whole of the archip., but become more prevalent as we go farther eastward. The fair or brown tribes are short, squat, and robust, 5 ft. 2 in. being the greatest height commonly of the men, and 4 ft. 11. in. of the women. Their lower limbs are large and heavy, but not ill-formed, the bosoms of the women rather small than large in proportion to their size, and the arms and limbs of both sexes are round and fleshy, rather than muscular. Face round, mouth wide, teeth remarkably fine, chin square, angles of lower jaw very prominent, cheek-bones high (cheeks therefore hollow); nose not very prominent, but never flat; eyes small and black; hair on the head long, lank, harsh, and generally black; elsewhere very scanty. This race is superior in appearance to the other, but less good-looking than most Asiatic nations. The black or Papuan race is a kind of dwarf African negro, never more than 5 ft. in height; spare and puny, with a projecting belly and buttocks, which are much lower than the African's; complexion sooty, nose and under-lip projecting very much from the face; hair woolly, in small tufts, and each hair with a spiral twist. For undersized people, the inhab. of the archip. are strong and athletic, though not agile, nor, like some Asiatic nations, fond of practising and exhibiting feats, to show the flexibility of their bodies. They have a singular strength of constitution, and ability to recover speedily from bodily accidents and resist inflammatory disorders: childbirth is a function very easily performed amongst them. Their most prevalent diseases are remittent and intermittent fevers, worms, smallpox, and other cutaneous disorders; and as medicine is in a very low state, many perish miserably. Although so unclean as to wear what clothes they have till they drop from them, and otherwise very dirty in their homes and habits, they are temperate and abstemious, and not devoted to intoxicating liquors, although they universally use betel, areca, and tobacco, and would consume much opium were the price not so high. They are good-tempered, brave, humane, hospitable, and neither bigoted nor perfidious, but very revengeful; and under certain circumstances, such as great oppression, they have a peculiar custom of *running-a-muck*, in which an individual, careless of his own life, rushes forward with a drawn *kris* or dagger, striking at every thing and every one he meets. They are capable of attachment, gratitude, and fidelity, have great parental and filial affection, love for their country, and a regard for truth. The faculties of their mind are generally feeble; they are slow of comprehension, credulous, and superstitious; their judgment narrow, and their reason, memory, and imagination alike weak; they are, however, good imitators, and have an aptitude for music: in their manners they are grave, courteous, and reserved; they consider it most respectful to sit, cover the head, and turn the back to their superiors. The more savage tribes go quite naked, with the exception of a small piece of cloth worn round the loins. In the Philippines the dress is nearly the same for both sexes, and between the flowing dress of the Asiatics, and the close one of Europe, consisting of two coverings: excepting the Mohammedans, all wear the head uncovered. Their teeth are usually filed and blackened: the women's ornaments are chiefly of gold: pearls are never worn. All the men are armed with the *kris*, or dagger, which, with the spear, is the favourite weapon; the others are the club, sling, sword, and bow and arrows; the latter are often poisoned with *suckar*, which is, however, by no means a powerful drug. They are not expert in the use of fire-arms. The materials of their dwellings are commonly bamboo, ratan, palmetto-leaves, and wild grass, the two latter of which are used for roofing: houses in the neighbourhood of the seas are mounted on posts 15 to 20 ft. high, and superior residences are enclosed within temporary palings. They consist of but one floor, and their furniture is rude and scanty; the beds are rough mats, or often mere benches, on which a person lies down with his day-dress wrapt around him. Knives and forks are unknown, and porcelain dishes are a luxury: meals are taken sitting on the ground; the food is served up in trays of wood or metal, and grasped by handfuls by each as he wants it. The Polynesian language, which, in various dialects, is spoken over nearly the whole of the archip., and extends as well to Madagascar, and to the farthest of Cook's discoveries toward the S., is in every respect different from all others, and probably derived from an ancient nation originally settled in Java, where it is spoken in its greatest purity. Next to the dialect of Java, those of the Malay penins., Bugis, and Macassar, are the most civilised; Sanskrit is introduced into the more improved islands of the W. division; Arabic has also been introduced by the Mohammedans. There is in parts also a small admixture of Chinese and Persian, Portuguese and Dutch.

By far the greater portion of the land is yet uncultivated; and of that which is, the chief part is no better than a morass for half the year. There is a wide difference in the industry of the natives: some are roaming about their forests, but the greater number have actually made "a respectable progress in social order, tamed the useful animals, applied themselves successfully to agriculture, to fisheries, to navigation, and even to mining." The negro race are fond of hunting; all are devoted to games of hazard, and in Java cock-fighting is a favourite amusement. They are fond of dancing; their dances being grave, stately, and slow: their music is not destitute of melody. Polygamy and concubinage are common amongst the higher ranks, in the more civilised states. Chastity is variously appreciated; but women are never immured, and are even eligible to govern in elective monarchies as Celebes. Slavery exists every where except in Java. The inhab. of the archip. are clothed in cotton, mostly woven by themselves: silk they never wore generally, nor was the silkworm ever cultivated by them: their loom they have derived from the Hindoos. They know how to work many of the most useful metals, as iron, tin, and gold. Some of their musical instruments are made of a kind of bell-metal, which they cast themselves; and they sometimes use a metallic coinage. Iron, however, is but little used for tools and implements of agriculture: their cutlery is wretched, from a want of knowledge how to temper it; and they are unable to make a lock for a musquet. They carve *kris* handles, and make betel-boxes in a very superior manner, and build vessels even to 40 or 50 tons burthen; but their smaller ones are better, safer, and swifter. They manufacture *baluchong*, a kind of fish-sauce, both for home consumption and exportation: salt they obtain by the usual means of evaporation, and saltpetre by boiling the soil of caves which bats and birds frequent. The manuf. of glass is unknown; but they attempt that of gunpowder: the great request, however, in which they hold that of Europe, proves the inferiority of their own. In war the flower of their land-forces always consists of infantry; but their naval strength is the more formidable: their warfare has always been confined to predatory descents on adjacent islands. Every description of government is to be met with in this archip., from unlimited freedom in a savage state, to absolute despotism in the most civilised; in no one is there an hereditary nobility, and the civil and religious authority are in every case kept distinct. The public revenues are usually derived from the three sources of taxes on land, a poll-tax, and taxes on articles consumed or imported; in Java there is a tax on fisheries. Farming the revenues is a common practice, and it is common in many states for the prince or chief to reward his officers by assigning to them, instead of paying them directly, a certain extent of land, or the amount of the value of the labour of a certain number of cultivators. The prevailing religion is Mohammedan, which was introduced into the archip. in the 13th, and continued to spread till the end of the 16th century. Christianity prevails only in the Philippines and the Spice isl. The Mohammedan laws are those chiefly in force in the civilised parts, and are closely adhered to sometimes; but the task of avenging of private injuries mostly passes into private hands. The *lex talionis* is very popular, though almost all punishments may be compounded or alleviated by paying the party injured, his friends, or the executioner: stabbing by the *kris* is the most usual mode of capital punishment.

Trade in the archipelago is esteemed a most honourable employment, and even sovereigns personally engage in it. Java, Sumatra, and Celebes are the chief seats of trade: from the latter 40 vessels go annually to the N. coast of Australia, and many others into the rest of the archipelago, to collect articles for the Chinese trade, the most considerable of all, yet not of 180 years' standing. The exports to China are pepper, cloves, mace and nutmegs, scented woods, ebony, ivory, horns, hides, tortoise-shell, sharks' fins, edible birds' nests, gold dust, benzoin, camphor, betel, wax, wool, tripang, and European woollens and cottons. The trade with India is believed by Mr. Crawfurd to have commenced at the beginning of the second century of the Christian æra, and is now very extensive, the value of the imports from the archipelago into Calcutta only, in 1837-38, having amounted to 542,760*l*.: these imports consist principally

of pepper, tin, betel-nut, fine woods, gold and silver, damar, spices, &c. The exports to Europe and America have very greatly increased within these few years; principally in consequence of the wonderfully extended growth of sugar, coffee, indigo, &c. in Java (which see). But, exclusive of these great staples, Java sends rice to the other islands, to the Cape of Good Hope, and even to Europe; sago is sent to Europe, China, and Bengal; cotton is produced principally in the great south chain of the first and second divisions, but little, however, is sent beyond the archipelago. The chief imports are black tea, coarse porcelain, wrought iron, cottons and silks, brass and tutenague ware, paper, books, shoes, fans, umbrellas, paint, and toys, from China; salt, tobacco, blue cotton cloths and chintzes, from India. Chintzes dyed red, green, and other bright colours, and especially in patterns of *running flowers*, are peculiarly acceptable to the natives. Manchester and Glasgow cottons, *bandana* handkerchiefs, cotton velvets and woollens, English saddlery and iron, fire-arms and ammunition, glass and plated wares, raw and wrought silks, and opium, are also in great request. These nations are ignorant of arithmetic, and, excepting in Java, 1000 is the highest number they have any term to express. Interest on money lent is very high; bills of exchange are unknown; and women are almost solely the merchants, brokers, and money-changers. (For other particulars see *Articles on the several Islands*, and the learned and excellent *History of the Indian Archipelago*, by John Crawfurd, Esq., F.R.S., 3 vols. 8vo. *passim.*)

ARCIS-SUR-AUBE, a town of France, dep. Aube, cap. arrond. on the river of that name, at the point where it begins to become navigable, and where it is crossed by the high road from Troyes to Rheims. Pop. 2,752. There are no buildings worth notice. It has manufactures of woollen stockings and caps, an establishment for spinning cotton, tanneries, &c., and is the entrepôt of the iron of the valley of the Aube, and of the wire and woodwork of the Vosges. This town suffered severely during the campaign of 1814. Napoleon, who displayed equal skill and courage, repulsed at this point, with a very inferior force, one of the principal divisions of the allied army.

ARCO, or ARCH, a town of the Tyrol, with a castle, on the Sarca, 7 m. W. Roveredo. Pop. 2,000.

ARCOLE, a village of Austrian Italy, on the Alpora, 15 m. E.S.E. Verona. A series of sanguinary engagements took place here on the 15th, 16th, and 17th of November, 1796, between the Austrians and the French under Napoleon, when the former were ultimately defeated.

ARCOS DE LA FRONTERA, a town of Spain, Andalusia, on the Guadalete, 30 m. E. N. E. Cadiz. Pop. 10,000. It is situated on an elevated rock, and is of difficult access. Streets unpaved, and ill adapted for foot passengers. It has two parish churches, and some convents for both sexes. The great altar of the church of Santa Maria is much adorned. The country in the vicinity is mountainous, intersected by valleys, and very fertile.

ARCOT, a marit. district of Hindostan, prov. Carnatic, presid. Madras, divided into two sub-districts, or collectorates, comprising the whole country from Coleroon river on the S. to the frontier of the Nellore district on the N. and E. of Cuddapah, Mysore, and Salem, with the exception of the Chingleput district lying round Madras. The districts are divided by the Palaur river. That to the N. comprises an area of 8,200 sq. m., and a pop. of 506,831; and that to the S. an area of 4,500 sq. m., and a pop. of 550,239. Near the sea the country is low and well cultivated; but further inland it is hilly, with extensive tracts of jungle. Agriculture is the great business of the natives; and this depends very much on irrigation, to assist in which many very large tanks, artificial channels, and dams have been constructed. The country is held under the ryotwar system (see India). The revenue of the N. division amounted in 1835-36 to 227,718*l*., and that of the S. division to 240,967*l*. The trade in piece goods has been well nigh annihilated by the introduction of the cheaper cottons of Great Britain; but cotton stuffs still continue to be manufactured at Pulicat and Irrycum, and there is an extensive iron foundry at Porto Novo. (*Madras Almanac for* 1838, part ii. p. 17, &c.)

Arcot, a city of Hindostan, the Mohammedan cap. of the Carnatic, on the S. side of the Palaur, 68 m. W.S.W. Madras, lat. 12° 54′ N., long. 79° 23′ E. It is well built, is inclosed by walls, and contains the ruins of the palace of the nabobs of Arcot. The population consists principally of Mohammedans who speak the Decanny dialect, which we call Hindostani. It has a handsome Mohammedan mosque, with some other Mohammedan religious edifices. The citadel, formerly of large extent and considerable strength, is now quite in ruins, its principal defences having been blown up; but the rampart next the river, as it protects the town from inundation, is kept in good repair. Arcot is very ancient, and has undergone many vicissitudes. It came definitively into our possession in 1801. (*Hamilton's E. I. Gazetteer.*)

ARDAGH, an insignificant village of Ireland, co. Longford. The church is very ancient; and it was the see of a bishopric, united in 1685 to the bishopric of Kilmore, but separated from the latter in 1741, when it was united to the archbishopric of Tuam.

ARDEBYL, a town of Persia, prov. Azerbijan, 38 m. W. from the Caspian Sea, between and which there is a chain of pretty high mountains, near the edge of an extensive and elevated plain, lat. 38° 15′ N., long. 48° 23′ E. Pop. said by Mr. Fraser to amount to 500 or 600 families, or from 3,000 to 3,600 individuals. Houses mean and small, built of mud or sun-burnt bricks, with flat roofs like those of the poorest villages. It is surrounded by a ruinous mud wall; but the fort is a regular square, with bastions, a ditch, glacis, and drawbridge in the European style. The place is remarkable for its containing the tombs of Skeikh Suffi, the founder of the Suffite dynasty of Persian princes and of a religious sect, and of some of his descendents. It is a good deal resorted to by pilgrims, but is now falling into decay. A fine library formerly belonged to Ardebyl; but it was carried to Petersburg on the town being taken by the Russians, by whom, however, it was restored to the Persians. (*Fraser's Travels on the Shores of the Caspian Sea*, p. 296.; *Journal of the Geographical Society*, iii. p. 27.)

ARDECHE, a dep. of France, lying lengthwise along the W. side of the Rhone, by which it is separated from the Drome, having S. the Gard, W. the Lozere and Haute Loire, and N. the Loire. Area, 539,000 hect. Pop. 353,752. With the exception of a narrow border along the Rhone, most part of the surface is occupied by hills and mountains belonging to the chain of the Cevennes: Mount Mezen, on its W. frontier, the highest in the dep., rises to the height of 1,774 toises (5,770 feet) above the level of the sea. Several of the smaller hills are of volcanic origin. The cultivable soil is estimated at about 129,000 — meadows, 44,000 — vineyards, 27,000 — forests, 98,000 — mountains, heaths, &c. 148,000 — and *cultures diverses*, 63,000 hect. Besides the Rhone, the dep. is watered by the Ardèche, whence it derives its name, the Erieux, Doux, &c.; and it has to boast of the source of the Loire, which rises about 18 m. W. Privas. There are mines of coal, iron, lead, antimony, &c. The produce of corn is insufficient for the consumption of the inhabitants; the deficiency being supplied by potatoes and chestnuts, of which last the forests produce immense quantities. Valleys cultivated with the plough; hills generally with the spade. The inhabitants are exceedingly industrious, as is evinced by their careful system of irrigation, and by the terraces formed on the sides of the hills planted with vines. The culture of the latter is an object of great attention; and the wines of Limony, St. Joseph, Cornas, St. Peray, &c., particularly the last mentioned, are highly esteemed in foreign countries as well as in France. The raising of the silkworm and the production of silk is also a most important object in the economy of the dep. The culture of the olive has been abandoned, and the only oil used is now procured from walnuts. Butter and cheese yield considerable returns; great numbers of fat hogs are exported; and the sheep, which are numerous, furnish annually about 410,000 kilogs. wool. Manufacturing industry is prosecuted with much spirit and success. The dep., which from 1808 to 1812 produced at an average 732,000 kilogs. a year of cocoons, worth 2,196,000 fr., produced, in 1829, 319,600 kilogs. raw silk, worth about 16,000,000 fr., and had, at the same time, 226 establishments for spinning, organzining, &c. this silk, by which its value was raised to 23,244,256 fr.! and since then there has been a considerable increase. The paper produced at Annonay and other places ranks among the very best in Europe. The manufacture is not, however, very extensive, employing only about 400 work-people, and furnishing 313,500 reams a-year. Latterly the tanning of leather, particularly of goat-skins for gloves, has become a considerable business. There are also fabrics of coarse cloth, linen, and straw hats, establishments for spinning cotton, with iron works, forges, &c. The dep. returns 4 members to the Ch. of Dep. Constit. in 1837, 1,057. Total public revenue in 1831, very near 5,000,000 fr. Principal towns, Privas the cap., Annonay, Aubenas, &c.

ARDEE, an inland town of Ireland, co. Louth, prov. Leinster, on the Dee, whence its ancient name of Atherdee, "Town on the Dee," 36m. N.N.W. Dublin. A strong castle, now fitted up as a court-house, built here by one of the early English settlers, long rendered it a place of much importance; but it was notwithstanding burnt by Edward Bruce, during his invasion of Ireland, in 1315, and again by O'Neil, during the wars in the reign of Elizabeth. In 1641, it was the head-quarters of Sir Phelim O'Neil. Afterwards it fell into the hands of Cromwell, and was one of the stations of the army of James II., while retiring before that of William III.

previously to the battle of the Boyne. Pop., in 1821, 3,586, in 1831, 3,975, being about 2-3ds of that of the entire parish, which in 1834 contained 6,151 inhab., of whom 458 were of the E. church, 45 P. dis., and 5,648 R. Catholics. The town, which stands in a fertile district, consists of a main street, having several lanes branching from it; the dwellings, with the exception of some good houses, are mostly miserable cabins. The church, built in the early part of the 13th century, and originally forming part of an Augustine monastery, is a plain structure in good repair: the R. C. chapel is a new and spacious edifice. There are schools for both sexes, under the endowment of Erasmus Smith; a savings' bank, and a dispensary. In the centre of the town is another ancient castle, now fitted up as a dwelling-house, and near the entrance is a large artificial mound, called the Castle Guard. It was incorporated towards the close of the reign of Edward III., and received additional privileges from subsequent monarchs. Its ruling charter is that of 11th Anne, under which it consists of a portreeve, 23 burgesses, and an unlimited number of freemen; the municipal government being vested in the portreeve, 6 burgesses, and 6 freemen, who hold office for life. The corporation returned 2 m. to the Irish parl., and continues to enjoy a revenue of about 135*l.* per annum. The local courts have fallen into disuse; general sessions of the peace are held in January and June, and petty sessions every Wednesday: part of the ancient castle is used as a bridewell. The manufacture of malt is carried on to a considerable extent, 64,483 bushels having paid duty in 1836: there are also flour and meal mills; turf is brought from a bog, about two miles distant by the river Dee, which is here navigable for boats. A market-place for corn was built in 1710, and shambles in 1796, in which a well stocked market is held every Tuesday. Fairs, principally for live stock, are held in a large enclosed area provided by the corporation, on 1st Mar., 10th Apr., 6th June, 8th July, 20th Aug., 22d Oct., and 17th Dec.; that of October is principally for sheep. The right of tolls, which was for some time matter of dispute and turbulence, has been decided in favour of the corporation. The post-office revenue amounted in 1830 to 317*l*, and in 1836 to 546*l.*: a daily mail car from Drogheda to Louth passes through Ardee, carrying at an average two passengers each trip. (*Railroad Report; Priv. Infor.*)

ARDELAN, a prov. of Persia, forming the E. division of Kurdistan. It extends 200 m. in length, from the stream Sharook to the Turkish district of Zohaub, and is nearly 160 m. in breadth. From the Sharook to Senna, cap. prov., in lat. 35° 12′ N., long. 40° E., the surface presents successive clusters of hills, heaped, as it were, on each other, on extensive table lands, covered with huts, and the flocks of tribes passing the summer months here, and migrating in winter towards Bagdad. The soil is good, and will yield abundance of wheat and barley; but the Kurds, who prefer a pastoral life, content themselves with raising only what is absolutely necessary for their subsistence. Tobacco is cultivated in small quantities; and the extensive forests of oak on the mountains W. of Senna afford abundance of timber and gall-nuts. The former is floated down the Zab in rafts into the Tigris, and the latter exported to India. Various tribes inhabit Ardelan, which are represented as robust, brave, temperate, and living to a great age; but they are averse from settled habits; war and rapine are their delight; and they scarce consider murder and parricide as crimes! They have a language of their own, and are proud of their descent, which they trace back to the most distant epochs. Some of their chiefs have great power. (*Kinneir's Persia*, p. 142.)

ARDENNES, a dep. in the N. of France, having N. Belgium, E. dep. Meuse, S. dep. Marne, and W. dep. Aisne. Area, 517,386 hect. Pop. 326,823. It derives its name from the old forest of Ardennes, which occupies its N. division. It is divided into two portions by a mountainous ridge, a ramification of the chain of the Vosges, by which it is traversed from S. E. to N. W. Principal rivers Meuse and Aisne, connected by means of the canal of the Ardennes and the Bar. Soil of very different degrees of fertility. The N. is interspersed with mountains or high hills covered with forests and heaths, and some plains in the S. W. district are naked, arid, and barren. But it has some large and fruitful valleys, particularly that of the Aisne, one of the best corn countries in France. The extent of its principal divisions is set down as follows in the official tables, viz. cultivable lands, 314,000; meadows, 48,000; forests, 95,000; and heaths, &c., 11,000 hect. Agriculture has recently made much progress, and more corn is now produced than is sufficient for the consumption of the inhabitants. The crop of 1831 was estimated at about 570,000 hect. while that of 1832 was estimated at 912,000. Some inferior wine is made in the S. districts. There are large herds of cattle and flocks of sheep, there being among the latter, which are celebrated for their mutton, several of the long-wooled and merino breeds. Average annual produce of wool, 560,000 kilogs. This dep. is distinguished by its mines and manufactures. Among the former are those of iron, lead, calamine, &c., with quarries of slate and marble, the former the most important of the kind in the N. of France; coal is also found, but it is not worked, at least to any considerable extent. The annual produce of iron is estimated at above 4,500,000 kilogs. bar, and above 700,000 kilogs. cast. Charleville produces annually above 3,000,000 kilogs. nails; the copper works furnished above 180,000 kilogs. sheet copper, with above 110,000 kilogs. brass-wire for pins, clock-work, &c., and copper for caldrons and boilers. Above 6,000 individuals are employed in the arrondissement of Mezières in the nail trade, and 600 in the manufacture of ironmongery goods. Immense quantities of slate are quarried at Fumay, Fepin, St. Barnabé, &c. Fabrics of superior earthenware, glass, white lead, tanneries, &c. are met with at Montherme and other places. There are also numerous establishments for the spinning of wool; and various branches of the woollen manufacture are extensively carried on at Sedan, Bethel, &c. The great manufactory of fire-arms on account of government, carried on at Charleville, has been transferred to Feltri and Chatelleráult. Besides furnishing timber and other products for exportation to the contiguous depts. and Belgium, the forests are the great source of the productiveness of the mines, timber being the fuel used in the iron and copper works. The dep. is divided into 5 arronds., and had, in 1835, 122,583 properties. Public revenue in 1844, 11,439,917 fr. Principal towns Mezières, Sedan, Charleville, Bethel, Givet, &c. (*Hugo, France Pittoresque*, art. *Ardennes;* and *Official Tables*.)

ARDES, a town of France, dep. Puy-de-Dome, cap. cant. on a small river that falls into the Allier, 10 m. S. W. Issoire. Pop. 1,830.

ARDGLASS, a marit. town of Ireland, co. Down, prov. Ulster, on the sea-coast, a little to the N. of St. John's Point, between Dundrum Bay and the entrance of Strangford Lough, 68 m. N. N. E. Dublin. It was formerly of such commercial importance that a mercantile company from London settled here in the reign of Hen. IV., and in that of Hen. VI. its trade exceeded that of any port to the N. of Drogheda. It was also a place of considerable strength, as appears from the gallant stand made in it by Simon Jordan, at the close of the reign of Elizabeth, who maintained it successfully during a siege of three years against the earl of Tyrone; but subsequently, in consequence of its exclusive commercial privileges having been purchased up by the Crown, and transferred to Newry and Belfast, its trade declined, insomuch that it has been for many years merely a fishing station and watering-place, and the port for embarkation to a few passengers to the Isle of Man. Pop. in 1834, 1628, of whom 661 were of the E. church, 29 Prot. dis., and 938 R. Cath. It stands on the side of an elevated tract of land overlooking the sea, between two remarkable hills. The late proprietor expended a considerable sum in buildings suited to make it a fashionable bathing-place. It now consists of a long semicircular street, with lanes branching from it; a range, called the Crescent, overlooking the bay, and several detached residences. The pa. church and R. Cath. chapel are neat buildings. Schools, on the foundation of Erasmus Smith, educate 90 boys and 80 girls; there are also several private schools, in which about 100 pupils are instructed. The castle, now the occasional residence of the proprietor, consists of a range of very ancient buildings, supposed to have been stores for merchandise, converted into a castellated mansion of three stories. A manorial court holds pleas to the amount of 100*l*. The harbour has also been much improved. It consists of an inner cove, capable of admitting vessels of 100 tons, but nearly dry at low water, and of a large outer harbour, which, having been still farther enlarged by a pier, extending 300 feet into deep water, admits vessels of 500 tons at any time of tide: it has a lighthouse at its extremity. A constabulary force and coast-guard are maintained here. There are no manufactures: its trade is confined to that of grain, of which considerable quantities are shipped. Its low state in these respects is indicated by its post-office revenue, which, in 1830, was but 90*l*., and in 1836 was not returned. In its commercial arrangements it is considered as a creek or dependency of Killough, with which port its custom duties are consolidated. (*See* KILLOUGH.) The fishery is the almost exclusive occupation of the working classes; that of herrings being most followed. During the season, which continues from the beginning of June to the close of August, vessels assemble here, not only from the fishing ports on the E. coast of Ireland, but from the Isle of Man, and Cornwall. In 1834 about 300 vessels were collected, of which a third were Manx, a third English, from Penzance in Cornwall, and the remainder Irish. Besides herrings, most kinds of round and flat fish are abundant; but they are not so much sought for. The fishermen, as a body, are orderly, well conducted, willing to work, and not more addicted to the use of ardent

spirits than most others of the same grade. When disabled by age or accident, they are principally supported by their children and friends. It is observed, that though the takes of fish are frequently very large, the quantity brought in for sale never exceeds the demand. (*Fishery Report; Priv. Infor.*)

ARDJA, a town of Turkey in Asia, on the left bank of the Euphrates, 45 m. N. W. Bussorah.

ARDNAMURCHAN POINT, a promontory on the W. coast of Scotland, Argyleshire, being the most westerly point in the mainland of Great Britain, lat. 56° 45′ N., long. 6° 8′ 30″ W.

ARDNAREE, a marit. town of Ireland, co. Sligo, prov. Connaught, 160½ m. W. N. W. Dublin, on the Moy, a bridge over which river connects it with the town of Ballina. It being, therefore, in reality a suburb of the latter, the particulars relative to it will be found under Ballina.

ARDOCH, a village of Scotland, co. Perth, pa. Muthil, 8 m. N. Dumblane, remarkable for having in its vicinity one of the best preserved Roman stations or forts in the empire. It is an oblong, 420 feet by 375 within the lines. On the W. side it is defended by the steep banks of the river Knaig, on the S. by a deep morass and two ditches, and on the other sides, where it is most exposed, by no fewer than five parallel ditches and six ramparts. On the S. side the ditches have been partially destroyed in the process of cultivation, and the W. side has been injured by carrying (unnecessarily) the military road from Stirling through Crieff to the Highlands through part of the works; but it is now luckily inclosed and protected from further depredation. The prætorium, which is well preserved, is a square, 60 feet in the side, but it is not exactly in the centre of the station. Near this strong fort are three camps of different magnitudes, one 2,800 by 1,950 feet, estimated to accommodate 26,000 men; another, 1,910 by 1,340 feet, accommodating 12,000 men; and the third and smallest, 1,060 by 900 feet, accommodating 4,000 men. Nothing certain is known as to the period when, or the general by whom, this station and camps were constructed; but they are generally supposed to have been the work of Agricola. A little to the W. of Ardoch a cairn formerly existed 182 feet in height; but it is now nearly demolished, the stones having been carried away to build houses and fences. (*Roy's Military Antiquities; New Statistical Account of Scotland*, art. *Muthil.*)

ARDOYE, a town of Belgium, 14 m. S.S.W. Bruges. Pop. 5,900.

ARDRA, or AYEM, a country of Africa, formerly independent, but now a prov. of Dahomey. Ardra is also the name of the capital of the above country, about 40 m. inland.

ARDRES, a small but well-fortified town of France, dep. Pas de Calais, cap. cant., 9 m. S. E. Calais. Pop. 2,150. In the vicinity of this town, in June, 1520, was held the famous meeting between Francis I., king of France, and Henry VIII., king of England. The pomp and magnificence displayed on both sides, during eighteen days that the meeting lasted, acquired for the place of rendezvous the name of the *Champ du drap d'or*. The interview had no very important political result.

ARDROSSAN, a parish and sea-port town of Scotland, co. Ayr, the town being 24 m. W. S. W. Glasgow, 20 m. S. Greenock, and about 1 m. N.W. Saltcoats. Pop. of parish in 1841, 4,947; of Ardrossan at present (1850) from 2,500 to 3,500. The town was founded by the late Earl of Eglinton. His lordship's intention was to make a harbour here that should be accessible at all times of the tide; and as a project was, at the same time, set on foot for bringing a canal from Glasgow to Ardrossan, it was supposed that the latter would become the port of the former, and that the circuitous navigation of the Clyde would be avoided. In furtherance of this design, Lord Eglington expended vast sums on the harbour and town. The harbour is partly formed by a small islet, called Horse Isle, which shelters it on the N. W., and by a lengthened circular pier, and a breakwater. Within the extremity of the latter, there are 26 feet water at spring ebbs, shoaling gradually to 15 feet, where the pier commences. The wet docks which it was intended to construct have not been proceeded with. The town is laid out on a regular and magnificent plan; there is a splendid establishment of baths; and the purity of the salt-water, the mildness of the climate, and the facility of access, have made it be largely resorted to by visitors in the bathing season. The projected canal from Glasgow to Ardrossan not having been excavated further than the village of Johnstone in Renfrewshire, an act was obtained, in 1827, for constructing a railway from Johnstone to Ardrossan. For a while it was only completed as far as Kilwinning; but it has since been finished to Ardrossan; which, in consequence, has become more accessible, and is more frequented. The shipping of coal from Ardrossan has lately increased rapidly. During the year [illegible] there entered the port 1963 vessels, of the burden of 108,549 tons. (*New Statistical Account of Scotland*, art. *Ardrossan; Priv. Information.*)

AREBO, or ARBON, a town of Benin, on the river Formosa, 60 m. from its mouth. Lat. 5° 58′ N., long. 5° 8′ E.

ARECIFE, a sea-port town, cap. island of Lancerota, one of the Canaries, on its E. coast, lat. 28° 56′ N., long. 13° 36′ W. Pop. 2,500. The harbour, which though small is secure, is formed by several rocky islets. It has two entrances, the N. having a depth of 12, and the E. of 17½ feet. at low water, with a 9-feet rise of tide. Both entrances are defended by bomb-proof forts. The inhab. are mostly engaged in the fishery on the opposite coast of Africa. (*Journal Geog. Society*, vi. p. 287.)

ARENDAL, a sea-port town of Norway, on the Arendal, 75 m. N. E. Christiansand, lat. 58° 27′ N., long. 8° 50′ 25″ E. Pop. 1,800. It is mostly built on piles, and small vessels reach almost all parts of the town by means of the canals by which it is intersected. The harbour is protected by the opposite island of Tromoe. There are iron mines and forges in the vicinity; and a good deal of trade is carried on in iron and timber.

ARENDOUK, a village of Belgium, prov. Antwerp, 5¼ m. E. by S. Turnhout. Pop. 2,500 It has manufactures of stockings and linens, and distilleries.

ARENIS DE MAR, a town of Spain, Catalonia, 26 m. N. E. Barcelona, near the sea. Pop. 5,000. It is neat and clean, has a fine parish church and a convent, fabrics of silk and cotton stockings, a school of pilotage, a yard for the building of small vessels, and anchor-forges. The women employ themselves in making lace.

ARENSBURG, a sea-port town of European Russia, gov. Livonia, capital of the island of Oesel, in the Baltic, at the mouth of the Gulph of Riga, being situated on the S. side of the island, lat. 58° 15′ N., long. 22° 17′ 45″ E. Pop. 1,800. It has a castle, a Russian and a Lutheran church, a public school, and an hospital. The water in the harbour being shallow, vessels are obliged to anchor in the roads at a considerable distance from town. The articles of export consist of corn, timber, butter, cheese, tallow, hides, and seal oil. (See Oesel.)

AREQUIPA, a city of S. America, rep. Peru, cap. prov. same name, in the valley of Quilca, on the Chile, at the foot of M. Omate, 7,700 feet above the level of the sea, 30 m. E. from the Pacific Ocean, and 200 m. S.S.W. Cuzco, lat. 16° 30′ S., long. 73° 11′ W. It was founded by order of Pizarro, in 1536. The houses, though low, on account of the prevalence of earthquakes, are strongly built; and the cathedral, a bronze fountain in the great square, and the bridge over the Chile, deserve notice. It has four convents, a college, a workhouse, &c.; and it has, or had, flourishing manufactures of gold and silver cloths, woollens, and cottons. Its environs, notwithstanding their elevation, are very fruitful; and by means of its port Mollendo, and of the road passing through it from Lima to the S., it is the seat of a pretty extensive commerce. It is very subject to earthquakes, from several of which it has sustained great injury. The accounts of its pop. differ very widely; but it may perhaps be estimated at about 35,000.

ARETHUSA, a famous fountain of Sicily, which rises close to the sea, in the city of Syracuse. Cicero says of it, *In hac insula (Ortygia) extrema est fons aquæ dulcis, cui nomen Arethusæ est, incredibili magnitudine, plenissimus piscium: qui fluctu totus operiretur, nisi munitione ac mole lapidum à mari disjunctus esset.* (*In Verr.*, lib. iv. § 53.) Poetry and fable have combined to give an enduring celebrity to this fountain. It was supposed that the river Alpheus, which flows past Olympia in Greece, and falls into the Sicilian Sea, did not terminate its course there; but that it continued to flow in a subterranean channel, preserving the purity of its waters, till they again reappeared in the fountain Arethusa; and in proof of this it was affirmed that things cast into the Alpheus were after a while thrown up by the fountain! Virgil alludes to this circumstance when he says,

> Sic tibi, cum fluctus subter labere Sicanos,
> Doris amara suam non intermisceat undam.
>
> *Eclog.* x. lin. 4, 5.

and it is referred to by Pliny (*Hist. Nat.*, lib. ii. § 3.), Seneca (*Quæst. N.*, lib. iii. § 26.), and other ancient authors. The poetical account of the fountain may be seen in *Ovid's Met.*, lib. v. lin. 572.

This celebrated spring is now sadly changed. The sea has made its way, probably by the agency of the earthquakes so frequent here, into the fountain; so that, instead of being sweet, the water, which also is greatly diminished in quantity, in consequence of a large portion rising in the sea, is brackish and unfit for any purpose but that of washing. Its fish have disappeared with the sacred groves and temples that adorned its banks; and this glory of ancient Syracuse is now degraded into a sort of public washing tub for the poorer classes of the modern city. (*Swinburne's Two Sicilies*, ii. p. 332. 4to. ed.: *Hughes's Travels*, i. p. 41. 8vo. ed.)

AREVALO, a town of Spain, Old Castile, prov.

Arela, on the Adaja, 29 m. N.N.E. Avila. Pop. 4,500. Besides churches, it has two hospitals and two corn markets.

AREZZO (an. *Arretium*), a city of Tuscany, in the rich plain of Chiana (which see), 31 m. E. by N. Sienna, lat. 43° 18′ 53″ N., long. 12° 0′ 39″ E. Pop. 10 000. It is surrounded by walls, has a citadel, but is neither well built nor well laid out. It is the seat of a bishop, and has a Gothic cathedral. Its finest building, *le Logge*, containing the custom-house and theatre, in the principal square, has a magnificent portico, 400 feet in length. It has also numerous churches, convents, and 4 hospitals. There are manufactures of woollen stuffs and pins. Petrarch was born here, on the 20th July, 1304; and this also is the native country of Vassari, Bacci, and of Leonudo Bruin, called Aretin, Redi, &c.

Arezzo is very ancient, having been one of the principal states of Etruria. After it became subject to the Romans, it was reckoned a post of great importance as a defence against the incursions of the Cisalpine Gauls. It was famous for its terra-cotta vases, ranked by Pliny with those of Samos and Saguntum. (*Hist. Nat.*, lib. xxxv. § 12.) The remains of the ruins of an amphitheatre are still visible. It was taken by assault by the French on the 19th of October, 1800.

ARGANIL, a town of Portugal, prov. Beira, 21 m. E. Coimbra. Pop. 1,700.

ARGELET, a town of France, dep. Pyrénées Orientales, 14 m. S. E. Perpignan, near the sea. Pop. 1,967.

ARGENTAN, a town of France, dep. Orne, cap. arrond., on the river of that name, 22 m. N. by W. Alençon. Pop. 5,772. It is agreeably situated on a hill in the middle of a large and fertile plain. The walls by which it was formerly surrounded have been demolished, and its ramparts converted into agreeable promenades. It is pretty well built, has a tribunal of original jurisdiction, with manufactures of linen, lace (called *point d'Alençon*), tanneries, bleaching-grounds, &c.

ARGENTAT or ARGENTAC, a town of France, dep. Corrèze, cap. cant. on the Dordogne. Pop. 3,029. There are mines of coal and lead in the environs.

ARGENTEUIL, a town of France, dep. Seine et Oise, cap. cant., on the Seine, 13 m. N. W. Paris. Pop. 4,536. Heloisa was educated in a nunnery in this town; and it was to the same place that she retired, in 1120, after the misfortune of Abelard, before she became Abbess of Paraclet. There is here an hospital, established by St. Vincent de Paul.

ARGENTIE'RE, a town of France, dep. Ardèche, on the Ligne, 20 m. S. W. Privas. Pop. 3,000. It derives its name from mines of silver, wrought here in the 12th century. It is situated on a rock in a deep valley, has narrow crooked streets, and is ill-built and filthy. It has filatures and fabrics of silk.

ARGENTON-SUR-CREUSE, a town of France, dep. Indre, cap. cant., on the Creuse, 16 m. S. S. E. Châteauroux. Pop. 4,319. This town is divided into two parts by the Creuse. The higher and more ancient part contained a vast Gothic castle, dismantled by Louis XIV., and of which there are now hardly any remains. The bleaching grounds for woollens at this place have been long celebrated. Argenton was called *Arquitomagus* by the Romans; and medals, and other remains of that illustrious people, are still found in the town and its vicinity.

ARGENTRE', a village of France, dep. Ille et Vilaine, cap. cant., 5 m. S. S. E. Vitré. Pop. 2,060.

ARGENTRE-SOUS-LAVAL, a village of France, dep. Mayenne, cap. cant., 6 m. E. Laval. Pop. 1,702. It has valuable marble quarries.

ARGOS, a city of Greece, in the Morea, in antiquity the cap. of Argolis, the kingdom of Agamemnon, and one of the most ancient and celebrated of the Grecian cities. It is situated about 2 m. from the bottom of the Gulph of Argos (*Argolicus Sinus*), and about 4½ m. N. W. Napoli di Romania, lat. 37° 40′ N., long. 22° 44′ E. Some fragments of its Cyclopean walls, and vestiges of the theatre, are the only remains of the ancient city that can be identified below the acropolis. The latter stood upon a pointed rock of considerable elevation, and great natural strength, which is now surmounted by a castle, built on the foundations of the ancient citadel. The town suffered much during the revolutionary struggle between the Greeks and Turks, but it is said to have since rapidly risen from its ruins; the buildings, however, are mean and poor. Pop. probably 3,000.

ARGOSTOLI, a sea-port town, cap. island of Cephalonia, on the E. side of the gulph of the same name, lat. 38° 10′ 40″ N., long. 20° 29′ 15″ E. Pop. from 4,000 to 5,000. Situation low and unhealthy, and the houses mostly mean and poor; but both the appearance and police of the town, particularly the latter, have been much improved since it came under the protection of the English. The Gulph of Argostoli is about 8 m. in depth, by about 1½ or 2 m. in width, and has in most parts good anchorage.

ARGUIN, a very small island, in the gulph of the same name, on the W. coast of Africa, about 54 m. S. E. from Cape Blanco. It is abundantly supplied with fresh water, and is supposed, apparently on good grounds, by D'Anville, Bougainville, Rennell, &c., to be identical with the island of Cerne, where Hanno settled a colony during his famous voyage of discovery. In modern times it has been successively possessed by the Portuguese, Dutch, and French; but has been abandoned for more than half a century. The dangerous bank or shoal of Arguin extends S. E. a considerable distance from Cape Blanco. It has been the scene of numerous shipwrecks; among others of that of the French frigate la Méduse.

ARGUNSKOI, a town and fortress of Siberia, on the Argun, 162 m. from its mouth.

ARGYLE, or ARGYLL, a marit. co. Scotland consisting partly of mainland, and partly of islands, of which the principal are Islay, Mull, and Jura, having N. Inverness-shire, E. Perth and Dumbarton shires, S. the Irish Sea and the Frith of Clyde, and W. the Atlantic. Its shores are extremely irregular, consisting of lengthened promontories and deep bays and inlets. The total area is estimated at 2,054,400 acres, of which 1,446,400 are mainland, and 608,000 islands. The rivers are unimportant; but the freshwater lakes in the mainland and islands are supposed to cover 51,840 acres. Owing to its deep bays and gulphs, the sea coast of the mainland is estimated at about 600 m. A large portion of the surface consists of heathy moors, morasses, rocks, and wild rugged mountains. Ben Cruachan, the most elevated of the latter, rises 3,670 feet above the level of the sea. Woods and plantations cover from 35,000 to 45,000 acres. Lead, copper, and iron are met with, and coal is wrought near Campbelton. Good marble is found in the island of Tiree, and several other places; and the slate quarries of Easdale and Balachulish supply a large portion of the demand for Scotland. Climate mild, but wet, variable and boisterous. The entire extent of the arable land is not supposed to exceed 170,000 acres, so that grazing constitutes the main business of the farmer. Argyle is celebrated for the excellence of its native breed of black cattle; they are small, hardy, easily fed, and, when fattened in the rich pastures of the Lowlands of Scotland or England, afford the very best beef that is brought to table. The stock is estimated at from 65,000 to 70,000, furnishing a large annual supply for exportation. Sheep farming is not carried on so extensively as in some other Highland counties; but latterly it has been a good deal extended, and the breeds of sheep much improved. Property in a few hands. Farms of all sizes, extending from a few acres to many square miles. In various districts the practice of holding land in partnership, or what is called *run-rig*, is still kept up. Under this system, a number of persons take a farm in common, each being bound for the rent. They then divide the arable land into small contiguous portions, or ridges, as equally — quantity and quality taken together — as is possible; the space falling to each tenant being determined by lot, sometimes for the whole lease, and sometimes only for a single season! Ploughing and most other sorts of labour are performed in common; and if, as is usually the case, any hill pasture be attached to the low ground, it is let in common. In some of the low Highland districts occupied in this way, the land falling to the share of an individual does not exceed from 3 to 7 acres, and that, perhaps, is divided into some dozen or twenty patches. It is needless to enlarge on the pernicious influence of this mode of holding land. Where it prevails it is obvious there can be nothing like industry, nor any thing deserving the name of agriculture. We are, therefore, glad to have to say that, though still much too prevalent, it is rapidly declining both in this and other Highland counties, partly in consequence of the extension of the sheep farming system, and partly from many landlords having set themselves against it, and divided the lands held in common into separate possessions. Farm buildings very various: those on the largest and best farms good and substantial; but, in general, the houses of the smaller class of occupiers, and of the cottiers, are miserable hovels, sometimes without either windows or chimneys. Improved cottages are, however, begun to be introduced; and it is to be hoped that they may be universally diffused. Principal corn crops oats and barley, especially the first. Potatoes are very extensively cultivated, and form an important part of the food of the inhabitants. Average rent of land, including islands, in 1810, 1*s*. 11*d*. an acre. Kelp is made along the shores both of the mainland and islands; but the business has latterly fallen very much off. This, also, is the case with the herring fishery, which used formerly to be prosecuted to a much greater extent than at present, in Loch Fyne and other arms of the adjacent sea.

Argyle is popularly divided into the seven districts of Argyle, Cowal, Kintyre, Lorn, Appin, Islay, and Mull; and contains 50 parishes. Principal towns, Campbelton, Inverary, and Oban. It had, in 1831, 17,146 inhab. houses, 19,252 families, and 100,973 inhab., having increased

from 71,859 in 1801. It sends 1 m to the H. of C. for the co., and Campbelton and Inverary join with Ayr and Irvine in returning a m. Parl. constituency in 1837, 1552. Valued rent, 149,596*l*. Scotch; annual value of real property in 1815, 227 493*l*.

ARGYRO CASTRO, a town of Turkey in Europe, in Albania, the principal place in the extensive and well cultivated valley of Deropuli, near the river Drino, on the lower declivity of the mountains on the W. side of the valley, at a short distance from the site of the old Roman town of *Hadrianopolis* or *Justinianopolis*, 45 m. N. W. Yannina. It has an imposing and peculiar aspect, being built on three separate ridges, divided from each other by deep chasms or ravines. The houses, which are mostly good, are not contiguous, but stand in various positions. "Some are placed on commanding eminences, others beneath projecting crags, and many on the ridges of precipices; but the greater part upon the flat surface of the rock, between its deep ravines: the whole appearance is singularly striking, and its fine effect augmented, not only by the minarets of its mosques, but by the grand castle or fortress, upon a much larger scale than any ever before constructed in this country." (*Hughes*, ii. 360. 8vo. ed.) Pouqueville estimated the population, previously to the capture of the town by Ali Pacha, at 2,060 families, making probably from 12,000 to 13,000 inhab. (*Voyage dans la Grèce*, i. 339.) Mr. Hughes, who visited the town soon after its capture in 1813, states that it was supposed to contain about 15,000 inhab., which corresponds pretty closely with Pouqueville's estimate. It is probable that the pop. has not differed materially in the interval. According to Urquhart, (*Spirit of the East*, ii. 234) Argyro Castro contains 2,000 Albanian and 200 Greek families.* It has a good bazaar, which used to be well supplied with articles of commerce. Previously to its subjugation by Ali Pacha, it was a place of considerable industry, had a pretty extensive internal trade, and enjoyed a considerable degree of independence.

ARIANO, a town of Naples, prov. Principato Ultra, on a steep hill, in one of the passes of the Apennines, 17 m. E. Benevento, on the high road from Naples to Foggia and Manfredonia. Pop. circa 8,000. It is the residence of a bishop, and has a fine cathedral, with numerous churches, convents, and monts-de-piété; a seminary, an hospital, and a manufacture of earthenware. It suffered much from earthquakes in 1456 and 1732, and seems latterly to have been declining.

ARICA, a sea-port town of S. America, on the Pacific Ocean, at the mouth of a small and well-watered valley, 210 m. N. W. Potosi, lat. 18° 28′ 40″ S., long. 70° 13′ 30″ W. It naturally belongs to Bolivia or Upper Peru; but it belonged in 1836, and probably still belongs, with a narrow strip of land extending as far S. as the Pavillon de Pica, to Peru. It was nearly destroyed by an earthquake in 1605; and has been ever since in a comparatively poor state. But it is the natural outlet of one of the principal mining districts of S. America, and of a large extent of country; and now that the disqualifications under which it laboured, during the Spanish régime, are removed, it will, no doubt, become a port of very considerable importance. It is a better landing place than the contiguous ports of Ilo, Mollendo, and Quilca; and it is much better situated for commerce than Lamar, that has hitherto been the principal port of Bolivia. But notwithstanding its superiority to most other ports on this part of the American coast, it is, owing to the heavy surf, at all times difficult to effect a landing, and sometimes quite impossible, unless in the *balsas* of the natives. These are a sort of floats made of inflated seal-skins; and so dexterous are the natives in their management, that there is not the least risk of being upset, or even wetted with the surf. On these original and apparently frail rafts, all merchandise is landed at Arica; and the specie, and other articles of export, are conveyed to the vessels in the bay, unless the sea be unusually calm, and the surf run very low. (*Stevenson's S. America*, iii. 323. &c.)

ARIENZO, a town of Naples, prov. Terra di Lavoro, 8 m. N. Nola, and 18 m. W. by N. Naples. Pop. 11,000. It is situated on Mount Tifati, on the high road from Naples to Benevento, and has 7 parish churches, an hospital, and a *mont-de-piété*.

ARIGNA, a place in the N. of the co. Roscommon, Ireland, on the W. side of Lough Allen, at which are coal and iron mines that have been worked at different times with various success; but generally with great loss to the parties carrying them on. The coal is of an inferior quality. The proceedings of a company formed in London, in 1824, for working the Arigna mines, were of so singular, or rather so disgraceful a character, as to give rise to an inquiry before a committee of the House of Commons. Full details as to these mines may be found in *Weld's Survey of Roscommon*.

ARINTHOD, a town of France, dep. Jura, cap. cant., 21 m. S. Lons-le-Saulnier. Pop. 1618.

* Balbi says (3d ed. p. 584.) that it contains from 4,000 to 9,000 inhab.

ARISPE, a town of Mexico, in the intendency of Sonora, near the source of the river Yagrin. Pop. 7,600.

ARKANSAS, a large river of N. America. It rises in the Rocky Mountains, in about 41° N. lat. and 110° or 111° W. long.; and, pursuing an E. S. E. direction, unites with the Mississippi in lat. 33° 55′ N., long. 91° 10′ W. It has a course, following its bends, of above 2,000 m. It has several important tributaries, of which the Great Canadian, falling into it on the right, is the principal. During the periodical swell, the Arkansas is navigable to the Rocky Mountains; and at other times it may be navigated for above 600 m. from its confluence with the Mississippi. Its navigation is safe, being uninterrupted by rocks, shoals, or rapids. If the Missouri be reckoned the first in magnitude among the tributaries of the Mississippi, the second rank is due to the Arkansas, it being longer, and draining more surface than the Ohio, Mississippi proper, or Platte. (*Darby's View of the United States*, p. 316.)

ARKANSAS, one of the United States of N. America, so called from the above river, by which it is traversed through its whole extent from W. to E. between 33° and 36° 30′ N. lat., and 89° 44′ and 94° 30′ W. long., having E. the Mississippi, by which it is divided from the states of Tenessee and Mississippi. Area about 52,000 sq. m. Pop. in 1820, 14,273; in 1830, 30,388; and in 1840, 97,574, of whom 19,935 were slaves. In 1845, the pop. was estimated at 145,000. Besides the Arkansas, the principal rivers are the White River, the St. Francis, Washita, and Red River, all affluents of the Mississippi. The country is divided into three portions, viz. 1st, the E. portion, or that lying along the Mississippi, low, flat, and covered with a dense forest; 2d, the central portion, a little more elevated, and containing several extensive prairies; and the 3d, or W. portion, which, compared with the others, may be called mountainous. All descriptions of soil are met with. On the borders of the rivers it is exceedingly fertile, but as it recedes from them it becomes poorer, and in some of the more elevated parts is sterile. In many districts, there is a scarcity of water. In the E. part of the state, and in the hollows along the rivers, especially the Arkansas, the climate is moist and unhealthy; but in the middle and W. parts it is comparatively salubrious. The mineral riches of the state are very imperfectly explored: but it contains vast quantities of salt, which, indeed, render the waters of the Arkansas brackish. Indian corn and cotton are staple products, about 8,000,000 bush. of the former and 25,000,000 lbs. of the latter having been raised in 1848; wheat, oats, tobacco, &c., are also raised. The country is well fitted for the rearing of cattle, and large herds of buffaloes are met with. Wild turkeys are, also, very abundant. Manufactures have made but little progress. Education appears to be in a backward state. It is very indifferently supplied with common schools; though these would appear to be much neglected, there having been in 1840 no fewer than 6,567 persons of its white pop. over 20 years of age who could neither read nor write. It has no college, or other superior scholastic establishment. State debts in 1848, 3,862,172 dolls.; public lands remaining unsold, 1st of Jan. 1849, 27,464,603 acres. Arkansas was erected into a separate territory in 1819, and into a state in 1836. Suffrage universal: senate, elected every 4 years, to consist of not less than 17, nor more than 33 members; house of representatives, elected biennally, consists of not less than 54, nor more than 100 members. Governor elected for 4 years, judges for 8 years. Slaves not to be emancipated without owners' consent. Cap. Little Rock, or Arkapolis, on the S. bank of the Arkansas, about 80 m. in a direct line from its mouth. Pop. in 1840, 2,500, but now (1850) probably 6,500. It stands on high ground; and has a state-house, theatre, academy, gaol, penitentiary, &c. Several newspapers are published in the town. (*Darby's United States*, p. 487.; *American Almanack for* 1850, &c.)

ARKIKO, a sea-port of Abyssinia, at the bottom of the bay of Massuah; being, according to Lord Valentia, a mere collection of miserable huts. Lat. 15° 32′ N., long. 39° 45′ E.

ARKLOW, a marit. town, E. coast of Ireland, co. Wicklow, prov. Leinster, on the Ovoca, at its mouth, 39 m. S. by E. Dublin. It was taken possession of, and a castle erected by the first English settlers. In 1649 it was taken by Cromwell, and dismantled. A severe conflict took place here in 1798, between the royal forces and the insurgents; in which the latter were defeated with much slaughter, and their leader killed. Pop. in 1821, 3,808; in 1831, 4,383; being two thirds of the parish, which in 1834 had a pop. of 6,394; of whom 2,037 were of the E. church, and 4,357 R. Cath.

The town, placed on the declivity of a hill on the S. side of the Ovoca, which is crossed at a short distance below by a bridge of 19 arches, is divided into the Upper Town, consisting chiefly of a main street, formed of well-built houses, and of the Lower Town, called also the Fishery, from being chiefly inhabited by fishermen. The

church, a handsome building in the English style, was erected in 1823. The R. Cath chapel is also an elegant modern structure. The Methodists have a small place of worship. A male school is supported on the foundation of Erasmus Smith; two female schools by private contributions, and some others in the same manner; in which, and in private seminaries, about 550 children receive instruction. A fever hospital, with a dispensary, is in the immediate vicinity of the town. A small infantry barrack stands on the site of the ancient castle, and a coast-guard station is in the neighbourhood. Petty sessions are held every Thursday. The town is a constabulary station. The inhab. derive their support chiefly from the fisheries. There used to be an abundant summer fishery for herring and hake; but the former have deserted the coast for some years, and the winter fishery is also declining. The oyster fishery continues to be a great and constant source of employment to the fishermen; who attribute the comforts they enjoy to its continuance. The oysters are carried in boats to Beaumaris, in Anglesey, where they are laid on banks; and raised, when required, for the Liverpool market. These people build their cottages on the sandy beach, few have any kind of garden. Their exertions are much impeded by the defects of the harbour, which has a bar at its mouth, with seldom more than 5 feet water even at high spring tides. The boats when returning home are obliged to lie off the bar and watch the opportunity of crossing it on the rise of the wave, and few boats come in without striking. The fishermen keep up a light, at their own expense, during the season, to point out the bar.

The markets are held on Thursdays; the fairs on the 11th of January, 22d of March, 19th of April, 14th of May, 9th of June, 9th of August, 25th of September, and 15th of November. The post-office revenue for 1830, was 202*l*.; and for 1836, 252*l*. The mail-coach road from Dublin to Wexford passes through Arklow; and a car, conveying on an average three passengers each trip, plies between it and Dublin, six times a week. (*Fishery Report; Railroad Report; and Priv. Infor.*)

ARLANC, a town of France, dep. Puy de Dome, cap. cant., on the Dolore, 10 m. S. Ambert. Pop. 4,196. It manufactures ribands, and articles of *menue-mercerie*.

ARLES (an. *Arelas* or *Arelate*), a city of France, dep. Bouches du Rhone, cap. arrond., on the left bank of the Rhone, at the point where the river divides into two branches to inclose its delta, or the island of Camargue, 46 m. W.N.W. Marseilles, lat 43° 40′ 31″ N., long. 4° 37′ 47″ E. Pop. cant. (the largest in France) 26,048; town, 13,342. Its situation, though pleasing, is, owing to the adjacent marshes, not very healthy; and its streets being narrow and dirty, and its houses mostly old and mean, it is indebted for its celebrity principally to the historical associations connected with its name, and its monuments. It was an important town on the invasion of Gaul by Cæsar, who calls it Arelate. It subsequently became a Roman colony; and was long a large, rich, and populous city. Its amphitheatre (which does not, however, appear ever to have been quite finished) is a noble monument, capable, according to Martinière, of accommodating 30,000 spectators: it is of an oval form, 1284 feet in circumference, three stories high, occupying the highest place in the city, and is older, larger, and more magnificent than that of Nismes, but not so well preserved. The obelisk of Arles consists of a single block of granite about 54 feet in height; though, unlike other monuments of the same kind, it be without hieroglyphics, it is all but certain that it has been brought from Egypt; but there are no authentic accounts with respect to it, except that, after being long buried in the ground, it was erected on the pedestal, 20 feet in height, on which it stands, in 1676. A beautiful statue of Venus, now in the museum of Paris, was discovered here in 1651; and, exclusive of the above, the ruins of an aqueduct, of two temples, of a triumphal arch, an extensive cemetery, and numerous fragments of granite and marble columns, evince the former grandeur and importance of the city. It has a cathedral, and numerous churches; and has been the seat of several ecclesiastical councils. The townhall built by Mansard, is a handsome edifice; and it has a school of navigation, a college, a museum of antiquities, a small public library, a theatre, &c. Silk, soap, glass bottles, &c. are manufactured; and the sausages of Arles are in the highest esteem. To obviate the difficulties in the navigation of the Rhone and Durance, a navigable canal has been made from the city to the sea at Port Bouc, about 12 m. E. of the E. embouchure of the Rhone, and from the city to the Durance opposite to Cadenet. It is also connected with the canal of Beaucaire, and consequently with that of Languedoc; so that it has become the centre of a considerable and growing trade.

After being pillaged, A. D. 270, Arles was repaired and embellished by Constantine, whose son, Constantine II. was born in it. It declined under the Merovingian kings, in 855 it became the capital of a kingdom of the same name, united in 933 to that of Burgundy. It was sacked by the Saracens in 730. In the 12th century it constituted a republic; and in 1251 it submitted to Charles of Anjou. (*Martinière, Grand Dictionnaire*, t. i. pp. 413—417. *Hugo, Bouches du Rhone, &c.*)

ARLESHEIM, a village of Switzerland, cant. Bale, 4 m. S. E. Bale. It has baths and a fine botanical garden.

ARLES-SUR-TECH, a town of France, dep. Pyrénées Orientales, cap. cant. 6 m. W.S.W. Céret. Pop. 2,225. It has hot mineral springs.

ARLEUX, a town of France, dép. du Nord, cap. cant. on the Sauset, 6 m. S. Douay. Pop. 1755.

ARLON (an. *Orolaunum*), a town of the low countries, duch. of Luxembonrg, cap. cant., on a hill in the middle of forests, 16 m. W.N.W. Luxembourg. Pop. 3,653. It has iron works, and some manufactures of linen and woollen stuffs, and earthenware. Arlon, which is of very remote origin, was formerly fortified. In the excavations that have been made in the town, statues, medals, and stones bearing inscriptions have been dug up that leave no doubt in regard to its ancient importance. It was nearly burned down in 1785; and several engagements have taken place in its vicinity.

ARMAGH, an inland co. Ireland, prov. Ulster, having N. Lough Neagh, W. Tyrone and Monaghan, S. Louth, and E. Down. It is about 31 m. in length from N. to S., and 20 m across where broadest, containing 328,183 Imp. acres, of which 42,472 are unimproved mountain and bog, and 18,394 water, being part of Lough Neagh. Surface partly rugged and mountainous, but generally flat. Soil pretty fertile. Property to a great extent in the hands of the church, colleges, and corporations; but some noblemen and gentlemen have good estates. Minor estates numerous, and the tenures by which they are held such as to reduce them into the minutest portions. Farms very small, from 1, 2, and 5 to 25 acres; those of the latter size and up to 40 being deemed large. Of 1,500 tenants on Lord Gosford's estate, in the barony of Fews, there are not more than 60 or 70 who occupy so much as 20 acres. This is the estate on which Mr. Blacker introduced his system of stall feeding into the smallest farms; but though a vast improvement on the old scourging plan, it is quite visionary to suppose that there can be any thing like a really good or profitable system of cultivation on such patches. Potatoes, oats, and wheat are the principal crops; the land under these crops being, in 1848, potatoes 28,604, oats 84,211, and wheat 14,629; but it is understood that there is now (1850) a considerably greater breadth of land under potatoes; barley, turnips, flax, &c., are also grown. There are some dairies which produce butter; and cattle of an inferior breed are reared in the mountains. Sheep, few and inferior. Middlemen but little known. Habitations of the bulk of the lower orders decidedly superior to those of the same class in most other parts of Ireland, except the neighbouring counties of Down and Antrim. They are mostly whitewashed, well thatched, and have a clean and comfortable appearance. Notwithstanding their alleged propensity to gambling, the inhab. may be advantageously compared with those of most other parts of Ireland. Average rent of land 20*s*. an acre. Linen manufacture widely diffused. The rivers Bann and Newry being joined by the Newry canal, there is a navigable communication between the sea at Carlingford Bay and Lough Neagh. Armagh contains 8 baronies, and 20 parishes. Principal town, Armagh. Pop. in 1821, 197,427; in 1831, 220,651; in 1841, 232,393. It returns 3 m. to the H. of C., viz. 2 for the co. and 1 for the city of Armagh. Parl. constituency of co. in 1849, 937.

ARMAGH, a city and parl. bor. of Ireland, the seat of the archiepiscopal see of the "Primate of all Ireland," prov. Ulster, cap. of the above co., on the Callan, an affluent of the Blackwater, 70 m. N. by W. Dublin, lat. 54° 21′ N., long. 6° 39½′ W. It is said to have been founded by St. Patrick, A. D. 450; but the very existence of the saint is problematical, and we have no authentic notice of Armagh or of its primacy previously to 1122. (Ledwich's *Antiquities of Ireland*, p. 80.) Since the Revolution it has gradually increased in extent and prosperity, particularly from its having been the residence of Primate Boulter, and of his various successors in the see, who have all contributed to its improvement by liberal donations and bequests. The population in 1821, amounted to 8,493; and in 1831, to 9,470. In 1834 the total number of inhab. was 10,764 But though it may be regarded as the head quarters of Protestantism in Ireland, only 5,118 of its then inhab. were attached to Protestant doctrines, whereof 3,586 belonged to the estab ished church, and 1,532 to Prot. dis.; while

the residue, or 5,546, were R. Catholics. The pop. in 1841 amounted to 10,235, occupying 1,493 houses, being nearly 7 persons to a house.

It is well built, chiefly of a hard reddish limestone, raised in the vicinity. The streets, which are well constructed, flagged, and macadamised, diverge from the cathedral down the sides of the hill on which it is built. A plentiful supply of water is conveyed through them, in pipes, from a reservoir at some distance: they are kept perfectly clean, and are well lighted with gas. A library, lately rebuilt and improved, containing upwards of 14,000 volumes, was endowed by Primate Robinson, the great benefactor of the town. He also founded and endowed the observatory. It is supplied with an excellent astronomical apparatus, and enjoys a well deserved scientific celebrity. Primate Robinson endeavoured to raise the city to the rank of a university, but in this he failed. The Tontine buildings consist of a suite of apartments for assembly-rooms, and occasionally for dramatic entertainments: part of them is occupied by a spacious news-room. An enclosed space, called the Mall, adjoining the town, and neatly laid out and planted, affords the citizens a convenient place of recreation in fine weather. The primate's demesne, near the town, is also open to respectable people; and some resident gentlemen have imitated this liberal example by throwing open their pleasure-grounds. The archbishop's mansion is plain in style, but elegant in its architectural proportions, and near it is a private chapel. Barracks in the vicinity afford accommodation for 300 men.

Armagh derived its corporate privileges from a charter of James I. in 1613, confirmed by William III. The ruling body, which consisted of a sovereign, 12 burgesses, and an unlimited number of freemen, was abolished by the Municipal Reform Act. The bor. returned 2 m. to the Irish parl.; but it only sends 1 m. to the Imp. parl. The electors are the burgesses and freemen residing within 7 m., and the 10*l.* householders, their number in 1849 being 689. The Reform Act laid down a new boundary for electoral purposes, comprising 270 acres, whereas the former municipal boundary included 1147 acres. A seneschal's court is held for the archbishop's manor, for pleas of 10*l.* and under, but its jurisdiction does not pervade the whole place, part of the city being in the adjoining manor of Mountnorris. The assizes and general sessions of the peace are held twice a year; a court for insolvent debtors three times a year; and a court of petty sessions every Saturday. The sessions-house is a handsome modern building. The co. gaol, at one end of the Mall, is a plain substantial building, not sufficiently large for the proper accommodation of the numbers confined in it: it has a tread-mill.

The ecclesiastical prov. of the Primate of all Ireland comprises the 6 united bishoprics of—1. Armagh and Clogher; 2. Tuam, Ardagh, Killala, and Achonry; 3. Derry and Raphoe; 4. Down, Connor, and Dromore; 5. Kilmore and Elphin; 6. Meath. The diocese of Armagh is divided into the upper or English part, which includes the cos. of Louth and Meath, and the lower or Irish part, containing Armagh, Tyrone, and part of Londonderry. The archiepiscopal estates extend over 100,563 acres; the annual income, by rents and renewal-fines, is stated to be 17,670*l.*, which, on the demise of the present archbishop, is to be reduced to 12,000*l.* The cathedral, a large ancient building, has recently undergone very extensive repairs, principally at the expense of the present primate. It contains several fine monuments; but, to the extreme regret of all true Milesians, the monument of Brian Boru, said to have been interred in it after the battle of Clontarf, can no longer be traced. A chapel of ease, near the Mall, is consecrated to St. Mark. In the R. Catholic arrangements, the parish is one of those belonging to the archbishop, who resides and has his cathedral in Drogheda. The parish chapel, which is remarkable for its triple roof, is too small for the congregation. There are places of worship for Presbyterians, Seceders, Independents, Methodists, &c.

Armagh has one of the free grammar-schools so liberally endowed by James I. It is a large building, in an enclosed area, with accommodation for 100 resident pupils. The present primate maintains a separate school, for the general education of the boys of the choir. There is a charter school for boys and girls, under the endowment of Mr. Drelincourt; a Lancastrian, a national, and a Sunday school, besides several private establishments.

The county infirmary is in the town, the fever hospital and lunatic asylum in its vicinity: the latter, which receives patients from Armagh, Monaghan, Fermanagh, and Cavan, is in an enclosed area of 13 acres, used for the exercise and horticultural employment of the inmates. Average number of patients, 135; cost per head, including every thing, about 15*l.* per annum. The other charitable institutions are, a mendicity asylum, the paupers of which are employed in cleaning the streets; and two loan funds.

Though little or no manufacture be carried on in the town, Armagh is the centre of a large inland trade, chiefly in grain, linen, and yarn. The linen-hall, a large and well arranged building, is open for sales on Tuesdays, chiefly for brown linens. There are considerable weekly sales of yarn at the yarn-market. There are, in or near the town, two distilleries, a brewery, and several tanneries and flour-mills. Markets on Tuesdays for linen, yarn, flax, flax-seed, and provisions; on Saturdays, for grain and provisions; and on the first Saturday in every month for cattle. The market-house has extensive ranges of buildings for the exposure of goods. The tolls, having been bought up by the inhab., are regulated by a committee; the profits being expended in the improvement of the town. Fairs on the Tuesday after Michaelmas, and in the week before Christmas. The Bank of Ireland, the Provincial Bank, the Belfast banking company, the Northern banking company, and the Ulster banking company, have branches here. A Savings Bank, established in 1818, had, in November 1848, 43,499*l.* of deposits. Armagh is connected by the Ulster railway with Belfast. It is also connected with the Blackwater, which passes within 4 m. of the town, by the Lagan canal, and with Newry by the Newry navigation.

Two newspapers are published in the city. Postage in 1848, 1,111*l.*

The general appearance of Armagh is pleasing. Its situation, on the declivity of a high hill, gives it an imposing aspect, and renders it clean and salubrious. The houses are substantially built; the number of thatched cottages in its suburbs, very inconsiderable. The residence of the primate, of several of the dignified clergy, and of a number of noblemen and gentry, in the immediate vicinity, occasions a considerable expenditure. The habits of the higher classes are social and refined. The working classes suffer little from poverty or want of employment. They are comparatively well clothed, well lodged, and well fed. Coal is brought from Great Britain, via Belfast, by the canals, or from the collieries in Tyrone, but peat is the principal fuel. (*Thom's Almanac* for 1850, and *Priv. Information.*)

ARMEGON, a sea port town of Hindostan, on the coast of the Carnatic, 66 m. N. Madras, lat. 14° N., long. 80° 11′ E. An English factory was established here in 1625.

ARMENIA, an extensive country of W. Asia, consisting principally of the table land lying between the Kur on the N. and the Kurdistan mountains on the S., having the Euphrates from the ridge of Mount Taurus to Erzingan on the W., and approaching to near the Caspian Sea on the E. But the limits of Armenia differed widely at different periods, and were at no time exactly defined. The flat parts of the country are, probably, not less than from 5,000 to 6,000 feet above the level of the sea, and it is intersected by several lofty mountain chains, the summits of some of which—as that of Ararat (see ARARAT)—ascend within the line of perpetual congelation. Armenia gives birth to some large and celebrated rivers, as the Euphrates and Tigris, flowing S. to the Persian Gulph; the *Cyrus* or Kur, and its important tributary, the *Araxes* or Aras, flowing E. to the Caspian Sea; and the *Akampsis* or Chorak, flowing N. to the Black Sea. It has three great lakes; those of Van, Shahee or Urmiah, and Goukcha or Sevan. The circumference of the first is estimated at 240 m.; it has several islands; and its waters, though brackish, are drunk by cattle. The other two lakes are also very extensive. The water of that of Urmiah is excessively salt, and so buoyant that one can with difficulty stand where it is 3 feet deep. The soil and products are very various; but in general the former is abundantly fertile, especially in the few spots where it is irrigated. In the higher parts all sorts of corn may be advantageously

cultivated; and the valleys produce excellent cotton, tobacco, grapes, &c. The ploughs are all drawn by oxen or buffaloes; no fewer than 8 or 10 of the former being frequently attached to one. The only minerals raised in modern times are copper, iron, and rock salt; but in antiquity the precious metals ranked among its products. Owing to the great elevation of the country, the climate is in most parts rather severe; but though the winters last long, the summer heats are sufficient to bring all the fruits of the earth to perfection. The country is in many parts desert, and is every where very thinly peopled. Besides the Armenians, or old inhabitants, who are principally engaged in agriculture and trade, the population consists of Turks, Persians, and Russians, and wandering pastoral hordes of Turkmans and Koords. The principal towns are Erivan, Erzeroom, Nakchivan, Akhlat, Van, Akhalzikh, &c., which see.

Armenia, though it has long since been effaced from the list of nations, was governed, for a lengthened period, either by independent princes or by vassals of the Assyrian and Persian monarchs. It subsequently became the theatre of long-continued struggles between the Persians and Romans; and, notwithstanding the hardiness of the inhabitants, and the natural advantages of the country for defensive warfare, it seems never to have been able to oppose an effectual resistance to any invader. In the 13th century it was overrun by the Moguls; and in the succeeding century the last trace of its independence disappeared, and the Armenians ceased to have a country.

The people early began to seek an asylum in foreign parts from the oppression under which they suffered at home, and they are now widely diffused over Turkey, Persia, Russia, and India. Their emigrations have not, however, always been voluntary. In 1604, Schah Abbas, emperor of Persia, in order to protect his dominions on the side of Armenia against the Turks, resolved to carry off the inhabitants, and to lay waste a large portion of the country, so that it might no longer be able to support an army! This monstrous resolution was executed with the most revolting barbarity. The inhabitants, driven off like cattle, perished by thousands, while their houses were burnt down and every vestige of civilisation obliterated. A part of the survivors were settled in one of the suburbs of Ispahan, where they were kindly treated; but the greater number, being settled in an unhealthy part of the prov. of Mazunderan, were soon swept off by disease. Until recently, Armenia was divided between Turkey and Persia; but the former ceded to Russia, by the treaty of Adrianople, a considerable portion of her Armenian territories; and in 1827, Russia acquired the entire prov. of Erivan from Persia. These acquisitions have been consolidated into the government of Armenia.

Whatever may be its influence in other respects, there can be little doubt that the occupation of part of Armenia by the Russians will be of singular advantage to its inhabitants. Great numbers of Armenians have already emigrated from the Turkish and Persian provinces to those of Russia, where they have been advantageously settled. The depredations of the petty chiefs and of the wandering tribes will now be effectually restrained; and for the first time for these several centuries, the Armenians will be made aware of the advantages resulting from the security of property, and from living under a strong and (compared with those under which they formerly lived) a liberal and tolerant government. Col. Monteith bears decisive testimony to the benefits that have resulted to Georgia and other Transcaucasian countries from their occupation by Russia. You may now, he says, "travel *in perfect security, with post horses*, from the mouths of the Phasis to the Kur and the Caspian, through countries where, in 1815, the roads were all but impracticable, and exposed to the unrestrained attacks of robbers and other banditti." (*Journal of the Geographical Society*, vol. iii. p. 37.)

The total number of the Armenian nation is estimated by Mr. Conder at about 2,000,000, of whom about two thirds may be within the Ottoman dominions. With the exception of the Jews, no other people is so much scattered. It is supposed that there are about 200,000 in Constantinople and the adjacent villages; about 40,000 in India; 10,000 in Hungary and the contiguous countries; and they are met with in Africa and even America.

Like the Jews, the Armenians found in foreign countries are mostly all engaged in some department of commerce, or of the employments connected therewith. The moment, in fact, that they leave their native soil, they endeavour either to get themselves or their children into some branch of trade. They begin with the lowest departments; the more able or fortunate ascending gradually from one grade to another, till they arrive at that of banker, the summit of their ambition. A large proportion of the foreign and internal trade of Turkey, Persia, Southern Russia, India, &c., particularly the first, is in their hands. They are exceedingly industrious; and, though not free from the vices produced by slavery and ignorance, are honester in their dealings, and less prone to practise deceit, than the Greeks.

The Armenians are Christians differing but little from those of the Eastern or Greek church. They reject the decrees of the council of Chalcedon, and admit only a divine nature in Christ. Their officiating clergy, or *vartabeds*, are obliged to marry; but celibacy is enjoined upon those of a higher grade, as patriarchs, bishops, &c. The election of the officiating clergy is in the hands of the people, and is uniformly exercised by them: but, notwithstanding this circumstance, and that the priests have no fixed incomes, but depend entirely on fees and other perquisites, they do not appear to have much influence, or to be very attentive to their duties: they are uniformly almost in the last degree illiterate, and their morals are not represented in the most favourable point of view. (*Missionary Researches*, p. 243.)

The Armenians, with the exception of a small minority, do not acknowledge the supremacy of the Pope; but since 1441 have recognised, as their spiritual superior, the patriarch of Echmiadzin, residing at the famous convent of the three churches, near Erivan, now in possession of Russia. The patriarchs of Constantinople and Jerusalem have no authority in ecclesiastical affairs; but the Turkish government consider the former as the head of the Armenian rayahs: through him all applications are received and all orders issued; and he is accustomed to receive an annual stipend from the different bishops, which was paid him even by the patriarch of Echmiadzin till the latter became a Russian subject. Previously to 1441, the patriarchs of Sis and Athamar (a monastery on an island in Lake Van) shared the spiritual authority with the patriarch of Echmiadzin; and latterly the Porte has been endeavouring to sever the connection between its Armenian subjects and their old spiritual head, now under the control of a foreign power, by directing their attention to, and reviving the pretensions of, the patriarch of Sis, resident within the Turkish territories. — (*Elliott's Travels*, i. p. 470.)

The language of Armenia is harsh, and overloaded with consonants. Besides a great many Indo-Germanic roots, it exhibits numerous relations with the Finnish idioms of Siberia, and other languages of N. Asia. Its grammar is exceedingly complex. The ancient Armenian is no longer spoken, and exists only as a dead language in books: it is so very different from the modern Armenian, that it is no longer understood, except by those by whom it is studied. The modern language is largely made up of Persian and Turkish words; and its grammar, and the construction of its phrases, are totally distinct from those of the ancient language.

The alphabet of the Armenians, introduced A. D. 406, and still in use, consists of 38 letters, of which 30 are consonants, and 8 vowels. At an early period, the Armenians had a literature and learned men; and though the great bulk of the nation be now plunged in the grossest ignorance, they continue to this day to possess both, and works of considerable merit are still printed in their language. They have printing-presses at Constantinople, Venice, Moscow, Calcutta, and other places. — (For farther particulars, see *Tournefort*, vol. ii. pp. 349—418.; *Jaubert, Voyage en Arménie et en Pers*, *passim*; *Smith and Dwight's Missionary Researches in Armenia*, with the learned Introductory Discourse by *Conder*; *Colonel Monteith's* Paper, in the *Journal of the Geographical Society*, vol. iii.; and the excellent article by *Klaproth*, in the *Encyclopédie des Gens du Monde*.)

ARMENT, a village of Upper Egypt, near the left bank of the Nile, m. N. Esné. It occupies the site of the ancient *Hermonthis*. It has in its environs a temple, on the walls of which, among other figures, is a giraffe, — an animal now unknown in Egypt.

ARMENTIÈRES, a frontier town of France, dép. du Nord, cap. cant. on the Lys, 13 m. N.W. Lille. Pop. 6,512. It is well built, clean, and handsome; has a communal college; an establishment for spinning cotton; fabrics of table-linen, mattresses, laces, thread, tobacco, &c., with bleaching-grounds, soap-works, distilleries, and a refinery of salt. Large quantities of bricks made in the environs are exported by the Lys, and boats are built for its navigation. It has a celebrated market for seed corn.

ARNAU, a walled town of Bohemia, on the Elbe, 18 m. N. E. Gitschim. Pop. 1,400. It has manufactures of linen, bleach-fields, print-works, and copper forges.

ARNAY-LE-DUC, a town of France, dép. Cote-d'Or, cap. cant. near the Arroux, 29 m. S.W. Dijon. Pop. 2,617. It has manufactures of cloth, serges, druggets, &c. On the 25th June, 1570, the great Huguenot leader, Admiral Coligny, defeated near this town the army of the Marshal de Cossé-Gonor.

ARNEDO, a town of Spain, prov. Burgos, on the Cidacos, 10 m. S. Calahorra. Pop. 1,600. It is said to have had no fewer than *nine* parish churches! Good wine is made in its neighbourhood.

ARNEE, a town of Hindostan, prov. Carnatic, 74 m. S.W. Madras, lat. 12° 40′ N., long. 79° 23′ E.

ARNEMUYDEN, a small town of the Netherlands, island of Walcheren, 3 m. E. Middelburg. Its port, which was formerly considerable, has been filled up, and it is now nearly 2 miles from the sea; with which, however, it is connected by a canal.

ARNHEM, a town of the Netherlands, cap. prov. Guelderland, on the right bank of the Rhine, at the foot of the Veluwe hills, 34 m. E. by S. Utrecht, lat. 51° 58′ 47″ N., long. 5° 54′ 45″ E. Pop. 14,600. It is a fortified place of the first class; its fortifications having been greatly improved and enlarged, in 1702, by the famous engineer Coehorn. The ramparts, planted with elms, afford an agreeable promenade. The town is well built; has a good port on the river, which is crossed by a bridge of boats; and is advantageously situated for trade. It is the residence of a governor, and is the seat of a court of assizes, of a tribunal of original jurisdiction, and a tribunal of commerce; and has a college, a literary society, an agricultural commission, &c. In the church of St. Eusebius are the tombs of the old Dukes and Counts of Guelderland.

ARNO, a considerable and celebrated river of Italy (Tuscany), the *Arnus* of the Romans, has its source in the Appenines, at Mount Falterona, 5 or 6 m. N. Pratovecchio. At first it flows S. to Punte a Buriano; thence N.W. to Pontasiere, where it receives the Sieve; whence it pursues a westerly course, flowing through Florence and Pisa; 7 m. below which it falls into the Mediterranean. Its embouchure was formerly a good deal farther to the S.; but having become obstructed, it was diverted into a new channel cut for it in 1603. Its course may be estimated at from 140 to 150 m. It is naturally navigable from the sea to Florence, and has been made navigable from Florence to near its source by means of 27 locks: but its navigation is liable to many obstructions, at certain seasons from floods, and at other seasons from droughts: to guard against the injurious influence of the former, it has been embanked for the greater part of its course. The Val d'Arno, or the country between Florence and Pisa, is one of the richest, best cultivated, and most beautiful of any in Italy.

ARNSBERG, a town of Prussian Westphalia, cap. reg. and circ. of the same name, on the Ruhr, by which it is almost encompassed, 57 m. N. E. Cologne. Pop. 4,500. It is the residence of the provincial authorities, and has a court of appeal for the regency, a Catholic gymnasium, an agricultural society, &c. The inhabitants are principally employed in the preparation of potashes, and in distillation.

ARNSTADT, a well-built town of Saxony, princip. Schwarzburg Sondershausen, on the Gera, 11 m. S. by W. Erfurth. Pop. 4,500. It has a castle, a college, a cabinet of natural history, and fabrics of cotton and brass, with a considerable trade, in corn, timber, wool, furs, and colonial produce.

ARNSTEIN, a town of Bavaria, circle Lower Mayne, on the Werpe, 16 m. N.N.W. Wurzburg. Pop. 2,000. It is the birth-place of the historian Schmidt.

ARNSWALDE, a town of the Prussian states, prov. Brandenburg; cap. circle, 19 m. S. E. Stargard. Pop. 3,800. It is nearly surrounded by three lakes well supplied with fish.

AROLSEN, a town of the principality of Waldeck, on the Aar, 12 m. N. by W. Waldeck. Pop. 1,500. It is the residence of the prince, and the seat of the principal authorities of the province; is well built; has a fine castle, in which is a valuable collection of coins and antiquities, with a library and a picture gallery; there is also a college, grammar school, &c.

ARONA, a town of the Sardinian estates, prov. Novara, on the Lago Maggiore, near its southern extremity, lat. 45° 45′ 53″ N., long. 8° 34′ 18″ E. Pop. 2,000. Its fortifications, which were formerly considerable, were demolished by the French after the battle of Marengo. It is well built, has a gymnasium, an hospital, a collegiate church and 3 others, a port on the lake, with yards for the construction of vessels for its navigation, and a pretty considerable commerce. St. Charles Borromeo was a native of this town; and in 1697 a colossal statue was erected in honour of the saint, by the people of Milan, on a neighbouring eminence. This immense work, the *chef-d'œuvre* of Zanelli and Falconi, stands on a granite pedestal 46 feet high, and is itself 66 feet high! The head, hands, and feet are cast; the drapery and book which he holds in his hand are hammered out of sheet copper, set on timber framing: the execution is very fine, particularly the expression of the countenance, looking down upon the world "more in pity than in anger." The attitude of the body is remarkably easy and simple, and the proportions are so good that the idea of a colossus does not enter the mind until a comparison has been made with objects of known dimensions situated near it, such as the travellers every day seen at the foot of the statue. A sort of staircase leads from the bottom to the top of the statue. (*Simond's Italy*, p. 10.; *Conder's Italy*, vol. i. p. 310.)

ARONCHES, a town of Portugal, prov. Alentejo, 16 m. S.E. Portalegre. Pop. 3,000. It has a church, a convent, an hospital, and a workhouse.

ARPAGON, a small town of France, dép. Seine et Oise, 11 m. W. Corbeil. It has tanneries, a brewery, and some trade in flour.

ARPAIA, a miserable, bleak-looking village of Naples, prov. Principato Ultra, between Capua and Benevento, 3 m. E. Arienzo. It would be unworthy of notice were it not that it is supposed by some to occupy the site of the ancient *Caudium*, memorable for the great disaster that there befell the Roman arms, anno 311 B. C. But the better opinion seems to be, that the defile situated a little to the N. of Arpaia, between St. Agato and Moiano, is the real scene of this disaster, and the place so celebrated by the name of the *Furcæ Caudinæ*. The Forks consist of a small plane, traversed by a stream, having a narrow outlet at each end, and shut up every where else by continuous and impracticable mountains. A powerful Roman army having unwarily entered this defile, the Samnites immediately blocked up the further outlet; and the Romans, having retraced their steps, found that their enemies had anticipated their movement, by blocking up the pass by which they had entered as well as the other. Caught thus, as it were, in a trap, they were obliged to accept the terms dictated by the Samnites, who granted them their lives, on their delivering up their arms, and passing one by one half naked under the yoke. (*Liv.* lib. ix. cap. 1—7.)

ARPINO (an. *Arpinum*), a town of Naples, prov. Terra di Lavoro, 6 m. S.W. Sora. Pop. 9,000. It is agreeably situated on some eminences, has various churches, an hospital, with manufactories of the best cloth made in Naples, paper, and tanneries. This is a very ancient city. Having been wrested from the Samnites by the Romans, it became a municipal town, and its citizens were enrolled in the Cornelian tribe 302 years B. C. (*Liv.* lib. x. § 1., and lib. xxxvii. § 36., and *Cicero pro Cn Planco*.) But it is chiefly memorable for being the birthplace of two of the most distinguished men Italy ever produced,—Caius Marius, surnamed the third founder of Rome; and M. Tullius Cicero, the prince of Roman orators. The latter frequently alludes to Arpinum in his Letters, and dwells with complacency on the rude and primitive simplicity of its inhabitants. (*Cramer's Ancient Italy*, vol. ii. p. 114.)

In its environs is a paper-mill recently established at an expense of above 11,000*l.*, and employing 200 workpeople. Balbi says that it produces 60 reams a day, and that the pulp is converted into dried paper in less than a minute! We suspect this is an exaggeration, otherwise it exceeds any thing done in this country; about 3 minutes being required here, in the best mills, for the conversion of pulp into dried paper. (*Abrégé*, ed. 1837, p. 415.)

ARQUA, a town of Austrian Italy, prov. Padua, 12 m. S. W. Padua, in the bosom of the Euganean hills. The pop. does not exceed 1,000; and the place would not be worth notice, but for its having been the residence of Petrarch during the latter years of his life, and the place where that great poet and restorer of modern literature breathed his last, on the 19th of July, 1374. "His ashes are preserved in the churchyard of the town, in a sarcophagus of red marble, raised on 4 pilasters on an elevated base, and preserved from an association with meaner tombs." The kindred genius to whom we are indebted for these details, observes:—

> They keep his dust in Arqua, where he died;
> The mountain village where his latter days
> Went down the vale of years; and 't is their pride—
> An honest pride—and let it be their praise,
> To offer to the passing stranger's gaze
> His mansion and his sepulchre; both plain
> And venerably simple, such as raise
> A feeling more accordant with his strain,
> Than if a pyramid form'd his monumental fane.

"The house in which Petrarch resided is on the edge of a little knoll overlooking two descents, and commanding a view not only of the glowing gardens in the dales immediately beneath, but of the wide plains, above whose low woods of mulberry and willow, thickened into a dark mass by festoons of vines, tall single cypresses, and the spires of towers, are seen in the distance, which stretches to the mouths of the Po and the shores of the Adriatic. The chair in which the poet breathed his last is still shown among the precious relics of Arqua." (*Childe Harold*, canto iv. § 31. and note 9.)

ARQUA, an ancient village of Austrian Italy, on the Castagnaro canal, 5 m. S.S.W. Rovigo. Pop. 2,800. It has some trade in cotton and silk.

ARQUENNES, a village of Belgium, prov. Hainault, 18 m. N. W. Charleroi. Pop. 1,500. It has valuable lime and marble quarries.

ARQUES, a small decayed town of France, dép. Seine Inférieure, about 3 m. from Dieppe. During the middle ages this was the principal bulwark of Normandy towards the N.; its castle, now in ruins, having withstood several sieges. In the vicinity of this town, in 1589, Henry IV. defeated the troops of the League under the Duc de Mayenne.

ARRAN, an island of Scotland, co. Bute, in the arm of the sea between the Mull of Cantire and the Ayrshire coast; being separated from the former by Kilbrannan Sound, and from the latter by the Frith of Clyde. It is 4½ m. from the nearest point of the Isle of Bute, 3½ m. from the nearest point of Cantire, and 10½ m. from Ardrossan point in Ayrshire. It is about 16½ m. in length from N. to S., and from 6 to 9 in breadth *, comprising about 72,000 acres, of which about 11,000 may be arable. It exhibits a striking contrast in its N. and S. divisions: the former, or that to the N. of Brodick, presenting lofty bare and rugged granite mountains, connected by steep ridges and intersected by deep valleys and ravines. Goatfell, the highest mountain in the island, rises to the height of 2,865 feet above the sea. The S. and largest division of the island is composed of undulating hilly ground, the eminences of which are of a flattened or rounded configuration, and covered with a deep stratum of peat and other alluvial matter. Round the greater part of the coast an almost uninterrupted broad bank or girdle of gravel has been formed by the action of the sea, the soft greensward on which affords a pleasant and convenient access along the sea-side. The shores are generally steep and rocky, but high cliffs are not frequent. Three deep bays indent the island,—Ransa on the N. W., and Brodick and Lamlash on the E.: the latter, being defended from the W. gales by Holy Island, 1 m. in length, is one of the best asylums for shipping in the Frith of Clyde. Marble, jasper, agates, cairn-gorms, and a fine species of rock crystal, called the Arran diamond, are met with. The red deer and wild goat, formerly very abundant, are now nearly, if not entirely, extirpated. Cheviot sheep are generally introduced; and the native breeds of cattle and horses are being superseded by the larger and more esteemed breeds of Argyleshire and Ayrshire. Swine are raised in considerable numbers; and the steam boats that touch at the island have opened a new market for fowls and eggs. Grouse and black-cock are very plentiful. The system of agriculture formerly followed in Arran was as bad as can well be imagined; the lands were held jointly by several tenants on the common or *run-rig* plan (see Argyle), and were scourged by a constant course of corn crops, which succeeded each other in a series, unbroken except by the occasional introduction of potatoes, as long as the soil would produce any thing: but, since 1815, the Duke of Hamilton, who is proprietor of nearly the whole island, has laboured strenuously and successfully to introduce a better system; partly by letting farms to individuals for a fixed term of years, excluding subtenants and assignees; partly by introducing conditions into the leases fitted to insure a better system of management; and partly by expending large sums on the building of houses, inclosing, making drains, roads, &c. The people at first were very much opposed to the change; but their prejudices have gradually given way, and they are now for the most part sensible that it has been as advantageous to them as to the proprietor. Since the occupiers have enjoyed possessions each might call his own, they have steadily advanced in habits of industry; and though in this respect they are still behind the tenants and labourers of the mainland, it is believed that in no insular Highland district is greater industry shown than in Arran.

There are now a number of large farms inclosed, subdivided, and well cultivated, having valuable stocks of cattle and comfortable farm-steadings, where formerly there were numerous huts without chimneys or windows, and ridges running in all directions without a single inclosure or subdivision. The general rotation, except on the shores, is, 1. Oats; 2. Green crop — potatoes, turnips, beans or peas, with manure; 3. Bear or bigg, wheat, or oats, often manured; 4. Hay; 5. Pasture grass; 6. Pasture, sometimes grass a year or two longer. On the shores and holms, the rotation is, 1. Oats; 2. Green crop; 3. Bigg or wheat — these often with manure; 4. Hay; and then oats, &c. again. These rotations are not always adhered to by the tenants having the small possessions, but they all sow grass seeds with the corn crop which succeeds the green one; and this of itself necessarily leads to better management than they formerly practised. Wheat to a considerable extent has for a few years past been raised by the tenants of the larger possessions, and a great number of the small tenants also grow from half an acre to two acres each of that grain.

By these changes in the mode of possession, and by the improvement of the soil, it will easily be seen that more and better cattle may be reared and supported than formerly, and the produce of milk is also much greater. Since 1822, the Duke of Hamilton has supplied good Argyleshire bulls, at his own expense, for the cattle on his property, keeping always in the island from 20 to 30, placed at convenient distances. The consequence of this arrangement is, that the cattle have been surprisingly improved in every respect. On a few of the larger farms stocks of Ayrshire cows are kept, and succeed very well.

The rental of the island amounts to from 11,000*l.* to 12,000*l.* a year.

A number of boats employed in the herring fishery belong to Kilbride and Brodick, the principal villages. But the herring fishery in the Frith of Clyde and Loch Fyne is not nearly so prosperous at present as it once was. Luckily its decline is little, if any, loss to the island; for, having no considerable town population, the fishery is principally carried on by the cottiers and small farmers, engrossing their attention at the time their services are most necessary on shore, at the same time that it has a tendency to generate and keep alive idle and dissipated habits. Kelp used to be produced in considerable quantities, but its manufacture has now nearly ceased. Most of the woollen cloth formerly used in the island was made by the women, but a good deal is now imported.

The yearly export of produce from Arran cannot be given with perfect accuracy; but the following statement is believed to be a pretty near approximation to its quantity and value: —

	L.
900 black cattle, at 3*l.* 10*s.*	3,150
450 swine, at 1*l.* 10*s.*	600
Fowls and eggs	700
Sheep and wool	2,500
Bear or bigg, 2,500 qrs., at 26*s.*	3,250
Wheat, 700 bolls at 24*s.*	840
Beans and peas, 900 bolls, at 16*s.*	720
Oats, in grain and meal, 3,000 qrs., at 20*s.*	3,000
Potatoes, 3,000 bolls, at 10*s.*	1,500
Herrings caught by 100 wherries, at 40*l.* per wherry	4,000
Butter and cheese	1,000
Shell-fish, about	100
Freestone and limestone	500
Total	*L.* 21,860

A good deal of illicitly distilled whiskey was formerly exported; but that branch of industry, if it may be so called, has all but ceased.

Brodick, the principal village, is finely situated, at the bottom of Brodick Bay on the E. side of the island. Near it is Brodick Castle, a seat, and occasional residence, of the Dukes of Hamilton. Though Gaelic be generally spoken, English is understood by every body.

Arran is divided into two parishes. Its population amounted, in 1755, according to Dr. Webster, to 3,646; in 1801 it amounted to 5,179; and in 1831, to 6,427. It declined somewhat during the 10 years ending with 1831; but is again on the increase. (*Anderson's Highlands; M'Donald's Survey of the Hebrides;* and *Paterson's Account of the Duke of Hamilton's Improvements in Arran,* in the *Transactions of the Highland Society.*)

ARRAN (N. ISLES OF), on the W. coast of Ireland, co. Donegal, opposite Dangloe, the most N. extremity of the largest, called Arranmore, being in lat. 55° N., long. 8° 29′ W. A lighthouse is erected on this point, with a fixed light elevated 200 feet above high-water mark. This island contains about 2,000 acres, and nearly 1,000 inhab., the land being divided into the minutest portions, such as a "cow's foot," or the quarter of a cow's grass. They are mostly fishers. On a smaller island, a fishing village, called Rutland, was erected by the Fishing Board, in 1786, but it is now nearly deserted.

ARRAN (S. ISLES OF). These consist of three islands stretching N. W. and S. E., about 12 m. along the mouth of Galway Bay, in Ireland, being part of the co. Galway. They contain in all about 7,000 acres; the largest, Arranmore, comprising about 4,607; Innis More, 1,338; and Innis Leer, 909. Pop. 3,191. They are the property of Mr. Digby, and yield a rent of above 2,000*l.* a year, the tenants paying from 2*l.* to 6*l.* each. They are very fertile, but occasionally suffer from a scarcity of water. The fishing of cod and ling is carried on to a considerable extent, a pier having been constructed at the village of Killaney (pop. 1,000) on the largest island, at the expense of the Fishery Board, for the accommodation of the craft employed. The principal products are fresh and cured fish, oats, feathers, the produce of puffins, a superior kind of yearling calves in great demand by the Connaught graziers; to which were formerly added, great quantities of smuggled whiskey. A lighthouse, with a revolving light, has been erected on the highest point of the largest or most northerly of the islands, lat. 53° 7′ N., long. 9° 40′ W., having the lantern elevated 498 feet above the level of the sea. These islands give the title of Earl to the family of Gore. The inhab., who are very poor, continue in a very primitive state, and the Irish language is universally spoken. (*Dutton's Statistical Survey of Galway,* p. 2, &c.; *Reports on the Fisheries of Ireland,* app. p. 104, &c.)

ARRAS, a city of France, dép. Pas de Calais, of which it is the cap., on the Scarpe and the Crinchon, 60 m. S. E. Calais, lat. 50° 17′ 54″ N., long. 2° 46′ 25″ E.

* These are the dimensions as given in John Arrowsmith's map. It is generally represented as much larger, or from 20 m. to 35 m. in length, and from 12 m. to 20 m. in breadth.

Pop. 23,485. It is situated in the middle of an extensive and fertile plain: the Scarpe divides it into two parts: it is well built; houses stone; several of its squares and public buildings handsome, and worthy of notice. Among the latter are the old Gothic church of St Waast, the hôtel of the Préfet, theatre, belfry, barracks, &c. The cathedral, a fine old Gothic building, was destroyed during the revolutionary phrenzy. Arras was fortified, during the reign of Louis XIV., by Vauban. The citadel, which is very strong, is separated from the town by an esplanade, but it is included within the line of the works. It is the seat of a bishopric; and has a court of assizes, a tribunal of original jurisdiction, a college, a grand diocesan seminary, a secondary ecclesiastical school, a school of engineering (*école régimentaire de génie*), an academy of belles-lettres, a literary society, a botanical garden, a school for deaf and dumb, a school of design, a cabinet of natural history and antiquities, a museum of pictures, a public library containing 36,000 volumes, &c. There are establishments for the spinning of cotton, manufactures of cotton stuffs, hosiery, lace, coarse woollen stuffs, and potteries; and fabrics for the preparation of beet-root sugar, soap, starch, beer, rape-oil, &c. The Scarpe becomes navigable at this point.

Arras is a very ancient city, and has been the theatre of many sanguinary contests. The revocation of the edict of Nantes gave a severe blow to its manufactures. It also suffered much during the revolution, having been for a considerable time at the mercy of Lebon, a ferocious terrorist, a native of the place. Robespierre, of infamous memory, was also a native of Arras; as was Damiens, the assassin of Louis XV. (*Hugo, France Pittoresque*, art. *Pas de Calais*.)

ARRAYOLLOS, a town of Portugal, prov. Alentejo, 15 m. N.N.W. Evora, at the foot of a mountain on the summit of which is a citadel. Pop. 1,900. It has some fabrics of stained paper.

ARRIEGE, a dep. in the S. of France, on the Spanish frontier, having S. the Pyrenean mountains, E. the dépts. Pyrénées Orientales and Aude, and N. and W. the Haute Garonne. Area, 455,000 hectares. Pop. 260,536. This dep. consists principally of the N. slope of the Pyrenees; the mountains, which cover the greater part of its surface, increasing gradually in elevation as they approach its S. frontier; the altitude of the highest summits varying from about 7,000 to about 10,800 feet above the level of the sea. The principal valleys are those of the Arriège and the Salat, the only navigable rivers in the dep. According to the official tables, the cultivable lands occupy about 148,000, meadows 34,000, woods (on the mountains) 90,000, vineyards 11,630, and heaths, wastes, &c. 136,000 hectares. Gold has been found; and there are valuable iron mines near Vic Dessos, and other places. The N. portion is pretty fertile and well cultivated, producing wheat, rye, oats, maize, millet, &c. Horses an inferior breed, and oxen and mules frequently employed in their stead. The total produce of wine is estimated at 115,000 hectolitres a year; but the quality is inferior, and it is wholly retained for home use. The forests have not been taken proper care of; and in many parts, owing to the consumption of the iron furnaces, and the want of sufficient attention, there is a scarcity of wood. The working of metals is the principal branch of manufacturing industry; but there are also manufactures of cloth, serges, floss-silk, cotton stuffs, &c. It returns 3 m. to the Ch. of Dep. Const. in 1838, 806. Public revenue, in 1831, very near 3,000,000 fr. Principal towns, Foix, Massat, Pamiers, &c. (*Hugo, France Pittoresque*, art. *Arriège*.)

ARROYO-DEL-PUERCO, a town of Spain, Estremadura, 10 m. W. Caceres. Pop. 5,000. It has a parish church, adorned with some good pictures by Morales; with manufactures of cloth and earthenware.

ARS-EN-RE', a sea-port town of France, dép. Charente Inférieure, on the W. coast of the Isle de Ré. Pop. 3,609. Salt is produced in its vicinity, and shipped in considerable quantities from its port.

ARSIERO, a village of Austrian Italy, prov. Vicenza, 6 m. N. by W. Schio. Pop. 2,400. It has paper fabrics, and a quantity of fine white veined marble.

ART, a town of Switzerland, cant. Schwitz, at the S. extremity of the lake of Zug, 7 m. S. Zug, at the foot of mounts Rigi and Rossburg. It is well built. The church of St. George is remarkable for its architecture, and for an immense fountain, formed of a single block of granite. There is a convent of Capuchins, with a good library. The valley of Art is very picturesque and interesting, from its position among the highest mountains of breccia any where to be met with.

ARTA, a town of Spain, island of Majorca, on its N. W. angle. Cape Pera, where there is a small fort, depends on it. Pop. 8,000. Its territory, which is very fruitful, produces cotton, and has mill-stone quarries.

ARTA, a town of Turkey in Europe, Albania, on the Arta, about 7 m. above where it falls into the gulph of that name. It is a place of considerable size and trade. When visited by Dr. Holland, in 1812, it contained 6 mosques, a large cathedral, and a great number of Greek churches, and was supposed to have a population of about 6,000. It suffered severely during the Greek insurrection; and Lieut. Wolfe, by whom it was visited in 1830, says that, in many places, masses of ruins impeded the passage of the streets, and that an aspect of desolation and misery hung over it. We understand, however, that it has begun to improve. Its population was estimated by Mr. Wolfe at 7,000, at a maximum. It is governed by a bey, under the pacha of Yannina, and is the seat of a Greek bishop. It has manufactures of cottons, woollens, and leather. The floccatas, or shaggy capotes made here, are reckoned very superior. Embroidery is said to be brought to considerable perfection; and all articles of dress from Arta are highly prized. Each trade has its separate street or bazar; but, by a judicious regulation, butchers are obliged to kill, and sell their meat outside the town. The market is abundantly supplied with fruit and vegetables. There is a curious Venetian bridge over the river, consisting of one large and several very small arches.

There can be no doubt that Arta occupies the site of the ancient *Ambracia*. Traces of the ancient walls may be seen in many places, but especially under the more modern remains of the ruined castle: the stones consist of vast quadrangular blocks, so admirably fitted that it is with difficulty the point of a penknife can be inserted between them:—no mortar seems to have been used in their construction. There is here, also, the ruins of a convent, built in 845, now converted into a caravansera. (*Holland's Travels in Albania, &c.*, p. 82. 4to ed.; *Wolfe's Observations on the Gulph of Arta, Journal of the Geogr. Society*, vol. iii. p. 77.)

ARTA (GULPH OF), the *Sinus Ambracius* of the ancients, is a deep inlet or gulph of the Ionian Sea, between the Turkish province of Albania and the N. W. part of the new kingdom of Greece. The entrance to it, between Prevesa on the N. and the fort of La Punta on the S., is only 700 yards across. The fort now mentioned is built at the extremity of a low, narrow, tongue of land, celebrated in history as the *Promontory of Actium*. Outside the entrance is a bar, composed of gravel, coarse sand, and sea-weed, with 15 feet water when shallowest. On entering the Gulph, we first come to what is called the Bay of Prevesa, occupying the space between the mouth of the Gulph and Capes La Scoru on the N. and Madonna on the S., and it is only after passing these headlands that the Gulph properly opens. It is a noble sheet of water: its extreme length from W. to E., including the Bay of Prevesa, is about 25 m., and its greatest breadth about 10 m.; but in several places it is a good deal narrower: the depth varies from 13 and 14 to 36 fathoms. The S. shore consists of high land, with bold promontories, clothed with rich and extensive woods; the N. shore is for the most part low, and has encroached considerably on the water. Part of the vast chain of Pindus is seen from the Gulph. It has been long celebrated for the variety and excellence of its fish: red and grey mullet are the most abundant; and there are plenty of soles, eels, prawns, &c.: sardine fishing is extensively carried on.

The entrance to the Gulph of Arta was the scene of one of the most memorable and important conflicts recorded in history. The battle of Actium, which decided the fate of Augustus and Mark Antony, and of the Roman world, was fought off the promontory of that name, at the southern entrance to the Gulph, anno B.C. 29. The exact space occupied by the hostile fleets has been disputed. Most probably the battle raged all round the promontory, but principally on its W. side, or in what is now called the harbour of Prevesa, and the contiguous sea. (See the authorities cited in the previous article, *Ferguson's History of the Roman Republic*, cap. 35.; *Plutarch's Life of Mark Antony, &c.*)

ARTAGONA, a walled town of Spain, Navarre, 15 m. S. Pampeluna. Pop. 2,000.

ARTAKI, a small sea-port town of Turkey in Asia, on the S.W. coast of the peninsula of Cyzicus (which see), Sea of Marmara, 75 m. W. S.W. Constantinople. It has a convenient anchorage.

ARTERN, a town of Prussian Saxony, reg. Merseburg, on the Unstrut, 30 m. W. by S. Halle. Pop. 2,400. It has a castle, a brine-spring, and a distillery.

ARTHUR'S SEAT, a hill in the immediate vicinity of Edinburgh, on the S. E. side of the city, rising 822 feet above the level of the sea. Its ascent from the latter is gradual and easy; but on the side towards the city, it rises abruptly, and, in parts, almost perpendicularly, from the low grounds. On the S. side of the hill, above the footpath leading from Edinburgh to Duddingstone, is a superb range of porphyritic greenstone columns, from 50 to 60 feet high. The part of the hill nearest Holyrood House is called Salisbury Crags, and, till within these few years, its quarries furnished most part of the paving stones used in London. The view from the top of

Arthur's Seat is one of the most diversified and fine in the empire.

ARUDY, a town of France, dép. Basses Pyrenées, cap. cant., on the Osseau, 12 S. E. Oloron. Pop. 1,725. It is the centre of an active and considerable commerce with the neighbouring valleys.

ARUNDEL, a burgh, m. town, and pa. of England, co. of Sussex, on the N. bank of the Arun, about 3½ m. from its embouchure, 55 m. S.S.W. London. Pop. 2,803. The town is pretty well built, and has a thriving appearance. It derives its entire consequence from its being immediately contiguous to Arundel Castle, formerly a strong fortress, now the magnificent baronial residence of the Dukes of Norfolk, having been rebuilt at a great expence by the late Duke. The possessor of this castle enjoys, without further creation, the dignity of earl. Previously to the Reform Act, Arundel returned two members to the H. of C., the right of voting being vested in the inhabitants paying scot and lot; but since the Reform Act it only returns one member. Constituency, 1836-37, 336. The Arun, which is here crossed by a neat bridge, is navigable thus far; and is joined by canals with the Thames on the one hand, and Chichester harbour on the other.

ARVERT, a town of France, dép. Charente Inférieure, 24 m. W. Saintes. Pop. 2,360. It is the chief place of the peninsula of the same name formed by the Gironde, the Seudre, and the sea. It has a considerable trade in wine, and fresh and salt fish, particularly sardines.

ARZAMAS, a town of Russia in Europe, gov. Nijni Novgorod, cap. district, at the confluence of the Choka and Tiocha, 62 m. S. Nijni Novgorod. Pop. 8,000. It is old and ill-built; has 22 churches and 2 convents, with soap-works, tanneries, print-works, iron-foundries, &c. It has two great annual fairs.

ARZANNO, a town of France, dep. Finisterre, cap. cant., arrond. Quimperle. Pop. 1,957.

ARZANO, a village of Naples, in the immediate neighbourhood of the capital. Pop. 4,500. It has numerous villas; and flax and hemp are largely produced in its environs.

ARZEW (an. *Arsenaria*), a sea-port town of Algiers, prov. Tlemsen, at the mouth of the Sigg, 30 m. N. N. E. Oran, lat. 35° 45′ N., long. 4° 54′ E. The bay is small, but, though open to winds from the E. and N.E., it is the best on this part of the coast. The modern town, which is ill built and inconsiderable, occupies the site of the ancient Arsenaria: fragments of columns, inscriptions, cisterns, and other remains of the ancient city, being scattered all round. Corn and salt are both exported. The latter is obtained from the salt pits of Arzew, about 5 m. inland.

ARZIGNANO, a town of Austrian Italy, 10 m. W. Vicenza. Pop. 4,000. It is situated in an agreeable plain, surrounded with cultivated hills; and has filatures of silk, fabrics of cloth, dye-works, and brick-works. Its territory produces good wine, and has two coal-mines.

ASAPH (ST.), a city of N. Wales, co. Flint, 185 m. N.W. London, 5 m. N. Denbigh, finely situated in the Vale of Clwyd, on an eminence on the banks of the Elwy, near its confluence with the Clwyd, over both of which it has bridges. Pop. of parish 3,144, of city 2,000? It consists principally of a single street; and is remarkable only as being the seat of a bishopric, worth 6,300*l*. a year. The cathedral, a plain building, was erected towards the end of the 15th century, but has since undergone many repairs: it is not used for public worship; the parish church, in the lower part of the town, being appropriated to that purpose. Drs. Barrow (uncle to the famous Dr. Isaac Barrow), Beveridge, Tanner, Horsley, &c., have been bishops of this see; and in the cathedral is a handsome monument, erected in 1829, in memory of the celebrated Dean Shipley. It has a free grammar-school, endowed by Bishop Beveridge; and an almshouse, for 8 poor widows, endowed by Bishop Barrow. It unites with the other boroughs of this co. in returning a m. to the H. of C.

ASARO, a town of Sicily, prov. Catania, 9 m. S. Nicosia. Pop. 3,000.

ASCALON, an ancient sea-port town of Palestine, 15 m. N. Gaza, and 45 m. E.S.E. Jerusalem, lat. 31° 39′ N., long. 34° 33′ E. There is not a single inhabitant within the old walls, which are still standing; but a modern suburban village, called Scalona, from the ancient name, has a pop. of 300 or 400, and is frequented by the small vessels trading to this coast.

The ruins present a strange mixture of Syrian, Greek, and Gothic remains. There are also the remains of a Roman amphitheatre, and the columns of a temple, supposed to be that of the Syrian Venus, mentioned by Herodotus (I. § 105.), or a Greek edifice raised in imitation of it.

Ascalon is exceedingly ancient. Before the establishment of the Israelites in Palestine, it was one of the lordships of the Philistines. Subsequently, it became one of the ports belonging to the tribe of Judah; and, on the downfall of the Jewish kingdom, it fell to the king of Assyria. It afterwards formed part of the Persian empire, then of the kingdom of the Ptolemies; and, on the subversion of the latter in the last century B.C., it was subjected to the dominion of Rome. It was a bishop's see in the first ages of Christianity; was conquered by the Saracens at the commencement of their conquests, and became the scene of more than one battle during the time of the Crusades. It was one of the strongholds of the W. Christians; but Saladin, on gaining possession of the town, destroyed its works. It has since continued in a state of decay: the prophecy of Zachariah, "Ascalon shall not be inhabited," and that of Ezekiel, "It shall be a desolation," are now actually fulfilled.

Ascalon stands at the mouth of a stream (the Sorek), where the accumulation of soil is so great, that the ruins are every day removing farther from the sea. (*Volney*, ii. 283.; *Robinson*, i. 21.)

ASCENSION, an island in the Atlantic Ocean, between Africa and Brazil, about 8 m. in length by about 6 in breadth, its fort being in lat. 7° 26′ N., long. 14° 24′ W. It is of volcanic formation, and one of its hills, of tufous limestone, rises to the height of above 2,800 feet. It has a bleak and barren appearance; and was uninhabited till the imprisonment of Napoleon at St. Helena, when it was garrisoned by a small British force, through whose exertions it has been partly cultivated and wonderfully improved. Springs of fresh water have been discovered. Vast numbers of turtle are taken on its shores. The climate is remarkably healthy, and the anchorage, though open, is said to be good. The object in occupying it is that it may serve as a depôt for stores, and a place for watering ships cruising on the coast of Brazil, or in the S. Atlantic Ocean. Its name is derived from its having been discovered on Ascension-day, the 20th of May, 1501, by a Spanish navigator in the service of Portugal.

ASCH, a town and lordship, N.W. frontier of Bohemia, circle Elnbogen, 14 m. N.W. Eger. The town has 2,500, and the lordship, which belongs to the family of Zedlwitz, above 8,000 inhabitants.

ASCHAFFENBURG, a city of Bavaria, circ. Lower Mayne, on a hill, on the Mayne, which is here crossed by a stone bridge, 38 m. N. W. Wurtzburg. Pop. 7,000. The town is indifferently built, and the streets are narrow and crooked. It has, however, a fine palace, formerly occupied by the electors of Mayence, to which magnificent gardens are attached. It has also an old Gothic church, containing the tombs of its princes, a town-hall, &c.; with a lyceum, a gymnasium, an ecclesiastical seminary, a school of design, a public library, a collection of pictures, &c. It manufactures tinted papers, and has a good deal of trade in timber, wine, tobacco, &c.

ASCHERSLEBEN, a town of the Prussian states, prov. Saxony, reg. Magdeburg, at the confluence of the Eine and the Wipper, 14 m. E. S. E. Quedlinburg. Pop. 9,730. It has five Protestant churches, 1 Cath. do., a synagogue, a gymnasium, 2 hospitals, &c.; and very considerable manufactures of woollen and linen stuffs, and earthenware.

ASCOLI, a town of Italy, States of the Church, cap. deleg. same name, on the angle formed by the junction of the Castellano with the Tronto, 15 m. above where the latter falls into the Adriatic, lat. 42° 51′ 24″ N., long. 13° 25′ 15″ E. Pop. 12,000. It is a well-built, handsome town; has a cathedral and numerous churches, many of which are ornamented with valuable paintings by native artists. The church of St. Gregorio Magno consists principally of the remains of a Roman temple. Of modern buildings, the principal is the *Palazzo Anzianale*, containing a museum, a library, and a theatre: there is also the palace of the governor, and numerous palaces belonging to resident nobles. Ascoli is a frontier town, on the side of Naples, and is a place of some strength, being surrounded by old walls and towers, and furnished with a citadel. Its harbour, at the mouth of the Tronto, is a good deal frequented by coasters, and is defended by two small forts.

Ascoli, the *Asculum Picenum* of the Romans, is one of the most ancient of the Italian towns. It is described by Strabo as a place of great strength, surrounded by walls and inaccessible heights. It was the first city to declare against the Romans when the Social War broke out; and, in the course of that war, it sustained a long and memorable siege against Pompey; by whom, however, it was finally taken. (*Cramer's Anc. Italy*, i. p. 288.)

ASCOLI DI SATRIANO (an. *Asculum Apulum*), a town of Naples, prov. Capitanata, 13 m. E. by S. Rovino. Pop. 6,000. It is situated on a hill; has a fine cathedral, a diocesan seminary, an hospital, and some convents.

This town is very ancient. It was under its walls that Pyrrhus encountered the Roman legions for the second time, with no decisive advantage on either side. It was almost entirely destroyed by an earthquake in 1400.

ASDOUD, (the *Ashdod* of Scripture, and *Ἄζωτος* of the Greeks,) a sea-port town of Palestine, on the coast of the Mediterranean. Lat. 31° 45′ N., long. 34° 37′ E., 35 m. W. Jerusalem, and 11 N.E. Ascalon, on the summit of a grassy hill, surrounded by luxuriant pasture-grounds. Its present pop. is very limited, probably not more than 200 or 300. It has no ruins; and would be unworthy of notice, were it not for the figure it makes in sacred history. It was one of the five lordships of the Philistines (Phœnicians); and thither the Ark of the Covenant was brought when that people took it from the Jews. (1 Sam. v. 1.) It may be gathered, generally, that the Philistine power yielded to the arm of David (2 Sam. v. 29. *et seq.*, 1 Chron. xviii. 1.); and it is probable that Ashdod became then a Jewish town. If this, however, were the case, it did not remain so; for, 200 years later, the destruction of the walls of Ashdod is reckoned among the triumphs of Uzziah over the Philistines. (2 Chron. xxvi. 6.) It appears to have fallen into the hands of the Assyrians soon after this; and subsequently, according to Herodotus (II. § 157.), stood a siege of 29 years by the Egyptians, under Psammeticus. It is not afterwards heard of as a place of importance. The existing village is celebrated only for the number of scorpions that infest it. The water upon this part of the coast is shallow, and the land perceptibly gaining on the sea. (*Volney*, ii. 283.; *Robinson*, i. 21.)

ASHANTEE, an extensive native kingdom of W. Africa, lying along the Gold Coast of Guinea; extending from 4° 37′ to 10° N. lat., and from 4° 48′ W. to 1° 10′ E. long., being about 280 m. in length and as many in breadth. It may contain about 70,000 sq. m.

Physical Features of the Country. — Mountains and Plains. — This is a mountainous country, though it has few eminences very abrupt or precipitous. None of the mountains approach the snow line, being, like those of Africa in general, more remarkable for breadth and extent than for height. With regard to composition, all the species of granite, quartz, and slate are met with, but there is an almost total absence of calcareous stone. There are some small tracts of level land on the E. and W.; and the whole country N. of 7½° or 8° lat. is a large plain, terminated on the N. W. by a mountainous country, called, from the nature of its surface, KONG*, and on the N. E. by the sandy desert of Ghofan. (*Isert, Voy. Guin.* 249.; *Bowditch*, 163, &c.; *Dupuis*, par. ii. 30, &c.; *Capt. Adams's Remarks*, 176.)

Rivers and Lakes. — Though not lying in the basin of any one of the first-class African rivers, few countries are better watered. Along the coast are found the embouchures of several respectable streams, the various affluents of which intersect the country in every direction. The Assinee, a large river, is usually reckoned the line of demarcation between the Gold and Ivory Coast; and forms, for some miles from its mouth, the W. limit of Ashantee. The Volta, or Asweda, the largest of the Ashantee rivers, runs into the sea in 30′ E. long.: its length is estimated at about 400 m. There are several lakes which, in the summer season, frequently overflow their banks.

Climate.— Soil and Natural Products.—The heat and insalubrity of the climate of Guinea are proverbial, but both appear to be exaggerated. It seems to be now admitted that countries under and near the Equator are less hot than those under and near the Tropics, the annual motion of the earth keeping the latter regions for a much longer period vertically beneath the sun. From this cause, therefore, the heat of Ashantee might be expected to be less than that of countries 12° or 15° farther N. The accumulation of water serves also to lower the general temperature, and, upon the whole, though during 6 months, or from October to March, the heat is extremely violent, during the other half year it is so far from being inconvenient, that fires and warm clothing are frequently desirable. The nights (always nearly of the same length) are cold, even during the hot months, and, in a night-halt in a forest, a blaze is as necessary against the cold heavy dews as against the ferocious beasts. (*Bosman*, 90.; *Barbot*, 193, 194.; *Hutton*, 142.; *Adams*, 234.) The coast is, however, extremely unhealthy, especially to Europeans. Bosman (90. 92.) ascribes this partly to the scorching days followed by chilling nights, but more to a sulphureous mist (apparently a species of miasma) which rises from the valleys and the neighbourhood of rivers every morning, especially during the rainy season. Poor food, bad accommodation, and exposure to the night air, add to these evils, which are still farther increased by a want of regularity in living among both natives and Europeans; but, after all, the climate of this coast is not worse than that of most others similarly situated, and much superior to that of W. Africa farther N., or to that of Guiana, in the same lat., on the other side of the Atlantic. The interior, though covered with dense forests, and consequently exposed to the effects of vegetable decomposition under a vertical sun, enjoys a comparatively salubrious atmosphere; and Isert (p. 258.) recommends the erection of hospitals, in the inland parts, for the benefit of sufferers from the European forts on the coast. The air is usually calm, except in the cases of tornadoes, and the wind from the desert, called Harmattan. The former, however, are pretty frequent, and, in the dry season, particularly annoying, from being followed by violent cold rains. The Harmattan is mostly experienced between the end of December and the beginning of February. It has a N.E. or an E.N.E. direction; is perfectly dry, extremely cold, and loaded with an impalpable powder, sufficiently thick to obscure the sun at noon. It is exceedingly destructive; its dryness being such that it absorbs the moisture from every thing with which it comes in contact; opening the seams of ships, the joints of floorings, and destroying all animal and vegetable life opposed to its unmitigated violence. It is, in fact, a *cold* simoom (see ARABIA), dried in passing over the great desert, and subsequently cooled in crossing the high mountains S. of the Niger. It blows usually for two or three days, but occasionally for a fortnight at a time, and with much force. Like other tropical countries, Ashantee has its dry and rainy seasons, or rather two rainy and one dry season in each year. The first rains, ushered in by violent tornadoes, occur about the latter end of May or the beginning of June; being followed by fogs and hazy weather, extremely pernicious and particularly powerful in July and August. The second rains come on in October, and thence till April is the dry and hot season. The range of the thermometer in 1817, at 2 P. M., was between 86° (Jan. 2.) and 71½° (Oct. 12.): this was at Coomassie, among the mountains. In a sandy plain, near the mouth of the Volta, Isert (*Obser. Met.* 25.) once saw it rise to the extraordinary height of 130°; but even there the average, at 1 P. M., was not more than 78°. (*Bosman*, 90—99.; *Barbot*, 191—194.; *Isert*, 258.; and *Obser. Met. passim*; *Bowditch*, 315. 497.; *Adams*, 45. 164—168.; *Hutton*, 388.; *Dupuis*, i. 84.)

A small part of the coast, towards the E. and W. boundaries, is sandy, but the greater portion, and all the interior, is an argillaceous and alluminous soil, mixed with a rich black earth. This, with the abundance of water, renders the country extremely fertile. From 7½° N. lat. down to the water's edge, Ashantee presents a solid mass of forest, extending E. and W. from the Volta to the Assinee rivers. (*Dupuis*, par. ii. 29.) The trees have all the stupendous characteristics which mark African vegetation, but are strikingly different on the coast and in the interior. Near the sea flourishes the gigantic boabab (*Adansonia digitata*), the cactus (probably introduced from America), the mangrove (*Rhizophora mangle*), various species of palm, the cotton, and other large trees, mixed with a wild entanglement of thorny bush, itself growing to a size inconceivable to a European. (*Isert*, 98. 103. 140. &c.; *Barbot*, 205.) About 15 m. inland, on reaching the summit of the first mountains, the boabab disappears, but a tree equal in magnitude supplies its place (*Isert*. 255.); the mangrove also vanishes, and palms become very scarce, except the oliferous (*Elæis guineensis*), and the viniferous (*Phœnix*). Instead of these appear many peculiar species, among which is one tall tree of great elegance, bearing flowers like the tulip; a new kind of aloe and citron; and, in a word, a whole forest of trees unknown elsewhere. (*Isert*, 244—247.)

N. of 7½° or 8° lat., trees and shrubs appear only in widely distant patches, the lands are covered with jungle and Guinea grass, which grows to an enormous height and thickness; and which, being fired, is used by the natives to manure their plantations. (*Dupuis*, par. ii. 30. 34.) The sugar-cane grows wild; and the country produces, besides, tobacco, maize, dhourra, millet, yams, rice, potatoes, and all the alimentary plants, in the utmost profusion. Of fruits the list is interminable; including the pine-apple, orange, banana, cocoa, fig, papay, and in short all that are produced in any part of the world between the Tropics. Of gums and aromatic plants the list is very great; as is likewise that of dye and hard woods. The exuberant abundance of aloes, balsams (*Gloriosæ superbæ*), tuberoses, lilies, and amaranths, gives to the flora of Ashantee a splendour and magnificence nowhere excelled, and but rarely equalled. (*Bosman*, xiv. 267. 289.; *Barbot*, 190—205.; *Isert*, 118. 139. 183. 263.; *Adams*, 172.)

The animals are as various and numerous as the plants. Elephants, rhinoceroses, giraffes (*Dupuis*. i. 55.), buffaloes, deer, antelopes, sloths †, civet cats, apes, monkeys, baboons, porcupines, and goats, are among the

* Kong is the generic term for a mountain, in the language of the Mandingoes. (*Park's Travels, Appendix*, lxxxvi.)

† These creatures, called by the natives Potto and Youne, do not appear in Cuvier's list of Edentata. (v. 273-276.) They differ in many respects, as the size of the head, nature of the fur, &c from the Tardigrada of America, but their habits are identical, and, unless wilful and gratuitous deception be supposed in authors of deservedly high credit, their existence in this part of Africa cannot be questioned. (*See Bosman*, 237.; *Barbot*, 212.; *Dupuis*, i. 30.)

harmless kinds; lions (*Dupuis*, i. 24. 49. &c.), tigers, leopards, jackalls, wolves, wild boars, and wild cats, among those of a ferocious sort. The rivers swarm with hippopotami and alligators of several species; some of which are eaten by the natives. A gigantic rat, an odoriferous mouse, and a small animal called arompo (*man-eater*), which digs up and devours dead bodies, seem to be peculiar to Ashantee. The domestic animals are the same as those of Europe, but the horse is scarce, and of a bad breed, and the sheep peculiar in form. Reptiles are prodigiously numerous: serpents of every size, from the enormous boa to a frightfully venomous creature, scarcely a yard long, infest not only the woods and long grass, but the dwellings of the natives, and the forts of the Europeans. Scorpions (sometimes as big as a small lobster) and centipedes—the wound from which, though not dangerous, is extremely painful — abound in every place; and toads and frogs are not only as plentiful as in Europe, but the former grow to such a size, that Bosman, when he first saw one, took it for a land-tortoise (p. 257.). Lizards of all sizes; from the iguana downwards, including two species of camelions, are found, here. (*Bosman*, 224—247. 257—259.; *Barbot*, 206—216.; *Isert*, 53. 103. 185. &c.; *Bowditch*, 327—329.; *Adams*, 184—188.) Of birds, there are pheasants, partridges, wild ducks (of a beautiful plumage), doves, crown birds, parrots, paroquets, Guinea sparrows, beccaficoes, and a multitude of all kinds, great and small, many of them yet unclassed by naturalists. The water-fowl are — herons, bitterns, and sea mews: the birds of prey—eagles, kites, and a peculiar species, which, though not larger than a dove, is bolder and more rapacious than any other. A large and ugly bird, called the pookoe (of great service in destroying the field-rats), is peculiar here, as is also a creature, about twice the size of a sparrow, with a remarkable hollow and piercing voice, the sound of which is regarded by the natives as of evil omen. The general characteristic of the Ashantee birds is extreme beauty of plumage; but pleasing voices are rare among them, the nightingale and thrush being the only songsters known. Sparrows and swallows are very numerous; and the domestic fowl are the same as those of Europe. (*Bosman*, 229. 248—256.; *Barbot*, 217—220.; *Isert*, 21. 104. 185. 257., &c.) The woods abound in bees; and the destructive species of ant, called termes, is so numerous and rapacious, that a sheep attacked by them during the night has been found a perfect skeleton in the morning. (*Bosman*, 260.) It is said they will attack any animal, even the most powerful and venomous serpent, and destroy him. (*Dupuis*, i. 28.) Fire-flies, dragon-flies, a fly exactly resembling the cantharides in appearance and scent, together with all the insect tribes common to the Tropics, except the *musquito*, (*Bowditch*, 321.) are found upon the coast; and in the interior, Isert, among a vast variety of species, observed several which appeared to be peculiar. The locust is not wholly unknown, but its destructive visits are rare; owing probably to the great distance of the desert, and the intervention of high mountains between it and Ashantee. Black and hump-backed whales are numerous on the coast between September and December. Sharks are very numerous, are frequently captured, and form the most common food of the Gold Coast negroes. Other sorts of sea fish are very abundant; and the rivers are as well supplied as the sea, yielding, among others, great quantities of oysters and crabs, which feed upon the branches of the mangrove and other trees, but are not good for food if the water be fresh. (*Bosman*, 16. 260—266.; *Barbot*, 221—227.; *Isert*, 95. 257. &c.; *Adams*, 188—195.) Gold is more abundant in Ashantee than in any other part of Africa, probably, than in any other part of the world, not excepting even S. America. It is procured partly by washing the sands in the beds of rivers and torrents after violent rains, and partly by sinking mines or pits, in a very inartificial style, among the mountains, whence it is dug up for use. Of the amount obtained annually, Europeans are, and must be, ignorant; for the superstition of the natives deprives them of access to the mines, all of which are dedicated to the national gods, and some considered too sacred for even an Ashantee to cut into. The pits and washings in Tekee alone, are, however, reported to yield sometimes as much as 2,000 oz. per month; and Bosman, in 1726, gave the following as the average amount of the exports, which are now, probably, exceeded: —

	Marks.	Lbs.
Dutch West India Company	. 1,500 =	750
English African Company .	. 1,200 =	600
Dutch Private Traders .	. 1,500 =	750
English . . .	. 1,000 =	500
Prussians and Danes . .	. 1,000 =	500
Portuguese and French .	. 800 =	400
Total	. 7,000 =	3,500

Or above 1½ ton annually. (*Bosman*, 61—97.; *Adams*, 180.).

Population, Habits, Manners, and Customs. — Bowditch (p. 316.) estimates the pop. of Ashantee Proper at 1,000,000; of whom 204,000, he says, are warriors; 101,000 children under 10 years; 50,000 boys between 10 and 16; 7,000 old men; and 638,000 females; and the pop. of the whole empire may, perhaps, be somewhere about 3,000,000. The men are well made, more muscular on the coast than in the interior, free from the more revolting peculiarities of negro form and feature; and some of them have even aquiline countenances. The higher order of females (those not subject to hard labour) may be said to be handsome, with features rather of an Indian than an African mould. Both sexes are cleanly, washing from head to foot every day, and afterwards anointing themselves with the grease of the shea, or butter-tree; a good cosmetic, and a preservative of the skin in this hot climate. The clothes of the better classes are convenient, and not ungraceful, consisting of immense cloaks, exactly like the Roman toga, manufactured of the most costly silks. The war-dress substitutes for this a close vest, covered with metal ornaments and scraps of Moorish writing, as spells against danger, loose cotton drawers, and large boots of dull red leather. The superior chiefs have gold breast-plates; and all who can procure them, wear gold ornaments in profusion. Some of these are well wrought, others are merely lumps of rock-gold hung to the wrist: the war-cap consists of gold or gilded rams' horns, supporting an extravagant plume of eagle's feathers. In peace, the head-dress is usually a fillet. The lower orders wear nothing but a piece of cloth fastened round the waist. Bosman (112—116.) enumerates five degrees, or orders of society; — the king, the caboceers, the gentry, the traders, and the slaves. Besides the king, however, there is, in fact, but one distinction, that of slave and freeman; to the latter appertain, of course, all the better employments of war, state, &c.; to the former, all the meaner and more laborious occupations, of which the women get much more than their fair share. The caboceers (magistrates of towns and villages) are taken indiscriminately from the gentry; and these, again, are merely such as have enriched themselves by trade or inheritance, and who, not unfrequently, were born slaves. The occupations of trade are practised alike by the poorer freemen and the better class of slaves. The intercourse between the sexes is on the worst possible footing. Marriage is effected by paying a sum of money to the parents of the girl, and a family feast. The property of the man and woman (if she have any) does not become common. Polygamy is allowed; the king's wives amounting to the extravagant number of 3,333, a mystical number which is carefully kept up, to enable him to reward any distinguished caboceer by the *present of a woman*, but never exceeded. Few, however, except the richest individuals, have more than one wife, and very many have none; for the husband having unlimited power of life, limb, and liberty, over his wife, (and prostitution being noways discreditable,) females frequently refuse to marry: the father, in such cases, never attempting compulsion, but instantly disclaiming all future interest in his daughter. Infants are not unfrequently married to infants. The food of the higher classes is very various; soup of dried fish, fowls, beef, or mutton; wild hog, deer, and monkey's flesh! together with the whole host of vegetables which the soil produces. Well-stocked and well-regulated markets are held in the towns, for the supply of these necessaries, as well as for articles of clothing and European manufacture. The poorer classes, excepting household slaves, live almost exclusively on fish and dhourrah. The common drink is palm-wine; one species of which is said to create a ravenous appetite.

The Ashantees have two high festivals; one annually, at the yam harvest, in September; the other at intervals of about 21 days. The last is called the adai custom, and alternately the great and little adai. It forms the calendar; the year, which commences in October, being divided by it into equal parts, and terminated by the great yam festival. At these festivals, as on all public occasions, the most brutal excesses, and the most atrocious cruelties, are practised. The skulls of all the kings and chiefs whose fall has swelled the power of the reigning monarch, together with those of rebellious caboceers, to the amount of more than 200, are paraded before the assembled multitude. Rum and palm-wine are swallowed like water, till the guests are brought to a state of intoxication and madness, when hundreds of human victims are sacrificed. They seem, in fact, to delight in cruelty and blood. The death of a free person is, in almost all cases, attended by the slaughter of a human being, to "*wet the grave*;" and that of a chief invariably causes a frightful sacrifice of life. If a man of ordinary rank marry a royal female, he must be killed on his wife's grave, should he happen to survive her; and the ocras (personal attendants on the king) are all murdered on their master's grave, together with many others, male and female, often amounting to some thousands. Cannibalism, as far as respects the blood

and heart of an enemy, is practised, though not avowed: and the teeth and smaller bones of vanquished foes are ostentatiously worn as ornaments; the sculls and larger joints being preserved as public trophies. Such are the disgusting enormities perpetrated by this nation of savages; who, if they contrast advantageously with other negro tribes in energy and decision of character, yield to none in that cruelty and bloodthirstiness which seem to be leading features in the African character.

Singular as it may seem, the music of the Ashantees is said to be pleasing and melodious; and Bowditch has reduced to notes several airs that struck him as possessing merit. Their instruments are horns made of elephants' tusks, reed flutes, a sort of bagpipe without a drone, gongs, and cymbals. They have a game of chance, called Worra, played with a number of shells and a board full of holes.* They play also the Polish draughts, and a third game, which, from its description, appears to resemble the childish amusement called "*fox and geese*," in Europe. To complete their character, it may be further observed, that they are great thieves and extraordinary observers of etiquette. (*Bosman*, 100—120. 160—170. &c.; *Isert*, 162. 210. 212. &c.; *Bowditch*, 274—308.; *Hutton*, 84. 89. 92., &c.; *Dupuis*, i. 140., &c.)

Diseases and Remedies. — The Ashantees are subject to several malignant disorders, of which the most peculiar, and perhaps the most dreadful, is the "*Guinea-worm*," a reptile, which, formed beneath the skin, causes the most frightful sufferings. It is sometimes so large as to pass quite round the body, but more frequently varies from 5 or 6 to 8 or 9 inches in length. Extraction is the only cure; but if in effecting this the worm be broken, to avoid which much care and patience is necessary, the part left behind corrupts in the body, tainting the whole mass of the wretched patient's blood. This loathsome disorder is supposed to be owing to bad water, which is the more probable as it is confined to the coast: in the interior, where the water is pure and good, it is unknown. Charms and amulets are much resorted to for cures: they have, however, some knowledge of medicine. Bowditch gives a list of 37 simples, as forming their Materia Medica. Surgery does not form one of their arts; and those who are wounded, and recover, are indebted for their restored health to the *vis medicatrix naturæ*. (*Bosman*, 94—96.; *Isert*, 217. 336.; *Bowditch*, 370—380.; *Hutton*, 363.)

Industry, Agriculture, Arts, Manufactures, Commerce. — Dupuis (i. 67.) has justly remarked, that the labour of clearing away obstructions in a rankly luxurious soil is about equal to that of overcoming sterility in poor and barren lands. The former is the chief employment of the Ashantee agriculturist; and in this his chief instrument is fire; by means of which he both clears the ground, and spreads a mass of rich manure upon the soil. The only implement in use is a rude hoe; but this is sufficient, in productive grounds, flooded twice a year, to produce two crops of most kinds of corn, and an abundant supply of yams and rice. The plantations are laid out with considerable order and neatness, and the cultivated grounds are pretty extensive, though inadequate to the wants of the consumers. Despite the fertility of the soil, the approach of harvest is almost always preceded by scarcity, if not by famine. Though they do not smelt metals, the Ashantees, like several of the African nations, have blacksmiths and goldsmiths of a superior grade to what might be expected. The former manufacture all their arms (except muskets), razors, &c. The goldsmiths forge sundry ornaments, as rings, chains, brooches, &c., and cast figures of tame and wild beasts. They are also the great idol-makers, and are able to produce fine gold thread. The fineness, variety, and brilliance of the cloths of the native weavers would not disgrace an English loom; the patterns are painted by means of feathers, with sufficient regularity to have the appearance of a coarse print. Dyers, potters, tanners, and carpenters, complete the list of Ashantee artificers; of whose handiwork a number of manufactured and other articles, in case 6., room 1., of the British Museum, are specimens. The houses, generally of one story, are thatched, and the external walls decorated with a rude hieroglyphic sculpture: they are usually painted, but not floored; and pretty closely resemble an English barn. It should be mentioned, to their credit, that all good houses have their cloacæ, which agrees well with the Ashantee character for cleanliness; and evinces, in this respect, a superiority to most other negro nations. Commerce with Europe having now been carried on for some centuries, the natives have become shrewd and expert dealers: they practise all sorts of frauds; and their dexterity in adulterating gold equals that of a first-rate chemist. Barbot (230.) affirms, that the Portuguese taught them this art, as a means of driving the other European nations from the coast; and if this be true, they have shown themselves, in this instance, much more expert scholars than in any other. Gold is now, perhaps, the chief article of export: and some little is also done in the way of exporting ivory, and dye and hard woods. Slaves are exported on every possible opportunity; and, notwithstanding the vigilance of the British cruisers, there is reason to think that considerable numbers find their way across the Atlantic. The imports are principally muskets and other arms, gunpowder, spirituous liquors, tobacco, iron, tin, copper, lead, with cotton and Indian goods, which are taken, chiefly for their colours, to be unravelled and remanufactured in the native looms. The last-mentioned articles are, however, received chiefly through the interior from Dagomba, Fezzan, &c., with which the Ashantees maintain a very extensive trade, supplying them in return with liquors, iron, and other European commodities; but never with arms. The currency is gold, either in dust or small lumps; but the cowrie-shells, in use farther N., are not unknown. The denominations and values may be given as follows: — 200 cowries (5 strings) = 1 tokoo (about 8*d.*); 8 tokoos = 1 ackie; 16 ackies = 1 newemeen (ounce); 2¼ ounces = 1 benda; 1⅛ benda = 1 perguin. (*Bosman*, 6. 109. &c.; *Barbot*, 196. 227—235. 262. &c.; *Isert*, 107—116. &c.; *Bowditch*, 304—314. 330—343. &c.; *Dupuis*, par. i. 65—67. par. ii. 69—75. &c.)

Government, Constitution, Laws, Revenue. — Before the power of the Ashantee king had swallowed up that of the other states, each possessed its own peculiar form of government and administration; some, as Fantee, Mina, &c. were republics; others, and by far the greater number, were despotisms; but now all are alike brought under the Ashantee constitution; the legislative power of which lies professedly in the king, an aristocracy, consisting of only four persons, and the assembly of caboceers or captains. The aristocracy was formerly much more numerous; but Sai Cudjo, who reigned between 1753 and 1785, began to reduce it, by uniting the stool (seat of authority) of a deceased noble to that of one still living (*Bowditch*, 236.); and this plan has been successfully pursued, till the present result is the consequence. On all questions of foreign policy, the aristocracy have a voice equal to the king's, extending even to a veto on his decisions. In domestic affairs, they have considerable influence; but it is exercised in both cases privately, the public announcements always appearing to emanate from the sole will of the monarch. The assembly of caboceers has no deliberative voice: they are mere recipients of the laws promulgated by the king and aristocracy, to which, by their office, they are bound to give effect in their several governments. The influence of the aristocracy is curbed by their poverty: they are privileged from capital punishment, but may be despoiled for any offence; a regulation that has made and keeps them beggars; and thus, in effect, though not in form, the monarch is absolutely despotic. He is also heir to the gold of every one. The king's family are not exempted from capital punishment, but their blood must not be shed: if death be awarded them, they are drowned in the Dah. Death is the punishment for cowardice; for picking up gold dropped in the market-place; for killing *an equal*; for treason; and, in some cases, for theft and adultery. The common punishment for the latter is, however, fine, or, if committed in the open air, slavery; for the former, restitution by the friends of the thief. Mutilation is inflicted for many offences; but all accusations are mostly made at the peril of the accuser, who, if he fail to establish his charge, must himself undergo the penalty of the offence. Property is hereditary, but in a way that will appear rather extraordinary to Europeans; the children of the sister succeeding, on account of the uncertainty as to the wife's fidelity! This also is the law of succession to the Stool, or Throne. The state of the country, as respects security, may be inferred from the fact that interest of money is at 33⅓ per cent. for 40 days, and the creditor has the power of seizing his debtor and family as slaves. Two or three species of ordeal are practised in doubtful cases; one of which consists in making the accused chew about ¼ of an ounce of a poisonous bark, and then drink 3 or 4 calabashes of water. If he vomit, he is pronounced innocent; but if his stomach be potent enough to retain the poison, it is held to be a conclusive proof of guilt. The revenue, as far as it can be ascertained, consists of — 1st. The gold of deceased persons, and the goods of disgraced nobles. 2d. A tax on slaves purchased for the coast. 3d. The gold mines and washings in Sokoo, Dinkra, Akim, and Assin. 5th. The washings of the market-place. (See *Nat. Prod.*) 6th. Tributes from the recently conquered states, varying from 50 bendas to 200 penguins of gold annually. In some cases this tribute is taken in kind, the largest amount for any one town being 500 slaves. 200 cows, 400 sheep, 400 cotton cloths, and 200 silk cloths. (*Bosman*, 136—150. 171—177. *Bowditch*, 252—260. 319—321. *Hutton*, 87. 314—320.)

Religion. — The allegory of "The Book and the Calabash" is prevalent through all the Gold Coast and the states of Ashantee. The Great Spirit, after creating three

* This game is played also in Syria, and is well described by Dr. Hogg (*Visit to Alexandria, Damascus, and Jerusalem*, ii. 67.) under the name of "mangala."

white and as many black men and women, placed before them a large calabash and a sealed paper, giving to the black race the choice of the two. They took the calabash, which contained gold, iron, and the choicest productions of the earth, but left them in ignorance of their use and application. The paper, on the contrary, instructed the white men in every thing; made them the favourites of the Great Spirit; and gave them that superiority which the negroes always readily acknowledge.*

From this fable it is clear that they have some notion of one supreme deity; but they have, notwithstanding, lapsed into the absurdities of Feticism (see AFRICA), or of the lowest and grossest species of idolatry. They have an evil principle, of whom they stand in great dread, but it is denied that they pay him adoration. On the contrary, it is said that one of the most solemn ceremonies of many tribes is an annual assembly of men, women, and children, to drive the evil spirit from the towns and villages. They have a fixed belief in a future state, — kings, priests, and caboceers being believed, after death, to reside with the Great Spirit, in an eternal renewal of their earthly state: and it is said that the sacrifice of so many human beings on the graves of their kings is intended to supply them with attendants in the future world. The victims also, it is affirmed, are not altogether averse from this sacrifice; since by it they believe they will partake the superior heaven of their chiefs; their own being, at best, merely a release from labour in the house of some inferior Fetish. An uncommon number of charms, omens, lucky and unlucky days, and an implicit submission to the Fetish, complete the superstition (for it would be absurd to call it religion) of the Ashantees. In some tribes, Tuesday is observed as the general Fetish day or Sabbath: but different families generally consecrate different days; all, however, observing one. There are many Mohammedans among the Ashantees; some, by their lighter complexion, attesting their Arabic origin; but the majority are not distinguishable from the other negroes. They have great influence in the court of Coomassie, are subject to their own officers in all spiritual affairs, and, where very numerous, as is the case in several towns, are governed by them also in temporal matters. (*Bosman*, 121—136. *Barbot*, 304—317. *Isert*, 187—196. *Bowditch*, 261—273. *Dupuis*, par. ii. 10. 15.; *Adams*, 196—200.)

Language. — The European who has observed the affinities among the languages spoken in his own division of the world, the W. of Asia, and even the N. of Africa, is ill prepared for the Babel of tongues that prevails S. of the Sahara. In 60 m. of the Gold Coast, no fewer than seven or eight languages are found, each unintelligible to the tribes speaking the other, and bearing no relation whatever to any other (*Bosman*, iii.). Bowditch (*Appendix*, 503.) gives the numerals of 31 tribes, whence it appears that, though some few may be considered as variations from the same root, the majority do not assimilate in the slightest degree. The Ashantées, Fantees, Wassaws, Akimese, Assinese, and Aquapims, speak dialects of the same language; but for the rest of the tribes that make up this barbarian kingdom, an imaginary line often separates two who possess no means of social intercourse. This formidable obstacle to all communication is, no doubt, a chief cause of the continued degradation of the negro race, more especially as none of their languages possess symbolical characters. In Ashantee, as in other parts of Africa, the only persons who can read or write are the Moslems, and the only written language the Arabic. (*Isert*, 180—182.; *Bowditch*, 344—360.; *Hutton*, 368—384.; *Adams*, 195.)

History. — The Ashantees have two traditions as to their first establishment in their present homes; first, that they came in 12 tribes from a country nearer the sea (*quc.* the Atlantic ?); the other, that they were driven from the interior by the Mohammedan conquests in the first days of Islamism. (*Bowditch*, 228.; *Dupuis*, 224.) It may be that these accounts, though apparently contradictory, are but different versions of the same tale. But without stopping to inquire into this, we find them, in 1640, seated in the centre of their present possessions, and occasionally exercising an influence over the surrounding states of Akim, Assin, Quahou, and Akeya. Then, and for near a century later, the paramount state of the gold countries was Dinkra; but in the beginning of the 18th century, the king of that country having deflowered a wife of the Ashantee monarch, the latter, though considered a very inferior potentate, invaded the Dinkran territories, defeated his enemies in two decisive battles, killing, it is said, 100,000 men, and carrying off immense plunder. (*Bosman*, 67.) Dinkra, upon this, became attached to the Ashantee dominions, and from this epoch the extension of the latter proceeded rapidly. One by one the different states between the Assinee and Volta rivers were subdued; and, in 1807, the invasion of Fantee brought the Ashantees into collision with the British. Cape Coast Castle, the principal fort of the English on the Gold Goast, was in the Fantee country, and held, like the other European forts upon that coast, not as a territorial right, but at a rent from the native government. After the conquest of Fantee, the rent was claimed by and paid to the king of the Ashantees; but some difficulties made about recognising his sovereignty, led to much discussion, and to two embassies (those of Bowditch and Dupuis) to the court of Coomassie. In justice to the king it must be admitted, that, whatever may be thought of his conduct to the natives, an uncommon degree of forbearance marked his behaviour to the British authorities. The treaty concluded by Dupuis in 1820 was not ratified by the council at Cape Coast Castle, because, by the 5th article, it recognised the questioned sovereignty of the Fantee country; but the heart-burning necessarily consequent on this step did not break out for some time after. The death of Sai Quamina (king of Ashantee), who, according to Dupuis and Bowditch, was the steady friend of the whites, seems to have been the signal for hostilities. His successor declared war against the English; and on the 21st of January, 1824, Sir C. M'Carthy, governor of Cape Coast, at the head of 1000 men, was totally defeated by the Ashantees. It took almost three years before the English power on the Gold Coast recovered from this blow; but in 1826, the Ashantees having suffered a ruinous defeat, consented to pay 6000 oz. of gold as the price of peace, and to send the king's son for education, or rather as hostage, to Cape Coast Castle. The Ashantee power on the coast, since this event, may be considered as nearly destroyed. (*Bowditch*, 228—250.; *Dupuis*, 224—264. 194—223.; *Public Papers for* 1826.)

* Some believe that the reward of virtue in this world is, to be transformed into white men in the next. (*Bosman*, 131.)

ASHBOURNE, a m. town of England, co. Derby, on the E. side of the Dart, 122 m. N. W. London, 13½ N. W. Derby. The parish, in which the town is situated, contains 12,000 acres, and had, in 1831, 4,884 inhab., of which about a half belong to the town. It has an old church with a fine spire, a free grammar-school, two elementary schools, one for 30 boys, and the other for 30 girls, alms-houses for poor men and women, and some other charitable institutions. Dovedale, famous for its romantic beauties, is in the immediate vicinity of this town.

ASHBURTON, a borough m. town and par. of England, co. Devon, hund. Teignbridge, the borough being situated within 1½ m. of the Dart, on the high road from London to Plymouth, 170 m. W. S. W. London, and 19 m. S. W. Exeter. The parish contains 8,320 acres, and had, in 1831, a pop. of 4,165, of whom 3,467 belonged to the town. It has a handsome Gothic church, with a tower 90 feet in height, a grammar-school, and free schools, which supply elementary instruction to about 100 children. It is the seat of one of the stannary courts. Serge is, or was, manufactured in the town; and there are tin and copper mines in the vicinity. Previously to the Reform Act, Ashburton returned 2 m. to the H. of C., the franchise being vested in freeholders having lands and tenements holding of the borough only. The Reform Act deprived it of one m., and made the boundaries of the parish and parl. bor. identical. Constit. in 1836-37, 193. It was the birth-place of Dunning, the famous lawyer, who was created Baron Ashburton; and of William Gifford, the translator of Juvenal, and the original editor of the Quarterly Review, who, on his death, left a legacy to the town. It now gives the title of baron to the head of the family of Baring. (*Boundary Report, &c.*)

ASHBY-DE-LA-ZOUCH, a m. town and par. of England, co. Leicester, hund. W. Goscote, 116 m. N. W. by N. London. The par. contains 8,300 acres, and 4,727 inhab., of whom about 4,000 may belong to the town. It consists of one main street, and some smaller ones; has an old church; several free schools, for girls as well as boys; and manufactures, on a small scale, woollen and cotton stockings, and hats, and has some trade in malting. In the vicinity are the extensive remains of Ashby Castle, built by Lord Hastings, in the reign of Edward IV., and dismantled in that of Charles II.

ASHFORD, a m. town and par. of England, co. Kent, lathe of Scray, the town being situated on an eminence near the junction of the upper branches of the Stour, 47 m. E. S. E. London, 14 m. S. W. Canterbury. The par. contains 2,950 acres, and 2,809 inhab. The church, a Gothic fabric of considerable note, has a lofty well-proportioned tower, and several ancient monuments. There is a free grammar-school of some eminence, founded in the reign of Charles I. by an ancestor of the present Sir Edward Knatchbull, and some other charities.

ASHRUFF, a town of Persia, prov. Mazunderan, about 8 m. from the W. extremity of the bay, and 52 m. W. from the city of Asterabad. Near it are the ruins of an extensive and magnificent palace, built by the greatest of the Persian monarchs, Shah Abbas. The town, which was in a great degree dependent on the palace, has been seriously affected by the decay and ruin of the latter; and did not, in 1821, contain above 500 houses, thinly scat-

tered through an extensive jungle. (*Fraser's Caspian Sea*, p. 19.)

ASHTON-UNDER-LYNE. A pa. of England, co. of Lancash., hund. Salford, 6 m. long N. to S., 4 m. broad; area, 9,300 acres. Pop. in 1801, 15,632; 1821, 25,967; 1831, 33,597; and 1841, 46,304, of whom nearly half resided in the town of Ashton; and the residue principally in the hamlets of Lees, Mossley, Audenshaw, and part of Staley-bridge. Surface level, soil marshy and poor. But the inferior quality of the soil is compensated by the abundance of mineral products, coal of good quality and in the greatest abundance being found in almost every part of the parish. From this circumstance and its proximity to Manchester, of which it may be regarded as a dependency, the parish has become a principal seat of the cotton manufacture, most part of the population being engaged in and dependant on its various processes. Stout printing calicoes and ginghams are the articles principally produced. The manor and ecclesiastical patronage belong to the Earl of Stamford, who derives a large income from the parish.

Ashton-under-Lyne. A m. town of England, co. of Lancashire, in the above pa., on the N. bank of the Tame, 187 m. N.W. by N. London, and 6½ m. E. Manchester. Pop. in 1821, 9,220; 1831, 14,670; and in 1841, 22,514. It is well laid out, well built, and is eminently thriving. Its rapid growth is owing to the still more rapid extension of the cotton manufacture. In 1841 no fewer than 6,080 individuals were engaged in the different branches of that business, and it has been materially extended in the interval. It has, also, a hat manufactory and a silk mill. Among the public buildings are an old and a new church, with numerous chapels and other places of worship, a court-house, a theatre, concert-room, &c., an excellent market, the buildings connected with which cost above 10,000*l*., has been erected within these few years. The free school is but slenderly endowed; but there are several other schools, with a mechanics' institute, and several large Sunday schools.

The Ashton, Staley-bridge, &c., Banking Company, established in 1836, has its head office in the town; and here, also, the Manchester and Liverpool District Banking Company, and other banks, have branches. Market-day, Saturday. There is a cattle market on the first Saturday in each month: Fairs, March 23., April 29., July 14. 15. and 25, Nov. 10. and Nov. 21.

Ashton is admirably situated for trade and manufacture, in the centre of a populous neighbourhood, having an unlimited command of coal, and communicating by means of canals and railways with all parts of the empire. It was anciently a borough, but for some cause or other has long been disfranchised. The Reform Act conferred on it the privilege of sending one m. to the H. of C. It had, in 1848, a constituency of 763.

ASIA, the largest, most early civilised, and in many respects the most interesting of the great divisions of the globe, extends from 1° 20′ to 78° N. lat., and, when the islands belonging to it are included, from 1 S. lat. From west to east it extends from 26° to 190° E. long. The most northerly point of the continent is Cape Taimura, 78° N. lat.; the most easterly, Cape Tshukotskoi Noss, 190° E. long; the most southerly, Cape Buros, 1° 20′ S. lat.; and the most westerly, Cape Baba, in Asia Minor, 26° E. long. Cape Taimura and Cape Buros are more than 5,300 m. distant from each other, and this consequently is the extent of Asia from N. to S. Its greatest breadth occurs under the parallel of 40° N. lat., between Cape Baba and the E. coast of the Corea, where it extends about 5,600 miles from W. to E. Its surface is supposed to cover about 17,500,000 sq. m., being above four times the area of Europe.

I. Sketch of Asia. — On the N. Asia is washed by the Arctic Sea, which separates it from the arctic countries of America; on the E. by the Pacific Ocean, which divides it from the continent of America; on the S. by the Indian Ocean, which lies between it and Australia; on the W. it is conterminous with Africa and Europe. The boundary-line between it and Africa is formed by the Gulph of Aden, the Straits of Babelmandeb (where both continents are only about 16 miles apart), the Red Sea, and the isthmus of Suez, where both continents unite for about 70 miles. Asia is separated from Europe by the Mediterranean Sea, the Ægean Sea or Archipelago, the Straits of the Dardanelles, the Sea of Marmara, the channel of Constantinople, and the Black Sea. From the eastern shores of the latter sea, the boundary-line runs along the crest of Mount Caucasus to the Caspian Sea, which constitutes the boundary as far as the mouth of the river Oural. Thence it follows the course of that river up to its source in the Ouralian R which latter forms the remainder of the boundary-l the Gulph of Kara, E. of the island of Novaia Zem

To the S. and S. E. of Asia is the greatest of all pelagos, containing many thousands of large and islands. These belong partly to Asia, and pa Australia, but they are not separated by any boundary. When the Portuguese and Spaniards to be acquainted with the islands of India, th quered or settled those only which were suppose to repay the expense and trouble. These wer and are still, considered, as belonging to As others, which did not offer such advantages, a not settled or visited at that time, are now incl Australia. In this way, Japan, Formosa, the pines, the Moluccas, and that long chain of which, in the east, begins with Timorlant, and west terminates with Java, are considered as be to Asia, whilst the numerous islands dispersed b the Moluccas and New Guinea, and lying at a sh tance from the former, are included in Australia.

In looking at the map of Asia, we are str observing, that the Pacific Ocean, which divides America, nowhere reaches immediately to the c the continent, but is separated from them by chains of islands, which, with the coast, form a of smaller sea-basins. The most northerly of th basins is the *Sea of Kamtchatka*, lying between th extremity of Asia and the N.W. of America, a rated from the Pacific by the Aleutian Island Kurilian Islands, extending from Cape Lopatka the most northerly of the islands forming the e Japan, separate another sea-basin from the P is called the *Sea of Tarakai*, from the larg forming its W. side, and commonly called S Farther S. lies the *Sea of Japan*, shut up by th constituting that empire and the opposite c Manchooria and Corea. Then follows the se *Tongo Hai* (Eastern Sea) by the Chinese, with tensive northern gulph the Wang-Hai (Yello This basin is more open towards the Pacific, its being shut up only by two or three small g islands, among which the Loo Choo have obtai celebrity in later times. The island of Formo the southern boundary of this basin. From th to the equator extends the *Han-Hai* (Souther the Chinese, called by the Europeans the *Chi* because it is traversed by them in their voyage t The eastern boundaries of this basin are the Ph and the islands of Palawan and Borneo, and it f great gulphs in the continent, those of Tonkin a The formation of these five sea-basins is partly the three great peninsulas, which project from t nent, the peninsula of the Tshuktshes, occupyi sq. m., and those of Kamptchatka and Corea, nearly of the same extent.

The S. coast of Asia is not surrounded by c but is quite open to the Indian Ocean, except borders on the Chinese Sea; but in these parts a gulphs which deeply penetrate into the conti thus form extensive peninsulas. The principal Bay of Bengal, the Sea of Arabia, the Persian G Gulph of Ajan, and the Red Sea, separating A Africa. The peninsulas which occur on this those of India without the Ganges, which has a nearly 800,000 sq. m., India within the Gan Arabia. Each of the last mentioned comprising of a million sq. m.; the three together being nea to Europe in extent.

Where Asia approaches Europe, we meet t peninsula of Asia Minor, covering a surface of m 200,000 sq. m., which being surrounded by the ranean and Black Sea, facilitates the intercourse continents by sea as well as by land.

The N. coast of Asia, indented by numerous d and having several projecting tongues of land, wo great advantages to maritime intercourse wi countries, did the severity of the climate not ren inaccessible all the year round. They are nea where enclosed by ice.

1. *Great Northern Plain.* — *Conformation of face.* — *Rivers.* — Along the coasts of the Arc always covered with ice, except in the summer when it is open along the shores to a distance miles, extends the greatest plain of the glob plain not only covers nearly the whole of N Asia, but advances westward, extending over th Europe, and reaching to the very shores of th Sea, opposite Great Britain. We may even aff the low and level countries which in Englan along the North Sea between the Thames and constitute the farthest W. corner of this vast pla a traveller departing from London, and advanc ward between the parallels of 52° and 53° N. la as 85° E. long., and hence between 55° and 56° will arrive at Takutzk, on the river Lena (1 long.) without having passed any mountain-range. The

... about in this desert. Na-
... found, but water is met with on
... in those districts which have a

boundary ... to 40° N. lat. and 72° E. long.
N. lat. and 82° E. long., ... From this point
and hence nearly due S. to 34°.

Caspian Sea, which constitutes the boundary as far as the mouth of the river Oural. Thence it follows the course

will arrive at Takutsk, long.) without having pa

highest ground in his way would occur about 66° E. long., between the river Oural and the sources of the Tobol, where a chain of hills rises, but only to an absolute height of less than 2,000 ft. In this long journey he would have traversed 130 degrees of long., or more than a third part of the curvature of the earth, and this is the length of the great plain in this parallel. But along the Arctic Sea it stretches farther east, and terminates at 165° E. long. on the banks of the river Kolyma.

This plain would extend from the Atlantic to the Pacific Sea, but for two mountain-ranges, which rise at its western and eastern extremities, like high walls, to protect it against the encroachments of the sea. At its western extremity are the Scandinavian mountains, lying N.N.E. and S.S.W. At its eastern extremity are the Aldan mountains, which extend from 55° N. lat., close along the shores of the Sea of Tarakai or Gulph of Okhotzk in a W.S.W. and E.N.E. direction, till they terminate on Behring's Strait with East Cape and Cape Tshukotskoi Noss. The S. extremity of this range is, at the sources of the river Aldan (about 55° N. lat.), closely connected with the chain of the Great Khing-Khan. It occupies a considerable width, being probably no where less than 150 miles across, but does not rise to a considerable height, the highest of its summits which have been measured attaining only 4,055 ft. above the sea, and its mean elevation being estimated at less than 2,000 ft. Its N. branches fill up the whole country between the peninsula of Kamtchatka and the Polar Sea with mountains of moderate elevation, many of which, however, are always covered with snow on account of their high latitude near the Polar Circle.

It is worthy of remark, that in the seas adjoining the two boundary-ranges two of the most active volcanic systems are met with. To the west of the Scandinavian mountains a great number of volcanoes are placed on the island of Iceland, and as it seems also on the neighbouring island of Jan Mayen. On the east of the Aldan range the peninsula of Kamtchatka offers a similar phenomenon. It seems, that the chain of mountains is mostly covered with volcanic matter, and several very high summits are still active volcanoes. The highest of the two summits of the volcano of Shivelush rises to 10,591 ft. above the sea, and that of the volcano Kliutshewsk even to 15,825 ft. The tracts of low land which extend along the sea-coasts of this peninsula are partly covered with thick forests, and partly with fine grass, but neither agriculture nor the rearing of cattle is attended to, the very scanty population finding it more easy to get its subsistence by fishing.

Besides the two ranges, forming the boundary of the plain to the E. and W., it is nearly in its middle traversed by another chain, the Ouralian mountains, which run nearly due N. and S., on both sides of 60° E. long. This range, which in breadth occupies hardly any where more than 50 or 60 m., exhibits near its N. extremity a few summits, which rise to from 4,000 to 5,000 ft. But the mean elevation is probably not more than 2,000 ft. above the sea. Between 56° and 54° are also some summits which attain between 4,000 and 5,000 ft. At the sources of the river Oural the range lowers considerably, and divides in several ridges; of which one, called the hills of Mugodsharsk, advances in a S.W. direction, and terminates on the plain which divides the Caspian Sea from the lake of Aral. Thus this chain does not join the mountain-ranges in the interior of Asia.

Nearly in the middle of the S. border of the Great Plain, on both sides of the hills of Mugodsharsk and the countries lying S. of it, between 45° and 64° E. long., occurs the most remarkable depression on the surface of the earth. A tract of country, extending over an area of more than 300,000 sq. m., exclusive of the Caspian Sea, is, according to the supposition of Humboldt, lower than the surface of the ocean. The lowest part of it is occupied by the Caspian Sea, which was supposed by Humboldt to be no less than 348 ft. below the surface of the Black Sea; but later, and it is believed more correct, measurements make the level of the Caspian Sea only 116 ft below, and that of the Lake of Aral, 14 ft. above the level of the Black Sea. According to Humboldt, this depression extends between the rivers Kooma, Wolga, and Oural, up to a line drawn from Saratow to Orenburg, whence its boundary runs to the Lake of Ak-sa-kal (48° N. lat., and 63° E. long.), and then includes the countries traversed by the lower courses of the Sir-Daria (Sihoon, *Jaxartes*) and Amoo-Daria (*Oxus*). This country is so little elevated above the great lakes, which lie in the midst of it, that a strong N.W. wind of some continuance forces their waters over many miles of the adjacent tracts. Its soil consists partly of sand, and partly of hard clay, on which neither trees nor shrubs grow, and which, only in spring, after the melting of the snow, is covered with a scanty but nourishing grass and numerous flowers. It is only used as pasture by the nomadic tribes which wander about in this desert. Natural wells are no where found, but water is met with on digging some feet down in those districts which have a sandy soil, but not in those where it consists of clay. Along the banks of the watercourses trees and shrubs grow, and the soil is fit for agricultural purposes, but is commonly used as meadows.

Along the shores of the Caspian Sea this low and desert country extends to the very edge of the table-land of Iran (Persia), where it terminates between 36° and 37° N. lat., but from the table-land of Eastern Asia it is separated by a mountain-region, which comprehends the countries of Khokan and Badakshan, and between them and the desert extends Bokhara, whose surface is broken into ridges of moderate height, and valleys of considerable width, which, being watered by artificial means, are very productive of all kinds of grain and fruit. This country, therefore, offers a succession of fertile and sterile tracts over the whole of its surface.

The Caspian Sea, which covers a surface of 120,000 sq. m., is very deep towards its S. extremity, where it is surrounded by the mountain-ranges of Iran, but where it borders on the desert it is shallow. Its waters are salt. The Lake or Sea of Aral, lying farther east, has a surface of between 40,000 and 50,000 sq. m., and its waters are likewise salt, as is the case with all the numerous smaller lakes which occur in the above-mentioned depression. The Lake of Aral receives the two largest rivers, which drain the S. parts of the desert, and decend from the table-land of E. Asia. The Sir-Daria, which in its upper course flows through Khokan, runs about 950 m., and the Sir-Amoo, which rises in Badakshan, and flows through Bokhara, and afterwards through the desert, has a course of nearly 1,100 m.

The Oural dividing Asia from Europe, the great plain is divided between these two continents. Though that portion of it, which belongs to Europe, has immense tracts of very fertile land, especially in the centre of Russia, the plain of Siberia no where exhibits such a soil. Those parts which lie contiguous to the great depression, and as far E. as 82° E. long., are steppes, that is, level countries with a sandy, gravelly, or clayey soil, destitute of trees, except along the bottoms of some of the rivers, and covered partly with low shrubs, and partly with coarse grass, which affords only very scanty pasture. In most parts they are destitute of water. The great steppe of Barabinskaja, between the river Yrtish and Obi, is partly covered with large swamps, and intermingled with numerous salt-lakes, some of considerable extent; the remainder has a dry sterile soil, but when it begins to rise in hills towards the Altai range, many districts are fit for agriculture and are cultivated. This last observation applies still more to the countries farther E., between the river Oby and Yenesei, where agriculture has already advanced from 56° N. lat., to Krasnoyarsk. This portion of the plain is considered the granary of Siberia. Its surface is rather hilly. The countries lying east of the Yenesei do not exhibit a level plain, but rather an undulating surface, which in some parts is even broken. But as the climate is less mild than farther west, agriculture is only pursued in a comparatively few sheltered places, and the rearing of cattle and the chace affords subsistence to its scanty population. This part of the plain is covered with immense forests of pines, birch, &c. of which the W. steppes are destitute, and its pastures are also much richer. That portion of the plain which extends N. of the Polar Circle has its surface frozen ten months of the year, and even in July ice is met with at the depth of a foot. It is an immense desert, covered with moss, and interspersed with numerous lakes and swamps. In summer its whole surface is changed into a swamp, and then it is inaccessible. This mossy desert is called *tundra*. It is worthy of remark, that at the mouth of the Lena, and between it and that of the Indighirka, immense masses of bones, and even entire skeletons of elephants, rhinoceroses, and antediluvian animals, are found imbedded in the ice, which never is dissolved by the rays of the sun.

This plain is drained by numerous rivers, which, descending from the Altai mountains, on the southern border of the plain, traverse it in a northerly direction. Some of them may be enumerated among the largest rivers of the globe. Such are the Obi or Oby, which unites with the Yrtish, and whose whole course rather exceeds 2,000 miles. The Yenesei is still longer; for if we take for its source the Selenga, which falls into the Lake of Baikal, and issues from it under the name of Lower Angara, but changes it afterwards into that of Upper Tunguska, it runs not less than 2,500 miles. The Lena, which is joined by the large tributaries Witim and Aldan, has a course of hardly less than 2,000 miles. Farther E. is the Yana, which flows about 400 m., the Indighirka about 700 miles, and the Kolyma 900 miles.

2. *Elevated Table-land of Eastern Asia.*—The boundary of this extensive region lies near the parallel of 50° N. lat. between 82° and 122° E. long. On the W. the boundary is formed by a line extending first from 50° N. lat. and 82° E. long., to 40° N. lat. and 72° E. long., and hence nearly due S. to 34°. From this point it

follows the range of the Himalaya mountains in its S.E. direction, to 82° E. long., where this chain, which constitutes the S. edge of the table-land, begins to turn nearly due E., and continues in that direction as far as 97° E. long., near the parallel of 28° N. lat. Hence it passes S.E. to the table-land of Yu-nan, 25° S. lat., and 103° E. long., which forms the most southerly point of the Great Table-land of Eastern Asia. The eastern boundary runs along the range of the Yun-ling mountains, which extend from the most southerly bend of the river Yang-tse-kiang (26° N. lat., and 103° E. long.), in a N.N.E. direction to the most northerly bend of the river Hoang-ho (41° N. lat., and 109° E. long.). At this place the Yun-ling is divided only by the narrow valley of the river from another mountain-range, the In-shan, which hence forms the boundary of the table-land running E. to 116° E. long., where, turning to the N., the mountain-chain is called Khing-khan, and meets the N. boundary of the table-land between 51° and 52° N. lat., and 121° E. long.

The whole of the immense area included within these lines is considerably elevated above the level of the sea. Only a few comparatively small tracts of country are supposed to have less than 3,000 ft. of absolute elevation, and many of its southern plains rise to more than 10,000 ft. According to our scanty information, we may suppose that the whole country rises continually higher in form of terraces as it approaches its southern boundary, the Himalaya range. But, examining the course of the rivers, we are obliged to suppose, that this country gradually declines towards the east, as those rivers which flow from it to the west rise only on the very borders of the table-land, but many of those, which traverse its internal plains, descend to the Pacific Sea. Even those, which are not connected with the sea, but terminate in lakes having no outlet, run mostly from W. to E.

This table-land does not extend in one uninterrupted plain, but besides its being almost everywhere surrounded by mountain ranges, its interior is likewise traversed by several extensive chains. We shall first indicate the ranges which are met on its borders, then those in the interior, and make a few observations on the countries lying between the mountain chains.

Along the N. edge of the table-land runs the Altai range, a chain of mountains which varies in width between 200 and 300 m., and extends along the table-land about 1,400 miles in length, but it continues more than 600 miles farther east, terminating at the mouth of the river Amur. The name of Altai properly applies only to the W. portion as far as the Lake of Baikal, that portion which lies S.E. of the lake being called by the Russians Da-urian Mountains, and by the Mongols Khing-gan. That part of the chain, which lies farther E., is named by the Russians Yablonoi Khrebet, and by the Mongols and Chinese Khing-khan Tugurick. The highest part of the range is near its W. extremity, where, on the banks of the river Tshunya, an upper branch of the Oby, it rises in some summits to more than 10,000 ft. above the level of the sea, and is always covered with snow. The mean elevation of the whole range probably does not exceed 5,000 or 6,000 ft., but the larger portion of it, lying within the Chinese empire, has not been examined. In this range is embosomed the greatest alpine lake, that of Baikal, 355 m. in length, by 30 and 40 m. in width, and covering a surface of 14,800 sq. m., so that it is larger than half Scotland.

The W. boundary of the table-land, between 50° N. lat. and 82° E. long., and 40° N. lat. and 72° E. long., is not formed by a mountain-chain, but by a country with a broken surface, which we shall notice hereafter. But between 40° and 34° N. lat. a continuous range rises to a great height. It is called, on our maps, Bolor Tagh, but, by the natives, Tartash, and by the Chinese geographers Tartash I-ling. We know nothing of it, except that it rises to a very great elevation.

The vast range of the Himalaya mountains runs along the S.W. and S. edge of the table-land, from 34° N. lat. and 73° E. long., to 28° N. lat. and 97° E. long., being about 1,300 m. in length, and from 250 to 350 m. across. From the low plains of India, which border on the range on the S.W., the mountain-mass rises abruptly to about 4,000 or 5,000 feet. Behind it lies a belt of an extremely broken surface, from 100 to 200 m. in breadth, overtopped by numerous high summits, which grow higher and higher as they approach the table-land. The base on which they rest also rises gradually, till it attains near the table-land the height of 8,000 or 9,000 ft. Then follows the highest portion of this stupendous range, the crest of the *Himäus* or *Imäus* of the ancients, some of whose summits exceed by 10,000 and 11,000 ft. the altitude of Mount Blanc, and are the highest in any country hitherto discovered. The Dhawalagiri (28° 30′ N. lat., and 83° 30′ E. long.) attains 26,862 ft. above the sea, and the Chamalari (28° N. lat., and 89° 30′ E. long.) is probably but little lower. The Tawahir (30° 22′ N. lat., and 79° 57′ E. long.) rises to 25,749 ft. There are probably above 200 summits which rise more than 18,000 feet above the sea, and are covered with eternal snow. In fact, the name Himalaya or Himaleh is merely a Sanscrit term for snowy; a circumstance of which Pliny was well aware when he says, *Imäus incolarum lingua nivosum significante.* (*Hist. Nat.*, lib. vi. § 17.) By far the greater number of these high summits lie W. of the Chamalari; for E. of that high pinnacle, the mountains, which attain the snow-seem huge, but few. On the S.W. are the plains of India, which are nowhere more than 1,000 ft. above the sea; and on the north of the range are the plains of Tibet, which have at least 10,000 ft. of absolute elevation. The highest crest of the range towards this table-land is between 16,000 and 18,000 ft. high, the Neetee pass, one of the lowest, rising to 16,569 ft. above the sea.

The country which lies between the E. extremity of the Himalaya range (97° E. long.) and the table-land of Yu-nan (between 100° and 104° E. long.) is entirely unknown. It contains the sources of the Irawaddi, and seems to rise to a great elevation, and to be overtopped by high summits. The table-land of Yu-nan itself must be of considerable height, as the winters are very cold, though it be placed near the tropic. Some mountain-summits, which rise from it, attain the snow-line; they are mostly situated along the most southerly bend of the river Yang-tse-kiang, and may be considered as the most southerly extremity of the Yun-ling.

The Yun-ling, which rises on the E. edge of the great table-land, and runs in a N.N.E. direction between the great bends of the rivers Yang-tse-kiang and Hoang-ho, is also of considerable height, so that it is frequently called by the Chinese the Siue-ling (Snow range). The snow-capped summits are numerous, between 30° and 36° N. lat., and more especially between 32° and 34°. The length of this range is little short of 1,200 m.

Respecting the In-shan and Khing-khan ranges little is known; the first has never been seen by a European, and we have only acquired some notion of its position from the Chinese geographers. But towards its E. extremity it is traversed by the great road leading from Kiachta to Pekin, and here the highest part of the mountain-pass rises to 5,525 ft. above the sea level. The Khing-khan seems not to rise much above the elevated plains which extend from its western declivity westward, but it is much elevated above the valleys contiguous to its E. descent. Its absolute elevation does not appear to be great, as at the places where it was traversed by European travellers it was covered with stunted trees and low bushes to its very summit. The length of the In-shan does not much exceed 360 miles. But the Khing-khan, whose northern extremity advances to the most northerly bend of the river Amur, has a length of nearly 800 miles.

The most northerly of the mountain-ranges traversing the interior of the great table-land of Eastern Asia is the Thian-shan. It begins at the northern extremity of the Tartash-i-ling, or Bolor Tagh, (40° N. lat.) with which it forms nearly a right angle. But, properly speaking, it projects under the name of Ak-Tagh into the plains of Bokhara, lying farther W. The Thian-Shan runs from W. to E., between 70° and 96°, and then it terminates abruptly in the plain. Its western portion, which is called Muz-Tagh, does not rise to a great elevation, and is passed by the caravans between Guldsha and Khasghar. Here its breadth does not exceed 30 or 40 miles. But near 79° E. long., where it is traversed by the road between Puldsha and Aksu, the highest part of the mountain-pass is covered with snow, and leads over a glacier. Hence this pass is called Mussur dabáhn, or the glacier-pass. Farther E. is the high volcanic peak, called Pe-shan. The centre of the whole range is occupied by an extensive mass of very high rocks, which rise far above the snow-line, and this mass is known as one of the highest mountains in northern Asia by the name of Bogdo Oöla. To the east of this high mountain-mass occurs another volcano, named the volcano of Ho-theou (Fire-town). Snow-capped mountains appear likewise on the east of the Bogdo Oöla, but we are very little acquainted with this part of the range.

It was formerly supposed that a high mountain-range, running S.W. and N.E., connected the western extremity of the Thian-Shan with the western extremity of the Altai range, but it is certain that no such range exists. The country lying between these ranges is indeed traversed by several lower ridges, of which some are of considerable extent, but they are not connected with each other, wide plains extending between them. These plains do not much differ from the steppes of Western Siberia, being only covered with coarse grass; but along the rivers are considerable tracts of land, fit for agriculture, and yielding rich crops of rice and millet. Besides, there are similar tracts along the foot of the ridges. But, as this country is placed between two great deserts stretching far to the E. and W., and inhabited only by nomadic nations, agriculture was entirely unknown down to the middle of last century, when it was conquered by the Chinese, who took great pains to introduce agriculture, which is now in a flourishing state

in several districts. This country is, besides, remarkable for the great number of large lakes which are met with over its whole surface. The most remarkable are the Balkash, which is said to extend from 120 to 140 miles from N. to S., the Issekul or Temurti, which is half as long, the Ala-kul, Zaisan, Kijilbash Noör, Ike-Aral Noör, Ubra Noör, and a great number of smaller ones. Except the Zaisan, they have no outlets, and the water of none of them arrives at the sea. Another remarkable circumstance is the occurence of volcanoes, at a distance of about 1,000 miles from the sea. For, besides the volcanoes noticed in the Thian-Shan range, there occur others to the N. of the chain, and one is found on an island in the Lake of Ala-kul.

Not far from the S. extremity of the Tartash-i-ling (between 35° and 36° N. lat.) another mountain-range, running E. and W., is connected with it. This chain is called, by the Chinese geographers, Kuen-luen, or Kulkun. We know very little of it, except that it stretches over the whole breadth of the great table-land, and nearly in the middle of its extent (about 92° E. long.) divides into two ranges, of which that which declines somewhat to the N. is called Nan-Shan, and is probably connected with the In-shan by the Ala-Shan, a range of mountains extending along the banks of the Hoang-ho, where it flows N. The other branch of the Kuen-luen, which declines somewhat to the S., is called the Bayan Kara mountains, and frequently also the Kuen-luen, and unites with the Yun-ling about 33° N. lat. Nothing else is known of these ranges, except that they rise to a great height, and in many parts are covered with snow all the year round; whence they frequently are called Siue-mountains (snow-mountains) by the Chinese.

The immense tract of country which lies to the N. of this range (on the W. between it and the Thian-Shan, and on the E. between it and the Altai Mountains,) is known by the name of Cobi, or more properly Gobi (the desert in the Mongolic language), or Shamo (Sand-sea in Chinese). But the whole of this tract is not a desert. The W. portion of it, between 72° and 96° E. long., or between the Thian-Shan and Kuen-luen, is only from 300 to 400 m. across, and nearly 1,200 m. in length. Here we find a tract of country from 50 to 80 m. across, along the foot of the Thian-Shan range, fertile in many districts, producing different kinds of grain, cotton, wine, and fruit, or covered with nourishing grass. Through this tract runs the great commercial road, which connects W. Asia with the more eastern countries, and here are situated the commercial towns of Khasghar, Aksu, Kutshé, Karashar, Turfan, and Khamil, or Hami. The W. portion (between 72° and 77° E. long.) is also not a desert. Though the tracts separating the rivers are steppes, i. e. plains without trees, and producing only a coarse grass, the lands bordering the banks of the watercourses are fertile in grain and cotton. Here is the town of Yarkand, and, towards the Kuen-luen, Khotun, through which two places a road runs, which connects N. Asia with India. It is supposed that the term *cotton* is derived from the name of the last-mentioned town. The remainder of this region is a desert, and mostly of the worst kind, where the sandy surface, according to a Chinese author, moves like the waves of the sea. This desert is sometimes distinguished by the name of Shashin, or the Gobi of Lop Noör. The Lop Noör is one of the extensive lakes without an outlet, which frequently are met with in this desert. It receives from the W. the Erghengol, or river of Yarkand, which runs probably not less than 1,000 miles. This part of the Great Table-land is supposed to be between 4,000 and 5,000 ft. above the sea-level.

It seems, that under the meridian of Khamil (96° E. long.) the desert is narrowed to about 150 miles across by the fertile districts of Tangut, which skirt the N. declivity of the mountains of Nan-shan, and protrude far northward into the desert. The desert, dividing it from Khamil, and called Gobi of Tangut, is also less level, more stony, and better adapted for pasture, than farther E. or W. Hence the Chinese government has extended its N.W. prov. of Kansi, through this desert to the N. side of the Thian-Shan mountains.

The Great Desert, Ta-Gobi, extends from the eastern extremity of the Thian-Shan (96° E. long.) to the Khing-Khan (120° E. long.), nearly 1,200 miles in length, and its width between the Altai range on the N., and the Nan-Shan, Ala-Shan, and In-Shan, on the S., varies between 500 and 700 miles. Through the middle of this tract extends, in the whole of its length, what is properly called the Shamo (Sand Sea). It is from 150 to 250 miles across; and in it sand almost exclusively covers the surface, which commonly is level, but in some places rises into hills, on which masses of loose stone are met with. Small and shallow lakes are frequent, but their water is either salt or bitter. The vegetation is very scanty, and affords but indifferent pasture. In a few places a small number of stunted trees are met with. This part of the Gobi is about 3,000 ft. above the sea-level, but it sinks in some places even to 2,600 ft. In those parts of the Gobi, which lie to the N. and S. of the Shamo, the surface is between 3,000 and 4,000 ft. above the sea. Here it is not, in general, covered with sand, but with gravel and pebbles, and is in many places rocky. The vegetation is much more vigorous, and the pastures consequently richer. It is even thought that, in many districts, agriculture would succeed, if the Nomadic nations inhabiting these countries would attend to it; and in some districts which border on China, millet is grown abundantly, and even wheat and barley, though not to a great extent. Trees are also met with, as well on the N. as on the S. of the Shamo, especially fir, birch, and poplars, but not in large forests. The countries are likewise better provided with water than the Shamo, which could not be traversed, if wells were not dug at certain places where the roads pass. The northern and southern districts have also a less level surface, ridges of stony and rocky hills traversing it in many places; they run commonly from W. to E., and are called the Black Clouds. The few and sluggish rivers, which are met with, are lost in lakes without outlets. Only in the north-eastern angle are the Kerloon and Khalka-Pira rivers, which, joining, form the Argoun, the principal branch of the Amur. The temperature of the air is extremely low over the whole Gobi, the waters being covered with ice six months of the year.

The country, which is included between the two branches of the Kuen-luen range, the Nan-Shan, and Bayan Kara mountains, is called Thoing-Hai, or Khookhoo-noor. The latter name is derived from an extensive lake, in its N.E. district. It is very little known, and seems to exhibit a succession of narrow valleys and very high mountains, whose numerous summits pass far beyond the snow-line. These mountains form very extensive and high masses in the bend of the Hoang-ho, which river has its sources in the W. districts of this region.

The whole country, S. of the Kuen-luen mountains, as far S. as the Himalaya range, is comprehended under the name of Tibet. It is, doubtless, the highest part of the great table-land of Eastern Asia, and there are good reasons for assigning it an average absolute elevation of 10,000 ft. above the sea-level, though, towards the east, the valleys of some rivers may be considerably less. A mountain-range runs through it from W. to E. It is connected with the Himalaya range by a level table-land of 14,000 ft. elevation, which surrounds the sacred lakes of Manassa-Rowora and Ravan-Hrad, and on which, or near which, are the sources of three great rivers, the Indus, Ganges, and Yaroo-Zangbo-tsiu. The mountain-chain itself is called Gang-dis-ri on the W., but further E. it bears the name of Zang. Its E. extremity is separated from the Yun-ling by the valley of the Yang-tse-kiang, which here flows from N. to S. Little, or rather nothing, is known of this range, which probably being placed on so elevated a base, passes with its summits the line of congelation.

Of the country which lies to the N. of this range very little is known, if we except the most westerly corner, where the Indus river, issuing from a table-land between mountain-ridges, enters the spacious, level, and fertile valley of Leh, or Ladak, and runs in it about 300 miles, till it breaks through the mountain-ranges which oppose its course, and enters the plain of India. On the W. of this fine, but elevated valley, is the Himalaya range; and on the E. another high chain, the Karakorum mountains, which, extending N.W. and S.E., connect the Kuen-luen chain with the Gang-dis-ri mountains.

The country east of the Karakorum mountains, and extending between the Kuen-luen and the Gang-dis-ri ranges, is called Katshe, or Kor Katshe. There occur in it some ranges, but the greatest part extends in wide plains, similar to the steppes, but abundantly provided with good pasture. More is not known of it. Near the Gang-dis-ri range is an extensive lake, called Tengri, and N. of it are the sources of the Yang-tse-kiang, and perhaps also those of the rivers Mackhun and Thaluen.

The country between the Gang-dis-ri range and the Himalaya mountains is Tibet Proper, and is somewhat better known, at least as far E. as H'Lassa, its capital. Its surface exhibits only low rocky hills, without any signs of vegetation, rising on extensive arid plains, covered at certain seasons with rich grass, and affording pasture to numerous herds of cattle. The valleys in which the rivers run are considerably depressed below the surface of the plains, and in these valleys agriculture is carried on with great care. All kinds of European grains are cultivated, and in some places rice. Most of the fruit-trees of Europe also succeed. But, as the portion of the country which is fit for agriculture is only a small part of the whole, the population, though far from numerous, is partly supplied with corn from the adjacent countries. The climate is very severe, and the rivers covered with ice for some months. The E. part of Tibet is very little known; it seems to be

traversed by high ranges, and not to exhibit the large plains which occur farther W. In Tibet is the lake Palte, which has a large island in its centre, so that the lake has the form of a ring. The Yaroo-Zangbo-tsiu, or Sampu river, runs through this country from W. to E., and after a course of more than 1,000 miles, breaks through the chain of the Himalaya range, about 95° E. long., and joins the Brahmapoutra under the name of Di-hong.

The table-land of Yu-nan, which forms the most southerly portion of the great table-land of Eastern Asia, has an extremely diversified surface, being a succession of mountains which in some places rise above the snow-line, and of valleys, which, however, frequently widen to small plains. The climate indicates a considerable elevation above the sea-level, but it is not so high as to preclude agriculture, corn being raised in the valleys and plains, and in some districts rice. Towards the N.W., however, it rises much higher, as there the rearing of cattle forms the principal occupation of the inhabitants, who have herds of chowry-tailed cattle (Bos grunniens,) which are only found in very cold countries.

3. *Countries lying to the East of the Table-land of Eastern Asia.* — East of the desert of Gobi extends Shing-king, or Manchooria (the country of the Manchoos), to the coasts of the Pacific. It is divided from the desert by the Khing-khan mountains, which on the side of the desert are destitute of wood, but towards Manchooria are covered with fine forest-trees, among which oak is frequent. The N. boundary is formed by the Yablonoi Khrebet, or Khing-khan Tugurick. From this range (56° N. lat.) it extends to the neighbourhood of the Hoang-Hai, or Yellow Sea (41° N. lat.); from which it is divided only by a range of hills. But in advancing farther E. these hills rise to a high mountain-chain, the Chang-pe-Shan, or Shan Alin, which attains the snow-line where it runs on the boundary between Manchuria and the peninsula of Corea. It then approaches the coast and runs so close along it as to leave only at some places a very narrow stripe of low country until it terminates at the mouth of the river Amur, opposite the Yablonoi Khrebet. Along this coast the mountain-chain rises with great steepness to from 4,000 to 5,000 ft. above the sea. The countries enclosed by these mountain-ranges exhibit different characters. The S.W. part of it, N. of the river Sira Muren, or Leao-ho, is a desert, and may be considered as part of the Gobi, which here projects beyond its natural boundary, the Khing-khan range. It has a scanty vegetation, and is only inhabited by nomadic nations. E. of it, and as far N. as the Amur river, the country is traversed by ridges of mountains and hills, between which, however, spacious valleys extend, whose fertile soil is in some places well cultivated, and yields rich crops. The mountains and hills are partly covered with trees, and partly afford rich pasture-walks for numerous herds of cattle and sheep. The climate of this portion of Manchooria is very temperate. N. of the river Amur the whole country is covered with mountain-masses, intersected by narrow valleys. Here agriculture ceases, and cattle form the principal riches of the inhabitants, who also apply themselves industriously to the chace of animals affording furs, of which there is a great abundance. The principal river is the Amur, whose upper branch, the Argoun, runs through the N.E. districts of the Gobi, and after entering the mountains joins the Shilka, when the river is called Amur, or Sakhalien. The whole course of this river does not fall short of 2,000 miles.

The peninsula of Corea is separated from Manchooria by the Chang-re-shan, and from this range another branches off to the S., which runs close to the E. shores, towards which it descends with great rapidity, and in these districts the level or cultivable tracts are of small extent. The numerous offsets to the W., which are less steep and elevated, contain between them large and well-cultivated valleys. But the whole country seems to have a considerable elevation above the sea-level, as its climate is very cold, its N. rivers being covered with ice for 4 months; yet rice, cotton, and silk, are produced in abundance.

China Proper occupies the remainder of the countries lying between the Great Table-land of Eastern Asia and the Pacific. Several mountain-ranges issuing from those that surround it, traverse its interior. Where the In-Shan and the Khing-Khan meet, stands a high summit, the Petsha, more than 16,000 ft. above the sea-level, and from it a chain runs first S.W., and then S., 400 m., and terminates at the last great bend of the Hoang-ho. It is called Kho-thsing-Shan, and though high, does not rise to the snow-line. Near 34° N. lat. two ranges branch off from the Yun-ling, the Peling (northern range) and the Tapa-ling, and they continue as high mountain-chains as far E. as 111° or 112° E. long., when they sink down to hills. These ranges contain some snow-capped summits towards the W., and are steep and rugged. From the E. side of the table-land of Yu-nan branches off another range, called Nan-ling (southern range), which constitutes the most extensive mountain-system in China. It runs E. as far as 116° E. long., passing about 150 miles to the north of Canton; it then inclines to the N.E., in which direction it continues with a slight bend to the W. to its termination on the sea, near the harbour of Ning-po, opposite the islands of Chusan. Several summits of this range rise above the snow-line, W. of 110° E. long., and here it extends also to a considerable width. East of 110° E. long. no snow-capped summits occur, though some rise to a great elevation, but every where the descent of the range is steep and rugged.

The country lying between the Kho-thsing-Shan and the Tapa-ling is full of high and extensive mountain-masses, and intersected by valleys, which are very narrow, except two which are drained by the Wei-ho, a tributary of the Hoang-ho, and by the Kan kiang, a branch of Yang-tse-kiang. These are wide, and afford large tracts for agricultural purposes. The large tract, which extends between the Tapa-ling and the Nan-ling, is traversed by many ridges of mountains and hills, which mostly branch off from the last-mentioned range, but these elevations rise only to a moderate height, and the gentle declivities are mostly cultivated. Besides, they are separated from one another by very wide valleys, which frequently are intersected by pretty extensive plains, that every where recompense the industry of the careful cultivator. They are, in fact, hardly inferior in fertility to the great Chinese Plain.

This great plain occupies the N.E. part of China, extending in length 700 miles from the Great Wall, N. of Pe-king, to the confluence of the rivers Yang-tse-kiang and Kan-kiang, near 30° N. lat. Its breadth is various. North of 35° N., where it partly extends to the shores of the Hoang-hai, and partly borders on the W. declivity of the Chang-tung mountains, a low range, occupying the peninsula of that name, the width of the plain varies between 150 and 250 m. Between 35° and 34° N. lat. the plain enlarges, and in the parallel of the Hoang-ho it extends more than 300 m. E. and W. Farther S. it grows still wider, and reaches nearly 500 m. inland, in the parallel of the mouth of the river Yang-tse-kiang. This large plain, though the N. districts have mostly a sandy soil, and the E., between the embouchures of the Hoang-ho and Yang-tse-kiang, are partly covered with swamps, is, perhaps, the best cultivated and most populous portion of the globe, producing abundance of rice, cotton, wheat, and tobacco, &c. It contains at least 210,000 sq. m., so that it is seven times as large as the most fertile plain of Europe, that of Lombardy. The internal communication of this fertile tract is rendered easy by the Great or Imperial Canal, which traverses it from S. to N., and whose length exceeds 500 m. in a straight line, but probably its whole length is not less than 700 m. It is, also, traversed by the lower courses of the two great rivers of China, the Hoang-ho and the Yang-tse-kiang, which flow through it from W. to E. The Hoang-ho runs upward of 2,000, and the Yang-tse-kiang more than 2,900 miles, if their bends be taken into account.

4. *Countries lying to the South of the Great Table-land of Eastern Asia.* — This region comprises the two peninsulas, which are known in Europe by the name of India within and without the Ganges.

The peninsula without the Ganges is traversed by four mountain-ranges, of which the three farthest east are connected with, or branch off from, the table-land of Yu-nan, the most southerly extremity of the Great Table-land. The most easterly, which may be called the Anam range, begins at 22° N. lat., and runs S.E. till it approaches the Chinese Sea, near 17° N. lat.; hence, farther south, it proceeds parallel to the shores of that sea, and terminates at Cape St. James (10° 15′). This range occupies about 100 m. in width; its elevation has not been ascertained, but it seems to be considerable, though far from rising to the snow-line, except, perhaps, where it is connected with the table-land of Yu-nan. Two other mountain-chains branch off from the S.W. side of the same table-land, between 95° and 97° E. long., and run nearly due S., including the narrow valley of the Thaluen river. The most westerly, which may be called the Birmah range, terminates as a chain of considerable elevation at the mouth of the Thaluen river; the other, which runs to the E. of that river, and may be called the Shan or Siam range, continues farther S., but gradually declining in height till it disappears entirely N. of the most narrow part of the peninsula of Malacca, the isthmus of Krah (11° 30′ N. lat.): for the low mountains, which occupy the interior of the S. part of that peninsula, are not connected with it.

Between the Anam range and the Gulph of Tonkin lies a large plain, that of Tonkin, about 100 m. in length and width: it is low, level, and extremely fertile, especially as far as it can be irrigated. It is surrounded on the N. and W. by very fertile valleys, and traversed by the river Song-ca, which rises on the table-land of Yu-nan, and runs in an E.S.E. direction probably more than 700 m. The plain of Tonkin terminates between 19° and 20° N. lat: farther S. the offsets from the Anam

range approach close to the sea, and leave only between them larger or smaller valleys, which commonly are very fertile. South of Cape Avarella steep rocks occupy nearly the whole of the country.

We know very little of the N. portion of the country occupying the extensive tracts which separate the Anam range from the Shan range. It would seem, that as far S. as 16° N. lat. it exhibits several pretty high mountain ridges, which include valleys and surround elevated plains. S. of 16° N. lat., however, low plains constitute the general character of the country: for though several ridges occur, they do not seem to rise at any place above the elevation of high hills. These low plains have a greater abundance of water than any other country of Asia. A considerable portion of their surface is covered with permanent lakes: others are formed during the rainy season, by the inundation of the numerous and large rivers; and at that season a great portion of the land is changed into immense swamps. Though the soil is very fertile, and yields very rich crops of rice and every kind of vegetables cultivated for food between the tropics, civilisation is less advanced than either in China or Hindostan; because its inhabitants, being unable to turn this abundance to their advantage, it acts as an incentive to idleness. Three large rivers drain this country. The most easterly is the Sai-gun, which runs along the Anam range, and falls into the sea near Cape St. James: its upper course is entirely unknown, but from its size towards its mouth it is supposed to run from 500 to 600 m. The Mackhaun, or river of Cambodja, is called by the Chinese Lan-tsan-kiang, and rises in the interior of the Great Table-land, so that its whole course probably exceeds 2,000 m.: it falls into the sea, W. of the mouth of the Sai-gun river. The third river is the Menam, or river of Siam, which runs about 700 m., and falls into the Gulph of Siam.

The valley, in which the Thaluen runs between the mountain-ranges of Siam and Birmah, is narrow; its soil is stony, and too much elevated to be irrigated by the water of the river, which rushes with great impetuosity down its confined bed, descending from the Great Table-land, where it is called Loo-kiang, or Noo-kiang. Its whole course probably exceeds 1,500 m.

The peninsula of Malacca, which constitutes the most southerly part of the continent of Asia, and terminates with the Capes of Buros and Romania, between which the island and town of Singapore are situated, is connected with the main-land by the isthmus of Krah (between 9° and 11° S. lat.), about 150 m. long, and from 70 to 80 m. wide. It is low, and its soil is formed by alluvium. The peninsula itself contains a mountain-ridge in the interior, which rises to 3,000 or 4,000 ft., and is mostly covered with thick wood, but along the shores extends a level country, which in some districts is very fertile, but mostly not very productive.

The most westerly of the four mountain-chains, which traverse the peninsula beyond the Ganges from N. to S. nearly in its whole length, is the Aracan range, dividing Aracan from the Birman empire. It is not connected, like the others, with the table-land of Yu-nan, but with the Himalaya range. The Himalaya mountains are considered to terminate at the sources of the Brahmapoutra (97° 30′ E. long., and 28° N. lat.). The mountains which surround the upper course of that river are called the Langtan mountains, and many of their summits rise above the snow-line; the highest of those which have been measured, the Dupha Boom, attaining 13,713 ft. above the sea-level: the passes which lead over it do not sink below 11,000 ft. From these mountains, which rather constitute a large mountain-knot than a range, a chain issues, running W. parallel to the Himalaya range. That portion of the chain, which is immediately connected with the Langtan mountains, is called Patkoi mountains; it seems to be much lower, and more accessible. Farther W. they are called the Naga mountains, which are still lower, and extend to about 93° 30′ E. long., where they are succeeded by the Garrow hills, which rarely rise to more than 6,000 ft., and terminate opposite the mountain-ridges which surround the enormous pinnacle of the Chamalari in the Himalaya range.

Between this range and the Himalaya mountains extends the valley of Asam, or of the Brahmapoutra, one of the largest in Asia: its length exceeds 400 m., and in width it varies between 30 and 50 m. Its soil is very fertile, and the climate such as to bring to perfection nearly all productions cultivated between the tropics; but here also the too great abundance of water retards the progress of agriculture and the increase of the population.* The Brahmapoutra runs more than 500 m. through the centre of this valley, and is here joined by the Di-hong, which, under the name of Sampu, or Yaroo-Zangbo-tsiu, flows through the plains of Tibet, and has run a course of more than 1,000 m. before it reaches the Brahmapoutra. Issuing from the valley of Asam, the Brahmapoutra runs 360 m. farther through the plain, of Bengal.

* The eastern portion of the valley is hardly more than 400 ft. above the sea-level, and at its western extremity it sinks down to 200 ft.

The country which extends along the mountain-chains constituting the S. boundary of the valley of Asam, and advances as far S. as 24° N. lat., seems to be considerably elevated above the sea, the plain on which the town of Moonipore is built having an elevation of nearly 2,500 ft. But the plains are commonly not of great extent, and the valleys are narrow, though the mountains which cover the greater part of the surface do not rise to a great elevation. As far as is known (for the eastern portion of this region has not been visited by European travellers) these ranges run S. and N., and form right angles, or nearly so, with the range from which they issue. One of these ranges, extending along the meridian of 91° E. long., is called the Khiebunda mountains, between Moonipore and Katshar, but farther S. the Aracan mountains. This chain, whose length rather exceeds 700 m., attains, towards the S., only a mean elevation of about 3,000 ft. above the level of the sea, though some of its summits rise to 5,000 ft. and upwards. Its mean width may be 50 miles: it terminates at Cape Negrais.

Between the Aracan mountains and the Birmah range lies the greatest part of the Birman empire. A small portion of its surface consists of rich cultivable lands: these lie in the wide valley of the Irawaddi, and in two large plains; one, situated between 22° and 23° N. lat., along the N. side of the great bend of that river, and the other between 16° and 18° N. lat.: the latter comprehends the large delta of the Irawaddi and the adjacent low country as far E. as the Birmah mountains, and may have a surface of nearly 100,000 sq. m. But its agriculture suffers from excess of water. The country E. of the Irawaddi, and S. of its great bend, is a high country, from 1,500 to 2,000 ft. above the level of the sea; whose hilly surface suffers from want of water, the soil being sandy and dry. The Irawaddi, which drains the Birman empire, rises in that unknown region E. of the Langtan mountain-knot, and runs upwards of 1,200 miles, if its bends be taken into account.

Aracan, or the country lying east of the Arácan mountains, is hilly, and even mountainous in its northern districts, the table-mountain (near 21° N. lat.) rising to 8,340 ft. above the sea: but its middle parts are occupied by the rather wide valley of the Huritung, or Aracan river, and this is continued farther S. to 19° N. lat., being separated from the sea to the S. of the mouth of the river, by a ridge of broken hills, which rise to between 500 and 700 feet. The rains during the south-west monsoon being extremely heavy, and of long-continuance, agriculture is here also retarded by the abundance of water.

Hindostan, or the peninsula within or on this side the Ganges, is not connected either with the table-land of Eastern or that of Western Asia, being separated from each by a wide plain, extending first from the mouth of the Ganges along the southern declivity of the Himalaya range to the shores of the river Indus, in a W.N.W. direction, and thence along the mountains, forming the boundary of the table-land of Iran, in a S.S.W. direction to the mouth of the Indus. Thus this plain has the form of a right angle; and is, on account of its different character in the eastern and western district, with propriety divided into the plain of the Ganges and that of the Indus.

The plain of the Ganges may be compared with the great plain of China, in respect of fertility and extent, though not of population. Its length is upwards of 1,000 m., and its width varies between 120 and 350 m.: it covers an area of more than 200,000 sq. m. From the mouth of the Ganges it rises imperceptibly towards the N.W.; but, even at a distance of 200 m. from the sea, its surface is not 1,000 ft. above it. The country between the W. mouth of the Ganges, the Hooghly, and that of the Brahmapoutra, to a distance of nearly 100 m. from the sea, is extremely low, and frequently inundated by high tides. It is called the Sunderbunds, and is nearly uninhabited on account of its unhealthiness, being covered with large forest-trees, and frequented by tigers and other beasts of prey. The country which lies N. of the Sunderbunds, to an extent of 200 m. and upwards, is subject to the annual inundations of the Ganges; by whose deposit it is fertilised, so as to give the most abundant crops of rice. It is cultivated with the greatest care, and nourishes a very numerous population. N. of 25° N. lat. the annual inundations of the river cease; and where no artificial means are employed to effect an irrigation for the culture of rice, the country produces wheat and other grains. But the natural fertility of the soil decreases as we advance higher up the river. It becomes more sandy, and N. of Delhi the tracts along the rivers can only be cultivated. At 30° N. lat. it is a complete desert. Between this plain and the lowest range of the Himalaya mountains extends the Tariyana, a narrow stripe of land from 12 to 20 m. wide, covered with immense forests, and frequented by a great

number of elephants, tigers, and other animals. It is uninhabited, on account of its unhealthiness, the surface in the rainy season being converted into an immense swamp; but between November and March it may be visited without danger. The people inhabiting its borders are disfigured by goitres.

The river which drains this plain, the Ganges, rises in the highest and most northerly range of the Himalaya mountains, bordering on the table-land of the sacred lakes of Manassa, Rowarra, and of Hrawan Hrad. Its several sources unite before it issues from the mountains at Hurdwar. It soon begins to change its W. into a S. and south-easterly course. In the latter direction it traverses the upper part of the plain. But from its junction with the Jumna it runs E. to the neighbourhood of Rajamahal, where it again turns to the S. E., and soon after begins to form its extensive delta, dividing in a great number of branches, of which the most easterly and principal falls into the Bay of Bengal, a few miles W. of the mouth of the Brahmapoutra; but the western mouth, called the Hooghly, is in a straight line 180 m. distant from it. All rivers descending from the Himalaya mountains, between 78° and 90° E. long., increase its waters, and most of them inundating the lands contiguous to their banks during the rainy season, contribute to increase the fertility of the plain. The course of the Ganges exceeds 1,300 m.

The plain of the Indus is somewhat less in extent, and greatly inferior in fertility. It extends in length about 600 m., and in width 300 at an average. Its surface may cover an area of 180,000 sq. m. Its N. part is called the Penj-ab (country of five rivers), from being watered by five large rivers, which afterwards join the Indus. This tract is commonly very fertile along the watercourses, and there are even, between the rivers, districts whose soil recompenses the labour of the husbandman; but in general they have a light soil, which frequently passes into sterile sand or clay. This description also applies for the most part to the tract of land which lies on the right of the river, between it and the ranges which separate it from the table-land of Iran. But on the left of the Indus extends an immense sandy desert, which in the N. is called Maroost'hali, or the Great Desert, and to the S. Thur, or the Little Desert. It extends over the delta of the Indus, and occupies nearly half the whole plain. At its southern extremity is the Runn, an extensive salt morass, connected with the Gulph of Cutch. In the desert also occur smaller lakes and marshes, in which salt is produced. It is only inhabited in a few places, where rocks protrude through the sand, having their surface covered with scanty grass. The Indus, which drains this plain, has its sources near those of the Ganges; descending through the spacious valley of Leh or Ladak; it breaks through the mountains at the north-western extremity of the Himalaya range. Its whole course amounts to upwards of 1,500 m.

Where the two plains of the Ganges and Indus meet, in the parallel of Delhi, between 76° and 77° E. long., begin the mountainous countries of Hindostan, which extend to its most southern extremity, Cape Comorin (near 8° S. lat.). This immense tract may be divided into two triangles, connected at their bases at the Vindhya mountains, which extend between 22° and 23° from the Bay of Cambay, to the plain of the Ganges, N. W. of Calcutta. This chain is of moderate elevation, its highest summits probably not exceeding 3,000 ft. above the sea, and the most frequented of its mountain-passes, that of Jaum, only rising to 2,328 ft. At its western extremity, about 30 m. from the Bay of Cambay, it is connected with another chain, the Aravulli range, which first runs N., in broken masses, up to the vicinity of 24° N. lat., but farther N. forms a continuous range, running N. N. E. It descends westward, with a steep declivity, to the desert of Maroost'hali, and prevents the sand of that district from encroaching on the fertile country lying farther E. Its average elevation probably does not exceed 3,000 ft., though some summits rise higher, and the Aboo or Aboda Peak (between 24° and 25°), even to more than 5,000 ft. These two chains, the Vindhya mountains and the Aravulli range, constitute two sides of the northern triangle, and from them the country gradually lowers, until it meets the plain of the Ganges, not far from the banks of the Jumna. Contiguous to the mountains are two considerable plains; the table-land of Malwa, well known by its extensive plantations of opium, skirts the northern declivity of the Vindhya mountains for about 300 m., and has an average breadth of 50 m. Near the mountains its elevation is between 1,800 and 1,900 ft. above the sea level; but towards the N. it imperceptibly lowers to less than 1,300 ft. The table-land of Mawar extends along the Aravulli range; it is between 150 and 180 m. long, from S. to N., and from 70 to 100 m. wide. Its elevation near the mountains is about 2,000 ft. above the sea, but on its eastern border it sinks to 1,400 ft. In fertility it is much inferior to the plain of Malwa; it produces different kinds of grain, but little rice. The tracts of country which separate these plains and extend to the plain of the Ganges, have a very broken surface, which on the E., in Harraoutee, rises in steep and rugged hills, but farther W., in Bundlecund, presents more gentle acclivities, and wider, as well as more fertile, valleys. The rivers which drain these countries fall into the Jumna, a tributary of the Ganges.

The peninsula of Gujerat, lying opposite the mouth of the rivers Nerbudda and Tapty, is united to the continent of Hindostan by an isthmus more than 50 m. long, between the southern part of the salt morass called the Runn and the Bay of Cambay. This isthmus is so low that, in the rainy season, the waters of both gulphs unite and convert the peninsula into an island. The districts contiguous to this isthmus, as well as those bordering on the gulphs of Cambay and Cutch, have an undulating surface, and contain extensive tracts of fertile and well cultivated land. The lands along the western coast are rather level, but their surface is stony, covered with little earth, and not fertile. The interior of the peninsula, and all the districts along the southern coast, have a very broken surface, and are mostly covered with bare rocks, but contain a number of fertile valleys. The mountains in the centre of the peninsula attain a moderate elevation. The whole is well supplied with running water, except the north western extremity, but is destitute of wood, except on the hills along the southern coast.

Contiguous to the eastern extremity of the Vindhya mountains, but S. of them (between 81° and 83° E. long., and 22° and 23° N. lat.), the country rises to a considerable elevation, probably to more than 5,000 ft. It is overtopped by numerous summits which rise 2,000 ft. higher. This rugged country, which seems to constitute a mountain-knot, from which ridges and rivers run out in all directions, is called Omerkuntuk. The most considerable of these rivers is the Nerbudda, which runs westward in a deep valley, overhung on the N. by the steep acclivities of the Vindhya mountains, and bounded on the S. by another range, the S. Sautpoora mountains. This valley, which is wide, except at its eastern extremity, and of considerable fertility, is considered as the boundary line between Hindostan Proper, lying N., and the Deccan, extending S. to Cape Comorin. The length of the valley, and of the river, is about 600 m. Similar is the valley in which the Tapty runs along the southern declivity of the Sautpoora mountains, parallel to the Nerbudda, but its course does not much exceed 300 m.

To the S. and S. E. of Omerkuntuk, between the lower part of the plain of the Ganges, and as far S. as the course of the river Godavery, extends a tract of country whose elevation above the sea has not been determined; but the comparatively low temperature of the air, and the healthiness of the climate, seem to indicate that it must be between 3,000 and 4,000 ft. Its surface is broken; the hills rise to 2,000 ft. above it, but they are separated from each other by wide valleys, and frequently by plains of moderate extent and indifferent fertility, except along the foot of the ridges, where the soil commonly is rich. The eastern border of this rugged table-land is formed by a chain of mountains, which does not seem to rise considerably above it, but they are so steep as to be almost impassable for horse or wheeled carriages. Their distance from the sea varies between 60 and 80 m. The narrow tract lying between them and the sea is called the Circars. It is not a level, but commonly a succession of hills and dales; though there occur some levels of considerable extent. Its soil along the sea-coast is generally sandy, but it improves gradually towards the mountains; and produces abundant crops of cotton, tobacco, and grain; including rice, when artificially irrigated.

On the mountain-knot of Omerkuntuk rises the river Mahanuddy, which traverses this broken country in an E. S. E. direction nearly in the middle. It falls into the Bay of Bengal, after a course of more than 500 m., and forms at its mouth an extensive delta.

South of the mouth of the river Tapty, and nearly in its parallel, rises suddenly from the plain a continuous mountain range called the Ghauts, extending southward as far as the river Ponany (11° S. lat.), through 10° of lat. In some parts it is 30 or even 40 m. distant from the sea; in others it constitutes its very shores. It rises abruptly with a steep ascent from the low coast, and attains a mean elevation of from 4,000 to 5,000 ft.; but some of its summits rise much higher. The highest portion are the Neilgherry hills (11° S. lat.), which are more than 9,000 ft. above the sea; the Liliandumale (12° N. lat.) is above 5,500 ft.; and the Subramuni (12° 30′) above 5,400 ft. In many points, the range sinks down to less than 2,000 ft., and over these depressions lead the *ghauts* or mountain-passes; whose name has been transferred to the range itself.

The narrow tract of country which intervenes between this range and the sea-coast is called Malabar. It is mostly occupied by the short offsets of the Ghauts, which

preserve their character of steepness, but include small valleys which display a vigorous vegetation. The narrow tract of level land along the sea, which seldom exceeds 3 m. in width, and is in general much less, is separated from the sea by low downs; this gives them the advantage of irrigation during the rainy season. The fresh water descending from the mountains has no vent, and must therefore stagnate until it evaporates: hence these tracts produce much rice, though their soil is poor, consisting chiefly of sand.

The Neilgherry hills constitute the S. extremity of the Ghauts, which are called the W. Ghauts, to distinguish them from another chain of mountains, called the E. Ghauts. The last-mentioned mountains begin on the banks of the river Cavery (11° 20′ N. lat.) and extend thence, first in a N. E. direction, as far as 13° N. lat., where, opposite the town of Madras, they turn to the N., and continue so to the banks of the river Kistna (near 17° N. lat.). Between this river and the Godavery are a range of hills, which connects them with the mountains which separate the Circars from the elevated country lying further W. The E. Ghauts do not form an uninterrupted chain, being at several places broken by the rivers which rise on the E. declivities of the W. Ghauts, and descend to the Bay of Bengal. They also do not form one mass; but are frequently divided in several ridges, by longitudinal valleys. These mountains do not rise to the elevation of the W. Ghauts; yet to the W. of Madras, the Nalla Malla mountains attain 3,000 ft. and more, and farther S. (near 12°) the Sherwabary mountains rise to 4,935 ft.

The extensive country enclosed between the two ridges of the Ghauts is an elevated table-land. Its surface extends nearly in a level, which is only here and there broken by short ridges or groups of hills, rising a few hundred ft. above it. Its elevation above the level of the sea, where it is contiguous to the W. Ghauts, varies between 2,000 and 3,000 ft., and thus it may continue to the middle of the table-land; but it sinks in approaching the E. Ghauts, where, in most places, it has barely 1,000 ft. or less of elevation. Its soil is rather fertile, and well adapted to the culture of rice, where it can be irrigated, and where not, it produces abundance of wheat and other grain. The S. part is called the table-land of Mysore, and the N. that of Balaghaut.

The Eastern Ghauts are at a distance of about 150 m. from the sea, or coast of Coromandel. The surface of the intervening country extends mostly in wide plains, which here and there are interspersed by hills of no great elevation. The soil is dry, light and sandy, but nevertheless it gives rich crops, wherever it is irrigated, which is rendered easy by the great number of rivers descending from the Western Ghauts, or originating in the Eastern Ghauts. The coast is low, sandy, and without harbours, surrounded by shoals, and exposed to a very heavy swell, which renders it extremely dangerons during the north-eastern monsoon. Europeans have, however, preferred it to other parts of India, having formed here more settlements than any where else. Three large rivers descend from the eastern declivity of the Western Ghauts through the table-land of Mysore and Balaghaut, to this coast, and fall into the Bay of Bengal. The most southerly is the Cavery, which runs about 450 miles. Farther N. is the Kistna, or Krisha, and the Godavery, the former flowing about 600 the latter 700 miles. These rivers, though in many parts very valuable for irrigating the contiguous lands, are only navigable in the low plain of the Carnatic. On the table-land they in general have little water, and where they break through the Eastern Ghauts, they are broken by numerous rapids and cataracts.

On the parallel of the embouchure of the Cavery river, (11° N. lat.), the peninsula may be traversed without passing any mountain. Here exists a great depression in the Western Ghauts, called the Gap of Coimbatore. The narrowest passage is at the fortress of Animally (77° E. long.), where the level low country between two mountain-ranges presents a valley about 12 miles wide. The elevation of the highest part of this gap is only 400 ft. above the sea level. The whole country in this district is covered with large forest-trees, especially with teak; but during the rainy season it is converted into a swamp.

To the S. of the Gap of Coimbatore the Ghauts rise again with a very abrupt ascent: they attain also a great elevation. The Permaul Peak, situated W. of Dindigul, nearly in the middle between both seas, is 7,367 ft. above the sea level, and according to the statements of the natives the mountains farther W. rise to the snow line. The chain lies here farther from the sea, leaving a low tract from 30 to 40 m. across between them, and runs S. S.W. towards Cape Comorin, terminating abruptly at a distance of about 20 En. m. from the Cape with a huge mass of granite, 2,000 feet high: a low rocky ridge extends to the Cape. The mountains are here covered with thick forests.

The country W. of these Southern Ghauts is wonderfully intersected by inlets of the sea, which often run for great length parallel to the coast, receiving the various mountain streams, and communicating with the ocean by different shallow and narrow openings. Between Cochin and Quilon these lakes form a continual series, being united to one another by short channels, and affording an easy means of communication. The low country, which extends for some miles inland from these lakes, has a good soil, and, being abundantly watered, gives very rich crops of rice and other tropical productions. Still more vigorous is the vegetation in the valleys which are enclosed by the offsets of the mountains, but they are not cultivated with equal care. The low coast is here exposed to a continual and very heavy swell from the ocean, and can only be visited by vessels during the north-east monsoon (from Oct. to May).

The plain and nearly level country, which on the E. of the Southern Ghauts extends to an average width of of between 70 and 80 m., is partly covered with extensive forests and partly with cultivated fields, yielding rich crops of rice: their irrigation is rendered easy by the numerous small rivers. Along the shores of the Gulph of Manaar and of the Palk Strait are a great number of salt swamps and lagunes, which mostly communicate with one another. Between them and the sea are sand downs, which in some places extend to several miles across. The stagnating water renders these places very unhealthy.

Deccan, being placed between two seas and the conflict of the monsoons, is always cooled by sea breezes. Its surface being formed by a series of terraces, and lying within the tropics, enjoys all the advantages of tropical countries, without partaking of their disadvantages. On the sultry coast the luxuriance of vegetation is displayed in the cocoa-palm, the mango-tree, the cinnamon-laurel, and the pine-apple; it thence passes through forests of teak-trees to the table-land of Mysore and of Balaghaut, and still higher, on the cool summit of the mountains, it offers the fruit-trees and corn-fields of Europe, flax plantations, and rich meadows.

5. *The Hindoo-Coosh.*—The N. W. extremity of the plain of the Indus is only about 300 m. distant from the plains drained by the Daria Amu, which form the southern districts of the level country that extends S. of the great depression, in which the Caspian Sea and the Lake of Aral are placed. This tract, between the S. and N. plains, is occupied by a mountain system, called the Hindoo-Coosh, which, like an isthmus, connects the great table-land of Eastern Asia with Iran, the most easterly of the table-lands of Western Asia. The whole tract is occupied by high and steep ranges, running in every direction, but the principal of them runs E. and W., and seems to be a prolongation of that high chain which is called on the great table-land of Eastern Asia, the Kuen-luen range. Many summits in this range rise far beyond the line of congelation. One of them, the Son Tchookesur, N. E. of the town of Peshawer, is at least 22,500 ft. high; but that snow-capped enormous mass, which properly is called the Hindoo-Coosh, seems to attain a much greater elevation. The valleys of this mountain region are but narrow, except that in which the river of Caubul flows, which is of considerable breadth. The mountains present mostly naked rocks on their steep declivities, but afford pasture ground where the slopes are more gentle. Some parts of them are well wooded.

Western Asia, or the countries lying west of the plain of the Indus, the Hindoo-Coosh mountains, and the plains of Bokhara, is, like Eastern Asia, an elevated table-land, but each differs considerably from the other. Whilst in Eastern Asia the table-land forms one mass, extending in all directions, that of Western Asia has nearly in its middle and in the direction of its greatest extent, from S. E. to N. W., a deep depression, which at its south-eastern extremity, where it is occupied by the Gulph of Persia, varies between 30 and 200 m. in width, but farther to the N. W. extends over the basin of the river Euphrates and the adjacent desert, so as to be from 200 to 500 m. across. The whole length of this depression, from Cape Ras el Had (Sat), the south-eastern point of Arabia, to Romkala, where the Euphrates issues from the mountains and enters the plain, does not fall short of 1,500 m. in a straight line. On the N. E. of this depression is the table-land of Iran, the mountain-region of Armenia, and the table-land of Asia Minor; the latter projects far beyond the depression. On the S. W. of it is the table-land of Arabia, which latter is connected with the table-land of Asia Minor, by the mountain-range of Soristan (Syria), whose mountains separate the north-western part of the lowlands from the Mediterranean Sea. Besides, the table-lands of Western Asia do not rise to so high an elevation as the southern portion of the table-land of Eastern Asia: they attain only the height of the northern region, but being placed farther to the S., and nearer the sea, they enjoy a better climate and are more adapted to agricultural purposes. It is also to be observed that the table-lands of Western Asia descend almost every where with a steep

descent to the adjoining plains or seas, and are not surrounded as those of Eastern Asia on all sides by lowlands.

6. *The Table-land of Iran* (Persia) extends from E. to W. from the plain of the Indus to that of the Euphrates, and from S. to N. from the Gulph of Persia to the Desht Kowar, or desert of Khiwa (38° N. lat.), and the southern shores of the Caspian Sea. The interior of this great tract of country extends in large and level plains, only in a few places broken by rocky hills, mostly unconnected with one another. The elevation of these interior districts seems rarely to exceed 5,000 ft. above the sea-level, and as rarely to descend to less than 3,000 ft. These plains are bounded on every side by a broad border of more elevated tracts, whose surface is diversified by mountain-ridges, valleys, and some table-lands of moderate extent.

The highest portion of this elevated border is at the eastern boundary of the table-land, contiguous to the plain of the Indus. From this plain the country rises in several steep ridges, running parallel to the plain, and including deep and narrow valleys. These mountains are called, S. of 29°, Hala mountains, and N. of this, Soliman mountains. The former are somewhat lower than the latter, which seem to preserve in the greatest part of their extent more than 10,000 ft. of elevation, its highest summit, the Takht Soliman (the throne of Soliman), attaining 12,836 ft. Adjacent to these parallel ridges, on the west side, are several elevated plains of moderate extent, especially the plains of Kelat (29°), Kwella (31°), and Ghizni (33° and 34° N. lat.); of which the former is elevated between 7,000 and 8,000 ft., and the latter probably more than 9,000 ft.: yet they are cultivated, especially towards the hills that surround them, and the depressions of their surface, which frequently descend some hundred feet: the higher districts afford good pasture. All these tracts are very cold, and covered by deep snow during winter.

The southern border of the table-land of Iran, extending from the plain of the Indus as far W. as the Strait of Ormus, does not rise to a great elevation. From the sea however the mountains rise rapidly, having only a narrow low stripe along the shores, but their height probably does not exceed 2,000 ft. North of this ridge is a mostly level plain, which, as it contains extensive plantations of date-trees, cannot have a great elevation; it is otherwise sterile, and has few spots which can be cultivated. North of this plain is another much more elevated chain, the Wushutee mountains, which probably attain 5,000 ft. In this part the mountainous border of the table-land is hardly 120 m. across; but towards its western extremity a mountain-group projects northward (near 60° E. long.), the Surhad mountains (cold mountains), which seem to attain a higher elevation, but have several fertile valleys towards the E. From this mountain-group issues northward a rocky ridge, which is narrow, and in general low, but has a few elevated summits. This ridge, advancing to the northern border, divides the interior plain of Iran in two parts, and forms the political boundary between Afghanistan, or East Iran, and Persia, or West Iran.

By far the greater part of the plain of East Iran is occupied by a sandy desert, which, from the Wushutee mountains, extends northward to the parallel of Ferrah, Ghirish, and Kandahar (from 27° to 32° 10′ N. lat.), nearly 400 m., and from E. to W. nearly the same distance. Its southern part, the desert of Beloochistan, is covered with fine sand, which, when moved by the wind, rises some feet above the solid surface. It is entirely uninhabited. The northern portion, the desert of Sigestan, or Seistan, has a few small oases, and considerable tracts of fertile and cultivated ground along the banks of the river Heermind, which rises on the western declivity of the Hindoo-Coosh, and runs about 500 miles. Half its course is through the desert, and it loses itself in the Lake of Zarch, about 120 m. long and 50 m. wide, but when swelled by the melting of the snow in the more elevated regions, it occupies a space more than double these dimensions. Along the northern border of the desert lies a country whose surface is partly hilly and partly undulating, but its breadth is not considerable, being between 50 and 80 m. across.

The northern border of East Iran is formed by an extensive table-land of very broken surface; the upper part extends in wide level plains, but they are frequently intersected with deep valleys. This region, the Paropamisus of the ancients, has been called by modern geographers the mountain-region of the Eimaks, and Hazareh, from the savage nations which inhabit it. It extends S. and N. about 400 m., and nearly double that extent E. and W. The ground is cultivated only in the narrow valleys, but the extensive pastures nourish large herds of cattle and sheep. On the N. it is separated from the plain of Bokhara by the Hazareh mountains.

The interior plain of West Iran is of greater extent, its length from the boundary of Afghanistan to the neighbourhood of the Caspian Sea, N. of the town of Kasbin, exceeding considerably 500 m., whilst its mean width may be 400 m., but towards the north-western extremity it narrows to 150 m. and less. Its middle is occupied by a desert, called the Salt Desert, its surface being impregnated with nitre and other salts. Towards the boundary of Afghanistan it may be 250 m. across, but farther W. its width hardly exceeds 100 m. Its length is 400 m., or nearly so. It is entirely uninhabited. Those portions of the plain which extend on both sides the desert have a broken surface, but the level plains are extensive, and the hills, though sometimes high, do not occupy a great space. These districts, far from being infertile, are frequently well cultivated and abound in pastures. In many districts fine fruits are raised plentifully: but rocky plains also occur frequently.

The northern border of West Iran seems not to exceed 100 or 120 m. in width. It is likewise composed of different ridges, which mostly run in the direction of the table-land E. and W. Though very rugged and steep, the mountains do not rise to a great elevation above the elevated plains lying southward, before they arrive at the meridian of 56° or 55°. From hence, westward, they rise higher, but their width narrows to from 60 to 80 m. This more elevated part of the chain is called the Elburz mountains, and runs parallel to the southern shores of the Caspian Sea, at an average distance of 20 m., descending to it with a descent which is extremely rapid. Its offsets, which are not less steep, though less elevated, fill up the space between the principal range and the sea, with the exception of a narrow stripe along its shores. The valleys, though not very wide, are very fertile. The mean elevation of the Elburz mountains may be 7,000 or 8,000 ft.: some summits rise higher: the highest is the Demawend, N. E. of Teheran, which exceeds 10,000 ft. above the sea.

The S.W. mountainous border of the plains of West Iran is still more distinctly marked. The mountain-tract, about 80 or 90 m. wide, extends from the Straits of Ormus along the Gulph of Persia, and farther N. along the plain of the Euphrates, to the place where the Tigris, breaking through the mountains, enters the low plains N. of the town of Mosul. This mountain-tract consists of from three to seven ridges, running parallel to each other, and separated by as many narrow longitudinal valleys, which sometimes are many days' journey in length. They are separated from the sea by a narrow low coast called the Gurmsir (warm region), and rise in the form of terraces towards the interior. The valleys in the southern portion of this region are cultivated, but N. of the parallel of 30° N. lat. they are inhabited by different tribes of Kurds, who prefer a nomadic life and the rearing of cattle. This northern range was anciently called Zagros, but is now known under the general name of mountains of Kurdistan. Their elevation has not been ascertained, but some summits rise to the snow-line.

The great commercial road which connects the western countries of Asia with India, traverses the table-land of Iran. It runs between the deserts and the northern mountain border, through the fertile and cultivated district between them, and passes from the town of Tabriz in Azerbijan through Casbin to Teheran, and thence to Nishaboor, Meshed, and Herat. Thence it declines from its eastern direction to the S. to avoid the mountain region of the Eimak and Hazareh, and leads to Kandahar, where it passes over part of the table-land of Ghizni to Caubul. It then follows the valley of the river Cabul to Peshawer and Attock, where it passes the Indus, and traversing the Penj-ab, enters the plains of the Ganges.

7. *The mountain-region of Armenia.*—The most northerly and narrow extremity of the interior plain of Iran reaches to the vicinity of the river Kizil Ozein, and N. of it extends a country filled with mountain-masses, which rises higher and higher as they proceed northward. East of Tabriz is Mount Sellevan, which attains an elevation of 12,000 or perhaps 13,000 ft. above the sea-level, and other summits seem not to be much lower. Between these mountains are numerous deep valleys, which are partly cultivated, but the inhabitants mostly depend on their herds of cattle and sheep for subsistence. A few plains lie embosomed between the mountains: the most extensive are those which are filled up by the Lakes Urmia and Van. The former is 300 m. in circumference, and its waters are salt, more salt than those of the sea, but they are perfectly clear. The Lake of Van is somewhat less in extent, and its waters are likewise salt, but not to such a degree. North-east of the Lake of Van the mountain-region attains its highest elevation in Mount Ararat, whose summit is 17,230 ft. above the sea-level, and the country which extends W. of it to the sources of the river Aras and the two upper branches of the Euphrates, the Kara-su and Murad, has at least 6,000 ft. of absolute elevation, as the town of Erzeroum is 5,500 ft. above the sea-level. Four mountain-ranges, rising from 4,000 to 5,000 ft. above their bases, run E. and W. between

39° and 41° N. lat., and the most northerly descends to the Black Sea with great steepness, and so close to its shores that no road can be made along the coast E. of Trebizond. Though the mountains occupy the greater portion of its surface, the valleys along the large rivers are so wide that they may be taken for plains, being from 10 to 15 miles across. These valleys, though cold, are mostly very fertile, and yield rich crops of corn, whilst the declivities of the mountains afford abundance of pasture. The farthest south of the above-mentioned mountain-ranges, that which, branching off from Mount Ararat, contains the sources of the Murad river, or eastern branch of the Euphrates, and which farther W. is broken through by this river, after its two upper branches have united, is to be considered as the continuation of Mount Taurus, which traverses Asia Minor. But it does not constitute the southern boundary of the mountain-region of Armenia: this is constituted by a much less elevated mountain-ridge running E. and W. between the rivers Euphrates and Tigris, about 37° 20′ N. lat., and on whose southern declivity the town of Merdin is built. After breaking through this range at Romkala, the Euphrates enters the plain; the Tigris does the same N. of Mosul.

8. *Natolia, Nadoli,* or *Asia Minor.*—This extensive peninsula is to be considered as a western continuation of the mountain-region of Armenia. It is nearly of the same breadth, and lies between the same parallels (37° and 41°); but there is doubtless some change in the direction of the mountains where both regions border on each other. From the Gulph of Iskenderoon, on the side of the Mediterranean, to the town of Trebizond on the Black Sea, the ranges run from S. W. to N. E., as is also clearly indicated by the south-western course of the Euphrates between 39° and 36° N. lat. It would therefore seem that these ranges are only a prolongation of those of Soristan, which continue southward in the same direction. The middle part of this tract, between the towns of Sivas, Malatiah, and Cæsaria (Kaïsariyyeh), seems to form a table-land of considerable elevation, as the winters are severe and snow falls abundantly; the summers are short and not warm. Probably its height above the sea is from 5,000 to 6,000 feet. Its surface is a succession of levels, divided from each other by ridges of low elevation; the plains are fertile and produce rich crops of corn. The southern border of this table-land is Mount Taurus (near 38° N. lat.), which seems to rise to a great height, and sends off some branches to the Mediterranean, among which the Alma mountains (Mons Amanni), which enclose the Gulph of Iskenderoon on the E., seem to attain the highest elevation. A northern offset of the Taurus, the Ali Tagh mountains, terminates near Cæsaria with Mount Erjish, which is always covered with snow, and probably rises to 12,000 ft. above the sea-level. The mountains extending from Sivas to Trebizond are also high, but we know very little of them.

From this eastern and much elevated border the peninsula extends nearly 500 m. westward. Along the Mediterranean as well as along the Black Sea, it is traversed by ranges of mountains. That which runs along the Mediterranean constitutes a continual range of elevated mountains, the Mons Taurus of the ancients. The average distance of the highest part of it from the sea may vary between 30 and 70 m.; but the whole tract lying between them is filled up by mountains of considerable elevation. They attain the greatest elevation on the broad peninsula between the Gulphs of Adalia and Makry (29° and 31° E. long.), where Mount Taghtalu is 7,800 ft. high. But the mountains farther inland are even in August covered with snow for a fourth part of the way down their sides, which indicates an elevation of at least 15,000 ft. above the sea-level. Farther W. the mountains rapidly decrease in height, and are only of moderate elevation where they terminate on the shores of the Ægean Sea, on both sides of the Gulph of Kos. The rocky masses of this chain press so closely on the shore of the sea, that commonly only a narrow stripe of low or hilly surface intervenes, except along the innermost part of the Gulph of Adalia, and along the N. shores of that of Iskenderoon, where low plains of moderate extent occur. In some places high mountains constitute the very shores of the sea, for many miles together.

The mountains which occur along the Black Sea do not form a continual range, being frequently broken by deep, and commonly open valleys, by which several larger or smaller rivers find their way to the sea. They therefore constitute several separated ranges, and have neither in ancient nor in modern times been designated by a general name. The several ridges which lie between these valleys run E. and W., parallel to each other, forming commonly a wider mountain border on the N. of the peninsula, than the higher chain of the Taurus on the S.; their mean breadth may be 100 m. None of their summits seem to pass the snow-line; the highest which has been measured is Damaun-Tagh, the Mons Olympus of the ancients, S. E. of Brusa, more than 9,000 ft. above the sea-level. The wide and extensive valleys which lie between the mountain-ranges of this tract contain much cultivated land, which sometimes extends, even on the gentle slopes of the mountains themselves, whose higher parts are used as pastures, whilst nearly the whole of Mount Taurus is only available for the latter purpose.

The country which lies between these two mountain-districts, and the meridians of Cæsaria (35° 30′) and Kutahiya (30° 20′) is, properly speaking, a plain whose elevation has not been determined, but it does not seem to be much above or below 2,000 ft. above the sea. Its surface is not every where level, but it exhibits extensive level plains, and the ranges of hills which occasionally occur do not occupy much space, nor are they commonly much elevated above their base. The soil is dry, but not sandy: and, along the water-courses, or where water for irrigation can be got, rather fertile; but the tracts where no water can be procured are very extensive, and serve in winter as pasture grounds to several nomadic tribes, who in summer retreat to Mount Taurus, or the high-lands E. of Cæsaria: even the fertile tracts are not cultivated, because exposed to the continual robberies of these tribes. The soil in the S. districts is strongly impregnated with nitre and other salts, and hence in these parts a considerable number of lakes occur whose waters are salt, and from which great quantities of salt are procured. These lakes have, as is commonly the case with salt-lakes, no outlet. The most important of the rivers which drain this table-land is the Kizil-ermak, which rises at a short distance E. of Sivar, and runs 200 m. westward, and afterwards nearly 300 m. N. E. and N. It is the Halys of the ancients.

The table-land seems to extend even W. of the meridian of Kutahiya, but in these parts its surface begins to be broken in hills and dales. The hills seem to increase in height, as they proceed westward, and the valleys to sink deeper, and to become wider. Both the hills and valleys continue to the shores of the Ægean Sea, which is indicated by the indented sea coast, which consists of boldly projecting promontories and deep bays between them, forming excellent harbours. This is by far the best portion of Asia Minor, the cultivated land extending over the valleys, and on the sides of the mountains, and yielding rich crops of rice, cotton, and corn, whilst the gardens produce many kinds of excellent fruits. This region is also the most populous, and contains probably more than half the population of the peninsula.

9. *Soristan,* or *Syria,* which unites the table-land of Nadoli with that of Arabia, is a country which has a very peculiar physical constitution. Two elevated ranges run from its northern extremity (37° N. lat.) through its whole length, and terminate on both sides the Gulph of Akaba (28° N. lat.), the farthest east of the two gulphs which the Red Sea forms at its northern extremity. But both mountain-ranges, with the intervening valley and the adjacent shores of the Mediterranean, occupy only a space from 60 to 70 m. across. The most easterly of the two mountain-chains lowers considerably soon after having branched off from the Alma Tagh; and in the parallel of Aleppo (36° 10′ N. lat.) it sinks down to hills of moderate elevation, nor does it rise much higher until it reaches 37° 20′, where it rises to a considerable height, probably 5,000 ft. and more: it is called Jebel Essharki, the Antilibanus of the ancients. It preserves a considerable elevation as far S. as 32° 55′, where it lowers again, but soon widens in an extensive mountain-region, called El Kura, which extends to 32° 10′. Hence it continues as a rocky ridge of moderate elevation on the eastern side of the Dead Sea, to its southern extremity E. of the Gulph of Akaba. The western chain is much higher, at least in the northern districts. As a high mountain-range, it skirts the eastern sides of the Gulph of Iskenderoon, and at some distance S. from it is broken by the river Aazzy (Orontes), but S. of that river it again rises to a considerable elevation. Its highest portion, however, is between 34° 30′ and 33° 20′: this is the famous Libanus of the ancients, its northern and more elevated portion still retaining the name of Jebel Libân: but towards the S. it is called Jebel el Drus, from its being inhabited by the Druses. The highest summits of the Jebel Libân are always covered with snow, and that which bears the name of Jebel Makmel (34° 12′) attains to 12,000 ft. above the sea. S. of 33° 20′ the mountains sink much lower, and these low ridges continue to its southern extremity, on the rocky peninsula between the Gulphs of Akaba and Suez. Near the most southerly point they terminate with the stupendous and famous mountain-mass of Mount Sinai, whose highest summit is probably more than 9,000 ft. above the sea.

The valley, which extends between the two ranges, has nowhere a great width. N. of 32° N. lat. it may vary between 8 and 20 m., but is much wider N. of 34° N. lat. than between the two ranges of the Libanus

From the southern extremity of the Dead Sea, to the Gulph of Akaba, it is reduced to a narrow, rocky, and waterless cleft in the mountains, probably not more than 1 m. or 1½ across. The northern and wider part of the valley is watered by the river Aazsy (the Orontes of the ancients); the middle and highest part, lying between the two ranges of the Libanus, by a small river, the Liettanie: this district is probably 2,000 ft. above the sea. S. of the Liettanie, the valley is watered by the Jordan, which traverses the Lake of Tiberias, and empties itself in the Dead Sea, after a course of about 100 m. The Dead Sea, called by the Arabians Bahr-el-Loot, is about 50 m. long, and nearly 15 m. broad where widest; it is remarkable for the asphalt or bitumen found on its shores, and for the remarkable events and associations connected with its history.

Between the western mountain-range and the shores of the Mediterranean, are some extensive plains, S. of 33°, where the country for many miles inland is low and sandy, but without harbours. Between 33° and 35° is the country of the ancient Phœnicians, lying between the sea and the Libanus. The whole tract from the sea to the mountains is filled with hills, and, in advancing to the shores, these hills form numerous small harbours: the country further N. is of the same description.

The southern part of the region just described is nearly a desert. S. of the Dead Sea the surface is mostly nothing but bare rocks, destitute of vegetable mould and water. It is therefore called Arabia Petrea, or Stony Arabia. N. of it is Palestine, whose plain towards the Mediterranean is nearly a desert, on account of its sandy surface: but the higher portion, between this plain and the Jordan, is rather fertile, where cultivated, though some districts have a stony soil. The valley of the Jordan is not distinguished by fertility. The country W. of the Libanus is more fertile, especially along the range, and in its small valleys, and even on its declivities; but on its side some of the valleys are sterile, and the E. declivity of Libanus is a naked rock. N. of Libanus the country improves; and is in general fertile, and partly well cultivated. E. of the mountain-region is the Syrian desert, which belongs to the great depression in the interior of Western Asia; but this desolated country does not advance to the foot of the ranges: it is divided from them by a tract of most fertile country, intermixed with sandy spots. This tract may be 50 or 60 m. across, but it becomes more sandy and sterile in advancing further E.

10. *Arabia* is a table-land of considerable elevation, but we are unable to determine the line where it begins to rise from the low plain of the Syrian desert. Probably this line is a good way S. of the caravan road leading from Damascus to Bussorah, but not far from a line drawn from the most northerly corner of the Gulph of Akaba to the mouth of the Euphrates. The table-land rises abruptly on the other three sides, at a distance of from 3 to 40 m. from the sea, except along the northern coast of the Gulph of Persia, to which it descends with a gentle declivity. The low narrow border, with which the table-land is encompassed on all sides, is called the Tehâma, and the table-land itself Nejd, or Nedjed. The rocky and uneven border, which divides the Nejd from the Tehâma, is mostly called Jebel (mountain), or Hedjaz.

The Nedjed is divided into two parts by a rocky ridge, which cuts the Tropic Circle with an angle of about 30°. It begins on the W. near 22° N. lat., and terminates near the Gulph of Persia, near 25°. This ridge, called Jebel Aared, divides the table-land into two parts, of which the southern is nearly a complete desert, and seems almost uninhabited. North of the Jebel Aared, sand also covers by far the greater part of the Nedjed, but is in numerous places interspersed with rocky tracts and some hilly grounds; where, during the rainy season, water collects and forms small streams, by which these tracts become inhabitable, and even fit for the culture of some kinds of grain; especially dhourra, a kind of millet. There occur also extensive plantations of fruit-trees, especially dates. The sandy desert which separates these inhabitable spots is also covered, after the rainy season, with grass and flowers, and the Bedouins, or wandering Arabs, find there all the year round subsistence for their horses, camels, and sheep. It has not been determined to what elevation above the sea-level any part of the Nedjed rises, but its cold climate in winter seems to indicate that it exceeds the general elevation of the table-land of Iran, though probably not that of Ghizni or Kelat.

The Hedjaz, or rocky edge of the Nedjed, is narrow N. of the Tropic, where it probably never exceeds 15, or at the utmost 20 m., except in two or three places where it is contiguous to a rocky district of the Nedjed. S. of the Tropic it considerably widens, and here its mean breadth may be about 50 m.: S. of Mekka the Tehâma and Hedjaz together extend more than 100 m. from the Red Sea. The Hedjaz resembles much the rocky tracts enclosed by the Nedjed, except that water is more abundant, and that therefore it is better adapted to agriculture. In it are extensive plantations of coffee.

The low plains of the Tehâma have a sandy soil, which it is supposed has been deposed by the sea along the foot of the great mountain-mass, by which the Hedjaz and Nedjed are supported; and it is maintained that it is still increasing in width. As it does not rain, frequently for many consecutive years, it could not be cultivated but for the watercourses, which, during the rainy season, descend from the adjacent Hedjaz. Irrigated by them, with the addition of some artificial means, these sultry dry plains yield good crops of some kinds of grain, and are rich in fruits, dates especially.

11. *The Plain of the Euphrates* comprises the whole of the great depression in the interior of Western Asia, except that portion which is occupied by the Gulph of Persia. Its northern boundary is formed by that range of mountains which, on the W. of the Tigris, begins a little above Mosul, and running westward near the towns of Merdin and Orfa, terminates on the banks of the Euphrates, near Rumkola. On the W. it is bounded by the table-land of Iran, on the E. by the mountain-region of Syria, and on the S. by the northern declivity of the Nedjed. That portion of it which lies contiguous to the Nedjed and Syria, up to the eastern banks of the Euphrates, is a complete desert, mostly covered with sand, and subject to the pestiferous blast of the *simoom* or *samiel*. It is, however, inhabited by some wandering tribes of Arabs; and through it run the roads which lead from Aleppo and Damascus to Bussorah. It is called the Syrian Desert. It spreads even beyond the Euphrates to a considerable distance from the river in its middle course, where its banks are hardly better inhabited than the desert itself. In the northern districts of the plain sand also prevails, but it is frequently interspersed by extensive tracts of rocky ground; and as these patches have commonly mould on them, they are cultivated and planted with trees. This tract, through which runs the road from Aleppo to Bagdad, extends on the banks of the Tigris to the last-mentioned place. S. of Bagdad the country between the two rivers is fertile, when irrigated, which is done by water derived from the rivers themselves, and from several canals; but those tracts, which lie to the E. and W. of these rivers, are only cultivated along their banks, sandy deserts beginning at a short distance from them. The two rivers, which water this great plain, the Euphrates and Tigris, rise nearly in the same parallel, between 38° 30′ and 39° 30′ N. lat., on the declivities of the same mountain-range in Armenia; but the Euphrates, running first W., has already had a course of 500 m. before it arrives at the parallel of the sources of the Tigris. It then by degrees turns S.E., and continues in that direction, approaching gradually nearer to that river, and unites with it about 100 m. from its mouth. The united river is called the Shat-el-Arab, and falls in the northern extremity of the Gulph of Persia.

12. *Mount Caucasus*, which at present is considered as the boundary between Asia and Europe, does not constitute a part of the table-lands and mountain-regions of Western Asia, being separated from the mountain-masses of Armenia by a kind of valley, about 100 m. across. This valley is a level plain, where it approaches the Caspian Sea, and at a distance of about 100 or 150 m. from it. Farther W. the surface of the valley is hilly, intermixed with some undulating plains, of moderate extent. It rises in higher hills, between 43° and 44° E. long., where a ridge of low mountains forms the watershed between the river Kur (the Cyrus of the ancients), and the Rioni (the Phasis of the ancients). The most westerly district of the valley, which is watered by the Rioni, is almost entirely filled with hills, the valleys and level tracts occupying only a small part of its surface.

Mount Caucasus itself rises from this valley, with a rather steep descent, and forms a continual mass of high rocks, running from E.S.E. to W.N.W., from the shores of the peninsula of Absheron, on the Caspian Sea, to the small town of Anapa on the Black Sea, a distance hardly less than 700 m. Its width does not exceed 120 m. where widest, and hardly more than 60 or 70 m. where narrowest. This mass of rocks covers 56,000 sq. m., or nearly the surface of England and Wales. Its highest summit, Mount Elbrooz, or Elborus, attains an elevation of 17,785 ft., and is situated nearly in the centre of the range. The portion of the range, which extends W. of that high pinnacle, nowhere rises to the snow-line, but several snow-peaks occur to the E. of it, among which Mount Kazbeck is 14,500 ft. high. Traces of agriculture are met with in but few of its valleys, the inhabitants living almost exclusively on the produce of their flocks. This mountain-system is remarkable for the great number of nations, belonging to different races, which inhabit its elevated valleys. At both extremities of Mount Caucasus are places, where the soil is impregnated with naphtha or bitumen, especially in the peninsula of Abcharon.

13. *The Islands of Asia.* — The *Aleutian* islands, which extend between the peninsula of Kamtchatka and the peninsula of Alashka in America, as well as the *Kurile* islands, which lie S. of Cape Lopatka, and terminate near the eastern shores of Jesso, are of volcanic origin, and in some of them are still found active volcanoes. Their soil is mostly rocky, and destitute of wood, but the most southerly islands of the last-mentioned group are cultivated on the lower grounds.

The large island, which, between 45° and 55° N. lat., extends along the coast of Manchooria, called *Sakhalien*, *Tarakai*, or *Karafto*, is very little known, except that it forms an enormous mass of rocks, which rise towards its centre probably to the height of 3,000 or 4,000 ft., and perhaps even higher. It is mostly destitute of trees, and no part of it is cultivated: its scanty population subsist on the produce of their fisheries.

The islands of *Japan*, consisting of four large (*Yeso*, *Niphon*, *Sitkokf*, and *Kioosioo*) and a considerable number of smaller ones, are also formed by immense masses of rocks, which, especially on Niphon, rise above the snow-line. In most places the steep or gentle declivities of the rocks extend to the very shores of the sea, but at others plains of considerable extent extend between them. Though the soil does not seem to be distinguished for fertility, it is rendered productive by the great care with which it is every where cultivated; corn-fields extend on the slopes of the mountains to a considerable elevation. In many districts the surface consists of lava.

The island of *Formosa*, divided from the continent by a channel about 70 or 80 m. wide, extends from N. to S. more than 200 m. Its southern extremity is a level, but not of great extent, for not far from it rises that mountain-range which traverses the island in its whole length, and which in its higher parts seems to attain an elevation of from 10,000 to 12,000 ft. above the sea. Its valleys towards the western shores, and the small level spots which occur along the sea, are fertile and well cultivated. The country E. of the range is not known.

The island of *Hainan*, near the S. coast of China, is separated from the mainland by a strait hardly more than 10 m. across. It extends from S.W. to N.E. more than 180 m.; its average width is about 100 m., or somewhat more. In its centre rises a mountain-mass to a considerable height, from which some lateral ridges branch off, but they do not reach the shores, except in some parts on the E. coast. Every where else a low flat country separates the mountain from the sea. The flat districts are either sandy, or covered with grass and without trees, like the savannah; in some places they are cultivated and fertile, as are also the valleys.

The extensive group of the Philippines, which lies between 18° 30′ and 5° 30′ N. lat., comprises more than 100 islands; of which, however, most of the smaller ones are uninhabited. Most of them are mountainous, and the smaller ones naked rocks; but the larger islands contain many plains of considerable extent, and of a very fertile soil. They are well watered — perhaps too much so: some of them are volcanic.

The *Sooloo* islands, between Magindanao and the eastern coast of Borneo, have a rocky and uneven soil, but it is very fertile, being covered with a thick vegetable mould. But the large island of Palawan, lying farther N., is a rocky mass, rising in the middle to a high range, in which some summits attain a great height. The rocks are commonly bare; in some parts the sides of the mountains are covered with trees; but agriculture is confined to a few small spots on the coast.

Borneo, the largest of the Asiatic islands, and not much inferior to France in extent, is nowhere mountainous except in the peninsula which projects N.E. from the main body of the island; and even there, as it appears, the mountains do not attain a great elevation. The remainder, which comprises at least four fifths of its whole surface, seems to be a plain, on which a few ridges occur at great distances. This plain has an alluvial soil, to a distance of several miles from the shores, and afterwards the country rises gradually, perhaps 200 or 300 ft. The whole of this plain, as far as it is known, seems to possess great fertility; and the want of culture, which every where is visible, is probably the effect of the too great abundance of water, as the island is subject to continual rains. All kinds of productions and fruits, commonly met with between the tropics, grow to perfection.

The island of *Celebes*, divided from Borneo by the Strait of Macassar, is traversed by four ranges of mountains, which, however, do not attain a great elevation, except where the four mountain-ranges and the four peninsulas, of which the island consists, meet together; in this part the mountains are of considerable height. The surface of the whole island is hilly or mountainous, the flat tracts along the coast being of small extent. Its soil is rather sandy, and not distinguished by fertility. Its produce in rice is not equal to the consumption of the inhabitants; but it produces many tropical fruits, and sago in great abundance.

The *Moluccas*, lying W. of Celebes, consist of some hundred of smaller and larger islands, divided in several groups between 5° N. lat. and 8° S. lat. They rise mostly with a steep ascent from the sea shore, but rarely to a considerable elevation. Many of them seem to owe their origin to volcanoes; and on eight still exist volcanoes, in activity. Their soil, though mostly sandy and stony, is fertile, and particularly adapted for some productions. Amboyna has large plantations of cloves, and the Banda group furnishes muscat nuts and mace. The culture of rice and other grains is very limited, as the soil seems not favourable to their growth; but this want is supplied by the extensive plantations of sago-trees.

That series of mostly considerable islands which begins on the E. with the island of Timour and terminates on the W. with that of Bali, including the islands of Rotti, Savoo, and Sandelbosh, which lie S. of the series, are called by geographers the *Lesser Sunda Islands*, to distinguish them from the group of the *Larger Sunda Islands*, comprising Borneo, Celebes, Java and Sumatra. The Lesser Sunda Islands are mountainous; and in some of them the mountains rise to 8,000 or 9,000 ft. above the sea, and probably higher. Several of them are active volcanoes, which frequently bring destruction over the islands in which they are situated. We are not well acquainted with these islands, nor with the degree of fertility they possess; but from the few indications we have received, it may be inferred that, in general, they are as far from being sterile, as from an exuberant productiveness. Many of the tropical productions grow to perfection.

Java, the most important of the islands of the Indian Ocean, is properly a continuation of the former series. It extends in length nearly 700 m., but its breadth hardly exceeds 100 m., where widest. A continuous chain of mountains runs through the island in its whole length, lowering more rapidly towards the N. than the S., where the coast is high and nearly inaccessible. Some summits of this chain rise to more than 12,000 or 13,000 ft. The highest are the Semeero and Tagal. Most of these summits are volcanoes, either extinct or still active, and their frequent eruptions have in later times laid waste several districts. The more fertile tracts lie along the northern shores, which are low, and from which a flat country extends several miles inland. Their fertility is very great, and produces rich crops of every kind of grain or roots cultivated between the tropics. But part of these flat lands are so low and so badly drained, that they are converted into swamps during the rainy season. Some tracts preserve their swampy soil all the year round; and hence arises the insalubrity of these coasts.

Sumatra, only second to Borneo in extent, is 900 m. long and from 150 to 230 m. wide. In its length it is traversed by a mountain-chain of great elevation, several of its summits exceeding 12,000 ft. of elevation: Mount Ophir exceeds even 13,000 ft. Many of these summits are volcanoes, but most of them appear to be extinct. The volcano Gunong Dempo is more than 11,000, those of Ber Api and Barawi more than 12,000 ft. high. The declivities of these mountains extend in many places to the western shores, which therefore afford several good harbours. The eastern shores are flat and sandy, and the adjacent plains extend in some places 100 m. and more inland. Some tracts of these plains are swampy, and others sterile and covered with sand. Still a great part of its surface is fertile, and affords many valuable productions. The western districts, being more uneven and consequently better drained, are more fertile and much more healthy. In the extensive woods, which cover the declivities of the mountain, the camphor-tree is frequent, and yields the best camphor. From the eastern shore extensive shoals extend far into the Straits of Malacca, and render the navigation tedious and difficult. East of this island, and towards its southern extremity, is the island of Banca, famous for its inexhaustible mines of tin.

Ceylon, divided from the peninsula of the Deccan by the Gulph of Manaar and Palk Strait, is from S. to N. 280 m. long, but its greatest breadth does not exceed 140 m. In the middle of the island, and towards its southern extremity, on both sides of 7° N. lat., is a mountain-mass, which extends over nearly an eighth part of its surface. The mean elevation of this mass may exceed 1,000 ft. above the sea, though some of its more elevated valleys rise to nearly 4,000 ft. This mountain-mass is overtopped by several high summits, among which the Adam's Peak attains 6,152 ft.; but Pedrotallagalla, the highest pinnacle, is 8,280 ft. above the sea. This mountain-region is surrounded by a hilly country, to a distance of 10 or 12 m. and more. Its mean elevation above the sea varies from 400 to 1,000 ft. This hilly region may in some degree be said to extend to the very shores of the sea in the S. districts; for the country contiguous to the coast between Batticaloa, on the E. coast, and Negumbo, on the W., is not level and undulating, and the coast itself is rather high. The northern half of the island is a level plain

and it is supposed, that even in the interior, it does not rise above 300 ft. Its coast is every where flat and sandy, and remarkable for the great number of lagunes, with which it is skirted. These lagunes increase in size during the rainy season, so as to flow into one another, affording an inland navigation for boats, in some places for 60 or 80 miles. Along the whole of the eastern coast, from Point Pedro to Dondrah Head, and hence to Negumbo, the sea is deep, and may be navigated by vessels of any burden; but the W. coast, N. of Negumbo, as far as Point Pedro, is surrounded by a shallow sea, in which only vessels of 100 tons can be used; and the common vessels employed in this trade vary between 25 and 50 tons. The fertility of the island is very great; sandy tracts indeed occur, but they are not extensive, and produce commonly good crops, when irrigated. Swamps, which in the other islands of the Indian Ocean, cover great tracts of the low country, are rare in Ceylon, and of small extent.

II: Botany of Asia. — Temperature, soil, humidity, and light are the principal agents in the geographical distribution of plants. These elements exist under greater variety in Asia than in any other region; and hence the amount and diversity of Asiatic vegetation are absolutely without a parallel. It is not alone the extent in lat. of this vast continent, though stretching from the equator to the highest N. parallels; it is not simply the different elevations of its surface, though of these the greatest and least are respectively 27,000 ft. above and 110 ft. below the level of the sea; it is not even the abundance of water in one district, and its almost total absence in another, — which will or can account for this amount and diversity. Powerful as are these causes in influencing the physical conditions of any region, one still more powerful exists in Asia; viz. the very peculiar nature of its conformation. The centre is a high table-land, varying from 6,000 to perhaps 15,000 ft. of elevation, bounded on every side by high mountains, which effectually shut it out from the sea, and on the exterior sides of which the kingdoms of Asia are arranged in every variety of inclination. The difference of aspect thus induced, still more than either lat. or elevation, serves to divide the whole continent into 5 great botanical regions, which, however subject to subdivision among themselves, are distinguished from each other by peculiarities as striking as though the Atlantic or Pacific rolled between them. N. from the great table-land, the vast country of Siberia slopes to the Arctic Ocean. The intensity and duration of the cold in this dreary region prevent the thriving of any but the most hardy plants, except in the S. districts; where, in addition to the effects of lower lat., vegetation is protected by mountain ranges, which screen it from the freezing N. E. winds. The oak and hazel are found in Daouria, on the border of the country of the Manchoos (*Gmelin, Flor. Sib.* i. 50.); but their size is diminutive, their vegetation languid; nor are they met with in any other district N. of the Altai Mountains. (*Pallas, Flor. Russ.* i. 3.) Yet the well watered lands of S. Siberia abound in thick forests, consisting of birch, willow, juniper, maple, ash, pine, alder, fir, larch, poplar, aspen, and elm trees. (*Gmelin*, i. 150—180. iii. 150.; *Pallas, Flor. Russ.*; and *Voy. en Russ., pass.*) Of fruits there are the Siberian cedar (*Pinus cembra*), the nut of which is an article of commerce; 2 or 3 species of raspberries, blackberries, and other bramble fruit; a species of cherry (*Prunus fruticosus*), from which is distilled a wine; bilberries, whortleberries, and the Siberian apricot. Gmelin (iii. 173.) gives a list of 4 species of currants; and Pallas (*Flor. Russ.* i. 20—23.) one of 5 species of pears; but the fruit of these is valueless, with the exception of one species of currant, which is confined to the banks of the Argoon, a tributary of the Saghalien, in the S. E. corner of Daouria. During the short but powerful summer, the Siberian soil is covered with flowering and aromatic plants in immense profusion. (*Gmelin* and *Pallas, passim.* See also *Georgi's Phys. Geog.* vol. iii.) But these, as well as the timber, gradually diminish towards the N.; till above the 60th parallel scarcely any thing remains but the hardy beech and a few of the more vigorous lichens and mosses. Gmelin remarks (*Preface*, xliii.), that vegetation undergoes a marked change E. of the Yenisei; and, as it is a well-known fact that temperature decreases towards the E., it is not surprising that this should be the case; but the unproductive nature of the soil seems to have been overrated; for, in 1830, an agricultural society was founded at St. Peter and St. Paul, in Kamtchatka, from whose paper (of Nov. 20. 1830) it appears that the return of wheat, raised in that district, was 13½ for 1, of rye 21 for 1; and that the cultivation of buckwheat, Himalaya barley, and other grains had proved equally successful. The potatoe, cabbage, onion, beetroot, chicory, and melon had also thriven; and though the cucumber had failed, its failure was owing not to the impracticability of the soil, but to the bines having been destroyed by rot.

The second botanical kingdom of Asia is contained in the great central table-land itself. This is unquestionably the highest and most extensive plateau in the world, having for its bearers the mountains of Altai and Yablonoi to the N.; the Manchoorian mountains E.; the Himalayas and the mountains of China to the S.; and on the W. the Beloi Tagh, the Elburz, and the Persian mountains. Lying at a great though not equal elevation, bounded and intersected by lofty mountain ranges, and without a single natural outlet to the ocean, the climate, soil, hydrography, and general physical features of this vast region (occupying more than 2-5ths of Asia), are all of a very peculiar kind. The characteristics of the first are dryness and coldness; the second consists of a dry sand, sometimes broken by patches of verdure, at others stretching out into immense deserts, like that of Gobi or Shamo; and the water system consists of lakes without outlets, the final recipients of many rivers, some of them very respectable for length and magnitude. Many of the streams are, however, absorbed in the sandy soil. From these circumstances it may be reasonably imagined that the vegetation is also peculiar; but unfortunately little is known upon this subject, and the investigations of Rubruquis, Marco Polo, and others in the 13th century, and of the Jesuit missionaries in the 17th, were till very lately the only sources from which knowledge could be gained; and though Lord Macartney (*Embassy to China*) and Timkouski (*Voyage à Peking à travers la Mongolie*) afford more recent, they scarcely afford more extensive, information concerning a region which is still, in a great degree, a *terra incognita* to science. Wood of all kinds is extremely scarce in these high and consequently bleak regions; so scarce that the nomadic inhabitants use the dung of their cattle for fuel (*Du Halde*, iv. 18.), and similar materials not unfrequently serve for the groundwork of their gilded idols. (*Marco Paulo*, lib. i. c. 49.) On the S. slopes of the table-land are found oaks, aspens, elms, hazels, and walnut trees; but all, even on the immediate confines of China, diminished to mere shrubs; while on the high lands and N. slopes of the same frontier the only wood consists of some wretched thorny brambles. (*Lord Macartney*, ii. 200.) This remarkable absence of timber throughout so great an extent of country is owing, probably (even more than to the nature of the soil), to violent and cold tornadoes, which are extremely frequent, especially during the summer.* (*Carpin*, cap. xvi. art. 1.) In the N. parts of Mongolia the timber approaches in character to that of S. Siberia, but is still very inferior both in kind and quantity. (*Timkouski*, i. 44. ii. 290. &c.) Considering the vast number of beasts that traverse these plains (see *Zoology*), there must be, notwithstanding the extensive deserts, a great variety of grazing herbs and grasses; but except in the E. (*Timkouski*, ii. 229.) agriculture is not practised, and the vegetable food of man unknown. The natives live exclusively on flesh and milk (*Carpin*, c. xxvi art. 4.; *Rubruquis*, cap. v.; *M. Paulo*, liv. i. cap. 57. &c.); and when questioned as to why they so totally neglect the earth, their reply is, that "God made herbs for beasts, but the flesh of beasts for men." (*Du Halde*, iv. 32.) Timkouski saw in the N. parts of this region red currants, peaches, hemp, and flax, all growing wild. (ii. 290.) There is also here a very remarkable fungus, called, from its resemblance to the animal, the Tartar lamb; and there can be little doubt but that the flowering and aromatic plants of this region are numerous and peculiar.

The E. slope of the table-land, comprising the basin of the Saghalien (or Amoor) and other great rivers which flow into the Pacific Ocean, forms the third great kingdom of Asiatic botany; and is, in every respect, strongly contrasted with its immediate neighbour. Here are immense forests; so extensive that it required 9 days to traverse one of them, and so thick that it was necessary to fell several trees in order to take an observation of the sun's meridian. (*Du Halde*, iv. 7.) The cold is very severe to as low a lat. as 43°; and consequently the trees are of the kind usually met with in the more N. parallels of Europe. Of fruits, this district possesses apples, pears, nuts, chestnuts, and filberts, all in great abundance; and of grain, wheat, oats, and millet, are produced, together with a peculiar species, unknown in Europe, called *mai-se-mi*, partaking of the nature of both wheat and rice. Rice itself is grown, though in no great quantities; and, in fact, from the little that is known of this great region, it would appear that there is no large district of the earth better adapted for the residence of an agricultural population. Its capabilities are, however, wholly neglected by the Chinese government; while the natives of the soil (the Manchoos), though they do not, like the great majority of the Mongols, utterly neglect the pursuits of husbandry, yet, in general, they may be described as a race of hunters, resembling strongly in habits and manners the aboriginal inhabitants of America. The cotton shrub grows here;

* Timkouski (i. 609.) remarks the frequency of these winds, but denies their violence.

but owing to the low temperature (the lat. being remembered), it does not thrive well. Esculent roots of very many kinds are, however, plentiful; and the medicinal herb ginseng is found nowhere but in this country and N. America. The Chinese believe this plant to be an infallible remedy for every disease, mental and bodily; and it is sought amid incredible fatigues and dangers by parties who are marshalled under officers, almost in the manner of an army. Ginseng has no reputation with European physicians; but this may arise from their having used the American species only, which the Chinese declare to be greatly inferior to their own. One attempt was made, by the Jesuit Lourino, to raise the Asiatic plant in Europe; but the result was a complete failure, the seeds, though sown under circumstances of soil and temperature precisely resembling those natural to them, refusing to germinate. Some parts of the soil are swampy and full of wild desert marshes; but sand is almost unknown, and, in general, the ground bears a strong resemblance to the best parts of N. Europe in the thickness and vivid colouring of its grasses, and the variety of its flowering plants. It is a curious fact that the roses, lilies, and other flowers of this part of Asia, excel greatly those of Europe in beauty, but are very deficient in point of odour. The pines and oaks that clothe the mountains are of great size, but diminish rapidly as they approach the sea. (*Du Halde*, iv. 5—7. &c.; *La Perouse*, iii. 16, 17. 21. 75. &c.; *Muller*, *Bot. Dict.* iii. art. *Panax*.)

The three foregoing districts of Asia, though very extensive, are each remarkably uniform in their productions and general physical appearance. It is true they are comparatively little known, and future discoveries may, it is not unlikely, bring to light many and important deviations from this uniformity; but, at present, wherever surveyed, the variations in different parts of each have been of degree, not of kind; and whatever peculiarity of vegetation marks any one part of any region, appears to mark the whole, and to distinguish it from both its adjoining neighbours. The case is different on the W. slope of the great table-land, the fourth botanical kingdom of Asia. This region is uniform as far W. as the deep depression of the Caspian Sea, but beyond this all becomes changed: the face of the country, the direction of the rivers, the natural productions, every thing constituting the physical geography of a region, puts on a new appearance; and the Caspian seems placed by the hand of nature on the precise spot where it could most decidedly mark the limits of two large districts possessing few things in common. The great plain of Tartary (the only true W. slope from the table-land) is very productive in its E. parts; that is, in the countries of Kokhan, Badakshan, and Bokhara. The description of Ebn Haukel, an Arab geographer, is particularly vivid. "The cultivated plains of Bokhara," he says, "extend above 12 farsang by 12 farsang; and the Soghd (the *Sogdiana* of ancient geography) is for 8 days' journey full of gardens and orchards; corn fields and running streams, reservoirs and fountains, both on the right hand and the left." (*Ouseley's Trans.*, 237.) Corn of all kinds and rice are here very prolific; so much so, that, according to Hadgi Khalfa, a field of one or two *dunen* (acres) is amply sufficient to support a family. (*D'Herbelot*, 207.) Of fruit, grapes, melons, pears, apples, figs, &c., grow to such perfection, and in such abundance, that they are exported to Persia, and even to the more fertile region of Hindostan. The pasture grounds are also extremely luxuriant; but it may be gathered that timber is scarce, and the whole country deteriorates as it recedes W. and N. The soil of the Kirghiz country N. of the Sihon is chiefly of a saline character; but the pasturage must still be good, since immense numbers of animals, wild and domestic, are fed in the extensive steppes. Trees of the hardier kinds, larch, beech, and firs, appear also on the banks of the rivers. (*Pallas*, i. 618. 630. &c.) In journeying W. the country for a time exhibits the extremes of richness and desolation (*Burnes*, i, 332.); the former, however, gradually diminishing till the whole soil becomes a wretched unproductive sand, except in the immediate neighbourhood of rivers. (*Burnes*, ii. 1. 10. 16. 46. &c.) There is not, perhaps, in the world a more sterile district than that between the Aral and Caspian Seas. In the countries W. of the latter, a strange contrast is presented: on the N. slopes of the Caucasus, indeed, a constantly deteriorating country terminates at last in the wretched wastes of Astrakhan; but even here corn fields and rich pasture grounds dispute the soil with the tamarisk, the camel's thorn, the absynthium, and other desert plants: while on the E., W., and S. declivities of the same mountains, magnificent forests of cedars, cypresses, savins, red junipers, beeches, oaks, &c., flourish in great luxuriance; while of fruit, the soil boasts the almond, fig, peach, quince, apricot, pear, date, jujube, olive, &c.; and of flowers, the rhododendron, Christ's thorn, ponticum, asolia pontica, laurel, seringa, jessamine, lily, Caucasian rose, and a whole host of others. The bread corns and the most useful roots are also produced in most parts of this mountainous country. (*Guldenstadt*, *Com. Petrop.* xx. 49. 435. 483. &c.; *Pallas*, ditto, 1779, ii. 274.) With regard to Asia Minor, Mesopotamia, and Syria, it is impossible to give within any reasonable limits the slightest sketch of their numerous productions; though the two last be partially desert, and their deserts be of the most sterile character, yet their fertile spots are scarcely inferior to any on the earth's surface. Rice and barley yield a return of 100 fold; the cotton shrub flourishes; and indigo, sugar, and tobacco are among the useful productions. Lemons, oranges, tamarinds, apricots, dates, and grapes are a very few among the fruits of these regions; which produce in great abundance also nearly all the esculent roots, pulses, and grains. Wood is extremely scarce in Mesopotamia (the date palm is the only tree known there); but in Syria the majestic cedar of Lebanon maintains the fame which it acquired in the days of Jewish greatness; while majestic oaks, cypresses, planes, sycamores, savins, olives, mulberry trees, pistachios, junipers, and fig trees clothe the sides of the Anatolian and Syrian mountains, and spread their arms over plains where flourish almost every species of flowering roots and shrubs. Among the oaks of Asia Minor is the *Quercus infectoria*, the gall of which is an important article in dyeing. The pistachio is rarely found beyond the neighbourhood of Aleppo. (*Volney*, ii. *passim*; *Niebuhr*, *Voy. en Ar.* ii. 250. &c.: *Olivier*, iv. 26. 184. 197. &c.; *Leake*, *passim*; also in *Walpole*, ii. 202. &c.; *Belon*, 79. 165. 166. &c.)

The fifth kingdom of Asiatic botany remains to be noticed. It comprises the S. slope of the central plateau, and contains the three great peninsulas of Arabia, India, and Malaya, together with the extensive territory of China proper, and the S. shore of Persia and Beloochistan.* The W. part of this region is badly watered (see Arabia, Laristan, Beloochistan); and consequently consists chiefly of deserts, or of pasture grounds depending on rain for their fertility. The vicinities of the few and small rivers are, however, even here, crowded with vegetation; and from the Indus eastward (where the hydrography is on a scale of the most profuse luxuriance) a district is comprised unequalled, for the abundance and variety of its productions, by any other part of the world. Nearly every plant of the E. continent is indigenous, or can be raised in some part of S. Asia. The following is an imperfect list of the trees alone; and these are not, in general, confined to particular localities, but, in most cases, spread over the whole region: —

Forest Trees.

Bamboo.	Fir.	Oak.	Ponna.
Birch.	Larch.	Palm.	Poplar.
Chestnut.	Mangrove.	Pine.	Teak.
Cypress.	Myrtle.	Plantain.	Willow.

Hard Woods.

Aloes.	Ebony.	Lingoa.	Sandal-wood.
Eagle-wood.	Iron-wood.	Rose-wood.	

Fruits.

Almond.	Citron.	Jamboo.	Peach.
Apple.	Cocoa.	Lemon.	Pear.
Apricot.	Coffee.	Lime.	Plum.
Banana.	Date.	Mangostein.	Pomegranate.
Banyan.	Dunon.	Mulberry.	Shaddock.
Betel.	Fig.	Olive.	Tamarind.
Bignonia.	Guana.	Orange.	Vine.
Bread Fruit.	Guava.	Pandanus.	Walnut.
Cashew.			

Spice Trees.

Camphor.	Cinnamon.	Mace.
Cassia.	Clove.	Nutmeg.

Many of these trees yield gums, resins, odoriferous blossoms, or are otherwise useful beyond the generality of their class. There are also several species which cannot be conveniently classed under either of the four foregoing heads; as the champaka, malor, and tanjang, flower-bearing trees; the touki, from the bark of which the Asiatics manufacture a paper; the faang, which yields a rich red dye; the tallow tree, which exudes an unctuous matter, whence its name; the upas, the most deadly of vegetable poisons; the cotton tree; and, above all, the tea plant.

The other kinds of vegetation are not less abundant. Grain of every kind, including 27 species of rice; and some varieties of dhourrah and barley, scarcely known in other

* The high lands of Persia and Caubul, though directly S. of W. Tartary, appear to belong naturally to the second kingdom; that, namely, of the central table-land. They have the same physical conformation, the same peculiar hydrography and vegetation, and are connected with the Mongolian plateau by a mountain *isthmus* (the Hindoo Koosh), which divides the low levels of Bokhara and the Punjaub, in a manner very similar to that in which the Atlantic and Pacific Oceans are divided by the mountain ridge of Panama. (See Mongolia, Caubul, India, &c.)

regions, is grown with little labour to the cultivator, the richness of the earth in many places precluding the necessity and even the possibility of using manure, though 2 crops are produced annually. The leguminous plants now common in Europe came, in most instances, originally from S. Asia; but, in addition to the peas, beans, lentils, &c., there are here a whole host which have never found their way W., as the lotus, moong, murhus, tanna, tour, toll, &c. (See INDIA, CHINA, &c.) A root called katchill supplies the place of the American potatoe; but this last root, as well as the yam, is abundantly cultivated, especially in China and the E. peninsula of India. This is also the native home of the arrow-root, galanga, jalap, sarsaparilla, datura, anise, opium, and other drugs. The fields abound in flax, hemp, tobacco (a native plant, according to *Lord Macartney*, ii. 174.), together with flowers of every kind and dye; though it is remarkable that those of powerful scent are confined to the N. parts. The fine rose that yields the attar is rarely found S. of 26°, and is chiefly limited to the plains of the Upper Ganges and Penjab. (See LUCKNOW and CASHMERE.) Dye plants are very numerous; the sugar cane grows luxuriantly; and among the numerous strongly odoriferous gums, attempts have been made to identify the spikenard, bdellium, malabathrum, sepachra, and other precious ointments of the ancients, but without much success. (*Du Halde*, i. 14. &c., ii. 64. &c.; *Lord Macartney*, ii. 43. 165. &c.; *Crawford, Emb. to Siam, passim; Russell's Int. to Roxburgh's Plants of Coromandel*, 1—66.; *Finlayson's Mission to Siam, passim; Asiatic Researches*, and *Journal of Asiat. Soc. Beng. passim.*)

With regard to the number of species in each order of plants, it is to be remarked that Humboldt gives the Cryptogamæ as 1-15th of the whole vegetation for equinoxial plains; as 1-5th for equinoxial mountains; as ⅛ (on an average) for the regions of the temperate zone; and as the *sole* vegetation of mountains in polar lands. The same authority gives the Monocotyledons (of the old continent) as 1-5th for the torrid, 1-4th for the temperate, and 1-3d (on an average) for the frigid zone. (*Dict. des Sci. Nat.* xviii. 436.) De Candolle, following Persoon, makes the proportions somewhat different; namely (for the whole world), Cryp. 1-6th, Monoc. 1-6th, Dico. 4-6ths of the whole vegetation. (*Idem*, 395.) From these data, and the various authorities cited throughout this article, the following approximative Table of Asiatic Botany is deduced. But it is necessary to observe, that the absolute number of known species is very uncertain. In 1806, there were but 27,000; Brown's splendid addition of Australian plants increased the amount by nearly 1-6th, and since that time discovery has been rapidly at work. It may, however, be doubted whether the very love of science has not betrayed some of its followers into too nice distinctions. De Candolle thinks that Persoon's 27,000 species should be increased to 56,000, and that the number of plants yet unknown or unclassified would swell the list to 110,000 or 120,000 (*Dict. Sci. Nat.* xviii. 420.) Lindley is more moderate; he makes the gross number of species 86,000. (*Intro. to Botany*, 504.) That assigned in the table (44,000), is from Humboldt's data.

Orders.	Whole No. of known species.	Whole No. of known Asiatic species.	No. of species common to Asia and other regions.	No. of species peculiar to Asia.
Cryptogamous	6,000	1,837	900	937
Monocotyledonous -	6,909	1,950	875	1,075
Dicotyledonous	31,091	4,050	2,169	1,881
Total -	44,000	7,837	3,944	3,894

III. ZOOLOGY OF ASIA. — Asia is the native home of all the more useful species of animals; with the exception, perhaps, of the sheep. From some district or other of this continent came, originally, the ox, horse, camel, goat, ass, together with the whole race of domestic poultry; except the turkey, which is a denizen of the New Continent. Utility may, indeed, be regarded as the leading characteristic of Asiatic Zoology; for though its carnivorous mammalia be numerous as compared with the whole number of species, the majority are not merely harmless to man, but in a considerable degree useful to him, consisting of several kinds of seals, and the fur-bearing quadrupeds of the north. Birds of prey are remarkably scarce, when the great extent of mountain land is taken into consideration; and of those existences which have little but peculiar or anomalous formation to distinguish them Asia is all but destitute. The truth of these remarks will be at once evident from the following tables, constructed, with as much care as possible, from *Cuvier's Règne Animal; Shaw's Zoology; Pennant's Hist. of Quad., Genera of Birds, Arctic Zoology*, and *View of Hindoostan; Du Halde's China; La Perouse's Voyages; Georgi's Geog., Phys. and Nat.*, vi. and vii.; *Pallas's Spicilegia Zoologica, Travels, &c.; Gmelin's Reise der Sibierin, Reise der Russland, &c. &c.*

Mammalia.

Orders.	Whole No. of known species.	Whole No. of Asiatic species.	No. of species common to Asia and other regions.	No. of species peculiar to Asia.
Quadrumana	155	44	11	33
Cheiroptera -	136	60	15	45
Insectivora -	27	9	5	4
Carnivora -	177	77	42	35
Marsupialia -	59	2	0	2
Rodentia -	192	73	20	53
Edentata -	21	1	0	1
Pachydermata	24	11	4	7
Ruminantia	142	57	16	41
Cetacea -	27	14	11	3
Total -	960	348	124	224

Aves (Birds).

Orders.	Whole No. of known species.	Whole No. of known Asiatic species.	Species common to Asia and other regions.	Species peculiar to Asia.
Accipitres - -	251	49	13	36
Dentirostres	1,873	247	77	170
Fissirostres -	127	30	14	16
Conirostres -	440	87	42	45
Tenuirostres -	311	49	17	32
Syndactyles -	116	53	18	35
Scansores -	481	101	25	76
Gallinæ -	344	136	20	116
Grallæ -	331	107	49	58
Palmipedes -	289	78	41	37
Total -	3,963	937	316	621

Reptilia.

Orders.	Whole No. of known genera.	Whole No. of known Asiatic genera.	Genera common to Asia and other regions.	Genera peculiar to Asia.
Chelonia -	60	16	9	7
Sauria - -	117	38	12	26
Ophidians -	93	20	4	16
Batrachians -	35	2 ?	2 ?	0 ?
Total	305	76	27	49

The Reptilia are divided into *genera*, not *species*, according to the text of Cuvier. The list of species is sufficiently long in some other authors; but the French naturalist warns his readers to receive them with extreme caution, as they abound in repetitions of the same species under different names and in transpositions of synonyms (ix. 263.). Similar considerations forbid the attempt to classify the Pisces, Insecta, or Mollusca, a tabular arrangement of which classes would not, indeed, possess much interest.

A glance at these tables will exhibit, at one view, the zoological riches of Asia. Of the class Mammalia, more than a third of the whole number of species are found upon its soil, and nearly a fourth (accurately 7-30ths) are peculiar to it. In the more important species, these proportions are considerably increased. The Asiatic Ruminantia are nearly two fifths of the whole; those peculiar to the soil, nearly two sevenths. The Pachydermata are in a still higher ratio; the Rodentia and Carnivora, which two orders include the more useful fur-bearing animals, in nearly the same. The strong-winged Cheiroptera are indeed almost equally numerous; but the Quadrumana are reduced to little more than a fourth of the whole, and the anomalous orders of Marsupialia and Edentata can scarcely be said to have a place in Asiatic mammalogy. But it is not either the actual or relative amount of animal life that constitutes the chief advantage of Asia in this respect; among its numerous species of the more important orders it reckons the most important of the species themselves. Of these, the first in rank, with reference to its locality, is, perhaps, the camel. Other animals are more generally useful to man; but without this patient and intelligent servant, a large, perhaps the largest, part of Asia would be no home for the human race. Expressly formed for existence in a desert, it has been domesticated for a period long antecedent to all history, and for countless generations has been the means of connecting districts otherwise effectually separated, and has formed the principal wealth of

their inhabitants. The camel has this peculiarity to distinguish it from other domestic animals, that it does not follow its master in his wanderings. The other tribes, with one exception (the rein deer), have become denizens of every corner of the earth, however remote from their native home. It seems, indeed, a law, that the lower animals which herd with man shall follow him, with these two exceptions; but these, though fully as subservient and as useful as any others, have never become naturalized beyond the limits where they were first found. The attempts to establish the camel in Greece, Italy, Jamaica, and Barbadoes, have been signal and decisive failures. Yet the animal can support as great a range of climate as most others, being found in N. Tartary, as far as the shores of Lake Baikal (from 50° to 55° N. lat.), where the average temperature is scarcely, if at all, higher than that of Lapland, and where the winter's cold is frightfully severe, as well as under the scorching sun of intertropical countries. It is true, in these N. lands, its size becomes diminutive; but it preserves its hardy character, multiplies abundantly, and forms the wealth of the Burat and Mongol not less than of the Arab and Syrian. (*Marco Paulo*, ii. 159.; *Pallas's Spic. Zool.*, xi. 4.; *Du Halde*, iii. 483.; *Pennant's Hist. Quad.*, 120.; *Cuv.*, iv. 8. &c.)

Of the ox tribe, the most useful species are Asiatic, as the common ox (Bos Taurus of Linnæus), the aurochs, the buffalo, and the yaik. Their varieties are almost numberless; but those enumerated are considered by Cuvier (iv. 28—31.) as the only distinct species, with the exception of those not found in Asia, such as the American bison, the Cape buffalo of Africa, and the musk ox. The most striking distinction between the Asiatic and non-Asiatic species of this genus, is, that the former only are domesticated, or appear capable of domestication. In all other respects they exhibit a general resemblance, amounting almost to identity; their gregarious habits, their food, their internal formation, all are extremely similar; nay, they breed promiscuously, and the issue of a cross are prolific: but while the Asiatic species have been domesticated as long as society has existed, the others remain to this day as untamed as when they first took possession of their native woods. A natural result of this distinction has been the distribution of the common ox from the Arctic circle to New Zealand, and round the whole world in longitude; while the American and African species appear incapable of multiplying beyond their original limits. The buffaloes, or humped, are less dispersed than the straight-backed species, and appear to be less capable of supporting a low temperature; but wherever the climate is at all adapted to them, they, like the others, are found to be naturalized, and thus they have spread from India (apparently their native home) over N. Africa and S. Europe; nor can there exist any reasonable doubt but that they would equally thrive in Australia, Polynesia, and Temperate America, were the experiment tried.

The auroch and the yaik (or grunting ox) are only partially reclaimed, if, indeed, the former do not still exist in all his original wildness; but Cuvier seems to be mistaken when he limits his locality to the Carpathians and Caucasus. Tartarian travellers describe the breed as existing in a state of semi-domestication on the Plateau of Mongolia, and breeding with the domestic cow, thereby producing a cross much stronger and more fit for labour than the common ox. (*Marco Paulo*, ch. lxii. p. 52.; *Rubriquis*, ch. xviii. p. 57.) This creature is, next to the rhinoceros, the largest of land animals. It has been by some naturalists supposed to be the original specimen of the domestic variety; but Cuvier has pointed out some osteological differences, which plainly refer it to a different species. It has also the grunting voice of the yaik, which might by possibility be regarded as a small variety of the aurochs, were it not for the tail, which in the yaik resembles that of the horse, and is the same which composes the standards of the Turkish officers. The number of cattle fed by the wandering Tartar nations seems almost incredible: every fertile plain, and some plains that are almost sterile, are covered by them; and some one or other of the species thrive upon the sides and even upon the summits of the wintry mountains of Tibet and Daouria. The domestic ox was unknown in Kamtchatka till introduced there by the Russians; and the musk ox appears to be unknown in Arctic Asia, though remains of the creature have been occasionally found, especially a scull (not fossil), near the mouth of the Obi, in the latter end of the last century. (*Pallas's Nov. Com. Pet.* xvii. 601.; *Gmelin's N. C. P.* v. 331, &c.; *Du Halde*, iv. *passim*, &c.; *Timkowski*, ii. 299, &c.; *Pennant's Hist. Quad.*, i. 15—27.; *Cuvier*, iv. 28—31.) Nor are sheep less plentiful in Asia than cattle, though it may perhaps be doubted whether this useful creature be not one of the very few treasures which belong originally to Europe; the derivation of the various woolly species is doubtful between the Moufion of Italy and the Argali of Siberia. (*Cuvier*, iv. 27.) There is no race of animals, except the dog, so subject to vary; and amid the multitude of breeds now distributed all over the world, it is probably useless to attempt to identify the original. The Argali, found in Siberia and all the mountainous regions of Asia, is, like the European varieties, distinguished by its short tail. Like other arctic animals, the Argali, also, changes its covering, which is rather fur than wool in the winter. In India the sheep are long-tailed; and in Persia, Tartary, China, and Syria, the tail is not only elongated, but loaded with a mass of fat. The power which this creature possesses to accommodate itself to climate seems almost unlimited: in the hot plains of Asia its covering becomes coarse and scanty; while in the frozen regions of Tibet its thick wool has an under lining of the finest kind, forming an important article in manufactures and commerce. (*Pallas's Spic. Zool.*, xi. 3—31. 58—82.; *Gmelin's Reise durch Rupland*, iii. 486. *et seq.*; *Reise durch Siberien*, i. 168. *et seq.*; *Du Halde*, iv. *pass.*; *Pennant*, 33—46.; *Cuvier*, iv. 25—28.) There can be little doubt but that the *Capra Egagrus* of Gmelin, the *Ibex Alpium Sibericarum* of Pallas, is the original stock whence all the varieties of the goat tribe are derived. It herds in the mountains of Taurus, Tartary, Persia, China, E. Siberia, and Kamtchatka. It inhabits indifferently all climates, but assumes a very different appearance under different circumstances. The Angora goat of Cappadocia, the Tibet goat, the Bousquetin or Ibex, and the domestic species, *Capra Hircus*, are the most noted varieties. The animal is in a very high degree serviceable to man, especially to the nomadic races of its native country; its coat furnishing an important article of manufacture, its skin the leather of which the wanderer makes his water-bottles and packing-cases: its milk is salutary in many complaints; and, when young, it affords a nutritious and agreeable food. (*Pallas's Spic. Zool.*, xi. 31—57.; *Pennant's Hist. Quad.*, 49—56.; *Cuvier*, iv. 23—25.) The rein deer is common to the arctic regions of Asia, Europe, and America. It runs wild in the snowy wastes of Siberia and Kamtchatka, but is likewise domesticated, and supplies to the tenants of these dreary regions the place of the horse, cow, sheep, goat, and camel. It is not, however, so extensively domesticated in N. Asia as in Lapland. (*Hist. Kamtchatka*, 228.; *Bell's Travels*, i. 213.; *Cuvier*, iv. 9.) The elk is also common to Asia, Europe, and America; it inhabits the cold regions of Siberia and Mongolia, where, though undomesticated, it is highly useful as an animal of chase, the flesh furnishing a good species of food, the tongue especially being esteemed a great delicacy; and the skin making a buff leather, capable, according to good authority, of turning a musket ball (*Pennant's Hist. Quad.*, i. 93—98.; *Cuvier*, iv. 9.).

Of other ruminants, Asia has the musk, apparently throughout its whole extent from Siberia to Ceylon (*N. C. Pet.*, iv. 393.; *Pallas's Spic. Zool.* xiii. 3—45.; *Bell's Travels*, i. 249., ii. 88.; *Du Halde*, i. 63. 324; *Hamilton's Voy. E. Ind.*, i. 261.), together with a great variety of deers and antelopes; it is, however, among these, with the llamas of America and the giraffe of Africa, unquestionably the least useful of the order, that the only Ruminantia wanting in Asia will be found. (*Pallas's Spic. Zool.*, i. 3—44., xii. 3—71.; *Cuvier*, iv. 5. 8—23.)

In its Pachydermatous tribes, Asia exhibits the same superiority over other regions: the elephant, horse, ass, and hog, have their home in its forests and plains; while the animals of this order absent from its soil are the useless hippopotamus, and the inferior species Tapir, Peccory, Phaco, Damans, &c. The elephant rarely propagates in a domestic state; but it is an error to suppose that this never takes place: the tame females sometimes escape to the woods in breeding-time, and, after coupling with the wild males, return to the herd, or are brought back, and produce their young at the end of 9 months. The locality of the Asiatic elephant is limited: it does not appear to be found W. of India or N. of the Himalaya mountains; but in India, Malaya, Birmah, China, and the islands of the Eastern Archipelago, it is numerous both in its wild and domesticated state; and, besides its utility as a beast of burden, and the value of its tusks as an article of commerce, it is held in great regard for many occult medicinal properties supposed to exist in its flesh, eyes, bones, &c. (*Du Halde*, iii. 480.; *Crawfurd's Em. Si.*, 429. 479.; *Pennant's Hist. Quad.*, 150—161.; *Cuvier*, iii. 326.) The horse and ass are both indigenous to Asia, and originally peculiar to that continent. Species of the same genus are indeed found in Africa, but, as in other similar cases, they seem incapable of domestication; while the Asiatic species, especially the Arabian variety, have supplied the whole world with two of the most useful quadrupeds that wait on man. The Dziggetai, a creature intermediate in size between the horse and ass, still runs wild in the Asiatic deserts; like his congeners, he is gregarious, and, like them too, his numbers seem almost unlimited; a similar remark will apply to the Koulan or wild ass. (*Du Halde*, ii. 17. 50., iv. 30. *et passim*; *Bell*, i. 225.; *Pennant*, 1—13.; *Cuvier*, iii. 340—343.) The hog is so spread over the world that it is difficult to assign its original locality; the fact that the species *now* peculiar are all

African and undomesticated, seems, however, to imply that the original stock of the domestic swine is Asiatic; the more especially as the creature is dispersed over every part of the continent from its S. extremity to the N. shores of Lake Baikal in 55° N. lat. (*Bell's Travels*, i. 279.; *Pallas's Spic. Zool.*, ii. 3.; *Crawfurd's Embassy to Siam*, 479.; *Cuvier*, 330—332.) Two species of the rhinoceros are peculiar to Asia and the Indian islands, the latter distinguished by a double horn like the *Rh. Africanus*. (*Du Halde*, i. 239.; *Crawfurd*, 429. 478.; *Pennant's Hist. Quad.*, i. 138.; *Cuvier*, iii. 336.) Tropical Asia possesses most of the fiercer Carnivora: lions, tigers, leopards, black panthers, ounces, and tiger cats, of the cat genus; wolves, hyenas, and jackals, of the dog tribe. They do not, however, all exist in equal numbers, nor equally in every part. The lion is becoming very rare in Asia; he is now found only in the deserts of Mesopotamia, Persia, and India, and perhaps in some parts of China. He does not appear to be heard of in Siam or Cochin China; to which districts, the wolf, hyena, and jackal, as far as is yet known, are also strangers. (*Crawfurd's Em. Si.*, 428.) The manul, lynx, and wild cat are most numerous in temperate Asia; the first extending, however, almost to the arctic regions, the second stretching into both the frigid and torrid zones; but the last (scarcely ever met with beyond the Caucasian Mountains) appears originally to have been European. The dog and fox, in all their varieties, are common to all the continent; the former, in some parts (as Kamtchatka), supplying the place of a beast of burden, in others being used as an article of food. The Angora and Persian cat are celebrated for the fineness of their fur, as is also the blue cat of Siberia; though the last, if not the two former, seem to have been derived, as well as the domestic cat, from Europe. Formidable as are some of these creatures, they constitute a considerable portion of the wealth of the countries which they inhabit; their skins form an important article of commerce; and what is remarkable, the *bones* of the tiger are supposed, like those of the elephant, to possess medicinal qualities, and are highly valued accordingly. (*Crawfurd's Em. Si.*, 428.) The smaller Carnivora are also found in great abundance, as the different species of martens, among which the ermine and sable stand pre-eminent for their fur; the Asiatic civets, which possess the odour, though not the glandular excretion of the African species; and the Mangousti or ichneumon, which attacks and destroys the most dangerous serpents: bears, badgers, gluttons, sea otters, morses, walrusses, seals, complete the list of Asiatic Carnivora. (*Bell*, i. 100., ii. 81. *et pass.*; *Du Halde, pass.*; *Pallas's Spic. Zool.*, xiv. 29. *et seq.*; *Crawfurd's Em. Si.*, 428. 478.; *Pennant's View of Hindoostan*, i. 193—197. *et pass.*; *Hist. Quad.*, 219—300.; *Cuvier*, ii. 23—61.) The Insectivora and Rodentia consist, the first, of hedgehogs, shrew-mice, and moles in their various species; the latter, of the more important animals, beavers, hares, rabbits, lemmings, marmots, squirrels, dormice, porcupines, jerboas, rats, mice, &c. Of these, the Asiatic species are very numerous, and they form, with the smaller Carnivora, the principal wealth of Siberia, since among them are found many that afford some of the richest furs, especially in the winter, when the covering of the creatures becomes thicker in texture, finer in quality, and generally superior in colour. Animals of this order do not appear to be numerous in S. Asia. Crawfurd remarks, that the hare and rabbit are unknown in the lower parts of Siam. The porcupines, on the other hand, are not found in the N. regions; and the jerboas seem peculiar to the wide open plains. (*Gmelin's Reise durch Sib., passim*; *Crawfurd's Em. Si.*, 428. 478.; *Cuvier*, iii. 63—95.; *Pennant's Hist. Quad.*, 368—469.; *Pallas's Stin., pass.*; *Com. Pet., pass.*) Of the Quadrumana the principal Asiatic species are the orang outang and the gibbons; the smaller apes and monkeys are numerous in the S., especially in India, China, and the islands. As a general fact, the Asiatic monkeys are inferior in structure and intelligence to the African, but much superior to those of America. (*Cuvier*, i. 207—220.) The Cheiroptera are numerous all over the world; they seem, however, to abound more in the Asiatic islands than on the continent: some of them, as the Roussette of the Sunda and Molucca isles, are accounted delicate food; others, as the Timor bat, rather large and destructive; but the more powerful and mischievous species of this order appear to be American, and strangers to the soil of Asia. (*Pallas's Spic. Zool.*, iii. 3—35.; *Pennant's Hist. Quad.*, 548—563.; *Cuvier*, ii. 4—15.) The Marsupialia of this continent consist of but 2 species of Phalangers, *Phal. Rufus* and *Phal. Chrysorrhos*. (*Buffon*, xiii. 10.; *Temminck*, 12.) They are peculiar to the Moluccas, Java, and Celebes, exhibiting thus, at the extremity of Asia, the first indication of the anomalous Mammalogy of Australia. The single Edentata is the short-tailed Manis, which, like the last order, is peculiar to the Indian islands, except some few instances found in Bengal. (*Pennant*, 505.) Marsden (*Sumatra*, p. 18.) seems to imply that the African long-tailed Manis is sometimes found in that island. Lastly, the Cetacea consists of dolphins, manati, porpoises, sea unicorns, and whales, of which some one or other species is found on all the coasts of Asia. (*Pennant*, 536—545.; *Cuvier*, iv. 430—443.)

A single glance at the table will exhibit the fact, that the Ornithology of Asia is less rich than its Mammalogy; the former containing considerably less than a fourth of all the known species, while the latter possesses very much more than one third: the continent maintaining, however, in this respect, as in the former, the peculiar character of utility in its possessions; for of the Gallinæ, unquestionably the most useful order to man, the number of its species is between a third and a half of the whole, and fully a third of the whole is peculiar to its soil. Among these species are reckoned the original stocks of all the domestic poultry, except the turkey, which is American; the pheasants, partridges, peacocks, and whole flights of pigeons. The species in which it is most deficient are among the grouse, quails, and pintados; but there is scarcely a genus of this useful order of which Asia is wholly destitute. Of other birds, the order Grallæ furnishes the ostrich, crane, heron, stork, bittern, plover, spoonbill, ibis, &c., many of which are highly useful in tropical climates as destroyers of serpents and other dangerous reptiles: the Scansores consist of those climbing birds, parrots, parroquets, woodpeckers, macaws, &c., the beautiful plumage of which add so much to the splendour of equinoxial forests; and the Syndactyles (the smaller order of bright plumages), of bee-eaters, kingfishers, and hornbills; which last, from their greater size and peculiar habits, have far less resemblance to the other genera of the order than they have to each other. In all these orders, it will be observed that Asia is relatively rich, except with regard to the Scansores, which, having little but their beauty to recommend them, are the least useful of any yet enumerated. In the others the proportion becomes still lower; and though among the palmipede, petrels, albatrosses, pelicans, gulls, geese, ducks, swans, &c., Asia has some which the natives have turned to account, as the great cormorant, taught by the Chinese to fish: yet the great home of this order of birds lies in other quarters; America, Africa, Australia, and even Europe. Of birds of prey (Accipitres) Asia has its eagles, vultures, falcons, owls, and hawks; but here, again, the number of species is comparatively small, though in some cases the individuals of a species are very numerous: and in the 4 remaining orders, consisting of all the tribes of graniverous and insectiverous birds, shrikes, pies, thrushes, crows, swallows, goat-suckers, birds of Paradise, and the various songsters, the Asiatic woods are very poor; their chief tenants, of these orders, being generally such as are distinguished for beauty of plumage. Song birds are very scarce. (*Pallas's Spic. Zool.*, iv., v., vi.; *Gmelin*, i. 48—76. 152., ii. 163—193., iii. 86—106. 249—251. 364. 378, &c.; *Pennant's Gen. Birds, pass.*; *Crawfurd's Em. Si.*, 432—480.; *Du Halde, pass.*; *Cuvier*, vi.—viii.)

In Reptiles, as in birds, Asia is less abundant than some other regions. Of the Chelonia it has several fine species of edible turtle, and others that are chiefly valuable for their shell. Lizards are very numerous in individuals, though not in genera, and probably not in species; among these, 2 or 3 kinds of alligators are very destructive in the rivers of India. Of serpents, the most dangerous is the Indian Python (improperly confounded with the boa constrictor); but there are many others highly venomous, and some which are extremely beautiful and quite harmless. Frogs and toads abound in all marshy places, but it seems doubtful whether they be of many different kinds. (*Pallas's Spic. Zool.*, vii.; *Gmelin*, iii. 58, &c.; *Pennant's View of Hindoostan, pass.*; *Du Halde, passim*; *Cuvier*, ix.)

The seas and rivers appear to possess every known kind of fish, and some that are peculiar (*Pallas*, vii. viii.): and the insect tribe are numerous throughout the whole continent; the ravages of some, as the locust, in Arabia, Syria, and Persia, being far more dreaded than the attacks of carnivorous animals. (*Pallas*, ix. x.; *Cuvier*, ix. xiv. xv.)

IV. Races of People and Languages.— Not only the majority of the human race in number, but also the greatest variety in the species, is found within the limits of Asia. The subject, as well from extent, nature, and, in many respects, deficiency of information, is one of great difficulty; but we shall, nevertheless, offer some observations upon it, founded on the physical form, intellectual character, and genius of the language of the races. Some of these families or races consist of many millions, while others embrace but a few thousands; a circumstance which has

naturally arisen from the favourable or unfavourable position in which they have been located on their original distribution, and perhaps also from an intrinsic difference in the capacity of the races themselves,—causes which have multiplied some into numerous, powerful, and civilised nations, and kept others in the condition of petty and rude tribes. We begin our classification from the west.

The first family, which may be called the *Caucasian*, comprises all the aboriginal inhabitants of the mountainous region lying between the Black Sea and the Caspian, from about the 38th to the 42d degree of N. lat. It includes the mountaineers of the valleys of the Caucasus — such as the Abasians, Ossetes or Iron, Lesghians, and Kisti; and, in the more level country, or wider valleys lying to the south of the Caucasus, the Georgians, Mingrelians, and Armenians. In personal form this family may be described as European, but in mind Asiatic. The face is of an oval form; the forehead high, and expanded; the nose elevated, with a slight convexity; the mouth small; the lips moderate in size, and the chin full and round. The complexion is fair, without, however, the clearness of the European; the eyes are generally dark, and the hair of the head rarely of any other colour than black, or brown: and, indeed, it may here be once for all observed, that the great variety in the colour of this tegument. with which we are familiar, is confined to Europe, — black being nearly universal in every other part of the world. The hair on other parts of the body, with the Caucasian family, is abundant; the stature is nearly equal to that of the European, and the form of the whole person is symmetrical and handsome. The personal beauty of this race has induced Blumenbach and some other eminent naturalists, to assume its form as the type of the European, or first of the *five* great varieties into which they have, fancifully enough, divided the whole of mankind. They have even gone the length of fancying that the entire European family sprung from the mountaineers of the Caucasus; an hypothesis for which it is almost unnecessary to say that there is not a tittle of historical, philological, or any other evidence. Notwithstanding undoubted advantages of physical form, no nation of this family has ever made any eminent advance in civilisation. Many of them, with a country not unlike Switzerland, though with a better soil and climate, are, at the present day, not more advanced in civilisation than the Swiss or Germans, as described by Cæsar near 2000 years ago. The Armenians alone of the whole family have made a considerable, though far from a distinguished progress. About five centuries before the Christian æra they constituted an extensive society, and even exercised some influence in the political events of Western Asia: they alone of all the nations and tribes composing the Caucasian family, possess a national literature; but even their invention of alphabetic writing dates only from A. D. 406, for previously to that time they used the characters of the Greeks and Persians: always acting a secondary and subordinate part, they have been successively subdued by Persians, Greeks, Romans, Arabs, Turks, and Russians. Language, it should here be observed, considered as the test of unity of race, must be viewed, as respects its genius and the general character of its formation, and not by the identity or dissimilarity of individual words, which, through the accidents of conquest, settlement, religion, and commerce, often find their way even into languages of very opposite genius. As happens in rude and early stages of society, in every part of the world without exception, the number of languages spoken by the nations of the *Caucasian* family is very great. The tribes inhabiting the valleys and mountains of the Caucasus are said to speak seven distinct languages, besides many dialects; a number, however, which falls far short of those spoken within a similar extent of territory in many parts of America as well as of the islands of the Indian Ocean. The only language of the Caucasian family, of which Europeans have any critical knowledge, is the Armenian, of which we possess dictionaries and grammars: those who have examined it consider it as quite peculiar and distinct from all other known tongues: it abounds in rough consonants: its structure is exceedingly complex: it has an article at the end of nouns: its nouns and adjectives have each ten inflections in the singular and as many in the plural, and the verb is agreeably varied by corresponding changes. All this, which applies, however, more especially to the ancient language, implies that the Armenian is a primitive and original tongue, which, like the Sanscrit, Arabic, Greek, the Latin generally, and for the most part the German, has suffered little change in structure from the commixture of foreign nations and their languages. The modern Armenian has been simplified in its grammatical structure by the mixture of the people with foreign nations, especially the Persians and Turks; changes similar to, but not so extensive as, the Latin language, has undergone in its conversion into Italian, Spanish, French, &c. &c. From this account of the Armenian language, taken together with differences in the physical form and mental qualities of this people, it is not improbable but that, on a better acquaintance with both, it may be found a family entitled to be classed separately from the inhabitants of the Caucasus.

The second Asiatic family has been called by philologists and naturalists the *Arabian* or Semitic, the last name being given to it on the hypothesis that the whole is derived from the eldest son of Noah: it embraces all the aboriginal inhabitants of Palestine, Asia Minor, Syria, and Arabia from the east coast of the Mediterranean and Red Sea, up to the west coast of the Persian Gulph. A brunette complexion; more or less intense black or dark brown eyes; long, lank, and almost always black crinal hair; bushy large beards, generally black, but sometimes of a reddish tinge; an oval face in bold and distinct relief, with a nose always elevated, and not unfrequently aquiline; high forehead, and stature nearly of the European mean; — are among the most prominent characteristics of this family, as we occasionally see it exhibited in one of its handsomest forms, the Jewish: we say occasionally, for the differences existing between the Jews settled in different foreign nations show plainly enough, that they have more or less mixed their blood with the people among whom they have established themselves; for they are fair in Germany, brown in Poland, and nearly black in India. Compared with the European, the whole form of the Arabian is spare, slender, and of small bulk and weight. The wrists are comparatively slender, the hand small, and the fibre throughout soft and flexible. These last characters, however, it is to be observed, belong more or less to the inhabitants of all warm climates. In intellectual power and energy, the Arabian family stands un-

questionably next to the European. The history, institutions, and literature of the Jews; the early civilisation of the Assyrians; the commerce and colonies of the Phœnicians; and the conquests, settlements, and literature of the Arabs; attest the truth of this assertion. The influence of the Hebrew institutions has pervaded the whole civilised world; while the language, literature, and religion of the Arabs may be traced from the western confines of Spain and Africa to the Philippine Islands over 130 deg. of longitude, and from the tropic of Capricorn to Tartary, over 70 deg. of latitude. Among a race, so energetic, civilization made a very early progress, and it is not improbable but that 4000 years ago the Phœnicians, Hebrews, Assyrians, and Arabs had already domesticated many of the useful animals, cultivated many valuable plants, and were acquainted with the useful and even precious metals. Several of the nations of this family had invented alphabetic writing, in times far beyond the memory of history, — as the Jews, Phœnicians, Arabians, and Assyrians. Their literature has always been of a more vigorous and masculine character than that of any other Asiatic people, but still has never evinced the taste, sound judgment, and practical common sense displayed by several European nations in various periods of the history of the latter people. For the fine arts, if we except architecture, they have not exhibited a glimmering of capacity. There is one circumstance, however, in the position of this family, which has always proved a serious obstacle to its advancement in civilisation — the unsuitableness of much of the country which it inhabits for any other than the pastoral state of society, owing to its heat, drought, and sterility. Hence the people are necessarily divided into two opposite and hostile classes, a roving and predatory, and a settled and industrious one; the first incapable of advancing itself, and sure to oppose the advancement of the last. In the genius and structure of the languages of the Arabian family, there is a common affinity. They possess sounds which no other people can articulate: while their neighbours have sounds in their languages, which they, in their turn, cannot imitate. In grammatical structure they resemble each other, and the words of their language are readily interchanged, while they rarely, if ever, admit those of neighbouring tongues. While the dead language of India, for example, has found its way into the ultra-Gangetic languages as far even as New Guinea,—into many of the Mongolic and Turkish languages, and into most of the ancient and modern languages of Europe: it has made no impression whatever on the languages of the Arabian stock of nations; so that in the Arabic, the most copious of them all, Sir William Jones could point out but a single word (one of the many synonymes of the *sun*), as common to it and the Sanscrit.

Between the Caspian Sea and Persian Gulph, to the west,— the ocean to the south, India to the east, and an indefinite line to the north, extending at least to 50° of latitude, — there are several races which have much resemblance, but which differ enough in person, mind, and language, to entitle us to class them as different families. The first of these, beginning in a westerly direction, is the *Persian*. With this family, the complexion is fair without transparency; there is little or no colour in the cheek. The hair is long, straight, and almost always jet black; the beard abundant, bushy, generally black, but now and then with a reddish tinge. The features, according to European notions, are regular and handsome, though generally minute; and, beard excepted, rather effeminate. The stature is little short of the European standard; and the body gracefully but not strongly formed, being altogether less robust than that of the European. The present inhabitants of Persia are much mixed with the blood of Arabian and Turkish settlers; and probably, therefore, the purest sample of the genuine Persian will be found in the emigrants established in foreign countries, called Parsees, who scrupulously abstain from intermixture with the people among whom they are settled. The Persians were among the earliest civilised nations of mankind; but their progress has not been in proportion to their precocity. It is probable that a thousand years before the Christian æra they had tamed the useful animals, cultivated useful plants, were acquainted with the useful metals, and constituted a considerable community. That they had at an early period a written language, and that it was national, is attested by the existence of the undecyphered and peculiar characters, of unquestionable antiquity, still found at Persepolis and other places. When the Arabs conquered and converted the Persians about the middle of the seventh century they found three spoken languages; viz. the Parsee, Pehlvi, and Deri, besides the Zend, or language dedicated to religion. The first of these has superseded the rest, which are known only by name, and become the universal language of the country. The modern Persian is of simple structure, like English, French, or Italian, that is, it possesses few or no inflections, prepositions governing its cases, and auxiliary verbs its times and modes. Many of its roots can be readily traced to the Sanscrit. Since the Arabian conquest, it has received a large accession of Arabic words easily discovered by their exotic sounds, for there are many sounds peculiar to one people which are foreign to the utterance of the other. The entire literature of the Persians dates since the Arabic conquest, and, therefore, the earliest portion is little more than 1000 years old, while the great bulk belongs to the 15th and 16th centuries. It consists of songs of considerable merit; of poetical romances, wild and extravagant; of loose chronicles without date, founded on tradition alone; and of treatises on morals written to little purpose for one of the most sensual, mendacious, and astute, but also one of the cleverest people of Asia. For the history of the Persians, for 1500 years before the Arabian conquest, we possess, from themselves, nothing but incongruous fable; and were it not for the occasional, but always unsatisfactory information respecting them communicated by the Greeks first, and then by the Romans, we should have known as little of their early history as we do of that of the Hindoos or Mexicans. The intellectual capacity of the race may be judged of by such facts as these. For 2500 years they have certainly not been wholly stationary; but, measured by the European standard, they have made surprisingly little progress. It is just, however, to state, that the physical geography of their country is not propitious to civilisation. Much of it, like Arabia, is, from drought and sterility, unfit for agriculture, and fitted only for occasional pasture; and hence, at all times, the roving and predatory habits of a large portion of its popualtion; while the same character belonging also, and even to a greater degree, to the countries which surround it, the progress of industry and civilisation has not only been obstructed by internal, but also by

foreign enemies. The Persian family has never been distinguished for the bold spirit of enterprise, or capacity for social improvement, which has characterised the Arabian.

It made some early but temporary conquests in northern India, and often mastered some of the Turkish tribes; but it never made any settlement in Europe, and a few petty Greek states were sufficient to baffle it in its utmost strength. Very different from the Jews and Arabs, such has always been the mediocrity of talent among the Persians, that they have no name which belongs to history, except that of Zoroaster.

The next family of nations we shall notice is the *Turkish*, or Scythian. The extensive country in which this family is found, or rather its parent country, lies between the 35th and 60th degrees of latitude from the Hindoo Koosh, a continuation of the Himalaya, to the Belur Tagh, a spur of the Altai chain, and from the Caspian Sea to the western boundary of the desert of Cobi, where they are mixed with the Mongols. The family consists of the Scythians and Parthians of antiquity, and of the true Tartars and Turcomans, with the eastern and western Turks, of the moderns — the Usbecks, Tadjuks, and Kirgis. To the west it has, probably, been considerably intermixed with Greek and Caucasian blood; to the east and north, with Mongolian; and to the south, with Persian. The complexion of this race is a light brunette. The hair generally black, strong, and long; but when the complexion is remarkable for its fairness, it is brown, and also of a more delicate texture. The colour of the eye is a light brown, but the form somewhat contracted. The skull is remarkably globular, the forehead broad, and the space between the brows very prominent; the proportions of the face are symmetrical; the upper jaw-bone is singularly short, and the basis of the lower jaw is also remarkable for its shortness: the facial line is nearly vertical. The body is stout, but the stature shorter than the European. Abstracting hair, complexion, colour, form of the eye, and stature, with the intellectual powers as they have been hitherto developed, the Turk is in fact a European. The Turkish language is one of simple structure, like the Persian or English; and its sounds, but not its words, resemble those of the former. By the conquests of the various nations who speak it, it has been spread from Greece to Chinese Tartary, and from Persia to the 55th degree of latitude; but, unlike the Arabic or Persian, the more cultivated languages of a more civilised people, it has nowhere superseded or much mixed itself up with the dialects of the conquered people; nor in the government of a conquered people have the Turks ever exhibited the skill or tolerance of the Arabs or Mongols. What has been said of the character of the physical geography of the native country of the Arabian and Persian families, is still more applicable to the Turkish. A great portion of it is mere desert, without trees and water; and the cultivable portions are, in fact, but so many patches along the banks of rivers, thinly scattered over a boundless waste of sand. In these patches industry and civilisation spring up, surrounded in every direction by robbers and freebooters, and liable at every moment to be crushed by them. To use the words of Mr. Erskine, in his excellent introduction to the "Translation of the Memoirs of the Emperor Baber," we find among the Turkish family "tribes who, down to the present day, wander over their extensive regions, as their forefathers did, little, if at all, more refined than they appear to have been at the dawn of history. Their flocks are still their wealth, — their camp their city; and the same government exists of separate chiefs, who are not much exalted in luxury or information above the commonest of their subjects around them." This cause, however, it must be admitted, will not account for the backward civilisation of the Osmanli Turks, who have now for centuries occupied some of the finest regions of Asia and Europe, and been during the same time in close communication with the civilised nations of the latter.

That some nations of the true Turkish family were early civilised to a certain extent, is not to be doubted. It was among them that Alexander, more than three centuries before the Christian æra, found the principal materials for founding his Greek kingdom of Bactria; and from time immemorial the horse, ox, camel and dromedary, ass, hog, and dog, have probably been domesticated among them. The ass and hog are still wild animals of the country; and in early times it is not improbable the others were so also.

The Turkish or Scythian family seems to have invented no written character, and hence, in early times, to have had no literature. The evidence of some Bactrian coins shows, that when the more improved nations among them had advanced to writing, they used the alphabetic characters of ancient Persia. The best and most fertile portion of the country of the Turks was conquered by the Arabs towards the end of the 7th century, and this was followed by the adoption of the Arabian alphabet, and by much of the language and literature both of the Arabs and Persians. It was not, however, until the establishment of a firm government under Jaghatai, the son of Jengis Khan, that the Turkish language — from him called the Jaghatai Turkish — began to assume the character of a polished speech, and to be written; and its most flourishing period is comprised in the short time from the death of Timur, in 1405, to the death of Baber, in 1530. Its literature consists chiefly of popular poetry, in the form of odes or songs: but there are also some prose compositions, religious and chronological; of which last the most remarkable are the memoirs of Timur and Baber. Turkish composition, as described by Mr. Erskine, is less inflated and rhetorical than Persian and Arabian; and, judging by his own translation of the last of the works above mentioned, we should be disposed to consider Turkish literature as making a nearer approach, on the whole, to the good sense, taste, and simplicity of that of Europe, than any other literature of Asia.

In the south-eastern angle of what is commonly considered Persia, and now known by the name of Beloochistan, we have three races of men, distinct in person and language, living in the same country, and dwelling together, yet not often intermixing their blood, — a circumstance which will frequently be found in what remains of our review of the "Races of Asia." These are the Belochees, Brahoos, and Dehwars. The *Belochees* have dark-brown complexions, black hair, long visages, elevated features, with tall and active, but not robust persons. Half their language is a corrupted Persian; and, although the nature of the other be not ascertained, we have little doubt of its being primitive and original. The *Brahoos* are described by Pottinger as wholly unlike the Belochees. They have, according to him, thick short bones, — are, in fact, a squab instead of a tall people. Their faces are round, and their features flat, instead of being raised. Frequently they have brown hair and beard, from which we should

augur a fairer complexion than is ascribed to them. The language of the Brahoos is entirely different from that of the Belochees; it contains no Persian, and but a few words of the neighbouring dialects of the Hindoos. The *Dehwars* have blunt features, high cheek-bones, bluff cheeks, and short persons, being altogether rather an ill-favoured race. What is remarkable of them is, that their language is that of a people to whom they bear no personal resemblance, the Persians. This, it may here be observed, is also the case with the Tadjuks of the Turkish family, who claim to be the aboriginal inhabitants of Bokhara; but then the Tadjuks, though stout in stature, have elevated features, and a ruddy brown complexion. None of these nations have a national literature, or seem ever to have invented an alphabet. Even in the time of Alexander, although rude barbarians, they were far from being savages; for they had oxen, goats, and camels, and cultivated wheat, barley, and several fruits.

To the N. of the races now described, and in the N. E. angle of Persia in its widest acceptation, we find another race, the *Afghan*. This family is marked by a brown complexion, black hair, sometimes brown, a profusion of beard of the same colour, high noses, high cheek-bones, long faces, a robust person, and a stature short of the European. Their language, called Pushtoo, is peculiar; it contains few Sanscrit words, but a good many of those of the popular language of Upper India, or Hindi: the sounds are rough, and some of the consonants are such as have no existence in the Persian. They have no alphabet, and use the Arabic characters; and their national literature, consisting chiefly of lyrics, is said not to be above 150 years old. In the time of Alexander these people were rude barbarians, but not savages, for they had towns, and corn, and cattle, and were probably on a level with the Germans and Britons in the time of Cæsar. It is only in comparatively late times that they have made any figure in history. Conquered by a Turkish nation, in the last years of the 10th century, they continued, by their military enterprises and invasions, to exercise great influence over the affairs of Hindostan, and some even over the affairs of Persia, down to the middle of the 18th century.

Among the high mountains and narrow elevated valleys, which lie E. of the country of the Afghans, exists a people, of whom little is known beyond their names: these are the Kaffers, or infidels, so called by their Mohammedan neighbours, the Dards, Tibet-Baltai, Chitral, Hazaras, and Aimaks. These people are described as remarkable for their fairness; the possession, occasionally, of light hair and blue eyes, and great personal beauty. They speak many languages, which are absolutely unknown to Europeans. According to a most judicious writer, Mr. Erskine, they constitute "a series of nations, who appear never to have attained the arts, the ease, or the civilisation of the southern states; but who, at the same time, unlike those to the north, have, in general, settled on some particular spot, built villages and towns, and cultivated the soil." Letters seem to be unknown to these people: they cultivate small quantities of wheat and millet, but their principal wealth consists in oxen and goats. The mountain barriers which surround them have protected them from invasion; and the narrow valleys which comprise their country, divides them into numerous tribes, and hinders their civilisation. For want of a better name, this may be called the Dard family.

Proceeding eastward, we come to a great and numerous family, the *Hindoo*, spread from the 7th to the 35th degree of north latitude, and from the 68th to the 95th of east longitude. Correctly speaking, this is perhaps not one family, but an aggregate of races, bearing such a general resemblance to each other, as the European varieties do among themselves, although wider in degree. The colour is commonly black, or at least a deep brown; and hence the name of Hindoo, applied to them by their fairer Turkish and Persian invaders: for that word in the Persian language is equivalent to negro in ours. The hair is always long, coarse, and black; the beard of the same colour, and not deficient; the eye invariably black, or deep brown; the face oval, and the features well raised, symmetrical, and handsome; so far at least as the absence of colour and transparency will allow, but generally with an effeminate cast: with some defect in the lower limbs, the person is well formed. The stature is generally short of the European: the body is spare, and deficient in strength and capacity of enduring toil, if compared with the surrounding families; but the want of force is in some measure compensated by lightness, flexibility, and dexterity. Judging by the form of the skull, modern naturalists have placed the Hindoos, or still more whimsically, "the higher orders" of them, in the same class with the natives of Europe. This is but an ingenious philosophical dream; and Orme, who knew them well, and who never suspected the possibility of placing them in the same category with men of white skins, robust frames, and high enterprise, justly describes them as having been "from the earliest ages of antiquity a people who have no resemblance, either in figure or manners, with any of the nations contiguous to them." Their general appearance to a stranger is truly and graphically described by Mr. Ford, chaplain to the factory at Surat in the commencement of the 17th century. "A people," says he, "presented themselves to mine eyes, clothed in linen garments, somewhat low-descending; of a gesture and garb, as I may say, maidenly, and well-nigh effeminate; of a countenance shy, and somewhat estranged, yet smiling-out a glozed and bashful familiarity." Clearness and subtlety, rather than depth with vigour, characterise the intellectual capacity of the Hindoo. In practical good sense they are below the Chinese; in energy, vigour, and enterprise, below the Arabs, Persians and Turks; but they are equally astute with any of these; if, indeed, they do not, in this respect, surpass them all. They have been repeatedly, and, for so numerous a people, easily conquered; but, on their side, they have never gone abroad for conquest.

The Hindoos were probably among the earliest civilised of the families of mankind. Nearly 2,200 years ago, the Greeks found them composing communities, whose advance in the arts of life was equal to that of the Persians of the same period; and to have attained such a state, must have been the work of many previous centuries. The country they inhabit has a favourable climate, and fruitful soil, and nature presented to the exercise of their natural ingenuity many valuable products in the animal, vegetable, and mineral kingdoms, such as the useful animals, many of which are still found in a wild state in the country with several descriptions of corn, esculent roots, cotton, and silk. All the languages of the Hindoos are of simple grammatical structure, except one, the dead Sanscrit, as complex as the Greek or Arabic.

There are at least 10 alphabets, which we hold to have been each separately invented, but afterwards more or less improved by borrowing from that of the Sanscrit, the most comprehensive of them all, particularly in the adoption of its regular and almost philosophical arrangement. We know as little of the people whose language the Sanscrit was, as we should of the Romans, if we had no writings in Latin but what were mythological, dramatic, or poetical, that is, if we had neither Roman history nor Roman monuments. We should in that case point to the modern language which approached the nearest to the Latin, and certainly decide upon Italy as the native country of the Romans. The Hindoo language which contains the greatest amount of Sanscrit, is the modern Hindi; and at the close of the 10th century, on the first Mohammedan invasion, a language was spoken at Delhi and its vicinity as nearly resembling it as Saxon does English. The nation then, of which the Sanscrit was the vernacular language, probably had for its primitive seat the countries on both banks of the Jumna, about the 28th degree of N. latitude; and this is, indeed, pointed out by many intelligent Hindoos, as the locality of the ancient people whose language and institutions have exerted so great an influence over a large portion of mankind. As we diverge from this focus, the proportion of Sanscrit found in the dialects of India, becomes less and less; and in some of the languages of the South, not more of it is to be found, nor in any other shape, than that in which we find Latin in English. Hindoo literature, notwithstanding the unquestionable antiquity of its culture, is extravagant, rhapsodical, puerile, and destitute both of instruction and amusement. In ingenuity and invention it can bear no comparison with that of the Hebrews, Arabs, or Persians; nor in common sense or authenticity, with that of the Chinese, tame and mechanical as is the latter. The authentic records of the Hindoos cannot be carried back by any ingenuity beyond eleven centuries; and even this much is the work of European antiquaries. That period then carries Hindoo chronology only to the middle ages of European history, — corresponds with the Arab conquest of Spain, — and is long posterior to the conquest of England by the Saxons, of France by the Franks, and of Italy by the Lombards. The capacity of the Hindoo family, then, tried by the test of literature, stands lower than that of any of its considerable neighbours. We have already said, that though in colour, form, and feature, a common character belongs to the whole Hindoo family, there exist also striking differences. We shall endeavour to point out a few of these. Beginning from the north-west, we have the *Cashmerians*, with genuine Hindoo features, brunette complexions, and rather stouter and taller persons than the inhabitants of the plains of Hindostan. They have a peculiar language and a national alphabet. South of these, and on the plain, we have the more numerous and powerful nation of the *Seiks*, or *Singhs*. "The features of the whole nation," says Burnes, the traveller who has most recently described them, "are now as distinct from those of their neighbours as the Indian and Chinese. With an extreme regularity of physiognomy, and elongation of countenance, they may be readily distinguished from the other tribes." We shall add to this, that they are a tall, active, handsome race; of very dark complexions, but of features strongly marked by the genuine Hindoo character. Their language is a dialect of the Hindi. Between the 25th and 33d degree of N. latitude, and the 72d and 87th degree of E. longitude, exists a numerous people, now, for the most part, speaking also a dialect of the Hindi, which has, in consequence of the Mohammedan conquest, received a large admixture of Persian, just as the Saxon did of French, and almost at the same period. They are generally taller and fairer than the people of the south, and of all the Hindoo family may be considered as having made the greatest advance in civilisation. Their language is written in the same alphabet as that used in writing Sanscrit. Throughout India they are known as *Hindostanees*. To the east of these, and inhabiting the extreme eastern portion of the country of the Hindoos, we have the Bengallee race, distinguished by dark complexions, low stature, and feeble and slender frames beyond any other Hindoo people. The Bengallees have a peculiar language of simple structure, without inflexions, the parts of speech being formed by the use of particles and auxiliaries. Sanscrit words and roots enter largely into its composition; and it has been alleged of this, and of most of the other vernacular languages of India, that Sanscrit forms their groundwork, as Latin forms that of Italian, French, and Spanish. This, however, is unquestionably not true of all the languages of the south of India; and we think it very doubtful if it be so even of that of the Bengallees. This last has a peculiar alphabet, formed on the principle of the Dewanagari, an alphabet of the Sanscrit, the basis most probably having been a rude character of indigenous invention. There is no Bengallee literature which goes further back than the 15th century, and very little even of this. The Bengallees, like the other Hindoos, have no history; and the first authentic date in their chronology, is the year 1203, when the country was invaded and conquered by the Turko-Persians, from Delhi. Upon the whole, the Bengallee race may be looked upon as the least energetic, physically and mentally, of the Hindoo family. Even within Hindostan, they have never ventured, as conquerors or emigrants, beyond the limits of their own country; while, from the earliest ages, they seem to have been invaded and subdued by all their western neighbours. In flexibility and acuteness, however, they equal any other Hindoos; and in our times, have exhibited a capacity for improvement beyond them all.

To the south of the Bengallees, we find the *Oria* race, or Orias, taller and stronger than the former, but still with slight and delicate figures. This race is remarkable, even among Hindoos, for a lack of spirit and intelligence. They have a peculiar language, of simple structure, into the composition of which both Sanscrit and Bengallee enter largely, but its foundation is most probably native. The alphabet is founded on the principle of the Dewanagari, and the literature consists almost wholly of translations and paraphrases from the Sanscrit.

To the south of the Nerbudda river, and of the Orias, we have the populous race of the *Telingas*, stouter, taller, and much more energetic. These are the people called by the earlier European settlers Gentoos. Their language is inharmonious, harsh, not very simple in its structure, and is written in a peculiar national alphabet; following, however, as all the Indian alphabets do, the convenient classification of the Dewanagari. Sanscrit is found in it, as

French exists in English, Greek in Latin, Arabic in Persian, or Turkish and Persian in the dialects of northern India. Their national literature is considerable in extent, but that is all that can be safely asserted of it. This is the only Hindoo race which has exhibited any thing like a spirit of foreign enterprise; and that enterprise is wholly mercantile. Their commerce and their migrations at present extend, and seem from very remote periods to have extended, to the islands of the Indian Ocean, and the countries between India and China. The spread of the language and institutions of the Hindoos, indeed, to these countries, was most probably in a great measure their work.

To the west of the Telingas, we find the *Mahratta* race, smaller in person; indeed rather of meagre and diminutive form, of ungraceful make, and rapacious aspect. The Mahratta language is peculiar; and in reference to the admixture of Sanscrit found in it, the same observations apply as to the Telinga. Among all the considerable races of the Hindoo family, the Mahratta had long been the most backward in civilization, and were totally unknown to history as a people, until the beginning of last century, when they suddenly entered on a career of conquest, which threatened, and, but for the presence of a European power, would probably have effected, the subjugation of all India.

The south of India, beyond the Telinga and Mahratta races, is occupied by four distinct races, differing in language, and, in some respects, in physical form and intellectual character; but as in both respects it would be difficult to define the differences with precision, we shall content ourselves with their simple enumeration. Of all of them it may be observed, that they are (the inhabitants of Bengal excepted) of shorter stature, but of more compact form, than the Hindoos of the north. They are commonly also of darker complexions. Immediately to the east of the Telinga, is the *Tamul* race, occupying the whole of the level country below and to the east of the great table land of the peninsula as far as Cape Comorin. South of the river Krishna, and occupying the table-land, is the *Karnata* or Cannarese race, considerably civilised, and wide spread in this part of India. Below the table-land, and on the western coast, we have two races, the *Malabar*, and the *Tulawa*, to the south, peculiar in their physical organisation, intellectual character, and language. Besides these well ascertained races, there are evidences of the existence of distinct races also in the peninsulas of Gujrat and Kutch, and in the territory of Sinde; in all of which there seem to have been peculiar languages, reduced at present to dialects by the admixture of conquerors and settlers from the north. Among the Hindoo races must be included the aboriginal inhabitants of Ceylon, or *Cingalese*, who resemble the Hindoo, and no other family, in their colour, the form of their persons, the character of their features, and the texture of their minds. They have a peculiar language, an indigenous alphabet, following the Sanscrit arrangement, and their speech contains an abundance of Sanscrit words.

But besides these more considerable races of the Hindoo family, there are a good many rude tribes, differing essentially in language, and often in person, from their more civilised neighbours, and from each other. If we reckon these last at not more than half a dozen, we shall find that the whole Hindoo family of nations does not consist of less than 18 different races, differing more or less from each other, in stature, strength, mein, and intellectual endowment. If we carry our minds back to a period of Hindoo history when society was in as rude a state as in America on its discovery; — before the time when some of the races, by their superior energy, and more favourable position, had destroyed or absorbed those that were more feeble, or less auspiciously situated, we shall probably be led to conclude that the number of races and languages was, in proportion to extent, as great in India, as we have found it to be in the New World, uniform as the Hindoo physical form and mind is commonly considered to be.

From the eastern limit of the country of the Hindoos, to the western limit of China, and from the 7th to the 26th degree of N. latitude, there exists a great family, which has a common character, that is, the different races, or nations, or tribes composing it, agree as much among themselves as Europeans, Hindoos, or Chinese. We shall give this family a name which has been already applied to it, viz. the *Hindoo-Chinese*, though perhaps it would be better to apply to it that of one of its leading varieties. The following is an outline of its physical form. Head generally well proportioned, but of remarkable flatness in the occipital part. Features never bold, prominent, or well defined, as in the nations of central Asia. Nose small, round at the point, but not flattened; and the nostrils, instead of being parallel, diverge greatly. Mouth wide, but the lower part of the face does not project; lips rather thick; eyes small and black. Eyebrows not prominent, nor well marked. The face, instead of being oval, as in the Hindoo, Persian, Turkish, Arabian, and European families, is of a lozenge form; arising from its great breadth across the cheeks, and the prominence of the latter. Complexion a light brown; much fairer than the Hindoo, but darker than the Chinese. It is never black, as in many Hindoos and most negroes. The people described, are themselves aware that they are a fairer race than the Hindoos; and, like the Turks and Persians, call the latter "black men." The hair of the head is always black, lank, coarse, and abundant. On every other part it is scanty; and the beard is throughout thin and defective. The average stature may be taken at five feet three inches; so that they are shorter than the Hindoos and Chinese, but rather taller than the Malayan family. The lower limbs are better formed than in the Hindoo family, and the hands larger and less effeminate. The whole person is robust, but without the lightness, flexibility, and grace of the Hindoo form. It is at the same time more vigorous, strong, and hardy. The languages of this family of nations are for the most part monosyllabic, and as we approach China wholly so. Even the polysyllabic words of foreign languages naturalised among them, are pronounced as if each syllable were a distinct word. It follows, of necessity, that they are extremely simple in their structure, particles supplying the places of inflexions in all parts of speech, and words following each other in the natural order of ideas. There are, besides the Pali, or character of the religious language, six alphabets, employed by as many distinct nations, which, however, on examination, may be reduced to three. The Birmese, Peguans, and Aracanese, write in the same alphabet, with trifling modifications. The Siamese, Cambojans, and, for the most part, the Laos, write in one alphabet — that usually called the Siamese. But a portion of the people of Lao also write in an

alphabet distinct from these two. The Birmese and Siamese have adopted the classification of the Sanscrit, but not so the peculiar alphabet of Lao. We hold all three to be of native invention, and the introduction of the Sanscrit classification to be only recent and incidental. The fourth alphabet, or Pali, in which religious works are generally written, is common to all the nations now mentioned, and is the same which is now used in Ceylon for a similar purpose, and which was once used in Java and other regions remote from India, the country in which it unquestionably originated. The languages of the Hindoo-Chinese countries now mentioned have not only a common character, as to sound, structure, and genius, but they contain also many words in common, the necessary effect of invasions, conquests, and settlements; the greater number of them, probably, in rude and early periods of society, and of which, with few exceptions, history has preserved no record. A large infusion of Sanscrit, through the medium of the Pali, is also common to them all. But what is the Pali itself? The common belief is, that it is the ancient language of Magadha or Bahar. It differs chiefly from Sanscrit in being more vocalic, more effeminate in its pronunciation, and less complex in its grammatical structure; and, in short, much in the same way that Romaic and Italian differ from Greek and Latin. Most probably it was a language which arose on the ruins of the Sanscrit; and was the result of a conquest of the people who spoke the latter, effected by some other Hindoo nation, the principal seat of whose government was Magadha or Bahar. This theory would confirm the common and rational opinion, that the religion of Buddha is of more recent origin than that of Brahma. The Pali is not an intrinsic portion of the Hindoo-Chinese languages; but it is found to exist in them, as Arabic does in Persian or Turkish. It, in fact, embellishes them, but is not essential. The mind of this family, as exhibited in their literary efforts, ranks them below that of the Hindoos. In enterprise they rank also below the latter. Their wars and enterprises have been wholly confined among themselves; and they have never exercised the slightest influence over the other great families of mankind; nor have they produced a single great name known to history, or one remembered even by themselves a century after his death. Still their civilisation must be of considerable antiquity, for the elements to promote an early advance unquestionably exist in their country, and these have never been presented to any family of mankind without begetting early improvement. The ox, the buffalo, and the elephant, are natives of their countries throughout; and very probably the horse and dog were so in early times. The soil too is generally of remarkable fertility; is well watered; and, in all likelihood, rice and some smaller grains, with some farinaceous roots and useful fruits, are indigenous. Inferior to the Hindoos, and still more to the Persians, Arabs, and Chinese, their superiority over all the negro and American nations is in a still greater proportion. Their progress in agriculture, in the common arts of life, the character of their religious and civil institutions, and their possession of a written character and a literature, to which they have been little indebted to foreigners, attest, in short, an early and considerable progress in society. Birmese temples, with every appearance of authenticity, can be traced back to the 9th century, corresponding to the ages of Charlemagne and Haroun-al-Raschid. This, to be sure, is no great antiquity: but the people who constructed such buildings were already far removed from being savages.

We shall now offer a brief sketch of the races or varieties of the Hindoo-Chinese family, beginning our examination from the westward. After leaving the country of the Hindoo family, — of the men of black complexion, fine prominent features, slender person, and graceful form, — we approach the men of brown complexion, flat features, and strong-built but squab persons. Still the Hindoo form, whether from admixture of races or original constitutional difference, has not wholly disappeared; and the half-civilised people of Cassay, Cachar, and Assam, with about a dozen small tribes in a wild and half-savage state, may be described as partaking of the physical form of both Hindoo and Hindoo-Chinese. All these speak different languages, and the more civilised write, some with the alphabet of the Bengallees, and some with that of the Birmese. Among a few, language is polysyllabic, but monosyllabic dialects prevail.

To the south and east of the savage semibarbarous or half-civilized tribes and nations now mentioned — extending to the south as far as the 7th degree of north latitude, and to the east as far as the Anam race, we find six considerable nations, in which the physical character we have ascribed to the Hindoo-Chinese family is well marked, the genius of whose languages agrees, and who are nearly in the same state of social advancement. These are, the Aracanese, Birmese, Peguans, Laos or Shans, Siamese and Cambojans Each of these has its own peculiar language; and there exists even in their physical form, especially as to size, strength, and feature, differences which, though not very obvious to a stranger, are sensible enough to themselves. Living among them in scattered communities, as far as European inquiry has extended, there exist no less than eight tribes, migratory or savage, speaking as many distinct languages.

From the eastern frontier of Camboja, to the western frontier of China, exists the Anam race, comprising the Cochin-Chinese and Tonquinese. These, though they have the common characters of the Hindoo-Chinese family, differ from the rest in so many particulars, that they might probably have been considered, without impropriety, as a distinct family of the human race. In stature they are shorter than their neighbours, the Laos, Cambojans, and Siamese, and greatly shorter than the Chinese. Their persons are squat, but well proportioned and active; their features are unseemly, their cheek-bones very high, and in that direction the face is very broad. Their language is purely monosyllabic, and in its terms has no admixture of the western languages. It has no alphabet; but, in lieu of it, uses, with little variation, the symbolic writing of the Chinese. Besides the Anam nation there are two considerable tribes inhabiting the same country, the Vhampa and Moi, speaking their own distinct and peculiar idioms. Thus, throughout the whole of the Hindoo-Chinese countries, and among a people probably not by *one-tenth* part so numerous as the Hindoos, we have 32 nations with distinct languages.

We now come to an important family, comprising, indeed, a very large portion of mankind, the *Chinese*. The outline of its physical character may be described as follows: — Colour a sickly white, or pale yellow; hair of the head lank, black, coarse, and shin-

ing; beard always black, thin, and deficient; there is but little hair on any other part of the body; eye invariably black, or dark; eyes and eye-brows oblique, turning upwards externally; cheek-bones high, and face round — neither square, nor lozenge-formed, nor angular in its outline. Nose small, depressed at its extremity, and thick at the root; lips thicker than with Europeans, but moderate compared to those of the negro. The whole person is well built and symmetrical; there is not in it the lightness and agility of the Hindoo; but there is sufficient activity, and far greater strength. The hands are small and soft, like those of the other people of warm climates. The lower limbs are particularly well formed, far excelling in this respect those of all other Asiatic people. The languages of this people are purely monosyllabic; none of the nations comprising it having ever known how to put two syllables together. 330 poor monosyllables, beginning with a consonant, and ending in a vowel, a liquid, or a nasal, and each monosyllable admitting commonly of about four intonations, so as to make in all about 1300 words, make up the whole of their meagre colloquial dialects, which are no less than 15 in number, corresponding with the ancient provincial divisions of the country, which in early times composed, probably, at least as many distinct nations. The Chinese monosyllables are neither affected by number, case, nor gender; by mood, tense, or person; but are designated by prefixed or affixed particles, about 30 in number. The language of the Hottentots is scarcely ruder, more uncouth, or inharmonious. The Chinese family never invented an alphabet. From knotted words they came to their present symbolic character, which bears no resemblance to the Egyptian or any other hieroglyphics. It is a language for the eye, and not the ear, — a character which may be read in English, or in Arabic, as well as in any Chinese language, and probably, indeed, with more precision. The Chinese writing, in fact, is a universal character, like the Arabic numerals, and has consequently many conveniences; but it has also its inconveniences. It has prevented the culture of oral language; occasioned the continuance of many distinct languages in the same country; and these, wretchedly meagre in structure, sound, and comprehensiveness. The Chinese mind, as indicated by its literature, is frigid, mechanical, and unimaginative. For the fine arts, in which the Greeks and Etruscans had made such remarkable progress 2500 years ago, the Chinese have never, to the present day, exhibited any capacity. They are laborious, practical, orderly, a vast assemblage, in fact, of shopkeepers and mechanics. They are among those families that made the earliest progress in civilization. Whatever they have is, also, indigenous; for of all mankind they owe least to strangers. The Chinese carry their authentic history back to a period of near 3000 years; and their sage, Confucius, lived and wrote in the present character 2300 years ago; — wrote, in short, his moral rhapsodies while Herodotus was writing history; and in the same age in which flourished Pericles, Phidias, Hippocrates, and Plato; so that China was obviously as inferior to Europe then as it is now. At that time, however, China, south of the Yellow river, which at present contains the greatest and most industrious portion of its population, was in a state of entire barbarism; and even the northern frontier was divided into many petty states, — facts that only contribute with many others to prove the comparatively recent origin of the whole human race. Two hundred and fifteen years before Christ, or above two centuries and a half later, the Chinese built along their frontier a wall of 1500 miles in extent, some 20 feet high, and broad enough for half a dozen horsemen to ride abreast, — the only human monument that makes "a conspicuous figure on the map of the globe." This was in the age of the Hannibals and Scipios, and in point of magnitude, but nothing else, far exceeded the power of the Romans and Carthaginians of the same period. We may infer from it that a people who could erect such a work, and who 2000 years ago had a frontier of 1500 miles to defend, were already numerous, and to a certain degree industrious. We may safely infer, then, that the Chinese, from their early progress in civilization, from their invention of printing, their discovery of silk and porcelain, their progress in useful works, such as domestic architecture, bridges, and canals, and their acquaintance with the art of civil administration, are, if not the most showy and brilliant, at least the most practical and useful, of the Asiatic races. One thing has been always common to this and the Hindoo family,— an absence of the spirit of enterprise. In no age have the Chinese gone abroad in search of foreign conquests or adventures; and even their indirect influence on strangers has been confined to their own immediate neighbourhood, no doubt a wide circuit. Like all Asiatic people, too, they exhibit a disposition to stand still, after making certain advances in civilization, which, in their case, have undoubtedly been respectable. They at all events display none of that illimitable facility of expansion which, in the history of our race, has hitherto alone characterised the European family. The Europeans of the 19th century bear very little resemblance to those of the 15th, except in spirit and enterprise; but we perceive that the Chinese of these two distant ages are in all respects very nearly the same. The European has advanced at the speed of the race-horse, while the utmost that can be said of the Chinese is, that its pace has been that of the tortoise.

Even in the apparently homogeneous population of China, there is to be found considerable diversity, both physical and intellectual, probably as great as in the European family or the Hindoo. It has been already stated that there are fifteen languages, belonging to as many provinces; and, indeed, several provinces have more than one language. The inhabitants of the southern and eastern coast are commonly more athletic than those of the centre and north; and among the latter are found some who have less of the obliquity of eye which is so characteristic of the Chinese, and whose features altogether approach more nearly to the European. There are even races within the empire that are not Chinese, either in person or speech, and who still preserve their independence, as the Meaou-tse in the interior, the Lolos on the western frontier, with the mountaineers of Hainan and Formosa. These two islands, indeed, seem only to have been colonised by the Chinese, as the Saxons colonised Britain; while the aborigines, like the Welsh and Highlanders, have been confined to the mountains. The language of Formosa is, in fact, polysyllabic, and contains many words of the Malayan family of languages; and the Chine colonisation of this island we know to be only of two centuries' date.

Near the Chinese we have another great family, bearing it some resemblance, but still so distinct

in physical and intellectual character, that we are warranted in classing it separately. This is the *Japanese*, which occupies a country of great extent, in the fine and temperate climate from 30° to 45° N., and comprises a population inferior only to the Chinese. Their colour is tawny; stature short, but robust; noses flattish; eyelids thick, and as it were puffed; eyes, as usual, dark, but less sunk than those of the Chinese; lower limbs large and thick, not clean and well made, as with the latter. "In the main," says Kempfer, "they are of a very ugly appearance." The language of the Japanese, instead of being monosyllabic, is polysyllabic. The Chinese can pronounce the aspirate *h*; the Japanese have no such sound in their language. The Chinese have as it were a natural incapacity of pronouncing the consonants *r* and *d*, which they always convert into *l*. The Japanese pronounce them with the same facility as Europeans. The different pronunciation of the two people made a lively impression on Kempfer, who describes it as follows: "As to the pronunciation, that also is very different in both languages, whether we consider it in general, or with regard to particular letters; and this difference is so remarkable, that it seems the very instruments of voice are differently formed in the Japanese from what they are in the Chinese. The pronunciation of the Japanese language in general is pure, articulate, and distinct, there being seldom more than two or three letters, according to our alphabet, combined together in one syllable: that of the Chinese, on the contrary, is nothing but a confused noise of many consonants, pronounced with a sort of singing accent, very disagreeable to the ear." He adds, that, with the exception of a very few commercial terms, the language of Japan does not contain a single word borrowed from the dialects of China; and hence he argues, with justice, that the two nations are wholly of distinct origin. The Japanese, to a certain extent, have adopted the symbolic writing of the Chinese; but they have also an alphabet of their own, which is syllabic, like that of the Manchoos, and like it, too, written from top to bottom. A Hindoo alphabet has also been recently discovered among them, confined to the priesthood, whose ritual is in the Sanscrit or Pali language. The Japanese, from the accounts we possess of them, are a race of considerable physical and intellectual energy; inferior to the Chinese in ingenuity, but superior to them in spirit and courage. Favoured by a country enjoying many advantages of soil, climate, extent, insular position, with most probably the possession, on the spot, of many of the most useful plants and animals, they could hardly fail to make an early progress in civilization. Their authentic history, according to themselves, dates 660 years B. C. This is probably greatly over-rating its real authenticity; for it would carry us back almost to the foundation of Rome, and would precede by nearly two centuries the age of Confucius and Pericles. In fact they admit that they are a people of more recent civilization than the Chinese by 12 centuries. They have had, however, a long time for improvement, and for the last three centuries may be considered as having been absolutely stationary; if indeed, as the result of their self-exclusion from strangers within that period, they may not rather be considered to be in a more unfavourable position than before it. While Chinese civilization has been repeatedly interrupted by the invasions of the shepherds of the North, no strangers have ever successfully invaded Japan; and the only attempt at conquest, made by the Mogul conquerors of China, between five and six centuries ago, the elements, and the courage of the Japanese, repelled, and punished by the destruction of 100,000 of the invaders. An industrious, and in many respects, an ingenious culture of rice, barley, and wheat, — respectable manufactures of silk, cotton, pottery and lacquered ware,—letters, literature, authentic records, the art of printing, and political institutions, — prove the Japanese to be capable of a respectable civilization according to the Asiatic standard; but they prove also, that notwithstanding their more favourable position, both as to climate and political security, their natural genius is inferior to that of the Chinese. That they are a peculiar and original family, we think there can be no question. This is their own opinion; and Kempfer observes, in reference to this subject, that they "fancy themselves highly affronted by the endeavours of some who busy themselves to draw the original of their nation from the Chinese or others of their neighbours."

We have described the individuals of the Japanese family as if there existed among them no differences, physical or intellectual; but if we knew more of them, probably many considerable variations would be found in both respects. The inhabitants of Nipon, the principal island, are distinguished by "big heads, flat noses, and musculous fleshy complexions," as Kempfer expresses it. Those of Saikokf are short in stature, of slender make, but well-shaped and handsome. The inhabitants of the Loochoo islands are described by our navigators as being neither Chinese nor Japanese, but partaking of both: they are most probably neither, nor yet a mixture of both, as they fancy, but an original and distinct race. Their stature does not exceed 5 feet 2 inches, so that they are a very diminutive race. Their language is peculiar, partaking equally of the monosyllabic and polysyllabic character. In fact, the Japanese empire is an aggregate of small hereditary principalities, in which a little acquaintance would probably discover much diversity. In language, too, probably much difference would be found to exist; although, in all likelihood, not to so great an extent as in China; owing to the existence of a more perfect oral language, a common alphabet, and, in general, the absence of the artificial medium of communication which is universal among the people of the latter country.

To the N. E. of China we have another family, the *Corean*, occupying a peninsula equal to Britain in extent. The Coreans are described as superior in strength and stature to the Chinese and Japanese, but they are evidently a race very inferior in mental energy and capacity to either. Their language, or most probably languages, are peculiar, differing from those of their immediate neighbours, the Manchoos, Chinese, and Japanese. It would appear, also, that they have a national alphabetic character, although occasionally having recourse also to the symbolic writing of China. In the useful arts they have made considerable progress; but the standard of their civilization is much below that of the Chinese and Japanese. Their authentic history goes back to 100 years B. C., or corresponds with the classic æra of Rome.

The inhabitants of two-thirds of the superficies of Asia, from the seats of the families already specified to the Frozen Ocean, remain to be described. These have a common resemblance in some important features; but it is only such a resemblance, colour alone excepted, as exists in all the families already mentioned from the

eastern shore of the Atlantic to the eastern confines of Hindostan. Modern naturalists have described the whole, including in it the nations to the E. of the Hindoos, which we have just classed, as *one* of the five permanent varieties of the human race, under the name of the *Mongolian*. A classification of this description, which arranges under a single head people differing most widely in form of person, stature, strength, language, and mental capacity, appears to us of no value whatever, and we feel ourselves warranted in attempting a different one, though the materials before the public for such a purpose be exceedingly imperfect; and the subject itself, from its extent and variety, as well as the rude and wandering character of nearly the whole of the races concerned, is naturally of much complexity. We shall divide the races into those which inhabit the valleys or southern slopes of the Himalaya chain: those which dwell between the latter, the Chinese and Corean families, and the Altai mountains; and, lastly, those which dwell between the Altai range generally and the Northern Ocean.

The first race, proceeding in the above order, and beginning from the E., is the Bootea, or inhabitants of Bootan. "It is not possible to conceive," says Turner, who was perfectly well acquainted with both, "a greater dissimilarity between the most remote inhabitants of the globe, than that which distinguishes the feeble-bodied and meek-spirited natives of Bengal, and their active and Herculean neighbours the mountaineers of Bootan." They have invariably black hair; the eye is a very remarkable feature of the face—small, black, with long pointed corners, as though stretched and extended by artificial means; their eye-lashes are so thin as to be scarcely perceptible; and the eyebrow is but slightly shaded. Below the eyes is the broadest part of the face, which is rather flat and narrow from the cheek-bones to the chin. The skin, about as fair as that of a southern European, is remarkable for its smoothness; and the beard does not present itself until a very advanced age, and then is scanty. The Booteas are a stout, active race, and their stature occasionally rises to 6 feet. Mr. Turner, indeed, describes them as "models of athletic strength." The Booteas are a long-settled agricultural people, and have made considerable progress in the arts; have a peculiar language; an alphabet which follows the Hindoo arrangement; and in civilization, allowance being made for their remote, insulated, and mountainous country, may be considered on a par with the inhabitants of the countries lying between India and China.

Westward of the Booteas is the country of the Nepal, which, independent of Hindoo colonists and settlers from the S., who are sometimes of pure blood, but have often mixed it with that of the natives, contains 8 aboriginal races; viz. the Gorkhas, Magars, Gurungs, Jariyas, Newars, Murmis, Kiraûts, and Lapchas. This, from the predominant race, may be called the *Gorkha* family. These are a short, robust people, of an olive complexion, and of features less Mongolian than those of the Booteas. Their languages are for the most part distinct from each other, and polysyllabic, and the greater number of them have a knowledge of letters. There is, among one of the races at least, the rudiments of a native alphabet; but the Dewanagari, adapted by additions and omissions to their native pronunciation, has been adopted by the greater number. Their state of civilization is nearly the same as that of the Booteas; but they have, recently at least, exhibited a greater spirit of enterprise.

To the N. of Bootan and Nepal, and on the terrace of the grand chain of the Himalaya, at an elevation of 12,000 or 13,000 ft. above the sea, in a cold and dry climate, and an ungenial soil, are found the Tibetian family; which, as far as our knowledge goes, extends over 26 degrees of longitude, or from the 74th to the 100th. The Tibetians have what is commonly called the Tartar countenance—a face angular and broad across the cheek-bones, and small black eyes, with very little beard. Instead of being tall, like the Booteas, they are short, squat, broad-shouldered; but slow and sluggish in mind as well as body. They are mild in disposition, and have never exhibited the mental energy or enterprise of their neighbours either to the N. or S. The horse and ass, two species of the ox, the goat, and sheep, are domesticated among them. All these are probably natives of the country, and the two first are said still to exist in the wild state. Their language is guttural, nasal, and harsh, and in a great measure polysyllabic. They possess a peculiar alphabet, which bears some resemblance to that of the Hindoos in their neighbourhood, but does not follow its arrangement. For religious purposes they have another alphabet, much resembling the Pali, and which they no doubt received along with the religion of Buddha or Fo, which they have been the medium of communicating to many of the tribes of Tartary, including the two which have conquered China. They have long possessed the art of printing with immovable wooden blocks, which they use, however, only for the multiplication of religious works.

We come now to far more important races: those inhabiting generally the vast *plateau* and extensive ascents between the Himalaya and Altai ranges, as far as the 140th deg. of long., and then between the former and the right bank of the Amur, or Amour. This is the *Mongolian* family, and may be described as being generally comprised between the 40th and 50th degrees of lat., and ranging over 80° of long., or from the 60th to the 140th deg. E., although, in some situations, exceeding these limits N. and S. by a few degrees. We shall first give the general description of the whole family. Forehead low and slanting; head altogether of a square form. The cheek-bones stand out widely on either side; the *glabella* and *ossa nasi*, which are flat and very small, are placed nearly in the same plane with the malar bones; there are scarcely any superciliary ridges; entrance of the nose narrow; the malar *fossa* forms but a slight excavation; the ulvular edge of the jaws is obtusely arched in front; chin rather prominent; body short of the European stature, broad, square, and robust; extremities short, but slender; shoulders high; neck thick and strong. Hair always black, and the eye invariably black or dark brown. Hair of the head long and lank; and there is a paucity of beard, as well as of hair over the rest of the body.

There are two great divisions of this family known to Europeans, under the name of Eastern and Western Tartars. The first comprise chiefly the Manchoos, sometimes called also Manshurs and Manjurs. These are the present lords of China, of which their parent country constitutes but a dependency, though a favoured one. Those that are seen in China are not always easily distinguished from the Chinese. They

are described as shorter and squatter than the Chinese, and having a more angular countenance, and harsher features. It must be recollected, however, that a perfect similarity of dress and costume is apt to mislead the observer, and that most of the first conquerors marrying Chinese women, the nominal Manchoos of China are in reality, in a great measure, a mixed race. Inhabiting a more genial climate and a better soil than the Mongols or Western Tartars, the Manchoos are a more civilised people than the latter. They have for the most part habitations, and some agriculture, though flocks and herds constitute their chief wealth. The great river Amur, or Saghalien, and its many branches, which abound in fish, passing through their territory, many exist as fishermen. The Manchoo language is quite national and peculiar; it is polysyllabic, full, and sonorous. It has the sort of copiousness which characterises the Sanscrit and Arabic, and which, in a perfect language, ought rather to be called redundancy. The number of words for the horse, ox, and dog, according to age, sex, size, colour, and other qualities is, for example, overwhelming. The present alphabet of the Manchoos is syllabic, written in columns from the top to the bottom of the page, like the Chinese, but, contrary to the practice of that character, from left to right. It is said to have been invented only during the present dynasty, the Manchoos having, previously, used the same character as the Mongols. The Manchoos, though they have acted a considerable, have by no means acted an equally distinguished, part on the great theatre of the world with their neighbours the Mongols. In the 11th century, however, they established the great empire known in the middle ages by the name of Katay or Cathay, by uniting to their own country the northern half of China. This, after lasting 117 years, was subverted by the arms of Jengis Khan; but in the year 1624, and at an interval of more than four centuries, the Manchoos again possessed themselves of China, and have now for more than two centuries governed that empire, and probably with a skill and wisdom never equalled by its native masters.

We come now to the true Mongols, — to the race "whose rapid conquests," as Gibbon expresses it, "may be compared with the primitive convulsions of nature, which have agitated and altered the surface of the globe." They extend westward from the longitude of Pekin, or about 116°, to the Sea of Aral, a sweep of at least 3000 miles, and with the same physical form, the same language, and no great variety of manners, embrace the communities or tribes known to us under the various denominations of Mongols, or Moghuls, Kalkas, Eluths, Ogurs, Kokonors, Kamï, and Kalmucks. It is peculiarly to this family that the descriptions given by European writers of "the Tartars" is applicable. They are, in fact, the same men as the companions of Attila, Jengis Khan, and for the most part of those of Timur, who, though priding himself on being a Turk, was in reality a Mongol, whose family had been long settled in a Turkish country, and whose myriads were a mixture of both races. Gibbon, on the authority of Jornandes, describes the person of Attila, and says that it exhibited "the genuine deformity of a modern Calmuck." An ecclesiastic, quoted by Matthew Paris, gives, in 1243, a picture of the Mongols who were the instruments of the conquests of Jengis and his sons, which is evidently drawn by an eye-witness. "The Tartars," says he, "have firm and robust bodies, lean and palid countenances, high and broad shoulders, short and distorted noses, pointed and prominent chins, a low and deep upper jaw, long teeth distant from each other, eyelids stretched out from the temple to the nose, eyes black and unsteady, an expression oblique and stern, extremities bony and nervous, large and muscular thighs, but short legs, with a stature equal to our own, the deficiency in the length of the lower limbs being made up in the rest of the body." The Catholic missionaries, who in the reign of the Chinese emperor Kang-hi repeatedly travelled over the country of the Mongols, and actually surveyed a portion of it, confirm this description. The Mongols, by their statement, are a stout, squat, swarthy, and ill-favoured people, with the common Tartar countenance expressed in its boldest lineaments. The language of the Mongols is polysyllabic, and differs wholly from that of the Manchoos. What is remarkable, and almost peculiar to this people, is, that the whole race speak the same language, from the longitude of Pekin almost to the Caspian, and in some situations even into the heart of Siberia, and westward within the confines of Europe. This arises, no doubt, from their being physically the same race, from their ever wandering and unfixed habits, the frequent mixture arising from these habits, the practice of a universal hospitality, and their having been repeatedly united under the same government, though never very permanently. Something similar to this may be found among the islands of the Indian Ocean, the languages of which have a vast number of words in common, a pacific sea constituting in this case a common medium of intercourse and communication, like the steppes and deserts of the Mongols, the *prao* and the canoe, in fact, taking the place of the horse, the ox, and the camel. The country of the Mongols is cold, elevated, and dry, few parts of it being fit for culture, and a great portion of it consisting of deserts, or "seas of sand," as the Chinese express it, in which there is neither herb nor water. It abounds, however, in game and wild animals. For the chace there is the tiger, leopard, deer, antelopes, hares, and many species of the gallinaceous family. The camel, ass, and even the horse, are still found in it, in their wild state; and no doubt the ox and sheep were so also before they were appropriated. Such a country necessarily made the Mongols early a nation of shepherds and hunters, and chained them down as it were to that condition.

The Mongols, with the exception of a very small number, live exclusively on animal food; and their clothing and dwellings, or tents, are for the most part of animal tegument or fibre. When urged to agricultural employment, their answer is, "Herbs were made for the beasts of the field, and the beasts of the field for man." (*ante*, p. 178.)

Their whole employment consists in the tending of cattle, war, and the chase. Their knowledge of letters is of the humblest order, and applicable only to the purposes of superstition in the hands of their priests. One tribe, the Igurs or Ogurs, invented a meagre alphabet of 14 letters, which, improved and extended from that of Tibet, is still in use. Of their own history and important migrations, which civilised nations have recorded for more than 2000 years, they know as little as rats or marmots do of theirs. Jengis Khan was wholly illiterate, and Timur and Baber had a knowledge only of Turkish and Persian letters. The immense country of the Mongols may be described as a vast nursery of soldiers, consisting of many camps, equipped, provisioned, and ready to march at a moment's notice, without inconveni-

ence or expense. The people have strength and hardihood of body, and vigour and intelligence of mind, to avail themselves of these advantages; and whenever a leader of genius capable of uniting the tribes in a common adventure has sprung up among them, they have proved a pest and nuisance to all the civilised races of mankind within their reach. Such a union made it necessary for the Chinese to build their great wall more than two centuries before the Christian æra; occasioned about the same period the destruction of the Greek kingdom of Bactria; caused the settlement of the Huns within the confines of Europe, with their acts of destruction and rapine in the finest parts of it, in the 4th and 5th centuries; and the conquest of Turkestan, Persia, India, and China, achieved by Jengis Khan, Timur, and their descendants in the 13th, 14th, and 15th centuries. The Mongolian family is at this day very nearly what it was 2000 years ago, and in all intermediate times. Are mankind likely, then, to be again harassed by any of their great military expeditions? Such an event is very unlikely with any nation, the Chinese excepted; and as far as the European family is concerned, the invention of gunpowder and fire-arms, with other improvements since the 15th century, have made it all but impossible. Asiatics, indeed, though sometimes obtaining temporary advantages, have never been a match for the Europeans, even when the latter were comparatively weak and semibarbarous. Attila was defeated in the plains of Chalons by an inferior army of the barbarians of northern Europe; and the whole of his adventures were, after all, but so many predatory inroads on a large scale. Jengis Khan, his successor, effected only the conquest of the weakest and rudest nations of Europe, the Russians, Poles, and Hungarians, and even their subjugation was temporary. Timur did still less, and the Bosphorus was sufficient to stop the progress of a conqueror who had marched in triumph over 5,000 miles of Asiatic territory. The Franks defeated the Arabs in the height of their pride and power. A handful of Normans dispossessed them of Sicily, and the mountaineers of Biscay, after a long struggle, finally expelled them from Spain; so that within the memory of history no Asiatic people has formed any thing better than a temporary establishment in Europe. Civilised Europeans have been conquered by barbarians of their own family; but not, since the historic age, by Orientalists. The researches of modern philologists, however, make us acquainted with the singular and apparently unaccountable fact, that the languages of India, the Manchoos, and Mongols, and of the Turkish, Persian, and European families, contain many words in common; not so much changed by the peculiar pronunciation of each people as not to be clearly identified; while the Arabic and other languages of the same family do not contain any such common words. It appears to us that this may be most rationally accounted for on the supposition of an invasion and settlement of Transoxiana, Persia, and Europe by the Mongols, in times far beyond the reach of history, before the invention of letters, when there were neither Greeks nor Romans to tell the story. How the Mongolian languages came to possess many words in common with the Hindoo, seems obvious enough. All the Mongolian nations at this day receive their religion, and the language in which that religion is explained, from the Tibetians; and the Tibetians, it is admitted, have received both from India. But what, it may be asked, could tempt the Mongolian nations to the invasion, conquest, and settlement of a country so rude and remote as Europe in the times we are supposing? The answer is, the same cause which produces constant international wars among themselves down to the present moment, — the restless military habits engendered by their position, — the constitutional animal courage of a race energetic and enterprising, — the desire to find new pastures for horses, herds and flocks, which a well watered and (then) thinly peopled country like Europe could well supply; and the victories of one tribe, forcing the conquered to abandon their own lands and seek new establishments. This was, in fact, the cause which drove the Huns of the 2d century B. C. upon the Greek kingdom of Bactria, and eventually brought that people to Europe in the 3d and 4th centuries after Christ, producing even their permanent settlement on its eastern confines. The conquests of Attila, and of Jengis, it may be added, had similar objects in view, but took a different direction, and ended differently, owing to the resistance in their times of a comparatively numerous, wealthy, and civilised people. Timur, with the strength which Europe had already attained, at the close of the 14th century, only threatened to invade it. Both he and Jengis invaded and overran all the other countries of the West in the languages of which Indian words are to be found; but, like the remote invaders to whom our theory alludes, they never touched the Arabian peninsula, nor formed any permanent establishment in any country in which the Semitic class of languages is spoken.

The native capacity of the Mongolian family is sufficiently attested; by the production of such men as Attila, Jengis, Timur, Baber, and Kublay Khan; as well as in the conquest, the retention for more than 200 years, and the skilful government during nearly the same time, of the vast empire of China. It is singular, indeed, that the most useful, if not the greatest public work in that country, the grand canal of 600 miles in length, was the work of the first Mongol emperor, who was the undisputed lord of the whole. Kublay Khan, the grandson of Jengis, though born a shepherd, added to the enterprise and courage of his own race the learning and skill of the conquered people.

Between the Altai range and river Amur to the S. and the Frozen Ocean to the N., there exist tribes almost as numerous as in any equal extent of the American continent, and far more distinct in physical form. Many of them are obviously distinct families: and others, not so considered, will, we are satisfied, be found to be such on a better acquaintance. The whole are so numerous, obscure, and unimportant, that it is difficult, or rather impossible, to classify them satisfactorily.

There are found near to, and on the banks of the Amur or Saghalien, 4 nations, called Soloni, Kertching, Daguri, and Natkis, all of which have languages wholly different from their immediate neighbours the Manchoos, while they differ also among themselves. They are rude, dull, and wholly without the knowledge of letters; live on fish; and with them we find the dog, from necessity, first substituted for the horse and the ox.

Sherbani, the grandson of Jengis Khan, led a colony of Mongols into Siberia, amounting to 15,000 families, and his descendants reigned there for 300 years, or until the Russian *discovery* and conquest; so that the Mongols, although originally foreigners, now form a considerable portion of the population of Siberia, either pure or mixed up with the native tribes of the country. The *Tungoos* are said to be allied to the Manchoos.

They are of middling stature, with features more distinct and more in relief than the Kalmucks or Mongols; well-made, active, and courageous. The *Buriats*, it is pretended, also, are of the Mongolian race; but it is evident from their physical form that this cannot be the case, notwithstanding the existence of Mongolian words in their language. According to Pallas, an eye-witness, they are short in stature; and so effeminate, that six of them hardly equal, in point of strength, a single Russian. These cannot be of the same stock with the powerful and intrepid people that, centuries ago, conquered these same Russians. The *Wagaul* constitutes a small family, dwelling between the Ouralian mountains and the Obi, of stature below the European, with black hair, scanty beard, and Tartarian face. The *Ostiaks* are a family small and feeble, with hair of a light colour and reddish tinge. They can count no further than 10, and live almost exclusively on fish. The *Samoyeds* extend along the Frozen Ocean from the 40th to the 115th deg. of E. long. The stature of this very distinct family is commonly from 4 ft. to 5 ft., and consequently at least a foot short of the European standard. Head disproportionately large; face flat; mouth large; ears also large, and the lower portion of the face projecting. The *Tchouktchis*, *Yakagines*, and *Koriaks* occupy the extreme eastern angle of Asia fronting America, and are a coarse-featured, short people; without, however, the flat noses, or peculiarly small eyes of the Kamtchatcadales. They resemble the Esquimaux of America; and speaking three distinct languages, are probably as many distinct races. The *Kamtchatcadales* are a very short race, with broad shoulders, a large head and a flat elongated countenance, thin lips, small eyes, and very little hair. The *Aleutians*, or inhabitants of the Aleutian islands, are a different race from these. They are swarthy, short, but stout and well-proportioned. The people occupying the great island of Saghalien at the mouth of the Amur, and the whole chain of the Kurile islands, from the Cape of Kamtchatka, to Jess in Japan, are a distinct race from any of those above mentioned.

The stoutest and most vigorous of the people of this part of Asia, or those found to the S., dwell in moveable tents, like the Mongols; have horses and oxen; and are not wanting in stature, strength, and the military virtues. On the contrary, the inhabitants of the bleak and inhospitable regions towards and on the shores of the Polar Sea all exchange the horse, ox, and sheep for the rein-deer and dog; live in cabins or caverns instead of moveable tents; are small, weak, and pusillanimous: "a race," as Gibbon expresses it, "of deformed and diminutive savages, who tremble at the sound of arms." Among all the native races to the N. of the Altai mountains, letters are wholly unknown, agriculture is scarcely practised; for war on a large scale the people have neither disposition, capacity, nor means; and, to obtain food and clothing, nearly their whole time is consumed in fishing and the chase.

V. Amount of Population.—Political Divisions.—There are no means whatever by which to form any thing like a correct estimate either of the extent or population of the greater number of Asiatic states. The estimates of the population of China only vary from about 150 to about 368 millions; and the differences in the estimates of the population of other countries, though much less in absolute amount, are quite as great in degree. There are also great discrepancies in the estimates that have been formed of the area of the different states, originating partly in the want of correct measurements, and partly in the fluctuating and ill-defined nature of their boundaries. The subjoined estimate is not, therefore, put forth as if it were exempted from error; but we are inclined to think that it will be found to be more nearly accurate than most of those by which it has been preceded.

Estimate of the Area and Population of the different Asiatic States.

States.	Area in Square Miles (Engl.).		Population.	
Chinese Empire and dependent States		7,141,000		168,000,000
Russian Empire		5,846,000		3,600,000
Empire of Anam		98,000		5,000,000
Birman Empire		184,000		2,000,000
Siam		80,000		2,800,000
Malay Peninsula		58,000		600,000
Cassay		7,000		70,000
Beloochistan		200,000		1,000,000
Affghanistan, &c.		200,000		5,000,000
Independent Tartary, or Turkestan		727,000		5,000,000
a. Khanat of Bokhara	263,940		2,000,000	
b. Khanat of Kokan	135,680		1,000,000	
c. Khanat of Khiva	6,880		800,000	
d. Independent Kirghiz and Toorks	320,500		1,200,000	
Persia		482,000		9,000,000
Turkish dominions		447,000		12,500,000
Arabia		1,000,000		10,000,000
Hindostan, with Assam, and the British provinces beyond the Ganges		1,339,100		147,130,000
Independent States: —				
a. Nepal	53,600		2,500,000	
b. Bootan	64,000		1,500,000	
c. Scindia's dominions	39,400		4,000,000	
States under British protection: —				
Dominions of the Nizam, Berar, Oude, Mysore, Travancore, Cochin, Sattarah, the Guicowar, the Rajpoot, and Bundlecund chiefs, Gwalior, &c.	433,670		41,100,000	
British dominions: —				
A. Bengal Presidency, including the Punjab, Assam, Cachar-Jynteah, Aracan, and the ceded Birmese provinces	483,000		74,450,000	
B. Madras Presidency	129,900		14,895,000	
C. Bombay Presidency, inc. Scinde	128,100		7,940,000	
Portuguese, French, and Danish dominions	7,430		745,000	
Total of Continental Asia		17,812,100		371,700,000
ISLANDS		1,235,700		56,100,000
Empire of Japan	266,500		30,000,000	
Ceylon	21,700		1,500,000	
Borneo	262,500		3,000,000	
Sumatra	170,000		2,200,000	
Java and Madura	52,000		9,600,000	
Celebes, Booton, &c.	75,000		1,800,000	
Philippines	135,000		4,000,000	
Papua and the remaining Islands in the E. Seas	250,000		4,000,000	
Total		19,047,800		427,800,000

VI. Progress of Discovery.—The geographical knowledge of Asia may be considered as commencing with its western countries, and with Greece, the cradle of our present civilisation. Judea and Phœnicia are the quarters from which the earliest information comes. The Jews scarcely recognised distinctly any object more easterly than the Euphrates, emphatically termed by them "the river;" beyond which, at a vague and uncertain distance, they placed "the ends of the earth." Tyre traded with several cities on its banks, but does not seem to have pushed her intercourse further; though Dr. Vincent reasonably conjectures, that the chests of rich apparel, carefully bound with cords, brought by this channel, were from countries much more remote. A great traffic is mentioned with Dedan, a city of Arabia, which, from its many isles, and its merchandise of precious cloths, must have been in the vicinity of Ormuz, and have drawn these commodities from India. They were transported, by large caravans, across Arabia to Edom or Idumea, which was greatly enriched by this traffic. From the south of Arabia, Sheba, or Sabea, sent caravans laden with gold and incense, both probably obtained from the opposite coasts of Africa.

The knowledge of the Greeks, in the nearly cotemporary age of Homer, was far more limited. He seems to have had no distinct knowledge of any country east of Asia Minor. Colchos, on the Euxine, being supposed to contain the chariot of the sun, must have been viewed as the eastern extremity of the earth: the voyage thither by Jason, in the ship Argo, was regarded as an almost superhuman achievement. The name Asia was then applied only to a part of the coast of Caria, whence it was extended to the peninsula, and ultimately to the whole continent; after which the other was named the Lesser Asia.*

The triumphant contest of Greece with Persia excited deep interest, and generated plans of conquest, which rendered every information respecting that empire acceptable. The most valuable contributor was Herodotus, who, during a residence at Babylon, collected materials for a description of the satrapies into which it was divided. To the north it extended over a part of the Caucasian provinces, enabling the writer to delineate tolerably the extent and boundaries of the Caspian. Margiana and Bactria probably reached to the Oxus, beyond which wandered the Scythian tribe named Massagetæ. India was the most easterly satrapy; but being described as containing no great river except the Indus, and bounded by an immense desert, it evidently contained only the western provinces, while the Gangetic and southern countries were entirely unknown. Herodotus gives a somewhat rude description of the inhabitants, suggested probably by the bordering mountaineer tribes. The fact of its affording a revenue four times that of Egypt, shows clearly that it was already opulent and improved. Darius is said to have employed Scylax, the Caryandrian, to descend the Indus, sail along the southern coast, and come up the Red Sea; a voyage accomplished in two years.†

The next great source of information to the Greeks was the expedition of Alexander. It did not, indeed, extend much beyond the already known limits of the Persian empire; but the countries, before known only by vague report, were then carefully examined and described. Under his direction two engineers, Diognetus and Baeton, made surveys of each march, which were published by the latter, but are unfortunately lost. To the north, Alexander pushed beyond the Jaxartes, but without being able to bring under subjection the rude tribes who tenanted those regions. On the side of India, he learned the existence of the Ganges and the fine countries on its banks, to which he eagerly sought to penetrate; but the mutiny of his troops compelled him to stop at the Hyphasis. The Greeks had then an opportunity of observing some of the peculiarities of the Indian people; their division into castes; their fantastical religious austerities; and the merit attached to suicide. Alexander descended the Indus to its mouth, and sent thence a fleet under Nearchus, who traced the coast of Asia as far as the Persian Gulph, which he ascended, and joined his master at Babylon. This voyage, now so easy, was then considered a most perilous achievement, and the party arrived in a state of distress and exhaustion. Alexander himself, in returning through the maritime provinces, became aware of their extremely desolate character, through which, indeed, his army was in danger of perishing.

On the partition of Alexander's empire, Seleucus obtained Syria, with as much of the countries to the eastward as his arms could hold in subjection. He is said to have attempted the conquest of India; but there is no distinct account how far he penetrated; probably it was not beyond Alexander's limit. He sent however an embassy, under Megasthenes, to Palibothra (Pataliputra) on the Ganges, capital of one of the most powerful kingdoms ever formed in India; and through this channel a good deal of additional information was obtained. He also employed his admiral, Patroclus, in an attempt to circumnavigate Asia; and rumour even represents him as having accomplished this vast circuit, and entered from the northern ocean into the Caspian; but the manifestly fabulous character of this report makes it impossible to conjecture how far he really penetrated.

All the materials thus collected were at the disposal of Eratosthenes, the learned librarian of Alexandria; and were employed by him in forming, on the astronomical principles of Hipparchus, the first systematic delineation of the globe. It is however, as to Asia, extremely imperfect. The Ganges is made to fall into the eastern ocean, represented as bounding the habitable earth. The Cape of the Coliaci (Comorin) is made at once the most southerly and most easterly point of Asia. About ten degrees north of the Ganges, and a very little east, is placed, in the same ocean, the city of Thinæ, often alluded to as the extremity on that side of the habitable world: this appears the first very imperfect rumour, which reached the western nations of the Chinese empire. Not far from Thinæ, the coast turned westward, stretching along the great northern ocean, which bounds both Europe and Asia, but at so low a latitude that the Caspian was considered to be a gulph connected with it by a narrow strait. This was a retrograde step even from Herodotus, who had described it justly as an inland sea. Asia, thus wanting Tibet, China, the greater part of Tartary, and all Siberia, possessed little above a third part of its real dimensions.‡

The Romans did not, by their conquests, obtain any accession to the knowledge of Asia. Before they reached Persia, that country had been occupied by the Parthians, a brave

* Voss, Cosmography of Homer, in Malte-Brun. Maritime and Inland Discovery. Cab. Cyclop. book i. ch. 2.

† Herodotus, lib. iii. iv. Rennell's Geography of Herodotus, sections 11, 12.

‡ Arrian, Expedition Alexandri et Historia Indica. Strabo, lib. i. ii. xv. Vincent's Periplus of Nearchus. Gosselin, Géographie des Grecs

northern people, the attempts to subdue whom were not only fruitless, but most disastrous. But the boundless wealth accumulated in the imperial capital, from the spoils of conquered nations, brought all sorts of commodities, however distant the place of their production, and however high their price, to its markets. The *Serica vestis* (silk), then first introduced, became for some time quite the rage, and was readily paid for at its weight in gold. The fragrant malabathrum (betel, or tea), and the ornamented vessels, named murrhina (probably porcelain), brought also vast prices. The merchants of Alexandria and Byzantium were thus impelled, not only to embark large capitals, but to brave hardship and danger in reaching the remote extremities of the continent, where these commodities were produced.

Of the maritime route, Arrian, a merchant of Alexandria, has given a detailed and correct account, supposed to be written in the first century. He describes it as extending along Persia, Arabia, and India, as far as Nelisuram (Nelkunda), on the coast of Malabar. The Greek navigators had not then proceeded farther east, but found in that port supplies of the important articles of silk and malabathrum. This trade was carried on by ships that steered directly across the Indian Ocean from the Straits of Babel-Mandeb, by the route first discovered by Hippalus. Of the more easterly coasts, Arrian gives only hearsay accounts, becoming gradually fainter and more fabulous. But he distinctly indicates Masulipatam and the mouth of the Ganges, with the exquisitely fine cottons there fabricated. Even beyond this limit, he mentions Chryse or the golden isle (Sumatra or Borneo). Thinæ is noticed, but in a manner still more confused than by Eratosthenes. But he gives a curious account of the collection of the leaves of malabathrum by a people, the form of whose visage shows them to be Tartars or Chinese, and of the manner in which they were picked, dried, and curled. Vossius, Vincent, and most other writers, conceive this to be the betel. Mr. Murray, however, has lately endeavoured to show, that this last, being only used for wrapping the areca nut, must for that purpose be used fresh, and would be destroyed by the above processes; that it cannot consequently be, and is not, an object of trade, though the areca is; and that the malabathrum alluded to was, therefore, most probably tea. The ancient accounts, however, give no distinct intimation how the article was used, nor any reason to think, supposing it to be tea, that it was by drinking the infusion, but rather, in some form, as an object of scent.*

About a century after, Ptolemy published his elaborate system of geography, which shows a very remarkable extension of knowledge in regard to Asia. He delineates, though rudely, a very large extent of coast from the mouth of the Ganges to Cattigara, on the coast of the Sinæ; chiefly from a pretty detailed route of his predecessor Marinus, partly furnished by Alexander, a mariner, who, from his name, was probably a Greek. His statement that it reached 1,300 miles S. E., and then about as much N. E., could only consist with a voyage from the head of the Bay of Bengal to China. Sada, the point where he turned north, must be at or near Singapore. Thence he described a coasting voyage of 350 miles, when he crossed "the sea," (evidently the broad mouth of the Gulph of Siam,) and reached what he terms the Golden Chersonese, a name very naturally suggested by the rich mines on the opposite coast of Borneo. Thence he had twenty days' coasting sail (along Cochin China and Tonquin); finally, a course, partly south, but more east, led to Cattigara, which must thus have been on the southern coast of China, and from its name probably Canton. Ptolemy, however, though he professedly made this the basis of his delineation, evidently adopted, and unskilfully combined with it, information from other quarters. In his tables, the Golden Chersonese, from its vast extension southward, and containing the names Malayo colon and coast of the Pirates, very clearly designates Malacca, conjoined probably with Sumatra, which is not separately mentioned. The extreme point of Cattigara, too, is placed on a coast, stretching, not east, as Alexander had described, but due south, with a view probably to harmonise with the strange theory, according to which the coasts of Africa and Asia formed a vast circuit, and met, enclosing the whole Indian Ocean. †

The same geographer describes a caravan route, formed through Asia by the merchants of Byzantium. Proceeding due east, through Asia Minor and Persia, they made some circuits in order to include Hyrcania (Astrabad), Aria (Herat), and Margiana (Khorassan): they then reached Bactra (Balkh), which seems to have been the main centre of the inland trade of the continent. The route, which had hitherto been through immense and level plains, led then over those lofty mountain ranges that lie to the north of India. After a laborious ascent, they reached a station called the Stone Tower, where the merchants, destined for the remotest extremities of Asia united for mutual aid and defence: thence, a route of seven months, chequered by many perils and vicissitudes, brought them to Sera, the capital of Serica. That this country is China is now so generally admitted, that we need scarcely notice the theories which assign to it a less distant position, especially that of Gosselin, who, in profound ignorance of the localities, would make it Serinagur, in the north of India. The produce of silk, the character of the people, industrious, mild, pacific, timid, and shunning the intercourse of foreigners, all combine to exclude any other supposition. It is remarkable that northern China, reached by this route, is called Serica, while its southern coast is named that of the Sinæ It is, in fact, uncertain, whether the two were then under one government; at all events, the names were probably those used by the neighbouring nations, as, at present, the term China, the same with Tsina or Sina, is received by us from the people of the oriental archipelago. Ptolemy's knowledge did not reach to the eastern ocean; and, unlike Eratosthenes, he did not assume its existence, but bounded Asia on that side, as well as on the north, by a vast expanse of "unknown land."‡

This communication, opened by Rome during her highest prosperity, was gradually lost amid the distractions and weakness of the empire, and when all the intermediate countries were occupied by the hostile Saracen power. Stephen of Byzantium, and the Geographer of Ravenna, about the eighth century, show only the most imperfect knowledge of the countries beyond Bactriana, including them under the vague term of India-Serica.

* Arrian, Periplus Maris Erethrei, in Hudson. Geog. Græc. Minor., tom. ii. Vincent on the Periplus, 4to. 1805. Murray, Historic. and Descript. Account of China, Edin. 1836.

† Ptolemæus, lib. i. ch. 13, 14. vii. 11. Vincent, Gosselin, &c.

‡ Ptolemæus, lib. i. ch. 12 vi. 14, 15, 16. Pliny, vi. ch. 17—22. Mela, iii. ch. 5. 7. Gosselin, Géographie des Grecs, tom. iii. iv.

A new people now arose, who, impelled by ambition and religious zeal, explored and civilised a great portion of the world. The Arabs, under the impulse given by Mohammed, rushed from their deserts, and conquered an empire more extensive than that of Rome. They penetrated even into Scythia, which had remained impervious both to the Persians and Greeks; and established flourishing kingdoms on the banks of the Oxus and the Jaxartes. During the enlightened æra of the caliphs, particular attention was paid to geographical knowledge. A number of leading positions were determined by astronomical observation, a process to which the Greeks had been almost strangers: India was well known to them, and ere long became subject to Mohammedan princes. China was never even approached by conquest, but commerce conveyed some pretty accurate ideas respecting that country; indeed, in the 9th century, two Arab merchants, Wahab and Abusaid, visited it, and published an account, in some respects very accurate, and accordant with modern observation. They mention its great fertility and populousness; the production and general use of rice, silk, tea, and porcelain; the rigid watchfulness of the police; the general diffusion of reading, and the preference of written over spoken language. It is remarkable that Abulfeda and Edrisi, the most eminent of the Arabian geographers, appear ignorant of this work, and their account is meagre and defective. On the north, some imperfect notices were received of Siberia and the Arctic Ocean. This region excited intense interest from its being supposed to contain the castle of two enormous giants, Gog and Magog, the search after which impelled the caliphs to expeditions of discovery. After several fruitless efforts, one was dispatched, with strict orders not to return without having discovered this castle. Under this impulse they marched towards the Altai, and returned with a truly formidable description of the fortress, as surrounded by walls of iron, and with a gate fifty cubits high. This report was implicitly received, and the castle appears conspicuous in all the maps of the middle ages.*

Europe mean time was buried in the deepest ignorance as to all that related to the eastern world Attention, however, was at last powerfully attracted to it by the crusades. Some direct accounts were received, and lights were sought in Ptolemy and other ancients: the result was a very confused mass of notions, which are curiously exhibited by Sanudo, in the map prefixed to his narrative of these expeditions, entitled, *Gesta Dei per Francos*. The world is there represented as a great circular plain, in the centre of which stands Jerusalem. Sera is borrowed from Ptolemy; but India is placed partly beyond it, and, under the titles of Major, Minor, and Interior, is scattered through different and distant parts of Asia. The Indus, in the text, is made the boundary of that continent. To the north, Albania and Georgia stretch almost to the sea of darkness, and in the same quarter appears the castle of Gog and Magog.

Attention was about the same time forcibly drawn to another Asiatic region. The Mongol chief Jengis, and his descendants, established an empire of immense extent, comprising on one side China, and on the other Russia, which was long held under Tartar sway. Thence they marched through Poland into Hungary and Silesia. The Duke of that country, having ventured to encounter them, was defeated and slain. Circumstances deterred them from proceeding farther; but their numbers, ferocity, and conquests, struck Europe with terror. In hopes of averting future invasion, it was determined to send embassies from the Pope, as the chief of Christendom; and two monks, Carpini and Rubruquis, were successively employed. They travelled by long journeys, of many months, over the vast plains of Tartary to Karrakarum, a rude capital, situated far east in that region. They were tolerably well received, as oriental courts are fond of the attention and homage which missions imply; but the threatened invasion was prevented by quite different causes. Being probably the first who had penetrated into those remote regions, they communicated new ideas respecting their vast extent, and the countries situated both at their eastern and northern extremities.†

About the same time that this intercourse with the east was opened, and partly in consequence of it, the spirit of industry and commerce revived among the maritime cities of Italy. Venice and Genoa had established factories and carried on trade, not only over all the Levant, but on the coast of the Black Sea. From this last quarter, two Venetian nobles of great enterprise, of the name of Polo, undertook to visit the court of a Tartar prince, descended from Jengis, with a view to dispose of some valuable commodities. Various vicissitudes led them on to Bokhara; and they were there induced to accompany a mission to Cambalu, the court of Kublay, named the Great Khan, who inherited the most valuable of Jengis's conquests in China and the neighbouring countries. Having returned to Venice, they again set out for the East, taking with them Marco, one of their sons, to whom we are indebted for a most interesting account of his and their travels. On their outward journey, they passed through Balkh, Kashgar, Khotun, Tangut, and other countries in that great table-land of Middle Asia, which we name Little Bucharia, and respecting which we have little better information than Marco communicated.

Cathay, as northern China was then called, with Cambalu, its capital, the modern Pekin, completely dazzled the travellers. The walls forming a square, each side of which measured six miles — the lofty ornamented gates — the spacious streets — the immense palace, with its painted halls — the beautifully ornamented gardens — the pomp of the imperial festivals — all these objects, nearly on the same scale as now, far surpassed any magnificence of which Europe could then boast. Being well received, and even officially employed, Marco madean extensive tour through the western provinces, visiting part of Tibet, and obtaining information respecting Mien (Ava). This was followed by a more interesting journey into Mangi, or Southern China, which not long before had formed a separate kingdom, but happened then, as now, to be subject to a power resident in the north. He describes it justly as more fruitful and populous than the region first visited. Its capital, Quinsai, or the Celestial City, is painted quite in magic colours; its edifices, canals, ornamented bridges, spacious lake, and the palaces which embellished its shores. He indulges here in some exaggeration; yet Hangtchoofoo (as the place is now named, though it has long ceased to be a seat of empire,) is described as nearly as large as London, and surrounded by delightful environs.

* Edrisi, Géogr. Nubiens. Paris, 1819; Notices et Extraits des Manuscrits du Roi de France, tom. ii.; Anciennes Relations, &c. traduites par Renaudot. Paris, 1718.

† Hackluyt, i. 46. 117. Purchas, iii. ch 1.

Marco heard also of Xipangu, or Japan, as a rich insular empire, which the Great Khan had made a vain attempt to subdue. Returning by sea, the travellers touched at Tsiompa and Sumatra. They spent some time successively in Ceylon, Coromandel, and Malabar, and Marco gives a not unfaithful account of Indian manners and superstitions. Then sailing up the Persian Gulph, they proceeded from Ormuz to Trebisond, whence they returned to Venice, 24 years after their departure. No travellers ever perhaps carried home so great a mass of important information; but the narrative, being tinctured with the marvellous, and resting on Marco's sole authority, became exposed to much of that scepticism with which the first travellers into new regions are often unjustly assailed.

The great discoveries thus made were not however neglected. In the beginning of the fourteenth century, Juan de Monte Corvino, a Minorite friar, undertook a religious mission into the east. He penetrated to Cambalu, where he was allowed to reside for a number of years, and made many converts; the city was even erected into a see, of which he was named archbishop. About the same time Pegoletti, an Italian merchant, traced the caravan route through Asia as far as Cambalu, and published his itinerary.† Another Minorite friar, Oderic of Portenau, narrated a voyage made to India, the oriental archipelago, and China, returning by way of Tibet. He describes some Chinese peculiarities, which could not seemingly have been copied from former writers; such as the pride taken by the female grandees in long nails and little feet; and the use of birds in fishing. He mentions, indeed, a country of pigmies, with other wonders, which have somewhat shaken his credit. These, however, being related only upon hearsay, indicate credulity rather than bad faith. This cannot be said of our countryman, Sir John Mandeville, whose relations for some time drew a much greater attention: his statements are mostly borrowed, and exaggerated, from Oderic, and by pretending to have visited the pigmies, and seen other marvels, which the other stated only on report, he proves his work to be a complete forgery.‡

In the end of this century, the conquests and widely extended empire of Timur, with his victory over Bajazet the Turkish sultan, resounded throughout Asia, and in some degree through Europe. Henry III. of Castile sent two successive embassies to the court of the Tartar conqueror, the last in 1403, under Clavijo, who spent some weeks at Samarcand, and though he has not added much to geographical knowledge, he gave an interesting account of the court and policy of that monarch.‖

By these different means, a light, though somewhat dim, was thrown upon the farthest extremities of Asia; but it did not much avail the Italian republics, who were unable to reach its southern shores by sea, while the land-route was too arduous and perilous to be much frequented. The period, however, was now at hand, when the furthest extremities of Asia were to be the scene of European enterprise and adventure. In 1497, Vasco de Gama doubled the Cape of Good Hope, and reached the shores of India at Calicut. In the short space of twenty years the Portuguese, by a succession of victorious armaments, established forts and settlements in Hindostan, the Malayan peninsula, and most of the islands of the archipelago and even attempted them in China. Although this career could not be said to be one of discovery, almost all these countries being to a certain degree known, the hitherto doubtful accounts were authenticated, and they were surveyed with much greater precision. In the seventeenth century, a body of French missionaries, eminent for mathematical and astronomical knowledge, obtained permission to reside in Pekin, and were even employed in making a survey of China and the adjacent countries. The materials thus collected were transmitted to France, and arranged by D'Anville. Through the like agency, a less perfect knowledge was obtained of Japan.¶

But though the south of Asia, including its finest regions, had thus become completely known, there remained north of the Altai Mountains nearly a third part of the continent to which neither conquerors nor merchants had yet penetrated. Its discovery was reserved for Russia. After groaning for ages beneath the Tartar yoke, she emancipated herself, in the fifteenth century, under Joan Vassilievitch, and has ever since continued an active and increasing power. About the end of that century, having conquered the Cossacs, she had the address to engage that active and hardy race to explore and conquer for her the vast region of Siberia. They proceeded step by step, till, in 1639, fifty years after the commencement of the undertaking, Dimitrei Kopilof arrived at the Gulph of Ochotsk, a branch of the eastern ocean. Another division marched south-east upon the Amour, but there, having encountered the Chinese, were obliged to fall back. This progress, being along the southern part of the territory, did not bring them in contact with the coast forming the frozen boundary of the continent, which the English and Dutch were, in the meantime, exerting themselves to traverse as the nearest route to China. Middleton, Barentz, Hudson, and other navigators, engaged in this attempt; but none of them reached beyond the Gulph of Obi, a little east of Nova Zembla. About 1640, however, the Cossacs sent expeditions down the rivers Lena, Indigirka, Alaska, and Kolima, tracing their mouths, and the coasts between them. In 1646 they reached the extreme north-east peninsula of Asia, inhabited by the Tchutchi; in 1648 Deschnew and another chief undertook to sail round it, and though the accounts are imperfect, seem to have accomplished their object. Towards the end of the century, Behring discovered the most easterly cape of Asia; he and Tchirikoff afterwards made voyages to America. Cook, in his third voyage, sailed through these straits, and appeared to ascertain the disjunction of the two continents. It was still possible, however, that their coasts, by a vast circuit, might join each other; but this idea has been completely removed by the voyages of Wrangel on one coast, and of Beechey, Dease, and Simpson on the other. We may observe also that Cook, Perouse, and Broughton did much to explore the eastern boundary of Asiatic Russia, and its connection with the large island of Jesso, with Japan, and China.**

The entire coast of Asia has thus been explored, and in a great measure possessed, by Europeans. But the interior, never well described, and having ceased to be regarded in a commercial point of view, has continued comparatively unknown. The great range of the

* His Narrative in Ramusio, tom. ii. copied or translated in almost every collection; with notes, by Marsden, 4to. 1818.
† Maritime and Inland Discovery, Cab. Cyclop. i. 310—315.
‡ Oderic in Hackluyt, ii. 39—53. Mandeville, London, 1499. In Hackluyt's 1st ed. 1589, omitted in 2d.
‖ Clavijo, Historia del Gran Tamerlan, &c. fol. Seville, 1582.
¶ Di Barros, Secomte, Duhalde, &c.
** Coxe, Muller, Burney, Cochrane, Cook, &c.

Himmalah, better described by Ptolemy than in many modern maps, has, however, been carefully surveyed, and its astonishing height ascertained. The expeditions of Turner and Moorcroft into Tibet, Elphinstone into Caubul, and Burnes into Bokhara, greatly extended our knowledge of these regions.* The embassies from Russia to China crossed Mongolia and the desert of Gobi; while Pallas and Humboldt, from that side, gained much information respecting these central regions. But Ferghanah, Yarcund, Kashgar, and the whole of Chinese Tartary, with its fine plains and lofty mountain ranges, are but little known, and would amply reward the enterprise of a traveller, who should elude the jealous policy by which they are shut against strangers.

ASIA-MINOR. See NATOLIA.

ASIAGO, a town of Austrian Italy, prov. Vicenza, 24 m. N. Vicenza. Pop. 4,700. It is built on the summit of a hill, and is celebrated for its dye-works, and fabrics of straw hats. The annual value of the produce of the latter is supposed to exceed 150,000*l*.

Asiago is the chief town of a district containing seven communes, the inhabitants of which speak a corrupt dialect of the German. They are supposed, by some antiquaries, to be descended from fugitive Cimbri, escaped from the great battle in which that people were totally overthrown by Marius, 101 years B. C. Marco Pezzo, an ecclesiastic, and a native of the district in question, published a curious dissertation on this subject, a third edition of which appeared at Verona in 1763.

ASOLA, a town of Austrian Italy, on the Chiesa, 20 m. N. by N. Mantua. Pop. 3,000. It is fortified, has an hospital, and a filature of silk. Its foundation dates from the remotest antiquity.

ASOLO, a town of Austrian Italy, 19 m. W.N.W. Treviso. Pop. 3,000. It is finely situated on a hill, and is encircled by walls flanked with towers. It has an old cathedral, a public fountain, and some good houses. It is very ancient.

ASPE, a town of Spain, Valencia, 16 m. W. Alicant, in a mountainous country near the Taroffa. Pop. 5,000. There are quarries of fine marble in its vicinity.

ASPERG, a town of Wirtemberg, 3 m. N.W. Ludwigsburg. Pop. 1,400. Its church has some remarkable antiquities. At a little distance to the N. is the fort of Hohen-Asperg, on a steep rock, 1,105 feet above the level of the sea. It is at present used as a prison.

ASPERN, a small village of the arch-duchy of Austria, on the left bank of the Danube, opposite the island of Lobau, about 2 m. below Vienna. This and the neighbouring village of Essling were, in 1809, the scene of a tremendous conflict between the grand French army commanded by Napoleon, and the Austrians under the archduke Charles. After two days' (21st and 22d May) continuous fighting, with vast loss on both sides, Napoleon was obliged to withdraw his troops from the field, and take refuge in the island of Lobau.

ASPET, a town of France, dep. Haute Garonne, cap. cant. 8 m. S.E. St. Gaudens. Pop. 2,784. It has manufactures of nails, combs, and boxwood articles.

ASSAM, an inland territory of India beyond the Ganges, a dependency of the British empire, forming part of the E. frontier of our Indian possessions. It is included in the valley of the Brahmapoutra, between 25° 50′, and 28° 10′ N. lat., and 90° to 97° 35′ E. long.; having N. the Himalaya Mountains, which separate it from Bhootan and Tibet; E. Tibet; S. the Naga and Garrows Mountains, which divide it from the Birman and Munneepoor territories; and W. Bengal: length, E. to W., about 460 m.; area, 18,200 sq. m.; pop. (*Pemberton*, 1835) 602,500. (*Hamilton's Hindostan*, ii. p. 740.)

It is divided into,—

	Area.	Pop.	Revenue.	Chief Town.
	sq. m.		rupees.	
Upper Assam	10,000	202,500	120,000	Joorhath.
Central Assam	5,635 }	400,000	{ 4,000	Gergong.
Lower Assam	2,365 }		{ 316,000	Gowhati.

The general aspect of Assam is that of fine and fertile lowlands, inclosed by ranges of undulating hills, and these again by loftier ones, the surface of which is mostly covered by forests, but their summits, in winter, are often covered with snow. The geology of this region has not been much studied: the mountains which form its S. boundary, which increase in height as they proceed eastward, consist in part of a hard grey granular slate; and on the inferior heights there are many scattered boulders of granite: shell limestone is found in large quantity near Dhurmpoor. (*Pemberton Boileau, Report on the E. Frontier of British India.* Calcutta, 1836, p. 73.)

The most remarkable natural feature of Assam is the number of rivers, in which it surpasses every other country of equal extent. Besides the Brahmapoutra, which runs through its centre in a S. W. direction, it has 34 rivers flowing from its N., and 24 from its S. mountains, all of which are navigable for trading vessels of some size! (*Hamilton, E. I. Gazetteer*, p. 89.; *Pemberton, Report.*)

In Upper Assam, the Brahmapoutra divides into two streams, inclosing the considerable island of Dehing, one of the most fertile tracts in the country, having an area of 1,800 sq. m., and a pop. of 25,000. The inundations which prevail during a part of the year (*see* BRAHMAPOUTRA), and give Assam the appearance of an extensive lake, and the great subsequent heats, render the climate most unwholesome and pestiferous both to Europeans and natives. The chief mineral products are gold dust, in the sands of many of the rivers, the collection of which employs a great number of people, the produce of the Dhunseree river alone being estimated at 180,000 rup. a year; silver; iron; salt, chiefly from springs in Upper Assam; lead; coal; and petroleum. Throughout the whole length of the Assam valley, a forest 7 or 8 miles wide extends along the N. border, chiefly of a tropical character; but at the foot of the hill ranges, chestnut, alder, &c., are intermixed with the other trees. The timber is not remarkably fine, nor any of the trees large, excepting the caoutchouc (*Ficus elastica* Roxburgh), which grows solitary, sometimes to the height of 100 feet, and covering with its branches an area of 600 sq. ft. Tea, of a genuine kind, has been discovered in the region inhabited by the Singpho tribes, where it grows over a large tract of the peculiar yellowish soil so characteristically adapted to it: it has been brought to the London market, both black and green, and has fetched a high price; but it remains to be seen whether it can be produced as cheap and of as good a quality as in China. Our anticipations, we confess, are not very sanguine (January, 1839). This province is very favourable to the production of silk, which is of a very superior quality, but mostly made by wild insects, of which there are 5 different species; the sugar cane grows in Assam, but no sugar is made; a beautiful deep blue dye is obtained from *room*, a species of Ruellia, *Acanthaceæ*; and a powerful poison is procured from some plant by the Assamese, into which they dip their arrows. The hills along the bed of the Trolich are very steep, and covered with dense jungle nearly to their summits. There are no tigers, but many bears, monkeys, squirrels, &c. The chief object of culture is rice, and next to this mustard seed; wheat, rye, barley, and millet are rare; many sorts of pulse, the banana, orange, and other fruits, black pepper, ginger, turmeric, capsicum, onions, and garlic, are cultivated; and cotton by the hill tribes. Cattle and poultry are few; the buffalo is most used in agriculture. Villages rare, and the scattered huts mostly built of bamboo. There is some small trade with Bootan and Tibet: several remarkable roads or causeways intersect Assam, the origin of which is not known, but they appear to have been constructed at a distant period; one of these extends from Cooch Bahar in Bengal to the extreme E. limits of this country. The land is tilled by *pykes*, or natives of 4 different classes, who are obliged, for a portion of the year, to give their services for the benefit of the rajah granting them their land. (*Pemberton*, p. 73.; *Hamilton, E. I. Gazetteer*, pp. 40, 41.)

The manufactures are those of silk velvet and cotton stuffs, and are carried on by the women: silks are in general use for clothing, and similar to those of China. The trade is mostly with Bengal, the imports from which are broadcloths, muslins, chintzes, &c., salt, opium, liquor, glass, crockery, tobacco, betel, and rice; the exports being gold dust, ivory, silver, amber, musk daos, Birmese cloths, and a few Chinese cloths; in 1833, cotton was added to the exports from Assam. (*Pemberton*, p. 72.) There is a duty of 10 per cent. on the value of all imports. The country is inhabited by a number of different tribes, who in central Assam are united under a rajah tributary to the British Government. Upper and Lower Assam are in the direct occupation of the British, who keep at Suddya two companies of Assam light infantry under a British officer, and two gun-boats. (*Pemberton*, p. 71.) Justice is administered by the heads of tribes, and their punishments are of the most barbarous description, a capital crime involving the death, not only of the criminal, but also of all the members of his family! The religion is that of Brahma, introduced in the 17th century; before that period, the god Chang (probably the same as Boodh) was adored: the priests have great influence, and are intriguing and vicious. The people are active, hardy, and enterprising; but barbarous, revengeful, and deceitful: they consist of

* Asiatic Researches, vols. 6. 10, 11, 12. Fraser's Tour in Himmala Mountains, &c.

numerous different tribes, as the Bor-Khamti, Singphos, Mishmees, &c., each under a separate chieftain. Principal food rice, but they also eat serpents, rats, locusts, dogs' flesh, &c.; they use an Hindostanee dialect, the language of Assam being nearly extinct. Some of the tribes go quite naked; others have a covering round their middle, and over the head and shoulders: they wear moustaches, but shave the scalp and chin. Their habitations, even in the principal towns, are mere huts, with a clay floor and conical roof of straw or bamboo. In every respect, this country is in a state of abject barbarism. Little is known of their history; in 1638, they invaded Bengal, but were repulsed by some of Shah Jehann's officers, and lost some of their own frontier provinces. A general of Aurungzebe subsequently led an army into Assam, which he lost before Gergong during the rainy season by disease and the resistance of the enemy. Assam is one of the provinces ceded to the British by the Birmese in 1826. (*Hamilton, Description of Hindostan*, pp. 744, 745.; *Hamilton, E. I. Gazetteer*, p. 41.)

ASSCHE, a town of Belgium, prov. South Brabant, about half way between Brussels and Dendermonde. Pop. 4,000. It has some trade in hops, flax, and corn.

ASSEERGHUR, a town and fortress of Hindostan, presid. Bombay, prov. Candeish, cap. distr. belonging chiefly to Sindia's dom., on a detached hill of the Sautpoorah Range, 15 m. N. Boorhanpoor, and 215 m. E.N.E. Surat. Lat. 21° 28′ N., long. 76° 23′ E. Pop. (1822) about 2,000. The town, straggling and irregular, with one good bazar, stands at the base of the rocky hill on which the fortress is placed. The summit of this hill is about 1,100 yds. from E. to W., by 600 yds. wide; it is inclosed by a wall, and surrounded by a precipice from 80 to 100 ft. in perpendicular height, so well scarped as to leave no means of ascent except at two spots, both of which are strongly fortified. A second line of works of excellent masonry protects it on the S.W. side, on the principal road to the fort; and a third line embraces the hill immediately above the town. It is besides protected by ravines and deep hollows on every side, and possesses the rare advantage of plenty of water. Magazines and a sally port, easily blocked up by the garrison, are excavated within the rock. The approach from the N. is over a wild tract infested with tigers and wolves. Asseerghur is surrounded on every side except the S.W. by Sindia's dom., and is the nearest place in the Bombay presid. to Bengal. It was taken in 1803 and 1819 by the British, who have held it since the last-mentioned year. (*Hamilton's E. I. Gaz.* i. 64.)

ASSENDELFT, a village of the Netherlands, prov. Holland, 7 m. N.N.E. Harlem. Pop. 2,200.

ASSENEDE, a town of Belgium, prov. East Flanders, 13 m. N. Ghent. Pop. 3,200. It has manufactures of wool and cotton, dye works, breweries, soap works, &c.

ASSENHEIM, a town of the G. duchy Hesse-Darmstadt, at the confluence of the Nidda and the Wetter, 13 m. N.E. Francfort on the Mayne. Pop. 4,000. A part of this town belongs to the duke of Issenburg Budingen. A good deal of wine is produced in its territory, and it has considerable coal mines.

ASSENS, a sea-port town of Denmark, W. coast of the island of Funen, on the channel called the Little Belt, 22 m. W. S. W. Odensee, lat. 55° 17′ N., long. 9° 54′ E. Pop. 1,500. It has distilleries, and a considerable trade in corn. It is the usual point of departure for persons leaving Funen for Sleswick.

ASSISI, a town of Italy, States of the Church, 13 m. E.S.E. Perugia. Pop. 4,000. It is situated on a mountain, is the seat of a bishopric, has a cathedral and several other churches, some of which are ornamented with fine pictures. Metastasio belonged to this town.

ASSOUAN. *See* SYENE.

ASSUMPTION, or ASUNCION, a city of S. America, cap. Paraguay, and residence of the dictator, finely situated on an eminence on the left bank of the great navigable river of that name, lat. 25° 16′ S., long. 57° 37′ W. Pop. circa 10,000. It was founded in 1535, and from its advantageous situation became of sufficient importance to be made a bishopric in 1547. It is miserably built; the streets being unpaved, and most of the houses no better than huts. The only good buildings are the convents. What has been called its "beautiful cathedral" is a paltry, white-washed fabric; and its government house, with the title of palace, though extensive, is mean. The men are said to be well made and athletic, and the women handsome; the country round is comparatively well cultivated and populous. Assumption is the centre of a considerable trade in hides, tobacco, timber, *matté*, or Paraguay tea, wax, &c. (*Robertson's Paraguay*, i. 288.)

ASSUMPTION, a small island of the Marianne archipelago, Pacific Ocean, lat. 19° 45′ N., long. 145° 54′ E. It is cone-shaped, and consists almost entirely of lava and other volcanic products. It produces a few cocoa nut trees, and is described by Perouse as a most wretched place.

ASSUS, an ancient city of Asia Minor, in Troas, near the sea, whose ruins occupy a site contiguous to the modern and inconsiderable village of Beiram, 12 m. E. Cape Baba (an. *Lectum*), 35 m. W.S.W. Mount Ida, and nearly opposite to Mollivo in Mytilene. It is said to have been founded by a colony from Lesbos, and was famous in the history of Grecian philosophy from its having been the birth-place of Cleanthes the stoic, and for a while the residence of Aristotle. Colonel Leake says of its ruins, that "they are extremely curious. There is a theatre in very perfect preservation; and the remains of several temples lying in confused heaps on the ground; an inscription upon an architrave on one of these buildings shows that it was dedicated to Augustus; but some figures in low relief on another architrave appear to be in a much more ancient style of art, and they are sculptured on the hard granite of Mount Ida, which forms the materials of several of the buildings. On the W. side of the city the remains of the walls and towers, with a gate, are in complete preservation; and without the walls is seen the cemetery, with numerous sarcophagi still standing in their places, and an ancient causeway leading through them to the gate. Some of these sarcophagi are of gigantic dimensions. The whole gives, perhaps, the most perfect idea of a Greek city that anywhere exists." (*Leake's Asia Minor*, p. 128.)

ASSYE, a town of Hindostan, prov. Berar, in the Nizam's dom., 28 m. N. Jaulna. It is celebrated as the spot where the Duke of Wellington commenced his career of victory. On the 23d of September, 1803, his Grace, then General Wellesley, with 4,500 men, (of whom only 2,000 were British,) completely defeated the combined forces of Dowlut Row Sindia, and the Nagpoor rajah, amounting to 30,000 men. The confederates fled from the field, leaving about 1,200 slain, 98 pieces of cannon, 7 standards, their whole camp equipage, and much ammunition. The British-Indian army lost 1,566 men, killed and wounded.

ASTAFORT, a town of France, dép. Lot-et-Garonne, cap. cant. on the Gers, 10 m. S. Agen. Pop. 2,527.

ASTERABAD, or ASTRABAD, a city of Persia, cap. of a small prov. of the same name, on the Gourgan, about 12 m. from where it falls into the S.E. angle of the Caspian Sea, denominated the Bay of Asterabad, lat. 36° 50′ N., long. 53° 23′ E. Mr. Fraser says that it contains from 2,000 to 3,000 houses, so that its population may be estimated at from 12,000 to 18,000. It is surrounded by a low mud wall, about 3½ m. in circuit. Formerly it was much more extensive than at present; a great part of it being in ruins, and there being, also, within the wall, extensive gardens and numerous trees. Houses, chiefly of wood, are said to be picturesque and pleasant, and are frequently furnished with verandahs resting on wooden pillars; their roofs project far beyond their walls. The streets are well paved, and clean, and are furnished with drains to carry off the water, which in most other Persian cities is allowed to stagnate in pools. None of the public or private buildings deserve notice. The palace of the prince, or governor, is a miserable fabric. The bazars, or public markets, are tolerably extensive; but they contain little besides the articles required for the consumption of the place. Asterabad, though in fact a port, has but little trade. It is said to be very unhealthy; a consequence, most probably, of thickets and forests being allowed to approach the very walls. (*Fraser's Caspian Sea, &c.* p. 7.)

ASTI (an. *Asta* or *Hasta Pompeia*), a city of the Sardinian states, prov. Alexandria, on the Bourbo, near its confluence with the Tanaro, 28 m. E.S.E. Turin, lat. 44° 57′ N., long. 8° 12′ E. Pop. 22,000. It is surrounded by old walls in a ruinous condition, and was famous for its 100 towers, of which hardly 30 now remain. Streets narrow; but it is in general pretty well built. The cathedral, a modern building, occupies the site of a temple of Diana, and it has, besides, numerous parish churches and palaces. Asti is the seat of a bishopric, of a court of original jurisdiction, and a royal college, and has several silk filatures, with manufactures of silk, stuffs, &c. The vineyards in its vicinity furnish the best wines of Piedmont; and it carries on a considerable trade in them, in raw and manufactured silks, and other articles. One of the greatest poets of modern Italy, and, indeed, of modern Europe, Victor Alfieri, descended from an ancient and noble family of Asti, was born here on the 17th January, 1749.

Asti is a very ancient city. In 1154 it was burned down by the emperor Frederic Barbarossa, but it had been previously evacuated by the inhabitants. (*Sismondi, Républiques Italiennes*, iii. p. 57.) It soon recovered its ancient grandeur, and in the 13th century was able to contend with the forces of Charles I. of Naples. In the 14th century it formed part of the territory of the lords of Milan, and was transferred, in 1387, as the dowry of a Milanese princess to the duke of Orleans, brother to Charles VI. of France. It remained under the dominion of the French till 1529, when it

was ceded by the treaty of Cambray to the emperor Charles V. The latter made it over to one of his female relations, who married a prince of the house of Savoy, in whose possession it still continues. (*Conder's Italy*, i. p. 225.)

ASTIER (ST.), a town of France, dép. Dordogne, on the Isle, 10 m. W. S. W. Périgueux. Pop. 2,300.

ASTORGA, a town of Spain, prov. Leon, 30 m. W. Leon, in an extensive and fertile plain near the banks of the Tuerto, lat. 42° 27′ N., long. 6° 10′ W. Pop. 4,000 It is very ancient, and was formerly fortified by a wall and a castle; but both of these have been allowed to go to decay. Some new defences were, however, constructed in 1810, previously to its reduction by the French under Junot. but we are not informed as to their present state. The town is ill built, and the streets narrow and dirty. It is the seat of a bishop, has a Gothic cathedral, celebrated for its high altar, 4 parish churches, and some convents.

ASTRAKHAN, an extensive gov. of Russia in Europe, lying along the N. W. shore of the Caspian Sea, and divided into two nearly equal portions by the Wolga. Area supposed to be about 83,000 sq. m. Pop. estimated by various authorities at from 250,000 to 320,000. This is one of the least valuable provs. in the empire. With the exception of the Delta of the Wolga, and a narrow strip of land along the banks of that river, it consists almost entirely of two vast steppes, one on each side the river, in part occupied with sand hills, but mostly low and flat; the soil consisting of mud and sand, strongly impregnated with salt, interspersed with saline lakes, and altogether unsusceptible of cultivation. In consequence, agriculture is all but neglected; but in the Delta of the Wolga, gardening is practised with some success, and superior fruits are raised. In summer the heats are frequently excessive, while in winter the frosts are equally severe. Horses are of the beautiful Calmuck breed; and some of the wandering tribes have great numbers of camels. That fertility which nature has denied to the land, she has given to the water. The fishery forms the principal source of the wealth of this government, and is carried on upon a great scale on the Wolga, which teems with fish, and along the shores of the Caspian. Sturgeon, carp, and seal, but particularly the first, are the fish most commonly taken. The annual value of the sturgeon fishery is estimated at from 2,000,000 to 3,000,000 roubles; and above 30,000 barrels of caviar, prepared from the roes of the sturgeon, have been exported from Astrakhan in a single year. Though few in number, the inhabitants consist of a great variety of races. They are mostly nomades; and, according to the official statements, there are, in the entire government, only 20,098 individuals subject to the capitation tax. With the exception of some fabrics in Astrakhan, manufacturing industry is unknown.

ASTRAKHAN, a city of Russia, in the cap. of the above government, on a small island in the Wolga, on the left bank of the main stream, about 30 m. from its embouchure, lat. 46° 20′ 53″ N., long. 47° 55′ E. Pop. 31,000. This "Alexandria of the Scythian Nile," as it has been sometimes called, stands on ground elevated sufficiently to be above the reach of the inundations. It consists of three parts:— the *Kremlin*, or citadel; the *Bielogorod* (white town); and the *Slobodes*, or suburbs. In the first, or nucleus of the city, is the cathedral, a large square edifice surmounted by five domes, the convent of the Trinity, and the archiepiscopal palace; in the second are the buildings for the government functionaries, including an admiralty board, having charge of the flotilla kept on the Caspian, the gymnasium, and the bazars, or factories for the use of the merchants. The houses in the suburbs, where the bulk of the population resides, are of wood; whereas in the other two divisions they are of stone. Streets crooked, and mostly without pavement. It is the seat of an Armenian as well as of a Greek archbishop; and it has also Mohammedan, Hindoo, and Protestant places of worship. Exclusive of the gymnasium, there is an ecclesiastical academy, a district grammar school, and some inferior schools; but education is, notwithstanding, at a very low ebb here, and throughout the government. There are several manufacturing establishments for the production of cottons, woollens, and silks; with distilleries, tanneries, soap-works, &c. Astrakhan is the centre of the fisheries carried on in the Wolga and Caspian. Its burgesses had formerly a monopoly of the fishery in the Wolga; but since 1803 they have been free to every one. During the season, the fisheries employ immense numbers of people and boats. The population of the city is then much augmented, and it presents an animated lively scene. It is the grand fishing mart for all the interior of the empire; it is also the great entrepôt of the trade with Persia and the countries to the east of the Caspian, sending to them leather, furs, iron, copper, tallow, &c., and getting back silk and cotton goods, raw silk, cotton twist, drugs, carpets, &c. The exports to the countries in question in 1834 amounted to 1,447,189 roubles, and the imports to 912,416 roubles; but they have sometimes been more than double these amounts. This trade is principally carried on by Armenian merchants. (*Schnitzler, La Russie, &c.* p. 699.; *Official Tables, &c.*)

ASTURIAS, a principality in the N. of Spain, now the prov. of Oviedo, lying along the Bay of Biscay, between 4° 30′ and 7° 10′ W. long., having E. the Castilian prov. of Santander, S. Leon, and W. Galicia. Its area has been variously estimated, but may be taken at about 3,650 sq. m. Pop. (1834) 434,635. Surface much diversified. Its S. border consists of a chain of high mountains, which gradually diminish in height as they approach the coast, along which there are extensive tracts of pretty level land. It is extremely well watered, being intersected by the Nalon, Navia, and other rivers, and has several sea-ports, as Gijon, Rivadesella, Cudillero, Aviles, &c. The climate along the coast is mild, but in the mountainous parts it is frequently severe, and it is distinguished by its humidity. But little wheat is raised, the inhabitants subsisting chiefly on maize, and a species of corn called *escanda*. Hazel nuts are scarce; but chestnuts are very plentiful, and of excellent quality. The vine is cultivated in some parts; but the produce of wine is not sufficient for the consumption, the deficiency being supplied with cider, which is partly also exported. Oranges and lemons are produced in a few places, and great numbers of cucumbers. Besides the chestnut, the wood of which, as well as the fruit, is most valuable, the mountains are covered with forests of oak, beech, plane, &c. There is a considerable exportation of cattle and horses from this prov. to the interior. Iron, copper, lead, antimony, jet, amber, marble, mill-stones, &c., are found in different places. Coal is also found, and Miñano says that 90,000 quintals are shipped for other parts of the peninsula. With the exception of hardware, with many articles of which this prov. supplies the rest of Spain, its manufactures are in a very backward state. Mr. Townsend says of the inhabitants, "They eat little flesh; they drink little wine: their usual diet is Indian corn, with beans, pease, chestnuts, apples, pears, melons, and cucumbers; and even their bread, made of Indian corn, has neither barm nor leaven, but is unfermented, and in the state of dough: their drink is water." (ii. 14.) The principal towns are Oviedo, Gijon, Aviles, Navia, &c.

Asturias may be said to be the cradle of Spanish independence. The Saracens, who had overrun the rest of the country, were unable to overcome the Christians, who had taken refuge in the fastnesses of its mountains. Pelayo was proclaimed king in 718; and his successors having gradually extended their conquests, took, about two centuries after, the title of kings of Leon. In 1388 the prov. was erected into a principality, and became the apanage of the heir presumptive to the throne, who has since been styled prince of Asturias. Several peculiar privileges have been conferred on this province on account of the services it has rendered to the monarchy. (*Antillon, Miñano.*)

ASZOD, a market town of Hungary, co. Pesth, on the Galga, 23 m. N.E. Pesth, in a fertile valley. Pop. 2,220, mostly Protestants. Here is a large and handsome country-seat belonging to the barons Podmaniczky, with a fine collection of coins and natural curiosities. It has manufactures of blue and green dyed sheep-skins, for which there is a considerable demand. (*Nat. Encyc.* i. 134.)

ATACAMA, an extensive district of Bolivia, or Upper Peru, lying along the Pacific Ocean, between the river Lao on the N., and the Salado on the S., or between 21½ and 25½ deg. S. lat. Towards its N. extremity there are some fertile valleys; but by far the greater part of its surface is an absolute desert covered with dark brown or black movable sand. The arid soil of this portion is never refreshed with rain, and except where a very few rivers descend from the Andes, it is both uninhabited and uninhabitable. Cobija, or Port La Mar, is built at the mouth of one of these rivers.

ATESSA, a town of Naples, prov. Abruzzo Citra, 14 m. W. Vasto d'Ammone. Pop. (canton, 1832) 7,526. It is situated on a hill, has a fine collegiate church, with parish churches, convents, an hospital, and 3 *monts de piété*. The poet Cardone was a native of Atessa.

ATFIEH, a town of Egypt, cap. prov. same name, near the right bank of the Nile, 42 m. S. S. E. Cairo. Pop. 4,000. It is supposed to be on or near the site of the ancient *Aphroditopolis*.

ATH, a town of Belgium, prov. Hainault, on the Dender, and on the high road from Tournay to Brussels, 15 m. N. by W. Mons, lat. 50° 42′ 17″ N., long. 3° 46′ 32″ E. Pop. (in 1835) 8,817. It was fortified by Vauban, and the works have been materially improved and strengthened since 1815. It is well built. Principal public buildings, the arsenal, town-house, and the church of St. Julian: the spire of the latter, 150 feet in height, was destroyed by lightning in 1817, and has not been rebuilt. Ath has a college, founded in 1416; a school of design; an orphan hospital; theatre, &c. It has manufactures of linen, woollen and cotton stuffs, hats and gloves; establishments for bleaching and dyeing; with oil-mills, soap-

works, breweries, distilleries, &c. It is an entrepôt for the trade in coal, and for the produce of the surrounding country.

ATHAPESCOW, or ATHABASCO, an extensive lake of N. America, being about 200 m. in length, and from 14 to 15 in average width. Fort Chipewyan, at its S.W. extremity, is in lat. 58° 42′ N., long. 111° 18′ W. It receives the Athapescow river; and the Slave river flows from it into Great Slave Lake, lying about 170 m. N.E. Its N. shore is high and rocky, whence it is sometimes called the lake of the hills.

ATHBOY, an inl. town of Ireland, co. Meath, prov. Leinster, on a small branch of the Boyne, from which it is supposed to have its name, signifying "the yellow ford," 31 m. N.W. by W. Dublin. It is a place of no historical notoriety. Pop. in 1821, 1,569; in 1831, 1,959, forming 2-3rds of that of the par., which in 1834 amounted to 5,491, of whom 333 were of the E. church, and 5,158 R. Cath. The town, situated in a level and fertile district, consists of one long street; has a modern church, with an ancient tower; a large and elegant R. Cath. chapel, in the ancient English style, with a steeple 90 feet high; a dispensary; schools, partly endowed and partly private, in which about 400 pupils are educated; and almshouses, in which 12 poor widows are supported. Fuel is supplied in plenty from an extensive neighbouring bog. The Hill of Ward, near the town, 4 0 feet high, is a striking object in this flat country. The town, which is a bor. by prescription, received a charter from Hen. IV., confirming and extending its privileges, which were confirmed and further extended by subsequent monarchs, particularly by Elizabeth, who conferred on it the right of sending 2 ms. to the Irish Parl.; and by James I., by whom the municipal limits were fixed at a mile beyond the town in every direction, to which was added a right to hold a court of record. But these, and some manorial powers, have fallen into desuetude since the Union, when the bor. lost its right to return ms. to Parl. Petty sessions are held here on alternate Thursdays. There is a large flour-mill in the town. The market, held in the market-house on Thursdays, is well supplied with corn and provisions. The fairs are numerous; the principal being those held on the Thursday before 28 Jan., on 4 May, 4 Aug., and 7 Nov.; the others, held on 3 and 10 March, 22 and 30 June, and on 22 and 29 Sept., are less important. The post-office revenue in 1830 was 201*l.*; and in 1836, 245*l.* The town is a constabulary station. A *caravan*, conveying an average number of 8 passengers each trip, plies between it and Dublin seven times a week. (*Municipal and Railroad Reports*, &c.)

ATHENRY, a decayed town of Ireland, co. Galway, 14 m. E. Galway. Pop. 1,319. It was formerly of some importance, having been enclosed by walls, and possessed of a university. It returned a member to the Irish Parl.

ATHENS*, one of the most famous cities of antiquity, the chosen seat of literature, philosophy, and the fine arts†, and the capital of the new kingdom of Greece, on the W. side of Attica, about 4 m. from the Gulph of Ægina, lat. 37° 58′ 1″ N., long. 23° 43′ 54″ E. Pop. in 1845, 27,800, inc. gar. Its situation bears a considerable resemblance to that of Edinburgh, being built on the W. side of an abrupt and rocky eminence rising out of an extensive plain terminated N. by mounts Pentelicus and Parnes, N.E. by Mount Anchesmus, E. by Mount Hymettus, S.W. by the Hill Museium, now called Philopappus, and W. by Lycabettus. During the prolonged conflicts of the revolutionary war (1820-27) the town was laid in ruins; and when the seat of government was transferred hither in 1834, it was with the greatest difficulty that buildings could be fitted up for the members of the regency, the diplomatic body and their offices. It is, however, again gradually rising into importance. Several streets have been opened, levelled, and widened, the principal being Hermes, or Mercury Street, Æolus Street, Minerva Street, and the Bazar or Market Street. The first of these traverses the town, which it divides into two equal parts, parallel with the Acropolis, and is crossed at right angles by that of Æolus, which terminates close under the Acropolis. Minerva Street, the broadest of all, runs in nearly the same direction as Æolus Street. Bazar or Market Street, so called from its containing the shops for the supply of the various articles required by the population, is about ½ m. in length. Among the commodities are "caviar, onions, tobacco, black olives, figs, rice, pipes with amber mouthpieces, rich stuffs, silver-chased pistols, dirks, belts, and embroidered waistcoats." (*Wordsworth's Residence in Attica.*) The houses, built in the modern German style, are generally supplied with "jalousies" and balconies, and contain shops and coffee-houses on the lower story. The other streets hardly deserve the name, being mere narrow lanes, displaying a marked contempt for regularity. The public buildings comprise the royal palace, the university, the hall for the national representatives, a theatre, a mint, an observatory, barracks, hospitals, &c., with a cathedral, now in the course of being erected, and several churches, inc. an English chapel. The palace is a large quadrangular edifice at the foot of Mount Lycabettus. The university, the finest of the modern buildings, established on the German model, has a pretty extensive library, a numerous *corps* of professors and teachers, and about 200 pupils. Athens has, also, a well-attended gymnasium, in which the government has founded some exhibitions, with various inferior academies and schools, a botanic garden, &c. Many large private houses have been erected, and building proceeded at one time "with so much spirit, that the sum of 300*l.* was frequently given for half an acre of land." (*Wordsworth.*) But house-rent is, notwithstanding, said to be extravagantly high; and most sorts of necessaries are dear. The population is of a more heterogeneous description than that of any other city of its size. "Greeks, in their wild costume, are jostled in the streets by Englishmen, Frenchmen, Italians, Dutchmen, Spaniards, Bavarians, Russians, Danes, and Americans." (*Steven's Travels in Greece.*) European shops invite purchasers by the side of Eastern bazars; coffee-houses and billiard rooms, and French and German *restaurants*, are opened all over the city. The mixture of its population bears a striking analogy to the extraordinary contrasts presented by the city itself. "The same half acre of ground," says a recent traveller, "often contains two or three remaining columns of an ancient portico, a small Christian chapel of the middle ages, a Venetian watch-tower, a Turkish mosque, with its accompanying cypresses and palm-trees, and a modern fashionable looking residence; thus, as it were, distinctly exhibiting the different phases of the varied existence of this celebrated city." Great efforts have been made to secure the health of the city, by taking down the walls by which it had been surrounded by the Turks; by cleansing and repairing the ancient sewers; and draining the marshes formed by the overflowings of the Cephisus, the exhalations of which were extremely noxious. A good road connects the city with its harbour at the Piræus. Here, also, several large houses have been built, and some good streets, flanked by respectable dwellings, have been completed. A large custom-house, a quay, and a lazaretto, have been erected, and though trade cannot be said to flourish, the town has rather a bustling appearance.

Athens stands on a spot rich in remains of

* Athens, so called from Αθηνη, Minerva, the patroness of the city. There were several places of the same name in Greece. Steph. Byz. (v. s. v.) enumerates 8. The Romans used to designate the city of Minerva, *Athenæ Atticæ.*

† *Adsunt Athenienses, unde humanitas, doctrina, religio, fruges, jura, leges ortæ, atque in omnes terras distributæ putantur: de quorum urbis possessione, propter pulchritudinem etiam inter deos certamen fuisse proditum est: quæ vetustate ea est, ut ipsa ex sese suos cives genuisse dicatur: et eorum eadem terra parens, altrix, patria, dicatur.* (*Cicero pro Flacco*, cap. 26.)

antiquity; and it is reasonable to suppose that its present tranquillity will prove favourable to the better illustration of monuments and places already identified, and that the excavations every where forming for laying the foundations of new buildings will lead to many valuable discoveries.

The ancient city of Athens

> —— The eye of Greece, mother of arts
> And eloquence, native to famous wits,
> Or hospitable ——

considerably exceeded in extent the modern town; and, unlike the latter, which, as already observed, spreads into the plain chiefly on the W. and S. W., encircled the Acropolis. It was enclosed in a sort of peninsula formed by the confluence of the Cephisus and Ilyssus, the former of which flows due S. past the W. side of the city; the latter, which rises a few miles to the N. E. of the city, runs past it in a S.W. direction. At the time when Athens had attained its greatest magnitude, it was encompassed by a wall surmounted at intervals by strongly fortified towers. The plan of this wall, many parts of which still remain, exhibits the form of an irregular oblong, having at its N. extremity the gate of Acharnæ, on the S. the Itonian gate and the fountain Callirhoe, on the W. the gate of Diochares, and on the E. the Peiraic gate. The following extract from an art. on Athens in the Penny Cyclopedia, gives a distinct idea of its outline. "Beginning with the gate of Acharnæ on the north, as above stated, the wall ran eastward near the base of Anchesmus, and past the Diomeian gate to the gate of Diochares, which led to the Lyceium; it then continued parallel to the Ilyssus on the western side of that stream to the fountain Callirhoe or Enneacrunos; and thence to the hill of the Museium, which it crossed, comprehending the still existing monument of Philopappus within its circuit. Its course from the Museium was north, taking in the chief part of the Pnyx and Mount Lycabettus, to the Dipylum, which led to the outer Ceramicus or great burying ground, and to the Academia or School of Plato, in the depression between the Pnyx and Lycabettus. A line from Dipylum to the gate of Acharnæ completes the circuit." Athens had three great harbours, the Piræus, Munychia, and Phalerum. These ports formed a separate city larger than Athens itself, and were connected with it by means of the long walls (μακρα τειχη) the identification of which has involved the learned in interminable disputes. The harbour of the Piræus, was a spacious basin embraced by two arms of rocky land which formed gigantic natural piers. Even now it is considered a safe port, and in former times it constituted at once the harbour, dockyard, and arsenal of Athens.

Athens, at its most flourishing period, contained about 10,000 houses (*Xen. Mem.* iii. 6. 14.), which were for the most part so small and mean in appearance that, according to Dicæarchus, it was to the public edifices alone that it owed its attractions. The inhabitants were comprised under three classes, citizens (πολιται), sojourners (μετοικοι), and slaves (δουλοι); of these the slaves greatly preponderated, though it is difficult to make an accurate computation of their numbers. Indeed, the whole question as to the population of Athens is involved in great obscurity. Hume, Letronne, Boeckh, Leake, Clinton, and others, have in our own times directed their efforts towards its elucidation, and have supported their reasonings with great learning and ingenuity, though with little unanimity or success: and the difficulties that surround the subject, from the vagueness, inaccuracy, and discrepancy of the *data*, are so great as almost to preclude the possibility of arriving at any thing like a satisfactory conclusion. Boeckh has estimated the population of the city and its ports at 180,000; Clinton at 160,000; and Leake at 116,000. The statement of Athenæus that the number of slaves in Athens (or Attica) was 400,000, is universally admitted to be grossly exaggerated. The commercial operations of Athens embraced every known country and commodity. "All the products of foreign countries," says Boeckh, "came to Athens, and articles which, in other places, could hardly be obtained singly, were collected together at the Piræus. Besides the corn, the costly wines, iron, brass, and other objects of commerce which came from all the regions of the Mediterranean, they imported, from the coasts of the Black Sea, slaves, timber for ship-building, salt-fish, honey, wax, tar, wool, rigging, leather, goat skins, &c.; from Byzantium, Thrace, and Macedonia, timber, slaves and salt-fish; slaves from Thessaly; carpets and fine wool from Phrygia and Miletus." "All the finest products," says Xenophon (*De Rep. Ath.* ii. 7.), "of Sicily, of Italy, Cyprus, Lydia, Pontus and the Peloponnesus, Athens by her empire of the sea is able to collect into one spot." Nor were manufactures neglected. It is true that commerce was regarded as the chief point of national policy, and that every encouragement was given to it which high protecting regulations and other privileges could bestow. But no restriction was imposed upon industry: the meanest manual occupation was attended by no disgrace; hence every branch of industry flourished, and the manufactures of Athens were every where esteemed. The native products of Athens too were of great importance; they consisted chiefly of olives, figs, and honey, and have been celebrated in all ages. The wealth of the city was also augmented by the silver mines of Laurion, and "those sumptuous edifices, which constituted the pride of the Athenians, and the admiration of the present day, owed their origin to the marble quarries of Pentelicus." (*Dodwell's Greece.*) The opulence, prosperity, and power of Athens are fully exhibited by Thucydides (lib. ii. 13.). Previously to the Peloponnesian war, the treasury contained 9,700 talents, besides a great quantity of gold and silver deposited in the temples of the gods and in other public edifices. The city was defended by 1,200 cavalry, 1,600 bowmen, and 13,000 heavy armed troops; 16,000 men were stationed in the fortifications, and the coast was guarded by 300 well manned ships. The same historian has distinctly indicated (lib. ii. 40.), that the freedom of the Athenian institutions, so pre-eminently adapted to develop the energies of the human mind, was the chief source of their unparalleled greatness; but our limits preclude us from entering into details on the government and public economy of Athens, and we can only refer the reader to Boeckh's invaluable treatise on this difficult and interesting subject.

We now proceed to notice briefly the monuments of antiquity which still exist at Athens, as they have been described by Chandler, Clarke, Gell, Stuart, Dodwell, Leake, and other travellers. The most striking object is the Acropolis *, or old Cecropian fortress, founded by Cecrops, about anno 1556, A. C., rising abruptly out of the Attic plain, and

* The Acropolis alone formed the ancient city, and from its elevated position was termed ἡ ανω πολις, in contradistinction to the lower part, ἡ κατω πολις, afterwards built. Athens, including the upper and lower parts, was styled, by way of eminence, πολις, or αστυ, *the city*.

covered with relics of Athenian grandeur. At its W. end, by which alone it was accessible, stood the Propylæa, the gate, as well as the defence of the Acropolis. Through this gate the periodical processions of the Panathenaic jubilee were wont to move; and the marks of chariot wheels are still visible on the stone floor of its entrance. It was of the Doric order, and its central pediment was supported by 6 fluted marble columns, each 5 ft. in diam., 29 in height, and 7 in their intercolumniation. On the right wing stood the Temple of Victory, and on the left was a building decorated with paintings by the pencil of Polygnotus, of which Pausanias has left us an account. In a part of the wall still remaining there are fragments of excellent designs in basso relievo, representing the combat of the Athenians with the Amazons: besides 6 columns white as snow, and of the finest architecture. Near the Propylæa stood the celebrated colossal statue of Minerva, executed by Phidias after the battle of Marathon, the height of which, including the pedestal, was 60 ft. But the chief glory of the Acropolis was the Parthenon, or Temple of Minerva. It was a peripteral octostyle, of the Doric order, with 17 columns on the sides, each 6 ft. 2 in. in diameter at the base, and 34 ft. in height, elevated on three steps. Its height, from the base of the pediments, was 65 ft., and the dimensions of the area 233 ft. by 102. The eastern pediment was adorned with two groups of statues, one of which represented the birth of Minerva, the other the contest of Minerva with Neptune for the government of Athens. On the metopes was sculptured the battle of the Centaurs with the Lapithæ; and the frieze contained a representation of the Panathenaic festivals. Ictinus, Callicrates, and Carpion, were the architects of this temple; Phidias was the artist; and its entire cost has been estimated at 1½ million sterling. Of this building, 8 columns of the eastern front and several of the lateral colonnades are still standing. Of the frontispiece, which represented the contest of Neptune and Minerva, nothing remains but the head of a sea horse and the figures of two women without heads. The combat of the Centaurs and the Lapithæ is in better preservation; but, of the numerous statues with which this temple was enriched, that of Adrian alone remains. The Parthenon, however, dilapidated as it is, still retains an air of inexpressible grandeur and sublimity; and it forms at once the highest point in Athens, and the centre of the Acropolis. On the N. E. side of the Parthenon stood the Erechtheium, a temple dedicated to the joint worship of Neptune and Minerva. There are considerable remains of this building, particularly those beautiful female figures called Caryatides, which support, instead of columns, three of the porticos: besides three of the columns in the north hexastyle with the roof over these last columns. The rest of the roof of this graceful portico fell during the siege of Athens, in 1827. Such is an outline of the chief buildings of the Acropolis, which in its best days had 4 distinct characters; being at once the fortress, the sacred inclosure, the treasury, and the museum of art of the Athenian nation. It was, so to speak, an entire offering to the deity, unrivalled in richness and splendour; it was the peerless gem of Greece, the glory and the pride of art, the wonder and envy of the world. In the city of Athens itself there are still some monuments of antiquity to be found. Of these, the principal are three exquisite Corinthian columns crowned by architraves: the Temple of the Winds, built by Cyrrhestes, of an octagonal figure, with a representation of the different winds on each of its sides; and the monument of Lysicrates, called by the modern Greeks, the lantern of Demosthenes. This building consists of a pedestal surrounded by a colonnade, and is surmounted by a dome of Corinthian architecture; it was supposed to be the spot which Demosthenes used as his study — a supposition which has, however, long been overthrown. Beneath the southern wall of the Acropolis, near its extremity, was situated the Athenian or Dionysiac theatre. Its seats, rising one above another, were cut out of the sloping rock. Of these, only the two highest rows are now visible, the rest being concealed by an accumulation of soil, the removal of which would probably bring to light the whole shell of the theatre. Plato affirms it was capable of containing 30,000 persons. It contained statues of all the great tragic and comic poets, the most conspicuous of which were naturally those of Æschylus, Sophocles, and Euripides among the former, and those of Aristophanes and Menander among the latter. On the south-west side of the Acropolis is the site of the Odeium, or musical theatre of Herodes Atticus, named by him the theatre of Regilla, in honour of his wife. On the north-east side of the Acropolis stood the Prytaneum, where citizens who had rendered services to the state were maintained at the public expense. Extending southwards from the site of the Prytaneum, ran the street to which Pausanias gave the name of Tripods, from its containing a number of small temples or edifices crowned with tripods, to commemorate the triumphs gained by the Choragi in the theatre of Bacchus. Opposite to the west end of the Acropolis is the Areopagus, or Hill of Mars, on the eastern extremity of which was situated the celebrated court of the Areopagus. This point is reached by means of 16 stone steps cut in the rock, immediately above which is a bench of stone, forming three sides of a quadrangle, like a triclinium, generally supposed to have been the tribunal. The ruins of a small chapel consecrated to St. Dionysius the Areopagite, and commemorating his conversion by St. Paul (Acts of the Apos. xvii. 34.), are here visible. About a quarter of a mile south-west from the centre of the Areopagus stands Pnyx, the place provided for the public assemblies at Athens in its palmy days. The steps by which the speaker mounted the rostrum, and a tier of three seats hewn in the solid rock for the audience, are still visible. This is perhaps the most interesting spot in Athens to the lovers of Grecian genius, being associated with the renown of Demosthenes, and the other famed Athenian orators,

> "Whose resistless eloquence
> Wielded at will that fierce democratie,
> Shook the arsenal, and fulmined over Greece
> To Macedon, and Artaxerxes' throne."

On proceeding without the city, our attention is attracted by the ruins of the temple of Jupiter Olympius. This was one of the first conceived and the last executed of the sacred monuments of Athens. It was begun by Pisistratus, but not finished till the time of the Roman emperor Adrian, 700 years afterwards; but of the 120 columns which supported it, only 16 remain. The last ruin to which we shall allude, is the temple of Theseus, built by Cimon, shortly after the battle of Salamis. This is one of the most noble remains of the ancient magnificence of Athens,

and the most perfect, if not the most beautiful, existing specimen of Grecian architecture. It is built of Pentelic marble. the roof, friezes, and cornices still remain; and so gently has the hand of time pressed upon this venerable edifice, that the first impression of the mind in beholding it is doubt of its antiquity. Such is an outline of the remains of the chief Athenian edifices, which link bygone times with the present, and which, as long as there is taste to appreciate, or genius to imitate, must arrest the attention and challenge the regard of every intelligent mind. We shall devote what remains of our limits to a short notice of the Athenian history, from the earliest ages down to the present time.

Concerning the early inhabitants of Athens, we are almost wholly destitute of information; and even after its history begins to emerge from obscurity, the events which distinguish it are for a long time scanty and doubtful. Though Ogyges is mentioned as the first king of Athens, it is not till three centuries later that Athenian history assumes a definite form, when Cecrops (A. C. 1556) a native of Egypt, by marrying the daughter of Actæon, obtained the sovereignty. He collected the hitherto scattered inhabitants of Attica, divided them into tribes, and founded the Acropolis. Nothing of importance occurs in the history of Athens among the successors of Cecrops, till the time of Theseus (A. C. 1300), who united in himself the attributes of legislator and warrior. The reins of government descended in his family, without any occurrence of historical importance, till Codrus (A. C. 1068) heroically sacrificed his life for his country. At this time an aristocratical was substituted for the monarchical form of government, and the title of "king" was exchanged for that of "archon." On its first institution, the office of archon was hereditary, and for life; but after the lapse of 2 centuries, it was limited to 10 years, and after passing through 6 hands on this footing, was finally changed to an annual office. When the last change took place, a further alteration was made by dividing the duties of archon among 10 persons, selected by the people from the class of the nobles, in whom were vested all legislative and judicial powers. Such a form of government was peculiarly exposed to party spirit and contentions for power, and pressed heavily on the people; and a strong desire for a definite code of laws arising, Draco was chosen as the lawgiver (A. C. 624). The atrocity of his code, however, which awarded the punishment of death at once to the most venial offences and the most flagrant crimes, soon rendered it incapable of execution; and Draco lost the public favour and died in exile. To quell the disturbances which continued to distract the city, the people (A. C. 594) had recourse to Solon, who had already distinguished himself as a general, and invested him with the office of archon. The code of laws which he framed, was admirably suited to the exigency of the times: for though its tendency was decidedly democratic, a counterbalancing check was given to popular encroachment by the establishment of the assembly of 400, and by the prerogatives vested in the court of Areopagus. Indeed, the freedom of spirit which Solon introduced and rendered durable, and the liberal education which the whole system of his laws made indispensably necessary to the noble and wealthy citizens, soon rendered Athens the central point of illumination to all the republics of Greece. Nor were the consequences of Solon's measures at all retarded by the subsequent domination of Pisistratus (A. C. 561). For notwithstanding his assumption of the regal power, his administration was characterised by an assiduous cultivation of the arts and sciences; and it is to him that posterity is indebted for the collection of the Homeric poems in their present definite form. That the spirit of Athenian freedom was not extinct, was proved by the expulsion (A. C. 510) of Hippias and Hipparchus (the sons of Pisistratus), whose tyranny became oppressive; and from this time the constitution of Solon was gradually melted down into a pure democracy, until Cleosthenes gave the last blow to the aristocracy by the institution of ostracism.

The petty internal contests which had agitated Athens, were now however to be swallowed up in others of far greater magnitude. With rapid strides the Persian monarchy had been encroaching upon Greece, and most of the Grecian states had already sworn fealty to Darius, when Athens and Lacedæmon raised the banner of defiance, and the battle of Marathon (A. C. 490), under the conduct of Miltiades, at once achieved the liberty of Greece, and enshrined Athens in the centre of a glory. We can do no more than allude to the subsequent invasion of Greece by Xerxes, his alternate successes and defeats, the seizure and conflagration of Athens and its citadel, the stratagems of Themistocles, the memorable battles of Salamis, Platæa and Mycale, and, lastly, the defeat of the Persians. Among other consequences that resulted to Athens from the Persian invasion, was the impetus given to its naval affairs. Themistocles, who was eminently imbued with a naval spirit, caused (A. C. 479) a new and more commodious harbour to be built at the Piræus, which in process of time was joined to the city by the celebrated Long Walls. This precaution invested Athens with the command of the sea, and raised her commercial and military marine to an unexampled pitch of prosperity; a prosperity which was maintained in full vigour by the moderation of Aristides, so deservedly named the just, and by the generous and martial spirit of Cimon, son of Miltiades (A. C. 466). Before the Persian invasion, Athens had contributed less than many other cities, her inferiors in magnitude and in political importance, to the intellectual progress of Greece. She had produced no artists to be compared with those of Argos, Corinth, Sicyon, Ægina, Laconia, and of many cities, both in the eastern and western colonies. She could boast of no poets so celebrated as those of the Ionian and Æolian schools. Her spirit hitherto had been decidedly martial; but her peaceful glories quickly followed, and outshone those of her victories and political ascendancy. After the termination of the Persian war, literature and the fine arts began to tend towards Athens as their most favoured seat, for here, during the age of Pericles, above all other parts of Greece, genius and talents were fostered by an ample field of exertion, by public sympathy and applause. It was during this age that painting, architecture, and sculpture, reached the highest degree of perfection; and that Greek poetry was enriched with a new kind of composition, the drama, which exhibited all the grace and vigour of the Athenian imagination, together with the full compass and the highest refinements of the language peculiar to Attica. The drama was indeed the branch of literature which peculiarly signalised the age of Pericles; and the intellectual character of the Athenians is vividly portrayed by the sublime and impassioned strokes of Æschylus, the graceful and elegant touches of Sophocles, the elaborate philosophy of Euripides, and the

caustic raillery and moral power of Aristophanes. And though time has effaced all traces of the pencil of Parrhasius, Zeuxis, and Apelles, posterity has assigned them a place in the temple of fame beside Phidias and Praxiteles, whose works are, even at the present day, unrivalled for classical purity of design and perfection of execution. But it was not alone to works of art and the embellishment of the city by splendid architectural decorations, that the efforts of Pericles were directed. For at the period in question, the whole of Athens with its three celebrated harbours, Piræus, Munychia, and Phalerum, connected by means of the Long Walls begun by Themistocles, was made to form one great city, enclosed within a vast parabolus of massive fortifications, extending to no less than 174 stadia, of which the circuit of the city amounted to 43, the Long Walls taken together to 75, and the circumference of the barbours to 76. But the advantages that flowed to Athens from the administration of Pericles were not without alloy. The splendour which he introduced exhausted the public revenues; and to supply deficiencies, recourse was had to the infliction of rigorous imposts upon the allied states. Hence a spirit of disaffection was engendered; and Sparta, who had long viewed with jealousy the magnificence of her rival, seized the opportunity of fanning the discord into a flame. This issued in the Peloponnesian war, the various fortunes of which have been so ably recorded by the pen of Thucydides. After the lapse of 27 years, during which period the movements of the conflicting parties were characterised by various success, victory at length declared for the Spartans, and the Athenians were forced to submit to the dominion of the Thirty Tyrants; a humiliating period in the history of Athens, over which we would willingly throw a veil. It was reserved, however, for the skill of Thrasybulus (A. C. 403) to restore to Athens its former constitution; a revolution which he was able to effect without much severity, or effusion of blood. Perhaps in the whole history of the Athenians, there is no feature more remarkable than the vigorous elasticity of spirit which they displayed in recovering from disasters; and never was the truth of this remark so strikingly illustrated as at the present period. One generation had scarcely passed away, since she was groaning beneath the Thirty Tyrants and the reign of terror — her native energies prostrate, her external resources swept away — and now we find her on a lofty eminence. Seventy-five cities hail her as the head of their confederacy; the Ægean isles are numbered among her foreign settlements; Lacedæmon recognises her dominion of the sea; she is confessedly, and without a rival, once more the first of the Grecian communities. Nor is this all; hitherto we have seen her producing and fostering legislators, warriors, statesmen, painters, sculptors, poets, historians, and orators; we are now to behold her in another aspect, as the mother of that philosophy at once subtle and sublime, which even at the present hour exerts a powerful influence over the human mind. This important æra in the history of Athens has been beautifully alluded to by Milton: —

> See there the olive grove of Academe,
> Plato's retirement, where the Attic bird
> Trills her thick-warbled notes the summer long:
> There flowery hill Hymettus with the sound
> Of bees' industrious murmur oft invites
> To studious musing; there Ilyssus rolls
> His whispering stream; within the walls then view
> The schools of ancient sages; his who bred
> Great Alexander to subdue the world,
> Lyceum there and painted Stoa next;
> * * * * *
> To sage philosophy next lend thine ear.
> From Heaven descended to the low-roof'd house
> Of Socrates; see there his tenement,
> Whom well inspired the oracle pronounced
> Wisest of men; from whose mouth issued forth
> Mellifluous streams that water'd all the schools
> Of Academics old and new, with those
> Surnamed Peripatetics, and the sect
> Epicurean, and the Stoic severe."

From this time a new æra begins in the history of Athens. Philip, king of Macedonia, by dint of dissimulation and bribery, contrived first to embroil the different states of Greece, and then to trample on their independence. The Athenians, roused by the thunders of Demosthenes, made a vigorous defence (A. C. 338); but the battle of Chæronea proved adverse to their hopes, and on this field sunk the supremacy of Athens. And if the last sparks of her heroism do not expire with Demosthenes, the fitful gleams they throw out from time to time, serve but to "mark the ruins they adorn." It is true that under the sway of Alexander the Great, and the different generals who succeeded him in the government of Athens, she made various efforts to throw off the yoke; but these efforts resemble more the spiteful ebullitions of a pusillanimous slave, than the glorious aspirations of a noble spirit struggling to be free. In this state she continued, the sport of every tyrant who chanced to draw a prize in the lottery of war, till the Roman eagles soared over the Acropolis, and the victorious Sylla proclaimed Athens a tributary of Rome (A. C. 86). But while Athens thus saw every trace of her political existence vanish, she rose to an empire scarcely less flattering, to which Rome itself was obliged to bow. Her conquerors looked to her as the teacher and arbiter of taste, philosophy, and science; and all the Romans who were ambitious of literary attainments, flocked to Athens in order to acquire them. This tribute of respect to Athenian taste and genius was paid by various Roman emperors in succession. Under Adrian (A. D. 117) she even regained much of her former internal splendour; and his example was followed by several of his successors, though on a less magnificent scale. The description of Athens by Pausanias belongs to this period. In the third century, according to Zosimus, Athens was taken by Gothic invaders, who, however, did not long retain their acquisition, having been expelled by the inhabitants under the command of Cleodemus. In the year 398, it was again taken by Alaric king of the Goths, who is said to have laid in ruins its stately structures, and to have stripped it of its ancient splendour. After this dreadful visitation, Athens sunk into insignificance, and became as obscure as she had once been illustrious. We are told indeed that the walls of Athens were put in a state of defence by Justinian: but from the time of this emperor, a chasm of nearly seven centuries ensued in its history, except, that in the year 1130 it furnished Roger, king of Sicily, with a number of artificers, who there introduced the culture of silk. Doomed apparently to become the prey of every spoiler, Athens again emerges from oblivion in the 13th century, under Baldwin and his crusaders, at a time when it was besieged by a general of Theodorus Lascaris, the Greek emperor. In 1427, it was taken by Sultan Murad; but some time afterwards was recovered from the infidels by another body of crusaders, under the Marquis of Montferrat, a powerful baron of the west, who bestowed it on Otto de la Roche, one of his followers. For a considerable time it was

governed by Otto and his descendants, with the title of duke; but this family was afterwards displaced by Walter of Brienne. The next rulers of Athens were the Acciaioli, an opulent family of Florence, in whose possession it remained till 1455, when it was taken by Omar, a general of Mohammed II., who settled a colony in it, and incorporated it completely with the Turkish empire. In the year 1687, it was captured by the Venetians under Morosini, after a short siege, during which the Parthenon, then in an almost perfect state, and the other buildings of the Acropolis, sustained great damage. After a short interval, it again fell into the hands of the Turks, under whose jurisdiction it remained, until the treaty of Adrianople in 1829, following up the provisions and the stipulations of the treaty of London in 1827, established the new kingdom of Greece, of which Athens is now the capital.

Such is a brief and necessarily imperfect sketch of Athens and its inhabitants. To have investigated the causes that led to its rise, progress, and decline; to have analysed the character of its people, and to have traced it through its varied phases in their love of glory, in their refined taste, in their fickleness and injustice on the one hand, and, on the other, in their generosity and gratitude, in their courage and cowardice, haughtiness and humility (*Plin. de Parrhas.*), would have involved us in discussions to which volumes alone would have been adequate, even if the vastness of the subject had not precluded the attempt. Plunged for centuries in barbarism, and subjected to the galling yoke of a foreign despotism, it is not surprising that the modern Athenians should have inherited little but the vices of their forefathers. But now that their nationality is restored, and the light of civilisation has again dawned upon their country, it may, we trust, be inferred that the few seeds of the ancestral character which still linger in their constitution, exhibiting themselves in pride, stubbornness and susceptibility, will ripen into such qualities as may render them worthy denizens of the soil, *unde humanitas, doctrina, religio, fruges, jura, leges ortæ atque in omnes terras distributæ putantur.*

ATHENS is the name of several towns in the U. States, but none of them is of any material importance.

ATHERSTONE, a m. town of England, co. Warwick, hund. Hemlingford, contiguous to the Coventry canal, 12½ m. N. Coventry. Pop. 3,870. It has a free school, founded in 1573, and manufactures of hats, ribands, and shalloons. There are here four annual fairs; that which is held on the 19th of September being one of the most considerable in England for the sale of cheese.

ATHERTON. See CHOWBENT.

ATHIS, a town of France, dép. Orne, cap. cant., arrond. Domfront. Pop. 4,537.

ATHLONE, an inland town of Ireland, cos. Westmeath and Roscommon, on the Shannon, 65 m. W. Dublin, lat. 53° 32′ N., long. 7° 54′ W. Its name is derived from *Ath Luan*, "the ford of the rapids." To command this ford a castle was built here by the English shortly after their arrival in the country, that became a post of great consequence. In 1641 Athlone was besieged by the Irish army; but, after a resistance of upwards of 5 months, was relieved by the Duke of Ormond. In the subsequent war of 1688, it was gallantly defended by Col. Grace against the English, but was taken by storm the next year by Ginkell, afterwards Earl of Athlone. The fortifications, which had suffered much during this siege, were renovated; but in 1697, the castle and the greater part of the town were destroyed by the explosion of a gunpowder magazine, occasioned by lightning. During the late war with France it was made the military depôt for the W. of Ireland, and secured by strong works on the Connaught side, covering an extent of 15 acres, and containing two magazines, an ordnance store, an armoury for 15,000 stand of small arms, and barracks for 900 men. The pop. in 1821 amounted to 7,543, and in 1831 to 11,406, showing an increase of 3,863 in the intervening period, being at the high rate of 51·213 per cent. In 1834 the pop. of the parishes of St. Peter and St. Mary, mostly in the town of Athlone, amounted to 15,040, of whom 1,708 were Protestants of the E. Church, 9 Prot. diss., and 13,323 R. Catholics.

The town is divided into two nearly equal portions by the Shannon, over which is a long and inconveniently narrow bridge, built in the time of Elizabeth. Its public buildings are the two parish churches, 4 Roman Catholic parochial chapels, a Franciscan chapel, a Presbyterian and 2 Methodist meeting-houses. A public school, endowed by one of the Ranelagh family with 470 acres of land, educates, maintains, and apprentices 15 boys; there are also parish schools for boys and girls, and an abbey school for Catholic children. The number of pupils in the different public schools is about 350, and the private seminaries in the town educate about 500.

By its ruling charter, received from James I. in 1606, its limits are fixed at 1½ mile in every direction from the centre of the bridge; but for electoral purposes they are confined nearly to the space covered with dwelling-houses, which extends over about 485 acres. The governing body consists of a sovereign; 13 burgesses, one of whom is the constable of the castle; a common council of about 20 members, chosen for life; and an unlimited number of freemen nominated by the common council. The borough was represented by 2 ms. in the Irish, and is now represented by *one* in the Imp. Parl. The right of election exists in the members of the corporation resident within 7 m., and in the 10*l.* householders: the number of electors in 1837 being 235. The sovereign holds a court three times a week, for petty criminal cases. The general sessions for Roscommon are held here twice a year, and those for Westmeath four times. There are petty sessions on alternate Saturdays. On the Roscommon side there is a small prison or bridewell for the temporary detention of culprits.

There are in the town, or in its immediate neighbourhood, two distilleries, and the same number of breweries, tanneries, and soap and candle manufactories, besides several flour-mills. Coarse hats were formerly made here in large numbers, but the demand for them is now trifling. A small trade is carried on with Shannon Harbour and Limerick by steamers on the Shannon, the intercourse being aided by a canal about 1 m. in length, near Athlone, by which the rapids in the river are obviated. Markets on Tuesdays and Saturdays. Fairs on the Monday after Epiphany, 10th March, Holy Thursday, and 24th Aug.: each fair continues for three days.

Athlone is principally supported by the expenditure of the garrison; and in proportion as this has been diminished by the continuance of peace, so has its wealth and prosperity declined. There are but few resident families of wealth or independence; and the working classes, being chiefly agricultural labourers, live according to the habits, and are affected by the fluctuations incident to this portion of the pop. of the island.

ATHOS, AGIOS-OROS, or MONTE SANTO, a famous mountain of Turkey in Europe, near the S. extremity of the most easterly of those peninsulas that project in a S. E. direction from the district of Saloniki (part of Macedonia) into the Ægean Sea, being that between the Gulphs of Contesa (*Sinus Strymonicus*), and Monte-Santo (*Sinus Singiticus*). This peninsula is joined to the mainland by a low isthmus, not more than 1½ m. across, and not more, where highest, than 15 feet above the level of the sea. But the peninsula itself, which is about 25 m. in length, by about 4 m. in breadth, is mountainous and rugged. Mount Athos has, by a recent survey, been found to be in lat. 40° 10′ N., long. 24° 20′ 30″ E., and to reach the height of 6,349 ft. above the level of the sea. It rises abruptly from the water, its lower parts being covered with forests of pine, oak, chestnut, &c., above which towers the bare conical peak of the mountain.

Mount Athos has been famous both in ancient and modern times. Herodotus relates that the fleet of Mardonius, the Persian general, in attempting to double Mount Athos, was reported to have lost above 300 ships, and 20,000 men. (Lib. vi. s. 44.) When Xerxes invaded Greece, he determined to guard against the occurrence of a similar disaster, by cutting a canal across the isthmus, of such dimensions as to admit of two triremes passing abreast (*Herod.* lib. vii. s. 24.); of which great work the traces still remain. In modern times the peninsula of Mount Athos have been occupied from a remote epoch by a number of monks of the Greek church, who live in a sort of fortified monasteries, of which there are about 20, of different degrees of magnitude and importance. These, with the farms or *metochis* attached to them, occupy the whole peninsula, which has thence derived its modern name of Monte Santo. The situation of the different monasteries is very various; but generally the most romantic and strikingly beautiful that can be imagined. Some of them belong to Russians, others to Bulgarians, and others to Servians. Except the produce of their own farms and vineyards, and the sale of crosses beads, &c., they depend chiefly on the oblations offered by

the numerous pilgrims by which they are occasionally visited, and on the sums collected by their mendicant brethren in other parts. They pay an annual contribution to the Porte. No females are admitted within this peninsula; and a market held weekly within its limits, and resorted to by the country people, presents the singular spectacle of a market without noise, and a crowd without a woman!

Most of the monasteries possess considerable collections of manuscripts, and it was long a prevalent opinion that some of the lost treasures of ancient genius might be recovered, were a diligent search made in the monasteries of Mount Athos. In 1801, however, they were thoroughly explored by Dr. Carlyle, and, with the exception of a copy of the Iliad and Odyssey, a few of the edited plays of the different tragedians, a copy of Pindar and Hesiod, the Orations of Demosthenes and Æschines, parts of Aristotle, and copies of Philo and Josephus, he did not meet with any thing that could be called classical! There were some valuable MSS. of the New Testament, but none so old by centuries as the Codex Alexandrinus or MS. of Beza. Polemical divinity, and lives of the saints, formed the great bulk of the libraries.

The monasteries suffered severely from the exactions of the Turks during the Greek revolution. The entire population of the peninsula was estimated at about 6,000 in 1801; but at present it is probably rather under 3,000. (*Walpole's Memoirs relating to Turkey*, i. pp. 194—230.; *Journal of the Geog. Society*, vii. pp. 61—74.)

ATHY, an inl. town of Ireland co. Kildare, prov. Leinster, on the Barrow, 38 m. S.W. Dublin. Its ancient name was Athlegar, "the western ford." From its position on the border of the English pale, and on a ford of the river, it has been a frequent scene of conflict. In 1308 it was plundered by the Irish, and burnt by Edward Bruce in 1315. A fort, built about 1506, to guard the pass of the river, was occupied in 1648 by Owen Roe O'Neal, on the part of the Irish, but in 1650 it surrendered to the parliamentary forces. Pop. in 1821, 3,693; in 1831, 4,494; in 1834, 4,615; of whom 790 were of the E. church, 20 Prot. dis., and 3,815 R. Cath. The two portions into which the town is divided by the Barrow, are connected by a bridge of five arches, thus forming one continuous main street, whence several lesser avenues diverge. There is a par. church, a plain building; a spacious R. Cath. chapel, with a Presbyterian and a Methodist meeting-house. Adjoining the town is a small chapel, an ancient cemetery, and a small Dominican monastery. Besides the parochial school, which instructs about 100 children, there are two others supported by voluntary subscriptions, in which 400 boys and 100 girls are instructed. There is also a dispensary and a poor fund. It is a chief constabulary station, and has a small cavalry barrack. By a charter of 11 James I., the corporation consists of a sovereign, two bailiffs, and 12 burgesses. Previously to the Union the borough sent two ms. to the Irish parliament. The summer assizes for the county are held here, as are general sessions of the peace in January and June, and petty sessions every Tuesday. The borough courts are now disused, except one called the curl court, in which the sovereign decides pleas of debt under 2*l*. Irish currency, on the first Monday in every month. The county gaol is near the town: it is built on the radiating principle, and is provided with 32 sleeping, and 3 solitary cells. The committals to it in 1837 were 90. The sentences were,—death, none; transportation for life, 6; for 7 years, 12; imprisonment for one year, 2; for 6 months or under, 29; fine or whipping, 7; liberated by acquittal, or want of prosecution, 34. The total expenditure for the year was 840*l*., being an average of 9*l*. 7*s*. for each prisoner. The markets are held on Tuesdays and Saturdays; the fairs on 17 Mar., 25 Apr., 9 June, 25 July, 10 Oct., and 11 Dec. The modern consequence of the town is mainly derived from its being at the junction of a branch of the Grand Canal with the Barrow, and from the latter being made navigable to its embouchure. It has, in consequence, become a place of considerable commercial importance. The principal trade is in corn, of which large quantities are purchased, partly for mills on the Barrow, but chiefly for the Dublin market, to which city it is conveyed principally by the Grand Canal. Corn, butter, provisions, &c., are also sent down the Barrow to New Ross and Waterford; and timber and other articles, for the use of the adjoining districts, are imported by the same channel. The malting trade is in a flourishing state: duty was paid in 1836 on 11,016 bushels. The post-office revenue in 1830 was 420*l*.; in 1836, 520*l*. Passengers are conveyed to Dublin by the Grand Canal by means of fly-boats. One of the mail-coach roads from Dublin to Cork passes through the town; and a *caravan*, carrying 8 passengers each trip, daily plies to Carlow. (*Municipal and Railroad Reports*, &c.)

ATINA, a town of Naples, prov. Terra di Lavoro, 12 m. S.E. Sora, near the Melfa, among some of the loftiest summits of the Apennines. Pop. 4,000. It has a cathedral, a convent, and an hospital; and was formerly the seat of a bishopric, suppressed by Pope Eugene III. It is principally remarkable for its Cyclopean remains.

This is one of the most ancient of the Italian cities; being, according to Virgil (*Æn*. lib. vii. 629.), a considerable town as early as the Trojan war. It was taken from the Samnites by the Romans, A U.C. 440. Cicero says it was a prefecture, and one of the most populous and distinguished in Italy. (*Cic. pro Planco.*) It received a colony from Rome during the reign of Nero. (*Cramer's Ancient Italy*, ii. p. 116.)

ATLANTIC OCEAN. This is one of the great divisions of that watery expanse which covers more than three fourths of the surface of the globe. It lies between the Old and the New World, washing the E. shores of the Americas, and the W. shores of Europe and Africa, extending lengthwise from the Arctic to the Antarctic Seas. Where narrowest, between Greenland and Norway, it is about 930 m. across; but between N. Africa and Florida, where it attains to its maximum breadth, the distance from shore to shore exceeds 4,150 m. Though it comprises little more than a fifth part of the whole ocean, its shores form a more extended line of coast than those of all the other seas taken together. This arises from several extensive mediterranean seas, which enter deeply into the contiguous continents, being connected by straits with the N. Atlantic Ocean, and forming portions of it. Such are the Baltic and Mediterranean Sea in the Old Continent; and Hudson's and Baffin's Bays, and the Columbian Sea (Gulph of Mexico and Caribbean Sea), in the New World. And it is probably in some degree owing to the facilities afforded for commercial intercourse by these arms of the Atlantic, that the countries in their vicinity have made a greater and more early progress in civilisation than those of most other parts of the world.

To the same cause has also been ascribed the circumstance of the nations inhabiting the shores of the Atlantic having applied themselves peculiarly to navigation: they have not limited their activity in this branch of industry to the Atlantic, but navigate every other sea; and there is now no harbour, how remote soever, which is not regularly visited by their ships, with the exception of those to which a free access is denied, or which do not furnish any article of trade. The Atlantic Ocean has thus, as it were, become the most frequented highway of commercial nations, and has been more completely explored and examined than the other seas; and frequently repeated experiments have enabled rules to be laid down for the guidance of vessels traversing its different parts, in different seasons of the year, which give the greatest facility and security to its navigation.

Those groups of islands which impede navigation, and render it comparatively difficult and dangerous, are much less numerous in the Atlantic than in most other seas. If, indeed, we except the chain of islands which separates the Columbian Sea from the Atlantic, and which, therefore, may be considered as forming part of the shores of the ocean, it can hardly be said that there exists any such group of islands between 50° N. lat. and 50° S. lat. The Azores, Canaries, and Cape de Verd Islands, as well as those of Guinea and the Bermudas, occupy a comparatively small space, and are easily avoided; and the two last-mentioned groups lie far from the common track of vessels. The Canaries, including Madeira, are frequently visited; being situated where it is usual for vessels to change the direction of their course.

The direction of the winds and currents is of special importance as affecting the performance of voyages; and to the more exact knowledge of their course and influence, as well as to other improvements in the art of navigation, is to be ascribed the fact that voyages are at present performed in nearly half the time they occupied only two centuries ago.

Winds.—As the Atlantic Ocean, including the two Icy Seas at its extremities, extends from the Arctic to the Antarctic Pole, it is in parts subject to the *perpetual* or *trade* winds, in others to the *variable* winds; and along some of its coasts, between the tropics, the winds are subject to a regular change according to the seasons—or, in other words, *monsoons* are there prevalent.

The trade-winds do not extend beyond the 32nd parallel from the equator; sometimes they are not met with at a greater distance than 27° lat. The whole surface of the sea extending from these latitudes to the poles is the province of the *variable* winds. The latter blow in every season from all points of the compass: but, by long experience, it has been found that the W. winds prevail in both hemispheres. If a line be drawn in the direction of a meridian, it is estimated that the proportion between the winds blowing from the W. to those that come from the E. is as 9 to 5½. This, at least, is the proportion in the N. hemisphere, where the estimate has been made with the greatest exactness. It is, besides, to be observed, that whilst the winds between the tropics and near them blow nearly always with the same degree of force, the variable winds vary extremely

in this respect,—blowing sometimes almost with the strength of hurricanes, and at other times sinking into dead calms.

The two trade-winds do not blow over the whole surface of the sea lying between the tropics. They are separated from each other by the *region of calms*. This region varies, according to the seasons, in extent; and does not always occupy the same part of the ocean. It is found to extend from a short distance off the shores of the Old Continent to a short distance off those of the New, but its breadth is very various. Sometimes it occupies not more than 3° of lat., and at other seasons up to 10°. The most remarkable fact respecting this region is, that it does not extend equally on both sides the equator, but lies nearly the whole year round in the N. hemisphere. Only when the sun is near the tropic of Capricorn it passes the line, but never extends farther to the S. than 2½°. On the N. of the equator it advances, at certain seasons, even to the 14th or 15th deg. of lat. These changes in the extent and in the range in which the region of calms is met with, and in which the trade-winds blow, depend evidently on the position of the sun. When the sun is near the N. tropic, or retiring from it, especially in July, August, and September, the calms advance towards the N. even to the 14th and 15th deg. of lat.; and at the same time the S. trade-winds encroach considerably on the N. hemisphere, being met with as far as the 4th or 5th deg. of N. lat. Then the breadth of the region of calms is 10°; but when the sun is near the S. tropic, or begins to retire from it, the S. trade-winds also recede farther S.; and in January, February, and March, the calms extend to the S. of the line, but only to a distance of from 1° to 2½°. In this season the N. trade-wind advances to 2° N. lat., and the width of the region of calms is then narrowed to from 3° to 4° lat. The central line of the region of calms may be placed at about 5° or 5½° lat.; and its mean breadth may extend over 5° or 5½°, or from 300 to 350 sea m. Continued calms reign in this region; and they would form an insuperable obstacle to the progress of vessels, were not the air daily agitated by a squall which occurs about 2 o'clock in the afternoon. At noon, a black and well-defined cloud appears near the horizon, which increases, and announces a violent thunder-storm; suddenly a wind arises, blows for a short time with great violence, sends down a few drops of rain; and after this tumult of the elements has lasted from ½ to 1 hour, the calm returns. These short violent squalls are called *tornados*, and it is only by their means that the region of calms can be passed by vessels using sails; but it always proves a very tedious navigation.

The *northern trade-wind* is subject to change, not only respecting the extent of sea over which, but also respecting the direction in which, it blows. When the sun advances in the N. hemisphere, it withdraws, as already seen, farther from the equator. It, also, blows over a wider range of sea, near the coasts of America, than at a short distance from the Old Continent. In the seas inclosing the Canary Islands, it is rarely met with at 30° lat., and often not before the 27th parallel is reached; here, therefore, its N. boundary may be fixed at 28½° N. lat. as a mean. On the W. borders of the ocean, however, near the coast of America, it extends farther N., even to 32° lat.; here its mean boundary may be fixed at 30° lat. In the neighbourhood of the Old Continent, this trade-wind blows from the N.E., but it declines more to the E. as it proceeds farther W. In the middle of the ocean it is E. ½ N., and where it approaches the New Continent it blows from due E. This wind is somewhat changeable towards its N. boundary; sometimes violent N.E. winds are found to prevail between the 22d and 30th deg. of lat., and in the same parallels it is frequently very weak. But no navigation can be more pleasant than that with this trade-wind. It is rather to be called a breeze than a wind; and is uniform, and never interrupted by squalls. The waves which are raised by it are low, and their swell gentle. Where this wind blows, the passage from the Old Continent to America may safely be effected in an open boat. Hence the Spaniards have called this part of the Atlantic Ocean the "Sea of the Ladies,"—*Golfo de las Damas*.

The *southern trade-wind* differs from the northern in the greater extent of sea over which it blows, extending, as we previously observed, in summer, to 5° or even 6° to the N., and never receding farther to the S. of the equator than 2½°. It is, farther, much more regular, not being interrupted towards its S. boundary by other winds. Its direction near the Old Continent is, also, somewhat different; for here it blows parallel to the coast extending from the Cape of Good Hope to the Bight of Benin—that is, from the S. At a distance from the continent it becomes by degrees more easterly, and where it approaches America its direction is nearly due E. The meridian of 20° W. of Greenwich may be considered as the line of separation between the winds which blow more southerly or more easterly. To the E. of this line, the wind varies between S.S.W. and S.S.E.; but to the W. of it, between S.S.E. and S.S.W.

In some parts the trade-winds extend to the very shores of the continents; in others, a tract of sea lies between the trade-winds and the land in which a different wind is prevalent. Thus it is found, that in the sea between the N. trade-wind and the African coast, from the Canaries to the Cape de Verd Islands, the wind blows constantly from the W. This phenomenon is sufficiently explained by the peculiar nature of the Great African desert, the Sahara. Its surface, destitute of vegetation, and covered with loose sand, is heated by the sun to an excessive degree, and in consequence the superincumbent air is rarefied, and rises. Where this rarefied air comes into contact with the more dense air covering the surface of the sea, the latter expands over the desert; and this gives rise to a continual flow of air from W. to E.

Farther S., between the Cape de Verd Islands and Cape Mesurado (7° N. lat.), a kind of monsoon prevails, which, in certain places, blows to the distance of 200 m., and opposite Sierra Leone about 150 m., off shore. From September to June it proceeds from the N. or N.E., and in the rest of the year from S.W. Along the coast of Guinea, and in the Bight of Benin, the S. trade-wind prevails nearly the whole year round; but its direction is a little changed, the wind blowing from the S.W. Between the Bight of Benin and 30° S. lat., the trade-wind blows to the very shores of the continent.

On the other side of the Atlantic Ocean, along the coast of Brazil, a regular monsoon prevails. It proceeds, between September and March, from between N. ½ E. and N.E. ½ E.; and from March to September, from between E. ½ N. to E.S.E. These winds blow with considerable force, and extend sometimes to a great distance from the shore, especially in the months of June and July. There are instances on record of its having been met with nearly as far as the middle of the Atlantic.

N. of Cape S. Roque, the trade winds reach the very shores of the American continent and the West Indies. In these parts they seem even to extend over a considerable part of the continent itself; for the continual E. wind which blows over the plain of the river Amazon, to the very foot of the Andes, is with reason considered as a continuation of the trade-winds. The same may be said of the E. winds which blow over the plains watered by the Orinoco, where this wind is felt as far as Angostura, and at certain seasons still farther W.

Currents.—We are less acquainted with the currents than with the winds. This arises partly from the difficulties in which the subject is naturally involved, and partly from the comparatively short time which has elapsed since they have attracted the attention of navigators and naturalists.

Currents are to be distinguished from *drift-water*. By the latter expression, that motion of the water is understood, which is produced on the surface of the sea by perpetual or prevailing winds. By pushing continually the upper strata of the water towards that point to which they blow, they cause a slow motion of the water in that direction. Accordingly, we find that that part of the Atlantic Ocean, which is subject to the trade-wind, is in a continual motion towards the W.; which is most sensible in those regions which are always exposed to the trade-winds, and less so where they blow only in certain seasons. This kind of current is in most parts constant, but its flow very gentle. Its mean velocity is from 9 to 10 m. a day, and it is very favourable to navigation.

Other drift-currents are met with in those parts of the Atlantic, in which the wind changes with the seasons; as along the coast of Sierra Leone, and that of Brazil, S. of Cape S. Augustine. In the former the current runs, from September to June, S., and in the remainder of the year in a N. direction. Along the coasts of Brazil, the current, from September to March, runs in a S. direction, and from March to September, N.

Even in those parts of the Atlantic which are subject to a continual change of the wind, a drift-current is observable. We observed, that N. of 30° N. lat., and S. of 30° S. lat., in the region of the variable winds, the W. winds prevail, and in these parts of the ocean a W. current is perceived; but it is feeble, and manifests itself in the N. Atlantic only on the whole course of a voyage from Europe to America and backward, retarding the former and forwarding the latter. This drift-current seems to attain its greatest velocity S. of 30° S. lat.

Besides the drift-currents, the velocity of which is moderate, there are others of much greater force, called properly *currents*. Their origin is still involved in obscurity; but, from some facts, we may suppose that they are not formed on the surface of the water, but are of great depth, and in many parts, if not in all, extend to the very bottom of the sea. These currents cannot be compared with rivers; for they extend over such a portion of the surface of the sea, that if they were trans-

ferred to the continent they would cover countries of great extent.

In the Atlantic, these currents run across the ocean in three places. The current crossing the Atlantic near the line, is called the *Equatorial current*; it runs from E. to W. The current, which, in a direction from W. to E., traverses the N. Atlantic between 36° and 44°, bears the name of the *Gulph Stream;* and that which runs in the same direction, through the S. Atlantic, between 30° and 40° S. lat., is named the *S. Atlantic current.* Other currents run along the shores of both continents between 40° N. lat. and 30° S. lat. Along the Old Continent they run towards the equator; but, on the shores of America, they flow from the line towards the poles. These latter kind of currents are intimately connected with the equatorial current; but very slightly, if at all, with the gulph stream or the S. current.

The *Equatorial current* may be supposed to have its origin in the Bight of Benin, on the W. shores of Africa, between the islands of Anno Bom and St. Thomas; whence it proceeds, in a W. direction, towards Capes S. Roque and Augustine, on the coast of Brazil. Its breadth is different in different parts. Near its origin it is not quite 3° of lat. across, about 160 m.; but, in its progress to the W., it increases considerably in width. Opposite Cape Palmas, its N. border is found at about 1° 45′ N. lat., but the S. reaches nearly to 5° S. lat.: thus its breadth extends here over more than 6° of lat., or upward of 360 nautical m. It attains its greatest breadth between 20° and 22° W. long., where it extends over 7° or 8° of lat., from 4½° or 5° S. of the equator to 2½° or 3° N. of it; here, consequently, it is 450 nautical m. across. A little farther W., between 22° and 23° W. long., it sends off a branch to the N.W.; and here it narrows to about 300 m., which breadth it probably preserves up to its division into two currents, opposite Capes S. Roque and S. Augustine; but that part of its course, which lies W. of 23° and 24° W. long., is somewhat declined towards the S. Its velocity varies likewise, not only in the different parts of its course, but also in different seasons; being much greater in summer than in winter. From Anno Bom to 10° W. long. it may run from 25 to 30 m. a day; but between 10° and 16° its velocity increases to from 44 to 60 m. at the end of June and the beginning of July; in the other summer month it is somewhat less; and, from October to March, very moderate, and sometimes very weak. Between 16° and 23° W. long., where it is commonly crossed by vessels, the rapidity of the current rises often to 45, 50, and even 60 m. per day; but its mean velocity may be fixed at about 30 m. That part of the current, between 23° and the coast of Brazil, is avoided by vessels, and its rapidity not exactly known; it seems rather to increase, and not to be affected by the seasons. The temperature of the water within the current is every where some degrees lower than that of the seas without the current. The whole length of this current, from S. Thomas to Cape S. Roque, amounts to upward of 2,500 sea m.

The portion of the equatorial current which branches off from the main stream between 22° and 23° W. long., and about 2½° N. lat., is called the *N. W. current.* At the point of separation, it may be from 180 to 200 m. in width; farther N. it widens even to 300 m., but narrows again to 240 and less. Its velocity is not so great as that of the main equatorial current. In its S. part, as far as 10° N. lat., it may run 30 m. a day; but it afterwards slackens considerably; yet at all times it may be traced up to 18° N. lat., and commonly even to 25°. In the N. part of its course it declines more to the N., till it is lost in the drift-current. It is not improbable that this current increases the velocity of the drift-current, which navigators have observed between 25° W. lat. and the island of Trinidad; and that the change in the direction of the drift-current, which here declines to the N.W., is also to be ascribed to the same cause.

At a distance of about 300 m. from the coast of Brazil, extending between Capes S. Roque and S. Augustine, the equatorial current divides into two branches. That which continues to run along the N. coast of Brazil, turns at the mouth of the Amazon to the N., and proceeds along the shores of Guyana to the island of Trinidad, where it enters the Caribbean Sea. It is called the *Guyana current*, and the length of its course does not fall short of 1,500 m. Its velocity is greatest in summer and winter; and may, in the former, be about 30 m. a day at a mean. It enters the Caribbean Sea by the different straits which, S. of the island of Martinique, divide the smaller Antilles from one another and from the continent of S. America. In these straits, the currents setting into the Caribbean Sea are strong: that between Trinidad and Grenada runs from 1 to 1½ m. per hour; less rapid is the current in the strait between S. Vincent and S. Lucia; and between the latter island and Martinique it runs not more than 21 m. per day. At the Virgin Islands the flow of the water is only 8 or 10 m. a day; and that is not more than the common rate at which the drift-current runs. In the Caribbean Sea the Guyana current terminates; for, in that sea, no perpetual current has been traced. It rather seems that the currents which exist there, depend on the winds, and change the direction of their course according to the seasons.

The other current, which branches off from the equatorial current, opposite Cape S. Augustine in Brazil, is called the *Brazil current*, and runs to the S.W. along the shores of S. America, but does not in any part of its course approach near to them. From 8° S. lat., where it separates from the Guyana current, to 16° or 17° S. lat., the current has a considerable width, and runs about 20 m. or somewhat more a day. Its distance from the continent is no where less than 250 m. Farther S. it increases in breadth and velocity, and approaches at the same time nearer the continent. Opposite Cape Frio it runs about 30 m. a day, and is not more than 200 m. distant from the coast. As, however, from the last-mentioned cape the land falls back to the W., the current is soon found at 300 m. and more from the continent. By declining, by degrees, its course farther to the W., it approaches nearer; but never is found at a distance less than 250 m. Thus it continues to the mouth of the La Plata river, running all this way from 15 to 20 m. per day. It becomes weaker as it advances farther S.; but may be traced to the Straits of Magalhaens and Le Maire. In the space of sea which intervenes between this current and the coast, the changeable currents occur, noticed above among the currents depending on monsoons.

The Guyana and Brazil currents are those, with which the Equatorial current is connected on the shores of America. The currents with which this great sea-stream is united near the coast of the Old Continent, are the S. and the N. African currents. The *S. African current* seems to have its origin some degrees N. of the Cape of Good Hope. It appears, however, not to be connected with the Agulhas current, which is found at a short distance S. from the Cape, and which runs W. from the Indian into the Atlantic Ocean. Between 18° and 11° S. lat. exists a current running from S. to N. at a short distance from the coasts of Africa, but we are not acquainted either with its breadth or velocity; neither, however, appears to be considerable. Between 11° and the island of Anno Bom, the current runs in a N.W. by W. direction, at the rate of from 15 to 25 or even 30 m. a day, but seems to be of inconsiderable width. It increases in velocity at the mouth of the river Zaire, and in width at Cape Lopez; but soon afterwards merges into the Equatorial current.

The *North-African current*, which is also called the *Guinea current* from its terminating opposite the coast of Guinea, has its origin opposite the coast of France, between the southern shores of Ireland and Cape Finisterre in Spain. It is impossible to determine more precisely the place where it originates; but it is a fact well established by experience, that the whole body of water between the Peninsula and the Azores is in motion towards the S., the western part setting more southerly, and the eastern more to the S.E. Between Cape S. Vincent in Portugal, and Cape Cantin in Marocco, the motion is directed towards the Straits of Gibraltar; and this motion extends as far westward as 20° W. long. Between Cape Cantin and Cape Blanco the general direction of the current is along the coast, but it sets in nearly perpendicularly towards the shores. This portion of the current is about 300 m. across between Cape Cantin and Cape Bojador, but only from 150 to 180 between the last-mentioned Cape and Cape Blanco. Between Cape Blanco and Cape de Verd the current runs a little to the W. of S., approaching the general direction of the drift-current of the trade-winds. Near the Cape de Verd Islands the temperature of the water of the current is 8° lower than in those parts of the sea which lie beyond it. After passing Cape de Verd, the current turns S., and by degrees S.E. and S.S.E. Here it does not approach the shores of Africa; at least, between Cape de Verd and Cape Mesurado it is met with only at a distance of about 200 m. from the coast. The intermediate space is occupied by periodical currents, which run, from September to June, S. or S.W.; but in the remainder of the year, N.E. S. of Cape Mesurado it approaches the coast, and increases in velocity, running sometimes at the rate of 2 m. per hour; here its temperature is considerably increased, but still lower than that of the ocean at large. At Cape Palmas it turns entirely to the E.; and skirts the coast of Guinea until it disappears in the sea opposite the mouth of the Quorra, and in the Bay of Biafra, where it partly seems to mingle with the Equatorial current.

With the N. African current another current is connected, which runs across the British Channel at its western extremity. It runs E. from Cape Finisterre along the S. shores of the Bay of Biscay; turns then to the N. and N.W., along the W. coast of France; and passing Ushant, it traverses the British and Irish Channels. At the Scilly Islands, which it touches with its eastern border, it is 60 m. across. It then con-

tinues to the southern shores of Ireland, W. of Carnsore Point; and hence turns to Cape Clear, where, after entering the ocean, it turns to the S. and S.E., and rejoins the N. African current. By this current vessels are frequently placed in danger near the Scilly Islands. With certain winds this current runs from 24 to 28 m. a day. We owe the exact knowledge of this current to the careful investigations of the late Major Rennel, and hence it has been called *Rennel's current*.

The *Gulph stream* which crosses the Atlantic between 36° and 44° N. lat., originates in the Gulph of Mexico. The water in this sea is set by two currents into a nearly circular motion; which seems to be the principal reason why it acquires such a high degree of temperature,—being 86° Fahr., whilst that of the ocean at large in the same lat. (25° N.) does not exceed 78° Fahr. The two currents, which put in motion perhaps three fourths of the water of the gulph, unite about 70 m. W. of the Havannah; and by this junction the Gulph stream is formed. It runs along the N. coast of the island of Cuba, eastward; but it is neither broad nor rapid at the entrance of the Straits of Florida at the Salt Kays, where it begins to run about $1\frac{1}{2}$ m. an hour. After entering the straits, its velocity increases to $2\frac{1}{2}$, 3, and occasionally 4 m. an hour. In the Narrows, however, between Cape Florida and the Bimini Islands (which belong to the Bahamas), where the strait is only 44 m. across, and the water-way is straitened by reefs and shoals to 35 m., it runs, in the month of August, 5 m. an hour; and at that rate commonly through the remainder of the strait up to Cape Cañaveral. Though the current has traversed, in this space, about 4° of lat., the temperature of its water is not sensibly diminished. From Cape Cañaveral (about 28° N. lat.) the gulph-stream runs first due N., and then nearly N.E., along the shores of the United States, up to Cape Hatteras (33° N. lat.). It increases gradually in width, and decreases in velocity. At Cape Hatteras it is from 72 to 75 m. across, and it runs only $3\frac{1}{2}$ m. per hour. The temperature of its water has sunk from 86° to 83°. In this part, the current runs not so close to the shores as in the Strait of Florida. Its N.W. edge is about 24 m. S.E. from Cape Hatteras. After passing this cape, the current increases still more rapidly in width, and diminishes gradually in velocity. Between Cape Hatteras and the banks of Nantucket and St. George (40° N. lat.), the general direction of the current continues to be from S.W. to N.E., though the W. edge runs nearly due N. At the Nantucket and S. George Banks it suddenly declines its course to the E., and brushing the S. extremity of the great bank of Newfoundland, it continues in that direction as far as 43° or 44° W. long., between 37° and 43° N. lat. Farther E. it bends to the S.E. and S.; and having inclosed the islands of Flores and Corvo, belonging to the group of the Azores, it is lost in the ocean. There are some instances on record of the warm water of the gulph stream having advanced to the very shores of Spain and Portugal. It is difficult to determine the width of the current where it runs across the Atlantic, because its warm water expands on both sides to a considerable distance, where no current has been traced. The strongest current is between 38° and 39° N. lat.; and it is probable that the breadth of the whole current does not exceed 120 naut. m., though the warm water is found to be 200, 250, and even 320 m. across. Between 65° and 66° W. long. the strongest current runs from 55 to 56 m. a day; but 900 m. farther E., only from 30 to 33 m. In the neighbourhood of the Azores its mean rate does not exceed 10 m. a day. The temperature of its water decreases less rapidly. At the meridian of $63\frac{1}{2}$° W. long., or 600 nautical m. from Cape Hatteras, the thermometer shows in summer 81°, or from 10° to 11° above the water of the sea under the same lat. At 73° long. its temperature is 75°; and even at Corvo, not lower than $72\frac{1}{2}$°, or from 8° to 10° above the ocean. The length of the gulph stream from the Salt Kays to the S. of the Azores is upwards of 3,000 naut. m. It traverses from 19° to 20° of lat. (from 23° to 42° or 43°), and its temperature decreases only $13\frac{1}{2}$° (from 86° to $72\frac{1}{2}$°). The sea which is traversed by it is subject to nearly continual gales; especially towards the outer edges of the current.

Nearly in the middle of the Atlantic the gulph stream is joined by the *Arctic current*, which originates beneath the immense masses of ice that surround the pole, and thence runs in a S.W. direction along the E. shores of Greenland, carrying with it a great number of icebergs, ice-fields, and ice-floes. Pressing these icy masses against the coast of Greenland, the current renders that coast inaccessible; but it prevents the ice from spreading over the North Sea, and from encumbering the shores of the British islands. At Cape Farewell the width of the current seems to be from 120 to 160 m., the ice-masses extending to such a distance from it. After passing Cape Farewell, the current bends to the N. and enters Davis's Strait, running along the western coast of Greenland up to the Polar Circle, where it crosses the strait to Cape Walsingham (about 66° N. lat.); hence it flows southward along Cumberland's Island to Frobisher's and Hudson's Straits. Opposite these straits it runs from 15 to 16 m. a day. Approaching Newfoundland, the current divides: one branch, running through the strait of Belle Isle, mixes with the waters brought down by the St. Lawrence; whilst the other skirts the E. shores of Newfoundland, where it passes between the great and the outer bank of Newfoundland (between 45° and 46° lat., and 46° and 47° long.), and at last joins the gulph stream between 44° and 47° W. long. The width of this current, probably, no where exceeds 200 m.; the temperature of its water is always considerably lower than that of the ocean, sometimes as much as 16° or 17°.

The last current we have to notice, is the *South Atlantic current*, which traverses the ocean from E. to W. between 30° and 40° S. lat. It is not known whether this current be connected with the Brazil current, and we are only generally acquainted with the existence of a motion in the sea between the S. coasts of Brazil and the Cape of Good Hope. In the W. part of the Atlantic its velocity seems to be moderate; but it increases as the current advances farther E., and opposite the Cape it is very strong. It is met with at a distance of from 150 to 180 m. from the Cape; hence it flows in a straight line into the Indian Ocean, and traces of it are found 2,000 m. beyond the Cape. That space of sea which intervenes between this current and the Cape, is occupied by another current, which runs in an opposite direction; being formed in the Indian Ocean by two currents which descend on both sides the island of Madagascar, and unite between the first point of Natal and Cape Recife, about 33° S. lat. Passing the Cape of Good Hope, it enters the Atlantic as a current, running at the rate of from 1 or $1\frac{1}{2}$ m. an hour in a N.W. direction, and may be traced as far as 25° S. lat. This current is called the *Agulhas current*, from passing over the bank of that name at the S. extremity of Africa.

Tracks of Vessels. — In proportion as our knowledge of the prevailing winds and of the strength and direction of the currents has increased, the tracks have been fixed with more precision, which vessels should follow in sailing from or to a country lying on the shores of the Atlantic. In a few cases they follow the same route, whether outward or homeward bound; but in most cases they follow different routes. We shall notice a few of those which are most frequented.

1. Between *Europe* and the *W. coast of N. America* vessels keep clear of the gulph stream, sailing along its N. border, between 44° and 50° N. lat. If, in sailing from E. to W., they were to enter the gulph stream and to stem its current, they would be delayed in their course, perhaps, not less than a fortnight. If, in sailing from W. to E., they were to enter it, they, doubtless, would arrive four or five days sooner in Europe; but the vessels would suffer, from the continual gales which prevail within the borders of the stream, so much damage in wear and tear, that it hardly could be compensated by the gain of a few days. In sailing to the United States N. of the gulph stream, vessels have the advantage of a counter current, which runs from the Nantucket and St. George Banks to Chesapeak Bay, and perhaps to Cape Hatteras.

2. In sailing from *Europe* to the *West Indies*, and the countries S., W., and N. of the Columbian Sea, different tracks are followed, outward and homeward. In sailing from Europe, the trade-winds are taken advantage of. The vessels pass Madeira and the Canary Islands, and sail S. as far as 21° N. lat., where they are certain to find a constant trade-wind. In this course they must avoid approaching too near the coast of Africa between Cape Nun and Cape Blanco, because the N. African current sets in towards the shores of the Sahara, and the winds blow continually from the sea towards the land. Many navigators who hoped to make the island of Teneriffe, according to their dead reckoning, have been carried so far to the E., that they have been cast on these inhospitable shores, where most of them have perished. Between 1790 and 1805, not less than 30 vessels are known to have been thus lost; and it is supposed that many others had the same fate, without its being known. Having got a constant trade-wind at 21° N. lat., the vessels sail W., and enter the Columbian Sea commonly by one of the straits lying between the islands of Martinique and Trinidad.

In sailing homeward ships sometimes go through the Mona (between Puerto Rico and Haïti) and windward (between Haïti and Cuba) passages; but more commonly they pass round the island of Cuba on the W., and sail through the Straits of Florida. As soon as they have got clear of the strait, they sail E. to get clear of the gulph stream. They then direct their course across the Atlantic, S. of the Bermudas, till they come into the longitude of the island of Flores. They then sail N., either passing between Flores and the other Azores, or to the E. of the group.

3. In sailing from *Europe* to the coast of *Guyana* (Demarara, Surinam, and Cayenne), and to those pro-

vinces of Brasil which are situated W. of Cape St. Roque, ships go S. till they meet the trade-wind, and then shape their course to the place of destination, but keeping a few degrees farther to the E.; for, on approaching the New Continent, they meet the Guyana current, which carries them W. If, therefore, they make land somewhat too far to the W., they find it very difficult to attain their place of destination,—having to bear up against the current.

In returning to Europe, the vessels sail along the shores of America, where they are favoured by the Guyana current, as far as the island of Trinidad. Then they keep to the windward of the Antilles, till they get into the variable winds, where they follow the track of the vessels returning from the W. Indies.

4. Sailing from *Europe* to *S. America, S. of Cape St. Roque*, ships have to pass through the region of calms, and to traverse the Equatorial current. The first retards their progress, and the second carries them forcibly to the W. If they cut the equatorial line W. of 25° W. long., they cannot make Cape St. Roque, and fall in with the Guyana current, which carries them still farther W., and along the N. coast of Brazil. Then they can only get back to Cape St. Roque by a toilsome voyage of many days, and even weeks. To avoid this, vessels traverse the line between 18° and 23° W. long. Having done this, they are assisted by the Brazil current in making, with ease, any part of the coast they please.

Vessels homeward bound from this coast take different tracts, according to the seasons. From March to September, when the monsoons blow, and the currents run, from S. to N., between the Brasil current and the continent of S. America, they sail along the shores, till, at Cape St. Roque, they meet the Guyana current; and then they follow the track of the vessels returning from Guyana to Europe. But, from September to March, the periodical winds and currents blow and run from E. to S. W., in the direction of the Brazil current. Ships then sail across the currents, and try to get into the middle of the Atlantic, where they follow the track of the vessels returning from the East Indies.

5. In sailing to the *East Indies*, it is now the general practice to avoid the numerous difficulties met with in navigating along the coasts of Africa, S. of the equator, and to follow the tracks of the vessels bound to Brazil. Afterwards, the vessels proceed along the coast of S. America to 32° or 33° S. lat., where they get out of the range of the S.E. trade-winds, and are certain to meet with the S. Atlantic current, which carries them eastward. They do not touch at the Cape of Good Hope, but follow the current until they enter the Indian Ocean.

In returning from the East Indies to Europe, vessels enter the Agulhas current near Madagascar, and are carried by it to the Cape of Good Hope, where they commonly stop for some time. From the Cape, the same current takes them by its N. W. course to the middle of the Atlantic. They then shape their course N., so as to traverse the line between 22° and 24° W. long., where they meet the N.W. current, which takes them to 20° or 25° N. lat.; whence they proceed to the Azores.

Ice.—Both extremities of the Atlantic Ocean are invaded by great masses of ice. They either have been detached from the enormous masses, which inclose the poles to a great distance, or from those countries, which are situated so near the poles, that their coasts are covered with ice for the greater part of the year. In the N. seas, the ice consists of icebergs, ice-fields, and ice-floes. The icebergs are enormous masses of ice, sometimes several hundred and even thousand yards long and broad; their summits being, in some cases, 100 ft. and more above the level of the sea, though only a seventh part of the whole mass rises above it. They are properly glaciers, formed along the high and snow-covered coast of Greenland, and which have afterwards been precipitated into the sea. The ice-fields and ice-floes are considered as having been detached from the ice surrounding the pole. This ice is commonly of the thickness of from 20 to 30 ft., and rises from 3 to 4 ft. above the sea. These masses are called fields, whenever they are so extensive that their limits cannot be discovered from the mast-head; and floes, when their extent may be overlooked from it. In the S. Atlantic only, fields and floes are found, icebergs never having been met with. It is further worth remarking, that the ice advances much nearer to the N. than to the S. tropic. The ice-floes at Cape Horn are far from being numerous; and Capt. Weddell says, that at 55° 20′ S. lat., there is no fear of falling in with ice. In the N. hemisphere, we always find great ice-masses at some distance from the E. shores of Newfoundland from January to May and June; and icebergs are annually seen grounded on the Great Bank. It even sometimes happens that icebergs are met with in the gulph stream, 40½° N. lat. and 32° W. long., as was the case in 1817.

Miscellaneous Remarks.—*Fish* seem to be much more plentiful in the seas near the arctic, than in those surrounding the antarctic, pole. This is probably to be accounted for by the greater number and greater extent of banks found in the N. seas, and these, besides, wash a far greater extent of shores, which many species of fish resort to in quest of food. Another remarkable fact is, that the seas near the equator, and, in general, those lying in lower latitudes, are much richer in species than the N. parts of the ocean; but that, in the latter, the number of individuals belonging to each species is far greater. Hence we find that the most extensive fisheries are those, which are carried on to the N. of 45° N. lat.; as the cod fisheries on the Great Bank of Newfoundland, and at the Laffoden Islands, the whale fishery at Spitzbergen and on both sides of Greenland, the herring fishery along the coasts of Great Britain, and the pilchard fishery in the British Channel. The most important fisheries S. of 45°, if we except the whale fishery near the S. pole, seem to be that in the Caribbean Sea along the coasts of Venezuela, and that which the inhabitants of the Canary Islands carry on in the sea surrounding Cape Blanco in Africa.

The *temperature of the water* is greater in the N. than in the S. hemisphere. In the seas N. of the Equatorial current, the thermometer indicates 80° or 81°, and S. of it 77° and 78°, at the time when the sun approaches the line. This difference may, perhaps, be satisfactorily accounted for by the sun's remaining annually seven days longer to the N. than to the S. of the equator.

The *specific gravity and saltness* of the sea-water is, doubtless, greater near the equator, than in the vicinity of the poles; but the experiments which have been made to determine the exact difference, have given such different results, that we must still consider this question as undecided. According to Capt. Scoresby, the specific gravity of the sea-water near the coasts of Greenland varies between 1·0259 and 1·0270. Between the tropics, some have found it 1·0300, or nearly this much; and near the equator, even 1·0578, but the last statement is, with reason, regarded as doubtful.

In a part of the Atlantic, the *gulph-weed*, or *fucus natans*, occurs in great quantities. This region extends nearly across the whole ocean, beginning on the E. at the 30th meridian, and terminating on the W. in the sea washing the E. side of the Bahama Bank. In width, it occupies the whole space between 20° and 36° N. lat.; but the whole extent of the surface between these lines is not equally crowded with weed. The most crowded part extends between 30° and 32° W. long.; where, in the neighbourhood of the island of Flores,—one of the Azores,—it forms first only a small stripe; but farther to the S. expands to a great width. In this part of the Atlantic, which is called by the Portuguese, *Mar de Sargasso* (Weedy Sea), the fucus covers, like a mantle, far and wide, the surface of the sea, extending from N. to S. more than 1,200 m. Another part of the sea, covered with fucus in a very crowded state, occurs between the meridians of 70° and 72°, and the parallels of 22° and 26°, towards the W. end of the region. The sea lying between these two crowded districts, is, in some parts, only lightly strewed with sea-weeds; but, in others, it occurs in dense masses.

Many conjectures have been formed as to the origin of the name given to this great sea. Of these, the most probable seems to be that which derives it from Mount Atlas. Being first navigated by Phœnician and Carthaginian adventurers, they would naturally designate it by the most conspicuous feature in the limited space with which they were acquainted; and would, therefore, call it *Mare Atlanticum*, or Sea of Atlas.

ATLAS (MOUNT), according to Herodotus, was a single isolated mountain of great elevation, on the W. coast of N. Africa. This information was probably obtained from the first navigators of these seas, who observed the elevated mountain which forms at Cape Geer (30° 40′ N. lat.) the western extremity, and as it were the gable-end, of that extensive range, now comprised under the name of Mount Atlas.

The principal and according to our present knowledge the highest range of Mount Atlas, is that which begins at Cape Geer (near 10° W. long.), and extends E., with a slight declination to the N., as far as 5° W. long., where it approaches 32° N. lat. As to cross it requires two days journey, its width may be estimated at from 30 to 40 m. Its height nowhere seems to exceed the snow-line; for its highest summit, the Miltsin, 27 m. S. E. from the town of Marocco, has been measured by Lieut. Washington, and found to have an elevation of 11,400 feet above the sea. It is only once in about 20 years free from snow; during the winter months the N. declivity of this range is frequently covered with snow for several weeks; we do not know whether this be also the case with the S. declivity, but as it is turned towards the great African desert (the Sahara), and towards the hot winds blowing from that quarter, it is likely that snow falls rarely there, even on the highest summits. This range is called by the natives Djibbel Telge.

From the E. extremity of the Djibbel Telge a chain branches off on the S. side, which runs in a W.S.W.

direction, and terminates with low hills on the Atlantic sea at Cape Nun. According to Jackson it contains a snow-capped summit, E. of Elala, but its mean elevation does not appear very great. Between this range and the Djibbel Telge lies the province of Suse. Along the S. base of this range, according to the newest information, runs the river Dràh, which does not lose itself in the sand of the Sahara, as has been usually believed, but reaches the sea about 32 m. S. of Cape Nun.

At about 5° W. long. and 32° N. lat., the chain forms a mountain-knot, from which issue two ranges, one running a little to the E. of N., and the other first N. E. and then E. Near the mountain-knot, between the sources of the rivers Oom-er-begh (Morbeya) and Mulwia or Mahala, it was till lately supposed that the Atlas attained an elevation of 15,000 or even 19,000 feet; but the route of Caillié lay precisely over this part of the range, and from his account we only can infer that the ridges rise from 1,000 to 2,000 ft. above the country at their base; and this country is probably not more than from 3,000 to 4,000 ft. above the level of the sea; he does not mention any summit rising to the line of congelation.

The range which runs a little to the E. of N. continues in that direction from 32° to 34½°, where at a distance of about 30 m. from the Mediterranean, it divides into two ridges, which hence run along the Mediterranean Sea, in opposite directions, the W. terminating on the peninsula forming the Straits of Gibraltar, at Cape Spartel, and the E. continuing through the whole of Algiers, and terminating at Capes Blanco and Zibeeb, on the strait separating Sicily from Africa. The undivided range (bet. 32° and 34½°) is called by the Europeans Greater Atlas, and by the natives Djebbel Tedla or Adtla. The chain which extends W. to Cape Spartel, is commonly named the Lesser Atlas; by the natives, Errif. Its highest part is hardly any where more than 15 or 20 m. distant from the sea; but in numerous places its branches occupy the whole space lying between it and the elevated shores; it forms the capes of Tres Forcas, Quilates, Negro, and Ceuta. Its mean elevation seems hardly to exceed 2,000 ft.

The chain which skirts the Mediterranean from 3° W. long. to 10° E. long., or to Cape Blanco, has no general name. The distance of the highest part of the range from the sea varies between 10 and 30 m., but at numerous points the coast itself is formed by mountains of considerable elevation, which are parts of the great masses lying behind them. No level country of any extent occurs along the shores, except the Plain of Metidjah, E. of the town of Algiers. This range is of greater elevation than the W. Shaw states that the higher portions of it are covered with snow a considerable part of the year; and the French naturalist Desfontaines estimated their height at 7,200 ft. But the highest points have lately been measured, and one has been found to rise 5,124 ft., and another 6,729 ft. only above the sea. E. of 5° E. long. the mountains in the interior seem to be much lower than farther W., but some high summits occur on the coast very near the sea. This chain is at several places broken down, and it is by these wide chasms, that the most considerable rivers of northern Africa find their way to the Mediterranean Sea, as the Mulwia, Shellif, Isser, Sumeim, Wad el Kebir, Seibous, and Mejerdah.

The mountains in which these rivers have their origin, are very imperfectly known, even as respects their geographical position. It is supposed that they form the continuation of the ridge which branches off from the mountain-knot at 5° W. long. and 32° N. lat. towards the N.E., but afterwards by degrees declines to the E. East of the meridian of Greenwich, its principal masses seem to lie near the parallel of 35° N. lat. and to extend eastward to the meridian of 10°. Between this range and the more southerly one, lie wide valleys and plains of moderate extent but of great fertility; they have a temperate climate, and constitute the best portion of the countries embosomed within the range of Mount Atlas. Edrisi thinks that no country can match these elevated valleys for fruitfulness of soil, and amount of population! (ed. Hartmann, p. 140.) The height of the range to the S. seems not to be equal to that lying N. of the valleys, though it probably occupies a greater width: perhaps on this last account it is considered as the principal chain of the Atlas. Among the natives a great portion of it is known under the name of Djebbel Amer, or Lowart.

The country extending south of this range is called, according to Shaw, Sahara by the natives; but though it doubtless partakes in some respects of the character of the Great Desert, it differs widely from it in others, and must be considered as belonging to the system of Mount Atlas. This country, as far as we are informed, presents a succession of flat-backed ridges of moderate elevation, but considerable breadth, running commonly E. and W. The lower grounds by which they are separated from each other, are completely closed valleys or plains of moderate extent, each of which has a temporary or permanent lake in its lowest part, the receptacle of the waters that flow down from the adjacent high grounds during the rains. The surface of this extensive country is composed of a sandy soil, entirely destitute of trees, and, in most parts, even of every kind of vegetation, at least during the dry season. But along the water-courses extensive plantations of date trees exist; hence the country has received the name of Bled-el-jereed (the country of dates). In most districts the water is salt or brackish; but in parts potable water may be obtained in abundance by digging wells to the depth of 100 and sometimes 200 fathoms. This country extends S. to the very borders of the Great African Desert, and extends eastward far beyond 10° E. long.; but the country east of that meridian is not considered as forming a portion of the Atlas which terminates between 9° and 10° with the Nefusa Hills, W. of the Bay of Cabes or the Lesser Syrtis.

Our knowledge of the roads traversing this mountain system, is of course very scanty. Jackson states that only two passes, Bebawan and Belavin, exist between the province of Suse and the country N. of the Atlas. Farther E. between 5° and 4° W. long. lies the great caravan road, on which the commerce between Fez in Marocco, and Timbuctoo in Soudan, is carried on. It traverses the districts of Tafilett and Drah, and does not appear to present great difficulties, according to the statement of Caillié, who returned by it to Europe: this road is connected with the great caravan road leading to Mecca. We are not well acquainted with the precise place where this latter branches off from the former, but it seems to be between 32° and 33° N. lat., not far from the sources of the river Mulwia. The principal stations of the caravans within the Atlas mountains are named Kassabi or Aksabi Shurefa, Tiz Fighig, Gardeia, and Wurglah, all of which are situated near the S. borders of the mountain system. From Wurglah the road passes to Gadames, and hence to Murzook in Fezzan.

We are very imperfectly acquainted with the mineral riches of the Atlas; the precious metals seem only to occur in the province of Suse, and not in abundance, at least no mines are worked. But copper is very plentiful in the principal range S. of the town of Marocco, where it is worked by the natives who inhabit the mountains, and are in a great measure independent of the sultan of Marocco. Iron of good quality occurs in many places, and is worked in few, as is likewise lead: antimony in abundance is found and collected in the range of Tedla. Rock-salt is also plentiful, but not worked, because salt may be obtained with less labour by evaporating sea-water. Saltpetre of a superior quality abounds in some districts of Suse, and in the neighbourhood of the town of Marocco; fuller's earth is abundant and of good quality.

Mount Atlas is inhabited by a nation which must be considered as aboriginal, having probably been in possession of N. Africa long before the beginning of our historical records. It is known under the name of Berebbers, or Berbers; though it seems that this denomination is entirely unknown to themselves. This nation, which still forms the bulk of the pop. of N. Africa, including nearly the whole of the Sahara, is divided within the limits of Mount Atlas into two great tribes, the Amazirghes, or Mazirghes, and the Shelluhs. The latter occupy the two high western ranges, including the province of Suse; and the Amazirghes the remainder. It has long been a question, whether these two nations speak only different dialects of one language, or two essentially different languages; but Graberg de Hemso, who lately published a work on the empire of Marocco, and understands the languages, states that they are substantially the same, the difference between them being not greater than that between the Portuguese and Spanish, or the English and Dutch languages. Both nations, however, differ in their manner of life and occupations, the Shelluhs living in houses, cultivating the fertile valleys of the mountain ranges, and applying themselves with assiduity and success to several mechanical arts; whilst the Amazirghes dwell in tents or caverns, attending only to their numerous herds of cattle and sheep. Only a few individuals of these nations are subject to the emperor of Marocco and the sovereigns of Algiers. Those inhabiting the mountains have preserved their independence, and are governed by independent chiefs. They are frequently at war with the sovereigns in whose territories their possessions are included. Among both nations a considerable number of Jews are settled.

The most exaggerated notions were early entertained of the height of Mount Atlas. Mela says of it, *In arenis mons est Atlas, dense consurgens, verum incisis undique rupibus, praeceps, invius, et, quo magis surgit, exilior, qui, quod altius quam conspici potest, usque in nubila erigitur, cælum et sidera non tangere modo vertice, sed sustinere quoque dictus est.* (lib. iii. s. 10.) This supposed extraordinary height of the mountain, and the ignorance that prevailed in the earlier ages of the contiguous countries, afforded full scope for the exercise of the imagination. The poetical history of Atlas may be seen in Ovid, (*Metamorph.* lib. iv. line 656.) and is referred to by Virgil in one of the finest passages of the *Æneid*, lib. iv. line 246.

ATRI, or ATRIA, a town of Naples, prov. Abruzzo Ultra I., 5 m. from the Adriatic, and 11 m. N. by E. Civita Penne, on a steep mountain. Pop. canton, (1830) 7,249.; town, about 4,000. It is the seat of a bishopric, has a cathedral, parish church, several convents, a grammar school, two hospitals, and a mont-de-piété.

This is a very ancient city, and, instead of the Venetian Adria, it has been supposed to have given its name to the Adriatic; but the weight of authority and probability is against this supposition; its origin is, however, undetermined, or lost in obscurity. Some extraordinary excavations exist in a hill near the town, forming a series of chambers, distributed with such regularity as to authorise the notion that they were designed for some particular object, such as prisons or magazines. These peculiarities have suggested the idea that they are of a more remote construction than the *Lathomiæ* at Syracuse, which they much resemble, or than the celebrated prisons of Servius Tullius at Rome. Some antiquaries have supposed, not without considerable plausibility, that the word *Atrium* must have been derived from these excavations. The town received a Roman colony about the year 465 U. C. It seems to be generally allowed that the Emperor Adrian was descended of a family originally of this city. (*Del Ré Descrizione delle Düe Sicilie*, ii. p. 52.; *Cramer's Ancient Italy*, i. p. 291.; *Craven's Abruzzo*, i. p. 300.)

ATRIPALDA, a town of Naples, prov. Principato Ultra, on the Sabato, 2 m. E. Avellino. Pop. 2,400. It has a collegiate and a parochial church, with fabrics of cloth, paper, and nails.

ATTERCLIFFE, a township in the par. of Sheffield, which see.

ATTICA, in antiquity, the most celebrated region of Greece, and the seat of its most renowned people, now part of the nomarchy of Attica and Bœotia, and forming the eparchy of Athens. It lies between lat. 37° 39′ (Cape Colonna), and 38° 22′ N., and long. 23° 20′ and 24° 5′ (C. Marathon) E., having N. Bœotia, E. the Ægean Sea, S. and S.W. the Gulph of Egina (Saronic G.), and W. the eparchy of Megara: shape triangular, the base to the N. W.: length 44 m.; breadth about 34 m. It owed all its ancient glory to the industry and genius of its inhabitants. Soil mostly rugged, the surface consisting of barren hills, or plains of little extent. The chief mountains are Nosea (Parnes), the loftiest; Elatea (Cithæron), and Manglia, which form its N. boundary; Mendeli (Pentelicus), famous for its marble; Vrelo-vuni (Hymettus), and Laurini (*Laurion*), famous for its silver mines. The most remarkable plains are those of Athens and Marathon: rivers, the Sarandaporo, Cephissus, and Ilissus. The produce of Attica differs remarkably from that of Bœotia; it is deficient of water, and yields little grain except barley; its pastures are but few, and its spontaneous vegetation consists mostly of evergreens, as the pine, prinari, olive, myrtle, &c. Parnes is covered by a forest, and supplies Athens and the surrounding country with fuel; Hymettus abounds with lentisks, wild thyme, and other odoriferous plants; its honey still enjoys some portion of its ancient fame; and its mutton has a delicious flavour. The oil is equal to that of France: what corn is produced is very good, and the harvest takes place earlier than in any other part of Greece. Game is very abundant, and wolves, wild boars, and a few bears, are met with in the N. Owls, especially the small grey owl (*Strix passerina*), still inhabit the vicinity of Athens in great numbers; but luckily there are remarkably few venomous reptiles or insects. The chief mineral treasures are marble, white at M. Pentelicus, and grey at M. Hymettus; the anc. silver mines of Laurium are no longer productive. Air pure and healthy; and though the country is in many parts dreary and uncultivated, the summits of the mountains afford sublime views, embellished by numerous classical remains, associated with imperishable and ennobling recollections. Every hillock of Attica appears to have been dedicated to gods or heroes, and decorated with their altars and statues, the ruins of which are often clearly traceable. It originally contained 174 demi or boroughs; it now possesses no town of any importance, except Athens: its villages are mostly inhabited by Albanians. (For farther particulars, *see* GREECE.)

ATTLEBOROUGH, a m. town and par. of England, co. Norfolk, hund. Shropham, 15½ m. S. W. Norwich. The par. contains 5,800 acres, and 1,939 inhab. The town, formerly a place of some importance, is now decayed and inconsiderable.

ATTOCK (*Atac*, a limit), an. *Varanas*, a fort and decayed, though formerly a considerable, town of the Punjab, Hindostan, on the E. bank of the Indus, in lat. 33° 56′ N., long. 71° 57′ E., 42 m. E. S. E. Peshawer, and 236 m. N.W. Lahore. The modern fort stands on a low hillock beside the river; it is of an oblong form; its shortest faces parallel to the river, being 400 yards in length, and the others twice as long. The walls are of polished stone, and the whole structure is handsome; but in a military point of view it is of little importance, being commanded by a hill, from which it is divided only by a ravine. On the opposite side of the river is a small village, having a fort erected by Nadir Shah, and a fine aqueduct built by some former Khuttuk chief. The Indus is here 200 yards broad, the channel deep, and the current rapid, but so tranquil that a bridge might be thrown over it; and it is easily passed both in boats and on the inflated hides of oxen, a contrivance common here, and as old as the days of Alexander the Great, who is believed to have crossed the Indus at or near this point. For a long period Attock belonged to Caubul; but in 1818 it was taken by the Maharajah Runjeet Sing, who now possesses it. (*Elphinstone's Caubul*, i. 96, 97.)

AUBAGNE, a town of France, dép. Bouches du Rhone, cap. cant., on the Veaume, 10 m. E. Marseilles. Pop. 6,481. It consists of an old and a new town; the former built on the declivity of a hill, and the latter at its foot. In the first, the houses are small, and the streets narrow and dirty; but in the new part the houses are good, and the streets broad and well kept. It has fabrics of earthenware and paper, and tanneries; and several fairs are held in it, for the sale of horses, mules, and jewellery.

AUBE, an inland dep. of France, S.E. Paris, between 47° 55′ and 48° 42′ N. lat., and 3° 24′ and 4° 48′ E. long. having N. dep. of Marne, E. Haute Marne, S. the Côte d'Or and Yonne, and W. Seine et Marne. Area, 609,000 hectares. Pop. 253,870. It is traversed by the Seine, which is navigable from Troyes, and also by its important affluent the Aube, whence the dep. has its name: the latter is navigable from Arcis-sur-Aûbe. Surface generally flat; but in the N. W. quarter there are some low hills. The soil of the region to the N. and W. of Troyes consists of chalk thinly covered with mould, and is exceedingly barren and unproductive, great part of it not being worth cultivation. The subsoil of the other portion, or that to the E. and S. of Troyes, also consists of chalk; but being for the most part thickly covered with alluvial deposit, produces luxuriant crops of corn, hemp, turnips, &c. Agriculture has made considerable progress since the revolution, particularly as respects the culture of turnips, and the formation of artificial meadows. Oxen as well as horses are employed in field labour. The annual produce of wool is estimated at 220,000 kilogs. A great number of hogs are fattened. The meadows in the valleys of the Seine, Aube, and Armance annually supply about 2,000,000 quintals hay, about one-third part of which is sent to Paris. The forests in some parts are pretty extensive; but in the barren chalk region there is a great want of trees. The best wines are those of Ricey, Bac, Bouilly, Javernant, and Laines-aux-Bois. According to the official tables, the principal divisions of the soil are—cultivable land 394,000, meadows 37,500, vineyards 23,000, woods 80,000, heaths, moors, &c. 22,000 hectares. Excepting chalk and marble, the minerals are unimportant. The manufacture of cotton stuffs and yarn, hosiery, and woollen stuffs, is extensively carried on. There were, in 1834, 2,500 looms, and 3,500 workpeople, employed in the weaving of cotton; 5,000 looms, employing 3,000 workpeople, produced annually 80,000 doz. caps, and 270,000 doz. pairs of stockings; the establishments for spinning wool, produced annually about 400,000 kilogs. of yarn; and those for the spinning of cotton put in motion 68,000 spindles, employing from 2,700 to 3,000 workpeople, and furnish annually 500,000 kilogs. of yarn. There are also tanneries, works for the preparation of beet-root sugar, glass-works, tile-works, &c. The dep. returns 4 m. to the Ch. of Deputies; No. of electors, 1,208. Amount of public revenue in 1831, 8,176,586 fr. With the exception of Troyes, none of the other towns are of much importance. The condition of the inhabitants of Aube has been materially improved during the last 30 years. "Les progrès de la civilisation y sont remarquables. Les paysans et les artisans sont vêtus avec propreté, on pourrait presque dire avec recherche. Les ouvriers mangent de la viande, et leurs salaires, qui se sont beaucoup accrus depuis la révolution, ont aussi accru leur bien-être. Ce bien-être leur a inspiré des idées d'ordre et d'avenir. Le département est un de ceux où un caisse d'épargne et de prevoyance a eu la plus prompt succès; l'établissement de celle de Troyes date de 1822." (*Hugo, France Pittoresque*, art. *Aube*; and *French Official Tables*.)

AUBEL, a town of Belgium, prov. Liege, 5 m. N. Verviers. Pop. 3,000. It has a good weekly market, and a considerable trade in butter and cheese.

AUBENAS, a town of France, dép. Ardèche, cap. cant., near the Ardèche, at the foot of the Cevennes, 13 m. S.W. Privas. Pop. 4,855. It is beautifully situated on the slope of a well-wooded hill, and is surrounded by the ruins of an old wall flanked with towers. The interior of the town by no means corresponds with the beauty of its situation, its streets being generally crooked, narrow, and filthy, and the houses *sombres et mal-propres*. It is the seat of a tribunal of commerce, and has manufactures of cloth, filatures and fabrics of silk, establishments for the dressing of leather, &c. It is the great mart for the sale of the wines and chestnuts of the dep., and has also a considerable trade in raw and wrought silk, wool, and cotton.

AUBERVILLIERS, a village of France, dép. Seine, a little to the N. of Paris. Its inhabitants are principally employed in the raising of garden stuffs for the supply of Paris.

AUBIGNY, a town of France, dép. Cher, cap. cant., on the Nère, 28 m. N. Bourges. Pop. 2,206. It is old, dirty, and ill-built. It has manufactures of coarse cloth, linsey-woolsey, serges, &c.; but they have greatly declined from their ancient prosperity. It is still, however, the centre of a considerable trade in wool. Aubigny is the name of numerous small towns and villages in different parts of France. This town with its lordship was erected into a duchy in 1684, in favour of the Duchess of Portsmouth and her son, the Duke of Richmond, in whose family it continues to the present day.

AUBIN-DE-CORMIER (ST.), a town of France, dép. Ille et Vilaine, on a steep hill, 16 m. N. E. Rennes. Pop. 1,769.

AUBIN (ST.), a town of France, dép. Aveyron, cap. cant., 18 m. N.E. Villefranche. Pop. 3,017. In the environs of this town are the burning mountains, or rather hills, of Fontagnes and Buegne, in which subterranean fires have been in action for ages. The smoke and other vapours produced by the fires deposit, on the sides of the crevices of the rocks and earth, by which they make their escape, large quantities of imperfect alum and sublimated sulphur. The alum crystals being collected and refined furnish excellent alum, sufficient for the supply of France.

AUBIN (ST.), a finely situated sea-port town of the island of Jersey, opposite to St. Hiliers, on the W. side of the bay on which the latter is built. Pop., inclusive of that of the parish, which is but small, 2,069. It consists principally of a single street of well built houses. There is a harbour formed by a pier, but it is deficient in water; but the largest ships may anchor inside the pier at St. Aubin's Castle, in the vicinity.

AUBONNE, a town of Switzerland, cant. Vaud, on the Aubonne, 14 m. W. by S. Lausanne. Pop. 1,650. Its castle, which commands a very fine view, was built by the counts of Gruyère, and repaired by Tavernier, the celebrated traveller, to whom it belonged, in the 17th century. The heart of Duquesne, one of the most celebrated naval officers that France ever produced, is interred in the parish church, where a monument has been erected to his memory. (*Biographie Universelle*, art. *Duquesne*.)

AUBURN, a town of the U. States, N. York, co. Cayuga, at the N. end of Owasco Lake, 169 m. N.W. Albany, and 314 m. N.W. New York. Pop. in 1835, 5,368. Principal streets wide and macadamized, having numerous lofty buildings of brick and dressed limestone. Auburn is principally celebrated for its state prison, founded in 1816. This is a very extensive building, and has been conducted, since 1823, on what has been called the "silent, or Auburn plan," that is, on the plan of confining the prisoners to separate cells during the night, and making them work together during the day, taking care to enforce, when they are together, the strictest silence. The prison was at first conducted on the system of solitary confinement, which not being found to answer, the present system was established in its stead, and is, no doubt, a very great improvement. It is now being introduced into this country. (For a full account of the Auburn prison, see *Stuart's Three Years in America*, i. 86., &c.) Exclusive of the state prison, there are at Auburn a county prison, built in 1833; a Presbyterian theological seminary, incorporated in 1820, with *three* professors, and a good library; a college, founded in 1836; a court-house, with numerous places for public worship, banks, &c. (*Gordon's Gaz. of New York*.)

AUBUSSON, a town of France, dép. Creuse, cap. arrond., on the river of that name, 20 m. S. E. Gueret. Pop. 5,631. It is picturesquely situated in a sterile country, in a narrow gorge, surrounded by rocks and mountains. It consists of one long street of good houses; has a theatre, an agricultural society, and publishes a journal entitled the *Album de la Creuse*. The carpet manufacture of Aubusson is the most celebrated in France, after that of the Gobelins and Beauvais. It was formerly, however, much more extensive than at present. In the early part of the 17th century the town is said to have contained 12,000 inhabitants, of whom upwards of 2,000 were directly employed in the carpet trade. But being mostly Protestants, the revocation of the edict of Nantes, by making the greater number emigrate to foreign countries, gave a blow to the manufacture, from which it never recovered. In 1780, it employed about 700 workpeople. It languished for a long time after the revolution; but within the last dozen years it has materially improved, and at present it employs a greater number of hands than in 1780. (*Hugo, France Pittoresque*, art. *Creuse*.)

AUCH, a city of France, dép. Gers, of which it is the cap., on the left bank of the Gers, lat. 43° 38′ 39″ N., long. 1° 35′ 11″ E. Pop. 8,470. It stands on the plateau and declivity of a hill, which gives it at a distance a fine appearance. A considerable suburb is built on the opposite side of the river, the communication with it being kept up by a bridge. It is the seat of a court of assize, of tribunals of commerce and original jurisdiction, and of an archbishopric; and has a royal college, a primary normal school, a theological seminary, a school of design, an agricultural society, a museum, a public library with about 5,000 volumes, a theatre, &c. Notwithstanding modern improvements, Auch is still generally ill-built, and the streets, though clean, are narrow and crooked. The best part of the town is on the summit of the plateau. There is here a magnificent promenade upon an elevated terrace of great extent, finely shaded, and commanding an extensive view over the neighbouring country as far as the Pyrenees. Principal public buildings, the cathedral and the hotel of the prefecture. The former is one of the most magnificent in France; but though taken as a whole it is admirable, its parts are not a little incongruous, the principal part of the building being Gothic, while the front and some other portions are Greek! The different parts of the interior are exceedingly well-proportioned; the woodwork of the choir and the painted glass windows are each admirable. The hotel of the prefecture, formerly the archiepiscopal palace, is a vast and a noble building. There is also (in the suburb) an immense hospital, with a town-house, barracks, &c. Auch has manufactures of thread and cotton stuffs, called *rases pleniares*, coarse cloths, with tanneries, and establishments for the spinning of wool. A considerable trade is carried on, particularly in the brandies of Armagnac.

Auch is a very ancient town. Before the Roman conquest it was called Climberris, and was the capital of the Auscii. Augustus having planted in it a Roman colony, it took the name of *Augusta-Auscocurum*, whence its modern name has been derived. The old city stood on the right bank of the Gers, on the site of the present suburb. The modern city is, however, very ancient, having been founded previously to the reign of Clovis. (*Hugo, France Pittoresque*, art. *Gers*; *Inglis's Switzerland*, p. 227.)

AUCHTERARDER, a village and par. of Scotland, co. Perth, on the S. bank of the Earn. The village, which is nearly 1 m. in length, consists of a single street on both sides the high road from Glasgow to Perth, being about 14 m. W. by S. from the latter. It is principally occupied by cotton weavers in the employment of the Glasgow manufacturers, there being above 500 looms in the par., and mostly in the town. At one time it returned members to the Scotch parliament, and it is uncertain how or when it lost the privilege. At present it is the seat of a Presbytery. It was burned down by the earl of Mar, in 1718, and has no building worth notice. Pop. of par. in 1836, 3,315, of whom there were in the town 1,981. The agriculture of the parish has been greatly improved within the present century. (*New Statistical Ac. of Scotland*, art. *Auchterarder*.)

AUCHTERMUCHTY, a town and par. of Scotland, co. Fife, the town being situated on the high road from Kinross to Cupar, 9 m. W. the latter. Pop. of par., 3,225. The town is intersected by a rapid streamlet, employed to turn flax and other mills, and to supply a bleach-field. It is very irregularly built, but it contains a fair proportion of good substantial houses. The inhabitants are principally employed in the weaving and spinning of linen and cotton, especially the former. It was created a royal burgh by James IV., but has never enjoyed the privilege of voting in the return of a m. either to the Scotch or British parliaments.

AUDE, a maritime dep. in the S. of France, on the Mediterranean, separated from Spain by the dep. of the Pyrenees Orientales. Area, 606,397 hectares. Pop. 281,088. The Aude, whence it derives its name, is the only considerable river in the dep.; but it is traversed from E. to W. by the canal of Languedoc. The coast along the Mediterranean is mostly low, and is bordered by several lagoons, or, as they are called in the language of the country, *étangs*. At the mouth of one of them is La Nouvelle, the only port in the dep. Surface generally hilly and mountainous, being encumbered on the N. with the Montagne Noire, a prolongation of the Cevennes, and on the S. with ramifications of the Pyrenees. The highest summit of the latter, the Pic Mosset, rises about 8,000 feet above the level of the sea; the highest point of the Montagne Noire is about 3,900 feet above the sea. Soil of the plains and valleys generally calcareous and very productive. Climate variable, and principally distinguished by the prevalence of hot winds; that from the S. E. called the *Autan*, and that from the N.W. called the *Cers*. Both of these blow with great force; and at Carcassone and Castelnaudary the autan is occasionally so violent as to unroof houses and tear up trees. In summer it sometimes strikingly resembles the sirocco. All sorts of corn are raised on the plains, and millet and buckwheat on the mountains. The produce exceeds the consumption of the inhabitants so much, that the export is estimated at about 500,000 hectolitres a year. It is singular, that notwithstanding improved processes

and implements have been pretty generally introduced, the primitive mode of threshing corn, by treading it with horses, is still almost universally adopted. Next to corn, wine is the most important agricultural product, the vineyards being supposed to furnish about 890,000 hectolitres a year. The red wines are inferior, but the white wines, particularly the blanquette de Limoux, are much esteemed. A good deal of brandy is manufactured. Sheep numerous: annual product of wool estimated at 1,600,000 kilogs. Irrigation well understood; and there are some fine artificial meadows. The severe winter of 1829 was fatal to most of the olive trees, and the culture of silkworms is not attended to. The honey of Narbonne is the finest in France. According to the official tables, the soil is principally appropriated as follows; viz. — cultivable lands 273,000, meadows 11,000, vineyards 50,000, forests 44,000, and waste lands, heaths, &c. 183,000 hectares. The dep. is rich in mineral products. Mines of iron are wrought in different places; and the total produce of the foundries is estimated at about 17,000 metrical quintals a year. Above 30,000 pieces of cloth are annually manufactured at Carcassonne, of which 6,000 are exported to the Levant. There is also a large manufactory of combs and articles of jet, with fabrics of paper, tanneries, distilleries, salt-works, &c. The trade and industry of the dep. have been greatly promoted by the facilities of communication afforded by the canal of Languedoc. The dep. returns 5 mem. to the Ch. of Dep. Number of electors, 1,959. Total public revenue in 1831, 9,162,801 fr. Principal towns Carcassonne, Narbonne, and Castelnaudary. (*Hugo, France Pittoresque*, art. *Aude*; *Dict. Géographique*; *French Official Tables*.)

AUDINCOURT, a village of France, dép. Doubs, cap. cant., on the Doubs, 3 m. S.E. Montbeliard. Pop. 1,432. This village is distinguished by its iron-works, which furnish annually above 5,000,000 kilogs. of bar and wrought iron, exclusive of considerable quantities of iron and tin plates. (*Hugo*, art. *Doubs*.)

AUDRUICQ, a town of France, dép. Pas de Calais, cap. cant., 2,373 m. N.N.W. St. Omer. Pop. 2,373.

AUERBACH, a town of Saxony, on the Golzsch, 12 m. E. Plauen. Pop. 2,000. It is the property of baron Planitz; and has manufactures of muslin and black lace, with breweries, paper-works, &c., and an active trade.

AUERBACH, a handsome village of g. d. Hesse Darmstadt, 15 m. S. Darmstadt. It has a castle, the summer residence of the grand duke; and several wells and baths, much resorted to by the inhabitants of Darmstadt.

AUERSTADT, a small village of Prussian Saxony, reg. Merseburg, 6 m. W. Naumburg. Here, on the 14th of October, 1806, the main body of the grand Prussian army, under the Duke of Brunswick and the king in person, was defeated by the division of the grand French army commanded by Marshal Davoust. The same day Napoleon defeated, at Jena, the right wing of the Prussian army, under General Mollendorff. The combined action has been called the battle of Jena. (See JENA.) Davoust, in reward of his skill and gallantry, received from Napoleon the title of Duke of Auerstadt.

AUGGUR, a town of Hindostan, prov. Malwa; in the dom. of Sindia; on a rocky eminence 1,598 ft. above the level of the sea, between two lakes, 40 m. N.E. Oojein; lat. 23° 43′ N., long. 76° 1′ E. It is surrounded by a stone wall, and has a well-built native fortress: it is of considerable extent, and in 1820 contained 5,000 houses; but these, excepting one street, were merely mud buildings.

AUGSBURG (an. *Augusta Vindelicorum*), a city of Bavaria, cap. circ. Upper Danube, finely situated in an extensive and fertile plain, between and near the confluence of the Wertach and Lech, 35 m. N.W. Munich; lat. 48° 21′ 46″ N., long. 10° 54′ 42″ E. Pop. 35,000, of whom about 12,000 are Protestants. This was long one of the richest, most commercial, and powerful of the free cities of the empire. Its fortifications were dismantled in 1703; and though it be still surrounded by walls and ditches, they are no longer useful as means of defence. The streets are mostly narrow and inconvenient; but "the Maximilian Strasse is a noble street, more than ½ of a mile in length, wide and airy, with lofty well-built houses, and ornamented with several fine fountains." (*Spencer*.) There are also some other good streets and squares. The houses, which are mostly old, are many of them large, and sculptured and painted fronts are common. The town-hall, near one of the extremities of the Maximilian Strasse, the finest building in the town, was finished in 1620. It has a hall on its second story, denominated the golden hall, from the profusion of gilding, reckoned one of the finest apartments in Germany. The other public buildings are the palace, formerly the residence of the bishop, but now used for government offices; the cathedral, an extensive Gothic fabric, "devoid of symmetry and grandeur" (*Murray*); the arsenal; the *ci-devant* abbey of St. Ulric, with the church of St. Afra, &c. The town is extremely well supplied with water, and is intersected by no fewer than 4 canals. Exclusive of the walks on the glacis and in the neighbourhood, it has a fine promenade in front of St. Ulric's church. Among the educational establishments are two gymnasiums, one for Protestants and one for Catholics; an academy of arts, founded in 1820; a polytechnic school; a polytechnic society; 2 endowed schools for females; a Lancastrian school, Sunday schools, &c. The public library is said to contain a valuable collection of printed and manuscript Greek works. The collection of paintings, chiefly of the German school, formerly in the town-hall, has been mostly removed to the *ci-devant* convent of St. Catherine; but the best pictures have been carried to Munich. Among the charitable establishments is the *Fuggerei*. This consists of 106 (Reichard says 51) small houses, built in 1519 by the Fugger family, and let to indigent citizens at a mere nominal rent. In our own times, Schaesler, a banker of the city, has followed up this example, by endowing a school of industry for 100 orphans and poor children, and founding an asylum for decayed towns-people.

The manufactures of Augsburg are various and important. That of woollen stuffs is the most extensive and thriving; those of cotton and linen, though still considerable, are said to have materially declined: it has also a cannon foundry, and produces large quantities of paper, with gold and silver lace and jewellery, printing-types, soap, glass, &c. The *Algemeine Zeitung* is published here, and it is the centre of an extensive trade in printing, engraving, and bookbinding; but its principal importance at present, and for a long time past, has been derived from its being, next to Frankfort, the grand seat of banking and exchange operations in Central Europe. The greater part of the extensive transactions between Vienna and W. Germany, as well as most of those between Germany and Italy, are finally balanced and adjusted in this city.

This was formerly a place of much greater population and importance than at present. It is very ancient, Augustus having settled a colony in it about 12 years B.C. In the middle ages it was early distinguished by its trade; and having purchased its freedom from the dukes of Suabia, it rapidly rose in importance. At the end of the 14th century Augsburg, Nuremberg, and some other cities in Southern Germany, had establishments in Venice, and carried on a very extensive trade with Italy, the Levant, and the rest of Germany. The family of the Fuggers, probably the richest and most extensive merchants of the 15th and 16th centuries, and who afterwards became princes of the empire, were originally simple burghers of this city; and though the most celebrated, they were not its only citizens who attained to almost regal opulence and power. Augsburg declined, partly in consequence of the prolonged wars of the 16th and 17th centuries, but more, perhaps, from the change in the channels of commerce, occasioned by the discovery of the route to India by the Cape of Good Hope, and the rise of other emporiums. Latterly it has improved considerably.

Augsburg has been the theatre of many important events. At a diet held within its walls, on the 25th of June, 1530, the famous Confession of Faith, drawn up by Melancthon and subscribed by the Protestant princes, was publicly read before, and presented to, the Emperor Charles V. This celebrated document has thence been called the Augsburg Confession. Here, also, the *interim*, or provisional edict, was published by Charles V. in 1548; and here, in 1555, was concluded the peace which assured the full enjoyment of their rights and liberties to the Protestants. Augsburg continued to be a free city till 1806, when it was ceded by Napoleon to Bavaria. (*Murray's Handbook for Southern Germany*; *Reichard, Guide des Voyageurs* (Berlin, 1835); *Penny Cyclopædia*; *Schmidt, Histoire d'Allemagne*, v. 513. and vi. 414.)

AUGUSTA, a city of the U. States, E. frontier of Georgia, on the Savannah river, by which it is separated from Hamburgh in S. Carolina; 123 m. N.N.W. Savannah, 138 m. W.N.W. Charleston, lat. 33° 33′ N., long. 80° 46′ W. Pop. (1810) 2,476; (1830) 6,000. It is situated on an elevated plain; streets wide, and intersecting each other at right angles; houses brick, many of them being spacious and elegant. It has a city hall, court-house, theatre, academy, hospital, with numerous places for public worship; a medical college, and a college for Methodists. It has a considerable transit trade, particularly in the conveying of cotton to Savannah and Charleston. It is united by a bridge to Hamburgh, on the opposite bank of the river.

AUGUSTA, a town of the U. States, cap. Maine, on the Kennebec, 168 m. N.E. Boston. Pop. in 1810, 1,805; in 1830, 3,980. It is a finely situated town, and has been, since 1832, the seat of the legislature and government of the state. The river, which is thus far navigable for vessels of 100 tons, is here crossed by a bridge of two arches, each 180 feet in span.

AUGUSTINE (ST.), a town and sea-port of the U. States, E. coast of Florida, lat. 29° 52′ N., long. 81° 25′ W. Previously to the acquisition of Florida by the U. States, this was a place of some importance, contained from 4,000 to 5,000 inhab., and was defended by a fort. But it has

since declined, principally in consequence of the badness of its port. The bar at the mouth of the latter has not more than 8 or 9 feet water at high spring tides, and at low water not more than 5 feet, which at times makes it impossible even for boats to pass in or out. A light-house, on the N. end of Anastasia Island, with a fixed light, marks the entrance to the port. (*Blunt's American Coast Pilot*, p. 243.)

AULENDORFF, a market-town of Wirtemberg, circ. Danube, 12 m. S.S.W. Bibberach. It is beautifully situated, and has a castle that belongs to the counts Konegsegg-Aulendorf.

AULETTA, a town of Naples, prov. Principato Citra, on a hill, near the Negro, 36 m. E.S.E. Salerno. Pop. 1,800. This town is very ancient, having been founded by a Greek colony.

AULONA or VALONA (an. *Aulon*), a sea-port town of Turkey in Europe, prov. Albania, cap. sanjiack, near the mouth of the Adriatic, on the E. side of a gulph of the same name, 54 m. E.N.E. Otranto, in Italy, lat. 40° 27′ 15″ N., long. 19° 26′ 20″ E. Pop. 5,000 or 6,000, consisting of Turks, Christians, and Jews banished from Ancona, by Pope Paul IV. Though very ancient, it has few or no remains of antiquity. It was taken by the Turks from the Venetians in 1691; and the only good houses of which it has to boast, were built by the latter. It is defended by a castle. The Gulph of Aulona has at its mouth the small island of Sassino, which serves as a natural breakwater, protecting it from the heavy seas that would otherwise be thrown in from the W. and N.W. There is deep water on each side the island, and within the gulph expands into a fine basin with excellent anchoring ground. The country round Aulona is exceedingly fertile; but it is very unhealthy in summer, when the town is nearly deserted by the inhabitants. This is a consequence of the contiguous marshes not being drained, and might, it is believed, be easily obviated. But no amelioration need be looked for at the hands of its present masters. "*Campés sur une terre qui les dévore, étrangers à toute idée d'amélioration, ils ne s'occupent que du moment, sans apercevoir aucun avantage dans l'avenir.*" (*Pouqueville, Voyage dans la Grèce*, i. 286.)

AUMALE, a town of France, dép. Seine Inférieure, cap. canton, on the Bresle, 14 m. E.N.E. Neuchatel. Pop. 2,063. It has manufactures of coarse cloth, &c. Henry IV. was wounded in an action with the Spaniards under the prince of Parma, on the bridge of this town, in 1592.

AURAY, a sea-port town of France, dép. Morbihan, cap. cant. on the Auray, 11 m. W. Vannes. Pop. 3,895. It is built on the declivity of a hill; the town-house and the parish church are worth notice. Vessels of small burden come up to the town; but its port lower down is accessible to vessels of considerable burden, and it has a good deal of coasting trade. Charles of Blois was killed and Duguesclin made prisoner in a battle fought here in 1364.

AURICH, a town of Hanover, cap. West Friesland, 15 m. N.E. Emden. Pop. 2,600. It is the seat of the provincial government, a chancellery, a Protestant consistory, &c.; has 3 churches, a college, and a gymnasium, with fabrics of tobacco, paper, and pipes.

AURILLAC, a town of France, cap. dep. Cantal, on the Jordane, 147 m. E. Bordeaux, lat. 44° 55′ 41″ N., long 2° 27′ 40″ E. Pop. 9,897. The town is built on the declivity of a hill, and between it and the river is the agreeable promenade, called *le Gravier*. Though generally well built, it is gloomy and disagreeable: the streets are narrow, crooked, and ill paved, but well watered and clean. It was formerly surrounded by walls, and defended by a castle; but excepting a part of the latter, the rest of its fortifications have been demolished. The college is the largest of the public buildings: the hotel of the prefect, the town-house, and the church of St. Giraud, belonging to the ancient monastery to which the town owes its foundation, deserve notice. There is a handsome bridge over the river. Aurillac has tribunals of original jurisdiction and of commerce; a theatre, a public library containing 6,000 volumes, a society of agriculture, arts, &c., a cabinet of natural history, and a *dépôt des chevaux*, or *haras*, for the supply of the royal stud. It is an industrious town, and has manufactures of paper, lace, tapestry, with coppersmiths and cutlers, curriers, tanners, shoemakers, &c.

Piganiol de la Force, the author of a *Description Géographique et Historique de la France*, (best ed. Paris, 1752—53, 15 vols. 12mo.) was born here in 1673. Carrier, in amous for his atrocities during the revolution, was also a native of this place. (*Hugo, France Pitt.*, art. *Cantal*.)

AURIOL, a town of France, dép. Bouches du Rhone, on the Veaume, 15 m. E. N. E. Marseilles. Pop. 5,319. It is said to be rich, with fine streets and good houses; but to be infected by the dunghills, which, according to a custom tolerated in most small towns of Provence, are deposited on the high road! (*Hugo*, i. p. 218.) It has manufactures of wool, brick and tile works, with well-frequented fairs held on the 18th September, 3d October, and the 6th of December, for hogs, mules, grain, and cloth.

AURUNGABAD (*the place of the throne*), a large marit. prov. of the Deccan, Hindostan, comprised partly in the British dominions (presid. Bombay), and partly in those of the Nizam; principally between 18° and 21° N. lat., and 73° and 77° E. long.; having N. the provs. Gujrat, Candeish, and Berar, E. Beeder, S. Bejapoor, and W. the Indian Ocean. Surface very irregular, and in general mountainous, especially toward the W., where the Ghauts attain a considerable height. That part of the prov. E. of the Western Ghauts is a table-land rarely less than 1,800 ft. above the sea, and often much more: it abounds with natural fortresses and strongholds. There are no rivers of any size; the Neera, Beema, and Godavery rise within this prov., but acquire no magnitude until after they have left it: the two former streams unite in marking the S.W. boundary. The climate is particularly favourable for the production of European fruits, which arrive at greater perfection than in any other part of India, especially the peach, grape, and strawberry; nectarines, figs, and melons are excellent; but the oranges are inferior to those of Sylhet and Tipperah. The gardens and fields around the villages are very generally inclosed by hedges of prickly pear and milk-plant; rice is the grain most cultivated. Great numbers of horses for the Maharatta cavalry were formerly reared on the banks of the Neera and Beema; they are a hardy breed, but neither strong nor handsome. The inhab. are chiefly Maharattas; but the prov. is comparatively thinly peopled, especially towards the N. E.: the Mohammedans are to the Hindoos only as 1 to 20. Aurungabad has 13 subdivisions, and contains the cities of Bombay, Poonah, Aurungabad, and Soolapoor. The bazars of its larger towns are cheerful and enlivening enough, but the streets of its smaller ones extremely dull and gloomy, from the absence of windows facing towards them. The religious edifices are distinguished by many peculiarities from those of the prov. both of N. and S. India; the portico is often nearly as large as all the rest of the building, and in some towns the pagodas are either 12-sided pyramids or square buildings surmounted by a large cupola. Many remarkable antiquities exist in this prov.; as the temples and caves at Salsette, Elephanta, Carlee, Ellora, &c. Until the destruction of Maharatta power, in 1818, plundering by land and piracy by sea prevailed much in and round this prov., the greater part of which, for some time previously to that year, was subject to the Peishwa. Aurungabad was also the great source of the predatory bands that devastated Hindostan for more than a century; though, after the overthrow of the Maharattas, it unexpectedly became one of the quietest and most orderly portions of the peninsula; and in 1820 no part of S. India was so undisturbed, crimes of violence being rare, and property safe. This prov. was formerly called Ahmednuggur, and afterwards Dowletabad, from the cities so named being in turn its capitals, under two dynasties previously to A. D. 1635; at which period Shah Jehan finally conquered and annexed it to the Mogul empire. The seat of government was then transferred from Dowletabad to Gurka, which town becoming the favourite residence of Aurungzebe, acquired, as well as the prov., its modern appellation.

AURUNGABAD, a city of the Deccan, Hindostan, cap. prov. of same name, within the dom. of the Nizam, and the head quarters of a battalion of his army under British officers. It is built in a hollow on the banks of the Kowlah, a tributary of the Godavery, in 19° 54′ N. lat., and 75° 33′ E. long., 275 m. N.W. Hyderabad, 180 m. E. N. E. Bombay, and 140 m. N. E. Poonah. Pop. (1825) estimated at 60,000, but scattered over a space of 7 miles in cir. Aurungabad was once highly flourishing, and the favourite residence of Aurungzebe, but now, in great part, presents an appearance of decay and ruin; though, at a distance, its lofty minarets, large white domes, and terraced houses, give it an imposing character. The wall which surrounds it, though capable of affording protection from predatory bodies, is lower than such walls usually are. The streets are broad, especially the principal bazar, which is 2 m. in length, and has at one extremity a spacious quadrangle, with a handsome modern market: some few streets are paved. There are many large and good houses; and the public buildings, mosques, and caravanserais, are superior to those usually met with in native cities, and interspersed with numerous gardens, groves, and fountains. The shops are supplied with the goods of both India and Europe; but there is neither activity, bustle, nor any other symptom of industry, occupation, or prosperity. The only structures worthy of notice are the royal palace of Aurungzebe, which covers a large space of ground, but is now fast mouldering away; and a mausoleum erected by that monarch to a favourite wife, an octagonal building with a cupola and four minarets, constructed on the model of the *Taja Mahal* at Agra, but Lord Munster says it is in every respect inferior: the inclosure surrounding it contains perhaps 30 acres of land laid out in gardens. The principal suburb is on the opposite side of the river, and connected with the city by two substantial stone bridges. Toward the N. there is a large marshy tract of ground cultivated with rice, and near the Delhi gate is a con-

siderable tank, now overgrown with weeds; from which circumstances, combined with its low situation and ruinous state, this city is decidedly unhealthy. It is, however, by reason of its position, well supplied with good water, conveyed thither in stone conduits from the neighbouring hills, and distributed by earthen pipes into stone reservoirs in every quarter. The climate is subject to great and sudden alterations: for 1-3d part of the year E. winds prevail, and the thermometer ranges from 50° to 86° Fahr.; for the rest of the year W. S.W. winds are the most common, the thermometer often rising to 100°. Tropical fruits of all kinds are produced in abundance, and the grapes and oranges are scarcely inferior to those of Europe. The military cantonments are in a salubrious spot about a mile S.W. the city. Aurungabad was originally named Gurka, and became the seat of the provincial government after the Mogul conquest in A. D. 1634. (*Hamilton's E. I. Gaz.* i. 82, 83.; *Conder. Mod. Trav.* x. 279—282.)

AUSPITZ, a town of the Austrian empire, Moravia, circ. Braunn, belonging to Prince Lichtenstein.

AUSTERLITZ, a small seignorial town of Moravia, circ. Brunn, on the Littawa, 13 m. S. E. Brunn. It has a magnificent castle and gardens. In the vicinity of this town, on the 2d of December, 1805, took place the famous battle that bears its name between the grand French army under Napoleon, and the combined Russian and Austrian armies under their respective emperors. The genius of Napoleon never shone more conspicuously than on this occasion. His superior talent more than compensated for the numerical inferiority of his forces; and secured for the French a complete and decisive victory with comparatively little loss on their part. The battle of Austerlitz was followed by the treaty of Presburg, signed on the 26th of December.

AUSTLE (ST.), a m. town and par. of England, co. Cornwall, hund. Powder, on the declivity of a hill, at the bottom of which is a small rivulet, 243 m. W. S. W. London, 14 m. N. N. E. Truro. The par. contains 11,540 acres, and 8,758 inhab., of whom the town may have about two-thirds. It is situated about 2 m. from St. Austle's Bay, and is connected by a railway with the port of Pentewan, and also with the port of Charleston. It has a good church, but the streets are narrow and inconvenient, many of them being unpaved. It is the seat of the most considerable of the stannary courts; but it owes its entire consequence to the Polgooth and Crennis tin and copper mines, &c., and the soap-stone quarries and china clay-works in its immediate vicinity. The pilchard fishery is also prosecuted to a considerable extent in St. Austle's Bay. The extension of the mines and clay-works has been such that the population has more than doubled since 1801, it having then amounted to only 3,788. About 5,000 tons of soap-stone and 7,000 tons of china-clay, are annually shipped from Charleston and Pentewan, principally for the potteries. (*Priv. inform.*)

AUSTRALIA, a great division of the globe, lying S. and S.E. of Asia.

It was for a lengthened period supposed that the different points of land that were discovered in the Southern Ocean, to the S. of the islands of Java and Celebes, and of the Cape of Good Hope and Cape Horn, belonged to, or formed parts of a vast southern continent, to which the name of *Terra Australis* was given. The existence of this great continent was inferred, not merely from the discovery of lengthened portions of coast, but also on theoretical grounds, it being supposed to be necessary as a counterpoise to the vast extent of land round the Arctic pole. (*Histoire des Navigations aux Terres Australes*, i. 13.) But as this Terra Australis was supposed to extend quite round the globe, the expediency of subdividing it into smaller portions became evident; and the learned President de Brosses, in his excellent work referred to above, suggested that that portion of it to the S. of Asia should be called *Australasia*, that to the S. of America *Magellanica*, and that to the S. of the Pacific Ocean *Polynesia*, from the number of its islands. (*Navigations aux Terres Australes*, i. 80.) The discoveries of Cook and other modern navigators, have shown that there is but little ground for thinking that there is any continent S. of America. But the appropriateness of the names given by De Brosses to the other portions of the Terra Australis, have been very generally acknowledged. And with the exception of the conversion of Australasia into Australia, and the extension of the latter a little further to the E. than De Brosses had probably in view, his definitions are now universally adopted. It is not, however, very easy to assign the precise limits of Australia, mingling as it does with the Polynesian islands towards the N. E. and with those of the Indian archipelago towards the N. W.: physical, rather than purely geographical, considerations must dictate the demarcation; and, guided by these, the following is probably as little objectionable as any: —

S. of the tropic of Capricorn, Australia extends from the 113th to the 180th meridian.

Between the tropic and 11° S. lat., from the 113th to the 170th meridian.

Between 11° and 5° S. lat., from the 135th to the 165th meridian.

Between 5° and 1½° S. lat., from the 131st to the 160th meridian.

Between 1½° S. lat. and the equator, from the 130th to the 150th meridian.

Within these limits are included the mass of Australian land, generally called New Holland (a term now rapidly and justly falling into disuse), and the islands of New Zealand, New Caledonia, New Hebrides, Queen Charlotte's Islands, Solomon's Archipelago, New Britain, New Ireland, New Hanover, Admiralty Isles, and Papua or New Guinea.

The continent* of Australia lies between 10° 39' and 39° 11' S. lat., and extends from 113° 5' to 153° 16' E. long. In form, it is very compact; its greatest length, from W. to E., between Dirk Hartoy's Point and Sandy Cape, being 2,400 m., its greatest width from N. to S. between Cape York and Cape Wilson 1,971 m. Its average length and width may perhaps be estimated at 1,800 and 1,700 m. respectively; its coast-line at 7,750 m.; and its area is estimated at about 3,000,000 sq. m. (*Flinders' Charts, Voyage*, i. 224. ii. 8. *passim*; *King*, ii. 178, *et pass.*; *Picture of Australia*, 11.)

I. Sketch of Australia. *Coast.* — In comparison with the outlines of Europe and Asia, and the E. sea board of America, Australia may be regarded as almost iron bound. It possesses only two *large* indentations, the Gulph of Carpentaria on the N., and Spencer's Gulph on the S. Shark's Bay on the W. and Hervey's Bay on the E. are the next largest, but they are very inconsiderable, not more than 40 or 50 m. in width and depth; and for the rest, though some of them, as Port Philip on the S., and Van Diemen's Gulph on the W., are large, when regarded as harbours; they are insignificant if considered as breaking the continuity of the coast. The same remark applies still more forcibly to such inlets as King George's Sound, Western Port, Corner Inlet, &c. on the S., or to the Twofold Bay, Jervis Bay, Botany Bay, Port Jackson, &c. on the E. It may be observed, too, that these ports and harbours are numerous only on the E and N. shores; a very considerable portion of those on the S. and W. being quite unbroken. (*Flinders*, i. 49—223., *King*, ii. 159—178.; *Australian Directory*, 30, 31, &c.)

But the most remarkable feature in the Australian coast is, the total absence of outlets for any large rivers. So complete is this, that after Flinders' survey (in 1801-3) had established the fact, a belief became pretty general that the whole land was fenced, at no great distance from the coast, by a continuous mountain ridge; on the inner sides of which the principal rivers had their sources, flowing inwardly to a great internal lake or mediterranean sea. Wild as this hypothesis may now appear, it received some countenance from the earlier results of interior discovery, though it was unwarranted by the accounts on which it was founded, and has been completely disproved by more recent and more accurate investigation. The S. coast, through a length of more than 20°, from Cape Leuwin to Spencer's Gulph, is generally low and sandy, with only here and there some eminences, and scarcely any where exhibiting a high inland country. (*Flinders' Charts*, 2—4. *Voy.* i. 49—255.) On the E., indeed, a range of mountains rises at no great distance from the coast, extending from the S. extremity of the continent as far, at least, as the 26th parallel, and, most probably, as far as Cape York, on Torres Straits, the most remote point of

* Continents differ from islands in nothing except size, and (as a consequence of that difference) variety in surface, climate, &c. since every mass of land, however large, is finally surrounded by the ocean. Now the area of America is not more than six times that of Australia; while the latter is more than ten times that of either Borneo, or Papua, the next largest portions of continuous land. Hence, from its being more proportionate with continents than with islands, it seems reasonable to class Australia with the former rather than with the latter.

the mainland towards the N. (*Adm. Ch. Flinders'*, ii. 1—76. ; *King*, i. 165—240. ; *Bligh's Nar.* 46—69.) But on the N. shore, a mountain, not higher than the mast of a sloop, is noticed by Flinder as the highest point of ground seen by him in a run of 175 leagues along the coast. (*Voyage*, ii. 134.) Low levels, with only here and there some elevations of no great character, mark, also, the shore W. of Carpentaria, as far as Cape Londonderry, where the land begins to tend toward the S. W. (*King's Survey*, i. 247—309.) The W. coast, as low as 22°, and, again, between 13½° and 16° S., appears to resemble that on the E. (*King*, ii. 159—192.), but between the parallels of 22° and 14°, about 500 m. of coast are wholly unknown, and it is uncertain whether many portions of that recently surveyed on the N. W. may not consist of detached islands, separated by greater or lesser intervals from the main shore. (*A. Cunningham's Geog. Journ.* ii. 132.)

Interior. — From what has been said, it is evident that the readiest road for the investigation of a strange country, that is, extensive creeks, inland seas, and navigable rivers, are wanting in this "land of anomalies." Its interior recesses had to be explored, if at all, by land travelling; and to this there appeared, at first, to exist an unconquerable barrier. The first settlers on the E. coast found their horizon bounded towards the W. by a dark and rugged chain of mountains which rose at no very great distance from the sea, and to cross which the earlier attempts, though made by parties of no common skill and energy, completely and signally failed. (*A. Cunningham's Geog. Journ.* ii. 99.) A rugged and abrupt ascent, called "Caley's Repulse," marks the limit of the first adventurer's tour (*Oxley*, 363.), and the efforts of Daws, Tench, Patterson, Hacking, Bass, and Bareillier, though some of them proceeded a few miles farther than Caley, led to no useful result. The aborigines, when questioned, were totally ignorant of any opening in the mountains (*A. Cunn., Geog. Journ.* ii. 99.); but they had a tradition that malignant spirits resided there, and that the country beyond was inhabited by *white men*. In 1813, however, after an interval of 25 years, an extremely dry season having destroyed the minor vegetation, and produced a great mortality in the flocks and herds, Lieut. Lawson, Mr. Blaxland, and Mr. Wentworth attempted to penetrate the hitherto impenetrable mountain barrier, in the hope of finding pasture and water for the exhausted cattle of the colony. They were so far successful that they gained a view of an extensive country W. of the mountains; but want of provisions compelling them to return, the honour of completing the discovery was reserved for Mr. Evans, the deputy surveyor-general. (*Oxley, Introd.* 7—9. ; *Sturt. Introd.* 73—75.) The barrier once penetrated, the lands beyond were not left long unexplored. In the 25 years that have since passed, Messrs. Hume, Hovel, Currie, Cunningham, Oxley, Sturt, Mitchell, &c., have pushed their inquiries as far as the 139th deg. of long. and the 26th deg. of lat.; while, on the opposite coast, the short period of 8 years from the establishment of the Swan River settlement has enabled Messrs. Dale, Preston, Erskine, Bannister, &c., to survey a tract reaching as far N. as 31° S., and including in some cases nearly 3° of long. Thus, between ⅙ and ⅕ of the continent has been explored within the period of a quarter of a century; a fact honourable alike to the zeal and the industry of the observers.

Mountains and Plains. — In the Old World, the mountain ranges, however tortuous, agree in general direction with the greatest length of the continents in which they lie. Thus the axis of America runs N. and S. of the E. continent (Europe, Asia, and Africa) from N. E. to S. W.; but in Australia the principal chains, so far as observation has yet been carried, appear to run transversely to the direction of the land; that is, from N. to S. The recent discoveries of Major Mitchell have made known a mass of mountain land, called by him the Australian Grampians, which commences near the S. coast at Portland Bay, in lat. 36° 52′ S., long. 142° 25′ E. The direction of these mountains is at first due N., but in lat. 37° 30′, long. 142° 47′, a range of grassy hills diverges to the E. N. E. to connect them with the highest masses yet seen in Australia, called by the natives Warragong, and by the settlers, the Australian Alps. The connecting range received from Mitchell the title of Australian Pyrenees. The Warragongs may be described as running N. N. E. from near the S. termination of the continent at Cape Wilson as far as 35° 20′ S.; but as high as 36° S. a chain of less elevation, called the Blue Mountains, branches off from them, and following generally the direction of the E. coast divides the E. and the W. waters. In lat. 32°, long. 150°, the range, after tending, for some distance, a little to the W. of N., suddenly turns due E., and, under the name of the Liverpool Range, runs in that direction for about 1° of long., when it resumes its northerly course; but though it has been traced as low as 26° S. lat., no name has been bestowed upon any part of it beyond the parallel of 32°. The highest peak in the Grampians is Mount William, 4,500 ft. above the level of the sea (*Mitchell*, ii. 265.), of the Pyrenees, Mount Cole, or Mount Byng, probably 3,000 ft.* No measurements have been taken of the Warragongs, but as they are covered with eternal snow (*Mitchell*, ii. 297., &c.; *Currie's Geog. Mem.* 373.), their height, in this lat., cannot be estimated at less than 15,000 ft. The Blue Mountains, so long impassable, do not attain a great elevation: Mount York, the highest peak, being no more than 3,292 ft., but the valleys and plains in this extraordinary range occur extremely near the summits King's table land is 2,737 ft., the Vale of Clwdd 2,496 ft., and Bathurst Plains 1,970 ft. above the level of the sea. (*Oxley's Bar. Mea. P. Cur.* 8vo. i. 152. ; *Wentworth*, 82.)

The Liverpool Range is almost as difficult of passage as the Blue Mountains (*A. Cunningham's Geog. Mem.* 152—177.); its highest peaks being between 6,000 and 7,000 ft., and the continuation of the dividing chain apparently still more rugged and abrupt. A gap of the kind, called by the Spaniards *quebradas*, in S. America, stopped Oxley in his journey from the interior to the coast, in 1818. This "*tremendous ravine*," he describes as being from 2 to 3 miles wide at top, and 3,000 ft. in perpendicular depth: its width at bottom does not exceed 100 or 200 ft., and is the bed of a river. (*Journal*, 295). Sea View Hill, in this part of the range is between 6,000 and 7,000 ft. high; but Oxley did not think it the most elevated ground in the neighbourhood. (*Journ.* 310.) Practicable passes are, however, being continually discovered; one over the Blue Mountains, near the 35th parallel, was effected by Mr. Thorsby in 1819, and 2 others by Mitchell since 1830. (*Mitchell*, i. 153.; *Wentworth*, 81.) That over the Liverpool Range, traversed by Mitchell in 1831, which is nearly on the meridian of Sidney, seems to be easier than Pandora's Pass, 1° to the E., crossed by A. Cunningham in 1823 (*Mitch.*, i. 25. ; *A. Cun.*, *Geog. Journ.*, 179.), and breaks are said to have been observed in the more N. mountains, which promise to be free from those difficulties which were well nigh the destruction of Oxley and his party.

The W. mountains, viewed from the S., appear to consist of three parallel ranges, extending about 20′ E. of the 118th meridian, and running, like the E. chains, almost due N. through the continent. The most E., and the highest of these mountains, appears to rise a few miles behind King George's Sound; the second, called the Darling Range, commences at Cape Chatham, in 35° S. 116° 35′ E., and the third and lowest is found running close to the shore from Cape Leuwin. (*Journals of Exped. in W. Australia; Surveyor-Gen. Rep.*, *May* 11. 1830.) Subsequent observation has, however, discovered that the first is not a continuous range running N. and S., but two detached and parallel chains extending longitudinally, and separated from each other by a plain of considerable magnitude. (*Journ. Dale*, p. 163—167.) The W. chain, called Koikyennuruff, is considerably the higher, one of its peaks, Toolbrunup, attaining the elevation of 3,000 ft., an altitude much exceeding that of any other mountain yet examined in W. Australia. The S. chain, called Porrungorrup, is not only lower, but of much less extent, having a base of only 13 m., while that of the Koikyennuruff is full 30. (*Journ. Dale & Collie*, 161—167. 139. 173, &c.) The Darling range is continuous as far as 31° S., to which distance it has been explored, and there is every reason to conclude that it runs in the same direction to the N. coast, in the neighbourhood of Dampier's Archipelago. Capt. King (i. 36—53. ; *Adm. Ch. N. W. & W. Aust.* vii.) lays down this coast as high and rocky, though bounded to the W. and E. by a low sandy shore, that is, as having all the appearance of the termination of a mountain chain. Should this eventually prove to be the fact, this range will be the most direct in the world; the high N. coast, just described, commencing at Cape Preston in 116° 5′ E., and Point D'Entrecasteaux, to which these mountains extend on the S. shore, lying in 116° 1′ E. (*Flinders' & King's Adm. Ch.*) The Darling Mountains average from 30 to 40 m. in width, and their greatest observed elevation is 1,800 ft.; but as still higher ground was observed at this altitude, they may probably, in some places, attain 2,000 ft. It is not likely that S. of the 31st parallel, they any where exceed this height. (*Journ. Preston*, 9. 11. ; *Dale*, 31. 33. ; *Surv.-Gen. Rep. Mar.* 22. 1830.) The third range, mentioned in the Surveyor-General's Report is unimportant; it is probably continued in Moresby's flat-topped range, the altitude of which is about 1,000 ft. (*King.* i. 22. ; ii. 174. *Adm. Ch.*) In about 33° S. lat., a rugged and irregular succession of mountains branches off W. from the Blue Mountain range, and appears like the dividing line of two great river basins. It quickly divides, however, into groupes, almost detached from each other, to which various names, as Canobolas, Croker Peel, Macquarrie, &c., have been given; and further W. the interior is here and

* Mitchell, in his description of these mountains (ii. 272—279.) speaks of the view from their summits as bounded only by the higher ranges W. and S., and the road over them as the very lowest neck in the whole range. This road (*Expedition Pass*) he afterwards (p. 400.) fixes at from 1,065 ft. to 1,292 ft. of altitude.

there studded with smaller knots; but, as far as has been yet observed, only in a belt of about 2°, namely, between the parallels of 31° and 29° S. The Canobolas is 4,461 ft. in height, an altitude much exceeding that of the Blue Mountains; and the Marga, another peak of the same series, attains the elevation of 2,106 ft. (*Mitchell*, i. 162.; ii. 10. 377.) Isolated mountains, which in other countries are rarely met with, except in the case of volcanoes, are common enough in this new land. (*Oxley*, 4—77. 234. 258. 261. 275, &c.; *Sturt*, i. 69—82.; *Mitchell*, i. 39. 45. 48. 62, &c.)

All the usual formations are found in the Australian mountains (*Fitton King's Appen.* 588, *et seq.*; *Sturt*, i. 197—200., ii. 249—256.; *Mitchell*, ii. 349—369.), but they seem to occur without order, and in defiance of all known geological laws in the Old World. A ferruginous sandstone forms the Blue Mountains, granite being rarely met with, except when it appears to have cracked the thick overlying stratum, in which case it is found in the valleys and the beds of streams. (*Mitchell*, ii. 349. 351.) Westward this fundamental rock is sometimes found in mountains of limited extent, and no great height, while more important ranges in their neighbourhood present regular horizontal strata. (*Dale*, 167.) In the interior the isolated hills are uniformly different in composition from the connected ranges, the latter being of granite, the former of sandstone (*Oxley*, 77.); limestone, so common in the formations of the N. hemisphere, was unknown in Australia before 1813. It was first discovered, W. of the Blue Mountains, in a district, named from it, *Limestone Creek* (*Oxley*, 6.): and although it has since been found in other parts of the continent, it is far from abundant, and presents little or no appearance of stratification. (*Mitchell*, ii. 348.) Trap occurs in many places, but no location can be assigned to it with reference to the position of other rocks, and vesicular lava is abundant in the neighbourhood of the only volcano (an extinct one) hitherto discovered in Australia. (*Mitchell*, ii. 350.) This volcano, called by Mitchell (ii. 235—246.) Mount Napier, and by the natives Murcoa, lies between the Grampians and the S. coast, in lat. 37° 52′ 29″ S. long. *about* 142° 20′ E. A bituminous burning hill, belonging to a low range called Wingen (the native name for fire) a little to the S. of the Liverpool Range, is chiefly remarkable for the great variety of rocks of which it is composed. The neighbouring peaks are chiefly porphyritic; but the burning mount itself contains within a very short distance, clay, shale, argillaceous sandstone, felspar, basalt, ironstone, trap, and horn-blende. (*Mitchell*, i. 23.) Wingen has been burning, apparently for a very considerable time, but no marks of any extensive change appear on the surface near the burning fissures.. Red heat is found at the depth of about 4 fathoms.

Malte-Brun observes, that the remarkable polarity of the principal mountains here described, extends throughout the whole of what he terms Oceanica; and if this be a little strained with regard to some of the islands of Polynesia and the Indian Archipelago, it is at least true with regard to New Zealand and the other islands included in Australia Proper. The same author (xii. 8.) conceives the chain of the Blue Mountains to be continued in the islands of Bass's Straits, and the axis of Van Diemen's Land, to Cape Pillar, the S. termination of the latter. Mitchell also (ii. 337.) thinks that geological appearances lead to the conclusion that the two lands were not always separated; and this is at least highly probable, and is supported by similar appearances in the Old World: but in the words of Oxley, (81.) "The whole form, character, and composition of this country is so singular, that a conjecture is hardly hazarded before it is overturned, every thing seems to run counter to the ordinary course of nature in other countries." In other lands the rocks and reefs that run into the sea determine, in many cases, the direction and continuity or otherwise, of the mountain systems, but the rocks and reefs of Australia afford no such key to the enquirer; they belong not to geology, they are the work of the coral insect, rising perpendicularly from the depths of the ocean till they form ridges and islands above its surface, which have nothing in common with any thing but themselves. (*Flinders*, ii. 113—116.) Even the fact, that the geology of the continent and its adjacent islands is similar, is not conclusive, for the number of detached ranges and isolated mountains, existing in the former, prepare the mind for a much more startling admission than that the Van Diemen System may be wholly unconnected with that of the Blue Mountains, from which it is separated by a deep sea, 140 m. in average width.

From the parallelism of the principal chains (the Blue Mountains and the Darlings), it might be not unreasonably supposed that the interior was a table land of moderate elevation. It has already been stated that early belief was directly contrary to this; and the course of discovery has shown both ideas to be erroneous. W. of the Blue Mountains, a succession of terraces, commencing at a great elevation, descend rapidly to a very low level. Oxley, at a distance of less than 80 m. from Bathurst, found himself only 600 ft. above the sea; that is, 1,370 ft. below the town. (*Journal*, 9.) The transverse mountains divide levels, apparently interminable, of the most monotonous character, and with a deficiency of vegetable matter, that, in the opinion of Sturt (i. 108.), argues powerfully for their recent origin. The line of the horizon is, in these vast flats, as unbroken as it is upon the surface of the sea; and there is every reason to believe, not only that they were at a comparatively recent period under water, but also that a very considerable portion of them is flooded by the overflow of the interior rivers, during wet seasons. The surface of these plains is extremely depressed, and so flat that the detached ranges and isolated mountains which rise out of them, appear like islands surrounded by an unbroken ocean. (*Oxley*, 22, *et seq.*, 89, *et seq.*, 107, &c., 273.; *Sturt*, i. 144, &c., ii. 52. 59, &c.; *Mitchell*, ii. 57, *et seq.*)

Rivers and Lakes. — The vicinity of the dividing ranges to the coast prevents the accumulation of large rivers towards the E. or W.; but from the fact of their running more or less through parallel valleys, these streams possess in general a longer course than might have been anticipated. The chief of those that rise in the Blue Mountains, are the Murroo, Clyde, Shoalhaven, Hawkesbury, Hunter, Hastings, and Brisbane. There is nothing remarkable in them, except the fact that some of them, as the Shoalhaven and Hawkesbury, notwithstanding their short courses, issue to the ocean in noble bays. They possess few facilities for internal navigation; and, from the tortuous nature of their currents, they are useless in communicating any idea either of the general shape or character of the country. Some of their affluents are, however, sufficiently striking. They flow through ravines in the sandstone rocks, of from 100 to 3,400 ft. in depth, and of such width that Mitchell supposes that a mass equal to 134 cubic m. must have been removed from the single basin of the Cox, one of the tributaries of the Hawkesbury! The Grose, another affluent of the same river, flows through a valley of less extent, but of more precipitous character; so that the amount of stone displaced is probably not less than in the case of the Cox. What adds to the peculiarity of this feature in Australian geography is, that the outlets to these stupendous ravines are generally very narrow: the disposal of the vast masses of earth is therefore as mysterious as their amount is marvellous. (*Mitchell*, i. 151., ii. 351.) The rivers here mentioned have their outlets between the parallels of 27° and 36° S. Oxley, in 1824, discovered the Boyne, a rapid mountain stream, falling into Port Curtis, in lat. 23° 56′ 30″ S. (*Field's Mem.* 7.) Pummice-stone River falls into Morton's Bay, in 26° 54′ 30″ S. It was discovered by Flinders (*Introd.* cxcvi.); but in consequence of only cursorily surveying the W. shore of that bay, he overlooked the more important Brisbane, probably the largest stream upon the E. coast. (*Oxley*, *in Field*, 12—23.) Endeavour River, in 15° 27′ 12″ S., is chiefly celebrated as the place where Capt. Cook repaired his ship after it had lain on a coral reef for 28 hours: it has a wide and convenient mouth; but at a very short distance inland, it becomes incapable of floating the smallest boat. (*King*, i. 221.) On the W. coast the rivers are less numerous, and still less important. Burns or brooks of excellent water are tolerably abundant, and 4 or 5 streams issue to the sea by very large æstuaries, which seem like the entrances of noble water-courses; but as they all have their sources in the farther W. mountain range, their length is insignificant, and they are useless for internal navigation. The Swan and Canning unite in Melville Water, near the parallel of 32°. They are by far the most important streams yet discovered on the W. coast; and it is more than probable that none of greater magnitude exist in that quarter. (*Cross's Journals*, 110.; *Irwin*, 7.; *Dale*, 27. 30. 155.; *King*, ii. 167. 191.; *Adm. Ch. Erskine*, 92.)

On the N. the shore is still more destitute of river mouths. The Liverpool in 134° 15′ E., the Alligators in 132° 36′, 132° 26′, 132° 20′ E., the Hunter and the Roe, in 125° 27′ E., and Prince Regent's River in 124° 53′ E., are all that were found by Capt. King in his laborious survey (1818-19). Of these, the largest (Prince Regent), is not navigable for boats more than 50 m. (including windings) from its mouth; but they are all full and wide streams; and, like those upon the E. and W. coasts, issue to the sea by immense æstuaries, through which the tide rises sometimes as high as 30 ft. The Prince Regent, Hunter, and Roe, flow between steep rocky hills, from 300 to 400 ft. perpendicular altitude. The Liverpool and Alligators through a flat muddy soil, of the tamest and most monotonous description. (*King*, i. 99—107. 255—261. 292—302. 402—413. 433—439.). On the S. coast, the Blackwood falls into Flinders' Bay, in 115° 10′ E. long.; and in 117° 56′ E., Oyster Harbour, the N. part of K. George's Sound, forms the large æstuary of the Kalgan or French river. Neither of these streams are of much importance; and though it would, perhaps, be too much to affirm that

no others fall into the sea between the Kalgan and the 139th meridian, that is, for more than 1,200 m. of long. it is certain that none have been discovered, and the nature of the coast renders it improbable that any should exist. At the bottom of Encounter Bay, in about long. 139° E., we meet with a river's mouth of puny dimensions, and so encumbered by banks as to be inaccessible to vessels of any considerable draught of water. But, how unpromising soever, this is the embouchure of the Murray, by far the most important river hitherto discovered in Australia, and which affords a vast channel of internal communication. (See *post*.) In 1836, Mitchell traced to its termination the Glenelg, a river which, rising in the Grampians, falls into the sea in 141° 17′ E.*, about 16 m. E. Cape Northumberland. This is one of the largest coast rivers in Australia: its affluents are numerous, and its course, including windings, upwards of 130 m., though its source be not more than 70 m. from the sea. It is wide and deep, *except at its mouth;* but, like most Australian streams, it first expands into a considerable basin, which, afterwards contracting, presents a very narrow outlet to the sea, the entrance from which is choked up by sand-banks. No river further E., except a few insignificant brooks, has yet been discovered upon the S. coast.

Along a coast-line of nearly 8,000 m., there are thus not more than 30 river mouths; and of the streams to which these give egress, none have a course of more than 200 m. inclusive of windings, and but very few penetrate to a direct distance of 50 m. from the shore. Since it is evident that these cannot drain 1-10th part of the whole land, it is not very surprising that the belief of an internal lake or mediterranean sea should have been entertained by the first inquirers; and though this be now proved to be unfounded, the hydrography of the interior is scarcely less anomalous than such an arrangement would have been. A little pains is necessary, both to describe and to comprehend this internal water system, to which nothing bearing the least resemblance exists in any other part of the known world. Immediately W. of the Blue Mountains, and in the very highest terraces and table-lands, a host of mountain streams combine to form the Darling, the Macquarrie, and the Lachlan, which, nearly on the same meridian (the 149th), diverge towards the N.W. and N. N. W. in their progress to the interior. The course of the Darling is a curved line, enclosing all the country W. of the Blue Mountains, from an unknown point N. and E. of the 30th parallel and 148th meridian to its junction with the Murray, in 34° 7′ S., 142° 3′ E. In this course, besides the rivers already alluded to, it receives the Bogan (New Year's Creek of Sturt), and such part of the waters of the Marquarrie as are not absorbed in the soil. (*Sturt*, i. 86—96.; ii. 106. 116—120.; *Mitchell*, i. 213—263., ii. 109—116.) Considerably farther S. another large stream, the Morrumbidgee, rises in the Warragongs, and, after receiving many short but full streams from the W. faces of the Blue Mountains, runs a very tortuous course, settling finally into one varying but little from due W. Still more to the S., in about 35° S. lat., the Murray, already alluded to, issues from the flanks of Mount Wellington, the culminating point of the Australian Alps. This great river follows, with many windings, a W. N.W. course from its source through about 8½ degs. long., till, at a point in about 141½° E. long. and 34° S. lat., it turns suddenly to the S., and ultimately unites with, and loses itself in, the large shallow lake of Alexandrina at the bottom of Encounter Bay. In its course it receives the waters of some very large affluents, including the Morrumbidgee and Lachlan and the Darling. In the course of last year (1853) the Murray was navigated by a steamer of 40 horse power, having a barge alongside, for a distance of 1,300 m. from the sea; and it is supposed that of its entire course of about 3,000 m., from 1,500 to 1,800 m. may be navigable for eight months of the year. (*Parl. Paper*, No. 89. Sess. 1854.) And if we add to this the navigation of its affluents, we shall have an extent of inland communication unequalled, except by that afforded by the Mississippi and other great American rivers.

It would appear, however, that the flow of water is not nearly so equable in the Australian as in the American rivers. Notwithstanding their great length of course, the former are in general of the nature of mountain torrents. Formed in the hills, by the confluence of many powerful streams, they rush from their mountain homes important watercourses; but quickly reaching a level country, they become sluggish in their motion, except when urged by the influence of flooding rains; and, receiving few or no tributaries, their existence depends on the magnitude of their sources, so that they shoal and narrow as they proceed, — an effect exactly the reverse of any thing observed in older countries. When the mountains are saturated with water, the beds of these streams become fully charged, and then they foam and thunder along their track, till, in the flats of the low country, they meet with some opposition, when (their banks no longer able to contain them) they spread to the right and left in marshes, of which the overflow finds its way by insignificant channels to other streams. In dry seasons, on the contrary, these rivers dwindle to trifling brooks, even in the mountains, while, in the plains, their wide and deep beds become converted into dry and dusty chasms. This is the case with the Macquarrie and Lachlan, which, issuing from the mountains in large and full streams, are lost in extensive swamps, which in wet seasons are every where inundated. After a long-continued drought, the beds of the rivers present a succession of ponds; and their marshes, nearly or wholly dried, exhibit the creeks by which their imperfect communication is kept up during the inundation with the Darling and Morrumbidgee. (*Oxley*, 35—37. 162. 136. 142. 382, 383, &c.; *Sturt*, i. 36. 38. 62. 148.; and *Mitchell*, i. 321., ii. 32. 771, &c.) The Darling itself, which Sturt found, in 1830, to be a large and powerful stream, was found by Mitchell, in 1836, to be nearly dry; as it would have been but for the backwater forced into it from the Murray.

The latter, however, from the greater number of its affluents, and perhaps, also, from the nature of the country through which it flows, never loses the character of a continuous river. And though at certain seasons its waters are reduced, its navigation, and that of its tributary the Morrumbidgee, may, it is believed, be depended upon for at least eight months of the year.

The extent of the basin of the Murray may be estimated at from 400,000 to 500,000 sq. m. It, of course, comprises every variety of soil; a large extent of land along its banks and those of the Morrumbidgee being amongst the most fertile hitherto discovered in the continent, though it must be at the same time admitted, that lands of a different and very inferior quality of soil preponderate. But, despite this drawback, it is not easy to imagine the extent of traffic of which the Murray will probably be the channel when the immense country through which it flows has been occupied. It is much to be regretted that its embouchure should be so disproportioned to its magnitude. But that defect will, doubtless, be overcome or greatly modified by the help of railways or canals, or both. And it is by no means improbable that the *entrepôt* at its junction with the sea may at some future period rival New Orleans in the extent of its trade and navigation.

Lakes are abundant in Australia, as might indeed be inferred from the level nature of the plain country, but none of them are very large, and few appear to be permanent. Lake Alexandrina, the recipient of the Murray, has by far the largest surface; but, as before observed, it is shallow; and Lake George (lat. 35° 5′, long. 149° 15′), which, in 1828, was a sheet of water, 17 m. long, and 7 wide, was said, by an old native female, to have been a thick forest within her memory; and in 1836 it had dried up to a grassy plain. (*Mitchell*, ii. 313.) The lakes of the interior are subject to the same variation (*Oxley*, 120—130.; *Mitchell*, ii. 34—37.), and when excited curiosity has drawn the traveller from his road to inspect one of these reservoirs, his examination is almost sure to end in disappointment. (*Sturt*, i. 15.) These lakes, such as they are, abound along the banks of the Lachlan and the Murray, as far as the junction of the Darling; they are so far from yielding any supplies to the rivers, that their own waters seem, in part, to depend upon the latter overflowing their banks. Some of them are, however, quite isolated, and none have any outlet. Many, and those the largest, are salt; and small salt-lakes, or rather brine-pits, appear to be common in the dead levels of the interior both E. and W.

Soil. — Were the soil of Australia merely extremely various in different parts of the continent, it would be no more than what is seen in every other part of the world. But the Australian soil varies according to laws of its own, apparently unknown in any other region. In other countries, rivers are the great fertilizers, and their influence is the greater the longer their course. In Australia, fertility is confined to the higher parts of streams; and, as has been shown, those which promise fairest at their outset from their mountain sources, invariably and quickly either dry in their beds, leaving the country an arid desert, or spread into marshes, rendering it an uninhabitable swamp, equally destructive of animal and vegetable life. Thus situated, it is not wonderful that productive soil should be mostly found on the sides and summits of considerable elevations; or that the explorers of the interior should look for the indications of mountain land with a feverish anxiety, which it is difficult for a native of the fertile plains of Europe and Asia to comprehend. "Had we picked up a stone," says Sturt, speaking of his abandonment of the investigation of the Darling (i. 144.), "as indicating our approach to high land, I would have gone on. But this seemed a desert, that not

* This is according to Mitchell's Map; but this gentleman places C. Northumberland 22½ farther E. than Flinders. (*Adm. Ch. and Voy.* i. 202.) The latter, by bearing a little off the land, in consequence of blowing weather, did not see the small mouth of the Glenelg.

even a bird inhabited. The vegetable kingdom was almost annihilated; and the native dog, so thin that he could scarcely walk, seemed to implore some merciful hand to despatch him." This was during a dry season, and the consequent failure of the streams. "There was not the smallest eminence," says Oxley (p. 89.), under circumstances diametrically opposite, "whence a view might be obtained, the country appearing a dead level; and although we could see for some distance all round, yet there was not a rising ground in any direction. The margin of the stream was a wet bog, full of water-holes, and covered with marsh plants. It was only on the very edge of the bank, and in the bottoms of the bights, that any eucalypti grew. There was not the least appearance of natives; nor was bird or animal of any description seen during the day, except a solitary native dog; — we seemed, indeed, the sole living creatures in these vast deserts." "From a tree near the camp," says Mitchell (ii. 148.), "Burnett descried a goodly hill, distant 22 m. It was indeed (p. 155.) a welcome sight to us, after traversing for several months so much of the dead levels of the interior; and I accordingly named this hill, Mount Hope." — "Within the water-line," (of Regent's Lake, now a grassy plain,) observes the same authority, "stood dead trees, of a full-grown size, apparently killed by too much water, too plainly showing to what long periods the extremes of drought and moisture may extend in this singular country." (ii. 34.) Again (ii. 157.) he speaks of a row of bare poles, the remnants of yarra trees, 8 or 10 years old, which occupy the very middle of a stream, though they must have attained their growth while the bed of the river was dry. The soil of these desolate and extensive plains is various; in some places red tenacious clay; in others, a dark hazel-coloured loam, rotten and full of holes: sand is not very abundant, but it is found; and whatever the composition, one unvarying appearance of dreariness and desolation marks the scene. Exceptions must be made, however, to some extensive tracts of land on the Murray and Morrumbidgee (*Mitchell*, ii. 136, &c.), but these are both permanent streams, their floods restrained by outer banks or *bergs*, so that the neighbouring country is in some degree preserved from the fierce extremes of drought and inundation. Yet this more favourable description must be taken in a restricted sense: about the meridian, where the other known rivers (the Lachlan, Macquarrie, and Darling) cease to flow, the country on the banks of the Morrumbidgee begins to deteriorate; and the river, though it does not fail, contracts soon after both in breadth and volume, till, at its junction with the Murray, it has all the appearance of an ordinary creek. (*Sturt*, ii. 51. 87.) Compared with the gloomy sterility of these flats, no contrast can be stronger than the abundant fertility of the elevated terraces. A rich, dry, vegetable soil, broken into gentle undulations, and watered with the various streams that form the abundant sources of the internal rivers, is the general characteristic of Bathurst Plains, Liverpool Plains, Yap Plains, and the other districts that stretch away upon the summits and N. sides of the Blue Mountains, and N. of the Liverpool Range. The W. valleys of the same mountains partake also of the same character; and a similar description will apply to the corresponding country on the E. faces of the Darling range. (*Oxley*, 186. 267. 275, &c.; *A. Cunningham*, in *Field*, 131—191.; *Sturt*, i. 6—14., ii. 11—36.; *Mitchell*, i. 27—57.; *Irwin*, 6—8.; *Dale*, in *Cross*, 51—72. &c.) But the best land hitherto found in Australia, is that discovered in 1836 by Mitchell, near the S. coast, and included in Victoria. It lies among the Grampians and Pyrenees; and, though surrounded and intersected by mud and swamps, its high levels and valleys, abundantly, but not excessively watered, are so prolific, that the discoverer justly congratulated himself on "being the harbinger of mighty changes, since his steps would soon be followed by the men and animals for whom this fertile region seems to have been prepared." (ii. 157—289.)

So many theories have been hazarded to account for the host of anomalies in this S. world, and each in succession found to be erroneous, that great circumspection is necessary in offering even a surmise as to the causes of physical arrangements and appearances, so much at variance with former experience. One fact, however, forces itself on our notice: the fertile parts of Australia, confined to the higher regions, are as effectually separated from each other by apparently irredeemable deserts, as though the ocean flowed between them. And how many centuries is it since the ocean did so flow? The different explorers unanimously declare the dead flats of the interior to be *new land*, — new, that is, in comparison with the mountains by which they are bounded; while those mountains themselves, judging by their poverty in primitive formations, are apparently more recent than the similar elevations of the N. hemisphere. Sturt believes the Darling to have been the main channel which carried off the last waters of the ocean from the low lands, and its bed — which he esteems an aestuary rather than a valley — to have remained the natural and proper reservoir of the streams falling from the E. and W. (ii. 119.) None, however, fall into it in 660 m. (*Mitchell*, i. 295.); but the whole appearance of the country on its banks is strongly corroborative of Sturt's opinion. But what, then, was the condition of the country, previously to that convulsion or change, of whatever kind it might be, which laid bare this extensive tract? Evidently that of island groups, at greater or less distances from each other, the surfaces of which (now the terraces and table-lands of the mountains) had remained exposed sufficiently long to enable mineral and vegetable decomposition to perform its work of creating a fertile soil. The rivers of these islands (now the sources of the anomalous internal streams) would, like other island rivers, run their short courses to the *then* sea, and having performed their office of irrigating the tracts through which they flowed, be there absorbed. On the exposure of the interior, all this would be changed. The newly uncovered land, destitute of vegetation with the exception of marine plants, would of necessity remain sterile till the decomposition of these gradually, though slowly, began to form a soil. (*Flinders*, ii. 116.) The rivers, no longer received into a sea, at no great distance from their sources, would begin to wear themselves channels in the new ground—a process which, while the descent was considerable, would be rapid in its operations; but which, when the stream, reaching a level flat, had lost much of its initial impetus, would decrease in energy; and, on the occurrence of a hollow, would wholly cease, at least for a season. Such a hollow is the Marsh of the Macquarrie (*Sturt*, ii. 158.), and a succession of such hollows seems to form the marshes of the Lachlan. (*Mitchell*, ii. 59—61.) The water losing its flow, and spreading over these hollows, deposits in them the fertile débris from its native hills, and thus gives birth to marsh plants, the decomposition of which still further improves the soil; and, in the season of flood, the washing of this débris to the sides of the concavity, by gradually forming a channel, gives to the exhausted stream new strength to struggle, inch by inch, along its course. That some such process has been at work ever since this land was first explored, seems evident from the bergs, or outer banks of the Murray, Morrumbidgee, &c.; and Mitchell could no otherwise account for the remarkable appearance of many of the lakes which he passed, than by supposing that their hollows existed *before the rivers began to flow* (ii. 34.). "We cannot doubt," says Humboldt (*Pers. Nar.*, iv. 150.), "that in both continents (Africa and Australia) there are systems of interior rivers which may be considered as not yet fully developed, and which communicate with each other, either in the times of great risings, or by permanent bifurcations;" a sagacious remark, made more than 10 years before the discovery of the extensive connection between the channels of the Australian streams, by which it is so remarkably confirmed. (See, also, *Carl, Ritter, Erdkunde*, i. 315.) But if Sturt's surmise be founded in truth, the bed of the Darling, or its continuation, that of the Murray, should be the common drain of all the land between itself and the older mountains towards the E and S.; and this it is, or is in progress of becoming. The union is effected for all the known streams except the Lachlan and Macquarrie; and of these the former has completed its bed (*Mitchell*, ii. 78.), though it has not yet been able to fill up the hollows which form its marshes in the wet season; and the latter, though much impeded by the extent and lowness of its swamp, is struggling to establish a permanent connection with the Castlereagh, through Morrisett's Ponds (*Sturt*, i. 146.), and with the Darling direct, through Duck Creek (*Mitchell*, ii. 32.). The great deficiency of springs and tributary streams is one great cause of the slowness of this operation; but the deficiency itself is only what might reasonably be looked for in a country of recent formation, especially in one where the eminences are so few and so little elevated as they appear to be in the interior of Australia. Springs can be formed only by the accumulation of moisture in the cavities and gullies of hills; and this accumulation must, in the first instance, proceed with extreme tardiness. When overcharged, and not till then, these reservoirs will give forth their superfluous waters; at first, by a simple overflow, and, when the additional supply has given to the torrent thus first formed sufficient power to deepen its bed, in a continual stream. (See the very profound article RIVER, in the *Ency. Brit.*, xviii. 39—91., more especially at p. 70. *et seq.*) When this process has been long in operation, these streams will be numerous, and such is the case in the terraces and older mountains of Australia: where the land is comparatively new, they may be expected to be scarce, and they are scarce beyond parallel in the interior of the same continent. Even when become permanent, time must be allowed for them to cut their path to their final channel; and this is a most wise arrangement, since, did such new-born currents find their way directly to an extensive bed, the source from which they are supplied would be exhausted. Centuries, therefore, must probably elapse between the first appear-

ance of the infant torrent and its final absorption into some river system. In the interval it will pursue its course surely, however slowly; and with a speed and direction varying according to the obstructions which it meets with, and the amount of its initial supply. Many of these incipient streams are found in the interior of Australia, making greater or less approaches to what Humboldt calls the "development of their system," the beds of some of them, though dry during the summer heats, exhibiting unquestionable signs of floods at other seasons; while others appear to be permanent to the point to which they have already cut their way. (*Sturt*, i. 123.; *Mitchell*, i. 209. 249—253. 261. &c.; ii. 32. &c.) But, again, upon the surface of a new country, so singularly devoid of vegetable decay (*Sturt*, i. 108.), production will necessarily be limited to those spots where the rivers and floods have deposited their fertilising slime. The barrenness of the districts remote from streams and swamps is, in fact, the universal theme of all travellers; while yarra trees so distinctly mark the bed of a river, that the course of the latter may be kept in view even at the distance of the visible horizon, and every flat subject to innundation is crowded with dense shrubs, box-trees, polygonum, kangaroo grass, reeds, and other native vegetation. Here, then, are abundant elements of a soil, the process of forming which is expedited by the remarkably prolonged and fierce extremes of drought and flood to which this region is subjected. (*See* CLIMATE.) The vegetation of Interior Australia, such as it is, does not live its natural term, or die of natural decay; but when a flood has given birth to that race of trees and shrubs which draw their sustenance from excessive moisture, a long-continued drought destroys nearly the whole tribe (*Sturt*, i. 145, &c.); while such plants as delight in a dry soil spring from the earth formed from their decomposition, to be in their turn destroyed, after 10 or 12 years' growth, by the constant exposure to too much water in a return of the season of floods. (*Mitchell*, ii. 34. 148. 313.) It is quite clear that this alternation must tend to fertilize the land much more rapidly than if either race of plants continued to draw their nourishment from the newly deposited and still meagre earth, till they perished from pure exhaustion, the more especially as deciduous trees are almost unknown, and consequently one great source of supply, the scatterings of autumn in other regions, is wanting to the native soil of Australia.

It appears probable, then, that both the land and water are here still in a course of formation; that the various anomalies, in each, which fill the minds of Europeans with wonder, are only the natural appearances of an imperfect, or rather of an unfinished work; and that they will vanish when the causes, now in operation, shall have produced their full effect. These opinions are hazarded, however, with much diffidence; and only because they appear to result from the facts collected by actual observers.

Climate. — About a third part of the Australian continent, the N. part, together with the large island of New Guinea, and the other isles enumerated at the beginning of this article, with the exception of New Zealand, lie in the torrid zone. The other portion of the continent, the islands immediately adjacent, and New Zealand, are in the S. temperate zone. The proportion of inter-tropical to extra-tropical land is, therefore, altogether about as 5 to 12 (*Malte-Brun's Tab.* xii. 270. 375.). Of the general climate in the former portion little is positively known, though it may be too probably inferred that it resembles generally those regions of the N. hemisphere, similarly situated, where running water is scarce; that is, that a considerable portion of it is burned up with intense heat. On the N. coast a wind from the S. raises the temperature with extreme suddenness, and a N. wind produces the same effect on the S., arguing, in both cases, a passage over a highly heated soil. Tropical Australia is in the range of the Indian monsoons, of which the N.W. sets in usually about the beginning of November, and that from the S.E. in the early part of April. There is, however, much irregularity in their recurrence, the variation sometimes amounting to more than a month. (*Campbell, in Geog. Journ.*, iv. 148.) In these regions the seasons can scarcely be divided into dry and rainy; for though the N.W. (or summer) monsoon be attended with very heavy falls, yet they seldom continue above 2 or 3 hours at a time, so that they rarely, if ever, put a complete stop to out-door labour. From June to September no rain falls, though these are unquestionably the healthiest months of the year. A great quantity of moisture must, however, at all times be suspended in the atmosphere, though imperceptible to the senses, during the prevalence of the dry or S.E. monsoon: for iron articles are kept from rusting only by incessant care; and the exposed surface of the rocks, along the intertropical coasts are so generally coloured by the oxide of iron, that the term red might without impropriety be adopted as descriptive of the N.N.E. and N.W. shores. (*Campbell's G. J.*, iv. 149.; *King*, i. 306.) The average temperature at Melville Island, on the N. coast, from April, 1827, to March, 1828, was 83° Fah.; the winter average 80°; that of the summer 86°; and the extreme averages 75° (for July), and 87° (for Dec.). It may also be observed, that the coolest part of the day appears to be 6 A. M., the temperature of that hour being from 1° to 7° lower than that of midnight. (*Campbell's G. J.*, 152.) With regard to Extra-tropical Australia, it is a pretty common observation, that the climate of N. S. Wales assimilates very closely to that of S. Italy: but this must be taken with some limitations: first, the atmosphere is very considerably drier; secondly, the extremes of temperature are greater; thirdly, the average heat is rather less; and fourthly, the temperature appears to decrease more rapidly by elevation. According to Count Strzelecki, at an average of the three years ending with 1843, the maximum temperature at Port Jackson was 81·9°, the minimum 45·3°, and the annual 66·6.° At Port Macquarrie, more to the N., the maximum temperature during the same three years was 88·3°, the minimum 46·8°, and the annual mean 68°; and at Port Phillip, more to the S., the maximum was 90·6°, the minimum, 36·9°, and the mean, 61·3°. (*Physical Description of N. S. Wales and Van Diemen's Land*, 229.) It appears, also, contrary perhaps to what is the common opinion, that the quantity of rain falling at Port Macquarrie amounts to 62·68 inches; at Port Jackson to 52·42 do.; and at Port Philip to 30·72 do. But notwithstanding this abundance of rain, the climate is properly characterised as dry; and it is a curious but well-authenticated fact, that floods on the coast occur simultaneously with dry weather in the interior, and conversely. May is the rainy season on the coast; in the interior the rains fall during the summer, or between September and February. The spring months comprise September, October, and November; those of summer, December, January, and February; those of autumn, March, April, and May; and those of winter, June, July, and August.

But a more important division of the Australian climate into wet and dry, is marked by periods or cycles of 10 and 12 years each. Once in such cycles, a year of unmitigated drought prevails, during which *no* rain falls, and the effects of which are equally intense on the coast and in the interior. Close upon this visitation follows a year of flood; but the rains, which are at first continuous and as general as the preceding drought, decrease with every succeeding year, till they again wholly fail for a time. It follows, therefore, that the 2 or 3 years following the great droughts may be denominated the wet *period*, and that an equal space of time preceding the great droughts may be regarded as the long dry season of Australia. It is only in the intermediate years that the regular recurrence of seasons, noticed above, is observable. (*Oxley*, vii.; *Sturt*, i. liv. 1.) A great drought began in 1824, and did not terminate till 1829. Very little rain fell during the whole of this lengthened period, and during the last six months there was not a single shower! In consequence, the whole surface of the ground was so parched and withered that all minor vegetation ceased, and even culinary vegetables were raised with much difficulty. Many of the settlers were well nigh ruined; and the cattle did not for some years recover from its effects (*Breton's N. S. Wales*, 296.; *Sturt's S. Australia*, i. 2.) In 1847 the Maneroo Plains, an extensive squatting district, suffered from a similar cause. The mortality among the flocks and herds was frightful; the water-holes being nearly all dried up, and filled with the carcasses of sheep and cattle. (*Southey on Colonial Wools*, 30.) Fortunately, however, these visitations are not of frequent occurrence, and when they do occur, they are mostly confined to not very extensive localities. On these occasions, and in the remoter places, cattle frequently stray away in search of water, and either perish or are lost to the owners. In reference to the reverse order of the seasons in Europe and Australia, it is worthy of remark that a cold winter in the one appears to be coincident with a hot summer in the other, and conversely. (*P. Cunningham*, i. 218.) For the rest, dews are very abundant, and, fortunately, fall the heaviest during the summer heats and the long-continued droughts. Hail-storms are frequent, as are also thunder and lightning; the latter flashing frequently for a succession of days, wholly unaccompanied by the former or by a single drop of rain. Earthquakes are occasionally felt on the N. coast. The climate of Extra-tropical Australia is peculiarly favourable to the human constitution, probably from the deficiency of vegetable decomposition. Endemic diseases are almost unknown: even small pox, measles, and hooping-cough are strangers; but the hot N. wind produces ophthalmia; and the teres, or round worm, is the common pest of childhood. Dysentery is the most prevalent disease; but one proof, and that a strong one, of the healthy nature of the atmosphere, is the facility

with which all disorders, even the worst cases of venereal affection, yield to the simplest remedies. The N. coast is unhealthy, but certainly less so than most other tropical countries. Typhus and acute fevers are there prevalent in the wet monsoons; and during the period of variable winds, pectolapla (moon blindness) appears to supersede ophthalmia; and scurvy seems to be an endemic, exhibiting itself with peculiar virulence where the tropical heat is exercised upon a damp soil. Even here, however, sickness puts on a generally mild form: the number of deaths, from disease, in Melville Island was only 1 in 9 for 4 years, or 1 in 36 per annum. (*P. Cunningham*, i. 171—173.; *Campbell's G. J.* iv. 149—151. 168.; *Wentworth*, 55.; *Irwin*, 4. 124.)

Mineralogy. — Iron is spread in great profusion over all the continent and its adjacent islands. The immense extent of iron oxide on the N. coast has been already alluded to, and several of the mountains violently affect the magnetic needle. (*Oxley*, 259.; *Sturt*, i. 115.) Copper and lead (the latter mixed occasionally with silver and arsenic) are said to have been traced both in the Blue Mountains and the Darling range; but no attempt has yet been made to turn such discovery to account. Within these few years, however, copper and lead ores, of the richest description, have been found in great abundance in the hilly tracts adjacent to Adelaide, in S. Australia; and mining has already become, perhaps, the most important branch of industry carried on in that colony (see *post*). At present the ores of S. Australia are mostly sent to England to be smelted. Inasmuch, however, as vast beds of coal exist in many parts of the continent, it is probable that in no very lengthened period, the business of smelting will be carried on at home, and that iron, also, will be extensively produced. (See *post*, Australia South.)

Gold Fields.—But the mines of coal, copper, iron, and other ordinary minerals found in Australia, and even its myriads of sheep, have all been rendered, for the present at least, of no importance, compared with the gold deposits with which it is profusely endowed. These are of the most extraordinary productiveness. The gold is found at various points, mostly on the western flanks of the great mountain chain which runs parallel to and at no great distance from the E. coast of the continent. This chain consists of a great variety of rocks; those of primary formation being in many parts pierced and broken through by those of igneous origin. Numerous quartz veins are found in the rocks; and these form the matrix of the gold, which is most frequently found with the quartz adhering to it, and accompanied with iron.

The existence of gold in this mountain chain had been conjectured on theoretical grounds by Sir R. J. Murchison and other eminent geologists. But its existence was not practically ascertained till 1851, when an extensive gold field was discovered near the town of Bathurst in N. S. Wales, about 120 miles W. N. W. from Sydney. The discoverer, a Mr. Hargrave, has since received a reward of 10,000*l.* A great variety of other gold fields have since been explored, epecially in Victoria, where they are of unparalleled richness.

The gold hitherto found in Australia has all been obtained from "diggings" in the beds of streams descending from the mountains, or in the detritus in ravines and hollows on their flanks. It is found in every variety of form, in grains or dust, in flakes or scales, and in lumps or nuggets. The separation of the smaller particles from the earth is effected in the same way as in California, by washing. But though the labour be severe, it is less so than in the latter. And owing to the water being less cold *, and the sun less powerful, the health of the diggers is not exposed to so severe a trial here as in California.

Such and so extraordinary has been the productiveness of the "diggings," that their produce in 1852 and 1853 may be moderately estimated at the immense sum of 17,000,000*l.* or 18,000,000*l.* a year! It would be idle to enter into any speculations as to the probable future amount of this produce. But considering the vast extent of the country over which the gold appears to be spread, the presumption would seem to be that a lengthened period may be expected to elapse before any material decrease of the supply needs be anticipated; and that for some considerable time to come its magnitude will probably depend more on the numbers of hands at the "diggings" than anything else.

The effect of this wonderful discovery has been most striking. At the outset it threatened a total disruption of society; and it has made a very great change in all the social relations that formerly prevailed in the continent. The demand for labour, the rate of wages, the prices of lodgings and of most articles of provision, have increased in an unprecedented degree. Hence, also, a vast amount of emigration has been directed to Victoria and N. S. Wales, and population and trade have made astonishing advances.

Though unfavourable at first to those engaged in agricultural and pastoral pursuits, the latter have now nearly recovered from the shock, and will probably become more prosperous than ever. The "diggings" are now beginning to be prosecuted more as a regular employment than as a gambling adventure. Many of those who were at first attracted to them from other departments have since returned to their former pursuits; while the rapid increase of population, by occasioning a proportional increase of demand for other products, has given a new and powerful stimulus to almost every branch of industry. In proof of this we may refer to the carcases of sheep, which, from being worth little or nothing, have, in consequence of the greatly increased consumption of butcher's meat, become of much greater value than the fleeces.

II. Botany.—It is well known that Botany Bay received its name from the abundant vegetation which Capt. Cook and Sir J. Banks found flourishing on its coasts: but its soil was notwithstanding found to be unprofitable, barren, and totally unfit for a settlement, which was, in consequence, established at Port Jackson.

The first great division of plants is into two great classes: the Cryptogamous, which have no blossoms nor visible means of fructification; such are mosses, ferns, fungi, &c.: and the Phanerogamous, which are reproduced by visible organs. This class includes, of course, all the higher orders of vegetables, but is subdivided into Monocotyledonous plants, such as have but one seed lobe; and Dicotyledonous plants, which are possessed of two or more: the former comprises the grasses, cyperaceæ, &c.; the latter, those productions of the earth, the organisation of which is most complicated, as the trees, superior shrubs, &c. The following table exhibits an outline of the arrangement of these primary orders in Australia. It is offered merely as an approximation, for knowledge on this subject is yet but scanty; but it has been constructed with much care from Brown's "Botany of Terra Australis" (*Appendix to Flinders*, 533—613.); the botanical papers of A. Cunningham (*Appendix to King*, 597—565.); *Field's Memoirs*, 325—365; P. Cunningham (i. 186—206).; Oxley, *passim*; Sturt, *passim*; Mitchell (i. xx. *et passim.*)

Orders.	Whole No. of known Species.	Whole No. of Aust. Species	No. of Spec. com. to Aust. and other Regions.	No. of Species peculiar to Aust.
Cryptogamous - -	6,000	700	210	490
Monocotyledonous -	6,909	1,144	40	1,104
Dicotyledonous - -	31,091	3,866	20	3,846
Total - -	44,000	5,710	270	5,440

So profound were the early investigations of Brown in this newly-opened region of strange vegetation, that his name was given to it as a distinct botanical kingdom. (*Lindley*, 522.) In his day the known plants of all the world amounted to 33,000 species, those of Australia to 4,200. (*Flinders' Appen.* 536.) The labours of succeeding botanists have done little more than enlarge the list, without at all affecting the arrangement, and only in a very trifling degree altering the various proportions. The first fact which strikes the observer in the foregoing table is the very great number of peculiar Australian species, amounting to nearly ⅛th part of those at present known. This is a proportion much greater than could

* In California it consists principally of melted snow and ice.

be looked for from the relative magnitude of the region, and which, were the individuals of each species in anything like a similar ratio, or were the species themselves of a kind highly useful to man, would render Australia a paradise. Unfortunately, neither is the case. Ferns, nettles, flowers, and even grasses, having the form, bulk, and habits of trees, are some of the distinguishing features in Australian vegetation; for the rest, the timber is generally of the hard wood kind, consisting of all the varieties of Eucalyptus and Casuarina, with some varieties of the rose wood, sandal-wood, cedar, &c. Most of the eucalypti are called gum-trees, though the exudations of many of them are properly resins, being insoluble in water; while others yield a manna as fine and as pure as that of Arabia. Another species yields the purest gum Arabic. There is a tree here called the tea tree, the leaves of which are used by the colonists instead of those of the Chinese plant; and there are also some medicinal trees, as the sassafras and the castor-oil tree. Palms are limited to the N. and E. shores, on the former of which the tropical mangrove grows in all its luxuriance; and, in fact, the peculiar aspect of Australian vegetation disappears in this part of the continent, being superseded by one assimilating more to that of India. In Tropical Australia the greater number of those plants are found which are common alike to this and other continents. It has been before observed that, with one exception, the Australian trees are evergreens: many of them are remarkable also for the inverted position of their leaf; the margin, and not either surface, being directed towards the stem. An Australian grove has, consequently, a peculiar and gloomy appearance; nor is the timber that it yields of the highest utility to the architect, being liable to rot at the heart, and so contractile that it has been known to shrink upwards of two inches within a week. (*P. Cunningham*, i. 192.) It remains to be observed that the trees in Australia are rarely so numerous as to impede horse travelling; and as a remarkable fact, that they appear to be most abundant on inferior soils. (*Gov. Rep. Oxley*, 368.) Flowering plants of very great beauty are found; but the lily, tulip, and honeysuckle exist in the form of standard trees of great size. There are also odoriferous plants, which scent the atmosphere to a great distance; and prickly shrubs, which grow upon sandy soils, and bind them down, thus preventing that drift which is the bane of the Arabian and African deserts (*Mitchell*, i. 222., ii. 106, &c.) Grasses are abundant and nutritious, but they grow in detached clumps, so that a heavy continuous sward, resembling an English meadow, is unknown. Flax, tobacco, a species of cotton, tares, indigo, chicory, trefoil, and burnet (the last a good substitute for tea), are among the natural productions, but there is an unparalleled deficiency of fruits and of vegetables fit for human food. The *cerealia* are totally absent; and the best substitute for them appears to be a species of reed, which, however, Mitchell found to make a very light cake. The only native fruits are raspberries, currants (more like cranberries), one or two tasteless fruits, and a species of nut. The useful productions of other lands are now, however, extensively acclimatized, and corn crops and orchards are found in every fertile spot in the settled districts. Every species of corn, including maize, is cultivated with success; while of foreign fruits, the orange, lemon, citron, nectarine, apricot, peach, plum, cherry, fig, mulberry, quince, banana, guava, pine-apple, grape, and many others, have long been a source of profit to the smaller settlers. The capabilities of the soil are thus attested; nor can there be a doubt that the sugar-cane and other tropical productions would thrive in the lower latitudes of the N.; but at present the prejudice of the colonists is in favour of pasturage, for which the extensive plains on the terraces afford much facility, though the keep of a sheep upon the native grasses requires three times the extent of ground that in a moderately fertile district in England would fatten an ox in summer, and keep two sheep in winter. (*P. Cunningham*, i. 262.)

III. Zoology.—Animal existence in Australia assumes a form more anomalous and peculiar than even that which marks its botany. The following tables have been constructed with every possible care from the "*Règne Animal*" of Cuvier, with the additions of Griffith, Gray, &c., the Zoology of Shaw, the Transactions of the Linnæan Society, and the works of the various travellers in Australia.

In these tables, Cuvier's great orders of Carnassiers and Passeres are divided into their several families; the former into Cheiroptera, Insectivora, Carnivora, and Marsupialia; the latter into Dentirostres, Fissirostres, Conirostres, and Tenuirostres.

From these results it appears, first, that the native animals of Australia are few in number; and, secondly, that they are very peculiar in kind. Of all the known Mammalia in the world, but 58 species, little more than 1-17th part of the whole, belong originally to this region. Of these 58 species, 46 were never heard of till they

Class Mammalia.*

Orders.	Whole No. of known Species.	Whole No. of Austra. Species.	No. of Spe. com. to A. and other Regions.	No. of Spe. peculiar to Australia.
Quadrumana -	155	0	0	0
Cheiroptera -	136	2	1	1
Insectivora -	27	0	0	0
Carnivora -	177	8?	5	3?
Marsupialia -	59	33	0	33
Rodentia -	192	6	1?	5
Edentata -	21	4	0	4
Pachydermata	24	0	0	0
Ruminantia -	142	0	0	0
Cetacea - -	27	5	5	0
Total -	960	58	12	46

Aves. (Birds.)

Orders.	Whole No. of known Species.	Whole No. of known Australian Species.	Species common to Austr. and other Regs.	No. of Spe. peculiar to Australia.
Accipitres -	251	16	6	10
Dentirostres -	1,273	130	7	123
Fissirostres -	128	12	1	11
Conirostres -	440	20	3	17
Tenuirostres -	313	30	1	29
Syndactyles -	116	7	0	7
Scansores - -	482	34	0	34
Gallinæ - -	345	20	3	17
Grallæ - -	335	25	4	21
Palmipedes -	289	22	2	20
Total -	3,972	316	27	289

were first met on this soil; and of the 12 species common to Australia and other regions, 5 are whales, and 4 (out of the 5 Carnivora) seals; so that, in truth, of the *terrestrial* Mammalia, only three species are common; of which 1 is the large and strong-winged bat of Madagascar, another (the single and questionable common rodent) is regarded by Mr. Ogilby as connected generically only with the Jerboas of America and Asia (*Linnæan Trans.* xviii. 129—132 †), and the third is the dog, of which it is a remarkable fact, that he is never found out of the society of man, and very rarely absent from any spot which man inhabits! The authority just quoted (p. 121.) believes, indeed, that he is not an aboriginal inhabitant of this continent, but that he came to it with the first primitive settlers, in the same state of savage domestication in which he now exists. He was unknown in Tasmania (Van Diemen's Land) before the settlement of the British colonists there (p. 122.). The other three Carnivora (probably only 2) marked in the table as peculiar to Australia, are seals (*Griffith's Synopsis of Cuv.* 180. 183.); so that the whole of this important order, together with the numerous tribes of the Quadrumana, Pachydermata, and Ruminantia, are absolutely without any known land-representatives in this extensive portion of the globe. (*Ogilby, Lin. Trans.* xviii. 121.) Of the Edentata, 4 species are marked in this table, after the arrangement of Cuvier (iii. 263—265.); but that arrangement was made in the utter despair of forming a better, and not because it had any systematic analogy to recommend it. Toothless, or all but toothless, the creatures unquestionably are; but classing them in this order reduces the naturalist to the dilemma of admitting that there are Mammalia which do not possess the distinctive mark of the class. The Echidni and Ornithorhynchi are *destitute of teats, and do not suckle their young*. The former genus consists of 2 species of porcupines, one entirely covered with thick spines, the other clothed with hair, in which the spines are half hidden. The Ornithorhynchi consist also of 2 species—*O. paradoxus* and *O. fuscus*. Possessing the body and habits of a mole, the feet and bill of a duck, and the internal formation of a reptile, these creatures lead a burrowing life amid the mud of rivers and swamps. They are extremely shy, and hence their mode of reproduction is yet unknown. Should they be oviparous, it would be perhaps more consistent to class them with the Reptilia than with the Mammalia; but, at present, their hot blood seems to forbid such an arrangement. The Ornithorhynchus has 2 cheek-teeth in each jaw; but they are without roots, and are merely fibrous. (*Cuvier*, iii. 264.)

Of the Rodentia, 2 species belong to the sub-genus Hydromys, and consist of creatures that seem to unite some of the peculiarities of the dormouse, rat, and beaver. (*Cuv.* iii. 72.) According to Griffith (*Synop. Cuv.* 222.), they are the *only* true Hydromys, are peculiar to Australia, and almost to Van Diemen's Land. A new genus of Rodentia was made known by Mitchell's expe-

* For an account of the discrepancy between this table and that given by Professor Von Ritter in the *Penny Cyclopædia*, see the former edition of this work.

† In the very able paper here cited, the whole number of Australian Mammalia agrees much more nearly with that given in the text than with that assigned in the *Penny Cyclopædia*.

dition in 1835 (i. 305), which has been called CONILURUS, to mark its general resemblance to a rabbit. It is, however, a rat; and the species found by Mitchell (the only one at present known) is remarkable for the formidable defence which it builds for itself against the dingo (native dog), and birds of prey. From this habit it has been named Conilurus constructor. Two species of mice (both peculiar), and the Dipus Mitchelli (the Australian jerboa), discovered by Mitchell in 1836 (ii. 143.), complete the list of Australian Rodentia, unless a small animal, omitted in the table, from the uncertainty of its classification, belong to that order. Mitchell names it *Myrmecobius rufus*, but with considerable doubt, and says that it was generally called the "red shrew mouse" by his party. (i. 17.) Should it prove to belong to the genus Sorex, it is the first instance, in Australia, of the order Insectivora. With these few exceptions, the whole of the Australian Mammalia consist of the very peculiar order Marsupialia, of which order more than 4-7ths are limited to this continent and its adjacent islands. The leading peculiarity in animals of this order, is the birth of the young in an immature state; in such a state, in fact, as is scarcely comparable to the ordinary development at which other fœti arrive within a few days after conception. From the time of this premature birth, without limbs or other external organs, the little animal remains attached to the teat of its mother (which enlarges, so as completely to fill the mouth), and enclosed in a natural pouch formed by the skin of the abdomen. It is this pouch which is the distinctive mark of the order; and its use induced Linnæus to arrange such species of these animals as he knew, under his genus *Didelphis*, a word implying double matrix. At the period of full development, the young fall from the teat, and this may be regarded as the real moment of birth; but for a long time after the dam continues to carry her offspring in the same receptacle; and the latter, even after they can walk, constantly return thither on the approach of any danger. This remarkable conformation is observed in every marsupial animal, and the arrangements of bones and muscles, necessary to it, is found in the males as well as the females. In other respects, however, the several genera of the order differ so essentially, that the whole might be regarded as forming a distinct CLASS of Vertebrata, and divisible, like the other Mammalia, into various orders. (*Cuv.* ii. 61—63.) The kangaroo, the largest animal of this order and of Australian Mammalia, has been known since Cook's first voyage. (*Hawkesworth*, iii. 576.) It is as large, in some of the species (of which Griffith enumerates 10), as a good-sized calf, is very large in its hinder quarters, and disproportionately small forwards. Its fore-legs are very short, and quite useless to the animal's motion, which is effected by a succession of springs, assisted materially by its long and powerful tail. The attitude is erect, except when feeding; the colour various in the various species, but is generally of different shades of grey. One species (*K. rufus*), however, is red and white. The other animals are the Potorvus, Phalangers (so named by Buffon, because the only species with which he was acquainted had 2 toes united by a membrane), the Dasyuri, the Parameles, the Petaurista, the Phascolarctos, and the Phascolomys. The different species of these genera vary in size from that of a rat to that of a dog; the largest, the dog-faced Dasyurus (*Thylacynus Haristi*), and Dasyurus ursinus (the devil of the colonists), being confined to Van Diemen's Land. (*Ogilby, Linn. Trans.* xviii. 122.) The former resembles closely an ill-made dog, but is marked with zebra-like stripes; the latter is represented as an extremely ugly and disgusting-looking animal, whence his colonial name. The other species of the Dasyuri approach in size and outward appearance to the weasel tribe. The Phalangers of Australia are not all distinguished by united toes; on the contrary, some of them, as the Vulpine Phalanger, approach in the formation of their extremities, to the Quadrumana. (*Shaw's Zoology*, i. 489.) Some of these, the instance taken, for one, are pretty and graceful animals. The Petaurista are a sub-genus of the Phalangers, and distinguished by an extension of the skin of the side, so as to form a kind of parachute; they are sometimes called flying Phalangers. Of this genus the *Didelphis Sciurus* (squirrel opossum) has so much the appearance of a squirrel, that a close inspection is necessary to detect its marsupial character. (*Shaw's Zoo. N. Holl.* 29.) The Parameles approach in form and habits to badgers, and indeed are called pouched badgers; they differ from the other Marsupialia in the weakness of their tail, that member being generally serviceable to this order, either by its strength or its prehensibility. (*Griffith's Notes, Cuv.* iii. 29.) The Phascolarctos, or Koala, as it is more commonly called, consists of only one known species; it has a clumsy body, about the size of a moderately large dog, short legs and claws, adapted for climbing and burrowing. The female carries her young, for a long time, on her shoulders, and not in her marsupial bag. Some naturalists have referred this animal to the Phalangers, and others have denominated it the New Holland sloth. It has, however, no resemblance to the Tardigrada, possesses cutting teeth, and is destitute of canines. (*Cuv.* ii. 76.; see also iii. 252.; and *Griffith's Synops.* 294.) The Phascolomys, like the last genus, contains at present but one species, the wombat of the colonists. It is a plantigrade animal, extremely slow in its motion, and is about the size of a badger. Shaw (i. 504.) mentions this creature under the name of Didelphis ursina, and a second species is suspected to have been seen by Bass. (*Cuv.* ii. 78.)

In habits the different genera of the Marsupialia differ as much as they do in form. There is scarcely indeed, an order of the whole class Mammalia to which one or other of them does not assimilate. Thus, the Dasyuri are carnivorous, and have many of the habits of the Felinæ; the Phalangers are insectivorous, and it has been already stated that some of them approximate in form to the Quadrumana; a similar approach will, perhaps, be admitted of the Petaurista to the Cheiroptera; and the Phascolomys or wombat is a true rodent. (*Cuv.* ii. 61—78.)

The kangaroos, though strictly herbivorous, cannot be compared with any known genus but themselves; and the useful orders of Ruminantia and Pachydermata are unrepresented by any marsupial form.

But those tribes, comprising most of the animals that, by their strength, docility, fleece, or hide, and the nutritious quality of their flesh, are most useful to man, though only recently imported, are now extremely abundant in all the settled parts of Australia. On the 1st of May, 1788, a stock was carried out by the first settlers of 1 stallion, 3 mares, 3 colts, 2 bulls, 5 cows, 29 sheep, 19 goats, 49 hogs, 25 pigs. (*Phillip*, 110.) And from this late and scanty stock, assisted by a few subsequent importations, have been derived all the vast numbers of sheep and other useful animals now to be found in the Australian continent. It is needless to trace their progress in detail. Suffice it to say, that though for a while their increase was comparatively slow, there were in N. S. Wales in 1810 25,888 sheep, and 12,442 head of cattle. In 1822 the former had increased to 290,158, and the latter to 122,939. On the 1st of January, 1847, the total stock of sheep had increased to 7,906,811, of which 4,909,819 belonged to the Sydney district, and 2,996,992 to that of Victoria; and in January, 1848, the total stock amounted, in both districts, to 10,054,000! At the same period the two districts had 1,596,914 head of cattle, and 103,915 horses. So rapid an increase is probably unequalled in the history of the world. The stock of sheep in Australia and Van Diemen's Land may at present (1854) be safely estimated at little short of 20,500,000! The exports of wool in 1845 exceeded 24,000,000 lbs.; and in 1852 they amounted to 43,197,301 lbs. The goats have also thriven and multiplied; and the same may be said of the rabbits, of which 5 were landed in 1788. (*Phillip*, 110.) It is clear, therefore, that the pastures and climate of Australia are well adapted to the useful animals so long strangers to its soil; and the beneficial changes which their introduction has effected in this new land, is one of the most interesting instances of the power possessed by man of modifying the physical peculiarities of the world which he inhabits.

Account of the Sheep's Wool annually imported from Australia into the U. Kingdom since 1818.

	Lbs.		Lbs.
1818	86,525	1836	4,996,645
1819	74,284	1837	7,060,525
1820	99,415	1838	7,837,423
1821	175,433	1839	10,128,774
1822	138,498	1840	9,721,243
1823	477,261	1841	12,399,090
1824	382,907	1842	12,959,671
1825	323,995	1843	17,433,780
1826	1,106,302	1844	17,589,712
1827	512,758	1845	24,150,687
1828	1,574,186	1846	21,865,270
1829	1,838,642	1847	26,056,815
1830	1,967,279	1848	30,034,567
1831	2,511,205	1849	35,774,671
1832	2,377,057	1850	39,018,221
1833	3,516,869	1851	41,810,137
1834	3,558,091	1852	43,197,301
1835	4,210,301		

The imports of Wool in 1840 and 1851 were derived as follows, viz.: —

	1840.	1851.
	Lbs.	Lbs.
N. S. Wales, inc. Victoria -	7,000,727	32,041,653
V. D. Land - - -	2,626,178	5,198,083
Western Australia - -	42,748	368,595
South Australia - -	51,590	3,392,603
Total - -	9,721,243	41,000,931

The ornithology of Australia is less anomalous than its mammalogy: no order of birds is without its representative, and there are but two the Australian species of which are wholly peculiar. Yet the common species bear a very small proportion to those which are peculiar; and for the most part, are common only to N. and E. Australia, and S. Asia, or the nearer polynesian islands. Several genera are wanting; all the tribes of usual singing birds, for instance: and of the common species, the most numerous are, as might be expected, those of strong flight and comparatively light bodies; such as the Accipitres (birds of prey) and the Dentirostres (shrikes, pies, &c). Among the rapacious birds, the most singular is a white eagle, which Cuvier thought was only an albino of some other species (vi. 49.), and which Shaw referred to the list of hawks (vii. 93.), but which subsequent investigation has proved to be a true eagle. (*Griffith's Notes Cuv.* vi. 50.) Among the order Dentirostres, are some species of great beauty; the superb warbler, a bird having the habits of the redbreast, is perhaps the most beautiful. There are also some *variegated* thrushes; but of these and other birds of this order, though very accurate descriptions be given of their appearance (*Phillip*, 157.; *Shaw's N. Holl. Zoo.* 25.); nothing is said respecting their notes; and it may be inferred that, notwithstanding their names, they are songless. A species of thrush, called thunder bird (*Cuv.* vi. 434.), has obtained from the colonists the name of the *laughing jackass*, from his peculiarly loud and discordant cry. Swallows and goatsuckers, of the order Fissirostres, are numerous; and of the Conirostres, the most remarkable species are the beautiful birds of paradise, which are almost confined to New Guinea. There are also several crows and magpies of this order; but the larks (so called) are but poor imitations of those of Europe, and appear all to belong to Cuvier's genus of field larks (vi. 480.), and consequently to the order Dentirostres. Of the Tenuirostres, the various species of the Epimachi are, like the birds of paradise, confined to the N. parts of Australia; like them, their plumage ranks amongst the most beautiful; and like them, too, they have been the subjects of innumerable fables. (*Cuv.* vii. 382.) The Syndactyles give to Australia its kingfishers and bee-eaters, of which the sacred kingfisher of the first, and the variegated bee-eater of the other, are worthy of notice for the extreme beauty of their covering. All the Australian species of this order are peculiar, as are also those of the Scansores, consisting of the parrots, paroquets, cockatoos, &c. These last are very numerous in the Australian woods, supplying there the place of the European songsters. (*P. Cunn.* i. 216.) The pheasants, quails, and pigeons of the order Gallinæ, are tolerably numerous; and, according to Cunningham, the mountain pheasant is a bird of song. The same gentleman makes the same remark upon one species of Australian magpie (i. 302.), and states further, that wild turkeys, of two varieties, are found; but those are, most probably, a species of bustard, and belong to the order Gallæ, which yields also the emu or Australian cossowary, nearly equal in size to the ostrich, and resembling it in many important particulars. (*Cuv.* viii. 298.) Of this order, Australia has also some species of curlews, herons, avosets, rails, &c. (*Cuv.* viii. 342—394.) Lastly, of the Palmipedes, there are in this region pelicans, boobies (so numerous as to have given name to an island on the N. coast), petrels, penguins, ducks of a peculiar kind, and swans which realise the *rara avis in terris* of the Latin poet, being coal black. (*Cuv.* viii. 561—624.) It remains to be observed, that the 18 turkeys, 29 geese, 35 ducks, and 87 chickens, which arrived here in 1788 (*Phillip*, 110.), have multiplied to an extent not surpassed by the sheep; and there can be little doubt, unless the deficiency of grain were fatal, that the songsters of Europe might be acclimatized to the woods, were the attempt made. (*P. Cunn.* i. 307.)

The reptiles of Australia are comparatively more numerous than either the Mammalia or the Aves. They consist of 2 or 3 genera of turtles; as many varieties of alligators; and a considerable number of lizards and serpents, both venomous and harmless. The land lizard and the Coluber porphyriacus (crimson-sided snake) are represented as of extraordinary beauty. The seas and rivers "abound in fish, many of them peculiar; and the Watts' shark, the smallest of the species at present known, is remarkable for having the mouth near the end of the head, instead of underneath, as in other animals of this genus." The insect tribe are very numerous, but they appear to differ far less than the other animals from those in other countries similarly situated.

IV. Races of Men in Australia. — If the division of the human family, by Blumenbach, into 5 varieties, be rigorously abided by, the Australian must be classed with the Ethiopian, or negro, as approaching, upon the whole, nearer to his conformation than to that of any other race. But Mr. Crawfurd (*Hist. Ind. Arch.* i. 24.), says that the "east insular negro is a distinct variety of the human species;" and, indeed, he has peculiarities quite sufficient to make his classification with the African Ethiop one of considerable violence. "The skin is lighter; the woolly hair grows in small tufts, and each hair has a spiral twist; the forehead is higher, the nose much less depressed, and the buttocks are so much lower than in the African, as to form a striking mark of distinction." It is to this race, if any, that the Australian must be referred; and the inhabitant of the continent recedes still more from the true negro, by having straight, or at all events curling, hair. Captain Cook's description of this race has been verified by every succeeding observer. "The skin," says he, "is of the colour of wood soot, or what is commonly called chocolate colour. Their features are far from disagreeable; their noses are not flat, nor are their lips thick; their teeth are white and even, and their hair naturally long and black; it is, however, cropped short; in general it is straight, but sometimes it has a slight curl; we saw none that was not matted and filthy, though without grease, and to our great astonishment free from vermin. Their beards were of the same colour with their hair, bushy and thick; but they are not suffered to grow long." (*Hawkesworth*, iii. 632.) The colour of the Australian does not appear to be uniform; some, even when cleansed from their filth, are nearly as dark as the African, while others have a tint not deeper than that of the Malay. The Australian is generally tall and slender, with little development of muscle, and more remarkable for agility than strength. Prichard, after comparing the various authorities, describes them in the last edition of his great work as follows: "The stature of the Australians is moderate, and often below the mean. The limbs among many tribes are slender, thin, and in appearance of disproportioned length, while some individuals, on the contrary, have them stout and well-proportioned. Their hair is not woolly; it is hard, very black and thick; they wear it dishevelled, and in general short, in frizzled masses. Their beard is of the same nature as their hair, commonly rough and tufted on the sides of their face. Their countenance is flattened, nose very large, with nostrils almost transversely placed, thick lips, mouths of disproportionate width, teeth projecting but of the finest enamel. Loose circular ears very amply developed, and eyes half closed by the laxity of their upper eyelids, give to their physiognomy a savage and repulsive aspect. The colour of their skin, generally of a smoky black, varies in its hue, which is never very deep. The Australian women, still more ugly than the men, have squalid and disgusting forms; the distance which separates them from the *beau ideal* appears immense in the eyes of an European. A great number of families place in the septum of the nose round sticks, from four to six inches long, which give a ferocious aspect to their countenances." (*Researches into the Natural History of Mankind*, i. 256. 4th. ed.) It must be remarked, however, that the Tasmanians (inhabitants of Van Diemen's Land) are woolly headed, as are also the natives of New Caledonia, New Guinea, and the other islands

considered in this article as constituting Australia, with the single exception of New Zealand. The latter, though more remote from the Polynesian islands than any of the others, is inhabited by the brown race of those groups which is said by Crawfurd (i. 18.) to have the same superiority over their sooty neighbours that the white men of the West have over the African negro. The physical distinction between the continental and insular Australians does not, however, appear to be one of importance; and this recently discovered region may with great propriety be regarded as the native home of a distinct and decidedly inferior variety of the human race (Crawfurd, i. 24.), which has spread itself to a considerable distance N. and E. among the islands of Polynesia and the Indian archipelago, and even to the S. extremity of continental Asia. That this variety is, physically considered, the lowest in the scale of rational beings, is sufficiently evident. Puny and weak, in comparison with the African negro, the Australian is hunted down, without making any effectual opposition, whenever he is encountered by any of his fairer neighbours; while the African is subdued only by superior intelligence, and successfully resists mere physical force. As personal strength is one effect of superior physical structure, the following results may be interesting. They are the averages deduced from the power exhibited in the arms and loins of 39 Australians, 56 Timorians, 17 Frenchmen, and 14 Englishmen. These people were found capable of bearing respectively the following pressures:—

Strength.	Of Arms in Kilogrammes.	Of Loins in Myriagrammes.
12 Tasmanians, av. - - -	50·6	
17 New Hollanders, av. - - -	50·8	10·2
56 Timorians, av. - - - -	58·7	11·6
17 Frenchmen, av. - - -	69·2	15·2
14 Englishmen, av. - - -	71·4	16·3

(*Lawrence*, 404.) The Timorians, it should be observed, are of the brown race; and it may be seen that in strength of arm they exceed the Australians more than they fall short of the Europeans. Between these two, the *weakest* English arm was more powerful than the *strongest* Australian, and the most muscular of the latter could bear upon his loins only ½ a myriagramme more than the weakest of the former.

The Australian is not more inferior in physical vigour than in moral and intellectual attainments. His is the only race with which we are acquainted, that has no sort of clothing. The Australian has domesticated no animals, and has no knowledge of agriculture, even in its simplest form. His huts, inferior by many degrees to the wigwams of the American Indians, are but rarely met with in the warmer portions of the continent. His canoes serve only to carry him across narrow creeks or inlets of the sea. And these, with spears and fish-hooks, stone hatchets, a kind of shield, and a carved wooden missile, which, when thrown by a skilful hand, rises with a rotatory motion in the air, striking at a considerable distance, and rebounding to near the thrower, form the sum total of his instruments of production, defence, and aggression. The subsistence of the Australians is alike scanty and filthy, consisting of the flesh of wild animals, shell and other fish, worms and other reptiles, ants and ant eggs, wild-honey, roots and berries And the supply of wild animals and of edible plants being limited in the extreme, and apt occasionally to suffer greatly from droughts, they seldom have a sufficiency of food, and whole tribes sometimes become the victims of famine. The treatment of females in Australia is in the last degree brutal. Wives are not courted or purchased, but are seized upon, stupified by blows, and then carried off to be the slaves of their unfeeling masters; and should a mother die with a child at the breast, it is usual to bury the latter alive with its dead parent! (*Collins' N. S. Wales*, App. p. 601.) They are in so far acquainted with the right of property, that each tribe claims the exclusive possession, for hunting purposes, of the territory which it occupies. They seem, also, to believe in the existence of good and evil spirits; but they have no feeling of gratitude towards the former, though they endeavour by superstitious observances to avert the wrath of the latter. In short, this race, the last and lowest of the human species, appears to be as barbarous as can well be imagined; and in this state it has hitherto existed, without apparently possessing either the power or the wish to make the first step in civilisation. Hence it has been concluded, that the Australians are incapable of civilisation; and that they are essentially, and not accidentally, inferior even to the lowest type of the negro. But, degraded as they are, this inference has been denied, at least to its full extent.

Nature, it is said, has been singularly unkind to the Australian, not in his conformation only, but in the circumstances under which he has been placed. The fertile spots fitted for the supply of his limited wants are separated by deserts as wild and inhospitable as the sands of Arabia; and to pass these, he had not, like the Arab, the assistance of patient, strong, and faithful servants of the brute creation. Few navigable rivers flow through his strangely constituted land; and thus communication, the great refiner and improver of mankind, was rendered difficult and of rare occurrence. His soil was destitute of those plants, which, though "eaten in the sweat of his brow," are at once the incentives to and the reward of man's labour; nor did it feed a single animal like those which, in more favoured regions, have formed from time immemorial the shepherd's occupation and wealth. The Australian being thus shut out from the two grand primitive employments, his life could be neither pastoral nor agricultural. Under less adverse circumstances, the red man continued a hunter in the greater part of America, during the ages that preceded his discovery by the Europeans. And even this resource was all but denied to the Australian; the animals around him being not only inferior in kind, but also remarkably few in number. It is farther said, that even the excitement of danger, which may be supposed to have roused the African to exertion, by making his life a constant struggle with the fierce and powerful tenants of the woods, was wanting here; for in Australia there was nothing dangerous, except some noxious reptiles, which do not, however, appear to have any very fatal powers. The Australian had nothing but hunger to contend with; and this he endeavoured, as already seen, to appease by picking up the spontaneous products of his ungrateful soil, and the shell-fish found on the sea shore, with insects and reptiles; to which he occasionally added a kangaroo or bird, overtaken or destroyed by accident. And Mitchell mentions, that such is the scarcity of the latter kind of food, that young men are forbidden to eat it. (ii. 340.) The surmise of Cook, that it was impossible for the inland country to subsist inhabitants at all seasons (*Hawkesworth*, iii. 631.), was found by Sturt to be fatally verified in the dry year of 1828. (i. 137.)

But the adverse circumstances now alluded to, do not, as some suppose, fully account for the barbarous condition of the Australian. The

stupidity of his nature, and the inertness of his faculties, are evinced by his having made few or no efforts to increase his supply of food, or to obviate those incessantly recurring attacks of famine to which he has always been exposed. His want of other things should have made him an expert hunter and fisher of such animals as are native to his country and its seas: but he is neither the one nor the other; and though it be perhaps going too far to say that the Australian is incapable of civilisation, the fair presumption seems to be, that he is destined to remain for ever at the bottom of the social scale; and to be inferior in point of comfort, as he has hitherto hardly been superior in contrivance, to many of the lower animals.

It has been supposed, apparently with much probability, that the increase of wild cattle will materially improve both the comforts and the character of the natives; but at present it is not possible to imagine a closer approximation to the least intelligent of the brutes, than the Australians. And yet this barbarous and degraded race has had its admirers! According to Count Strzelecki, the Australian would seem to have attained to the summit of human felicity, and he appears to regret that the immigration of Europeans "should have disturbed his happy economy!" (p. 343.) To comment on such a statement, would be about as absurd as the statement itself. It would be a libel on Providence, to suppose that it was intended that this extensive portion of the earth should be for ever occupied by a handful of naked savages, without arts, science, industry, or civilisation of any kind. Some of the Europeans who have visited Australia, have not certainly been very favourable specimens of civilised man. But despite their crimes and their vices, they carried with them science, talent, and enterprise, with the germs and the capability of rapid and unlimited improvement; and we are bold to say, that the least and worst of the settlements founded in this vast continent, has a thousand times more of all that dignifies, exalts, and adorns humanity, than ever was possessed by its entire aboriginal population. To complain of the disappearance of the latter, is, in truth, hardly more reasonable than it would be to complain of the drainage of marshes or of the disappearance of wild animals.*

V. History and Discovery.—Some accidental discoveries were made by the Spaniards as early as 1526; but the first accurate knowledge that was gained in Europe of these S. lands, was by the voyage of the Dutch yacht Duyfhen, which, in 1605, explored a part of the coasts of New Guinea. In the following year, Torres, a Spaniard, having passed through the straits, which bear his name, between that island and continental Australia, gave the first account of the N. part of the latter. The Dutch continued to be the chief discoverers for the next 40 years, chiefly from their possessions in the E. Indies; and between the years 1642 and 1644, Tasman completed the discovery of a large portion of the Australian coast, together with part of the island of Van Diemen's Land, now pretty generally, and we think properly, called Tasmania. During the period referred to, the Dutch navigators succeeded in surveying about half the continental coast line; and the names bestowed upon various parts of the land, as Carpentaria, De Wit's Land, Arnheim's Land, Endiacht's Land, Nuyt's Land, Leuwen's Land, Edel's Land, &c., commemmorate the names either of the discoverers themselves, or of the ships in which they sailed. It was late before the English entered on the career of discovery; but once entered, they prosecuted it with vigour. Dampier, between 1684 and 1690, explored a part of the W. and N. W. coasts; and in the remaining part of the 17th century, completed this survey, gave his name to the archipelago lying east of N. W. Cape, and pushed his inquiries to the islands of New Guinea, New Britain, and New Ireland; the straights between the first two being called by his name. The account which Dampier gives of the native inhabitants of Australia, being graphical and, in most respects, accurate, will be read with interest. "The inhabitants of this country," says he, "are the miserablest people in the world. The Hodmadods of Monomotapa, though a nasty people, yet for wealth are gentlemen to these; who have no houses and skin garments, sheep, poultry, and fruits of the earth, ostrich-eggs, &c., as the Hodmadods have; and setting aside their human shape, they differ but little from brutes. They are tall, straight-bodied, and thin, with small long limbs. They have great heads, round foreheads, and great brows. The eye-lids are always half closed, to keep the flies out of their eyes. * * * They have great bottle noses, pretty full lips, and wide mouths. The two fore-teeth of their upper jaw are wanting in all of them, men and women, old and young; whether they draw them out I know not; neither have they any beards. They are long visaged, and of a very unpleasing aspect, having no one graceful feature in their faces. Their hair is black, short, and curled† like that of the negroes, and not long and lank, like that of the common Indians. The colour of their skins, both of their faces and the rest of their body, is coal black, like that of the negroes of Guinea. They have no sort of clothes, but a piece of the rhind of a tree tied like a girdle about their waists, and a handful of long grass, or three or four small green boughs full of leaves, thrust underneath their girdle to cover their nakedness. They have no houses, but lie in the open air without any covering, the earth being their bed, and the heaven their canopy."—(*Dampier's Voyages*, ii. 464., ed. 1729.) Between 1763 and 1766, Wallis and Carteret followed in the track of Dampier, and added to his discoveries those of New Hanover and other islands. These were followed by Cook, who in 1770 discovered and traced the whole E. coast of continental Australia, from Cape Howe at its S. to Cape Yorke at its N. extremity. In the same voyage this great navigator discovered the island of New Caledonia, and did more, in fact, for Australian discovery, than had been done by all the navigators by whom he had been preceded. In this brief notice the name of Bligh should not be forgotten, who, after the mutiny of the Bounty, in 1789, though in an open boat, and devoid of almost every necessary, carried on a series of observations on the N. E. coast, which added considerably to the general stock of knowledge. A colony having been established at Sydney in the previous year, internal and coasting expeditions were simultaneously set on foot for exploring the new land which had become the residence of Englishmen. It may be observed that, previously to this, France entered on the task of southern discovery, but with no great success; Navigators' Islands, and the Louisiades, explored by Bougainville, between 1768 and 1770, being the most important additions her officers had then made to the maps of this division of the world. Edwards, in 1791, Bligh (2d time), Portlock, in 1792, and Bampton and Alt, in 1793,

* But despite this hallucination, Count Strzelecki's is an able and a valuable work. He accounts in part for the disappearance of the savage races that come into contact with civilsed man, by stating that such women among the former as have once had children by the latter, will not again become pregnant by savages. If the fact be so, it is a very interesting one, and leads to several curious inferences.

† This is not generally true. See *ante*, statement by Prichard.

nearly completed the knowledge of Torres' Straits and a great part of the N. coast; but the greatest discoverers, towards the end of last century, were Bass and Flinders, who surveyed a great extent of coast, mostly in open boats. In 1798 they sailed through the strait between Tasmania, or Van Diemen's Land, and the continent. In the last year of the 18th century, Grant explored a portion of the S. coast, which bears his name; and, in the five following years, Flinders completed a survey of the S. and E. coasts, and of the Gulph of Carpentaria, which may be regarded as nearly perfect. In the same years, Baudin's expedition was employed on the same coast and Van Diemen's Land, the French and English commanders having met in Encounter Bay, so named in consequence of that event.

The voyages of Captain King completed the survey of the Australian coast, except for about 500 m. between the lats. of 22° and 14°. The progress of inland discovery has been already noticed.

Extent and Population.—We subjoin a table, partly adopted from Malte-Brun, though with great modifications, of the extent and population of Australia:—

	Surface in sq. miles.	Colonial Population. 1853.	Native Population.	Total Population.
Australia - -	3,000,000	530,000	60,000	590,000
V. Diemen's Land	12,200	70,000	3,000	73,000
N. Caledonia -	6,100	- -	40,000	40,000
N. Hebrides -	2,300	- -	150,000	150,000
Q. Charl. Isles -	1,500	- -	30,000	30,000
Solomon's Isles -	17,600	- -	100,000	100,000
Louisiades - -	760	- -	10,000	10,000
N. Britain - -	24,400	- -	65,000	65,000
N. Guinea - -	305,500	- -	500,000	500,000
N. Zealand -	100,000	22,000	250,000	272,000
Total -	3,470,360	622,000	1,208,000	1,830,000

The number of native inhabitants, though a good deal less than that given by Malte-Brun, is probably overrated; every traveller speaks of the deserted nature of the interior; and Mitchell, whose travels extended over nearly 1-7th part of the continent, does not estimate the aborigines at more than 6,000. The white population, on the other hand, is rapidly increasing.

VI. British Settlements in Australia.—These are both numerous and important. The oldest, most extensive and valuable of our colonies, was founded in 1788 at Sydney, on the E. coast of Australia, in the vast tract discovered by Captain Cook, and known by the name of N. S. Wales. The island of Tasmania, or Van Diemen's Land, was next occupied, but not till 1808. And at still later periods we established the colonies of Victoria and South Australia, on the S. coast of the continent, and Swan River on its W. shores. We have also numerous settlements in New Zealand.

It will be seen from the subjoined notices of these colonies, that their progress has been much more rapid than might have been anticipated. The colonies in N. S. Wales and Van Diemen's Land, were originally intended principally for penal settlements; and their progress was, in consequence, retarded by the vicious character of the population, and by the comparative scarcity of females. But despite these adverse circumstances, whose influence has not yet been wholly overcome, they have continued rapidly to increase in wealth and population. This has been principally a consequence, as already seen, of the suitableness of the country to the growth of sheep, and of the unprecedented increase in the exports of wool; nor is it possible to form any estimate of the vast extent to which this branch of industry may yet be carried.

Emigration to the Australian colonies holds out various advantages to the industrious and enterprising emigrant; though it must at the same time be stated that these are, partially at least, counterbalanced by certain disadvantages. Amongst the former may be mentioned the fact of there being, almost invariably, a pretty brisk demand for additional labour; wages, previously to the gold discoveries, though not extravagant, were high; provisions, except in seasons of drought, which do not often occur, are abundant and reasonable in price; and, above all, the climate is mild, healthy, and well suited to European constitutions, and the country is remarkably free from all varieties of dangerous and offensive animals. The principal drawbacks are the immense distance from Europe, and the consequent cost of the voyage, with the general inferiority of the land, and the exorbitant price set upon it by government. The latter, however, is not a natural, but an accidental and contingent evil; and it may be expected, that the evidence which is being daily afforded of its ruinous influence will, at no distant period, make it be abandoned. At present the minimum price, even of the worst lands in Australia, from 4 to 5 acres of which are required to depasture a single sheep, is fixed at 20*s.* an acre; and lands are not generally sold except in lots of 640 acres and upwards. We should be presuming too much on the patience of our readers were we to enter into any lengthened statements to show the inexpediency of these regulations. They discourage agricultural pursuits, and the emigration of small capitalists; at the same time that they tempt the larger capitalists to become the lessees of vast tracts for sheep pasture, and thus either disperse the population over the surface of the country, or congregate it in towns, which are thus rendered disproportionally large. But this vicious combination of quackery and pedantry will, no doubt, come to an end; and with it will cease the greatest of the existing drawbacks on emigration to Australia.

Among the other drawbacks incident to emigration thither, may be mentioned the fact that all conveyances of land by one individual to another are framed on the model of those of England. Being in consequence alike cumbrous and expensive, they are a great obstruction to its transfer; and instances every now and then occur in which the cost of the instrument of conveyance exceeds that of the land conveyed. An abuse of this sort should, and might, easily be rectified. A grant or conveyance of land by the crown is a short document and costs but little; and this, also, should be the character of conveyances by individuals.

Apart from the extraordinary attraction of the gold-fields, the greater mildness and salubrity of the climate is the principal, or rather, perhaps, the only recommendation in favour of emigrating to Australia rather than to Canada or the U. States. Whether, however, this be a sufficient counterpoise to the peculiar disadvantages attending it, is a point which we do not presume to decide, but which deserves serious consideration from intending emigrants. It seems to be the unanimous opinion of every one acquainted with Australia, and entitled to be heard upon such a subject, that "*in every case, emigrants of every sort will find it for their interest to come out married.*"

We subjoin an account of the number of persons who have emigrated from the U. Kingdom to the Australian colonies and N. Zealand in each year, from 1825 to 1852, both inclusive.

Years.	Emigrants.	Years.	Emigrants.
1825 - -	485	1828 - -	1,056
1826 - -	903	1829 - -	2,016
1827 - -	715	1830 - -	1,242

Years.	Emigrants.	Years.	Emigrants.
1831 -	- 1,561	1843 -	- 3,478
1832 -	- 3,733	1844 -	- 2,229
1833 -	- 4,093	1845 -	- 830
1834 -	- 2,800	1846 -	- 2,347
1835 -	- 1,860	1847 -	- 4,949
1836 -	- 3,124	1848 -	- 23,904
1837 -	- 5,054	1849 -	- 32,191
1838 -	- 14,021	1850 -	- 16,037
1839 -	- 15,786	1851 -	- 21,532
1840 -	- 15,850	1852 -	- 87,424
1841 -	- 32,625		
1842 -	- 8,534	Total	. 316,379

The Government of the different Australian colonies is now nearly similar, and was placed on its present footing in 1851, by the British act of the previous year, the 13 & 14 Vict. c. 59. combined with the 5 & 6 Vict. c. 76. The executive power is vested in an executive council, usually consisting of the governor, the commander of the troops, the colonial secretary, the attorney and solicitor general, and one or two more functionaries. The legislative councils, in which the legislative power is vested, consist of members which are partly elected and partly nominated by the Crown. The elected members represent counties, cities, and districts; the right of election being given to such natural born or naturalised male subjects of the Crown as have freehold estates of the nett value of 100*l.*, or leasehold estates of the annual value of 10*l.*, or who occupy houses of the annual value of 10*l.*, or who hold licenses to depasture lands. Provision is made for varying the limits of electoral districts, and for increasing their number and the number of elected members; but with and under the condition that when two such members are added, another member may be named by Her Majesty, so that one third part of the additional members may always consist of nominees, that being about the proportion which the latter at present (1854) bear to the whole number of members. The governors and legislative councils are empowered to make laws, provided they be not repugnant to the law of England, or interfere with the rights of the Crown to the lands belonging to it within the colonies, or to the revenue accruing from the same.

These arrangements, which have obviously been formed on the model of the English constitution, appear (with the important exception of the *proviso* in regard to the land) to give the colonists all they could well desire. They are now, in most respects, self-governed; and their connection with England can rarely be productive of aught save advantage to them. The nominees of the Crown are intended to act as a check on the more democratical portion of the assemblies, and to prevent the hasty adoption of extreme resolutions. Their functions are akin to those of the House of Lords in this country; and they seem to be as necessary in Australia as the Lords are indispensable here.

Nominees are, however, very unpopular in all colonies. They are looked upon as mere creatures of the Crown, and are supposed to be more attached to its interests than to those of the colony. Probably, therefore, it would be better were a second chamber formed, consisting of members chosen by a higher class of electors, or of nominees for life. Provided the great end be gained of insuring stability to the government, and checking all rash and one-sided proceedings, it is of less importance how it is brought about; and the least offensive the mode in which it is secured the better.

Our readers will probably be surprised to learn that it has been gravely proposed, in N. S. Wales, to establish, instead of the nominees, a mimic House of Lords! But no such proposal could be seriously entertained. Some hundred years hence it would not be so preposterous as at present. The distinction between the descendants of convicts and free settlers will then be forgotten; and if the taste for titles should survive so long, it may be gratified without inquiry into the ancestry of those on whom they may be conferred. But even if there were no other objections to the measure, a chamber of life nominees would serve every purpose that could be served by a house of peers. The members would be quite as independent, and would not be encumbered with the care of providing for ennobled descendants.

The power given to the governors and legislative councils of varying the electoral districts and the number of members is one that is liable to much abuse, inasmuch as it may give to any party or faction which happens to have a majority the power of perpetuating its ascendency, without regard to the public interests. But this is an abuse to which all representative governments are liable; and can only be checked by the good sense and intelligence of the community.

The colonies in Continental Australia are, taking them in their alphabetical order, Australia South, Australia West, Cooksland or Moreton Bay, New South Wales, and Victoria. Of these we beg to subjoin the following brief notices, viz.

AUSTRALIA (SOUTH), the name given to that portion of the great Australian Continent comprised between the 132nd and 141st degs. of E. long., and extending from the sea N., to lat. 26° S.; having E. the region watered by the Murray and its tributaries, and the colony of Victoria. Area loosely estimated at 200,000 or 225,000 sq. m. Pop. on the 31st December, 1852, 68,663, of whom 36,310 were males and 32,353 females.

The coast of S. Australia is more indented than that of any other part of the continent: Spencer's Gulph, which stretches inwards in a N. N. E. direction for about 200 m., is separated from St. Vincent's Gulph, lying more to the E. by Yorke peninsula. Opposite the latter and the Gulph of St. Vincent, is Kangaroo Island, about 100 m. in length from W. to E., and 35 m. in its greatest breadth. This island, which is said to contain several fertile, grassy, and well-wooded tracts, has on its N. side the harbour of Nepean and the settlement of Kingscote; but hitherto few portions of it have been occupied. Most part of the settled land in the colony lies on the E. side of the Gulph of St. Vincent, in which direction, also, is the greater portion of the explored territory. Several parallel mountain or hill ranges traverse this part of the country from S. to N., but none of them is of any great elevation: Mt. Bryant, apparently the highest peak, reaching to only 3,012 ft. above the sea. The surface is mostly undulating and abounds in "park-like scenery," interspersed with scattered woods or scrub. The hills are moderately steep, and their sides covered with forests of gum-trees (*eucalypti*), casuarinas or she-oak, pines, various kinds of acacias, &c., or with a sward affording extensive pasturage; but their summits are uniformly bare, and exhibit formations of granite, gneiss, mica, quartz, clay-slate, sandstone, and many varieties of limestone. Some of these rocks have been found to contain prolific veins of valuable minerals; and mining has, in consequence, become a very important branch of industry. South Australia has no great river, except the Murray, which, however, as already seen, is of the highest importance. Unluckily the entrance to it is obstructed by a bar, which prevents the access of any but small vessels from the sea into Lake Alexandrina at its mouth. But a tram-road, that will probably be replaced by a canal, has been already constructed from where the Murray ceases to be navigable to Port Elliott, on the N. E. coast of Encounter Bay, lat. 35° 32′ 45″ S. long. 138° 43′ 15″ E.; and the navigation and trade of which the Murray is no doubt destined to be the channel, will eventually render this an important *entrepôt*. In addition to Lake Alexandrina and that of Albert connected with it, this territory comprises the large and mostly unexplored Lake Torrens, and a great number of ponds and creeks. It is also watered by numerous small rivers, along the banks of which there is commonly a rich alluvial soil: one of these, the Torrens, on which Adelaide, the cap. of the colony, is situated, loses itself in a marsh before reaching the sea. It is stated that where water is not abundant on the surface, it may generally be obtained by sinking wells from 20 to 100 ft. in depth. Between May and October, S. W. winds chiefly prevail, and are accompanied by showers: these are, however, less heavy than in W. Australia or Van Diemen's Land, and the mean annual fall of rain at Adelaide, during the 5 years ending with 1843, was found to be only 19·9 inches, being considerably less than in either New South Wales

or Phillipsland; but evaporation is much less rapid than in the former of these regions. The annual temperature is a good deal higher than in England, and more analogous to that of some parts of Italy. The thermometer ranges from about 37° to 115° Fahr., and ice as thick as a shilling is rare in the winter months. In summer, that is in January, February, and March, a hot and oppressive wind occasionally sets in from the N., which, however, is soon followed by a cool breeze from the S. It is said that no drought has occurred in the colony since its settlement. The atmosphere is, in general, remarkably clear and salubrious. Mr. Wilkinson states, that with emigrants establishing themselves in the country, "a house to live in is a secondary consideration on account of the healthiness and geniality of the air and climate, which enables persons to do things there that would consign them to a bed of sickness in England. Thus it is common to sleep for nights together in the open air, without any injury to health; and on first entering on a country life, a tent or such-like slight covering is considered amply sufficient for all wants till the emigrant has ploughed, sown, and fenced his land." (*S. Australia*, p. 62.) Storms sometimes occur, and earthquakes have been felt, but the latter have not been productive of damage. Dysentery and influenza are the only epidemic diseases, and the former is said to have become rarer than at the first settlement of the colony. Ophthalmia appears to be less frequent than on the E. side of the continent; Mr. Wilkinson says it is produced by a small fly, which at certain seasons infests the country.

It has been stated that of the country E. of St. Vincent's Gulph about a third part is adapted for agriculture or grazing, that another third is covered with scrub or forest, and that the remaining third is barren.

The most extensive grazing tracts lie N. of Adelaide: in that direction is a good deal of level land, watered by the Gawler, Broughton, Wakefield, and other rivers, which terminate about 100 m. from the capital in a chain of grassy downs. E. and S. of Adelaide the country is more broken, but there are many fertile valleys, and the hill slopes are well adapted for pasture. Along the shores of Lake Alexandrina and the banks of the Murray for 100 m. from the lake are some good sheep and cattle runs, with strips of rich alluvial land. Many valuable tracts border the coast from Encounter Bay to the Glenelg river on the frontier of Phillipsland. Yorke and Eyre peninsulas, on either side of Spencer's Gulph, appear to be much less fertile than the other explored portions of the colony: the latter has the harbour of Port Lincoln, and some good grazing tracts, but the greater part of it is said by Mr. Eyre to be "barren, arid, and worthless." Its table land is generally about 1,300 ft. in elevation.

The land in S. Australia is sold in smaller lots than in New South Wales; tracts of various sizes being disposed of at the government quarterly sales, the minimum upset price being here, as elsewhere, fixed at the extravagant rate of 1*l.* per acre. From 1835 to 1852 inclusive, there were sold 790,077 acres, at an average price of about 1*l.* per acre. Under the existing regulations for their disposal, the waste lands are divided into the three classes of town, suburban, and country lots; the intended sales are notified by proclamation at least 3 months before sale; and on purchase a deposit of 10 per cent. is required to be paid immediately, and the remainder within a month. Country lots put up and not bid for may be claimed by a purchaser without competition; and persons may apply for 20,000 acres without competition, the price, however, not to be less than the minimum of 20*s.* an acre. The deeds of purchase contain a grant of all above and below the soil; the government reserves no right to the minerals that may be discovered, or to make roads across the property, as is the case in New South Wales; its only claim is to the sea coast within 100 ft. of high-water mark. A tract of 14,000 square miles has been leased for pastoral purposes for 14 years from the 1st July, 1851, and 1,143 do. under leases annually renewed.

The S. Australian Company has purchased some extensive tracts, which are let out in lots, for farming, &c., on leases of 21 years, at a rent of 4*s.* per acre during the first period of 7 years, 5*s.* per acre during the second period, and 6*s.* do. during the third. The lessee may purchase the freehold he rents, but in their report of 1848, it is stated, "that the policy of the company is not to sell either town or country lands except in particular circumstances, and at a large advance on the inventory rate." From the same report it appears that the total quantity of country lands belonging to the company, and under lease, on Sept. 29th, 1847, amounted to 21,657 acres; whereof 20,015 do. were let to about 250 tenants, for agricultural purposes, at an average rent of nearly 5*s.* per acre, and 1,612 acres for pasturage at about 1*s.* per acre. In all, their rental was then stated to amount to 8,874*l.* per annum, of which that in the town of Adelaide produced 4,626*l.*: the value of the company's property in Australia was estimated at 308,921*l.* No official information in regard to the extent of land under cultivation has been obtained later than 1850, since which, however, it is known, notwithstanding the scarcity of labour, to have increased very considerably.

The value of the exports of farm produce in 1852, amounted to 352,311*l.*, viz. wheat and flour 190,881*l.*; wool 115,877*l.*; bran and pollards 10,765*l.*; the rest being made up of oats, barley, hay, butter, hams, bacon, cheese, and live stock. It is difficult, amid the conflicting statements put forth by interested parties, to obtain any really satisfactory information with respect to the agricultural capabilities of the land either in this or in the other Australian colonies. On the whole, however, it may be fairly concluded that the really fertile land, though of very considerable extent, bears but a small proportion to that of a secondary and inferior description; and the probability is that wool-growing and mining, rather than tillage husbandry, will, in the end, be the staple businesses of the colony.

The finest corn-growing district is in the neighbourhood of Mt. Barker, S. E. from Adelaide. From 30 to 35 bushels of wheat per acre is said to be a low average crop for that district, and from 40 to 45 bushels have repeatedly been raised. (*Dutton*, p. 201.) Some samples of wheat have been exhibited at the Adelaide agricultural shows weighing upwards of 67 lbs. per bushel. But the average fertility of the corn-growing portions of the colony is much below this, and, according to Mr. Dutton, may be taken "at about 20 bushels of wheat of 60 lbs. per acre." The produce of barley per acre may be estimated at 30 bushels, averaging, according to Wilkinson, 56 lbs. the bushel. Oats are said to succeed, though we should suppose that the climate was too dry for them. Maize, on good soil, yields from 50 to 60 bushels an acre, and potatoes frequently from 9 to 10 tons; but these crops, with rye, which is chiefly raised by the German colonists in the villages round Adelaide, are of minor importance.

The S. Australian Company requires that some amount of money shall be expended by the tenant in improvements, and, according to their circular, "the lowest sum recommended to be deposited as farming capital for a farm of 67 or 80 acres, is 150*l.*, and for a farm of 134 or 160 acres 300*l.*" Mr. Wilkinson, with whom we cordially concur, advises all persons commencing farming to purchase land in preference to renting it; for though the prime cost be 1*l.* per acre good land cannot be rented under at least 2*s.* 6*d.* He adds that under ordinary circumstances no person should set up as farmer unless he be possessed of 500*l.* He calculates that the purchase of 80 acres of land, and of stock, seed, provisions, and labour for the first year, will cost from 330*l.* to about 490*l.*, according to circumstances. But the return from 80 acres of wheat, at 20 bushels to the acre, he estimates at 320*l.*, and he states that the first year the produce may pay for all the land, farm buildings, cattle, and a large proportion of the labour already hired, and that the second year the farmer may be entirely cleared of all his first outlay, and have his farm complete. (*Wilkinson*, pp. 81, 82.) A substantial cottage of timber and stone, or clay, costs about 30*l.* or 40*l.* Good farm implements are made at Adelaide and elsewhere; and a Mr. Ridley is stated to have benefited the colony and distinguished it in the annals of art and science by the invention of a machine which reaps, thrashes, and winnows at the same time at the rate of nearly an acre an hour. This extraordinary machine, the performances of which appear to border on the marvellous, is minutely described by Mr. Wilkinson, and is alleged to be of great practical utility.

The country produces all the choicest fruits of southern France and Italy, such as vines, olives, mulberries, oranges, lemons, pomegranates, melons, peaches, almonds, figs, &c., with tobacco and hops. Hitherto, however, but little attention has been paid to the culture of the finer descriptions of fruits; and this is not to be regretted. We agree entirely with Mr. Sidney (*How to Settle and Succeed in Australia*) in his condemnation of all projects for making wine, raising cotton, and cultivating olives, indigo, &c., on an extensive scale, either here or any where else in Australia. Some 50 or 100 years hence, when the population becomes dense and wages are comparatively moderate, such branches of industry may be undertaken; but at present they can be productive of nothing but failure and a misapplication of the capital of the settlers. Indigo is said to be indigenous in parts of the colony, with sarsaparilla and other drugs. The tobacco raised is chiefly used for washing sheep, but it is also fitted for smoking.

In 1838, the stock of sheep amounted to 28,000; in 1846, it had increased to 530,000; and is now (1852) probably little short of 1,600,000. It is said that on the best runs an acre will suffice to feed a sheep the year round; but there can be no manner of doubt that this statement is extremely exaggerated, or that such runs are very rare, or both. According to Mr. Wilkinson, a capital of 1,000*l.* is required for farming 600 sheep; nearly 500*l.* are sunk in the first year, and provided the increase

be sold advantageously, that year will yield only 40*l.* profit. (p. 141.) The scab is so prevalent amongst the flocks that Mr. Dutton considers he is "not far wrong in saying that half the sheep in the province are infected with it." On the other hand, ovine catarrh is by no means a common disease, and foot-rot is confined to the flocks pastured in marshy runs. Wild dogs, which are the great pest of the colony, sometimes prove very destructive to the sheep; but their numbers are rapidly diminishing. The S. Australian Company are the largest sheep proprietors: in 1847, they had nearly 48,000 sheep, and 2,600 horned cattle. Mr. Dutton, of Aulatz, a few years ago possessed 20,000 sheep, several other proprietors own from 10,000 to 16,000, and flocks of from 4,000 to 5,000 are common. Of late years some large sheep-runs have been leased around Rivoli Bay and other parts of the S. E. coast, and beyond Port Lincoln in the W. In 1845 the exports of wool amounted to 1,331,788 lbs., and in 1852 to 2,714,504 lbs.

The breeding of cattle and horses is not pursued on nearly so extensive a scale as in New South Wales or Victoria. The breeds were originally imported from the Cape of Good Hope and Van Diemen's Land. Bullocks are mostly used for agricultural labour. Before the introduction of farm stock into the colony, the flesh of the kangaroo and emu formed the principal food of the settlers; at present these animals, from the wholesale destruction to which they have been subjected, are seldom met with in the vicinity of the settlements.

In 1843, at a period when this, with the other Australian colonies, was labouring under the greatest depression, arising from the excess to which speculation and over-trading had previously been carried, a sudden impetus was given to the enterprise of the colonists by the discovery of valuable metallic ores in different parts of the country. Such was the influence of this discovery on the sale of land, that whereas in 1843 the government sold only 598 acres, in 1844 it sold 3,428; in 1845, 69,658; and in 1846, 31,301 acres, realising as much as 75,715*l.* to the colonial treasury. In 1845 three blocks of 20,000 acres each, and in 1846 one lot of the same size, were sold expressly for mining purposes.

Lead and copper are the principal metals. The former is most abundant E. and S. E. from Adelaide (in the Glen Osmond, Wheal Gawler, Wheal Watkins, &c. mines), at Mt. Beevor, and at Gattagolingo, close on the coast near Cape Jervis. Copper is raised in numerous localities in the hill chain between the region of the Murray and the Gulphs; also in a plain 15 m. S. of Adelaide, at Gattagolingo, at the head of St. Vincent's Gulph, and W. of Port Lincoln. The ores are met with near the surface of the ground, and some of them are extremely rich.

"The ore of the Burra-burra mine (about lat. 33½° S., long. 139½° E.) contains, it is stated, 75 per cent. of metal (copper), a pure oxide, requiring no flux to smelt it; a common blacksmith's forge producing sufficient heat to run the metal. The lode is 17 feet wide, of vast extent, and is quarried out like stone, in immense masses. Ten weeks' working have sufficed to produce 1,700*l.* value of ore." (*Wilkinson*, p. 256.) The South Australian Mining Association, which commenced working this mine with only 2,000*l.* as working capital, had, in 1846, built a village with 400 inhabitants, had nearly completed smelting works, and had sunk to the depth of 144 ft., and in length, measuring all the shafts and galleries, to 1¼ mile. "They have raised in one year 7,200 tons of copper ore, worth, at an average, at least 25*l.* per ton (or 180,000*l.*), at a cost, including all expenses of preliminary charges, and also buildings and improvements, of 16,624*l.*" (*Ibid.* p. 283.) The Kapunda copper mine, the first discovered, is also very productive, and the vicinity of many of the mines to Adelaide and the sea, give them material advantages. The Glen Osmond lead mine has been found to yield 75 per cent. of lead, besides a proportion of silver; and the ore is said to have fetched 13*l.* 13*s.* per ton, when the cost of raising it was only 4*l.* 4*s.* (*Dutton*, p. 297.)

The discovery of the gold fields in Victoria and N. S. Wales has had a very unfavourable influence over the mining industry of this colony. At first large numbers of the miners withdrew from their employment; and some of the less productive mines have been wholly abandoned. And yet, despite these untoward circumstances, the value of the copper and copper ores shipped from the colony in 1852 amounted to 374,778*l.* Now, however, that wages have been raised nearly to their level in the adjacent settlements, the efflux of labourers has ceased; and some of the miners who had left have returned to their employment.

Gold has been found in this colony, but not hitherto in such abundance as to make the search for it profitable. Manganese, zinc, quicksilver, antimony, &c. have also been met with; but we have not heard that any mines of these metals have been opened. Iron of excellent quality is everywhere plentiful, and foundries have been established in Adelaide, at which steam-engines have been made of iron produced in the colony. The absence of coal — a mineral not hitherto discovered in S. Australia — is a formidable obstacle to the reduction of the ores, which are mostly sent to Swansea to be smelted. Mr. Dutton contends that the cost of freight might be avoided or greatly reduced by sending the ores for smelting to Newcastle, in New S. Wales, where coal is supplied at the pit's mouth at from 6*s.* to 8*s.* per ton. And he thinks it probable that the ships laden with wool from that colony will soon be generally sent round to S. Australia to take in copper ore for ballast. The transport of the ore from the mines to the coast is at present effected by drays, carrying from 1½ to 2 tons of ore, and drawn by 6 or 8 bullocks; but the construction of various iron and wooden railways is projected, and a company has been formed for making a railway from Adelaide to its port.

There are in Adelaide numerous flour-mills, breweries, malt-houses, machine factories, and brass and iron foundries; with manufactures of barilla, tobacco, soap, candles, leather, earthenware, &c. A manufactory of woollen goods has also been started, though it is not easy to imagine that it can succeed, except for very coarse fabrics. Labour has always been in great demand; and, since the discovery of the gold fields in the adjacent colonies, wages have rapidly increased. Clothing may generally be had at but a small advance upon the home prices; but tools are often scarce and dear. The expence of erecting a country dwelling varies from 35*l.* to 50*l.* Mr. Wilkinson gives an account of the life of the settler in the rural districts, from which we extract the following passages: —

"Whoever comes to your hut, whether a stranger or not, drinks with you, not wine, but tea, for which the kettle is always on the hob, to be ready for any new arrival. Tea-drinking and tobacco-smoking are in vogue among all classes, and serve to while away many a dull hour. . . . During the heat of the day, if no particular work presents itself, you remain in your hut, to talk or read, smoke and drink tea; but if you are busy, either draughting, branding, or seeking cattle, you pay little attention to the broiling sun. . . . Dinner is generally on the table at 2 or 3 o'clock, and consists of vegetables and salads grown upon the farm, and meat reared and fattened upon the pastures surrounding. It is accompanied by tea, which makes its appearance at every meal; and among the polite you may be asked to take a cup of tea instead of wine, during the repast. At the tables of the rich and luxurious, the difference is not seen between Adelaide and England. . . . All work is over about 6 p.m., and tea ready; and if no friend or traveller is passing the night at the station, the evening is consumed over a paper or book, accompanied by smoking and tea-drinking; or, if you please, your horse is put in requisition, to carry you to a friend's hut, or whithersoever pleasure attracts or business requires." (*Wilkinson*, pp. 116—199.)

We subjoin the following official account of the quantities and values of the principal articles of native produce and manufacture exported from South Australia in 1852.

Articles.	Quantity.	Total Value. £ s. d.
Horses - - -	No. 245	6,530 0 0
Bacon and Hams -	- -	2,038 0 0
Bark - - -	Tons. 114 16 0 0	709 0 0
Cordage, Rope, and Twine - -	- -	990 0 0
Barley - - -	Qrs. 1,969½	3,864 0 0
Bran and Pollard -	Tons 1,428½	10,765 0 0
Flour - - -	Tons 7,519	172,936 10 0
Oats - - -	- -	5,681 10 0
Wheat - - -	Qrs. 8,552½	19,737 9 0
Hay - - -	Tons 424½	2,592 0 0
Metals, viz. Copper -	Cwt. 39,187 0 10	161,847 0 0
Ores, viz. Copper -	Tons 11,311½	200,301 0 0
Regulus - -	Tons 403	12,630 0 0
Spirits - - -	Galls. 66,216	16,923 10 0
Tallow - - -	Cwt. 1,462	2,075 0 0
Whalebone - -	- -	290 0 0
Wood, square and split	- -	14,071 0 0
„ manufactured -	- -	2,687 10 0
Wool (9493 bales) -	Lbs. 2,714,504	115,877 0 0

Total Value of Exports during the same year - 1,787,741 10 7*
Total Imports - - - - - - - 798,811 19 8

Of the latter, the value of the portion furnished by the U. Kingdom amounted to £517,850 13*s.* 2*d.*

The whole trade centres at Port Adelaide; and is at present in great part carried on by shipping belonging to S. Australian colonists. There are no harbour dues, tonnage rates, or other duties on shipping in any of the ports of this colony. Hence they are especially well fitted for the repair and refitting of the ships engaged in the Southern whale fishery. For an account of Adelaide, see Supp. Vol. II.

* Of this sum, bullion and coin, principally from Victoria, amounted to £873,004 9*s.* 7*d.*

Account of the Specie, Gold, Bullion, and Tokens in the possession of the S. Australian Banks on the 31st December, 1852, and of the Average Amount of their Paper in Circulation in the course of that year.

Name of Bank.	Specie.			Gold, Bullion, and Tokens.			Circulation.		
	£	s.	d.	£	s.	d.	£	s.	d.
Bk. of South Australia	109,466	15	7	323,594	9	1	129,638	18	4
Bk. of Australasia -	71,887	6	4	82,877	18	7	45,502	0	0
Union Bank - -	56,670	14	6	219,001	5	6	63,679	13	2
Totals - - -	238,024	16	5	525,473	13	2	238,820	11	6

The government of this, as of the other Australian colonies, is vested in a governor, an executive and a legislative council; the latter consisting of members, of whom two-thirds are elected by the different constituencies, and the other one-third nominated by the crown.

S. Australia forms the diocese of a bishop of the Church of England, who resides at Adelaide.

We subjoin a note of the receipts and expenditure of the Local Government in the following years:—

	Total Revenue.			Total Expenditure.		
	£	s.	d.	£	s.	d.
1844 - -	27,881	12	10	31,712	17	3
1845 - -	37,175	9	10	46,710	6	6
1846 - -	48,017	19	8	53,382	15	1
1847 - -	66,946	10	8	67,799	16	1

The ordinary expenditure for the Government establishments increased from 27,000*l*. in 1844 to 37,000*l*. in 1847, the latter of which, it will be observed, was little more than half the total expenditure.

South Australia was erected into a colony by an act of the British Parliament in 1834, when it was provided that no convicts should at any period be transported to it from the mother country or elsewhere by the British government. (See ADELAIDE.)

AUSTRALIA (WESTERN), so called from its being situated on the W. side of the continent, is understood, in its most extensive acceptation, to comprise the portion of Australia W. of the 120th deg. of E. long.; but in a more limited sense the term is applied to what was formerly known as the "Swan-river colony," lying between the 32nd and 35th degs. of S. lat., and the 115th and 119th degs. of E. long., comprising the S.-W. portion of the continent, its W. and S. coasts being washed by the Indian Ocean. The occupied region is about 300 m. in length from N. to S., by 150 m. in average breadth. Pop. very limited, amounting, on the 1st of Jan. 1852, to 8,711, including 1432 convicts. The aborigines are estimated at from 4,000 to 5,000.

Three parallel mountain or hill ranges run from N. to S. through this colony, progressively increasing in height from the W. coast to the interior: the culminating summit near King George's Sound is about 3,500 ft. above the sea. The Swan River, with its main stream the Avon, makes its way through these ranges, and after receiving the Helena and Canning widens into an estuary which unites with the ocean in lat. 32°, opposite Rottnest Islands. The town of Freemantle is at its mouth, and Perth, the cap. of the colony, about 12 m. farther up. The other princip. rivs. are the Murray, Preston, Blackwood, Denmark, and Raleigh, all to the S. of the Swan River, but none of them is of any very considerable magnitude. The inlets of the sea are numerous: principal, Cockburn Sound, Peel Inlet, and the bay *du Geographe* on the W., with Flinders's Bay and King George's Sound on the S. Cockburn Sound, though its entrance is unluckily impeded by rocks, forms a sheltered and secure harbour; and on its shore, where there is deep water, it is intended to build the town of Rockingham. The mouth of the Swan River is the next most eligible harbour on the W. coast. There are also anchorages at Peel's Inlet, Port Leschenault, Augusta, &c., and in Shark's and Doubtful Island bays beyond the limits of the settled territory. King George's Sound has all the qualities of a good harbour, except that it is often difficult to leave it, owing to the prevalence of strong westerly gales. All round the coasts are numerous petty inlets, lagoons, and lakes; and salt-pools and marshes are scattered over the interior. Much of the surface is, notwithstanding, but indifferently watered. From April to July a good deal of rain is brought by W. winds to the territory bordering the sea; the quantity falling at King George's Sound during the winter months being about equal to the fall on the W. coast of England; but the country 100 m. inland is much less abundantly supplied with moisture, and in the hot season, between November and April, droughts are common. The climate is favourable to the constitution of Europeans; though in summer the days are hot, the nights are invariably cool. Dysentery of a mild character, and ophthalmia, are the principal diseases which affect Europeans. Granite, gneiss, and red sandstone, intermixed with clay, and roofing-slate, and limestone, are the prevalent geological rocks; along the bay du Geographe basalt is abundant; and in one locality there is a columnar basaltic formation similar to the Giant's Causeway. There appears to be a decidedly greater breadth of bad and inferior land in this than in the other Australian colonies, though with manure good crops may be produced. The weight of the wheat has sometimes exceeded 70lb. per bushel, and its quality generally has been as good as that of South Australia. Soil upon which sheep have been folded produces at an average about 20 bushels an acre, but the yield might be increased. Of 7,634 acres under tillage in 1851 no fewer than 4,304 were under wheat, and 805 acres under barley: the soil and climate are said not to be suited to oats and flax.

The herbage, except in the best watered districts, is scanty, and at a medium 5 or 6 acres are required for a single sheep. The stock of the latter is now, however, rapidly increasing. In 1851 the exports of wool amounted to 356,153 lbs., of the estimated value of 16,768*l*. 7*s*. 8*d*. The quality of the wool is similar to that from the sister colonies; but owing to its being at first sent over in bad condition, it brought a less price. It constitutes the main article of export, and is susceptible of an indefinite increase. (*Southey on Colonial Wools*, p. 81.) Sandal wood promises to form a valuable article of export, being sent to Singapore and China. There is likewise an available supply of ship-building timber, which grows quite close to the sea: it is analogous to Honduras mahogany, is of large size, resists the sea-worm, and is not apt to split or warp, while at the same time it is more easily worked than any other wood in Australia. It has been used in the colony for building small vessels, and also for rafters, &c., in houses. A shipload was recently supplied at the dock-yard at Chatham, and was highly approved of. The vine, the fig, and the olive are beginning to be cultivated. Zante currants thrive as well as the grape, but none have been produced for exportation. Wine has been made for consumption in the colony, and projects are entertained for procuring a supply of German vine-dressers. In 1852 the value of the imports amounted to 97,304*l*., whereof those from Great Britain amounted to 65,447*l*.: the value of the exports in the same year amounted to 16,571*l*., wool (ex. trifling quantities of timber, whale-oil, and whalebone) being almost the only article.

Coal of good quality has been traced in veins of considerable thickness over a large surface, and, it has been stated, within 4 or 5 m. of the coast. At present the cost of bringing it down for embarkation, in consequence of the high price of labour, exceeds the cost of English coal; but were smelting works established near the pits, the reduction of the ores of S. Australia might, perhaps, prove a profitable business, no coal having hitherto been found in that colony. Iron ore of excellent quality is met with in large quantities, as is also zinc; and traces of copper, lead, quicksilver, &c., have been found, though no mines of these metals have been opened. A trade in gums is commencing, their collection being entrusted to the aborigines, who dispose of them to the Europeans at the various settlements. A species of *Phormium tenax*, or tough flax, is stated to be amongst the indigenous plants which might be turned to account.

Very little trade is carried on from this colony to South Australia or New South Wales, but there is some communication with Singapore and the Mauritius. To the latter the exports are sheep, cattle, potatoes, and horses; the last being highly prized both there and in India.

The first settlements in this territory were established on Swan River in 1828; and on the formation of the colony very large grants of lands were made to individuals, to which cause its comparative want of progress may be in part, at least, attributed. One settler had a block of 250,000 acres, and there were other grants of a similar nature, so that not less than 1,500,000 acres had been appropriated previously to 1841. Labour is scarce, and wages high. The community being small, they would not be able, from want of capital, suddenly to receive and employ any great number of immigrants; but it is supposed that from 1,500 to 1,600 labourers annually might be provided for with as much advantage as in any other colony.

Owing to the extensive grants originally made, land may be obtained at a low price in this colony. In 1844, a million acres might have been purchased at 3*s*. an acre. Squatting, or the occupation of land, at a low rent for the depasturing of sheep, was for a while prohibited! There can, however, be no manner of doubt that the inferior quality of the land, and the want of moisture in the inland districts, have been the main causes of the slow progress of the colony. Had the soil been moderately fertile, the obstacles alluded to above would have been got over. At present the colony is in an improving condition. And it should be borne in mind that the favourable position of the Swan River colony for commerce with the Asiatic Archipelago, and the countries washed by the Indian Ocean, and its greater proximity

to Europe, are advantages which it is probable will hereafter contribute to its prosperity.

The government is administered by a lieut.-governor appointed by the crown, and assisted by a colonial council. It is divided into cos. Princip. towns, Perth, Guildford, Freemantle, Rockingham, York, Beverley, Australind, Augusta, and Albany, but none is of much importance. Publ. rev. (1852) 29,533*l.*; expenditure 34,777*l.*

COOKSLAND, is a name proposed to be given, in honour of its great discovever, to the Moreton Bay, or northern division of the colony of New South Wales, extending along the E. coast of Australia, between the Tropic of Capricorn (23½) and the 30th deg. S. lat., with an undefined boundary toward the W. But the occupied portion of the territory extends only between the 26th and 30th deg. This portion lately consisted of the co. Stanley round Moreton Bay, and the squatting dists. of Clarence River, Darling Downs, New England, &c.; but the greater part of it is now (1848) probably subdivided into cos. (*Parl. Rep.* 1848, p. 104.) The pop. of this extensive territory was, in 1846, estimated at only 3750 individuals of European descent, besides a few aborigines. The Australian Andes, a mountain chain mostly from 60 to 70 m. distant from the Pacific Ocean, and separating the affluents of the Darling flowing W. from the rivs. flowing E., have a general elevation varying between 3000 and 4000 ft.; but some heights in New England are much more lofty, and Mt. Lindsay, in a spur near Moreton Bay, rises to 5700 ft. above the sea. Immediately on proceeding into the territory from New South Wales, the mountains are seen to assume a peaked and volcanic shape; they are mostly granitic, and sandstone being less prevalent than in the cos. round Sydney, the soil is superior. Moreton Bay, the most remarkable geographical feature in Cooksland, is an inlet of the ocean between the 27th and 28th degs. S. lat., and 153 and 153¼ degs. E. long.: it is 50 m. in length from N. to S., 20 m. in width, studded with islets, and sheltered seaward by Moreton and Stradbroke islands. Its shores, which form the co. Stanley, are suited to the culture of both European and tropical products. Proceeding from S. to N., the principal streams flowing E. through the territory are the Clarence, Richmond, Logan, Brisbane, and Widebay rivs., all of which are navigable, but, like the streams nearer to the S., they have bars at their mouths. The Clarence, the largest riv. in E. Australia, empties itself into Shoal Bay, lat. 29° 20′ S. It is stated to be navigable for steamboats of 100 tons burden for 80 m. above its bar, and throughout this part of its course its banks consist of rich alluvial soil, well fitted for agricultural purposes; in the upper part, it waters a fine pastoral region on which many squatters are settled; and near its mouth it encloses a large island. The Richmond, about 45 m. further N., is navigable for 50 m. from the ocean. The country between this riv. and Moreton Bay, a distance of 60 or 70 m., is a continuous forest of pines, some of very large size; and the river Tweed toward its centre is a good deal resorted to for cedar timber by coasting vessels from Sydney. The Brisbane, a large and fine stream, with a very circuitous course, is navigated by steamers for 60 or 80 m. from its mouth in Moreton Bay; on it is Brisbane town, the cap. of Cooksland. Widebay riv. enters the sea at Port Curtis, the N. limit of the explored region. In 1845, the average temp. at Moreton Bay was found to be about 58° Fah.; in Dec. of the same year it varied from 72° to 80°; and in June, it was about 54° Fah. Nothing can exceed the salubrity of the climate of this region. The traveller, it is said, may sleep in the "bush" uncovered on the bare ground; and may ford rivers, ride in wet clothes, and expose himself with all but perfect impunity to every variation of temperature. (*Hodgkinson's Australia*, &c., p. 107.) Owing to the vicinity of the tropic, rains are more abundant and regular than further S.; and the alluvial flats along the sides and near the mouths of the rivers being unusually fertile, the country is better fitted for agriculture than the central region of New South Wales. The crops, also, are less injured by droughts. At present, wheat, salted beef, wool, skins, tallow, and pine timber, are the principal articles of export. According to Mr. Kent, government superintendent at Moreton Bay, the average produce per acre of the agricultural dists. between the Clarence and Widebay riv., is, of wheat, from 20 to 30 bushels, of maize from 50 to 60 do., of sweet potatoes 30 tons, and of tobacco about 15 cwts. (*Lang's Cooksland*, p. 238.) Sugar-cane of the Tahitian variety is indigenous. Tobacco, cotton, coffee, indigo, rice, bananas, oranges, melons, pine-apples, arrow-root, flax, millet, guinea-grass, come to perfection; the culture of silk has been successfully attempted, though hitherto not to much extent: the temperature is suited to the vine, but periodical rains occurring when the fruit is ripe, spoil the grapes, so that Cooksland is not likely to become a wine-growing country. Darling Downs, New England, and indeed most parts of the territory, except the alluvial flats, are extremely well adapted to sheep rearing, and a good deal of land is occupied in large runs by squatters. In 1846, the stock of sheep throughout Cooksland was estimated at 550,000, and that of horned called at nearly 58,000 head: the average weight of the fleece is less than in Phillipsland. At Moreton Bay it is stated to be 2½ lbs., while at Port Phillip it is 3 lbs. per head; no deterioration in the quality of the wool is, however, perceptible even at the N. extremity of the colony, though that is here the warmest. Some squatting stations have been occupied as far N. as the river Boyne, and extensive tracts have been discovered, supposed to be well adapted for sheep, still further N. within the limits of the tropic. (*Lang*, pp. 132, 133, &c.) Sheep weigh at an average from 70 to 80 lbs. at Moreton Bay, and cattle from 13 to 14 cwts. The Moreton Bay pine (*Araucaria Cunninghami*) is confined to the geographical limit of Cooksland; it grows to from 100 to 150 ft. in height, and yields excellent timber for masts and spars. The bunya-bunya pine (*A. Bidwellia*), red cedar, iron-bark, blue gum, rose and tulip woods, box, silk, and forest oaks, &c., are noble trees. "Dr. Leichhart found not fewer than 110 different species of trees, exclusive of parasitical plants and shrubs, in the brush or alluvial flat land of Moreton Bay, and 27 in the open forest, and along only 30 paces of a cattle track at Limestone Plain, near Ipswich, not fewer than 17 different species of grass in seed at the same time." (*Ibid.* p. 133.) Honey is becoming an article of commerce. Dyewoods and gums abound in great variety, but they have not yet (or had not at the date of last report) found a place in the markets. Turtle of various sorts, and pearl oysters, are abundant on most parts of the cost. Coal has been met with on both sides of the Australian Andes, but hitherto no mines have been opened.

Brisbane town, its cap., consists of three contiguous villages on opposite banks of the Brisbane riv., about 10 m. from its mouth. Pop. about 1100. The buildings, formerly appropriated for convicts, are now disused, and in decay. Ipswich, on the Bremer, at the head of its navigation, is the only other place worthy of mention. Contiguous to the bay are several settlements of German colonists.

NEW SOUTH WALES, the earliest settled, and most extensive of the British colonies in Australia, comprising, in its popular and widest acceptation, all the immense portion of that continent lying E. of 141° E. long., having N. Torres Straits, by which it is separated from N. Guinea; E. the Pacific Ocean; S. Bass's Straits, separating it from Van Diemen's Land; and W. S. Australia, and a wide extent of unexplored regions. This vast territory extends through 27 degs. of lat., and may, perhaps, include an area of 800,000 sq. m.

But what is called the colony of N. S. Wales, or N. S. Wales Proper, is of very inferior, though still of ample dimensions. It comprises the territory between the tropic of Capricorn on the N. and Cape Howe, in about 37½° S. lat., having a coast line of about 973 m. The country W. of Cape Howe, formerly Port Phillip (Phillipsland or *Australia Felix*), has been erected into a separate and independent colony, which, in compliment to her Majesty, has received the name of Victoria. This also, it is understood, will shortly be the case with the country immediately to the N. of the 30th deg. of S. lat., that is, with the country round Moreton Bay, to which it is proposed to give the name of Cooksland. And having devoted separate articles to each of these divisions, our observations in this place will consequently be restricted to the country between 37½ and 30 degs. S. lat., including the older portion of the colony E. the mountains, and the country westward, watered by the Macquarrie, Lachlan, and other tributaries of the Murray.

The Blue Mountains extend irregularly throughout the whole length of this region, parallel to the coast at a distance averaging from 30 to 50 m. Their medium elevation varies between 3,000 to 4,000 ft., and their slope is most abrupt on the E. side, between which and the ocean is a well wooded undulating territory, watered by numerous rivers. The Liverpool range, considerably higher than the Blue Mountains, trend from W. to E. in the N. part of the colony, dividing the cos. Bligh and Brisbane from the squatting district Liverpool plains, N. E. of the range. Sea view, perhaps, the loftiest in the colony, rises to the height of 6,000, ft.

Shores mostly bold; but indented with some fine bays or inlets, as Botany and Broken Bays, Ports Jackson, Hunter, Stephens, and Hacking, Bateman and Twofold Bays, &c. It was, as already seen, on the E. flank of the Connabalas Mountain, not far from Bathurst, and about 120 m. W. N. W. from Sydney, that the gold deposits were first discovered in 1851. Several of the rivers are of considerable size; but the mouths of all of them are more or less encumbered by bars, so that they are of comparatively little use for navigation. The Hunter, after a winding S. and E. course, estimated at 200 m., disembogues in Port Hunter, near lat. 35° S. The main stream is navigable only for 35 m., but it receives several tributaries available for shipping to a much greater distance; and the districts watered by it and its affluents are the richest in the colony. The Hawkesbury, formed by the junction of the Nepean and Grose rivers, bounds the co. Cumberland on the W. and N., and receives many considerable affluents in its course to the sea, which it enters at Broken Bay. It is navigable for vessels of 100 tons for 140 m. from its mouth. The MacLeay disembogues in Trial Bay, lat. 30° 40′ S.; it has a bar at its entrance, with, generally, sufficient water for vessels drawing 10 or 11 ft., and is navigable for vessels of 50 or 60 tons for 34 m. from its mouth. (*Hodgkinson*, p. 9.) Lakes neither large nor numerous: Macquarrie and Brisbane, both in co. Northumberland, are the largest; Illawarra (Camden), and the Tuggerah beach lakes, are mere inlets of the ocean, with narrow mouths. The sites of lakes George (co. Murray), and Bathurst (co. Argyle), in the S., have been for many years dry and under cultivation.

Climate warmer than that of England, mean temp. at Port Jackson being 66° 6′, and at Port Macquarrie 68° Fah. In winter, that is, in June, July, and August, snow sometimes lies on the mountains, and occasionally in the upland valleys, for some days together; but it is wholly unknown in the vicinity of Sydney and along the coast; there the winter is a season of rain, with slight frosts. The annual fall of rain at Port Macquarrie amounts to about 62¾ inches, and at Port Jackson to 52·42 do.; a much larger amount than at Port Phillip for example, where the average is only 30·7 inches (*Strzelecki*), though the latter is equal to the average in most parts of England, and considerably greater than the quantity falling on her E. coast. Rain sometimes descends in torrents in N. S. Wales; it is stated that on one occasion 25 inches fell at Port Jackson in 24 hours (*Strzelecki*); and a river in the mountainous region has risen from a similar cause, in a few hours, to 97 ft. above its ordinary level. But, the soil being in a great measure composed of disintegrated sandstone, this excess of moisture is soon dried up. It is, also, more exposed than most other parts of Australia to hot and parching winds from the N. These, which bear a close analogy to the Simoom of the Arabs and the Sirocco of S. Italy, are very oppressive, and produce ophthalmia amongst both the European and native races. Dysentery and influenza are pretty prevalent, attacking chiefly the inhabs. of European descent.

Soil and Produce.—Count Strzelecki observes, that, compared with the virgin soils which he had examined "in Canada, the U. States, Brazil, the Argentine Republic, Guatemala, Mexico, and the islands of Bally and Lombok, those of N. S. Wales and Van Diemen's Land are *greatly inferior* in the amount of salts and alkalies they contain, and therefore in fertility." (*Strzelecki*, pp. 360, 361.) This territory is, in fact, much better adapted for a grazing than for an agricultural country. The tilled land lies chiefly along the banks of the larger rivers, in the valleys of the Hunter, Hawkesbury, Nepean, Wollondilis, Goulburn, &c., and along the Macquarrie and Campbell, down to Wellington valley. The farms of the Australian Agricultural Society in the N. are amongst the best conducted and most thriving: the neighbourhood of Newcastle, from its excellent harbour, the facility of obtaining coal, tolerable irrigation, and good roads, is the most flourishing agricultural district in the colony. N. of the Nepean river (in the central part of the colony) tillage declines materially both in extent and produce, though the estate of Mr. Macarthur, in the co. Camden, presents a prominent exception to this remark. In general manuring, the rotation of crops, fallowing, draining, irrigation, &c. are either not attended to, or but very imperfectly; and in many parts the soil has been so impoverished by bad farming, that the grain has become greatly deteriorated, and lands yield only from 18 to 25 bushels an acre, which, with proper management, might, according to Strzelecki, yield 40 bushels. At the close of 1851, the total quantity of land under tillage was stated to be 152,057 acres, of which 82,110 were appropriated to the growth of wheat, 25,017 to maize (which grain, according to Dr. Lang, attains here to greater perfection than in the U. States), 6,725 do. to barley, 2,470 do. to oats, 4,079 do. to potatoes, 731 do. to tobacco, and 30,626 do. to hay and fodder crops. In the same year the produce was thus estimated: wheat 1,407,465 bushels, maize 717,053 do., barley 133,944 do., oats 49,069 do., potatoes 13,644 tons, hay 36,605 do., and tobacco 12,530 cwts. Owing to the disturbing influence of the gold discoveries the extent of land under tillage was reduced from 152,057 acres in 1851 to 130,643 in 1852, the various crops being reduced in about the same proportion. But this reduction will be temporary only. The extraordinary influx of hands to the "diggings," by occasioning a proportional demand for all sorts of farm produce, cannot fail to be of the greatest advantage to agriculture; and will, no doubt, speedily replace it in a state of greater prosperity than ever. It has been supposed that, under favourable circumstances, wheat might be a profitable article of export to Europe. (*Hodgkinson's Australia*, &c., pp. 161-3.) But we doubt whether this is at all likely to be the case; and at all events the growth of corn is not, at present, adequate to supply the home consumption. In 1852. the total quantity of grain and flour exported from N. S. Wales was valued at 23,846*l*., while the value of the imports of wheat, barley, oats, rice, and potatoes, in the same year, amounted to 37,471*l*. In 1852, 1,096 acres were planted with vines in N. S. Wales, and 92,744 gallons of wine, and 1,581 do. of brandy, were made. The growth of the vine appears to be on the increase, and vine-dressers and wine coopers have recently been in great request.

The olive has been introduced to a small extent. Silk also has been tried, but only on a limited scale: though not indigenous, the mulberry grows very well. The orange grows magnificently. The cotton plant, unlike the American description, is a perennial, the same as in Brazil, the East Indies, and Egypt. We believe, however, for the reasons previously stated in the article on Australia South, that these branches of industry are unsuited to the present condition of the colony; and that those who are unwise enough to embark in them on anything like an extensive scale will be heavy losers. When the sheep-runs have been all occupied, pop. become dense, and labour abundant, this sort of dilettante farming may be attempted with some prospect of success, but not till then.

Sheep Farming, &c.—Towards the end of last century the sheep in N. S. Wales consisted principally of the breeds of Bengal and the Cape of Good Hope; and the colony is mainly indebted for the introduction of the sheep-farming system, and, consequently, of its staple source of wealth, to the example and exertions of John Macarthur, Esq. That gentleman ascertained, somewhere about 1792 or 1793, that, by judiciously crossing the colony breeds with those of Great Britain, the quality of the fleece was very much improved, and that it ranked with the best European wool. In consequence sheep-farming has steadily and, of late, very rapidly advanced. In proof of this, we beg to annex the following account of the stock of horses, cattle, and sheep in this colony, in the years from 1848 to 1852, both inclusive:—

Years.	Horses.	Cattle.	Sheep.
1848	97,400	1,366,164	6,530,542
1849	105,126	1,463,651	6,784,494
1850	111,458	1,374,968	7,092,209
1851	116,397	1,375,257	7,396,895
1852	123,404	1,495,984	7,707,917

Population.—The progress of population in this and the contiguous colony of Van Diemen's Land, though great, has not been so rapid as might, perhaps, have been expected. This, however, is easily accounted for. At its outset, N. S. Wales was, and continued down to 1839, to be a place to which all sorts of convicts were sent. But from that period down to 1843 none were sent, except those who had been confined in Pentonville and other penitentiaries. And in the last-mentioned year the system entirely ceased; no convicts having since then been sent to Sydney. During the period that transportation continued in force 54,583 convicts, of whom 47,092 were males, and 7,491 females, were carried to that port. In 1846 the convicts of all classes in the colony amounted to 10,555, of whom 6,500 were liberated in 1848; and the residue had been reduced to 1708 in December, 1851. Convictism (to borrow a colonial phrase) has, therefore, terminated in New South Wales; but the taint it has imparted to the population will not be easily effaced.

While this was a penal settlement, it was usual, after convicts had been detained for a longer or shorter period, in the hulks or government establishments in the colony, to assign them as servants to the settlers; and subsequently it became customary to give them tickets of leave, enabling them to engage themselves to masters — a privilege which

was commonly coupled with a conditional pardon. As might be expected, a distinct line of demarcation was early drawn, and is still, though less strictly, kept up between convicts who had acquired their freedom, and the rest of the population. Society in N. S. Wales is divided into the two classes of free emigrants and their descendants, and of those convicted of any offence, or who have sprung, immediately or remotely, from a convicted party. These classes have, down to a late period, kept as distinct from each other as the pure and impure castes among the Hindoos, or the white and black races in the U. States: but within these few years, the prejudices in which this separation originated have abated very greatly, and will, probably at no distant period, wholly disappear. Transportation to Van Diemen's Land has now (1854) also ceased.

The stimulus given to immigration by the discovery of gold has been less felt here than in Victoria; but it has, notwithstanding, been very powerful. It is impossible, however, to form any conjecture in regard to its continuance, as that must in great measure depend on the future productiveness of the gold fields. But whether it continue about stationary, diminish or increase, still it is plain that the demand of those engaged in the search for gold, for provisions and other articles of accommodation, cannot fail in the end to give a corresponding impulse to every branch of industry, and to re-establish that general equality, taking all things into account, which usually subsists between wages and profits in different departments. How prosperous soever the "diggings" may be, the labourers drawn to them in the first instance from agriculture and other pursuits will be sure to be restored to the latter, or replaced by others.

The total population of the colony of N. S. Wales, on the 31st of December 1852, was officially estimated at 208,254, of whom 118,687 were males, and 89,567 females. Its increase has been more rapid than there was much reason to anticipate, considering the character and habits of the convicts annually landed upon its shores, the difficulties which the great distance from England interposes in the way of an emigration of voluntary settlers, and the inferiority of the soil. Owing to the circumstance of the great majority of the convicts and other immigrants being males, a great disproportion formerly existed between the sexes in the colony, which materially retarded its progress, and was, in other respects, productive of pernicious results. Government, however, availing itself of the assistance of benevolent individuals at home, and in the colony, has within these few years materially lessened the disproportion referred to, by sending out considerable numbers of young unmarried females, free of expense. Much, it was obvious, of the influence of this measure, was to depend on the discrimination with which the female emigrants were selected; and various precautions were taken, by the organisation of committees, and otherwise, to exclude from amongst them those whose character was in any degree suspicious. It was not, however, to be expected, that these precautions should be completely successful; and very conflicting accounts have been received of the conduct of the females on their landing, and the influence of their immigration on the colony. But though the results of the scheme may, in some respects, have fallen short of the anticipations of its more sanguine promoters, there can be no manner of doubt that it has been, on the whole, decidedly advantageous; and that it has tended both to increase the population, and to improve the morals of the colony.

Industry.—According to Count Strzelecki, 6 acres per head is the least extent of land required in the central part of the colony for pasturage; but from 4 to 5 acres is perhaps nearer the average allowed in the runs. The arts of breeding, pasturing by rotation of ground, &c., as pursued in Britain and in Silesia, are in general little understood, most part of the wool-growers being persons who, before emigrating, had little, if any, experience in sheep-farming. The rearing of other stock, though less attended to in the colony than sheep-feeding, is, as seen above, far from unimportant.

We subjoin an account of the quantity and value of the wool exported from N. S. Wales, from 1840 to 1852 inclusive:—

Years.	Wool exported.	Value of Wool exported.
	Lbs.	£
1840	7,668,960	498,210
1841	6,675,829	431,802
1842	6,599,252	443,729
1843	8,298,359	467,088
1844	9,215,944	471,300
1845	10,522,921	612,705
1846	10,072,570	668,514
1847	12,169,684	706,313
1848	12,445,048	683,623
1849	13,396,525	663,965
1850	14,270,622	788,051
1851	15,268,473	828,302
1852	11,086,974	676,815

During the revulsion that followed the wide-spread mania for buying land and stock that prevailed in 1836 and 1837, the price of sheep fell from upwards of 2*l.* to 2*s.* 6*d.*, and even 1*s.* a head; and that of cattle from 9*l.* or 10*l.* to 1*l.* or less. In this desperate emergency, when many of the settlers were reduced to bankruptcy, the practice was adopted of slaughtering the sheep for their skins and tallow. To procure the latter, the carcase was boiled down; the best portions of the meat, as the legs, &c., having been first (in some cases) removed for sale or salting. By this means the sheep were made to yield their owners about 5*s.* or 6*s.* per head, below which sum it is not, therefore, very likely they should hereafter fall, unless, indeed, the price of tallow were to sustain a corresponding reduction. Some of the largest proprietors in the colony adopted the above plan; and it has been since pursued to a great extent, partly from the fall in the price of wool, and partly from the want of shepherds. We subjoin

An Account of the Boiling Establishments, and of the Sheep, Cattle, and Hogs slaughtered for the same in each of the Years 1844—1852, with the Tallow and Lard annually produced.

Year.	Boiling Establishments.	Sheep slaughtered.	Horned Cattle slaughtered.	Tallow produced.	Hogs slaught.	Lard produced.
		No.	No.	Cwt.	No.	Lbs.
1844	43	127,280	16,891	28,901	388	11,481
1845	52	85,377	36,361	46,854	522	25,323
1846	34	33,538	9,438	16,802	184	7,114
1847	49	128,741	32,012	58,963	54	1,680
1848	55	165,701	33,097	60,812	56	1,865
1849	80	393,071	35,744	85,675	252	29,659
1850	94	292,416	60,385	128,330	45	2,916
1851	75	269,845	42,231	88,145	25	2,000
1852	72	292,000	71,194	147,947	21	1,200

We believe, however, that this destructive process has been seriously checked, partly and principally through the vastly increased demand in the colony for butchers' meat, and partly from the increased price which wool has latterly brought in England.

In the early period of the colony, the best part of the country near Sydney was given in free grants to colonists; the rest has been sold by government. The abolition of free grants took effect in 1831, after which land was for a time offered for sale at a minimum upset price of 5*s.* per acre. In 1839 the minimum price was raised from 5*s.* to 12*s.*; the sales producing in that year 92,968*l.*; and in 1840, during the zenith of the land mania, the sales produced 97,499*l.* A period of great depression and general insolvency followed, during which, in 1843, the upset price of land was raised to the extravagant sum of 1*l.* an acre. In the next year the sales realised 6,746*l.*, and in 1845 11,563*l.* We subjoin (see next page)

By an order in council, dated 9th March, 1847, the lands are divided into settled, intermediate, and unsettled; the first of which comprises the 21 cos. in the central part of the colony, lands within from 10 to 25 m. of the principal settlement, 2 m. from either bank of the Glenelg, Clarence, and Richmond riv. (for certain distances), and everywhere within 3 m. from the sea. The governor is empowered to grant leases of runs of land in the settled districts of a year, in the intermediate districts of eight years' duration, and in the unsettled districts for a term not exceed-

A Return of the Amounts received from the Sale of Crown Lands in the Colony of New South Wales, from the year 1837 to 1852, inclusive.

Year.	General Revenue.	Territorial Revenue.	Total Amount.
	£	£	£
1837 - - -		116,475	116,475
1838 - - -		79,130	79,190
1839 - - -		92,968	92,968
1840 - - -		97,499	97,499
1841 - - -		19,236	19,236
1842 - - -		11,845	11,845
1843 - - -		5,311	5,311
1844 - - -		6,746	6,746
1845 - - -	1,756	9,808	11,564
1846 - - -	3,386	7,864	11,250
1847 - - -	1,800	8,130	9,930
1848 - - -	600	7,024	7,624
1849 - - -	7,073	13,040	20,114
1850 - - -	11,733	22,024	33,757
1851 - - -	21,370	43,056	64,426
1852 - - -	11,740	44,068	55,808

ing 14 years, exclusively for pastoral purposes, the tenant being allowed to raise grain, hay, vegetables, or fruit, for the supply of his establishment, but not for sale or barter. The rent is proportioned to the number of sheep or cattle the run is estimated to be capable of supporting: each run carrying at least 4,000 sheep, or 640 head of cattle, is not to be let at a lower rent than 10*l.* per annum, with 2*l.* 10*s.* additional for every additional 1,000 sheep, or an equivalent number of cattle. During the continuance of the lease the land is not open to purchase by any one but the lessee, who may at any time purchase not less than 160 acres, at not less than 1*l.* per acre. The lease is forfeited by non-payment of rent, &c.; and the government reserves to itself the right of entering upon any portion of the lands thus leased "for any purpose of public defence, safety, improvement, convenience, utility, or enjoyment."

These regulations are very unpopular in the colony, and with good reason. It is difficult, indeed, for any one to imagine that they can have been contrived with any other object than to check its progress. Speaking generally, 5*s.* an acre would be a high price for land suited to agricultural purposes, unless it enjoyed some advantage in situation or in extraordinary fertility; and, if ordinary agricultural lands were sold at that price, in lots varying from 25 to 1,000 acres, farmers with small or moderate capitals, intending to emigrate, would resort to the colony, instead of being driven, as at present, to the U. States, and its improvement would be promoted in no ordinary degree. (See for further details with respect to the disposal of land in Australia, COMMERCIAL DICTIONARY, art. COLONIES.)

Mr. Hodgkinson, in his recent work, gives an account of the life of the squatters, from which we subjoin a few extracts.—"A person with a small capital, which he has invested in sheep in N. S. Wales, would find that his occupation as a flock-master in that colony would be attended with little of that intense application to business, long-continued toil, or harassing cares and anxiety, which necessarily fall to the lot of the small capitalist in England. . . . The greatest drawback to the life of an Australian settler is the solitude and the absence of the conveniences of civilisation. . . . In the districts near the coast many of the squatters are retired officers, who are often married men, with large families. In the inland districts the squatters are, however, generally unmarried, most of them being young men of education and of good connections at home. The life they lead is of the most wild and reckless character, their only amusements in the country being kangaroo hunting, with the occasional excitement of a hurdle race or steeple chase. They generally travel down once a year to Sydney, to sell their wool, and purchase supplies for the ensuing year. During their brief residence in town they participate largely in all its gaieties, to make amends for their long banishment in the wilderness. The following is a specimen of the daily life of the generality of the squatters at their stations in the bush. On awakening in the morning, the squatter lights his pipe, and smokes while his breakfast is being prepared. This consists of a huge heap of mutton chops, or a piece of salt beaf, and *damper**, which he washes down with an ocean of strong green tea, literally saturated with coarse brown sugar. After breakfasting, the squatter again lights his pipe, mounts his horse, and sallies forth on his daily avocations among his sheep or cattle. His dinner is the counterpart of his breakfast, viz., mutton chops or salt junk, damper, and tea viscid from excessive sweetness, which would create nausea in an English stomach, but to which our bushman has gradually habituated himself. In the evening the squatter smokes, reads or writes, until supper, when another vast mess of meat and tea is again brought forward; and then, after smoking one more pipe he goes to bed." (*Hodgkinson*, pp. 125-7.) We need not be surprised, considering the descent and character of a large proportion of the population, to learn that drunkenness is rather prevalent. In 1852 the customs revenue on spirits imported amounted to 138,729*l.*, and the duty on home-made spirits to 18,211*l.*

* Damper is a species of bread much in use at all the out-stations, and which is thus prepared:—A quantity of flour is mixed with water until stiff, and is then well kneaded, and made into a mass about two or three inches in thickness, and eighteen inches or more in diameter. A large fire having been made on the ground, and burned out, the hot ashes are scraped to one side, and the bread is thrown in, and covered up with the ashes until baked. It consists of nothing but flour, salt, and water. Another method of making it is, by taking some dough, made as before and flattening it on a sheet of bark cut from the trees into cakes about the size and thickness of biscuits, put these on the fire to grill or toast, when you will have a good and palatable damper. (*Wilkinson's S. Australia*, p. 167.)

It appears, from the official returns published at Sydney, that in 1852 the average wages (ex. board and lodging) of carpenters, smiths, wheelwrights, bricklayers, and masons, amounted to about 9*s.* a day; and that the average wages of farm labourers and shepherds (including board and lodging) amounted to from 25*l.* to 30*l.* a year. But, there is a great disinclination, since the discovery of the gold fields, on the part of labourers, to enter into any engagement of a permanent character. Wages at the "diggings" are very various; but, speaking generally, much higher than those mentioned above. Prices have fluctuated very greatly within the last 3 years, but, upon the whole, they have advanced less than might have been anticipated. In 1852 wheat fetched 6*s.* a bushel; fresh meat, 11*d.* per lb.; cheese, 1*s.* and 1*s.* 6*d.* do.; and coffee and tea, 3½*d.* and 1*s.* 4*d.* do. Clothing of all sorts is usually but little dearer than in England.

If its beds of coal should realise the anticipations now entertained, they will be of the greatest advantage to the colony. Coal is already raised in considerable quantities at Newcastle, near the mouth of the Hunter river, where its average price at the pit's mouth is said to be only 6*s.* 6*d.* per ton. (*Dutton, S. Australia, &c.*, p. 314.) In many localities it may be seen cropping out at the surface, and it has been ascertained to extend to a great depth. Copper mines have also been discovered. And in the Yass district, about 140 m. from Sydney, a valuable lead mine has been discovered.

Manufactures are carried on but only to a small extent, and are nearly confined to Sydney. The whale fisheries, which were formerly important, have latterly declined. We subjoin

An Account of the Quantities and Value of the principal Articles of Colonial Produce exported from the Colony of New South Wales, by sea, in 1852.

Principal Articles.		Quantities.	Value.
			£
Butter and cheese	Cwt.	7,263	18,930
Candles, Tallow	"	9,992	15,040
" Sperm	"	2,048	3,056
Coals and Coke	Tons.	24,794	109,951
Flour and Bread	Cwt.	84,240	41,080
Gold - -	-	818,751oz. 18dwts. 17gr.	2,660,946
Grain, Wheat -	Bush.	600	300
" Maize -	"	81,444	15,443
" Barley -	"	157,804	3,871
" Oats -	"	12,533	2,173
" Rice -	Cwt.	8,207	2,059
Leather - -	-	- - -	30,909
Live Stock -	No.	33,314	16,605
Oil, Sperm -	Galls.	251,086	39,247
" Black -	"	7,293	1,129
" Linseed -	"	1,217	310
" Cocoa Nut -	"	12,871	730
" Palm - -	"	126	10
Provisions - -	Lbs.	1,594,326	26,056
Skins - -	-	- - -	34,250
Tallow - -	Tons.	6,966½	174,731
Timber - -	-	- - -	21,768
Wool - -	Lbs.	11,966,241	688,317
All other Articles, including Re-exports of Foreign Produce	-	- - -	697,123
Total Exports - - -			4,604,034

The exports from the U. Kingdom to N. S. Wales in 1852 amounted to £1,632,137.

23 vessels, aggreg. burden 1,582 tons, were built in the colony in 1852, and the reg. tonnage and its shipping in the same year was 131 vessels, aggreg. burden 13,138.

Tariff.—It is but justice to the colonial legislature to say, that it has done all that was in its power to consolidate and extend the trade of the colony. The new tariff enacted in 1852 is, perhaps, the shortest and least onerous in existence. If the article dried fruits were struck out (we cannot imagine how it got in), it would be unexceptionable.

New Import Duties.—Brandy and gin, proof,	*s.*	*d.*
per gallon, "Sykes" - - - -	6	0
On beer, in bulk, per gallon - - -	0	1
— bottle, ditto - - -	0	2
Coffee, chocolate and cocoa, per lb. -	0	0¾
Tea, per lb. - - - - -	0	1½
Sugar, refined, per cwt. - - -	2	4

	s.	d.
Sugar, raw, per cwt. - - - -	2	6
molasses, ditto - - - -	1	8
Dried fruits, per lb. - - - -	0	0½
Spirits:—		
Rum, whisky, and other spirits, per gall. -	4	0
Wine, less than 25 per cent. alcohol, ditto -	1	0
Sweetened liqueurs, per gallon - -	6	0

	s.	d.
Tobacco:—		
manufactured, per lb. - - -	1	6
and after 31st December, 1853 -	1	0
unmanufactured, ditto - -	1	0
and after 31st December, 1853 -	0	8
Cigars and snuffs, per lb. - -	2	0
Drawbacks. — Refined sugar, per cwt.	3	4
— raw, ditto, ditto -	2	6

Return of the Value of Exports from the Colony of New South Wales, from the Year 1837 to 1852 inclusive.

Year.	To Great Britain.	To British Colonies.		To South Sea Islands.	To Fisheries.	To United States of America.	To Foreign States.	Totals.
		New Zealand.	Elsewhere.					
	£	£	£	£	£	£	£	£
1837	518,951	39,528	106,269	485	54,434	10,617	17,592	747,876
1838	583,154	46,669	85,973	7,137	33,988	11,324	6,525	774,770
1839	570,446	95,173	143,651	1,347	31,729	18,568	7,175	871,092
1840	732,347	215,486	236,585	6,621	27,864	27,885	21,014	1,270,832
1841	628,905	110,105	67,139	13,144	18,417	4,837	41,715	884,262
1842	531,033	127,519	123,358	3,005	22,862	17,101	38,661	863,569
1843	618,789	78,548	136,632	17,934	18,827	- -	23,918	891,648
1844	652,053	70,799	114,396	11,528	11,623	- -	10,869	871,268
1845	878,330	76,857	112,885	17,656	1,593	- -	5,068	1,092,389
1846	805,898	105,531	122,471	13,441	590	- -	8,407	1,056,338
1847	936,674	121,195	112,148	14,231	- -	- -	16,987	1,201,535
1848	901,869	163,938	78,210	6,944	- -	- -	4,018	1,155,009
1849	898,854	91,255	76,075	10,160	- -	55,611	3,989	1,135,944
1850	1,038,340	96,003	97,359	17,537	- -	95 473	13,072	1,357,784
1851	1,177,152	94,016	146,805	15,334	- -	33,784	29,191	1,796,912
1852	3,607,269	74,759	904,271	6,271	- -	5,081	6,383	4,604,031

A steam communication is kept up between Sydney, Melbourne, Launceston, Van Diemen's Land, and Adelaide; and the overland mail communication between England and India is continued to Singapore, and thence to Sydney, Melbourne, and Auckland, in New Zealand. A railway is nearly completed from Sydney to Paramatta; and a proposal is on foot for constructing a railway between Sydney and Melbourne. But it may be doubted, seeing how easily the communication between the two capitals is maintained by sea, whether the colonies are ripe for so great an undertaking as that now referred to.

New South Wales (inc. Cooksland) lately consisted of 49 cos., besides squatting dists., which will gradually be formed into cos. The government is vested in the governor, and an executive council, composed of the governor as president, the commander of the forces, the colonial secretary, colonial treasurer, and two other members. The legislative council consisted, in 1852, of 54 members, of whom 36 were elected, and 18 nominated by the crown. The statute laws of England are those in force. The Supreme Court, presided over by a chief justice, with two puisne judges, has powers in the colony as extensive as those belonging to the court at Westminster. Circuit courts and sessions are held at the principal towns; and courts of requests, each presided over by a crown commissioner, in almost every county-town. Ecclesiastically, the colony is divided into the dioceses of Sydney and Newcastle, the latter comprising the N. cos. with Cooksland. Total public revenue in 1852, 682,137*l*., of which the customs furnished 217,321*l*., the territorial revenue (including the produce of the sales and leases of land, and immigration debentures), 238,502*l*, and the gold revenue, 62,307*l*. During the same year the total expenditure amounted to 600,322*l*., of which 158,097*l*. was incurred on account of immigration. Next to Sydney, the cap. (which see), the princip. towns are Paramatta, Newcastle, Maitland, Bathurst, and Goulburn: none of the other settlements had in 1846 a thousand inhabitants.

VICTORIA, formerly PORT-PHILLIP, or PHILLIPSLAND, a country of Australia, comprising all that portion of the continent S. of the river Murray, between lat. 34° and 39° S. and long. 141° and 150° E., having N. E., N. S. Wales, from which it is divided by a straight line drawn from Cape Howe to the nearest source of the Murray, and then by that river; W. the colony of S. Australia; and S. the ocean and Bass's Straits, by which it is separated from Van Diemen's Land. It is divided into 24 cos. ex. some very extensive unsettled and squatting dists. Area estimated at about 100,000 sq. m. Pop. on the 31st December 1852, estimated at 151,126, the excess of immigrants over emigrants in the course of the year being reckoned at 65,277. Pop. on 31st December 1853, estimated at above 230,000.

This territory from the mouth of the Glenelg river, its W., to Cape Howe, its E. extremity, has about 500 m of coast, along the most S. part of the Australian continent, towards the centre of which is Port-Phillip, — a magnificent basin, about 40 m. in length and breadth, entered by a narrow channel, only 1¾ m. across. Melbourne, the cap. (see SUPPLEMENT), is situated on a river flowing into the head of this bay; and the flourishing town of Geelong stands on the extremity of its W. arm, about 40 m. from Melbourne. E. of Port-Phillip are the bays of Westernport, Corner Inlet, and Lake King; on the W. are Discovery and Portland bays, and Port Fairy. Chief headlands, Capes Bridgwater and Otway, and Wilson's promontory. Most part of the surface is level or undulating, and separated by mountain ranges into different basins. The Warragong mountains, or Australian Alps stretch from the settled country of N. S. Wales southward to the extremity of Wilson's promontory: Mt. Wellington, or Kosciuszko, the culminating point of this chain, rises to 6,000 ft. above the sea. W. of this chain are successive ranges isolated from each other, known by the names of Mount Macedon, the Australian Pyrenees, the Grampians, &c.; they have mostly a N. and S. direction, and with the Australian Alps separate the Hume, Hovell, and other tributaries of the Murray from the rivers flowing southward. The rich gold fields of Mount Alexander, near the sources of the Loddon, are about 60 or 70 m. N. W. from Melbourne; those of Ballarat lie more to the S.; and there are others in different parts of the colony. The streams in this region are small and innavigable; but the country is in general well watered, and it contains numerous salt lakes, the principal of which, Lake Carangamite, is upwards of 90 m. in circuit. The climate approaches nearer to that of Great Britain than that of any other part of Australia. It has "somewhat of an intermediate character between the climates of N. S. Wales and Van Diemen's Land — not so hot as the former in summer, nor so cold as the latter in winter. There is frost sufficient to freeze the surface of the ponds for two or three days perhaps every season, and snow falls occasionally, but more rarely. There is a good deal of wet and cold weather during the three or four winter months; and in summer again, the heat is tempered by cold breezes, the nights being always cool, excepting during the prevalence of hot winds. Fires are agreeable morning and evening for eight or nine months of the year." (*Lang's Phillipsland*, p. 336.) The temperature at Port Phillip has been found in January to average from 65° to 74° Fah., and in June from 50°·8′ to 56° Fah. Its annual range is from 32° to 90°, and its annual mean about 61°·3′ Fah. (*Strzelecki*, p. 229.) Less rain falls here than in either N. S. Wales or Cooksland; the annual average at Port Phillip not being more than 30·7 inches; but evaporation being much less rapid than in the latter-named regions, this is probably the district of Australia that is best supplied with moisture. It is, however, like the other portions of the continent, liable to severe droughts.

On the N. W. and E. frontiers of Victoria, there is a large extent of arid and desert country, but on the banks of the N. rivers, there is a great deal of land well adapted for agriculture, and this also is the case throughout nearly all the country within 50 m. of the coast. Gipp's Land in particular, N. E. of Wilson's promontory, is a basin containing, it is said, 320,000 acres of alluvial soil unencumbered with timber and ready for the plough. The Port Fairy district is also sufficiently productive; and, according to Dr. Lang, there is on the Glenelg and Wannon rivs. a tract of 50 m. square without an acre of bad land. (*Ibid.* p. 181.) The produce of wheat in the vicinity of Lake Colac is stated to average 30, and that of

barley 40 bushels an acre; in other parts near the coast, 30 bushels of wheat are said to be a fair average. But these statements are all very vague, and but little to be depended upon. At present the corn produced in the colony is inadequate to supply the demand for home consumption; the surplus required being imported from Van Diemen's Land. Sheep-rearing is in this, as in other parts of Australia, a principal branch of industry; but this, no doubt, is, in part, at least, a consequence of the absurd regulations with respect to the sale of land. Here, as in N. S. Wales, it is chiefly let in large runs to squatters and grazing-farmers.

An attempt made by Col. Collins to form a settlement at Port Phillip in 1803 not having been persevered in, the country remained little, if at all, known to Europeans until its exploration by Messrs. Hovell and Hume in a journey overland from N. S. Wales, in 1824. About ten years subsequently, it was surveyed, and reported favourably of as a grazing country, and various extensive tracts of land were, in consequence, purchased from the natives by the Van Diemen's Land Association. Immigration immediately set in with great rapidity from Tasmania; and by the end of June, 1836, the pop. exceeded 200, and the stock of sheep amounted to 50,000. "A regular village on the site of the present town of Melbourne had been formed; 50 acres of land were in cultivation; gardens had been laid out in various localities, and the country was occupied for 50 m. from the port. For the next 18 months, the arrivals, both of settlers and stock, from Van Diemen's Land, continued at a similar rate."—(*Lang*, p. 29.) But the colonial government having refused to recognise the legality of any purchase made by the Van Diemen's Land Association from the natives, or any other in which the initiative was not taken by the crown, that Association, with others, broke up, its members being allowed, "in consideration of their payments to the aborigines, a remission to the extent of 7000*l*. of the purchase-money of whatever lands they might choose to purchase in the prov. from the crown." (*Ibid*., p. 33.) The purchase-money obtained by the N. S. Wales government for lands in this territory was then appropriated to further immigration, and by the end of 1840, the pop. had increased to 11,738 persons, who possessed 50,800 head of cattle, and upwards of 782,000 sheep, and had 4,875 acres in cultivation. In the years immediately following, the mania for buying land raged as much here as in N. S. Wales: land set up by the colonial government in small lots, and at extravagant prices, was so eagerly bought up, that Dr. Lang states, that "a single acre of building ground in the town of Melbourne realised 10,000*l*., or from 15 to 62 guineas per foot of frontage!"

The reaction which followed the land mania was here, as elsewhere in Australia, productive of wide-spread distress. But the colony, notwithstanding, continued to advance. The value of exports rose progressively from 12,180*l*., in 1837, to 256,847*l*. in 1844, and to 755,000*l*. in 1849.

But the progress of the colony since the discovery of the gold fields, in 1851, has exceeded every thing previously heard of, and is, in truth, all but miraculous. This is evinced by the following

Statements illustrative of the Progress of Victoria Colony during the 3 Years ending with 1852.

		1850.	1851.	1852.
Revenue - -	£	261,321	379,824	1,576,801*
Imports - -	„	744,925	1,056,437	4,013,896
Exports - -	„	1,041,796	1,423,909	7,338,000
Shipping inwards	No.	555	669	1,657
	tonnage	108,030	126,411	408,216
Bank deposits, fourth quarter - -	£	†	822,254	4,334,211‡
Circulation, ditto -	£		180,058	1,327,311
Coin and Gold -	£		310,721	3,034,538§
Number of Banks -	No.	2	3	5
Valuation of Melbourne (annual value) -	£	154,063	174,723	638,000
Population, 31st December		75,000	95,000	160,000

* Includes 438,845*l*. of gold revenue.

† There are no bank returns for Victoria, as distinct from New South Wales, prior to 1st July, 1851.

‡ Of this amount nearly 700,000*l*. is deposited by the government. The banks give no interest on any deposits.

§ Of this amount 1,129,420*l*. consists of gold dust, estimated either at cost or valuation.

In 1853 the progress of the colony was equally rapid. It appears from recent accounts that the revenue in that year amounted to 3,202,249*l*., being more than double the revenue of the previous year. The proceeds of the gold licences rose from 399,138*l*., in 1852, to 660,833*l*. in 1853; the customs duty on spirits imported, from 186,491*l*. to 561,317*l*.; the produce of the sale of land, from 703,355*l*. to 1,496,713*l*. The population at the close of the year was estimated at 233,000.

A Licence Duty of 30*s*. a month, charged on all individuals who engage in the search for gold, was much, and we think justly, objected to. Licence duties are essentially unfair, except when they are proportioned to the extent of business carried on by those who pay them. But the business of the gold diggers is, to all intents and purposes, a lottery. So that while the tax pressed with great severity on the great bulk of those at the 'diggings," it was hardly felt by the few who carried off the great prizes. A better plan would have been to make the licence duty next to nominal, and to impose a moderate customs duty on gold when exported. The tax would then have ceased to be felt as a burden by individuals, while it would have yielded quite as great a revenue to government. This plan will probably be in the end adopted; but in the meantime the licence fee has been reduced from 30*s*. a month to 40*s*. for 3 months.

Account of the Quantities and Values of the principal Articles of native Produce exported from the Colony of Victoria by Sea in 1852.

Articles.		Quantity.	Total.
			£
Bones - -	No.	53,500	249
Gold - - -	-	1,988,526 oz. 10 dwt. 13 gs.	6,135,728
Wheat - -	Bush.	25,249	11,583
Guano - -	Tons.	115	30
Hides - -	No.	22,124	7,523
Live Stock, Cattle -	„	4,615	15,747
„ Sheep -	„	24,876	19,513
Provisions, salted -	-	397 tons 14 cwt.	9,338
Skins, Sheep	Bales.	1,250	5,199
Soap - - -	-	103 tons 15 cwt.	2,854
Tallow - -	-	1,995 tons 4 cwt.	60,261
Wool - - -	lbs.	20,047,453	1,062,787
During the same year, the total value of the exports of Articles the Produce or Manufacture of Victoria amounted to - - - - - -			7,337,925

Account of the Value of the Imports into and Exports from Victoria in 1852, specifying their Origin, and the Values of those brought from and shipped for different Countries.

	Produce or Manufactures of Victoria.	Produce or Manufactures of the United Kingdom.	Produce or Manufactures of other British Dominions.	Produce or Manufactures of Foreign States.	Total.
	£	£	£	£	£
Imports -		2,013,614	1,028,297	1,027,831	4,069,742
Exports -	7,337,925	54,898	6,434	52,292	7,451,549

Account of the Ships that cleared Outwards from Victoria (Port Phillip) in 1851 and 1852.

	1851.			1852.		
	No.	Tons.	Men.	No.	Tons.	Men.
To Great Britain -	40	19,152	-	68	36,936	
„ New Zealand -	2	483	-	7	1,952	
„ Other British Cols.	598	82,990	-	1,358	284,211	
„ South Sea Islands -	-	- -	-	1	222	
„ Fisheries - -	1	346	-	-	- -	
„ U. S. of America -	4	2,541	-	-	- -	
„ Foreign States -	13	5,943	-	41	26,975	
Total - -	658	111,005	6,698	1,475	350,296	17,320

Mr. Westgarth, in his valuable work on Victoria, gives the following account of the rates of wages in 1852 in the principal departments of colonial industry. (Appendix, p. 55.)

Males (*ex. Rations*).		Rate.
Carpenters -	Per Day	20*s*.
Blacksmiths -	„	18*s*.
Labourers on Roads	„	10*s*.
With Rations, &c.		
Married couples (no family)	Year	£80
Shepherds -	„	£35
Bullock-drivers	Week	£3
Farm-labourers	„	30*s*.
Ploughmen -	„	35*s*.
Gardeners -	Year	£70

Seamen.		Rate.
For the run home	The Run	£45
For Calcutta - -	„	£40
For Callao - -	„	£40
Coasting - -	Month	£9
Females.		
Cooks - -	Year	£40
General Servants	„	£30
Housemaids -	„	£25
Laundresses -	„	£35
Nursemaids -	„	£22

The prices of lodgings and of most sorts of provisions had increased in an equal proportion. But in the interval they have generally declined, though in Melbourne the cost of lodgings is quite extravagant. The charge for lighterage on the river, and for conveyance to and from the "diggings," is such as would anywhere else be deemed incredible. (See MELBOURNE, in Supp.) Wages, in 1853, were higher than ever.

Here, as in other parts of Australia, wool, down to the discovery of the gold fields, was the principal article of produce and export. And it is seen from the following statement, which we borrow from the *Argus*, an able and well-informed Melbourne journal, that its exportation went on increasing down to the present year.

"Account of the Wool shipped during the Years ending July 5, 1852, 1853.

	1852.	1853.
	Lbs.	Lbs.
Melbourne - - - -	9,389,967	10,248,019
Geelong - - - -	6,791,400	6,721,960
Port Fairy - - - -	723,400	1,259,725
Portland - - - -	1,752,800	3,080,560
Total - - -	18,657,567	21,310,294

"But it would be wrong if we did not apprise our British readers that a process is going on, of which we have before warned them, and which may one day seriously affect the supply of wool which they now draw from these shores. The value of the carcass is so steadily gaining upon that of the fleece as naturally to affect the care with which each is watched by the settler. Fine, fat, large-sized sheep now frequently sell at 30*s.* each, the current price before the gold discovery having been 10*s.* to 12*s.*, while the fleece has scarcely improved in value at all. So fast, too, is the proportion between meat and its consumers altering that higher prices still for the carcass are reasonably to be looked for.

"Besides, that terrible scourge of the sheep-owner, the scab, is spreading rapidly through our flocks, and the high rate of labour prevents the squatters from grappling with it as they ought. Sheep are run in flocks of unmanageable size, frequently camped out, and allowed to wander; and, except when brought up by wide rivers, this devastating disease progresses almost unopposed.

"A continuous high price of wool in the English markets will afford great encouragement to the settlers to struggle with these two tendencies so greatly deteriorative to our wool; and the manufacturers of Great Britain will have to afford that encouragement, or they must gradually teach themselves to look elsewhere for a supply."

The same journalist remarks as follows on the importation of grain: — "For a supply of breadstuffs we must still reconcile ourselves to looking abroad. Our own production is a mere drop in the bucket compared with our consumption; and so numerous is our population becoming, and such large consumers are they of all the necessaries of life, that the supplies of all adjacent colonies, New Zealand included, must for a long time be utterly inadequate to our requirements. We have considerable stocks of American flour on hand; but shipments from the ports of the United States appear now to have been nearly suspended; and, as is always the case in a rapidly-fluctuating market, low prices have for a time prevailed, and we begin to fear a possible scarcity before our own harvests come round. It is rather a fearful thought to those who do not deal in flour, and therefore have no interest in high prices, that a community like ours, accustomed to extravagant consumption, is so far distant from all extensive sources of supply. The course of post with England and America necessarily occupies many months, and between the periods of orders being sent and being executed there seems quite a possibility of prices ranging from a rate that will be ruinous to shippers — to one little short of famine to the consumer. While fodder continues so high that oaten hay has long been, pound for pound, dearer than wheaten flour, our agriculturists will naturally avoid turning their attention to the production of grain. And in the meantime, probably for many years, the supply of these colonies with breadstuffs will constitute a trade very well worth the careful attention of the merchants of Great Britain and America."

Prospects of Emigrants to Victoria. — The journal from which we have now quoted has made in a late No. (20 Jan. 1854) the following remarks on the social condition of the colony, and on the prospects which it holds out to industrious immigrants. But it is almost needless to add that much depends on the continued productiveness of the gold fields. Were they to fall off, there would be, for a while at least, an excess of labour in the colony.

"Notwithstanding the additional benefits that Melbourne is every day holding out to the working classes, the tide of immigration from Great Britain seems to be on the decline. Houses are becoming abundant, rents are falling, the price of labour is rising; and yet, out of the 53 ships that arrived from Great Britain in our port during the month of December, only nine brought steerage passengers. Although it be true that such a circumstance may spring partly from the increased demand for labour in England, we are far more inclined to attribute it to the reaction that has most causelessly taken place in the public mind — a reaction produced mainly by the exaggerated accounts that the English press seem now to delight in giving of the horrors of a Melbourne life, and the domestic hardships which all classes here must undergo. They seem to know no medium between the glaring absurdity of describing children scrambling for gold in one of our public thoroughfares, and depicting our towns as utterly devoid of all the appurtenances belonging to civilised life. We will readily allow that a young gentleman, with his brain still ringing with the gaities of a London season, may miss his morning calls, his evening soirees, his drives in the Park — that he may write most desponding letters home to his sympathising friends, and that if he be not stout-hearted, he may feel rather miserable for a short time. But such hardships as these do not press very heavily upon the labouring man. He has never known any superfluities of the kind, and cannot therefore feel their want. The great error under which most people labour in England is, that they confuse the various conditions and modes of life of the different classes here. They receive a dispiriting account from some person who has been accustomed to all kinds of luxuries, and therefore by a method of false logic they suppose that the change presses equally upon those who were only but too happy if they were enabled to earn the bare necessaries of life in England.

"The fact is, that not only can a working man in Melbourne realise in a short space of time a far larger sum of money than in England, but he will also, generally, enjoy a far greater degree of comfort in Melbourne than he ever experienced in his English home. Let the simple facts speak for themselves. Contrast the two conditions: see what are the differences of his mode of living — what are his earnings, and what his average expenses. Take first the case of a mechanic or artisan, who earns from his guinea to thirty shillings a week in England. Let the same man, by some means or other, be enabled to emigrate to our golden lands, and what a change immediately takes place! The very hour he lands he finds his services are in request. He earns on an average his six pounds a week; and while he can afford to keep what will appear to him a most sumptuous table, he discovers that he can lay aside such sums of money as to supply a certainty of his becoming in time, by the aid of industry, economy, and sobriety, a comparatively wealthy man.

"We have endeavoured to ascertain accurately the expenses of the working-classes here, both married and unmarried, and find that, upon an average, they would be as follows: — A single man, in a tent, may maintain and clothe himself for 20*s.* a week; if he is an inmate of one of the many boarding-houses that crowd this city, it will, perhaps, cost him 30*s.* to 35*s.* A married man, in a tent, with a family of two or three children, will spend about 2*l.* 10*s.* for their sustenance and clothing; he may, however, if he choose, join with one or two other families, and take a cottage, and then his expenses will be very slightly increased. But although this statement only applies to those who live economically, yet by that term we mean persons who do not lavish their money in wanton extravagance, nor spend, as is but too often the case, their whole week's earnings in one night's debauch. But the working man can still afford to live in a liberal manner. Let any one of those false alarmists take a morning walk through Melbourne, and pay attention even to the huts and tents that he passes; he will find that from every one of them invariably issues the savoury odour of broiled chops, beef-steaks, &c., all cooking for the breakfasts of those who in England would have deemed such dishes a high luxury for their dinner on a gala day. As a matter of course, almost the whole of the working classes in Melbourne have meat at their meals three times a day; and although they may not be able to afford the rent of a brick house, still we doubt whether their dwellings are not as healthy and as comfortable as those inhabited by them in the close regions

of a densely populated town at home. The season of Christmas, just passed, would furnish us with the strongest proof of the far superior condition of the humbler classes here; and with wonder at the check to which immigration has been subjected.

"In confirmation of our statements we need only direct attention to the fact that carpenters are earning from 7*l.* to 9*l.* a week; masons from 9 to 10 guineas; blacksmiths, from 6*l.* to 7*l.* 10*s*; many of the compositors in our office earn from 10*l.* to 12*l.* a week. In the single item of the pay given to labourers on the public roads, we find an increase from eight shillings a day to twelve and fifteen shillings; and we feel confident in saying that there is not a labouring man in this colony who cannot, by industry and economy, at the end of the year, put by from his earnings a sum in pounds which in England the same man might count himself happy to have saved in pence.

"There is no class for which there is a greater demand than that of female servants. In many cases it is almost impossible to procure them, and ladies ransack the various register offices in the city in vain. On account of their scarcity, they become, as it were, the mistresses of their mistresses, command their own holidays, receive their own visitors, and do pretty nearly what work they choose. Delicate ladies may often be seen suddenly deprived of their servants at a moment's notice, and for more than a fortnight's space totally unable to procure another. It affords occasion to admire the fortitude and good temper with which British women can adapt themselves to circumstances. They light the fire as if it were a great joke, and sweep the room as if they were acting some novel part in pleasant amateur theatricals. A good female servant can almost select her own place at the rate of 30*l.* or 40*l.* a year; and if she is a steady respectable girl, she will not be long before she has a home of her own to superintend.

"In other respects, encouraging features in our social progress are not wanting. Churches and chapels are gathering round us; schools are everywhere springing up. Melbourne itself is making very considerable progress; hotels and restaurants of a large size are being built at a prodigious expense in every part of the town and its suburbs. Stores and shops of a superior description are springing up on all sides. Concerts take place almost every night, where music of a very creditable order can be heard; and our theatre, our circus, and dancing-rooms continue to be crowded. There are several cricket clubs, who weekly hold their matches in this truly English strife; and steeple-chases in our suburbs each month delight the lovers of sporting recreations. But, with all these advantages, we are bound to confess that Melbourne is very far from being an agreeable city to live in. It is one of the dustiest places in the world; it is without sewers, without gas, and without water; and its corporation, true to the usual character of such bodies, take care that it shall be profusely supplied with stenches and other nuisances of the most nauseous and noxious kind."

Wine has not yet become an article of export; though it is made to some extent. Veins of coal have been met with along the coast from Port Phillip to Cape Otway, as well as indications of lead and manganese: and rich veins of copper ore have, it is said, been discovered on the banks of the Yarra-Yarra river, on which Melbourne is situated. Pumice stone, lava, and salt from the lakes are the other principal minerals. The mntns. are clothed with large timber trees, which are also numerous in Gipp's Land, and along the coast lands in the west.

Down to a recent period the greater number of the labourers immigrating into Victoria were ticket-of-leave convicts from Van Dieman's Land. At certain periods they were accustomed, after drawing considerable sums of money from their employers, to proceed to Melbourne, and there squander them in the most absurd manner. But industrious immigrants, though without capital, frequently became independent.

To expedite the transit of produce from the interior to the sea, it is proposed to form wooden railways in some parts of the territory, for which the level character of a great part of the country, and the ready supplies of timber, afford unusual facilities.

Victoria is subdivided into about 24 counties, ex. squatting districts. In 1852 the executive council consisted of 5, and the legislative council of 38 members. Of the latter 25 were elected, and 13 nominees of the crown. It constitutes the diocese of Melbourne. (See Melbourne, in Supp.)

AUSTRIA (THE ARCHDUCHY OF), the nucleus and centre of the Austrian empire, divided into the two provs. of Austria above the Enns, and Austria below the Enns, commonly termed Upper and Lower Austria, lies between lat. 46° 57′ 25″ and 49° 0′ 30″ N., and long. 12° 46′ and 17° 7′ E. It contains 15,017 Eng. sq. m., of which 7,317 belong to the upper, and 7,700 to the lower prov. The boundary of the archduchy is formed towards Tyrol and Carinthia by the central chain of the Noric Alps, in which the primitive formations predominate. The highest summits are the Gross Glockner, 11,782 ft., Sulzbach Kees, 11,270 ft., Krummhorn, 11,104, &c. Immense glaciers and beds of eternal snow fill the clefts and cover the higher declivities of these mountains, from which several important rivers derive their origin. The N. limestone range of the Alps forms the boundary between the archduchy and Styria, and branches from it cover large portions of the country. One of these, the Wiener Wald, approaches to near Vienna, but it gradually diminishes in elevation as it recedes from the grand chain. To the N. of the Danube the Bohemian forest throws out its offsets to that river's bed, whose banks offer, in consequence, highly picturesque scenery during its course from Passau to Vienna. The lesser Carpathians and the Leitha hills mark the frontier towards Hungary on the E. The southern, or limestone range, is traversed at several points by the affluents of the Danube, the Inn, Salza, Traun, and Enns, which are navigable along the greater part of their course. The Leitha falls into the Danube in Hungary, and the Morawa, or March, which rises in Moravia, unites with that river on its left bank, a little to the W. of Pressburg, after having for some distance marked the Hungarian frontier. The Mur, which rises amongst the lofty summits of Lungau in Salzburg, flows into Styria.

The Danube enters the Austrian territory at Innstadt, opposite Passau, where it is joined by the Inn, which is here nearly as large as the stream into which it merges. Linz being looked upon as the key of the river, strong fortifications have been erected for its protection. The navigation of the Danube between Passau and Vienna is accompanied with no difficulty except that of overcoming a strong current in mounting the stream. The high rocky banks confine the river in one bed, and its depth is considerable, with the exception of a spot near Grein, where reefs of rocks occasion a surf which used formerly to be much dreaded; but they have been so far reduced by blasting, that they no longer offer any serious obstacle to navigators. Between this point and Pressburg the fall of the river is said to amount to 450 ft., and the rapidity of its current in the canal of Vienna to be 8 ft. a second. This canal is an arm thrown off from the main stream a few miles above the city, under the walls of which it passes. The main stream is separated from Vienna by the Prater island, and one or two small islets. The island of Lobau, about 2 m. below Vienna, is famous for being the spot to which, in 1809, Napoleon retreated after the battle of Aspern, and from which he issued previously to the battle of Wagram. On the frontiers of Hungary the Danube is once more shut in between the fall of the Alps, which flatten down almost to its level on the S., and the rise of the lesser Carpathians on the N. bank. This passage divides the river into the Lower and the Upper Danube; the former in antiquity was called the Ister.

The lakes of Upper Austria are celebrated for their picturesque scenery, and are eminently useful as means of internal communication. The most remarkable are those of Gmunden or Traun, 7¼ m. in length, and nearly 2 m. across in the broadest part; and of Hallstadt, 5 m. long, and about 1 m. broad; the lake of Aussee, which is much smaller, is connected with the other two by means of the river Traun, and the salt produced along the line it traverses, with the timber and other products of the extensive forests of the *Salzkammergut* (as this portion of the duchy of Salzburg is named), are forwarded by its means to the Danube. The Atter Lake is 11¼ m. long, and 2¼ m. broad. The lakes Mondsee and St. Gilgen are also extensive, but are not connected with any navigable river, except for the purpose of floating down wood. The number and variety of the waterfalls add greatly to the beauty of the mountain scenery.

Extensive morasses are found in Upper Austria, in the vale of Pinkgau, or of the Salza. In the Mühl circle, on the N. side of the Danube, and in the neighbourhood of the principal lakes, large tracts of marshy land also occur.

The climate of the archduchy varies according to the elevation of the ground. In Upper Austria the mean temperature at Linz has been found to be + 7° 6′ Reaumer's scale (=48° 28′ Fahr.); at Salzburg it is 7° 4½′ R.; at Kremsmünster, 7° 4′. At Vienna the mean heat is 8° 30′ R. (=51° 7′ Fahr.); in 1836 it reached + 8° 53′ R. The greatest heat in that year was +26° 8′ R. (90° 48′ Fahr.); the greatest cold, − 14° 4′ (=0·21′ Fahr.). The mean elevation of the barometer was 28′ 2″ 4‴. In 1837 the greatest cold was −15° 5′ R. (=−1·55 Fahr.) The elevation of Vienna is 954 ft., that of Salzburg 1250 ft., above the level of the sea. Baron Welden has fixed the limit of forest vegetation at 5,000 ft., that of eternal snow at 8,000 ft.

The surface of the country in Upper Austria presents a succession of mountain tracts, whose elevation, in the southern parts, admits of little cultivation, but which are extensively clothed with fine and valuable forests.

As they subside towards the Danube, the country assumes a more cultivated appearance, but the effects of the cold winds from the snow-covered summits is detrimental to the growth of the more delicate plants. The vine is first met with at Krems in Lower Austria: it follows thence the course of the Danube, and where the mountains open near the capital, both their sides and the plains are covered with vineyards, interspersed with fruit trees of every description. The valley of the Enns is remarkable for its luxuriant growth of corn, as is the plain of Tulla on the Danube. The Marchfeld between the Moravian frontier and the Danube is also highly productive, though much exposed to drought.

The archduchy is distributed into 10 divisions, whereof 5, including the captain-generalship of Vienna, are in the lower, and the like number in the upper, prov. The pop. of the former amounted, in 1842, to 1,417,783, and that of the latter to 859,741, making together 2,277,524.

The agriculture of the archduchy is generally good, although open to many improvements, especially in the cultivation of the vine. The best wines are produced near Vienna. Cyder is extensively made in Upper Austria.

Coals, iron, and alum are produced to some, though but a very limited, extent, in Lower Austria; and in addition to these products, the mines of the upper prov. supply small quantities of gold, silver, and copper. The salt works at different places in the latter, furnish employment to from 5,000 to 6,000 individuals, and yield large quantities of salt.

Owing to the great consumption of all articles in the capital, the province exports but little produce, while its imports are proportionally great. As the high roads from Trieste and Hungary to the western and northern provinces pass through Vienna, the carrying business is extensive, and in general well managed; and the communication between the capital and all the provinces is very brisk. The roads throughout the archduchy are excellent, and the communication between Vienna and the up. prov., as well as with Hungary, is facilitated by steam navigation on the Danube, by means of which the journey from Linz to the capital is performed in a day, and that from Vienna to Pesth in 18 hours. Vienna is now (1848) also connected by railways with most provs. of the empire.

The inhabitants of the archduchy are all Germans, and are distinguished for their industry and quickness of apprehension. As the population is more sparingly distributed in the mountainous parts than in the plains and valleys, there is an appearance of well-doing throughout all classes of the inhabitants; and the schools for the lower classes are both numerous and well attended. The dress and manners of the inhabitants of the mountainous parts, especially of Salzburg, resemble those prevailing in Styria and Tyrol, as the manners and customs, as well as the occupations, of the Austrian mountaineer are nearly the same with those of the neighbouring provinces. The business of driving the cattle up to the Alpine pastures in summer, whence in the autumn they are brought down with festive parade, is the department of the women. Hand-weaving and the spinning of flax, cotton, and wool, are much carried on, especially during the winter. Agriculture is the chief employment of the inhabitants of the duchy, and is managed with considerable skill. The mountaineer is confined to more frugal fare than that enjoyed by the inhab. of the plain; oatmeal or barley puddings, prepared with the milk and butter of his cows, being his chief support. Whether this species of nourishment, or the quality of the water, or the nature of his occupations, be the cause of the *goitre* or swelling of the neck, which commences on the mountains on the Styrian frontier, is unknown. The lowlanders' enjoyments are sought in the dance and in the wine-pot, of which his libations, especially of the one-year-old liquor (*heuriger*), are both deep and frequent. The large earnings of the peasantry give a cheerful appearance to a large portion of the lower classes, that is scarcely to be met with anywhere else; and the Lower Austrian deserves credit for both earning the good things of this life, and for enjoying them.

The Gubernia at Linz and Vienna are the chief provincial authorities for the provs. of Upper and Lower Austria. Under these is the captain of the circle, who unites the judicial and administrative powers, in as far as the inhabitants of the country are concerned. In towns the administration of police is confided to a special commissary, and the magistracy performs the judicial functions. The manorial courts of the large proprietors are placed under the courts of the circle, and may be appealed from to the latter. The governor of Upper Austria resides at Linz, the cap. of the prov., and the seat of the authorities. Those for Lower Austria reside at Vienna. The Archbishop of Vienna is the head of the clerical authorities in the Catholic church for Lower Austria; the Archbishop of Salzburg exercises the same functions for the upper prov. Superintendents at Linz and Vienna conduct the clerical affairs of the Protestants under the Consistory at Vienna. The commander of the forces for both provinces resides at Vienna.

AUSTRIA (EMPIRE OF), one of the largest, most populous, and most important of the European states.

Situation and Extent. — The empire of Austria is situated in central and southern Europe; and, with the exception of a narrow strip at its S. extremity, projecting along the coast of the Adriatic, its territory forms a compact mass. It extends from about 42° to 51° N. lat., and from about 8° 30′ to 26° 30′ E. long. Its length from Lake Maggiore, in Italy, to the E. frontier of Transylvania, is about 860 m., and its breadth (exclusive of Dalmatia), from the S. frontier of Croatia to the most N. point of Bohemia, about 492 m. The total area is estimated, in the official returns, at 12,104·16 sq. Germ. or 255,640 sq. Eng. m. On the S., Austria is bounded by Turkey, the Adriatic Sea, and the independent states of Italy; W., by the states of the king of Sardinia, Switzerland, and Bavaria; N., by Prussia and Russian Poland; and E., by Russia and Moldavia. The frontiers of the empire are well defined by natural boundaries, consisting principally of mountains and large rivers, with the exception of a considerable portion of the frontier of Galicia, along the Russian territory, which is quite open.

Divisions, Population, &c. — The Austrian empire is composed of many states, differing widely in extent and population. The greater part of these states having been united under the imperial sceptre by peaceable means — that is, by inheritance or by treaty — the boundaries of all remain as they existed whilst they were independent, with the exception of the Italian provinces, whose frontiers and divisions date only from 1815.

The following table shows the area and pop. of each prov. in 1842, according to the returns published by government in 1846. (See next page.)

It is plain, however, that the population assigned to Hungary in this table is an estimate only; and it is generally believed that it is materially and designedly under the mark. Becker, a well-informed statistical writer, estimated the population of Hungary in 1840 at 12,096,202, or at 1,596,202 more than the government estimate; and supposing his statement to be nearly correct, the total population of the empire in 1842 would amount to 37,400,354; and it may now (1848) be safely concluded that it exceeds 38 millions.

The estimates of the numbers of the different races of which the population is made up vary very considerably; a consequence partly of the real difficulty of coming to any accurate conclusion upon the subject, and partly of the biases of the different writers. The following statements are in part taken from an able article on this subject in the "Morning Chronicle" for November, 1848.

First, SLAVES, viz., the *Czechs*, or *Tshehs*, of Bohemia and the south-west part of Moravia, the latter called *Mowrasci;* the *Slowaken*, or *Slovacks*, in the north-west and north parts of Hungary and in part of Moravia, chiefly in the Hradich and Prerau circles. In Hungary the Slowacks make up nearly the whole population in 9 counties, at the same time that they constitute a large proportion of its amount in a great number of others. The *Lechs*, or Polish Slavonians, are chiefly found in Galicia, in the Mazurka plains, and in Silesia, &c. The *Rusniacks*, or *Ruthener*, (Red Russians,) are found in the middle and eastern parts of Galicia, partly in the Bukowine, and also in the north-east part of Hungary; they are Greeks in religion. The *Wenden*, *Slowenci*, or *Slowens*, inhabit Lower Illyria, Carinthia, the borders of the Drave, and the parts of Croatia between the Save and the Drave. The Croats are, espe-

Provinces.	Area in Geog. sq. m.	Population in 1842.	Pop. to a Geog. sq. m.	Chief Towns.	Population in 1838.
Lower Austria	359·45	1,417,783	3,944	Vienna	326,350
Upper Austria	347·97	859,741	2,476	Linz	23,310
Styria	408·40	983,744	2,409	Gratz	39,770
Carinthia and Carniola	369·91	766,396	2,072	Klagenfurt Laybach	12,000 13,000
Illyrian Coast	145·41	486,435	3,345	Trieste	44,530
Tyrol	522·87	842,768	1,611	Innspruck	10,730
Bohemia	943·73	4,279,189	4,534	Prague	102,918
Moravia and Silesia	498·27	2,223,729	4,463	Brunn Troppau	36,700 12,550
Galicia	1594·38	4,910,629	3,080	Lemberg	54,960
Dalmatia	232·41	401,541	1,727	Zara	6,461
Lombardy	392·15	2,600,760	6,632	Milan	150,900
Venice	433·90	2,202,529	5,076	Venice	97,150
Hungary	4143·03	10,500,000	2,533	Buda and Pesth	104,600
Transylvania	998·23	2,103,405	2,112	Clausenburg	14,500
Military Frontier	714·08	1,220,503	1,709		
Totals	12,104·16	35,804,152	2,958	—	—

cially in the military frontiers, known as *Slowenо Howratci*. The Slavo-Serbs, or Servians, inhabit Illyria, the *Slavonians* the frontier country called Slavonia Proper. The *Serbs* are also found in Croatia, &c. The Uskocki, or Uskoks, in Carinthia, &c. Besides these, there are also the Slavonian families of the *Morlachs*, *Dalmatians*, *Ragusans*, &c. As to the whole number of Slaves within the empire, the estimates made by those under or connected with the government of Vienna have been much under the estimates of others. In Cannabich's edition of Galetti's Statistics, printed at Vienna, but published at Pesth in 1835, the lowest estimate of the whole population of the Slave race is 15,600,000, or half his estimate of the entire population of the empire in 1825. Springer, however, who had access to official accounts, says, in 1837, that the Slave population amounted only to 14,820,000, viz., 4,500,000 in Hungary; 3,760,000 in Galicia; 2,500,000 in Bohemia; 1,500,000 in Moravia; 760,000 on the military frontiers; 480,000 in Krain and Carinthia; 355,000 in Illyria; 300,000 in Styria; 400,000 in Transylvania; and 230,000 in Dalmatia. But this statement is but little to be relied on; and we believe we shall be within the mark if we estimate the Slave population of the empire as follows, viz.; — Hungary, including Croatia, Slavonia, and the Banat, all contiguous countries, at 6,750,000 inhabs.; Transylvania, 250,300; Galicia, at least 4,250,000; Bohemia, Moravia, and Silesia, at least 4,750,000; Illyria, Dalmatia, Carinthia, &c., at least 1,750,000; making a total of 17,750,000. Other estimates exceed 19 millions; and it may, perhaps, be said, that the inhabitants of the Slave race are about equal to half the population of the empire, whether we take it at the official account of 1842, or at the higher estimates.

The GERMANS, the *second* race, in point of numbers, occupy nearly the whole Archduchy of Austria, including Salzburg, with some parts of Bohemia and Moravia, great part of the Tyrol, parts of Styria and Illyria, being also dotted in detached colonies and settlements over the military frontiers, and in spots of Hungary, Galicia, and Transylvania. They are the most industrious portion of the Emperor's subjects, and those who, it was supposed, (though the Viennese would appear to have been an exception,) troubled themselves least about reform and politics. The total number of Germans was estimated by Springer at 6,400,000; and we may now at least estimate them at 6,500,000.

Third. The MAGYARS. — The Austrian statistical writers generally contend that the numbers of this leading, though not most numerous, portion of the inhabitants of Hungary, have been greatly overrated. But, on the other hand, their estimates are justly suspected of being underrated. Springer estimates the Magyar inhabitants of Hungary at 4,500,000, and of Transylvania at 620,000; those of the military frontiers at 180,000; and of the Galician do., at 3,200; being in all 5,305,000: and this amount, judging from other statements, would appear to be about, or rather over, the mark. Cannabich did not estimate the whole number of Magyars, in 1833, at above 4,500,000.

Fourth. The ITALIAN population of the Austrian states amounts, as nearly as possible, to 5,300,000 inhabs.

Fifth. The WALLACHS, or Dacians, who call themselves Rumini, or Romani, are settled in Hungary, on the military frontiers, in Transylvania, the Bukowine, &c. They amount to about 1,700,000 souls.

Sixth. The JEWS are chiefly settled among the Slave races, whose business they usually manage. There are about 260,000 of them in Galicia, 250,000 in Hungary, 70,000 in Bohemia, and they are scattered over the other parts of the empire. Altogether they amount to about 670,000. Greeks, Armenians, Ziguenes, or Gypsies, and some others are also found in most provs.; the first two generally employ themselves as money dealers or traders.

These results may be summed up as follows, viz, —

1.	Slavonians	17,750,000
2.	Germans	6,500,000
3.	Magyars	5,305,000
4.	Italians	5,300,000
5.	Wallachians	1,700,000
6.	Jews	670,000
7.	Gypsies, Greeks, Armenians, &c.	150,000

Nearly every prov. differs from the others in the density and distribution of its population. In Galicia and Hungary, both agricultural countries with comparatively little trade, the villages are usually very large and populous, but widely scattered. In Lombardy and Venice the inhabitants are so much diffused over the face of the country, that the inmates of towns form but a small proportion of the whole; and consist almost exclusively of the nobility and traders. The German and Slavonic provinces show a medium between the two.

There are no means by which to form an accurate estimate of the progress of population in the Austrian empire. It differs considerably in different years. The visitations of the cholera on two occasions within the last 20 years effected a considerable decrease of the population; and the extreme differences in the physical and economical condition of the different provinces, have a corresponding influence over the number of their inhabitants. But in ordinary years it may be estimated that above 200,000 souls are added to the population.

Face of the Country. — *Mountains*. — The Austrian empire exhibits every variety of surface. Two grand mountain ranges, branching from the central group of the Alps, traverse it in different directions, throwing out numerous and extensive dependent branches. The first of these, which has been termed the *Hercyno-Carpathian* chain, divides the regions of the German Ocean and Baltic from those of the Black Sea and Mediterranean. Leaving the canton of Grisons, in Switzerland, this mountain range traverses Vorarlberg in a N. direction to the lake of Constance: thence it passes through Wirtemberg and Bavaria, separating the regions of the Rhine and Elbe from that of the Danube, and re-enters Austria on the N. E. frontier of Bohemia, where it throws off an extensive branch of the Erz (Ore) mountains, which stretches into that kingdom and into Saxony. Taking a S. E. direction from the sources of the Eyer, this chain runs, under the name of the "Bohemian Forest," nearly to the Danube, where it once more diverges to the N. E., and dividing Moravia from Bohemia, sends out a branch into Prussian Silesia and Lusatia, named the Riesen (Giant) mountains. On the frontiers of Galicia and Hungary, it joins the Carpathians, which branch off to the Danube near Presburg. The central Carpathians form the boundary between the above-named provinces, as far as the sources of the Save and Dniester, where a chain of low heights stretch from them into the Russian territories, separating the region of the Vistula from that of the Dniester. The eastern

Carpathians cover the N.E. counties of Hungary, the Bukowine, and Transylvania, as far as the Danube.

The second mountain range, which has much more elevated summits, and covers a larger tract of country, divides the region of the Mediterranean from that of the Black Sea: it stretches from the frontiers of Switzerland and Piedmont in three chains, which, through the Tyrol, run nearly parallel to each other. The central chain exhibits the primitive formations of granite and slate: its summits are covered with eternal snow, above the elevation of 8,000 feet. Following the right bank of the Inn, as far as the point of junction of Salzburg and Carinthia, it takes a N.E. direction through Styria into Hungary, and subsides in the Leitha chain near the Danube. The two accompanying chains are of limestone: that on the N. covers northern Tyrol, Salzburg, and great part of the Archduchy of Austria, and is intersected by the numerous streams which flow from the central chain to the Danube. The S. parallel chain sends its ramifications from S. Tyrol into Lombardy; and, passing through Illyria and the Croatian frontier district, unites with the Balkhan on the borders of Bosnia. Three important branches strike off from this chain, one of which stretches between the rivers Raab and Drave, under the name of the *Bakony* Forest, into Hungary; a second divides the region of the Drave from the valley of the Save; and the third, stretching along the Adriatic through Dalmatia, is called by the natives, from its dark colour, *Monte Nero*, or *Negro*.

The principal valleys in Austria are situated in the southern provinces, and run parallel with the Alps, in the direction of W. to E. They are found in Tyrol, Salzburg, Styria, and Illyria. Croatia belongs for the greater part to the valley of the Save; and Slavonia to the valley of the Drave.

Large plains are also found within the empire; they follow, for the most part, the course of the principal rivers. The northern part of the plain of the Po, between the Adriatic Sea and the fall of the Apennines, belongs to Austria. The plain or basin of Vienna, which stretches from the Leitha mountains to the heights of Moravia, is traversed by the Danube and the March. In Hungary there are two very extensive plains; one in Upper Hungary, situated between the Carpathians and the Bakony forest; the second, extending from the E. fall of the last-named forest and the Matra hills to the rise of the Transylvanian mountains, and from the central Carpathian chain on the north, to the mountains of Slavonia on the south. The plain of the Vistula and the San, in Galicia, is a portion of the great level which stretches from the fall of the Carpathians on the north to the Baltic.

Rivers, Lakes &c. — Two thirds of the Austrian empire are comprised in the basin of the Danube. This great river enters Austria at Engelhard's Zell, near Passau: in its S. E. course through Upper and Lower Austria and Hungary, it receives all the rivers falling from the two grand mountain ranges described above; the chief of which are, on its left bank, the March, Waag, Gran, Theiss, Temes, &c.; and on its right bank, the Traun, Ens, Raab, Drave, Save, &c. These rivers, with many of their tributaries, are navigable to a greater or less extent, and afford very extensive means of commercial communication. Bohemia belongs to the basin of the Elbe, which, rising on its N. E. frontier, traverses it in a direction from N. to S., and then W. and N. W., being navigable for barges from Melnik, where it is joined by its important tributary the Moldau, flowing N. by Budweis and Prague. The Oder has its source in the chain of hills which connects the Silesian Mountains with the Carpathians. The Vistula has its sources in the Carpathians, near Jablunka. It may be navigated, in favourable seasons, for the greater part of its course along the N.W. frontier of Galicia. It receives the Dunajets, the Wisloka, and the San. The last-mentioned river is sometimes navigable for a part of its course by flat-bottomed boats drawing little water; but the truth is, that the navigation of *all* the Galician rivers is liable to much obstruction, especially in dry seasons. Even the navigation of the Vistula, from Cracow downwards, is frequently interrupted; and the difficulty of transport thence arising occasions the extraordinary discrepancy that usually obtains between the prices of wheat and other grain in Dantzic and in Galicia. The Dniester, which, also, has its source in the Carpathians, runs in a S. E. direction through the centre of the E. portion of Galicia, being occasionally navigable for barges from Koniuszki, 35 m. S. W. Lemberg. The Po, the principal river of Italy and of Lombardy, receives in its course through and along the borders of the Austrian territories, the Ticino, Adda, Oglio, and Mincio. The Adige, the Tagliamento, and the Lisonzo, traverse the provinces of Venice and Illyria in their course to the Adriatic. The Rhine bounds the extreme W. frontier of the empire for a small portion of its course before it falls into the Lake of Constance.

Lakes, &c. — On the N. side of the Alps the largest Austrian lakes are those of Atter-Gmünden, or Traun, Hallstadt, and Augsee, connected together by the Traun, and the lakes of St. Gilgen and Monel See. The Neusiedler and Balaton lakes, in Upper Hungary, are, however, by far the largest in the empire; the water of the former is saltish. On the S. side of the Alps, the Lakes Maggiore, Lugano, Como, Iseo, and Garda, are the most considerable, and the most celebrated.

Climate. — Four distinct climates are found within the limits of this extensive empire. The most southerly part of Dalmatia produces the palm-tree, and at Ragusa, the mean elevation of the thermometer is stated by Blumenbach to be +11° 8′ R., or 57° 3′ Fahr.: upon a line drawn along the S. foot of the Alps, the mean temperature at Milan is +9° 4′; at Temeswar, +9° 2′. On the N. side of that chain, in Linz, it is +70° 6′; in Vienna, +8° 5′, (nearly the climate of Strasburg); Buda, 8° 8′; in Klausenburg, +8° 3′. In Prague, the mean heat is +7° 9′; in Olmutz, +7° 3′; in Troppau, +7° 3′; in Lemberg, +6° 1′ R. Wine and Indian corn do not thrive to the N. of the last drawn line, except in unusually favourable situations; but corn of all other descriptions, flax, hemp, and hardy fruits, attain perfection. The observations at Vienna, for 1837, give for the mean temperature only +7° 2′ R. The air is for the most part clear and salubrious; but the heats of summer and the colds of winter are both in what we should consider extremes. The greatest quantity of rain falls in Lombardy, the smallest quantity in the central districts of Hungary and in Dalmatia, which often suffer from excessive drought. In this last province, the fall of rain averages 12 inches: at Vienna the average was, for 1836, 15·99 inches; for 1837, 15·86. The classification given by Francini for Switzerland has been found to suit Tyrol with equal precision.—1. The region of the vine from 700 ft. to 1,700 ft. above the level of the sea.—2. The region of the oak, from 1,700 ft. to 2,800 ft.—3. The region of the beech, 2,800 ft. to 4,100 ft.; the walnut only reaches 3,500 ft.; the plum-tree, 3,720 ft.; pear and apple-trees, 4,100: but little wheat is grown in this region; but the meadows are excellent.—4. The region of fir, from 4,100 to 5,500 ft.—5. The lower Alpine region famous for its pastures, 5,500 ft. to 6,500 ft.—6. The Upper Alpine region, 6,500 ft. to 8,200 ft., above which is the region of eternal snow.

Natural Productions, Minerals, &c. — The mineral riches of the Austrian empire, supposing they were fully developed, are probably not inferior to those of any other European country. Besides gold and silver, considerable quantities of which are produced by the mines of Transylvania and N. Hungary, Austria has inexhaustible supplies of the more useful metals, with coal, salt, &c. But mining industry (see *post*) is only in its infancy, and has neither attracted the capital nor the skill necessary to insure a successful result. Native steel, or carbonated iron ore, is found in Styria and Illyria, in masses that require rather to be quarried than excavated. Of the rarer metals, *titan* is found near Roese, in Hungary, *uran* in the Sudeten in Bohemia, *tellurium* in Hungary and Transylvania. Besides the opals of Hungary, the most beautiful that are known, an inferior kind is found in Moravia; carnelian, beryl, chalcedon, topaz, garnet, and amethyst, in Bohemia and Hungary, of superior quality.* Coal has been found in nearly every province, but the cheapness and abundance of fire-wood have hitherto prevented much search from being made after it. Upwards of 100 descriptions of marble, quartz for the manufacture of glass, clays for porcelain and mineral dies of all kinds, are also found in abundance. Upwards of 100 mineral springs are annually frequented; amongst which Carlsbad, Toeplitz, Marienbad, &c., attract visitors from all parts of the world.

Animals. — All the domestic animals found in England are met with in the Austrian empire. Exclusive of these the brown bear is indigenous in the Alps and the Carpathians, the wolf in both these mountain chains, and the lynx is found in all the provinces. The chamois, red and fallow deer, roebucks, wild boars, all descriptions of game known in England, with the exception of grouse, and several other kinds of birds unknown in our islands, are objects of chase. The urus and elk are sometimes found in the E. Carpathians, but only as stragglers. The ibex is nearly exterminated. Herds of wild horses of a diminutive size range the Hungarian plains; and even where the improvement of the breed is attended to, they are allowed to rove almost in a state of nature. The golden eagle inhabits Slavonia, and other large species are found in the Rhetian and Noric Alps. Herons of various kinds, some of the choicest plumage, abound in the morasses of Hungary; and there also the land tortoise is found in great numbers. The same morasses furnish an abundant supply of leeches,

* Graphite, a variety of black lead, occurs in Bohemia and in Lower Austria. Sulphur, vitriol, saltpetre, the latter especially, in Hungary, are extensively obtained.

whence they are regularly transported by means of a series of ponds, that serve as so many stations, to Paris and the W. of Europe. Wax is an important product of the Bukowine and other S. provinces. Cantharides are found in several parts of Hungary; cochineal in Galicia; and pearls of a beautiful water are fished in the Moldau.

Products (*Vegetable*). — These comprise the different sorts of corn and of cultivated grasses found in Europe, with vines, flax and hemp, tobacco, hops, saffron, woad, some species of indigo, yellow woad or *rhus cotinus*, galls, and an immense variety of fruits. The forests are of vast extent, and will, no doubt, come to be of great value. The mountain chains of the northern provinces and of the Alps are covered with fir, pine, beech, larch, &c. The low grounds, including the vast forest of Bakony in Hungary, with others in Transylvania, the Bukowine, Galicia, Slavonia, &c., produce oaks of a gigantic size, with beech, ash, alder, elm, &c. Every prov. is well supplied with wood, with the exception of Low. Austria (into which large quantities are imported from Tyrol and Up. Austria, to meet the consumption of the capital), Lombardy Proper, and Hungary, where, from neglect of management and bad economy, the stock has in many parts been alarmingly reduced. In the other provs. the forests are well managed; and care is taken to supply the annual consumption by sowing and planting in proportion to the quantity felled. The proprietors of estates are obliged, in Austria, as all over Germany, to employ foresters, who have been educated in forest schools, and have passed the necessary examination. Their business is to calculate the quantity of timber that may be felled without diminishing the stock. The means at their command in back ranges of mountains are generally applied with great ingenuity to forward the felled trees to the common channels of communication. A kind of hollow railroad of timber (*Riesen*), sloping down the side of a mountain, often several thousand yards in length, and down which the trunks of trees are precipitated, is one means of transport. The trunks are raised from a valley to the summit of a neighbouring chain, over which they have to be transported, by means of ropes and pulleys, worked by a rude water-wheel temporarily erected by the woodman on a little brook (*Holzaufzug*); and the springs near the summits being led into a temporary reservoir on the ridge of the hills, the burden thus raised is received by it in order to be precipitated into the hollow on the other side, when the sluices confining the waters are opened (*Klause*). The Tyrolese are particularly distinguished by their ingenuity in devising these sort of contrivances, and by their wooden fabrics. Among others they construct houses, shops, &c., the parts of which being regularly marked and numbered, are packed up and conveyed by the Lake of Constance to the adjoining countries, where they are erected with the utmost facility. But while this ingenuity is shown in the management of the mountain forest-tracts of fir, the far richer wooded districts of Slavonia, the military frontier, and Upper Hungary, in which the more valuable forest trees attain a size unusual in Europe, are neglected and but little known. The carriage, instrument, and cabinet-makers of Vienna furnish the cheapest goods of the kind in Europe; but the want of capital is equally visible in this branch of trade as in the mines, and but little skill is displayed either in economising the stock or in seasoning the supply of timber brought to market. The forests cover more than a third part of the productive soil of the empire, and are distributed, according to the statement of Becker (*Handel's Lexicon*, Vienna, 1837), as follows:—

Provinces.	No. of Acres of Forest Land.	Produce in cubic Vienna Fathoms.	Average Produce per Acre in cub. Fath.
Austria	3,219,561	2,053,131	·64
Styria	2,523,008	1,820,234	·72
Illyria	2,174,177	1,832,597	·52
Do. coast	451,124	234,039	·52
Tyrol	2,767,496	932,300	·33
Lombardy, Venice	1,618,451	869,257	·53
Hungary	12,716,576		
Dalmatia	394,380	252,060	·64
Mil. Frontier	3,070,995	1,113,717	·45
Transylvania	3,936,096	2,120,000	·56
Galicia	6,046,143	2,423,689	·40
Bohemia	3,393,215	1,165,092	·63
Moravia, Silesia	1,585,215	1,310,657	·84

Becker does not give the probable annual produce of the Hungarian forests, but it is very great. Some idea of the extent of the oak forests may be formed from the fact that nearly 200,000 bushels of gall-apples are annually exported, besides what are used in the country. The distribution of the forests is, however, very irregular; and, while in the mountainous tracts they are of immeasurable extent, the want of fire-wood is so great in the plains, that dried dung is a common substitute for faggots. In Transylvania, especially, and the military frontier, the forests are of great extent, and filled with trees of the finest quality, equally adapted for the use of the builder and the naval architect.

Facilities for Internal Communication and for Commerce.—The Austrian government has laudably exerted itself to improve the means of communication. From Pavia, on the S. W. frontier, an uninterrupted *Macadamized* road conducts the traveller to Czernowitz in the Bukowine, a distance of upwards of 1,000 m. From Milan to Vienna there are three lines of road, and through Galicia the line is double. Three grand high-roads from Venice, and two from Trieste, lead to the Tyrol and Germany, and double lines run from each of these cities to the capital. Prague is connected with Vienna by numerous lines of communication, which are continued to the frontiers of Bavaria, Saxony, and Prussian Silesia. Materials for making roads abound in most provinces, though not in all, and the art is well understood. Upwards of 60 mountain passes, varying from 10 to 70 m. in length, have been made not only practicable, but commodious for travelling and commercial purposes. On the roads across the Alps through Tyrol and Illyria the greatest sums have been expended; their importance in a military point of view, and the necessity of facilitating the communication with a powerful and not very well affected province, rendering them indispensable. The road over the Stelvio, or Wörmser Joch, in S. Tyrol, passes over an elevation of 8,400 feet above the level of the sea, and is covered in dangerous parts with solid stone arches, over which the avalanches glide into the depths below. This undertaking surpasses the roads of the Simplon and Mont Cenis in boldness and splendour of execution. But the exertions of private industry have not remained far behind those of the state. In Hungary, no doubt, many nobles still consider it a *privilege* to be exempted from contributing to the making roads; but individuals have at no time been wanting amongst that body who have set a laudable example in this respect. A joint-stock company, chiefly composed of Hungarian nobles, undertook the execution of a road from Carlstadt in Croatia, to Fiume on the Adriatic Sea; which has been carried over part of the Julian Alps in a very skilful manner, and with an easy ascent. Stout parapets have been constructed, which protect travellers and carriages against the furious blasts of the *Bora*, which would otherwise sweep away everything in its course. This road was commenced in 1803, and was named after the Archduchess Maria Louisa. Two other lines, one between the same points, the other running from Carlstadt to Zeng and Carlopago, across the same mountain range, each of which was scarcely less expensive, although not so serviceable as the "*Louisenstrasse*," had been constructed by, and called after, the emperors Charles VI. and Joseph II.

Sundry railways have also been constructed in various parts of the empire; though the nature of the ground and the thinness of the population frequently oppose the most formidable obstacles to their formation in districts where they would be of the greatest utility. Among others that have been executed may be specified the railway from Linz in Upper Austria to Budweis in Bohemia, on the Moldau. Another and more important line has been opened from Vienna to Brünn, in Moravia, whence a branch leads by Olmutz W. to Prague, and another N. E. to Bochnia in Galicia, whence it is proposed to carry it to Lemberg. A railway has also been completed, running S. from Vienna by Bruck to Cilley in Carniola, from whence it is intended to carry it over the Julian Alps to Trieste and Vienna; but the difficulties that will have to be overcome in this part of its course are so very great, that it may be doubted whether, if completed, it would be productive. Raab, the most important corn-market in Hungary, communicates by railway with Vienna; and in Lombardy a line has been formed leading across the lagoons, from Venice to Vicenza and Milan.

The river system of Austria, though upon a grand scale, is less available for the purposes of internal communication than is, perhaps, usually supposed, the navigation of the greater number of the rivers being liable to be seriously impeded both by floods and droughts, especially the latter. It is, also, to be regretted that none of the navigable Austrian, Hungarian, or Croatian rivers have their embouchure in the Adriatic; but are all affluents of the Danube, which, after traversing the centre of the empire, pours its waters into the Black Sea, whence only it is accessible. To obviate this deficiency it has been proposed to unite the navigable river the Save, one of the principal tributaries of the Danube, with the port of Fiume on the Adriatic; it being supposed that the corn, and other produce of Hungary, might be conveyed by its means to a much more convenient and better market than it is ever

likely to meet with at Galatz or other port near the mouth of the Danube. But it has not been seriously attempted to realise this project; and, though it were realised, it may, as previously stated, be doubted whether it would have the anticipated success. It would cost a very large sum: and the expense of conveying so bulky a commodity as wheat by its means, would be so great that the probability is it might be brought cheaper to Marseilles by Galatz than by this channel.

For several years past, the Danube has been navigated by steamers from Ratisbon to Vienna, which thence convey goods and passengers to Galatz, Trebisond, Constantinople, and Smyrna. But its navigation is very different from that of the great American rivers, and is subject to considerable difficulties. From Vienna to Presburg, the river is so very shallow as to be navigable, in dry seasons, only by vessels drawing from 18 inches to 2 or 2½ feet water, and even their progress is not unfrequently interrupted by changes in the channel of the stream, and the shifting of movable sandbanks. Lower down, for a space of about 80 m., between Moldova and Gladova, where the river leaves the Austrian territory, its channel is much contracted; and the water rushes over its rocky bed with so much violence, especially at the point called the Iron Gate, near Orsova, that it cannot be safely navigated downwards except during floods, and is nearly impracticable for vessels ascending the stream. Various efforts have been made, both in antiquity and in modern times, to obviate this difficulty, but with no very decided success. In consequence, passengers and goods, passing up and down the river, are now mostly conveyed by road from the one end of the rapids to the other. (See for further details on this subject the art. DANUBE.)

Ports and Harbours. — The principal commercial port of Austria is Trieste upon the Adriatic. It is a free port, and is, with Venice, which has the same privilege, shut out of the customs line; the duty on goods imported into them not being demanded until they are sent into the interior. Venice is the seat of the Admiralty, and has dock-yards and naval arsenals. Pola, in Istria, celebrated for its magnificent amphitheatre, has one of the finest harbours in the Mediterranean; but unluckily it is so very unhealthy that it is almost uninhabited.

Shipping. — Since the loss of Flanders, the mercantile navy of Austria has been wholly concentrated in the ports on the Adriatic. But it is, notwithstanding, very considerable; and engrosses at this moment a large share of the trade of the Mediterranean and Black Sea. The oak timber of Carniola and the Dalmatian coast is reckoned about the very best in the world; so that the Austrian ships, being built of it, are very strong, at the same time that they are particularly handsome. They are also well manned and provided. The seamen are expert, temperate, and orderly; and the laws for the regulation of the merchant service are said to be excellent.

By far the greater number of vessels of large burden belong to Trieste. The rest belong to Venice, Fiume, Ragusa, and the Bocche di Cattaro. On the other hand, the smaller vessels employed in the coasting trade, which is very considerable, are more equally divided; Venice having, probably, as many as Trieste, while a good number belong to the ports of Istria, Hungary, and Dalmatia.

The foreign trade of Trieste comprises all voyages beyond the limits of the Adriatic; and may be divided as follows: —

1. The Levant trade, including the Ionian Islands, Greece, Constantinople, Smyrna, Odessa, &c., the ports in Syria, Cyprus, Candia, and Egypt, more especially Alexandria.

2. The *ponente* or Mediterranean trade, in the west, comprising the coast of Barbary, Spain, France, and Italy; being principally carried on with Marseilles, Genoa, and Leghorn.

3. The commerce on the ocean, which the Austrian merchants have attempted with considerable success. Several ships sail for Brazil, Cuba, the U. States, England, Hamburg, &c.

The number of Austrian vessels engaged in foreign trade amount to about 650, having an average burden of 200 tons each. But exclusive of these, above 1,200 vessels of about 40 tons each are engaged in the coasting trade. The fishery is but inconsiderable.

A company at Trieste has been established, within a few years, under the name Lloyd's Austriaco. They have had a number of steam boats built at Porto Ré, near Fiume, with which a communication is now kept up between Trieste and Venice, the Dalmatian harbours, Greece, Smyrna, and Alexandria.

State of Agriculture. — The following tables, relating to the agriculture of the Austrian empire, are taken from the work of Tegoborski, *Des Finances et du Credit Public de l'Autriche*, by whom they were carefully compiled from Springer and other authorities.

Distribution of the Soil of the undermentioned Provinces of the Austrian Empire in 1837.

Provinces.	Arable Land.	Vineyards.	Meadows, Gardens, &c.	Pasturage.	Forests.	Total of Productive Soil.
	*Jochs.**	*Jochs.*	*Jochs.*	*Jochs.*	*Jochs.*	*Jochs.*
Austria below the Enns - -	1,399,910	80,153	447,758	251,347	1,122,285	3,301,453
Austria above the Enns - -	834,350	27	530,600	517,680	1,141,820	3,024,677
Styria - - - -	709,140	54,870	456,960	596,340	1,773,560	3,590,870
Carinthia and Carniola - -	477,490	16,810	556,970	763,840	1,528,940	3,344,050
Littoral - - - -	245,730	26,130	171,250	520,860	317,240	1,281,210
Tyrol - - - -	377,300	65,300	432,930	648,800	1,946,200	3,460,530
Bohemia - - - -	3,889,970	4,140	948,040	611,500	2,316,290	7,770,240
Moravia and Silesia - -	2,213,850	51,790	390,150	463,090	1,114,840	4,233,720
Galicia - - - -	5,770,390	30	2,068,030	1,360,160	4,250,930	13,449,530
Lombardy - - -	1,119,750	539,760	513,550	405,190	707,540	3,285,790
Venice - - - -	1,002,324	613,260	475,460	503,260	430,600	3,024,900
Total -	18,040,390	1,442,570	6,991,698	6,642,067	16,650,215	49,766,970

* N.B. A joch is equivalent to 1 ac. 1 rood, 27½ perch, English measure: hence 7 jochs are very nearly equal to 10 Eng. ac.

Account of the total Produce of the different Crops of Corn in the undermentioned Provinces of the Austrian Empire in 1837.

Provinces.	Wheat.	Rye and Maize.	Barley.	Oats.	Total.
	Metzen.†	*Metzen.*	*Metzen.*	*Metzen.*	*Metzen.*
Austria below the Enns - - -	1,212,700	5,230,000	977,000	5,782,000	13,201,700
Austria above the Enns - - -	665,400	2,327,200	1,337,000	2,007,700	6,337,300
Styria - - - - -	927,500	2,875,200	127,600	2,002,200	5,932,500
Carinthia and Carniola - - -	416,600	885,100	599,700	1,662,300	3,563,700
Littoral - - - - -	348,900	833,300	197,600	105,600	1,485,400
Tyrol - - - - -	384,000	812,600	373,000	340,000	1,909,000
Bohemia - - - - -	1,892,800	10,056,000	4,175,800	8,223,300	24,347,900
Moravia and Silesia - - -	1,700,700	5,482,100	2,326,000	5,770,600	15,279,400
Galicia - - - - -	2,902,500	7,552,100	10,527,200	14,693,100	35,674,900
Lombardy - - - - -	2,899,800	5,171,000	56,400	338,000	8,465,200
Venice - - - - -	2,598,000	4,791,000	58,000	317,000	7,764,000
Total -	15,848,900	46,015,000	20,755,300	41,241,800	123,861,000

† The metzen is equivalent to about 1⅔ imp. bushel.

We also subjoin a statement, compiled from different authorities, of the horses, kine, sheep, &c., in the different provinces of the empire in 1836. (See next page.)

The Lombards devote more attention to agricultural pursuits than any other people of Europe; and no where, perhaps, does land yield so much produce, in proportion to its quality, as in the district extending from the Alps to the Po, and from the Ticino to the Adige. The water from the great Alpine lakes, and from the rivers through which they discharge it, is conducted by innumerable canals to a large portion of the fields, in which a most effective system of irrigation has been introduced. It is common to mow these meadows three times a year, and to graze them besides during the autumn. The meadows feed the cows that produce the beautiful Parmesan and Strachino cheeses, the preparation of which is attended with no further mystery. The greater part of these meadows are broken up every three years, and crops of wheat and maize taken; when they are again laid down with rye-grass.

Provinces.	Horses	Oxen.	Cows.	Sheep.
Lower Austria - -	57,725	90,509	199,220	352,761
Upper Austria - -	43,134	86,349	279,386	191,514
Styria - - -	52,680	100,115	230,848	146,611
Carinthia - - -	38,352	110,346	165,812	227,671
Carniola - - -	14,803	48,369	65,696	63,004
Illyrian Coast - -	9,085	133,210	47,212	314,342
Tyrol - - - -	23,778	770,056	291,097	420,798
Bohemia - - -	137,807	240,252	690,969	1,340,409
Moravia and Silesia -	139,284	63,944	343,992	749,189
Hungary - - -	761,000	4,000,000		20,000,000*
Military Frontier -	296,861	239,685	281,526	160,565
Transylvania - -	350,000	600,000		900,000
Galicia (1837) - -	521,385	542,317	953,199	1,241,667
Dalmatia - - -	14,146	55,045	33,398	639,809
Lombardy - - -	58,778	159,800	263,354	198,351
Venice - - - -	50,100	207,051	201,508	365,077

The fields are further surrounded with plantations, and sometimes with a kind of hedge of mulberry trees, the leaves of which furnish food for the silkworms. The extent to which the cultivation of silk has of late years been carried is shown by the fact that while, in 1824, the exports from Lombardy amounted only to 956,605 lib. pic., they amounted at an average of the three years, 1835-6-7, to 4,905,850 lib. pic. of spun, raw, and waste silk! Although the mulberry tree is cultivated all over the north of Italy, yet it is more especially planted in the dry and stony districts near Verona. The production of oranges and lemons is confined chiefly to the neighbourhood of the Lago di Garda, where the trees are kept in covered gardens or terraces, against the sides of the hills. The division of agricultural labour is curious in these provinces. Not only a number of persons occupy themselves with silk-growing, who have no land, and are obliged to purchase the leaves from others, but the greater part of the cheese is made by persons who purchase or farm the milk of the cows, and whose whole vested property consists in the pans and utensils. Land in these provinces is perfectly free from feudal services and contributions, but is highly taxed. The practice of letting land prevails to a great extent in Lombardy; the usual rent paid by the farmer (Colone) being half the gross produce of the land. The stock, however, in such cases, generally belongs to the landlord.

No statement is given in the above table of the extent of land in tillage, or of the produce annually reaped in Hungary and Transylvania; and though numerous statements of this sort have been published, they are deserving of but little attention. It is sufficient here to state, that Hungary has almost unequalled capacities for the production of wheat and of all sorts of corn; but that these have hitherto been all but wholly neglected; and that, with a few trifling exceptions, agriculture, within the Hungarian territory, is in a state of primæval barbarism. The country from Pesth to the borders of Transylvania, and from Belgrade to the vine-bearing hills of Hegyalja, is a vast plain from 12,000 to 15,000 sq. m. in extent, traversed by the Danube, the Theiss, and the Maros, and presenting, one should think, the most inviting field for the labours of the husbandman. Mr. Paget, in his work on Hungary †, remarks on this vast plain as follows: — "The soil of the plain (*Puszta*), as might be anticipated from its extent, and, I might add, from the nature of the rocks, from whose débris it has been formed, is various in its nature and in its powers of production. A considerable portion is a deep sand easily worked, and yielding fair crops in wet seasons; a second, found principally in the neighbourhood of the Danube, Theiss, and Temes, is boggy, and much deteriorated in value from the frequent inundations to which it is subject, but capable of the greatest improvement at little cost; and a third is a rich black loam, the fertility of which is almost incredible. When the reader reflects that this fruitful plain is bounded on two sides by the largest river in Europe, that it is traversed from N. to S. by the Theiss, and that it communicates with Transylvania by the Maros, it is almost impossible to calculate what a source of wealth it might prove to the country. In any other part of the civilised world, we should see it teeming with habitations, and alive with agricultural industry, the envy of surrounding powers, the granary of Europe. Here it is the most thinly populated, the worst cultivated, and the least accessible portion of the country. Various causes have contributed to produce this effect. Most of the inhabitants of the plain are Magyars, whose warlike propensities induced them to take the most active part in the constant wars in which the country was formerly engaged. * * Among the Magyars, too, the number of children is generally small: why the Irish should be so prolific on starvation, and the Magyars so much the contrary on abundance, is, I must confess, a mystery to me; but such is the fact. The ease with which the land is obtained, its cheapness, the richness of the soil, and the few wants of the people, have also operated to check the progress of improvement in agriculture. The formation of roads, too, is rendered exceedingly difficult by the distance from which the necessary materials would often require to be conveyed; but still more by the unjust character of the law, which throws the whole burden of making them on the peasant, thus rendering it impossible to expend so large a capital as would be required for their first formation in such situations." (*Travels in Hungary*, ii. 3.)

Wine is a principal object in various parts of Hungary; and much care is usually bestowed both on the culture of the vineyards and the manufacture of the liquor. The best of sweet wines, Tokay, owes its celebrity entirely to the care with which the ground is tilled and the grapes sorted. The vine is, also, extensively grown in Transylvania; and though nothing can be ruder than the present process of wine-making in the prov., the wines are remarkable for their bouquet and flavour, and have considerable body. The culture of silk is rapidly increasing, and might be raised in every part of Hungary. A great obstacle to the improvement of agriculture was removed by the Diet of 1836, when a law was passed for fixing the division of land. Down to that period the peasant only tilled his portion for three years, after which another was allotted to him by his lord, and the share he possessed was either given over to others or turned into grazing land. The want of a market for their corn and their nomadic habits, have tempted the Hungarians to prosecute, on a large scale, the raising of sheep and wool. The number of sheep was estimated by Lichtenstern at 6 millions, in 1805; but it now (1848) probably amounts to above 24 millions.

Galicia is the second best agricultural prov. Its most fertile portion begins to the E. of the San, and follows the course of the Dniester, being part of the great plain extending nearly from the Carpathians to the Black Sea, and embracing Podolia, the Ukraine, and Moldavia. The soil is here nearly as rich as that of the best parts of the great Hungarian plain, and produces the beautiful white Danzic wheat, so much prized in the London market. That large portion of the land, which is held in small parcels by the peasants, is, in Galicia, particularly ill cultivated and unproductive. The rent of the holdings of the peasantry is commonly rated in contributions of labour (*robot*), payable to the proprietors; and as the latter generally insist on this labour or service being performed when it is most valuable, and is most needed by the peasants themselves, it leads to endless quarrels and oppression; and, besides being the bane of agriculture, has been the principal source of the atrocities that have been committed by the peasantry on their lords. The estates of the nobility in Galicia are in general pretty well farmed, and may be classed with those of Bohemia, Moravia, Austria, and the provinces to the south of the Danube. On these estates regular rotations of crops, with artificial grasses, are now pretty general; and many of the machines in use in England, such as improved ploughs, sowing and threshing machines, &c. have been introduced. A gentleman, who farms his own estate in a part of Moravia, where the soil is of average quality and the climate has a mean temperature, has furnished us with the following details: —

An estate of mean size contains from 850 to 1,400 Eng. acres of arable land, 140 to 420 acres of meadow land, and 1000 to 2,500, or more, acres of wood, according to the situation, that is, whether near the mountains or in the plain. The estates conferring the right of representation (landtäfliche Güter), and which are only held by knights or nobles, are of all sizes from a few acres to several German square miles. These estates can, strictly speaking, be held also by a commoner, but only on his paying a portion of the taxes twice over, and on his renouncing the right to all kinds of patronage and judicial authority. The estates of mean size may be estimated at two thirds of the whole. In Moravia about 30 are found to exceed 32 Eng. sq. miles in extent. In purchasing land, a profit of from 4 to 4½ per cent. per annum is generally looked for. The size of the peasant's holdings is also very various. In the plains a peasant's holding may be about 28 Eng. acres. In the hilly parts, where the population is thinner, and the soil less productive, it is 30, 40, and in some parts 70 acres. Half holdings, quarter holdings, as well as cottiers with small gardens, are also frequent. It is, however, supposed that of the peasant families 2-3ds hold land, and about 1-3d may be considered as mere labourers. The mode of cultivation adopted by the peasants in the low lands is a rotation of three crops, viz., wheat, rye, summer corn, fallow; the fallow being only partially used. In the hilly parts the fallows are more used for potatoes, tur-

* This estimate includes Transylvania and the Military Frontier.

† One of the very best works of its class that has appeared for a lengthened period.

nips, flax, &c.; in the mountains tillage is more irregular. Oats, potatoes, and flax are grown; and in the more elevated spots oats and buckwheat. On the greater part of the small estates of the nobles a better rotation of crops, with clover, green food, and meadows, prevail, according as the soil or the local advantages of common grazing (which is very extensive everywhere) render it necessary.

Distilleries and breweries are commonly established on large farms; and the culture of beet having been of late years greatly extended, there are numerous factories for the extraction of sugar from the root.

It is not usual to let land on lease in these parts of the empire. The few cases in which this mode of tenure occurs must rather be considered as exceptions than as a rule, although it is the opinion of competent judges that the incomes of the large landholders would be increased by the introduction of the practice. In Poland villages are often let for short terms, that is, an estate with the resident labourers upon it, who are bound to labour so many days in the week in lieu of rent for their lands. "In the management of his holding the peasant enjoys the liberty of turning at pleasure vineyards into meadows, of tilling pasture fields, or of converting the tillage fields into pasture; only in the case of woods the landlord reserves a right of inspection, to prevent, and punish, their being dealt with contrary to contract. But the peasant cannot let his land, nor leave it uncultivated, nor sell it in parcels. From the peasants' holdings the lord usually derives 1°. All that was stipulated on the original cession of the land, whether in the shape of a rent-charge in money or otherwise. 2dly, The *Landemium*, or fine, on transfer, whether by sale or inheritance (usually 5 per cent.). 3dly, The *Robot*, or personal service, the maximum of which has been fixed by law. This consists generally in 3 days' work, with a waggon and horses, weekly, for the peasant's entire holding; the half holding gives 1½ days' work, and the quarter holding 2 or 3 days' labour, weekly: cottagers give from 10 to 13 days per annum. 4thly, The right of grazing on uncultivated fallows and stubbles; which however the peasant may exercise upon the land of his lord. 5thly, The great and small tithes, which are often ceded to the church, or have been otherwise transferred. Dominical property (allodial estates) pay, in general, no tithe. The peasant may cede or leave by will his holding to whichever of his sons he pleases; but it is then usually charged with a sum for each of his brothers and sisters. The custom prevails of leaving it to the eldest son; but it is often ceded during the father's life, who retains a certain quantum of the produce for his own use: this generally happens when the father wishes to free his son from liability to the conscription." But it is not possible, do what you will, where rent is paid in labour or services, to avoid quarrels and oppression, or to have anything like a respectable agriculture.

It is certain, indeed, that agriculture is in most parts of the empire, Lombardy and some districts of Austria, Bohemia, and Moravia excepted, in the most backward state. And in proof of this, it is only necessary to add that, despite its vast capabilities and the thinness of the population, the imports of corn are but little inferior to, while those of cattle considerably exceed, the exports!

Mines, Manufactures, Trade, &c. — Mr. Turnbull has given, in his valuable work on Austria, the following account of the produce of the mines of the empire in 1837. — (ii. 356.)

	Government Mines.	Private Mines.	Total.
Gold - - marcs	1,282	4,083	5,365
Silver - - „	55,439	37,623	93,062
Quicksilver, quintals	3,543	31	3,574
Tin - - „	36	887	923
Copper - - „	13,992	28,627	42,619
Lead Ore - „	2,376	10,457	12,833
Zinc - - „	153	45	198
Iron - - „	384,551	1,224,847	1,609,398
Ditto, Cast - „	59,343	148,858	208,201
Coal - - „	46,341	4,193,500	4,239,841

The total official value of the above minerals was as follows, viz.: — Produce of Government mines, 5,199,195 fl.; private ditto, 10,321,597; making together, 15,520,792 fl.; or 1,552,079*l.* sterling.

Nothing can set the insignificant extent to which mining industry is prosecuted in Austria in a clearer light than this table. Notwithstanding her vast extent and capabilities, the value of the entire mineral products annually raised throughout the empire, including coals and iron, but little, if at all, exceeds that of the copper and tin produced in this country; and does not certainly amount to more than 1-20th part, or 5 per cent. of the total produce of our mines.

The quantity of salt annually produced is not accurately known, but it is estimated in the *Nat. Encyclopædia* at above 250,000 tons. Of this quantity, a large portion is annually exported to Russia, Poland, and Turkey. And surely the capital now so ill employed in keeping up forced manufactories, under the shelter of high import duties, and thus contributing to the taxation of the people, without enriching the coffers of the state, would be much better employed in ameliorating the system of mining, and in improving the means of transport. We refer to our articles on STYRIA, ILLYRIA, HUNGARY, and TRANSYLVANIA, for some notices of the mining wealth of the Austrian empire. — Iron and native steel are found in such abundance in Styria and Illyria, that the ore is merely quarried from mountains several thousand feet in height, which are solid blocks of carbonate of iron ore. Yet an advertisement of the New Polish Railway Company, in the spring of 1838, in the *Vienna Gazette*, set forth that, "having proved by official statements, that a sufficient quantity of rails could not be furnished by the mines and founderies of the empire, they had received permission to import from foreign countries the required supply;" and such continues to be the state of things down to the present time. The article of native steel is especially worthy of attention; for though, owing to the want of improved means of communication, English steel be, at present, sold cheaper at Trieste, yet not only is the quality of the Styrian and Illyrian metal superior, but it is found in such abundance, that it could supply the most extensive demand. In the survey of the Austrian manufactures for 1834, given by Becker, we find —

Silk spinning mills and manufactories - -	3,990
Woollen and cotton spinning and weaving establishments - - - - - -	298
Flax and hemp spinning mills, linen, and calico factories - - - - - - -	869
Cloth factories - - - - -	165
Leather and leather wares - - - -	580
Porcelain and earthenware - - - -	165
Glass and plate glass - - - - -	210
Iron foundries, &c. - - - - - -	700
Copper mills, &c. - - - - - -	185
Steel mills and factories - . - - -	210
Rosoglio factories and distilleries of spirits and perfumes - - - - - - -	250
Chemical wares and dying stuff factories - -	82
Beet-root sugar factories - - - - -	21

The total number of registered manufactories amounted, in that year, to 11,064; and were supposed to give employment to 2,330,000 individuals; their produce being 1,425 millions of florins. The greater number of these factories, together with the country breweries and distilleries, are carried on by the large landed proprietors. The principal seats of the cotton and woollen manufactures are, Bohemia, Moravia, Silesia, and Austria; and there they have attained to considerable perfection. Coarse cloths are everywhere manufactured; and large exports of cotton and woollen wares, especially of inferior shawls and red caps, are annually made to Turkey and the East. Linen is a leading article of manufacture; spinning and weaving forming the principal employment of the peasantry during the winter, especially of the women, in the northern provinces. In Galicia, not only a portion of the rent, but, in many large establishments, a part of the wages of servants, is paid in linen. The stained glass ware of Bohemia is a truly beautiful fabric, being superior in the richness and brilliancy of the colours to any that is elsewhere produced. It is extensively exported. Bohemian pure crystal is not, however, equal to that of England.

Notwithstanding all that has been done to facilitate the means of internal communication, large portions of the empire still find themselves isolated to a degree highly injurious to internal traffic. Much has been achieved for Hungary by the introduction of steam boats on the Danube; and Galicia has been brought nearer to the capital by the railroad from Vienna to Bochnia. Still, however, there is a very great discrepancy between the prices of bulky articles, such as corn and provisions, in the different parts of the empire. Sometimes the price of wheat at Lemberg, in Galicia, and at Pesth, in Hungary, is less than half its price at Dantzic and at Galatz, the ports whence the produce of these countries is shipped.

Factory Labour in Austria — The Austrian government enforces the following regulations in regard to factory labour, viz.: — 1. The earliest age at which children can be employed is fixed at 12 years. 2. The only exception shall be for children who, at 9 years of age, have for three years received a religious education and attended school; but as long as these children shall continue at an age at which they ought to attend school, the manufacturers shall watch over their education, and call to their aid the ministers of the Gospel, but without interrupting their work. 3. For children between

9 and 12 years old the *maximum* of the time they are to work is fixed at 10 hours, and between 12 and 16 years of age at 12 hours, but they shall be allowed an interval of one hour. 4. Manufacturers are bound to prevent all disorder and scandalous conduct among the adults in their establishments. 5. Manufacturers shall keep registers, in which shall be entered the names and ages of the children, their residences, and the period at which they entered the manufactory. This register shall be produced before the magistrate and the minister of public worship whenever it may be required. 6 All contraventions of these regulations shall be punished with a fine of from 2 to 100 florins; and in case of a repetition of the offence, the offender may be interdicted from having any children under 12 years of age in his employment. 7. The authorities are charged with the enforcement of these regulations.

Commerce.—The trade of Austria, owing to her central situation, and the distance of all her most important provs. (Lombardy excepted) from the sea, labours under considerable natural difficulties; and these have been still further increased by the mistaken policy of the government, which, in the view of bolstering up manufactures at home, has imposed high duties on most sorts of manufactured products. Sugar, coffee, and most sorts of colonial produce, are also very heavily taxed, so that smuggling is extensively carried on along most parts of the frontier. It must be obvious, too, on a glance at the map of Austria, that all attempts to repress the latter otherwise than by a reduction of the duties, must be in the last degree futile. The imports and exports may each be valued at from 12 to 14 millions sterling. We have no direct trade with Austria except what we carry on with Trieste, Venice, Fiume, and other ports on the Adriatic; but a considerable portion of our exports for the Hanse Towns and Holland find their way to the Austrian dominions; and British goods are also imported by the Sardinian, Turkish, Russian, and Polish frontiers.

The principal articles of import consist of cotton wool, cotton yarn, and manufactured cottons; sugar, coffee, and other colonial products; dye stuffs, olive oil, tar, wine and spirits, butter, fish, iron wares, &c. The exports principally consist of wool, woollen and worsted stuffs; silk, raw, spun, and manufactured; linens, glass wares, iron and steel, salt and potashes, quicksilver, rags, cheese, sumach, leeches, &c. Corn is both largely exported (from Galicia and Hungary) and largely imported; but the exports usually predominate. There is also an extensive importation and exportation of cattle, timber and wooden wares, wine, and other articles. With improved means of external communication, and a less illiberal tariff, the trade of the empire might be indefinitely extended. (See the Austrian tariff in *Commercial Dictionary*, art. *Trieste*.)

Sanguine expectations were entertained of the benefits that would result to both parties from the commercial treaty negotiated between this country and Austria in 1838. These expectations have not, however, been, and were not, in truth, of a sort that could be realised. A reduction of the duties on the principal British articles imported into Austria, would have been of advantage; but in the absence of this, other concessions were of trifling avail. It was supposed that an outlet might be found for corn and other Hungarian products at Fiume and other ports on the Adriatic; though (as already seen) the difficulties in the way of their transport across the Julian Alps, have hitherto opposed insuperable obstacles to the extension of trade in that quarter; and the length and cost of the voyage from the Danube to England prevent in ordinary years the importation of corn, timber, provisions, and other products from Hungary into this country by that route. But, notwithstanding the disadvantages incident to her situation, an effectual reduction of her tariff would vastly facilitate and extend the trade of Austria; and would be by far the most likely means of stimulating her dormant energies.

The usual coins in circulation are the ducat of Holland = 4 fl. 30 kr.; the sovereign = 13¼ fl.; the florin of 20 = 1 fine mark, divided into 60 kr.; 1*l*. sterling, at par = 9 fl. 31 kr. Bank notes, of 5 fl. and upwards, circulate, as well as the notes belonging to the depreciated currency, of which 5 fl. = 1 fl. in silver, and 1 fl. = 24 kr. This is denominated *Vienna value*; the silver value is called that of the *Convention*. Pieces of 20 kr., silver, 3 of which form a florin, with smaller pieces of 10, 5, and 3 kr., form the silver coinage. The 20 kr. piece is termed, in Italy, lire Austriaco. The lire di Milano was introduced by the French = 1 franc = 22·8 kr. The suado = 2 fl. 20 kr., in silver.

Income and Expenditure.—The financial system of Austria has been till recently involved in much mystery. The taxes vary in the different provs., and are seldom assessed on the same principles. To enter on these minutiæ would be out of place in a work of this description, and, though it were not, it would have but little interest for the reader. The taxes are distributed under the two great heads of *direct* and *indirect*. The former comprise, 1st. The land-tax, or *contribution foncière*, extending generally over the empire, but assessed differently in the different provs.; 2nd. The house-tax, from which Hungary is exempted; 3rd. A poll-tax, confined chiefly to the Italian provs.; 4th. A tax on industry, or rather on licences required to carry on certain branches of industry; 5th. A tax on Jews; and 6th. A tax on successions. The indirect taxes, which also differ in different provs., consist principally of excise duties on liquors and butchers' meat; customs duties, the important monopolies of tobacco and salt, stamp duties, and some others of minor importance. According to Tegoborski, the produce of these taxes might be estimated as follows, viz.

	Fl.	
Direct taxes.		
Land-tax	39,000,000	
House-tax	3,800,000	
Poll-tax	1,300,000	
Tax on industry (licences)	2,300,000	
Ditto on Jews	1,130,000	
Ditto on successions	700,000	
		48,230,000
Indirect taxes.		
Excise duties on consumption	19.200,000	
Customs ditto	15,700,000	
Monopolies of tobacco and salt	32,000,000	
Stamp-duties	3,450,000	
Roads and Bridges	1,900,000	
Minor taxes	2,300,000	
		74,550,000
Other sources.		
Domains and forests		3,500,000
Mines		960,000
Posts		2,400,000
Lotteries		4,000,000
Different revenues		4,500,000
Total revenue		137,140,000

This amount, taking the florin at 2*s*., is equivalent to 13,714,000*l*. sterling, and is, as will be immediately seen, very near the mark. (See the excellent work entitled *Des Finances et du Credit Public de l'Autriche, &c.*, i. 4.)

The estimates of the expenditure of the empire differed still more widely than those of its income; but it is needless to notice them in detail, inasmuch as the late events have removed all mystery both from the sources and the amount of the public income and expenditure. In proof of this we beg to subjoin the budget for the current year, 1848-49, as published in the *Vienna Gazette*.

Income.

Direct taxes.	
Land-tax	3,140.000
House tax	400,000
Poll-tax	115,000
Licenses	227,000
Tax payable by Jews	90,000
Miscellaneous	17,000
	3,989,000

Indirect taxes.		
Excise on articles of consumption	£1,860,000	
Ditto levied at town gates	1,668,000	
Salt	2,170,000	
Tobacco	1,107,000	
Stamps	475,000	
Assessed taxes	80,000	
Lottery	380,000	
Post-office	170,000	
Roads, bridges, and ferries	211,000	
United dues in Lombardy	29,000	
Powder and saltpetre dues in ditto	6,000	
		8,156,000*
Miscellaneous receipts.		
Produce of state domains	£322,200	
Clerical livings expected to fall in	5,200	
Manufactures	800	
Transfer charges on Government domains	16,300	
Sundry ordinary and accidental receipts	487,500	
		832,000
Total receipts		12,977,000

EXPENDITURE.

Interest on debt.		
Interest payable in silver		2,408,000
Ditto, in paper, at the rate of 2 florins silver for 5 florins paper		121,000
Ditto on debt of Lombardy		265,000
Ditto on floating debt		113,000
		2,907,000
(Exclusive of 666,000*l*. interest due to the general sinking fund, and also to the Lombardian Sinking Fund.)		
Civil List and Army.		
Civil list		461,000
(Including 68,000*l*. for Viceroy of Italy, 53,000*l*. for the Imperial Guard, and 11,000*l*. for the Court Theatre: reducing the actual expenses of the court and of the literary endowments under its direction to 329,000*l*.)		
Foreign ministers and diplomatic corps, including secret expenses, 3,400*l*.		195,000
Army, including pensions and hospitals		4,526,000
General expenses.		
Finance department	£933,000	
War-office	116,000	
Ministry of Justice	429,000	
Ditto of Interior	887,000	
Boards of General Supervision	235,000	
Consuls	20,000	
Sundries	36,000	
		2,656,000
State contributions for church purposes	80,000	
Schools	130,000	
Roads and waterways	795,000	
Prisons	216,000	
Charitable institutions	195,000	
		1,416,000†
Police		205,000
Registry-offices		60,000
Indemnities to corporations and contractors		75,000
Sundry expenses — commission on loans and Mint charges		65,000
Reserve for casual expenses		417,000
Total expenditure		£12,983,000

The total deficiency for the year, it will be observed, is only about 6000*l*.; so that had peace been maintained at home and abroad, the financial condition of Austria would have been satisfactory.

The greater share of the taxes have fallen upon the Bohemian, Galician, German, Illyrian, and Italian provinces. Hungary only contributes a moderate sum voted by the Diet, and defrays the cost of a certain quota of troops. In Dalmatia, a tithe of the produce of the land is taken in lieu of taxes. The parochial and county rates have to be added to the burdens in all provinces, and are defrayed by labour on the part of the lower classes, and by local imposts on the more wealthy. It is, consequently, impossible to state their value in money. The quartering of troops is also an important charge, especially in Galicia, Hungary, and Italy, where the greater part of the large standing army has, of late years, been cantoned. The cavalry is mostly distributed through the villages of the different provinces, for the easier procuring of forage. The peasant receives 8 kr. per diem for house, fire, and diet, per man: the dung of the horse is the remuneration for stable-room.

The *National Debt* amounted, according to Tegoborski, in 1842, to 970,000,000 fl., and as a loan of 87 millions was negotiated in 1847, it may now (1848) probably amount to 1,050,000,000 fl., or 105 millions sterling.

Form of Government. — It would be of little use to enter into any lengthened details with respect to the forms of government that existed in the Austrian states previously to the present year (1848), for these have been all but wholly destroyed. Contrary to what had been anticipated, the French revolution of February 1848, had the most powerful effect in Austria; and was speedily followed by the subversion of the existing political arrangements, and the introduction of an entirely new system, having for its fundamental basis the freedom of the press, and a popular representation bottomed on universal suffrage! This change, however, has not had the effect of re-establishing tranquillity; but, on the contrary, the empire is at this moment (November, 1848) involved in civil war. It is impossible to predict the result of this struggle, or to foretell whether a really free system of government will be established, or whether the empire will continue united. It seems probable that the unwieldy and ill-assorted mass will fall to pieces. There has been no amalgamation, nor even any very close intercourse, between the different races that make up the population; and not only the privileges of the different states, but their languages, customs, and habits, differ very widely. The purely German portion of the empire, or any other great race, supposing it were firmly attached to the reigning family, and anxious to maintain the union of the different provs. under one head, may not be powerful enough to effect such an object in the face of any very determined opposition on the part of one or more of the remaining races. And hence, as they are all violently opposed to each other, the probability of the empire being disunited. That its integrity should be preserved, would, under existing circumstances, be little less than miraculous. And, in truth, it is not in all respects to be desired. However rich and well-peopled, her Italian provs. will never coalesce with her other dominions, and will always be a source of weakness rather than of strength to Austria; and this, perhaps, is also the case with Galicia; but any further dismemberment would be injurious to her power, and to the interests of her people and of Europe generally.

The revolution in Austria Proper, and the anarchy by which it has been followed in other parts of the empire, have excited the surprise, or rather astonishment, of Europe. This, however, was principally a consequence of the ignorance in which the restraints on the press, and on the freedom of speech and debate, kept the rest of the world, and even the cabinet of Vienna, of the real feelings and wishes of the Austrian people. Instead of being, as was supposed, indifferent to political privileges, and zealous, unthinking supporters of the monarchy, the result has shown that democratic principles had made great progress amongst them, and that great numbers were desirous of a change. Hence the conflagration lighted up at Paris has spread its flames into every prov. of the Austrian empire; and it is abundantly certain, that, whatever form the government may ultimately assume, or whether the empire be dismembered or its unity preserved, the former order of things can never be restored.

This result has, no doubt, been principally owing to the erroneous policy followed by the government since the peace of Paris in 1815. Prince Metternich, who for more than 35 years was the real ruler of the empire, though not deficient in talent, acted throughout his lengthened career on the principle of preserving whatever was established, and of repressing disorders without inquiring into or endeavouring to dry up the sources whence they sprung. And the tranquillity enjoyed, with but little interruption, by the empire for a lengthened period, made many believe that his was the true line of policy to be followed

* Of these indirect taxes the cost of collection is not quite 6½ per cent.

† The whole of these institutions have funds of their own, amounting in the aggregate to 420,000*l*.

But it is one thing to suppress a symptom, and another to effect a cure; one thing to hinder the application of a match to a magazine, and another to destroy the magazine itself. Prince Metternich contented himself with the former. He dealt only with the outward signs of discontent and disorder, and did not attempt to eradicate the seeds which produced them. These he permitted to scatter themselves on all sides, till they took root in the vitals, and vitiated the entire economy of the state. And then, on the first great shock, the whole fabric, which, though fair on the outside, was hollow and rotten at the core, fell to pieces; all the powers of government were paralysed, and the prince was himself obliged to seek an asylum in a country with a free press and a popular representation!

Had Prince Metternich acted differently, and intermixed a little of the vigorous reforming policy of Joseph with the timid conservatism of Francis; had he gradually relaxed the restrictions on the press; reformed the gross abuses of the criminal law; given greater power to the states in the different provs., and permitted them to send deputies to Vienna to deliberate on questions connected with the general policy of the empire, it is probable that the revolution in which Austria is now involved would have been averted. And the presumption is, supposing it to have taken place, that it would have been less sweeping and destructive; and that there would have been far less risk of the dismemberment of the empire.

Laws, Civil and Criminal. — The present codes of civil and criminal law (*Bürgerliches Gesetzbuch, Gesetzbuch für Verbrecher*, &c.) were drawn up by a commission of lawyers by command of the late Emperor Francis I., and published by his order. They are much praised as a theoretical compilation; but are open to the objections raised against all codes in practical respects. In Austria the decisions of the judges are not published, and each judgment interpreting a paragraph of the codes is a fresh improvisation on the part of the judge. If it be discovered that under the same circumstances a former judge or another court decided differently, the case is referred to the ministry of justice, which decides what the law is *in that particular case;* but its decision is not to be taken as a construction of the law for future cases. The judges are removable, and may be promoted at the pleasure of the crown; but, like all other employés, can only be dismissed with pensions, unless convicted of improper conduct by some court of justice. In all cases trials under the late *régime* took place in secret, and the proceedings were in writing: even the examination of witnesses was not public: the decision was according to the votes of the president and assessors of the court. Criminal trials were protracted to an enormous length; and accused persons were often suffered to be in prison for years before their cases were brought on; and, then, if the trial was of a complicated nature, it might last for 3 or 4 years! The punishment of death could only be inflicted after confession. The police board occupied, with respect to the tribunals of law, a similar position to that occupied by the emperor's cabinet in respect to the council of state. The preventive power entrusted to it being naturally one which no law either prescribed or controlled, it was a formidable instrument. The political and local exercise of its authority included not only the preservation of public order, but the permitting strangers to reside in any part of the empire, — the allowing subjects themselves to change their places of abode or to travel, passports being requisite even in the country itself, and frequently only procured after long delay and much trouble. The police of the provinces was entrusted in the large towns to a board, whose officers were appointed by the crown: in small towns to the magistracy: in the country the captain of the circle united these functions with his judicial and administrative powers.

Prisons, &c. — The Austrian prisons are divided into three classes: — state prisons, for political offenders, the chief of which are the Spielberg at Brunn in Moravia, Kuffstein in Tyrol, Munkaes in Hungary, Lemberg, Milan, Venice, &c.; houses of correction (Zuchthaüser) in all the chief towns, in which criminals are kept at hard labour (those in irons are sent to the fortresses); and houses of detention, under the care of the police, in which persons who are arrested are kept before and during the judicial proceedings. A large prison, on an improved plan, was erected some years since in a healthy situation at Vienna; and it is usual to give every needy prisoner, on his discharge, a small sum of money, to keep him from the temptations of momentary indigence.

The Church, Clergy, &c. — The Austrian clergy are both numerous and powerful, although their wealth has been much diminished by the confiscations and secularisations of the Emperor Joseph II. They consist of 11 Roman Catholic archbishops, 1 Greek united abp., 1 Greek schismatic abp., 1 Armenian abp. The Roman church has further 59 bishops, with chapters and consistories, and 43 abbots of richly endowed monasteries in Austria, Styria, Illyria, Bohemia, and Moravia. Hungary has 22 abbots with endowments, 124 titular abbots, 41 endowed and 29 titular prebendaries, and 3 college foundations. Transylvània has 3 titular àbbots, and upwards of 150 monasteries and convents; and Galicia 70 monasteries. The Greek United Church has 1 abp. and 1 bishop in Galicia, and 5 bishops in Hungary. The Arminian Catholic Church have an abp. at Lemberg. The Archbp. of Carlowitz is head of the Greek Church, with 10 bishops and 60 protopapas (deans). The Protestants, who, in the greater part of the empire, are only tolerated (not being allowed to build churches with steeples, to use bells, or keep parish registers independent of the Catholic parish clergy), are placed under 10 superintendents for the Lutherans, and 9 superintendents for Calvinists. In Hungary and Transylvania, the Protestants choose their superintendents, who are controlled by district inspectors. A great part of the Magyar inhabitants of Hungary are Calvinists, and Protestants enjoy, in that kingdom and its dependent lands, equal rights with the Catholics. The Unitarians are tolerated, or rather recognised by law, in Transylvania; where they have a superintendent, and are dispersed over 164 parishes. The Roman Catholic religion is dominant throughout the empire; and in case of dispute, the right to the tithes is assumed to be vested in the parish priest. The church is, however, far from being the only possessor of the tithes; its wealth consists principally in endowments of land, or revenues charged upon estates; and its hierarchy is richer than even that of Great Britain. The richest see is the Primacy of Hungary; the Archbishopric of Olmüts being next in importance. On the suppression of the convents by Joseph II., a portion of the confiscated lands

and revenues was appropriated to form a fund for improving the salaries of the parish clergy; the minimum of whose incomes has been fixed at 300 fl. for a parish priest, and 150 fl. for a chaplain or curate. This fund is nominally under the control of the bishop, as far as concerns his diocese; yet estates belonging to it are constantly advertised for public sale. The united Greek and Armenian churches are assimilated to the Roman Catholic church, as far as their parishes extend. The schismatic Greeks possess a fund, vested in *bonum nationis*, in Hungary, which is managed by the Metropolitan and three assistants. The Protestant confessions have no endowed churches or parishes out of Hungary and Transylvania; the clergy elsewhere being chosen and supported by their flocks. The right of presentation to livings is vested, in general, in the landed proprietors and various corporations, as in England. The parishes in the gift of the crown as heir to the suppressed convents, are numerous. The emperor nominates all the bishops, with the exception of the Archbishop of Olmütz, who is chosen by the chapter of that city.

Church property throughout all the provinces, except Hungary and Transylvania, is very highly taxed; and the state inherits a moiety of the personal property of every Catholic clergyman; it being of course supposed that he has no direct natural heirs. But the line of policy respecting the church of Rome, of which the emperor Joseph laid the foundation, has not of late been adhered to; new religious orders having been suffered to establish themselves, and even the Jesuits have been permitted openly to settle in several provincial towns. According to the official returns for 1842, the numbers attached to the different sects were as follows: —

Roman Catholics - - - -	24,874,139
Greeks, United - - - - -	3,504,431
———, Disunited - - - -	2,954,975
Protestants, Lutherans - - -	1,207,309
————, Calvinists - - -	2,037,479
Jews - - - - - -	668,906
Unitarians - - - - -	45,769
Sectarians - - - - -	2,949

Classes of Inhabitants, and State of the Provinces. — The three classes of *nobles*, *citizens*, and *peasants*, were strictly defined in all the provinces previously to the late changes. The nobility is both numerous and rich in Austria, where estates are generally entailed; and the higher offices of the court, the army, and the church, are reserved for this class. The members of the male sex of the various noble families throughout the empire were estimated, in 1835, at 250,000. Of these, 163,000 belonged to Hungary, 24,900 to Galicia, and 2,260 to Bohemia. The latter country had 14 princely families, 172 families of counts, 80 of barons, and 100 of knights. Their total incomes were estimated at 18,000,000 fl. (1,800,000*l.*)* The privilege of manorial rights can only be enjoyed by a noble in Austria. These include the right of presentation to livings and schools on his estates, and the right to hold courts of justice in the first instance. Other privileges are those of peculiar tribunals, before which he can only be cited; the freedom from the conscription; and the right of sitting in the provincial estates. These immunities are also enjoyed by the newly-created nobility; but the court draws a marked distinction between old families and those recently ennobled. As the patent is given without difficulty to all who are willing to purchase it, the price thus paid by citizens who wish to become landholders, may be looked on as a tax laid upon the transfer of estates. Persons not of noble birth, who do not purchase a patent of this kind, pay a double amount of certain taxes. The peasant is personally free throughout the empire; and an appeal being allowed from the manorial court of his lord to the Circle court, his condition is daily improving, and his rights and property obtain more respect. But the fact that, in the greater part of the empire, the rent of his cottage and land is paid in contributions of labour (*Robot*), is a great drawback upon his industry and upon the improvement of agriculture. On the introduction of the present system of direct taxation by Maria Theresa and Joseph II., an arbitrary regulation of the dues claimed by the landlords was effected, and the total amount which a landlord could demand, whether paid in money, service, or kind, was not to exceed 17 fl. 46⅔ kr. for every 100 fl. which the land produced. At the same time, the peasant's *property* in the land he held, from whatever lord, was declared indisputable; and though the latter may seize upon his stock and moveables, he cannot eject for arrears of rent, unless the land be held on lease; which is by no means common in Austria.

Great differences are found, as may be supposed, in the state of civilization of the different provinces. Among the higher classes, in the great capitals, this difference is of course nearly imperceptible; the universities and the better institutions for instruction being open to the inhabitants of all provinces, and being arranged throughout on a uniform plan. Another cause of this similarity in the larger towns is the great proportion of Germans found among the trading classes, even in the Slavonic and Magyar (Hungarian) districts. The mass of the people may, perhaps, be said to be most advanced in the Italian provinces, where agriculture is carried to the highest perfection. The next, in point of intelligence, are unquestionably the inhabitants of the German provinces; then come the Bohemians, Silesians, and Moravians, who occupy almost exclusively the manufacturing provinces. The Slavonians of Carinthia, Carniola, and Illyria, may be ranked with the Poles or Moravian inhabitants of Hungary. The rude and almost nomadic life led by a large portion of the Magyars of Hungary, will be noticed in treating of that country. The Dalmatians stand on the lowest footing of civilization in Europe. The want of a central point of national interest to which the inhabitants of the provinces might have looked, and which might have directed the current of popular feeling in each to the common advantage of all, has been strikingly felt; and each province having had its own representation by estates, and many having had a different form of government from the others, each has been led to look upon itself as having interests separate from the rest. The effects of this system have of late years grown especially perceptible in the repeated applications made by the Bohemians, Poles, and Hungarians, to have their respective languages exclusively used in public business, and in the provincial schools: and the long-cherished animosities of the different races against each other having at length been allowed fully to manifest themselves, threaten the dismemberment of the empire.

As every province forms a separate land, each has its peculiar language or dialect, and its distinguishing customs and habits. Of the Slavonic languages, the Polish possesses the richest literature; but the Bohemian has of late years

* The nobility of Hungary counted 4 families of princes, 84 of counts, 76 of barons, and 390 of knights.

been most cultivated, and forms the written language of the Moravians and Slowaks of the N. W. counties of Hungary, The dialect of Carniola has been methodized, and is grammatically taught as the written language of Illyria and Croatia. The Slavonian nations have all the distinguishing characteristics of ardent feeling and sanguine temperament which make them more easily elated and sooner depressed than their neighbours the Germans. They are fond of music; and every district has its national airs, which are often of great antiquity, and usually plaintive. Among the Slavonians, the Poles are distinguished by a martial disposition and love of show. The national costume is now only kept up amongst the peasantry, whose winter dresses especially are tasteful, and even elegant. In the other Slavonic nations of the empire, the love of ornament is less remarkable, the national spirit having sunk in the long lapse of time during which they have been dependent. No Slavonic dialect was used previously to the late changes, in the courts of justice or in public instruction in the higher schools of the empire. The German peasants wear the dress commonly met with all over Germany, with varieties in the colour and head gear, in nearly every village. The Austrian women wear caps or bonnets made of gold lace and decorated with spangles. In Tyrol the German costume is most picturesque. The German language is used in transacting public business in the German and Slavonian provinces, and in the universities on the north side of the Alps.

The Magyars, or inhabitants of the Hungarian plains, of Tartar descent, are a high-spirited people, warmly attached to their national language, habits, and rights. Though inferior in point of numbers, they have been the ruling race in Hungary and its subordinate countries for nearly 900 years. They have sometimes been compared to the Normans in England; but they have not, like the latter, intermixed with the subjugated people, and become identified with them. On the contrary, the Magyars continue to be almost as much separated from the other inhabitants as when they first established themselves in the country towards the close of the 10th century. Their costume is the most splendid in Europe, and every family has its distinguishing colours. The rich *Dollmann* (Hussar jacket) and the tasteful *Attila* (a frock-coat, trimmed with fur) are only worn on state occasions by the nobles; but the tight pantaloon and short boot is the usual dress of the peasant, who also wears a blue jacket and a low broad-brimmed hat. Though fond of music the Hungarians are no musicians; the national dances are often highly pantomimic; and the Magyar, who is seldom seen to smile, expresses the excitement of his feelings, whether in joy or sorrow, in dancing. The Magyar and Latin languages are those used in the courts of justice and in the public offices; and the law passed by the Hungarian Diet, in 1844, to force the use of the former on the Slavonian provinces incorporated with Hungary, has helped in no ordinary degree to exasperate the existing animosities between the Magyars and the Slavonians. The dress of the Walachian peasantry, on festive occasions, is highly ornamented. The Italian costume is both rich and elegant; especially the head-dresses of the women, which are more tasteful than those worn on the north side of the Alps. The Italian language is used in the government offices, in the courts of justice, and in public instruction, in the Italian provinces.

The peasantry in every province have a religious turn, which they not only evince by their regular attendance at church, but by assembling in great numbers at stated periods for the annual pilgrimages made to the churches of the Virgin Mary. The chief of these places of resort, Maria Zell in Styria, is annually visited by more than 100,000 devotees. The next in importance is the shrine at Calvaria in Galicia, to which pilgrims annually flock from Bohemia, Silesia, Poland, and Hungary. The pilgrimages are however said to be, like the field "preachings" formerly held in Scotland, any thing but conducive to morality. The Sunday evening is everywhere devoted to festive enjoyment, and to indulgence in wine in such provinces as produce this beverage. Beer and whisky are the common drink of the northern provinces, the latter especially in Galicia and Hungary. Smoking is an all but universal habit in the provinces north of the Alps.

With respect to the comforts of life, the Hungarian, Italian, and German peasants are the most advantageously situated. The largest share of landed property falls to the Hungarian, and he receives the best remuneration for his labour. In Italy, where the peasant is hardly ever a landowner, unremitting industry, and a judicious division of employment, improve the condition of the mass of the people. Bohemia and Moravia rank on a level with the German provinces. The Galician peasant is the lowest on the scale except the Dalmatian.

Provision for the Poor. — Each parish is bound to support its own poor; but as the allowance is, in all cases, very low, the charge is nowhere burdensome. The large towns have poor-houses, supported partly by revenues from foundations, partly by voluntary contributions; and on extraordinary occasions, government supplies a sum from the public revenues to meet their exigencies.

Savings' banks have been introduced into the different provinces.

Among the institutions for ameliorating the state of the poor, the hospitals stand in the first rank. The exertions of Joseph II., to improve the medical department of the army, had a very advantageous influence over the medical establishments throughout the empire. In the *Allgemeines Kranken Haus*, at Vienna, one of the finest hospitals in Europe, 8,894 paupers were relieved, and supported, in the year 1837; and similar establishments are found in every provincial town of importance. The numerous hospitals of the "Brothers of Charity," in the various provinces, admitted (in the 6 years 1830-5) 111,086 patients; of whom, according to their own published reports, 101,669 were discharged cured, the deaths having only been in the proportion of 1 to 11¾ patients. These hospitals are supported by voluntary contributions.

Literature and the Fine Arts. — Newspapers and periodical publications are published in German, Italian, Bohemian, Polish, and Hungarian. Previously to the late disturbances a semi-official newspaper appeared, usually in German, in the different provincial capitals, accompanied, in the greater part, by another in the language of the province. But few things were more extraordinary in the late state of the empire, than the scarcity of the public journals and the limited extent of their circulation. This is accounted for by the fact that the Austrian government was as careless

of praise, as it was intolerant of censure. But few foreign papers were admitted to general circulation; and those which were, offered no remarks on the condition or policy of the empire. The Austrian newspapers were, in consequence of this system, little better than dry chronicles of passing events; and sometimes even these were omitted, and not unfrequently coloured. All political and economical inquiries, not agreeable to the authorities, were suppressed; and every effort was made, though, perhaps, unconsciously, to trammel and degrade the intellectual energies and pursuits of the people.

The fine arts are in a languishing state, in part owing to the apathy which prevails both amongst the higher classes and the artists, neither of whom are excited by public praise or blame. The pictures in the Imperial Gallery at Vienna are not permitted to be copied by artists; and every composition which is publicly exhibited is subjected, like books, to the censors, who are unremitting in the enforcement of their political, moral, and religious restrictions. Recently there have been annual exhibitions at Milan, and triennial ditto at Vienna. Music is cultivated with more success, and enters largely into the education of all classes in Bohemia and in the German provinces. The Bohemians are remarkable for their skill in instrumental music; and not only is it common to find eminent performers in small villages, but many of these excel on two or three different instruments.

Education. — Mr. Macgregor, in his work entitled *Austria and the Austrians*, says, "The foundation of elementary instruction in Austria was first laid in the early part of last century; and, soon after, about one in twenty-five of the inhabitants were taught to read. Joseph II. directed his energies to the instruction of youth; but the clergy, high and low, opposed him, and after his death succeeded in establishing generally their own plan of educating children. The government has, however, taken special care that the priests should not have the control over public instruction, and the law of 1821, consequent to that of 1819, in Prussia, directs that no village in the hereditary dominions shall be without an elementary school — that no male shall enter the marriage state who is not able to read, write, and understand casting up accounts — that no master of any trade shall, without paying a heavy penalty, employ workmen who are not able to read and write — and that small books of moral tendency shall be published and distributed, at the lowest possible price, to all the emperor's subjects.

"The provisions of this law appear to me to have been very generally put in force; for I have nowhere in Austria met with any one under thirty years of age who was not able to read and write; and I have found cheap publications, chiefly religious and moral tracts, almanacks, very much like 'Poor Richard's,' containing, with tables of the month, moon's age, sun's rising and setting, the fasts, feasts, holydays, markets and fairs in the empire; and, opposite to the page of each month, appropriate advice relative to husbandry and rural economy, with moral sayings and suitable maxims. The spirit of elementary instruction, if not the most enlightened, inculcates, at every step, morality, the advantage and happiness of a virtuous life, the evils of vice, and the misery consequent on crime."

Exclusive of the elementary schools, the empire is well supplied with the different varieties of superior seminaries, including Normal schools, academies, lyceums, gymnasiums, colleges, universities, and so forth, mostly well endowed, and furnished with able masters and professors. Nothing, however, is so remarkable in the Austrian system of education as the consonance of its different parts. It is consistent throughout; and seems to have been well fitted to imbue the pupils with the knowledge which, in the opinion of the authorities, would be conducive to the public well-being, and to prevent their engaging in ulterior researches. Hence the jealousy entertained by the government of every thing like freedom of inquiry or discussion as to matters connected with the principles of politics, public law, political economy, and even philosophy. These important branches are not taught, at least so as to be made available or useful, and are but little studied in Austria. The board of education (*Studienhofcommission*) appoints all professors at universities and colleges, and all teachers at schools; publishes the books used in instruction, and controls the minutest details relating to schools. It prescribes the course and distribution of the hours of study, from which not the slightest deviation is permitted; and the scholars of the few *private* schools are forced to attend the examinations of the *public* institutions, to ensure their being taught according to the prescribed system. "L'Autriche semble s'être souvenue, plus qu'aucun autre état, de l'influence que les anciens croyaient que l'éducation exerce sur la société, et elle a réglé ses écoles sur son gouvernement, cherchant à former des l'enfance le peuple tel qu'elle veut qu'il soit et qu'il demeure. Pour blâmer l'esprit des écoles autrichiennes, il faut blâmer son gouvernement, car l'esprit des écoles tient à l'esprit du gouvernement. Il n'y a là aucune contradiction entre l'éducation et la politique, comme cela se voit dans beaucoup d'états, où les écoles marchent dans un sens et la société dans un autre. En Autriche, bon ou mauvais tout est d'accord. Apprendre à chacun ce qu'il faut qu'il sache pour faire son métier le mieux possible, mais rien au-delà; ne rien negliger pour développer l'intelligence de l'ouvrier dans la sphère de sa vocation, mais se garder de lui enseigner des connaissances étrangères à sa profession, et dont l'effet inévitable serait de lui donner des besoins qu'il ne pourrait pas satisfaire; tels sont à tous les degrés les principes d'education en Autriche." (See the very able work entitled *De l'Instruction Publique en Autriche*, par un Diplomate Etranger, p. 15.)

But, how ingenious soever, this system has not had the effects that were anticipated. It has not rendered the rising generation satisfied with the existing order of things, or made them averse from change. On the contrary, it appears either to have had a directly contrary influence, or to have been wholly inadequate to countervail the effect of opposite principles and influences. At all events it is certain, however the fact may be accounted for, that the majority of the youths frequenting the higher schools and colleges of Austria, have been thoroughly imbued with the democratic spirit of the age; and that, whether popular or not among the more advanced portions of the community, a love of change and of revolution appears to be the prevalent passion among the young. (See table, next page.)

Elementary instruction is not, perhaps, so much diffused in Hungary and Transylvania as in the majority of the other provinces of the empire. But there is, notwithstanding, scarcely a village in the kingdom without one or more schools. "Where," says Mr. Paget, "the inhabitants are all of one religion, there are no difficulties to be overcome. Where differences exist, if the separate creeds be too poor to maintain a school each, the poorer attend that of the more powerful, which is commonly Catholic; the Protestant children, however, not being forced to take a part in the religious instruction which is left to the priest, or, still more commonly, to his *capellan*, or clerk. The education extends to reading, writing, arithmetic, moral maxims, and sometimes a little geography, history, and Latin Grammar. These schools are maintained, and the masters chosen, by the peasants themselves, the landlord being obliged to give ground for a school-house, and 30 or 40 acres of land for the use of the master. The payment is for the most part in kind and labour. There are normal schools in different parts of the country, for the education of

Table showing the number of Male and Female Children from 5 to 12 years of age in the under-mentioned Provinces of the Austrian Empire in 1836, with the number of such Children at School. — (*De l'Instruction Publique en Autriche*, p. 54.)

Provinces.	Children from 5 to 12 years of age.			Children at School.			Of every 1000 were at school.
	Boys.	Girls.	Total.	Boys.	Girls.	Total.	
Tyrol and Voralberg	54,597	51,842	106,439	57,326	50,181	107,507	1,010
Lower Austria	79,010	78,095	157,105	78,433	75,746	154,179	981
Upper Austria	45,495	45,081	90,576	43,619	42,866	86,485	954
Moravia and Silesia	146,896	140,836	287,732	140,704	131,934	272,638	947
Bohemia	268,368	258,201	526,569	255,123	239,106	491,229	938
Styria	53,880	48,110	101,990	42,849	34,020	76,869	753
Lombardy	171,220	165,181	336,401	113,111	66,731	179,842	538
Military Frontiers	72,686	53,988	126,674	43,451	21,099	64,550	509
Carinthia and Carniola	42,801	42,732	85,533	15,910	11,907	27,817	325
Venice	126,461	125,803	252,264	74,090	4,077	78,167	310
Transylvania	102,600	100,000	202,600	32,115	19,233	51,348	239
Littoral	30,748	28,502	59,250	7,206	2,711	9,917	133
Gallicia	276,472	237,836	514,308	48,677	18,601	67,278	131
Dalmatia	20,000	19,000	39,000	3,355	607	3,962	102
	1,491,234	1,395,207	2,886,441	955,969	718,819	1,674,788	

masters in the national schools. —(*Travels in Hungary*, ii. 533.)

The machinery for the teaching of the higher branches of education to Catholics, Protestants, Greeks, &c., is still more complete. The University of Pesth is one of the richest in Europe, its revenues amounting, according to Mr. Paget, to 34,000*l*. a year. It has, exclusive of several more, 9 theological, 6 juridical, 13 medical, and 14 philosophical professors, with libraries, museums, and so forth, and is attended by above 1000 students, comprising all religious denominations. The truth is, that it is not of the quantity but of the quality of Hungarian, as of Austrian education generally, we have to complain. It is not fitted nor intended to expand, but to contract the mind; to concentrate the attention on material objects; and to withdraw it from all inquiries that might lead the people to form a correct notion of their own rights and duties, and of those of their superiors. But here, as elsewhere, it has not succeeded even in its limited and secondary object; and while the arts and sciences are in the most backward state in all parts of Hungary, the wildest and most dangerous political theories have their votaries.

Army. — The army is raised in all the provinces, with the exception of Hungary and Transylvania, by conscription, from which, however, the families of the nobility and gentry (Kleiner Adel) are exempted.

At present the infantry consists of about 315,000 men, all regiments having, at least, two battalions of 1,200 men each, and 12 companies. A third battalion is provided for every regiment, but is only called out on emergencies; it is called the Landwehr, and this augmentation in time of war raises the number of the infantry to 490,000 men. The cavalry peace establishment is nearly 49,000 men; that of the artillery 25,675; with engineers, including garrison and frontier artillery corps, sappers and miners, and a battalion of pontoniers, and one of *tschaikistes* (in the gun-boats on the Danube and the Save), &c. The infantry are dressed in white coats, of coarse but comfortable cloth, with light blue trousers, the Hungarian regiments being distinguished by their national light pantaloons. The cavalry wear the national dresses peculiar to their several descriptions of arms. Hungary furnishes the hussars, and Galicia the lancer regiments; the Italian, Slavonic, and German cavalry regiments wear white uniforms with helmets. The men are usually taken from the provinces in which each regiment has its conscription depôt; but the officers are mixed throughout the army, and their promotion is seldom confined to one regiment. The finest men of each infantry regiment are selected to form the grenadier companies, usually in garrison at Vienna, Milan, Pesth, and Prague. The troops are well clothed and fed; and though an annual drain of the strongest and healthiest part of the population must be felt by the community at large, the conscription is not regarded as a hardship by the poorer classes. In Hungary the case is different; the regiments of that country are raised by recruiting, and the men are usually seduced by the promise of being placed in the hussar regiments: but in general the Hungarian peasants are averse from the service, though they make excellent soldiers. It is permitted to find substitutes; but the conscription too often includes persons of education who, being unable to purchase their exemption, are cut off from all hopes of advancement, as no promotion, except in the artillery, is made from the ranks. The colonel-in-chief of each regiment names and promotes the officers up to the rank of captain. The field officers are nominated by the emperor, and usually advance according to seniority.

Austria's contingent to the confederate German army is 94,822 men, forming the first, second, and third divisions. Exclusive of various foraging allowances, the army costs annually about 45,000,000 fl., or 4,500,000*l*.

The fortification of the avenues by which the French armies in the last war penetrated to the capital has drawn much attention. Linz (*see* LINZ) has been much strengthened, as the key to the valley of the Danube; and the passage from Italy through the Tyrol has been protected by the erection of a citadel and strong works at Brixen. There are also various fortifications; some of them of great strength, in all the provs. of the empire. Half the garrison of Mayence, in the grand duchy of Darmstadt, consists of Austrian and half of Prussian troops, as stipulated by the treaty of Vienna.

The Austrian navy is said to consist of 3 frigates, 2 corvettes, 3 brigs, and 3 schooners or galliots, besides guardships and revenue cruisers, &c.

States. — With the exception of Hungary, Transylvania, and the Tyrol, the powers of the states or provincial parliaments, that met annually in each of the other provinces, were very limited. They had no deliberative voice in legislative or financial matters. The amount of the taxes for the year, which varied according to the exigencies of government, was communicated to them, and the distribution of the taxes amongst the contributors took place under their inspection. They were likewise permitted to petition the throne on the subject of grievances, of which they but rarely availed themselves. The estates of Lower Austria were invariably convoked at Vienna in September, one month previously to the assembling of the provincial estates, which meet in October.

The Hungarian Diet possesses very different privileges, and has been able to maintain them notwithstanding the vast influence of the crown. They have a full deliberative voice in legislation, and nothing can be decreed by the sovereign without their concurrence. Hence the country is not subject to the heavy taxation, nor legally to the regulations respecting the police and censorship which prevail in other parts of the empire. Passports are not usual in the kingdom; and the Hungarians do not consider their liberty to travel in foreign countries as depending on the will of the sovereign. With these valuable privileges they have, however, preserved a number of faulty laws and cumbrous observ-

ances. But the exertions of the more enlightened members of both houses have of late years succeeded in obtaining considerable alterations in these, without sacrificing any of their rights; and the country, previously to the late revolution, was rapidly improving.

It is not, however, to be denied, that the freedom of Hungary has hitherto been little else than the freedom of the nobles and clergy. The great bulk of the people have long been and still continue to be substantially in the state of *adscripti glebæ*. Their condition has, however, been in some respects materially improved, and limits set to the lords' demands upon their services, through the interference of government, and principally of Maria Theresa and Joseph II., in their behalf; but there can be no doubt that the power and privileges of the other classes, however advantageous in some respects, have hitherto been injurious to the peasantry, that is, to the bulk of the population. The fair presumption is, that but for these privileges the peasantry of Hungary would now have been as free, and have enjoyed the same privileges as those of the German provinces of the empire.

Offices of Government and Administration. — The arrangement of the different branches of the administration in Austria attained its perfection under the late emperor Francis I., and was well calculated to admit of the personal interference of the monarch in every department. But this complicated system no longer exists! The entire constitution of the government has been changed; and though it is most probably destined to undergo many farther changes, there is no chance of the late system being re-established. To describe it would consequently be of little or no use; but such of our readers as wish to be informed respecting it, will find it succinctly noticed in the last edition of this work. The vice of the old system of government was the proneness of the ministry to interfere in everything; and though neither harsh nor tyrannical, it tended, by its instinctive aversion to moral and political changes, to weigh down the public energies, and to hinder individual and national advancement.

Public business in every department of the late government was carried on in writing. The spirit of the administration was mild and tolerant, except towards political offences. But it was, at the same time, timid and distrustful. Innumerable commissions of inquiry and control used to be annually appointed; and every check that could be devised to prevent abuse was adopted, save the most efficient of all, that of a really free press! It would be too soon to speculate upon the character of the system that will be established in its stead.

Rise and Increase of the Empire. — The House of Austria derives its origin and the foundations of its power from Rodolph, Count of Hapsburgh, in Switzerland. Rodolph, who was one of the ablest princes of his age, having extended his authority over the greater part of Switzerland, and distinguished himself by his ability and bravery, was raised in 1273 to the Imperial throne. His elevation was owing principally to the wish of the electors to have an emperor of undoubted ability, capable of putting down the anarchy that had long prevailed in the greater part of the states included within the limits of the empire, and who, at the same time, was not powerful enough to occasion any fear of his subverting the privileges of the different states. The family of the ancient dukes of Austria, of the House of Bamberg, having become extinct a short while previously to the elevation of Rodolph, their states were taken possession of by Ottocar, king of Bohemia, whose ascendancy threatened the independence of the empire. But Rodolph, having secured the sanction of the diet, declared war against Ottocar, whose forces were totally defeated, and himself killed, in the decisive battle of Marchfield, in 1278. This formidable competitor being removed, Rodolph had little difficulty in procuring from the diet the investiture of the duchy in favour of his eldest son, and it has ever since continued in the possession of his descendants, and formed one of the principal sources of their power.

Albert, the son of Rodolph, did not inherit the talents of his father. The Swiss revolted from his dominion in 1307, and after a lengthened contest achieved their independence. But notwithstanding this event, and the elevation of several princes of other families to the Imperial throne, the power of the House of Austria rapidly increased, and in no very long time its dominions embraced some of the largest and most important countries of Europe. It has been principally indebted for its extraordinary aggrandisement to fortunate alliances. The marriage, in 1477, of Maximilian, son of the emperor Frederick III., with the daughter and heiress of Charles the Bold, the last duke of Burgundy, brought to the House of Austria all the rich inheritance of the latter in the Low Countries, Franche Comté and Artois. Another marriage opened to the House of Austria the succession to the Spanish monarchy, including its vast possessions in Italy and the New World. And Ferdinand I., having married, in 1521, Anne, sister of Louis, king of Hungary and Bohemia, succeeded, on the death of the latter at the battle of Mohacs in 1526, to these states. There is, therefore, as much of truth as of point in the lines,

> "Bella gerant alii, tu, felix Austria, nube,
> Nam quæ Mars aliis, dat tibi regna Venus."

Charles V., the most powerful monarch of the House of Austria, concluded, in 1521, a treaty with his brother Ferdinand, by which he assigned to him the hereditary possessions of the family in Germany. And there can be little doubt that this arrangement was for the advantage of both branches of the House — that of Austria, properly so called, and that of Spain.

The great power and ambition of the princes of the House of Austria excited a well-founded alarm among the other European powers. For a lengthened period the whole politics of Europe, its alliances, and its wars, had little other object than the humbling of the power of Austria. This was the motive of the thirty years' war, terminated by the treaty of Westphalia, in 1648, which secured the independence of the different states of the Germanic empire, and the free exercise of the Protestant religion.

In 1699 the Turks were finally expelled from Hungary; and the genius of Prince Eugene gave the Austrians an ascendancy over the Ottomans they have ever since preserved.

In 1740, the male line of the House of Hapsburg terminated by the death of the emperor Charles VI. But his daughter, Maria Theresa, married to Francis of Lorrain, grand duke of Tuscany, succeeded to his dominions, and, eventually, to the Imperial crown. Shortly after her accession, Frederick the Great, king of Prussia, seized upon the greater part of Silesia. The recovery of this province was the principal object of Austria and her allies in the seven years' war. But his Prussian majesty triumphed over all his enemies; and Silesia was finally ceded to Prussia, by the treaty of Hubertsberg, in 1763.

The reign of Joseph II., the son and successor of Maria Theresa, is important from the reforms he effected in most departments of the government, and the territories he added to the empire. It has been objected to the former that they were not introduced with sufficient caution, and that he would have accomplished more had he attempted less. No doubt, it must be admitted that he did not make sufficient allowance for the inveteracy of ancient prejudices, and that his innovations were frequently neither appreciated nor approved by those for whose benefit they were intended; but there can be no doubt as to the rectitude of his intentions, and, notwithstanding the obstacles he experienced, his reforms, and the change he introduced into the mode of government, have been productive of the greatest advantage. He acquired Galicia from Poland, and the Bukowine from Turkey.

It would be unnecessary, even if our limits admitted of it, to attempt any sketch of the fluctuations of Austrian power during the eventful period that has elapsed since the breaking out of the French revolution, in 1789. At certain stages of her great struggle with France, Austria seemed to be depressed almost to the rank of a second-rate power. But the insatiable ambition of Napoleon having effected his downfall, Austria was left at the end of the contest as powerful as ever; the loss of the low countries being fully compensated by her acquisitions in Italy and elsewhere.

In 1804, Francis assumed the title of hereditary emperor of Austria; and on the 6th of August, 1806, he renounced the title of emperor of Germany. This latter event had been preceded by the formation of the confederation of the Rhine, and the entire dissolution of the old Germanic constitution. The present emperor, Francis-Joseph I., born 18th August, 1830, succeeded, on the abdication of his uncle Ferdinand I., 2nd Decemb. 1848. *See* SUPPLEMENT.

AUTUN, a city of France, dép Saone et Loire, on the Arroux, 43 m. S.W. Dijon, lat. 46° 56′ 48″ N., long. 4° 18′ E. Pop. 9,100. It is picturesquely situated, partly on the declivity and partly on the top and at the bottom of a hill. It is neither handsome nor regular; most part of its edifices are old, and have a mean appearance; but there are several among them well worth notice. It has two cathedrals situated on the summit of the hill: but neither has been completed. The spire of one of them, 325 feet in height, is remarkable for its elegance and the lightness of its construction. The church of St. Martin, built by Queen Brunehault, and containing her tomb furnishes specimens of different kinds of architecture. The *champ de Mars*, in the middle of the town, a spacious square elevated on a terrace, and planted with trees, affords an agreeable promenade. The square of the cathedral has a magnificent fountain. There are two bridges over the Arroux, one of which is said to be built on the foundations of a Roman bridge. Autun is the seat of a bishop, of tribunals of original jurisdiction, and of commerce; and has a college, a diocesan semi-

mary, a cabinet of antiquities and natural history, a collection of pictures, two small libraries, a theatre, &c. It has also manufactures of cotton velvet, of a sort of stuff described as *tapis de pied, dites marchaux*, fitted for coverlets, horse cloths, &c., with hosiery, tanneries, &c. There is a coal mine at the hamlet of Chambois, within about a league of the town.

This is one of the most ancient cities of France. It was originally called *Bibracte*, and is described by Cesar as by far the greatest and wealthiest town (*longe maximo ac copiosissimo*) of the Ædui. (*De Bello Gall.* lib. i. § 23.) Having been made a Roman colony by Augustus, it took the name of *Augustodunum** from that emperor, and *dun*, a Celtic term for a hill. Subsequently it was called *Flavia Æduorum*. The Burgundians took it in 427; and it was afterwards sacked and burned by the Saracens, and latterly by the English, in 1379. It espoused the party of the League, and suffered much during the religious wars. It still possesses many fine remains of antiquity. Of these the most celebrated is the triumphal arch, called the gate of Arroux, of large dimensions, and which, though built without cement, is in exceeding fine preservation; a smaller triumphal arch; the ruins of an amphitheatre, of a Roman burying-ground, of the temple of Janus, built by Drusus, and of a temple of Minerva, with many *bas reliefs*, medals, utensils, &c. The ancient city was much more considerable than the modern one. The walls may still be traced, and are so solidly built as to be almost like rock.

Tacitus mentions (*Annal.* lib. iii. § 43.) that the noble youth of Gaul resorted for instruction to Augustodunum. Eumenes, the rhetorician, who was born here about the year 261, states in his oration *Pro Restaurandis Scholis*, § 20., that representations, or maps, of the different countries of the then known world were delineated on the porticos or places where the youth met, setting forth their names, situations, the rise and course of their rivers, the outline of their coasts, &c.; and it is worthy of remark that some portion of this ancient delineation is said to have been recently discovered. (*Encyc. des Gens du Monde*, art. *Antiquités d'Autun*.)

The Prince de Talleyrand, who afterwards played so many important parts in the political drama, was bishop of this town at the commencement of the revolution. The Abbé Roquette, whom Molière is said to have taken for a model, was also one of its bishops. This has given occasion for the following epigram: —

> "Roquette dans son temps, Talleyrand dans le nôtre,
> Furent les évêques d'Autun:
> Tartuffe est le portrait de l'un;
> Ah! si Molière eut connu l'autre!"

(*Hugo, France Pittoresque*, art. *Saone et Loire*.)

AUXERRE (an. *Autissiodurum*), a town of France, cap. dep. Yonne, on the left bank of that river, 95 m. S.E. Paris, lat. 47° 47′ 57″ N., long. 3° 34′ 21″ E. Pop. 10,989. It is agreeably situated on a hill, and its environs are charming; but with the exception of the houses along the quay and the river's side, it is generally ill-built, with various crooked streets, and has a gloomy appearance. Principal public buildings, cathedral, one of the finest Gothic edifices in France; the church of St. Peter; the abbey of St. Germain; the bishop's palace; and the hotel of the prefect. A finely shaded promenade surrounds the town, and it is well supplied with water distributed from a public fountain. Auxerre was the seat of a bishopric which has been suppressed; it has tribunals of original jurisdiction and of commerce, a college (high school), a secondary ecclesiastical school, a model school, a society of agriculture, a botanical garden, a museum of antiquities, a public library with 24,000 vols. and 180 MSS., a handsome theatre, &c. It has manufactures of calicoes, woollen coverlets, hosiery and caps, hats, earthenware, violin strings, wine casks, &c. The wines produced in the environs are much esteemed, particularly those of *Migraine* and *Chainette*; and a considerable trade is carried on in them, and in casks, wood, staves, &c. The Yonne is navigable from a little above the town.

AUXONNE, a town of France, dép. Côte d'Or, cap. cant. on the left bank of the Saone, 18 m. E.S.E. Dijon. Pop. 5,150. It ranks in the 4th class of fortified towns, being defended by works constructed by Vauban. It is well built, and the ramparts serve as pleasant promenades. There is a fine bridge across the Saone, with a levy pierced by 23 arches to give a passage to the water in inundations. Auxonne is the seat of a tribunal of commerce; and has a college, a school of artillery, a small public library, &c., with manufactures of cloth, serges, and muslins, a brewery, a cannon foundry, &c.

AVA (*Ang-wa*, a fish-pond, so called because one formerly stood there); the ancient and again the present cap. of the Birman empire, on the left bank of the Irrawadi, 160 m. S.W. Bhamo, and above 300 m. N. Rangoon, lat. 21° 51′ N., long. 95° 58′ 10″ E. Pop. under 30,000. (*Wilson*.) It consists of an outer and inner city, both fortified: the outer is 5¼ m. in circuit, and is surrounded, except on the Irrawadi side, where there is scarcely any defence, by a brick wall 15 ft. high, and 10 ft. thick; outside of which, on the S., is a deep, rapid, and unfordable torrent, the *Myit-tha*; on the W. a jungle and swamp; and on the E. the *Myit-rigé*, a rapid stream, 160 yards broad. The inner city is placed at the N.E. angle of the former, and is surrounded by a better wall, 1 m. in circ., and has also some natural defences. The inner city is almost wholly occupied by the palace, council-chamber, arsenal, and the dwellings of a few of the principal courtiers. Ava contains many temples, in one of which is a sitting image of Gaudma, 24 ft. in height, said to consist of a single block of marble; in another all oaths of consequence are administered, the breach of which is considered a heinous crime. The houses are generally mere huts thatched with grass: the markets are furnished with British, as well as Chinese and Lao manufactures; but for trade, wealth, and prosperity, this capital is very far beneath Bangkok, the cap. of Siam. (*Crawfurd's Embassy to Ava, &c.*, pp. 318., &c.; *Wilson, Documents, &c.*, Appendix, p. 46.)

AVALLON, (an. *Aballo*), a town of France, dép. Yonne, cap. arrond. on the Cousin, 25 m. S.S.E. Auxerre. Pop. 5,089. It is beautifully situated on a granite rock, and commands, especially from the promenade of the *Petit Cours*, a fine view of the rich and well-cultivated valley of the Cousin. It is a handsome town, with good houses, and broad and well-kept streets. The front of the parish church, the hospital, the theatre, and the concert hall, deserve notice. It has a court of original jurisdiction, a commercial tribunal, and a college; with fabrics of cloth, paper, mustard, &c. The casks and other articles of *tonellerie*, are in high repute. The hills round the town produce excellent wine, of which it is the entrepôt; and it has also an extensive trade in corn, timber, staves, casks, &c.

Avallon is very old: it owes its foundation to a strong castle, every vestige of which has now disappeared, that once occupied the summit of the rock on which it is built. (*Hugo, France Pittoresque*, art. *Yonne*.)

AVEBURY, or ABURY, a parish and small village of England, co. Wilts, 5 m. W. Marlborough. Pop. 747. This parish contains the gigantic remains of what is usually considered to be a Celtic or druidical temple. This singular and stupendous ruin is situated in a flat tract of country, and consists of a large circular space of ground, having on the outside a bank or mound of earth, the inner slope of which measures about 80 feet in width: immediately within this bank is a broad and deep ditch; and along the inner edge of the latter stand the relics of a circle of vast upright stones, similar to those of Stonehenge, measuring from 15 to 17 feet in height, about 40 feet round, and estimated to weigh from 40 to 54 tons each. The diameter of this circle is about 1,400 feet: when complete it contained 100 stones, 40 of which were standing in 1722, when Dr. Stukeley examined it; but in 1802 only 18 stones were left, and the number has since been still further reduced. Within this outer circle, or great temple, as it is sometimes called, were two smaller temples, each formed of two concentric circles of stones, having one a single stone in the centre, and the other a group of three stones. Some of the stones in the two inner temples are of a prodigious size. They are all of a siliceous grit, and are of the same species as those that accompany the great chalk formation that here crosses the kingdom.

In connexion with the circular stones, or temples, already noticed, were two avenues each above 1 m. in length, formed by double rows of vast upright stones. One of these led in a S.E. direction to Overton, where, according to Stukeley, it terminated in a small elliptical temple of similar stones: the other, or W. avenue, terminated in a single stone. Stukeley supposes that the S.E. avenue had, when perfect, 200, and the W. 203 stones; but of the former, which had 72 stones standing in 1772, only 16 are now left, and of the latter only 2.

The village of Avebury stands within the periphery of the great circle, or temple, and is in part built of the stones with which it and the minor circles were composed; these having been blasted and broken to pieces, to serve for this and similar purposes. It is much to be wished that efficient measures were taken to secure what still remains of this extraordinary monument; otherwise it is but too probable it will, at no very distant period, be entirely destroyed.

Immediately S. from the great circle or temple at Avebury, dist. ¾ m., is the barrow, or artificial mound of earth, called Silbury-hill. This huge barrow covers, according to the measurement adopted by Sir R. C. Hoare, 5 acres and 30 perches of ground, being 2,027 feet in circumference at the base: its diameter at the top is 120 feet, the sloping height of its side 316 feet, and its

* The identity of *Bibracte* and *Augustodunum* has been denied by Cellarius, the Abbé Longrue, and M. De Valois; but has been conclusively demonstrated by D'Anville, in his *Eclaircissemens sur l'Ancienne Gaule*, p. 267–332.

perpendicular height 170 feet. It is impossible to say for what purpose this immense mass of earth was heaped together; but it seems not unreasonable to conclude that it may have been in some way connected with the stone circles at Avebury. (See *Dr. Stukeley's* volume on *Avebury*, published in 1743, and recently reprinted, *passim*; *Beauties of England and Wales*, art. *Wiltshire*; *Sir R. C. Hoare's Ancient Wiltshire*, &c.)

However desirable, it does not appear very probable that any satisfactory explanation will ever be given of the purposes for which the singular structures described above were erected. All traces of their origin seem to be buried in impenetrable obscurity. The favourite theory is, that the structure at Avebury, as well as that of Stonehenge, were druidical temples, where the druids, or priests of the ancient Britons, celebrated their sacred rites. But, notwithstanding the confidence with which this theory has been put forward, and the learning and ingenuity displayed in its support, it appears to be entirely destitute, not merely of proof, but even of any considerable degree of probability. Cæsar, Lucan, Tacitus, and Pliny, the principal authorities with respect to the druids, do not give the smallest countenance to the notion of their having constructed or made use of any such temples. Cæsar (See *Bello Gallico*, lib. vi. s. 13.) says that they retired at a certain period of the year *loco consecrato*; for which Grævius has proposed to read *luco consecrato*: and this emendation is rendered probable by what is said by Lucan, Tacitus, and Pliny. The first says, in reference to the druids,

> —— "Nemora alta remotis
> Incolitis lucis." Lib. i. line 453.

Tacitus (*Annal.* lib. xiv. s. 30.) tells us that the Romans, having taken Mona, or Anglesey, apparently the grand seat of the druids, cut down their groves sacred to savage superstitions — *excisique luci, sævis superstitionibus sacri*. And Pliny (*Hist. Nat.* lib. xvi. s. 44.) states that the druids *roborum eligunt lucos, nec ulla sacra sine ea fronde conficiunt*. But no classic author makes the remotest allusion to the druids using such extraordinary temples as those previously described. Hence, if any dependence be placed on ancient authority, it would seem that the seats of druid superstition were in the recesses of the forest — in places as remote as possible from Stonehenge, or even Avebury.

AVEIRO, a sea-port town of Portugal, prov. Beira, 34 m. N. N.W. Coimbra, on the S. shore of the æstuary of the Vouga, lat. 40° 38′ 24″ N., long. 8° 37′ 54″ W. Pop. 4,134. It is the seat of a bishopric and of a custom-house; and has a good deal of trade in salt, manufactured in the little islands in the bay; in sardines, of which there is an extensive fishery; and in wine, oranges, &c. It has a college, an hospital, a workhouse, and 7 convents. The oysters on the adjoining coast are reckoned the best in Portugal. The entrance to the mouth of the river is pointed out by two stone pyramids, each 70 feet high, which, when brought into a line, show the course over the bar. The latter has about 15 feet at high-water springs, and 9¼ at low-water do.: at neaps the depths are respectively 12 and 7¼ feet. It is necessary, however, to observe, that the bar being of shifting sand, is liable to perpetual changes, and that it should never be attempted without the aid of a pilot. (*Tofino, Spanish Pilot, Eng. trans.*, p. 97., &c.)

AVELGHEM, a town of Belgium, prov. W. Flanders, on the Schelde, 9 m. E. S. E. Courtnay. Pop. 3,600.

AVELLA (an. *Abella*), a town of Naples prov. Terra di Lavoro, 5 m. N.E. Nola, in a charming situation, commanding a view of Naples. Pop. 5,000. It is celebrated by Virgil for its honey or its apples, it is not certain which: —

> "Et quos maliferæ despectant mœnia Abellæ."
> Æn. vii. 740.

But some MSS. read *meliferæ*.

AVELLINO (an. *Abellinum*), a town of Naples, cap. prov. Principato Ultra, on the declivity of a hill, in a fertile valley near the Sabato, 29 m. E. Naples. Pop. 12,000. It is fortified, is the seat of a bishopric, of the civil and commercial courts for the prov., and has a royal college. It has a cathedral, 3 parish churches, a square adorned with an obelisk, a public granary, &c.; with manufactures of coarse cloth, paper, maccaroni, sausages, whose superior excellence has long been admitted, and dyeing works. It is the entrepôt of the surrounding country, and has a pretty extensive trade. Chestnuts are gathered in large quantities in the environs, but hazel nuts are their most important product. The latter were greatly esteemed by the Romans, and were called by them *nuces Avellanæ*.

Avellino is said by Swinburne to be "a considerable city, extending a mile in length down the declivity of a hill, with ugly streets, but tolerable houses. The churches have nothing to recommend them, being crowded with monstrous ornaments in a barbarous style, which the Neapolitans seem to have borrowed from the Spaniards. The cathedral is a poor building, in a wretched situation, with little to attract the eye except some uncouth Latin distichs, and shapeless Gothic sculpture. Their only edifice of note is a public granary, of the composite order, adorned with antique statues, and a very elegant bronze one of Charles II., king of Spain, while a boy. The town abounds with provisions of every sort, and each street is supplied with wholesome water." (*Swinburne's Two Sicilies*, vol. i. p. 111. 4to ed.) It has, however, been a good deal improved of late years; but the above is still a pretty fair representation of its general appearance.

AVENCHE (an. *Aventicum*), a town of Switzerland, in a portion of the canton de Vaud enclosed in that of Fryburg, 5 m. from Port Alban, on the lake Neuchatel, and 1½ m. from the shore of Lake Morat. This town, now hardly worth notice, was formerly one of the most important in Switzerland. According to some authorities, it was built, and a Roman colony placed in it, by Vespasian; but others, with more probability, conjecture that it was only repaired and beautified by Vespasian, after being laid waste by Vitellius. The ancient walls enclose a space of more than 5 m. in circumference. It has some fine remains of antiquity, such as mosaical pavements, an amphitheatre, columns of white marble, an aqueduct, &c.; and its importance is known from several Roman mile-stones found in parts of the Pays de Vaud being all numbered from Aventicum. Though now at a considerable distance from the lake, it was during the period of its prosperity upon its margin, the iron rings to which the boats were fastened being still visible. (*Coxe's Switzerland*, let. 51.; *Malte-Brun*, art *Switzerland*.)

AVENWELDE, a village of the Prussian states, prov. Westphalia, reg. Minden, about half-way between Bielefeld and Wiedenbruck. Pop. 3,000.

AVERNO (LAKE OF), (an. *Avernus*), a famous lake in the Neapolitan states, about 10 m. W. Naples, near the sea. The lake occupies what there is good reason to think is the crater of an extinct volcano, and is everywhere surrounded by high hills, except where there is an outlet, by which it formerly communicated with the Lucrine lake. It is from 1½ to 1¾ m. in circumference; the water clear, very deep, and well supplied with tench. During the early period of Roman history the hills round this lake were thickly covered with dense forests, which gave it a gloomy appearance, and by confining the mephitic vapours that rose from the volcanic soil, rendered the air extremely unhealthy. In consequence the place was early regarded with superstitious awe. The poets represented Avernus as sacred to the infernal gods, and as being, in fact, the entrance by which Ulysses and Æneas descended to the lower regions!

> —— "fama est Acherontis ad undas
> Pandere iter cæcas stagnante voragine fauces,
> Laxat et horrendos aperit telluris hiatus,
> Interdumque novo perturbat lumine manes."
> Sil. Italicus, xii.

It was said that no bird could fly over the lake without being destroyed by its poisonous exhalations, and hence its name Avernus (Ἄορνος, without birds). This is noticed by Virgil, in some well-known lines (*Æn.* vi. 237.).

But during the reign of Augustus, Agrippa dispelled the obscurity and sanctity that had so long encircled the Avernus. He cut down its groves; and having joined it to the Lucrine bay, he brought ships into its solitudes, and used it as a harbour in which to exercise galleys! The Lucrine lake, or rather bay, was almost entirely filled up by the subterraneous eruption of Monte Nuovo, in 1538. On one side the lake of Averno are the remains of a large octagon temple, probably appropriated to the worship of Hecate; and opposite the temple, on the other side the lake, is the opening of the subterranean conduit usually called the grotto of the Sybil, but which was, in fact, a tunnel leading from the lake to the sea. The hills round the lake are now covered with gardens and vineyards, and retain none of that gloomy grandeur for which they were once so celebrated. They are still, however, at certain seasons unhealthy. (*Swinburne's Two Sicilies*, 4to ed. i. p. 35.; *Cramer's Ancient Italy*, ii. p. 160.)

AVERSA, a town of Naples, prov. Terra di Lavoro 9 m. N. Naples, and 11 m. E. from the Mediterranean. Pop. 15,000. It is situated in a beautiful plain covered with vines and orange trees; is well built and well laid out; is the seat of a bishopric, said to be the richest in the kingdom; of a royal governor, and of a tribunal. It has nine churches and some convents; but it is principally distinguished by its foundling hospital and its lunatic asylum. The former is said by Balbi, to be a nursery of artists and artisans for the entire kingdom. The latter is exceedingly well managed. The apartments are laid out and furnished so as to suit the state of the patients; and every method is resorted to, by amusement and exercise, to divert their attention. Those

that are furious are of course separated from the others, and subjected, if need be, to the strait-jacket. This establishment has served as a model to others, at Reggio, Modena, and Palermo. A sort of almond-cake, called *torrone*, made here, is in great demand at Naples.

Aversa was built in 1030, by the Normans; but it was subsequently twice burnt down. Andrew, of Hungary, husband to Joan I. queen of Naples, was murdered here, in 1345.

AVESNES, a town of France, dép. du Nord, cap. arrond. and canton, on the greater Elpe, 10½ m. S. Maubeuge. Pop. 3,030. It is a fortified place of the 4th class, its fortifications having been repaired by Vauban. It is the seat of a sub-prefect, and has a tribunal of original jurisdiction and of commerce, a commercial college, an hospital for old persons, and an agricultural society. It is ill built, and *triste*. The cathedral has a spire 300 feet in height, which has five chimes of bells. It has manufactures of coarse serge, woollen hosiery, carpentry work, with tanneries, breweries, soap-works, &c. Avesnes suffered severely from the explosion of a powder magazine, when besieged by the Prussians in 1815.

AVEYRON, a dep. of France, in the southern part of the kingdom, being separated from the Mediterranean by the Herault, between 43° 41′ 30″ and 44° 55′ 25″ N. lat., and 1° 50′ 15″ and 3° 26′ E. long. Area, 887,873 hectares. Pop. 370,951. This is one of the most mountainous depts. of France. With the exception of some volcanic plateaus detached from the Plomb de Cantal, and which advance as far as the Truyere, all the other mountains belong to the chain of the Cevennes, the summit ridge of which forms its S. frontier. The mean elevation of the soil is very considerable, Rhodez being 2,280 feet above the level of the sea. The mountains are intersected by ravines, and have many subterranean caves. The soil of the plateaux and elevated grounds is generally very inferior; but that of the valleys is very fertile, and produces all sorts of corn. Principal rivers, Lot, Aveyron, whence the dep. takes its name, and Tarn. Agriculture is in a very backward state, in consequence partly of the unfruitful nature of the soil, partly of the long continuance of frosts and the frequent occurrence of hail storms, but principally of the want of capital and poverty of the inhabitants. Field labour is mostly performed by oxen. Produce of corn sufficient for the consumption. Sheep numerous, and their wool, which is generally fine, estimated at 650,000 kilogs. a year. A great number of cattle, horses, mules, and pigs are raised. In the district of Roquefort, where cheese is made from sheep's milk, and the district of Guyole, the dairy is an object of great attention. In some parts the farms are extensive, and the strictest gradation is preserved among the labourers attached. The latter eat little butcher's meat, and their food is very indifferent. Some wine is made, but the quality is inferior. According to the official tables, the soil of the dep. is mostly distributed as follows: — Cultivable land 365,000, meadows 122,000, vineyards 34,000, forests 84,000, and heaths, rocks, wastes, &c. 209,000 hectares. The export of agricultural produce reaches at an average 6,000,000 fr. a year, of which the cheese of Roquefort and Guyole make 1,100,000 fr., sheep 1,000,000 fr., and woollen stuffs, 800,000 fr. The coal and iron mines of the Aveyron are among the most important in France. The export of coal amounts to about 150,000 metrical quintals, and that of alum to about 200,000 kilogs. (*See* AUBIN, ST.) Iron-works have been established within these few years, and they are now prosecuted with great spirit and success, and furnish employment to some thousands of workpeople. A good deal of copper is also produced. Manufacturing industry has made very considerable progress. About 20,000 workpeople are supposed to be employed in the manufacture of coarse woollen stuffs, hosiery, &c. In the arrondissement of St. Affrique about 700 hands are employed in the spinning and manufacture of cotton; and there are in the dep. about 800 employed in the tanning and dressing of leather and the glove trade. There are also factories of hats and paper, with dye-works, coopers' works, &c. Aveyron sends 5 members to the Chamber of Deputies. No. of electors, 1,450. Total public revenue in 1831, 5,821,817 fr. Principal towns, Rhodez, Milhau, St. Affrique, and Villefranche. The inhabitants are said to be much addicted to drinking and quarelling; and as they all carry a knife, called a *capuchadou*, their quarrels sometimes end fatally. The condition of the fair sex seems to be about as bad as possible. "La condition des femmes, dans une grande partie du département, et surtout parmi les habitans des campagnes, est pauvre et malheureuse; leurs parens les traitent souvent avec une sorte de barbarie, et les forcent dès le plus jeune âge à se consacrer sans mesure aux rudes travaux de la culture. Le hâle, la sueur, et la fatigue continuel altèrent leurs traits et leurs formes. Avant dix-huit ans des filles qui ailleurs auraient été gracieuses et jolies ont la peau tannée, les maines calleuses, et la taille voûtée. Le mariage, au lieu d'être pour elles une époque de bonheur et de la liberté, est souvent celle d'une servitude plus dure." (*Hugo, France Pittoresque*, art. *Aveyron; French Official Tables*.)

AVEZZANO, a town of Naples, prov. Abruzzo Ultra II., cap. district and canton, in a fine plain, within about a mile of the N.W. angle of the lake Tecino. Pop. 3,166.* It is surrounded by walls, which, however, are in a ruinous condition. The houses are generally mean, but there are some good buildings, among which is a castle belonging to the Colonna family.

AVIGLIANA, a town of the Sardinian states, 15 m. W. Turin. Pop. 3,000. It is finely situated on a hill, has a castle, fabrics of coarse cloth and filatures of silk.

AVIGLIANA, a town of Naples, prov. Basilicata, cap. cant., 11 m. N.N.W. Potenza. Pop. 9,000. It is built on the declivity of a hill, a part of which being undermined in 1824, by continued rains, gave way, and destroyed a part of the town. It has a fine collegiate church, sundry convents, and a royal college. The surrounding country produces the finest oxen in the kingdom.

AVIGNON (an. *Avenio*), a city of France, cap. dep. Vaucluse, on the left bank of the Rhone, 53 m. N.N.W. Marseilles, lat. 43° 57′ 8″ N., long. 4° 48′ 30″ E. Pop. (ex. cant.) 27,733. It is the seat of an archbishopric, of a tribunal of original jurisdiction and of commerce, and has a royal college of the 2d class, a primary normal school, a theological seminary, a school of design, a public library containing 30,000 volumes and 500 MSS., a museum of pictures, a botanical garden, with societies of arts, agriculture, &c. Having been long the residence of the popes, Avignon was filled with churches, convents, and other religious houses, many of which have now fallen into decay. It is situated in a fine plain, and is surrounded by high walls, flanked with numerous towers: its promenades along the walls, and its quays along the river, are both said to be very fine. The city was formerly much more populous and thriving than at present, and half the space now included within the walls is occupied with gardens, &c. The streets are narrow and crooked; and the houses and buildings have generally a gloomy, melancholy appearance. Mr. Inglis says, — "I never saw any town that I should not prefer to Avignon as a residence: its filthiness is disgusting, absolutely inconceivable to be found in a civilized country. And it is the less excusable as the town is well supplied with water." (*Switzerland, &c.* p. 186.) Perhaps this may be rather overstated, but there can be no doubt that it is substantially true. The ancient palace, occupied by the popes, stands on the declivity of the rock called de Dons. It is a Gothic building, constructed at different periods, of vast extent, with high, thick walls, and now serves as a prison, military depôt, and barracks. The cathedral church of Notre Dame de Dons is very ancient, and contains the tombs of several distinguished persons. The church of the Cordeliers, of which only the spire now remains, contained the tomb of Laura, immortalized by Petrarch, and of the "brave Crillon," the friend of Henry IV., and one of the most chivalrous of French warriors. The Hôtel des Invalides, subsidiary to that of Paris, is an immense building, in which 1,000 old soldiers are accommodated. The Hôtel Dieu is also on a large scale. The theatre, a large handsome edifice, was erected in 1824. Avignon communicates with the opposite bank of the river by two bridges, one of wood and one of boats. Its manufactures are said to have improved of late years. They consist principally of silk stuffs and velvets. There are also some woollen and cotton fabrics, with a cannon foundry, a type foundry, dye-works, tanneries, &c. A good many works are printed in the town. Large quantities of madder are produced in the neighbouring country, and Avignon is the centre of the trade in that drug.

Avignon existed before the Roman invasion, and afterwards became a Roman colony. In 1305 Clement V. transferred thither the residence of the popes, who continued to reside here till 1377, when they returned to Rome; but two schismatical popes, or popes elected by the French cardinals, resided at Avignon till 1408. Clement VI. having acquired the property of the town and district, it continued to belong to the holy see; and though sometimes taken by the French, it was always restored, till 1791, when it was finally incorporated with France. (*Hugo, France Pittoresque*, art. *Vaucluse*.)

AVIGNONET, a town of France, dép. Haute Garonne, near the canal of Languedoc, 10 m. N.W. Castelnaudary. Pop. 2,479. Here five inquisitors were put to death by the Albigeois in 1242. Raymond, Count of Toulouse, suspected of secretly instigating the crime, was condemned by Innocent III. to be stripped naked and whipped!

AVILA, a town of Spain, cap. prov. Avila, on the Adaja, 64 m. W.N.W. Madrid. Pop. 4,800. It is the seat of a bishopric, and has a university, 8 parish churches, and numerous convents and hospitals. Formerly it was richer and more flourishing than at present; still, however, it has manufactures of cloth, cotton, hats, &c.

AVILES, a sea-port town of Spain, Asturias, at the embouchure of the river of the same name, lat. 43° 36′ N.,

* Balbi says about 6,000; but the above is the result of a census taken in 1831. The pop. of the canton is 15,000. (*Del Re Descrizione delle Due Sicilie*, ii. p. 124.)

long. 5° 52′ 45″ E. Pop. 6,000. It has some manufactures of coarse cloth, and prepares boilers and other utensils made of the copper obtained from the neighbouring mines. It has very little trade; the water in the port being so shallow that it is hardly accessible even to coasters.

AVIS, a town of the Tyrol, near the Adige, 13 m. S.S.W. Roveredo. Pop. 3,000. It has a castle, manufactures of silk and velvet, and a quarry of flints.

AVIZ, a town of Portugal, prov. Alentejo, 35 m. W.S.W. Portalegre. Pop. 3,330. It is the chief place of the knights of the order de l'Avis, founded by Alphonso I. in 1146.

AVIZE, a town of France, dép. Marne, cap. canton, 6 m. S. S. E. Epernay. Pop. 1,660. Its territory is celebrated for its vineyards, which produce large quantities of *Champagne mousseux* of the second quality. It has an extensive trade in wine.

AVOLA, or AULA, a sea-port town of Sicily, prov. Syracuse, 12 m. S. W. Syracuse. Pop. 8,822. "This town is prettily and salubriously situated on a woody eminence, having a marine village on the beach, a tonnara, and a battery for defence; and from several respectable edifices, tolerable streets, and a good market-place, has an air of cleanliness and regularity. Besides the profits of the tonnara, this town has a considerable traffic in wine, corn, cheese, carubbas, almonds, oil, honey, and fruit, and some in sugar, made from the only cane plantation now left on the island. The adjacent country abounds profusely with game, and supplies pasturage to a great number of fine cattle, many of which are exported to Malta. S.S.E. of the village on the beach, is the place where the nets for catching the tunnies are moored, and where they generally have a vessel at anchor with a hut built on her as a beacon." (*Smyth's Sicily*, p. 170.)

AVOLD (ST.), a town of France, dép. Moselle, cap. cant., on the Rossel, 18 m. W. Sarqueminea. Pop. 3,365.

AVON, the name of several rivers in England, of which the most important are: —

1. The *Upper Avon*, has its source at Avon-Well, near Naseby, in Northamptonshire, about 300 ft. above the level of the sea. It flows generally in a S.W. direction, but with a very winding course, passing successively the towns of Warwick, Stratford-on-Avon and Evesham, till it unites with the Severn at Tewksbury. It has a large body of water; and is navigable by barges for about 40 m., or from the Severn to Stratford, where it is joined by the Stratford canal. Its entire course may be about 100 m.

2. The *Lower Avon*, has its sources contiguous to Malmesbury and Wooton-Basset, in Wiltshire, its two arms uniting near Great Somerford; it thence pursues a circular course, passing Chippenham, Bradford, Bath, and Bristol, falling into the Bristol Channel about 8 m. below Bristol. Owing to the great rise and fall of the tide, the largest class of merchantmen come up the river to Bristol. The Kennet and Avon canal, from Newbury to Bath, connects the Thames with the Avon, establishing a water communication across the kingdom.

3. The *Hampshire Avon*, rises near Devizes on the N. side of Salisbury Plain. At Salisbury it is joined by the Wily and the Bourne; and is navigable from Trafalgar-house to where it falls into the English Channel at Christchurch.

There are some other rivers of this name in England, but none of them seem to be considerable enough to require any special notice. There are also three small rivers of this name in Scotland: — one an affluent of the Spey, one of the Clyde, and another having its embouchure in the Frith of Forth, near Borrowstoness.

AVRANCHES (an. *Ingena*), a town of France, dép. Manche, cap. arrondissement, on a hill near the Seez, 32 m. S.S.W. St. Lo, and 3 m. from the sea, lat. 48° 41′ 23″ N., long. 1° 21′ 32″ W. Pop. 7,000. This is a very old town. Its cathedral, consecrated in 1121, was unroofed during the revolution, and is now in ruins. In it, in 1172, Henry II., king of England, did penance and received absolution for the murder of Beckett. (*Lyttelton's Hist. Henry II.* v. p. 123.) Avranches has a tribunal of original jurisdiction, a college, a work-house, a theatre, and a public library, containing 10,000 volumes and 200 MSS., with manufactures of lace and blondes. Small vessels come up the river to the bridge opposite the town, but it has little trade.

AX, a town of France, dép. Arriège, cap. cant. on the river of that name, 20 m. S.E. Foix. Pop. 1,991. The situation of Ax is very picturesque and romantic. It derives its entire distinction from its numerous hot mineral springs, the heat of the water of some of which approaches nearly to the boiling point. Their reputation is daily increasing, and with it the size and importance of the town, the latter being entirely dependent on the resort to the wells.

AXEL, a fortified town of the Netherlands, prov. Zealand, 21½ m. W. N. W. Antwerp.

AXMINSTER, a m. town of England, co. Devon, hund. Axminster, on the Axe, 147 m. W. S. W. London, 16 m. E Exeter. The parish contains 6,590 acres, and 2,719 inhab., of whom the town has about 1,760. It is irregularly built on the declivity of a small hill, has wide streets, and is clean and healthy. The church, a clumsy structure, is in part very ancient, and there is a free school where 14 children are educated gratis. The inhab. are principally engaged in the manufacture of carpets, in imitation of those of Persia and Turkey, which are but little if at all inferior to the genuine fabrics.

AXUM, an ancient and much decayed town of Abyssinia, prov. Tigré, near one of the sources of the Mareb (*Astusapes*), 110 m. S.W. Arkeeko, on the Red Sea; lat. 14° 6′ N., long. 38° 27½′ E. Pop. 4,000? It is situated in a nook formed by two hills; and is said by Messrs. Combes and Tamisier, by whom it has been recently visited, to be the handsomest town of Tigré. The houses are of a cylindrical form, surmounted by a cone. In its centre is a Christian church, which seems to occupy the site of an ancient temple, described by Mr. Salt (*Valentia's Travels*, iii. 88.); but the travellers referred to above, say that Salt's statements with respect to it are much exaggerated. According to them it is inferior even to *nos greniers ordinaires*; so that in this instance Bruce, who is accused by Salt of having undervalued the church, would seem to be the preferable authority. (*Voyage en Abyssinie*, i. 267.) Axum, however, would not be worth notice in a work of this sort, were it not for its ancient fame, and its antiquities. That it is very ancient is abundantly certain; and its former greatness is evinced by the ruins which still remain. Of these the most conspicuous is an obelisk 60 ft. in height, (Salt says, in *Lord Valentia's Travels*, 80 ft.; but he afterwards rectified his mistake,) formed of a single block of granite, crowned with a *patera*, and beautifully sculptured, though not with hieroglyphics. There are said to have been formerly above 50 obelisks in the city; but, except the one now noticed, the others are all prostrate.

It is known that a Greek kingdom was founded in Ethiopia, of which Axum was the capital, and gave its name to the country, some time after the Christian æra. The Greek writers of the later ages used, in fact, to call the Ethiopians Axumites; and the Periplus of the Erythræan Sea affords authentic evidence of the existence of the independent kingdom of Axum, towards the end of the second century. Some light is thrown on this intricate subject by the discovery, at Axum, of an upright slab or stone, bearing an inscription, copied and translated by Mr. Salt. This remarkable monument records the result of a successful attack made by Aizanas, king of the Axumites, on some barbarous tribes. And it so happens that Aizanas was king of Abyssinia during the reign of the emperor Constantius, who addressed a letter to him anno 330. This, therefore, may fairly be concluded as the date of the inscription in question; but there is no evidence to show the æra of the foundation of the Axumite kingdom, or how long it existed after the above date.

Adulis, situated at the bottom of Annesley Bay, on the Red Sea, was anciently the port of Axum, and a great mart for the commodities of Ethiopia, Egypt, Arabia, &c. It was the port whence Ethiopian slaves were shipped for all parts of the world. (*Ancient Universal History*, xviii. 329. 8vo. ed.)

AY, or AI, a town of France, dép. Marne, cap. cant. on a hill near the Marne, 15 m. S. Rheims. Pop. 2,810. This town is famous for its incomparable wine, the best decidedly of the *vins mousseux* de Champagne. It is said by Jullien to be *fin, spiritueux, petillant, délicat, et pourvu d'un joli bouquet*. (*Topographie de Vignobles*, p. 31.) Dr. Henderson says, that "it is unquestionably an exquisite liquor, being lighter and sweeter than the Sillery, and accompanied by a delicate flavour and aroma, somewhat analogous to that of the pine-apple. That which merely creams on the surface (*demi-mousseux*) is preferred to the full-frothing (*grand mousseux*) wine." (*History of Wines*, p. 154.)

AYAMONTE, a fortified town of Spain, prov. Seville, on the E. side of the embouchure of the Gaudiana, 25 m. W. Huelva, lat. 37° 13′ N., long. 7° 19′ 15″ W. Pop. 6,350. It stands on the declivity of a hill, and has two parish churches, a foundling hospital, an alms-house, and some convents. The inhabitants are principally engaged in fishing; but some ship-building is also carried on, and lace, soap, and earthenware are manufactured.

AYLESBURY, a borough, m. town, and par. of England, co. Buckingham, hund. Aylesbury, on an eminence in the celebrated vale of the same name, 38 m. N. W. London, 18½ S. E. Buckingham. The borough includes an area of 3,200 acres, and a pop. of 5,021. It is irregularly built, has a modern market-house, constructed after the model of the temple of the eight winds at Athens, and a handsome county-hall, in which the Lent assizes for the county are held; the county jail is also in the town, and here, too, the members for the county are nominated, and the return declared. The church is a large ancient structure, with a tower visible many miles round. The charities of Aylesbury are numerous and valuable. Among others there is a free school, for the support of

which a considerable amount of property has been bequeathed, that furnishes education for about 130 boys; there are also a number of other charities, with alms-houses, &c. Some lace is manufactured, and a number of the inhabitants of the town and its vicinity employ themselves in the breeding and fattening of ducks, of which large numbers are sent to the metropolis. Aylesbury has returned 2 m. to the H. of C. since 1554. Previously to 1804, the right of voting was in the inhab. of the borough paying scot and lot; but in consequence of the flagrant corruption of the electors, the privilege of voting for the members for the borough was then extended to the freeholders of the hund. of Aylesbury. Parl. const. in 1847, 1513. The vale of Aylesbury is one of the richest tracts in the empire. It is principally appropriated to the fattening of cattle and dairying.

AYLESFORD, a village and par. of England, co. Kent, lathe Aylesford; the village being on the right bank of the Medway, which intersects the par., m. 30. S. E. London. The par. contains 3,330 acres, and a pop. of 1344. The church, a handsome building, is situated on an eminence higher than the roofs of the houses in the village. There is here a bridge over the Medway, and an alms-house, endowed in 1605. Near the town was a Carmelite monastery, granted at the dissolution of the monasteries, by Henry VIII., to Sir Thomas Wyatt; from whom it has descended to the Finch family, now earls of Aylesford, who have modernised the building, and made it a comfortable residence. But the most remarkable monument in the vicinity of Aylesford is *Kitscoty House*, about 1 m. N. E. from the village. It consists of 3 large upright stones, each about 8 feet in height, with another lying on the top, 11 feet in length by 8 in breadth, and 2 thick; and there are some similar stones in the vicinity. Antiquarians differ widely in opinion as to the object of this singular structure; but the more common opinion seems to be that it was intended as a monument to Catigern, a British chief killed in a battle, circa A. D. 455, with the Saxons under Hengist and Horsa. (*Hasted's Kent*, 8vo. ed. vol. iv.; *Turner's Anglo-Saxons*, book iii. cap. 50.)

AYR, a marit. co. of Scotland, on its W. coast, stretching for about 75 m. along the shores of the Irish Sea and the Frith of Clyde, having N. the co. of Renfrew, E. Lanark and Dumfries, S. E. Kirkcudbright, and S. Wigtown. It contains 608,800 acres, of which nearly a half is supposed to be arable. It is popularly divided into the three districts of Carrick, Kyle, and Cunningham. The first, which comprises the county to the S. of the river Doon, is, for the most part, moorish, wild, and mountainous. Kyle, the middle district, lying between the Doon on the S. and the Irvine on the N., possesses a large extent of low, well-cultivated land along the shore; but the E. part is hilly and mountainous. Cunningham, though the smallest of the districts, is the most populous, best cultivated, and richest. Climate moist and mild. Agriculture, down to the close of the American war, was, speaking generally, execrable; but it has been prodigiously improved in the interval, and especially during the last ten or dozen years. The whole co. is now intersected with good roads, and is well fenced and subdivided. Drainage, the most important of all improvements, has been prosecuted to a great extent; and the practice of *furrow draining* is carried on with extraordinary zeal and the most perfect success. Improved rotations have been everywhere introduced; and lands that formerly only produced poor crops of black oats now carry heavy crops of wheat and barley. The Ayrshire cow is particularly fitted for the dairy, which is extensively carried on, particularly in Cunningham, the original country of the Dunlop cheese. Farm-houses and offices, formerly mean and wretched, now, for the most part, extensive and commodious. Average rent of land in 1842, 11*s*. 8¾*d*. an acre. In proof of the wonderful improvement that has taken place, we may mention that the rental of one estate in the parish of Maybole amounted in 1785 to 364*l*. 10*s*., in 1819, to 2,157*l*., and has since rather increased. Coal is found in several parts, and is extensively wrought and exported. Iron is made at Muirkirk, Glengarnock, and other places. The woollen manufacture is carried on extensively at Kilmarnock; and cotton mills have been erected at Catrine. Principal towns, Kilmarnock, Ayr, Maybole, and Irvine. Ayr contains 46 parishes. It had, in 1841, 30,125 inhab. houses, and 164,356 inhab., the pop. having increased from 84,306 in 1801. It sends 2 m. to the H. of C.; for the co., and the boroughs of Kilmarnock, Ayr and Irvine, are associated with others in the election of representatives. Co. constituency in 1849, 4,288. Valued rent, 191,605*l*. Scotch. Annual value of real property in 1843, 520,828*l*. (*New Statistical Account of Scotland; Robertson's Rural Recollections, &c.*)

AYR, a sea-port, royal borough, and m. town of Scotland, cap. Ayrshire, on the S. side of the river Ayr, at its confluence with the sea. 65 m. S. W. Edinburgh, and 30 m. S. S. W. Glasgow. The pop. of the burgh and parish amounted, in 1841, to 8,264. But though, in different parishes, the Newton and Wallace Town are substantially parts of Ayr, being separated from it only by the river, over which are the bridges, celebrated by Burns; and these suburbs are, in fact, included within the parl. burgh, the pop. of which, in 1841, was 15,749; and is now (1850) estimated at 19,000. Ayr is finely situated on the margin of a broad level plain; and has recently been very much improved and enlarged. The county buildings, containing a county hall, with apartments for the justiciary court, &c., and town's buildings, containing a news-room, and rooms for dinners, balls, assemblies, &c., are both on a large scale: to the latter is attached a fine spire, 226 feet in height. The Wallace Tower, erected a few years ago, on the site of an old building of the same name, is 115 feet high. A statue of Sir William Wallace, by Thom, has been placed in a niche in its front; but the artist has not been so happy in this instance as in his statues of Tam O'Shanter and Souter Johnnie. There is an old and a new church, but neither is remarkable. The academy is a plain building, in a good situation; and no inconsiderable part of the late improvement of the town may be ascribed to the well-merited reputation of its teachers, which has attracted a great number of families. Ayr is a very ancient burgh. It was chartered in 1202; and parliaments have been frequently held in it. It is the seat of a synod and presbytery; of a justiciary and sheriff's court; has a good town's library, and a mechanics' institute; a theatre; several charitable institutions; two weekly newspapers; annual races, &c. About 1000 hand-looms are employed in the weaving of cotton for the Glasgow manufacturers; and there is an extensive foundry, with two tan-works, and a flourishing carpet-manufactory. From 80,000 to 90,000 tons of coal are annually exported. The port, at the mouth of the river, is formed by two piers, which project a considerable way into the sea; but it labours under a deficiency of water, not having more than 5 feet water over the bar at ebb-tide, nor above 15 feet at high water springs; and is exposed to the W. gales, which throw in a very heavy sea. This defect has, however, been in part obviated by the construction of a breakwater, which it is proposed to enlarge. There belonged to the port, in 1849, 49 vessels of the burden of 6,483 tons. A railway connects Ayr with Glasgow, Kilmarnock, &c. Ayr is joined with Campbelton, Inverary, Irvine, and Oban, in the return of a member to the H. of C. Parl. constituency in 1849–50, 416; municipal do., 283. Burgh rev., 1849, 2728*l*. Market-days, Tuesday and Friday. The cottage in which Robert Burns was born, with Alloway Kirk, &c., are in the immediate vicinity of Ayr, on the road to Maybole. (See *Alloway Kirk; Boundary Reports*, art. *Ayr; New Statistical Account of Scotland; Private Information*.)

AZANI, a city of Phrygia, on the Edrenos (*Rhyndacus*), now wholly in ruins. The small modern village of Tjaudere-Hissar, 22 m. W. by S. Kutaieh, appears to have been entirely built from its remains. Little is said about this city in ancient authors; but its ruins, which have been carefully described by Major Keppel, show that it had been a place of great wealth and magnificence. The principal remains are two bridges, connected by a superb quay, with a temple and a theatre, the latter being 232 ft. in diameter. Some of the columns of the temple are still standing: they are of the Ionic order; the shafts, formed of a single block of marble, being 28 ft. in length. And this is really only a fair specimen of the numberless remains of antiquity in a country once swarming with cities, and in the highest state of wealth and improvement; but now all but depopulated, steeped in poverty, and a prey to every disorder that a barbarian government and a debasing superstition can inflict.

AZERBIJAN (an. *Atropatena*), a prov. in the N. W. of Persia, between 26° and 38° 40′ N. lat., and 44° 20′ and 49° E. long., having N. the Aras or Araxes, E. a part of the Russian territories and the Caspian Sea, S. the Kizil-Ozein, which separates it from the other Persian provs., and W. Turkish Armenia. It consists of a succession of high mountains, separated by extensive valleys and plains. Mount Sevellan, towards its E. frontier, the next highest mountain to Ararat in this part of Asia, rises to between 12,000 and 13,000 feet above the level of the sea.* The Sahend Mountains, in the centre of the prov., attain to the height of 9,000 feet. The Talish Mountains run from N. to S. parallel to, and at no great distance from the Caspian. The great salt lake of Urmiah (see ARMENIA and URMIAH) is one of the distinguishing features of the prov. It has numerous rivers, of which the Araxes, Kizil-Ozein, and Iugatty, are the chief. The summers are hot; but the winters, owing to the height of the country, and the number of high mountains covered with snow for the greater part of the year, are severe and long-continued. In the valleys and plains the land is very fertile, and yields abundant crops.

* The story of the frozen prophet on Mount Sevellan, alluded to by Mr. Morier in his second journey, has been satisfactorily cleared up by a party of English gentlemen, who ascended the mountain in 1827. They found on its summit a tomb, with a skeleton, partly imbedded in the ice, and in pretty good preservation. *Journal of Geog. Society*, iii. p. 27.)

Mr. Kinneir says, "Azerbijan is reckoned among the most productive provs. of Persia, and the villages have a more pleasing appearance than even those of Irak. They are, for the most part, embosomed in orchards and gardens, which yield delicious fruits of almost every description; and were it not for the tyranny of their rulers, no people could anywhere enjoy to a greater degree the comforts of life. Provisions are cheap and abundant, and wine is also made in considerable quantities; but the bulk of the people are too poor to avail themselves of these blessings; and, in the hope of bettering their condition, contemplate with pleasure the approach of the Russians." (*Memoir*, p. 149.) The principal towns are Tabreez, Ardebyl, and Urmiah.

AZINGHUR, an inland town of Hindostan, presid. Bengal, prov. Allahabad, cap. distr.; 40 m. N.N.E. Benares; in 24° 6′ N. lat., 83° 10′ E. long. Cotton stuffs used to be largely manufactured here and in the vicinity. It was ceded by the Nabob of Oude in 1801.

AZMERIGUNGE, an inland town of India beyond the Brahmapoutra, pres. and prov. Bengal, distr. Sylhet; 55 m. N.E. Dacca; lat. 24° 33′ N., long. 91° 5′ E. It is a place of considerable inland traffic, and has an establishment for building native boats.

AZOFF (SEA OF), the *Palus Mæotis* of the ancients, an inland sea in the S. E. quarter of Europe. It communicates by the narrow Strait of Yenicalé (an. *Bosphorus Cimmerius*) with the N.E. angle of the Black Sea, and is everywhere else surrounded by Russian territories. Its name is derived from the town of Azoff (See next article), near its N. E. extremity. It is of a very irregular shape; its greatest length, from the long, narrow sand-bank facing the E. coast of the Crimea, to the mouths of the Don, being about 212 m.; and its greatest breadth about 110 m. From the Strait of Yenicalé to Taganrog is about 160 m. It is generally shallow, and encumbered with sand-banks, having, where deepest, not more than 7 fathoms water, and in some places much less. Along its western shore it is marshy; and its N. E. division, or that extensive arm denominated the Gulph of the Don, is so very shallow that it cannot be navigated, even where deepest, by vessels drawing more than 10 or 12 feet water. During the prevalence of easterly winds, the waters at Taganrog, and other places in the gulph, recede sometimes to a considerable distance from the shore, rushing back with great violence when the wind changes to an opposite direction. Inasmuch, however, as its bottom consists mostly of mud, vessels take the ground without being injured; and it is, in consequence, less dangerous than might have been supposed. Owing to the vast quantity of fresh water brought down by the Don and other rivers, its waters are little more than brackish; and at times are potable more than 20 m. below Taganrog. It teems with fish; and the fisheries are important and valuable. It is partially or wholly covered with ice from November until February, or even March. The commerce of this sea principally centres at Taganrog, which see. (*Purdy's Sailing Directions for the Black Sea, &c.*, p. 212.; *Hagemeister on the Commerce of the Black Sea*, p. 31., &c., *Eng. Trans.*)

Azoff, a town and fortress of European Russia, on an eminence on the left bank of one of the arms of the Don, near the N. E. extremity of the above sea. This town was founded at a very early period, by Carian colonists engaged in the trade of the Euxine; and was called by them *Tanais*, from the river (Don, then Tanais,) of which it was the port. In the middle ages it was called Tana. It came into the possession of the Venetians after the taking of Constantinople by the Latins; and was held by them till 1410, when it was sacked, and its Christian inhabitants put to the sword, by the Tartars. The latter gave it the name of Azoff, which it still retains. Formerly it had an extensive trade, being the emporium of all the vast countries traversed by the Don. But owing to the gradual accumulation of sand in that channel of the river on which it is built, and the consequent difficulty of reaching it by any but the smallest class of vessels, its trade has been entirely transferred to Taganrog; its fortifications have also fallen into decay; and it now consists only of a cluster of miserable cabins, inhabited by little more than 1,200 individuals. (*Formaleoni, Histoire des Colonies dans la Mer Noire*, i. cap. 7., and ii. cap. 22.; *Marin Storia del Commercio de' Veneziani*, iv. 129., &c.)

AZORES (THE), or WESTERN ISLANDS, an archipelago in the Atlantic Ocean, belonging to Portugal, from which it is about 800 m. distant, occupying a line of about 100 leagues from E.S.E. to W.N.W., between 36° 59′ and 39° 44′ N. lat., and 31° 7′ and 25° 10′ W. long. It is divided into three subordinate groups. The 1st, lying at the W.N.W. extremity of the archipelago, includes Flores and Corvo; the 2d, or central, Fayal, Pico, St. George, Graciosa and Terceira; and the 3d at the E.S.E. extremity, St. Michael's, the largest of the whole, and St. Mary's. The name (*Ilhos dos Açores*) is said to be derived from the vast number of hawks (*falco milvus*), called by the natives *açor*, by which they were frequented at the epoch of their discovery. These islands seem to be of comparatively recent volcanic formation. Their general aspect is picturesque and bold. For the most part they present an irregular succession of isolated, conical, or acuminated hills, with table lands rising from 2,000 to 5,000 feet in height; the former separated by valleys, the latter stratified and intersected by tremendous ravines and deep chasms, formed by the action of rain on the soft volcanic remains composing the mountains; the whole are almost invariably bounded by magnificent mural precipices, rising abruptly from the sea, and frequently rendered inaccessible by soft crumbling lava, and masses of loose tufa, of which they are formed. The peak of Pico, about 7,000 feet in height, is the highest elevation in the Azores. When seen from a distance it appears like an isolated cone in the middle of the ocean. This archipelago is subject to the most tremendous convulsions, towns and villages being sometimes swallowed up, while, at other times, rocks and islands have been forced up from below the waves. The last of these phenomena occurred in 1811, when an island was thrown up that has since disappeared. The soil is extremely fertile, and industry and intelligence are alone wanting to make it in the highest degree productive. The climate, though unsettled and humid, is, on the whole, excellent. The average annual range of the thermometer is from 50° to 75°. Rains are frequent, and often so violent as to effect considerable changes in the appearance of the country; but scarce a day passes in which the sun does not, at some period, shine forth. The decidedly fine days may be estimated at about 200, and the wet days at about 60. Sudden gusts and gales of wind are frequent; and this, combined with the fact that they have not to boast of a single good harbour, make the islands be shunned by the navigator. They produce luxuriant crops of all sorts of grain and pulse, wine, the finest oranges and lemons, bananas, sugar-canes, coffee-plants, tobacco, the valuable lichen roccella; and, with a little care, most vegetable products may be brought to the utmost perfection. Asses and bullocks are the usual beasts of burden. Horses are scarce and bad; sheep and goats numerous; and pigs and dogs swarm to an excess. Owing however to the idleness, occasioned in part by the productiveness of the soil and mildness of the climate, but in a far greater degree by the ignorance of the people, and the influence of vicious laws and regulations, industry is all but unknown. The lands are generally divided into large estates, held under strict entail; and the system under which they are leased out to the actual cultivator is as bad as possible. The latter, being exposed to every sort of exaction and tyranny, never thinks of attempting any improvement. Hence the practice of agriculture is but little, and the science not at all understood. The rude system of their forefathers is continued without change or modification of any kind; and their implements are little superior to those of the American Indians. And yet, despite this want of industry, such is the extraordinary fertility of the soil, that, though in great part waste and uncultivated, it not only furnishes sufficient supplies of corn and other things for the native population, but also a considerable surplus for exportation. A good deal of coarse linen is manufactured, part of which is exported.

The principal exports are, in ordinary years, to England, about 130,000 boxes of oranges, 2,000 pipes of wine and brandy, and some roccella; for which she sends in exchange woollen and cotton stuffs, hard-ware, wearing apparel, &c. To Brazil the exports are about 5,000 pipes of wine, 12,000 yards coarse linen, and pulse of all sorts; for which she sends back rum, coffee, sugar, &c. To Hamburgh and the N. of Europe are exported 14,000 boxes of oranges and lemons, and 6,000 pipes of wine and brandy, the returns being made in pitch, iron, glass, and cordage. To the United States are sent 4,000 pipes of wine, 200 of brandy, and 12,000 boxes of oranges and lemons, the returns being fish, staves, timber, tar, oil, &c. To Portugal are sent large quantities of grain and pulse, salt pork and beef, coarse linen and cheese; for which she returns salt, lime, tea, with images, crucifixes, indulgences, dispensations, and relics; the last five articles being publicly sold in the shops at very high prices! (*Boid*, p. 38.)

The population of the archipelago was found by a recent census to amount to about 250,000, not a sixth part of what it might be, were the islands moderately well cultivated. They are divided into three departments, and are governed by a governor-general and two lieutenant-governors. The seat of government is at Angra in Terceira, but Ponte Delgada, in St. Michael's, is the principal town. The revenues amount, in all, to about 525,000 crowns a year, and the expenditure to nearly 200,000, leaving a balance of about 330,000 crowns to be remitted to Portugal. (*Boid*, p. 80.) The men are well proportioned, strong, and well made; and the women fairer than those of Portugal. All classes are grossly

ignorant; and are, consequently, in the last degree superstitious and bigoted. The lower orders are temperate, and all ranks are passionately fond of music. The dress of the common people is rude, and they are intolerably filthy and dirty in their persons. The higher classes are pompous, overbearing, and in the most abject state of moral debasement. The ladies possess few acquirements, have no conversation, and lead a life of excessive indolence. The low state of intelligence and morals is principally ascribable to the ignorance and vices of the clergy, most of whom are disgracefully immoral and corrupt. Previously to 1832, there were numerous monasteries and convents, said to have been openly devoted to the practice of all sorts of debauchery. Luckily, however, these dens of profligacy were suppressed at the last-mentioned epoch; and it is to be hoped that this wise measure may be followed up by others of a similar character; and that such alterations may be made in the government and laws, as may develop the dormant energies and industry of the inhabitants.

The history of the Asores is obscure. They were unknown to the ancients; but the Arabian geographers of the middle ages seem to have had some knowledge of them, though it was not till towards the middle of the 15th century that a Flemish merchant, who had sailed from Lisbon, was driven by stress of weather on their coasts. The court of Portugal, being informed of the circumstance, sent the navigator Cabral to prosecute the discovery, who fell in with St. Mary's, in 1432. In 1457 they were all discovered. At this epoch they were entirely uninhabited and covered with forest and underwood. (*Dict. Géographique*, art. *Açores; Boid's Description of the Azores*, passim.)

AZPYTIA, a town of Spain, prov. Guipuscoa, 15 m. S.W. San Sebastian. Pop. 4,800. It is surrounded by walls, and has some iron foundries. There are jasper quarries in its vicinity.

AZREK (BAHR-EL), or the BLUE RIVER. *See* NILE.

B.

BAAL-BEC, or BALBEC (the *Heliopolis* of the Greeks), anciently a large and splendid city; lat.* 34° 1′ N., long. 36° 11′ E.; 40 m. N.W. Damascus, 41 m. S.E. Tripoli, 58 m. N.E. Sidon, and 130 W. by S. Palmyra. It is situated in a fertile, well-watered valley, the Cœle-Syria (hollow Syria) of the ancients, and the Batena of the moderns, between the ridges of Libanus and Anti-Libanus, at the foot of the lower ranges of the latter.

Baal-Bec has been declining for a lengthened period; but, of late years, its decay has been peculiarly rapid. In 1751 the pop. amounted to 5,000, in 1785 it had diminished to 1,200, in 1818 it did not exceed 500, and in 1835 it barely amounted to 200. In 1810 it had a serai (the residence of the emir), two handsome mosques, and one good bath: in 1816 one mosque had vanished, the other was in ruins; and in 1835 there remained no trace of either, or of the serai. The remains of ancient architectural grandeur are, however, more extensive in Baal-Bec than in any other city of Syria, Palmyra excepted; and Burckhardt regards them as superior in execution even to those of the latter. Finely grouped together, on the W. side of the town, are three temples, the largest occupying a circuit of more than half a mile, and originally consisting of a portico, hexagonal court, and a quadrangle, besides the peristyles of the temple itself. Of this last, six gigantic and highly polished pillars, 71 ft. 6 in. in height, and 23 ft. in circumference, with their cornice and entablature, remain to attest the stupendous magnitude and beauty of the structure of which they made a part. The two courts were encompassed by chambers, open towards the front, supposed by Wood to have been either the dwellings of the priests, or public schools; and the peristyle was surrounded, towards the W., by an esplanade 29½ ft. in width, and terminated by a sloping wall 32 ft. high. In this wall are three enormous stones, of which two are 60 and the other 63 ft. in length, their common breadth and thickness being 12 ft. These gigantic masses are more than 20 ft. from the ground; and the course immediately below them consists of blocks, less enormous, certainly, but varying from 30 to 37 ft. in length, with a breadth of 12 and a thickness of 9 ft. The remainder of this cyclopian wall is formed of very large stones, but there are none so vast as the above. Immediately to the S. of the great temple is a smaller, but more perfect edifice, of which the peristyle, walls, and 20 columns remain. The door-way leading into the body of this temple is 25 ft. high by 20 ft. 10 in. broad, surmounted by a superb basso-relievo, representing an eagle hovering, as it were, over the worshipper when about to render homage to the presiding deity. Both ruins are among the finest specimens of the Corinthian order. Walls, ceilings, capitals, entablatures, every spot where the chisel could be introduced, is covered with the most exquisitely finished carving and sculpture. Mr. Elliott says that no description can do justice to the taste and beauty of the workmanship of these structures, "nor can any relic of antiquity that I have seen or read of be placed in competition with them." (ii. 273.) Solidity, too, has been most successfully combined with, and not sacrificed to, ornament. Though little cement has been used, the joints are so admirably formed that a penknife cannot be introduced into them. The more ponderous masonry has preserved its position by the mere force of gravity; the parts of the pillars are connected by iron cramps. When perfect, the great temple, with its courts, exhibited 130 pillars; the lesser, 60; and, according to Wood and Dawkins, the dimensions of each were as follow:—

GREAT TEMPLE.

	Length.	Width.		Length.	Width.
	Feet.	*Feet.*		*Feet.*	*Feet.*
Steps - -	50	188	Peristyle - -	280	160
Portico - -	48	261	Esplanade -	- -	29½
Hexag. Court	190	266	Height of Temple from ground to pediment, 120.		
Quadrangle -	401	420			

SMALLER TEMPLE.

Length.	Width.	Height.
225 ft.	118 ft.	10½ ft.

The smaller temple is without courts.

A barbarous Saracenic wall is built across these ruins on the E.; 300 or 400 ft. from which is the third temple, a beautiful circular building, surrounded by Corinthian pillars; its extreme external diameter being 63 ft., and its interior 32 ft.: most probably it had been surmounted by a cupola. It is considered as a *chef-d'œuvre* of art; but unfortunately it is in a very dilapidated and tottering state. Like the larger temples, it is built of compact limestone, with but little, if any, cement. In the S.W. corner of the town, on the highest spot of ground within the walls, is a solitary Doric column (Pococke says Tuscan), 60 ft. high, including capital and pedestal. On the top is a basin 3 ft. deep, from which a hole, cut through the capital, communicates with a curved channel 9 in. wide and 6 deep, cut in the S. side of the shaft, from top to bottom. From this it has been inferred that the pillar was connected with the water-works of the city; some suppose it to have been a clepsydra or water-dial. The walls of the city, 3 or 4 m. in circuit, exhibit a strange mixture of materials; the breaches made by time or war, in the older erections, having been repaired at different times from the ruins of the ancient temples and other buildings. In one place may be seen a large altar-piece reversed; in others, stones inscribed with Greek or Roman characters; but all in confusion, and many turned upside down. The gates are of the Saracenic period. Without the walls, 5 or 6 m. W., is a remarkable isolated Corinthian column, between 50 and 60 ft. high, with a square compartment on its N. side, as for an inscription, but no letters remain. N.E. of the town is a subterranean aqueduct, 16 ft. below the surface, with several curious chambers cut in the surrounding rock. The whole neighbourhood looks like an immense stone quarry; and on the S.E., at 50 or 60 paces from the walls, among other stones of immense size, is one worked on three sides, larger than any used in the wall of the great temple. It is 70 ft. in length, with a breadth and thickness of 14 ft. Greek, Roman, and Saracenic ruins cover the country for 3 or 4 leagues round, all evidently connected with the former greatness and prosperity of this city.

No ancient author refers to the buildings at Baal-Bec! John of Antioch, a Christian writer of the 7th century, ascribes, in an incidental manner, the erection of *a* temple (perhaps the great one) to Antoninus Pius; and this is the only account, with any pretensions to authority, of the origin of these extraordinary remains! But Baal-Bec was a flourishing city ages before the Christian æra, and the probability seems to be, that the Baal-Ath, built by Solomon, in Lebanon (2 Chron. viii. 6.), was identical with Baal-Bec. This is, indeed, the received opinion of all classes in Syria; and though the remains of Corinthian architecture cannot be referred to a remoter period than that of the Roman emperors, the cyclopian wall is evidently of a far more ancient date, and answers to the description of the "House of the Forest of Lebanon," built for the daughter of Pharaoh. (1 Kings, vii. 10.) Dr. Richardson has shown that the cutting of the stones is of Jewish workmanship. (*Travels*, ii. 310. and 504.)

That the Syrian deity BAAL (literally *Lord*) was a personification of the sun, as the vivifying principle of nature, is evident from Herodian (v. 5.), the various pas-

* Authorities differ considerably as to the situation of Baal-Bec. Pococke's map (*Travels*, 1745) makes the lat. 34° 9′ N., long. 36° 38′ E.; Rennell (*Comp. Geog.* i. 75.) reduces them to 34° 1′ 30″ N., 36° 11′ E. In Robinson's map (*Travels*, 1837) the lat. is 33° 58′ 30″ N., long. 36° 2′ E.

sages of Scripture from Judges to Jeremiah, and, indeed, from the united testimony of antiquity. (*Calmet, Dictionnaire de la Bible*, art. BAAL.) BEC, or more properly BEIT, is a dwelling. *Baal-Bec* signifies, therefore, the house or city of the sun, and this designation the town retained, in the Greek form, *Heliopolis*, which is merely a translation of its Syrian name. It may be concluded that Ben-hadad subdued this city, with the adjacent country (2 Chron. xvi. 4.); and that, on the overthrow of the Syrian kingdom of Damascus, it passed beneath the sway of the Assyrians (2 Kings, xvi. 9.); but the silence of all the most ancient authors, respecting so populous and wealthy a city is as profound as it is remarkable. It, of course, shared the fate of the rest of Syria, passing, successively, into the hands of the Persians, Greeks, and Romans. It was the station of a garrison in the time of Augustus; but, while under the Romans, seems to have been famed, rather for its wealth and splendour, than for its military importance. It made, however, a brave resistance to the Arab arms A.D. 635, and was at length surrendered upon a capitulation, the terms of which sufficiently attest its great resources; 2,000 oz. of gold, 4,000 do. of silver, 2,000 silken vests, and 1,000 swords, besides those of the garrison, being the price demanded and paid to preserve it from plunder. In 748 it was sacked and dismantled in the wars of the Ommiyade and Abbasside caliphs, and from this blow it never revived. During the crusades it submitted, alternately, to whichever party happened, for the time, to be the stronger. In 1400 it was plundered by the Tartars under Tamerlane or Timur Bec, since which period it has been of no importance except to the antiquary and historian. In 1759 it was shaken by an earthquake; and, judging from its decline during the last century, the day is not far distant when, like many other eastern cities, it will cease entirely to be inhabited.

Though nothing certain be known of the history of Baal-Bec, it is sufficiently obvious that its opulence and grandeur must have been mainly owing, partly to its situation in a fertile and well-watered country, but more to its being a commercial *entre-pôt*. Any one who takes up a map of Syria will see, at a glance, that its position is one of the best that could have been selected for an intermediate station between Palmyra and the cities and ports along the Phœnician coast. Commodities passing from Palmyra to Tripoli, Berytus (Beyrout), Sidon, and Tyre, and conversely, would be most conveniently and expeditiously carried by way of Baal-Bec. No doubt, therefore, it was mainly indebted for that wealth, of which its ruins, like those of its great rival Palmyra, attest the magnitude, to the trade of which it was long a principal centre. And the desolation in which these two splendid cities are now involved is at least owing as much to the changes that have taken place in the channels of commerce, as to the barbarism and ignorance of their modern masters. (*Maundrell*, 181—187.; *Pococke*, ii. 106—113.; *Wood and Dawkins's Ruins of Balbec, passim*; *Volney*, ii. 195. 205.; *Burckhardt's Travels*, 10. 17.; *Richardson's Travels*, ii. 502—510.; *Robinson*, ii. 93—106.; *Addison*, ii. 49—73.; *Elliott*, ii. 274.)

BAAR, a town of Switzerland, cant. Zug, 2 m. N. Zug. Pop. 2,200. It is situated in a fertile plain, has a fine town-house, built in 1674, and a paper manufactory.

BAARLE, a town of the Netherlands, prov. Brabant, 12 m. S.E. Breda. Pop. 1,600. It gave its name to Barlæus, the celebrated littérateur and Latin poet.

BABA (an. *Lectum*), a cape and sea-port town of Asiatic Turkey, Anatolia, 22 m. S. from the most southerly point of Tenedos, lat. 39° 30′ 5″ N., long. 26° 5′ E. Near the cape is the town, small and ill-built, with about 4,000 inhabitants. It was formerly famous for a manufacture of knives and sword blades; but, though not entirely abandoned, this manufacture has greatly fallen off. The port is practicable only for small vessels. Large quantities of valonia are produced in the neighbouring country. The trees, with the fields on which they grow, belong to a multitude of individuals; one man being the proprietor of 5 trees, another of 10, and so on. The right to export the valonia is a privilege annually confirmed by a firman; a less or greater sum being paid to the seraskier by whom it is obtained. (*Voyage du Duc de Raguse*, ii. p. 146.)

BABA-DAGH, a town of Turkey in Europe, prov. Silistria, near the N.W. angle of Lake Rassein, which communicates with the Black Sea, 21 m. S. Danube. Pop. 10,000. It is well fortified; streets paved, but dirty; has 5 mosques, 2 public baths, and a college. The ground on which it stands is marshy; and the only water fit for drinking is conveyed to it a distance of about 3 m. by an aqueduct. It carries on a considerable trade by means of the port of Kara Kerman, one of the outlets of Lake Russein on the Black Sea.

Baba-Dagh was built by the Turkish sultan Bajazet. It is a place of considerable importance in the wars between Russia and Turkey, and has sometimes been the winter quarters of the grand vizier. (*Diction. Géographique*.)

BAB-EL-MANDEB (STRAITS OF), the strait uniting the Indian Ocean with the Arabic Gulph or Red Sea. The distance across, from a projecting cape on the Arabic shore to the opposite coast of Arabia, is about 20 m.; but in the intermediate space, though much nearer Asia than Africa, is the small island of Perim, and some other still smaller islands. Perim is in lat. 12° 35′ 30″ N., long. 43° 28′ E. The channel between Perim and the Arabic coast, though narrower than the other, and the current more rapid, is the most frequented by Arabic vessels, probably because, being only from 7 to 14 fathoms deep, it allows of their casting anchor, which, owing to its great depth, is impracticable in the greater or western channel.

Bab-el-Mandeb means literally the gate of tears; a designation it may have derived either from the dangers incident to its navigation, or from those incident to the navigation of the seas on either side.

BABYLON (Βαβυλων) or BABEL (בבל), a city of Asia, cap. Chaldea, and of the Assyrian empire, being probably the largest city of antiquity, and certainly one of the most famous. Nothing remains of the ancient buildings but immense and shapeless masses of ruins; their sites being partly occupied by the modern and meanly built town of Hillah, the cap. of a district, and the residence of a bey appointed by the pacha of Bagdad. This town lies on the W. bank of the Euphrates, and occupies nearly the centre of the S. part of the old enclosures; lat. 32° 28′ 30″ N., long. 44° 9′ 45″ E. Pop. 6,000 or 7,000, Arabs and Jews. It is surrounded by mud walls and a deep ditch, and has four gates.* It has a rude citadel, the only public building within the walls, except a single mosque, and 6 or 7 oratories. It may be gathered from the statement, by Rich (*Mem.* 11.), of the sources whence the public revenue is derived, that some manufactures of silk exist, and that there are also dyeing houses, tanneries, and lime kilns; but the mass of the inhabitants are evidently agriculturists (*fellahs*). The Euphrates, at Hillah, in its medium state, is 450 ft. wide, 7½ ft. deep, and its mean velocity is about 2½m. an hour. The whole surrounding country is intersected with canals. The undoubted antiquity of many of these works is not a little surprising, considering the nature of the soil, which is wholly alluvial, and so soft that the turning the course of the river by Cyrus (*Herod. Clio.* 191.; *Xen. Cyrop.* vii. 5.), does not appear to Rich an exploit of any great difficulty. (*Mem.* 17.) The Euphrates annually overflows its banks, inundating the country for many miles round, and even rendering the district between the Euphrates and Tigris navigable in many places for flat-bottomed boats. This annual flood fills the canals, and facilitates agriculture in a surprising degree. The air is salubrious, and the soil extremely fertile, producing dates, rice, and grain of every kind, in astonishing profusion; but, in consequence of the illegal and irregular exactions of the pachas, and the insecurity to which all kinds of property is exposed, the inhabitants exert no sort of industry; the numerous canals are left dry and neglected, except when filled spontaneously by the river; and the small quantity of land that is cultivated is not half tilled. (*Niebuhr, Voy. en Ar.* ii. 234—237.; *Rauwolf's Travels*, p. 174, &c.; *Rennell's Geog. Her.* i. 459, &c.; *Rich's Mem. on Ru. Bab.* pp. 1—17.; *Mignan's Trav. in Chaldea*, pp. 114—122.)

Such is the present state of a city, once the greatest, most magnificent, and powerful, in the world; "the glory of kingdoms, the beauty of the Chaldee's excellency." (Isa. viii. 20.) We need say little of the identity of the site occupied by the ancient and modern towns; this has been completely established by Major Rennell. It is

* When Mr. Rich was here, 1811, the pacha of Bagdad had ordered a new wall, of Babylonian bricks, to be constructed (*Mem.* 9.); but this appears not to have been done as late as 1827. (See *Mignan's Travels*, p. 121.)

sufficient to observe that the traditions preserved by eastern writers; the universal belief of the present inhabitants; the descriptions of the ancient historians, and, above all, the discoveries by modern travellers of stupendous ruins answering to those descriptions, — leave no room or ground for any reasonable doubt upon the subject. (*Rennell*, i. 459—511.) The magnitude assigned by ancient writers to this celebrated city is so immense as to stagger belief. It was a perfect square, and, according to Herodotus, 400 stadia in cir. (*Clio* § 178.) Strabo (p. 738.) gives the circ. at 385 stadia; Diodorus Siculus at 360, on the credit of Ctesias; but at 365, on that of Clitarchus, who was on the spot with Alexander (ii. 1.) Quintus Curtius gives it at 368 stadia (v. 1.), and Pliny (vi. 26.) at 60 Roman m. The inextricable obscurity in which the itinerary stadium of the Greeks is involved (see *Rennell*, i. 17—44.) renders it exceedingly uncertain whether these differences are to be regarded as real, or as arising from the adoption of different standards. Assuming, however, that the same stadium is meant in each case, taking it at its least possible value, 491 ft.; and taking also the measure of Diodorus, the least of the whole, the area of ancient Babylon, within the walls, will be found to be upwards of 72 sq. m. or nearly 3½ times that of London with all its suburbs. If, at the same value of the stadium, the measure of Herodotus, or that of Pliny (which agrees with it *), be taken, the area will amount to more than 124½ sq. m. or 6 times that of London; and, finally, if the common stadium of Herodotus, 600 Grecian or 604½ English ft. (*Euterpe*, § 149.), be adopted, as well as his measurement, the area will swell to 188½ sq. m., or 9 times that of London.

Various attempts have been made, by comparing its area with the area and population of modern cities, to estimate the population of Babylon. But, on the lowest calculation, it would be found, supposing it to have borne any considerable resemblance to a European city, to have had a population of the enormous magnitude of 5,000,000, or above double that of London, — a supposition to which all but insuperable obstacles are opposed. For, notwithstanding the amazing fertility of the surrounding country; the fewer wants of its inhabitants compared with those of northern latitudes; and the facilities afforded by the numerous canals, which intersected the adjoining provinces, and by the Euphrates and Tigris, to the importation of bulky and distant products; still there were circumstances connected with its situation and government sufficient to countervail these advantages, and to render it all but impossible that so vast a population could be supported within its walls. If any one take up a map of Asiatic Turkey, he will instantly perceive that the extent of country round Babylon available for agricultural purposes must have been quite inadequate to supply the necessary demands of the supposed population. The Babylonian plain, fertile as it is, is soon lost in the interminable deserts of Sinjar and Arabia; the marshes and lakes of Lower Mesopotamia and Chaldea make a large deduction even from its fertility; while, as if wholly to neutralise the natural advantages of the city, the Babylonian monarchs threw a variety of obstacles in the way of commercial enterprise. (*Her. Clio*, 185.) But we need not pursue this discussion, the fact being universally admitted that Babylon possessed but few points of resemblance to a modern European town. The buildings and population bore no proportion to its extent, and, in the words of Rich, "it would convey the idea rather of an enclosed district than that of a regular city." (P. 43.) Pasture and arable land was contained within the walls, sufficient, says Q. Curtius (v. 1.), to supply the wants of all the inhabitants. This, no doubt, is an extreme exaggeration; but if, as must have been the case, a large portion consisted of productive ground, its produce might have added considerably to the provisions it was possible to place in store. Xenophon affirms, that when the city was taken by Cyrus, it was stored for 20 years, — πλέω ἢ εἴκοσιν ἐτῶν (*Cyrop.* vii. 5.); and though this may reasonably be considered as much beyond the mark, yet, at a subsequent period, it actually did sustain a siege by Darius Hystaspes of 1 year and 7 months, and was then, as in the former case, subdued, not by famine but by surprise. (*Herod. Thalia*, 152.) That only a small part of its immense area was occupied by buildings is therefore evident. How much is another question, and one which it is impossible to decide. Perhaps, on the whole, we may estimate the population of Babylon at from 1,000,000 to 1,200,000. This supposition derives support from the fact that Seleucia, with a pop. of 600,000, is stated to have been about half the size of Babylon in the days of her greatest glory. (*Strabo*, xvi. 739.; *Pliny*, vi. 16.)

But though a population at all commensurate to the magnitude of the city, calculated on a scale of European density, be thus improbable, it does not by any means follow, seeing the way in which the area was partially filled up, that the magnitude itself is to be discredited. The authority on which we must mainly rely is undoubtedly that of Herodotus. Not only is he the earliest profane writer upon this subject; but he alone, of all the ancient historians, had the advantage of having visited Babylon in person, and while it was still in a state of tolerable preservation. His account of this interesting city has been, with few exceptions, amply corroborated by the testimony of succeeding writers, as well as by the investigations of modern travellers; and though it would be unfair to test his statements by the severe standards applied to topographical descriptions of the present day, — where critical accuracy is usually demanded, — it is clear that his general veracity is unimpeachable, while the circumstance of his having been an eyewitness of what he describes, heightens our belief in the details he has exhibited.

It is rather remarkable that Herodotus says nothing of the foundation of the city or its founder, merely remarking, that after the destruction of Nineveh, it became the seat of the Assyrian empire. (*Clio*, 179.) But even in his time it was of considerable antiquity, and biblical critics have unanimously referred its origin to the presumptuous attempt of the early postdiluvians to "build them a city, and a tower whose top may reach to heaven." (Gen. xi. 4.) Josephus (1. *Antiq.* iv. 3.) expressly says that Nimrod, the grandson of Ham, was the originator of this attempt; and to this day the inhabitants of these parts are as fond of attributing every great work to this "mighty hunter before the Lord," as those of Egypt are of referring similar works to Pharaoh. (*Rich*, 41.) Asshur, the founder of Nineveh (Gen. x. 11.; *Diod. Sic.* ii. 1.), having subdued the Babylonian with other surrounding powers, laid the foundations of the Assyrian empire. A domestic tragedy, resembling in many points that of David and

* The Roman mile was 8 Roman stadia. (*Rennell*, i. 18.)

Bathsheba, having made him the husband of Semiramis, the strong mind and many accomplishments of his wife, induced him, on his death, to leave her regent for his son, though it would appear that she governed in her own name, till her death (*Diod. Sic.* ii. 20.); and to her was owing most of the grandeur of Babylon.

According to Herodotus, the city was built on both sides the Euphrates, the connection between its two divisions being kept up by means of a bridge formed of wooden planks laid on stone piers. The streets are described as having been parallel, and the houses from 3 to 4 stories in height. The city was surrounded by a deep and broad ditch, and by a wall flanked with towers, and pierced by 100 gates of brass. The wall was built of bricks, formed from the earth taken out of the ditch, and cemented by a composition formed of heated bitumen and reeds; the former being brought from Is (Hit), on the Euphrates, about 128 m. above Babylon. In nothing perhaps do the accounts of Babylon differ more than in the statements in regard to the height and thickness of the wall by which it was surrounded. Herodotus says it was 200 royal cubits, or about 300 feet (303 ft. 6 in.) in height, and 50 cubits, or 75 feet thick. But as Rennell has observed, these measures owing most probably to corruptions of the text, are "enormous and improbable." (*Geog. of Herod.* i. 465.) It is not possible, indeed, to imagine for a moment that walls of so vast an extent could at the same time be of so gigantic a height. According to Quintus Curtius they were only half the height mentioned by Herodotus (*Curt.* lib. v. cap 1); and Strabo reduces them still further, or to 50 cubits or 75 feet (*Lib.* xvi.) And though by far the most reasonable and probable, this last statement is still, perhaps, a little in excess. Strabo further says, that two chariots driving in contrary directions could pass each other on the summit of the walls.

The temple of Jupiter Belus (most probably the Tower of Babel) occupied a central position in one of the divisions of the city. Herodotus describes it as a square tower of the depth and height of one stadium, upon which, as a foundation, 7 other towers rose in regular succession, the last tower having a large chapel, a magnificent couch, and a table of solid gold. The building was ascended from without by means of a winding stair. The space in which it was built was enclosed within walls, 8 stadia in circumference, and consequently comprising above 33 acres. The gates to the temple, which were of brass, and of enormous magnitude, were seen by Herodotus. In the other division of the city stood the royal palace, which seems to have been a sort of internal fortification, and was, no doubt, of vast dimensions. (*Clio*, 181.)

It is exceedingly difficult, or rather, perhaps, impossible, owing to their extremely dilapidated state, to say to which of the ancient buildings the existing ruins are to be ascribed. The principal of these are the Kasr, or palace; the Mujellibe, or the overturned; and the Birs Nemroud, or tower of Nimrod. These are all of great magnitude, and are at very considerable distances from each other. The most considerable, the Birs Nemroud, is a mound of an oblong figure, 762 yards in circumference. On its W. side it rises to an elevation of 198 ft., and on its summit is a solid pile of brick 37 ft. high. It consists entirely of brick-work, and Niebuhr, Rich, and Mignan agree in supposing it to be the remnant of the sacred edifice, and identical with the Tower of Babel. (*Niebuhr*, ii. 236; *Rich*, 88. 49. 54 &c., 2d *Mem pass*; *Mignan*, 202.)

The particulars given above of the ancient state of this famous city have been mostly derived from Herodotus, by whom, as already stated, it was visited after its conquest by Cyrus, and before it had sustained any material injury. But if credit be given to later and less trustworthy authorities, Babylon had to boast of still more extraordinary monuments than any previously mentioned. Among these may be specified a tunnel under the Euphrates, and the famous hanging gardens, containing near 4 acres of land, elevated far above the level of the city, and bearing timber trees that would have done no discredit to the Median forests. (*Diod. Sic.* ii. 7. 9. 10.; *Strabo*, xvi. 738.; *Curt.* v. 1.)

We confess, however, that we are not a little sceptical as to the existence of any one of these structures. Strabo, who describes the hanging gardens, did not visit Babylon, and could, therefore, proceed only on the reports of others. He represents them as consisting of a series of terraces raised one above another like seats in an amphitheatre, and resting on arches and pillars, some of the latter being hollow and filled with earth. And it is easy to see that structures of considerable extent and altitude might have been raised in this way, and might have afforded accommodation for a great variety of plants. But it is hardly possible to suppose, had these gardens been of any thing like the magnitude ascribed to them, that they should have escaped the notice of so curious an observer as Herodotus. It is also very doubtful whether the Babylonians were not ignorant of the arch, and, if so, the difficulties they would have to encounter in the construction of the gardens would be so much the greater. On the whole, the presumption appears to be, either that the gardens did not exist at all, or that they were of such moderate dimensions that their formation could not be regarded as a work of any extraordinary difficulty, or likely to arrest the attention of Herodotus. We may add that the very learned and judicious M. de Goguet is altogether sceptical as to the existence of the hanging gardens, and attaches no credit to the statement of Herodotus in regard to the height of the wall surrounding the city. (*Origine des Loix*, iii. liv. ii. cap. 1.)

The tunnel below the Euphrates, constructed, we are told, to enable Semiramis to pass privately between her palaces on the opposite sides of the river, is mentioned only by Diodorus. Had it really existed, it would have been decidedly the most extraordinary work in Babylon, or, rather, in the ancient world. But the statements in regard to it do not appear to be entitled to the smallest regard. The obstacles in the way of such a work, especially in the loose alluvial soil on which Babylon stood, were not of a nature that the engineers of these days could have overcome. Herodotus describes the bridge over the river, which was far less worthy of notice, and less likely to attract attention than the tunnel. But he does not say a word respecting the latter, and in this discreet reserve he is followed by Strabo.

The great works of Babylon were all constructed of brick, except the bridge, the stones for which must have been brought from a distance, since none are found in the alluvial soil of the country. The bricks are of two kinds, sun-dried and kiln-dried: they are much larger than the bricks now in use, and generally marked with figures or cuneiform letters. Straw or reeds are mixed with the courses, and bitumen, procured from Is or Hit, is the usual cement, though mortar and slime are also frequently used. Such is the extent of these vast ruins, that nearly all the cities in the neighbour-

hood are built from the materials found there, and the storehouse seems to be regarded as inexhaustible.

From the death of Semiramis, Babylon continued a kind of second capital to Assyria, till the revolt of Arbaces and Beleses against Sardanapalus, 30 generations later. It was subsequently sometimes the capital of the whole country, and sometimes that of the separate kingdom of Babylonia; but always advancing in grandeur and prosperity till the days of Nebuchadnezzar, under whom it may be considered as having reached its zenith. (*Joseph. Antiq.* x. xi. 1.) In the midst of its glory, however, the voice of the Jewish prophet was raised against it. The Median conquest is threatened full 120 years before its occurrence; and "this glory of kingdoms" is doomed to the fate of Sodom and Gomorrah; to be swept with the besom of destruction; to become a possession for the bittern and pools of water; a lair for the wild beasts of the desert, doleful creatures, owls, and satyrs (Isa. xiii. xiv. *et pass.*); predictions, the accomplishment of which has been literal and complete. In the reign of Labynetus, or Belshazzar, son of Nebuchadnezzar * and Nitocris, Cyrus, the "anointed of the Lord" (Isa. xlv. 1.), led his army against the city. Trusting to their fortifications, the Babylonians derided his attempt; but cutting a canal, he diverted the course of the Euphrates, leaving its channel through the town sufficiently dry for the passage of his army. The same thing had been done on a former occasion, by Nitocris, to build the bridge; but in this instance an additional work seems to have been performed in the erection of locks or dams, to preserve the river in its natural course till the very moment of attack, and thus prevent suspicion of his design; for had the Babylonians, says Herodotus, been aware of it, they might easily have enclosed the Persians, as in a trap, and effected their total destruction. Taking advantage, however, of a festal occasion, Cyrus drew off the waters, entered the town by surprise, and captured it almost without resistance. (*Xen. Cyr.* vii. 5.; *Herod. Clio*, 191.; Dan. v.) The sacred historian gives a vivid account of the manner in which the last Babylonian king spent the night before his death, and of the awful warning which preceded his overthrow. Babylon remained subject to the Persian monarchs till the reign of Darius Hystaspes, when it revolted, but was again subdued by stratagem. Darius took away the gates, and otherwise injured the city, so that its declension may be fairly dated from his time. Xerxes is said to have defaced the temple of Belus on his return from Greece; but such were the resources and conveniences of the city, that it remained the winter residence of the Persian monarchs for several generations. It made no resistance to Alexander, who intended making it the capital of his gigantic empire. He contemplated, also, the restoration of the temple; and having employed 10,000 men for two months, in removing the rubbish, the work was stopped by his death. Seleucus Nicator, who, after that event, became monarch of Babylonia, founded the city of Seleucia, on the banks of the Tigris, and made it his capital. From this time the decline of Babylon was as rapid as well could be; but the mighty city which required ages to rear, required also ages in which to perish. It was still important, though in ruins, at the commencement of the Christian æra. (*Herodotus, Thalia*, 159.; *Strabo*, xvi. 738.; *Arrian*, xvi.; *Pliny*, vi. 26.)

* Nebuchadnezzar is called also Labynetas by Herodotus. (*Clio*, 74.)

Its subsequent history is unknown. It is said to have been turned into a hunting-park by the Parthian kings, who overthrew the Seleucidian dynasty; and it is probable that the materials of its vast buildings served to construct the newer cities in its neighbourhood. It had shrunk to a mere name in the early days of Arab greatness (*Ebn. Haukel.* 70.): and in the 495th Hegira, A. D. 1101, was founded the present town of Hillah. (*Abul. Feda Irak*, art. *Babel.*) The rest of this once famous district is now, and has been for ages, a desolate void; its buildings masses of shapeless ruins, channelled by the weather, and literally the desolation which the prophet predicted: — "And Babylon shall become heaps, a dwelling place for dragons, an astonishment, a hissing, without an inhabitant." (Jer. li. 37.; *Rich* * *passim*; *Mignan*, 118—236.; *Hende*, 92—105.; *Kinnear*, 268—282.)

BACCARAT, a town of France, dép. Meurthe, cap. cant., on the Meurthe, 16 m. S.E. Luneville. Pop. 3,057. This town is remarkable for its being the seat of the principal manufacture of flint glass, or crystal, in France. It was established so far back as 1764; but it did not attain to any very considerable eminence till after the peace of 1815, when a manufacture carried on at Voniche in Belgium was transferred thither. The workmen and their families, to the number of 600, are lodged in the establishment; but the women employed in polishing the crystal live at Baon l'Etape, 2 leagues distant. The value of the raw material employed in the manufacture is estimated at 400.000 fr. a year, and the salary of the workmen at 450,000 fr. The annual product in rough or uncut crystal is estimated at 1,400,000 or 1,500,000 fr. Exclusive of the work-people already referred to, about 350 are employed in subsidiary departments, in preparing minium or red lead, extracting potash, preparing tools, &c. The machinery employed in the manufacture is all driven by water. (*Hugo, France Pittoresque*, ii. p. 248.)

BACHARACH, a decayed town of the Prussian States, prov. Rhine, at the foot of a steep mountain, on the left bank of the Rhine, 25 m. S.S.E. Coblentz. It is surrounded by old walls, strengthened by 11 towers. Bacharach is a translation or corruption of *Bacchi ara*, or altar of Bacchus, the name given to a rock in the river, usually covered with water, but appearing in very dry seasons, or in those most favourable to the growth of the vine. Hence the Romans are said to have sacrificed on the rock to Bacchus; and its appearance is still hailed as an omen of an excellent vintage. The town is mean and dirty, and the inhab. very poor.

"In fact," says Mr. Barrow, "the principal part of the food of the people, through the whole of the long ravine from Boppart to Bacharach, and as far as Bingen, must be brought to them from a distance, as, from the scarcity of land, wine and fruit are the only articles capable of being cultivated; and how the land which we here see can possibly pay the labour of cultivation is quite a mystery. There is scarcely a patch of half an acre in any one continued space; mostly not half a rood. Every little sheltered spot, however small, that possesses the least soil — every little crevice between the naked rocks — is choked up with vines; in many places the vine is planted in a basket, with adventitious soil, and sunk in the rocky fragments by the side of the hill. The care and the labour bestowed, though not toilsome, is constant; and the distance is frequently several miles which the poor cultivator has to go from his habitation to his vineyard; we should rather say *hers*, for they appear to be chiefly women, who bear but little resemblance to those fair and sylph-like damsels with which painters are in the habit of peopling their vineyards, when assembled to gather the purple grape. A jacket and petticoat, a dirty handkerchief tied round the head, the legs and feet naked, the features dark, dull, and unmeaning, furnish the true picture of a female labourer of a Rhenish vineyard; and this was so generally the prevailing feature of the picture in all places where the chief produce was wine, that we may almost with certainty come to the conclusion, that the culture of the vine is an indication of the poverty of those who perform the manual labour, however profitable it may be to the large proprietor."

BACKERGUNGE, a distr. of Hindostan, prov. Bengal, div. Dacca, including part of the Sunderbunds, and the mouths of both the Ganges and Brahmapoutre; having

* The references to Rich's *First Memoir* are to the edition of 1815, except when otherwise expressed; those to Rennell's *Topography* are made to "Babylon and Persepolis," published in 1839. Some interesting corroborative matter will be found in Sir R. K. Porter's *Travels in Georgia and Persia*, ii. 390—297.; and Buckingham's *Travels in Assyria*, 438—475.

N. Dacca Jellapore distr., E. Tipperah and the Bay of Bengal, S.W. Jessore; area 2,780 sq. m.; pop. (1822) 686,640; land revenue (1829-30) 78,180*l*. It is mostly covered with jungle, abounding with alligators and the largest class of tigers; but in parts it is very fertile in rice, &c. It has been noted for the frequency of crime, especially of river piracy or dacoity, the country presenting great facilities for the shelter of the culprits. It is subject to inundations that are occasionally very destructive. (*Hamilton's Hindostan, Rep. and Append. Revenue, and Map.*)

BADAJOZ (an. *Pax Augusta*), a city of Spain, cap. Estremadura, near the frontier of Portugal, in an extensive plain in the angle between, and at the point of confluence of, the small river Rivillas with the Guadiana; 198 m. S.W. Madrid, 135 m. E. Lisbon; lat. 38° 52′ N., long. 6° 11′ W. Pop. 12,088. The castle, situated on a rock overhanging the confluence of the two rivers, commands them and the town, which is further defended by various very strong fortifications. The Guadiana is here crossed by a good bridge of 28 arches, erected in 1596, and protected by a strong *tête du pont*. Streets narrow and crooked, but they are well paved and clean, and the houses good. It has 5 gates, and a fine promenade along the river. There is a deficiency of springs, and the supply of water is derived from reservoirs, cisterns, &c. It is the seat of a bishopric, and the residence of the captain-general of the prov. The cathedral has some good paintings, especially those by Morales, a native of the place; and there are several convents and hospitals. It has manufactories of soap and coarse cloth, with tanneries and dye-works, and is the seat of a pretty active trade (mostly contraband) with Portugal.

Badajoz is very ancient, having been a considerable place under the Romans. It has always been regarded as a military post of the greatest importance. During the late war with France, it was taken by the French under Marshal Soult on the 10th of Jan., 1811; the garrison, amounting to 15,000 men, becoming prisoners of war. In the course of the same year it was twice unsuccessfully besieged by the Anglo-Portuguese army. In the following year the siege was undertaken by the army under the Duke of Wellington; and, after some of the outworks had been carried, it was taken by storm, after a desperate resistance, on the 6th of April. On this occasion the allied army lost about 5,000 men, killed and wounded. The glory of this brilliant achievement was unhappily tarnished by the excesses committed by the victorious soldiery, despite every effort to prevent them, on the defenceless inhabitants of the town. (*Miñano; Napier*, iii. 433.)

BADALONA, a town of Spain, Catalonia, within a short distance of the sea, with a castle; 6 m. N.E. Barcelona. Pop. 4,875. The climate is excellent; and the environs are fertile and beautiful.

BADAUMY, a strong hill fortress of Hindostan, prov. Bejapoor, presid. Bombay, 55 m. N.E. Darwar; lat. 15° 55′ N., long. 75° 49′ E. Pop. about 2,500. It consists of fortified hills, with a walled town at the bottom, containing an inner f rt. It has always been reckoned one of the strongest hill-fortresses in India, and successfully resisted a whole Mahratta army. It was taken by storm in 1818, by a division of the army under Sir T. Munro. A remarkable chaotic distribution of rocks prevails throughout the country around Badaumy.

BADEN (THE GRAND DUCHY OF), in Germany, is bounded on the S. by the Lake of Constance, with its two arms, the lakes *Ueberlingen* and *Zell*, as far as Stein, between which town and Eglisau, however, the territories of the Swiss cantons, Schaffhausen and Zurich, intervene three times between the Rhine and the frontier of Baden. On the W. the Rhine forms the boundary towards Switzerland, France, and Rhenish Bavaria, with the exception of a part of the territory of Basel, which lies upon the right bank of the river. Towards the N. the territory of the grand duchy of Hesse and the kingdom of Bavaria, and towards the E. the kingdom of Wirtemberg and principality of Hohenzollern Sigmaringen form its boundaries. It lies between lat. 47°32′ and 49°47′ N. The surface is exceedingly varied, the length of the grand duchy being about 150 m. from N. to S.; its breadth, in Lower Rhine circle, from the Rhine to the Bavarian frontier, being about 60 m.; in the Middle Rhine circle, from the Rhine to the frontier of Wirtemberg, about 20 m.; and in the Lake circle, from the same river to the Wirtemberg frontier, extending to nearly 115 m.; thus forming a long irregular figure, very narrow in the centre, but stretching out to some breadth at the N. and S. ends. The eastern half of this tract of country is entirely occupied by a mountainous tract, extending from S. to N., under the denominations of the Black Forest, Odenwald, &c.; while the western half, extending from the fall of these mountains to the Rhine, is partly an undulating, but along the banks of that river, mostly a level country.

Mountains. — The Black Forest stretches from the banks of the Rhine, where that river forms the Swiss boundary, in a northern direction through the grand duchy as far as the Neckar, and towards the E. far into the kingdom of Wirtemberg, falling gradually in the latter direction with prolonged offsets, but suddenly and steeply towards the valley of the Rhine. Its main stock is composed of gneiss and granite, which form, as in the Vosges, dome-like masses, with steep sides, rising in the Feldberg 4,650 ft., in the Belchen 4,397 ft. (this name is analogous to the Ballans of the Vosges), and in the Herzogen Horn to 4,300 ft., above the level of the sea. On the granite red sandstone is superimposed, and forms extensive plateaux, capable of cultivation to a great height; so that not only extensive forests cover these mountains, but pastures, and even small villages, are found in them at an elevation of 3,500 and 4,000 feet. Deep valleys, with picturesquely precipitous sides, intersect the sandstone layer, and pour rapid streams, for the most part navigable for rafts, into the Valley of the Rhine. In some hills, as the Kniebigs, for instance, the sandstone appears to form compact isolated masses. 2. The bed of the Neckar, which divides the Black Forest (Schwarzald) range from the Odenwald, is also of sandstone, which alternates in the northern parts of the grand duchy with blue limestone and marl. The principal mass of the Odenwald is likewise, according to Keferstein (from whose work we take these details), composed of sandstone, little interrupted by the rise of the granite. The highest summit, the Katzenbüchel, 2,180 ft., lies in Baden; but the greater part of the chain belongs to the grand duchy of Hesse. Like the Black Forest, these heights fall steeply towards the Rhine, and along the foot of the range the *Bergstrasse*, from Heidelburg to Frankfort, a road celebrated for picturesque mountain scenery, uniting with the rich luxuriance of vegetation of the valley, has been carried. 3. The Kaisertuhl, in the circle of the Upper Rhine, is formed of a clump of heights of volcanic origin, separated from the Black Forest by the Dreisam and the Elz. On the rock, called the Toddenkopf (death's head), a tradition tells us that Rodolph of Hapsburg held a court of justice, whence the name of Kaiserstuhl (emperor's chair) is derived. The highest point is 1,763 Paris feet in elevation. 4. A range of steep hills, stretching from the Rhine, near Schaffhausen, along the W. and N. shores of the Lake of Constance, is named the Randen. The dominant formation of these hills is limestone; the highest point is 2,527 ft. in height. They run into the Black Forest on the W. and N., and on the N.E., into the hilly district of Nellenburg and Hegan. The last named elevations are composed of Jura limestone, in which the basalt and other isolated volcanic rocks of Hohendwyl, Hohenstoffeln, Hohenhowen, &c., occur. 5. Finally, the Heiligenberg, a rough and sterile tract, rises N.E. of the Lake of Constance, and slopes down towards its banks; on its summit, 2,2′0 ft. high, Prince Fürstenberg has a hunting seat, from which there is a fine view of the lake and the Swiss mountains.

Rivers. — The principal river of the grand duchy is the Rhine, which receives all its streams except the Danube. After losing itself in the Lake of Constance, at a distance of 100 miles from its source, it re-appears as a rapid stream near Stein, where its breadth is 250 ft., and works its way through limestone rocks to Schaffhausen, a little below which place it falls over a precipice from 50 to 60 ft. in height. Near Laufenburg the bed narrows to a width of only 50 ft., forming a rapid scarcely inferior in grandeur of effect to the celebrated fall at Schaffhausen. At Rheinfelden the rocky ravines in its bed form a violent eddy, and all these obstacles preclude the possibility of rendering the stream navigable above Basel, from which city onward it takes a northerly and tranquil course. Its breadth at Basel is 750 ft.; but its depth is by no means proportionate to this extent of surface, the stream being in many spots no more than 3 ft. deep, while its greatest average depth between Basel and Strasburg, does not exceed 10 to 12 feet. At Mannheim the bed of the river is 1,000 ft. in breadth; but its average depth between Strasburg and Mayence varies between 5 ft. and 24 ft. The fall of the Rhine between Stein and Basel is stated by Hennitsch to be 703 Paris ft., and between Basel and Mannheim 494 ft. The navigation on the Rhine is the most important of all the inland water carriage of Germany. Between Basel and Strasburg boats of 25 to 30 tons are used, and between the latter city and Mainz barges of 120 tons burden. Steam-boats now go up to Basel, notwithstanding the islands and banks formed by the shifting of the river's bed, and the uncertainty of its depth, which varies after every flood. The Rhine is traversed by two bridges of boats at Kehl and at Mannheim, besides several flying bridges.

The greater number of the streams falling into the Rhine on its right bank descend from the Black Forest with so rapid a fall that but few of them are navigable even for forest rafts. The most considerable are the Wiebach, which, during part of its course, forms the frontier of the canton of Schaffhausen; the Wiesen,

which falls into the Rhine below Basel, the Elz, the Kinzig, which joins the Rhine near Kehl, and the Murg. The two last named streams, on which the greatest quantity of timber and firewood is floated down, have a fall of nearly 3,000 ft., in a course not exceeding 60 English miles. The largest accession which the Rhine receives during its course through the grand duchy is the Neckar, which has its source in Wirtemberg in the Black Forest, and after traversing that kingdom, enters Baden at Heinsheim. It is navigable for boats from Cannstadt near Stuttgart, below which place it is joined by the Rems, the Kocher, and the Jax on its right, and the Enz on its left bank; it falls into the Rhine near Mannheim.

2. The Maine forms the frontier towards Bavaria but for a short distance, and receives the Tauber at Wertheim. Its depth is not great, but is regular; and its gentle fall, which is assisted by the numerous windings of its bed, renders its current well adapted to navigation.

3. The Danube, whose sources are in the grand duchy, leaves the territory before it assumes any greater importance than that of a mountain stream. Its most westerly source is that of the Brege, between the Rossuk and Briglein, in the Black Forest, a few miles N.W. Furtwangen. It is joined a little above Donaueschingen by the Brizach, and into their united streams, which from that point bear the name of Danube, the waters fall, which, issuing from the springs in the Castle yard of this town, claim the honour of being the original sources of the great river. After traversing a small district of Wirtemberg, the Danube once more enters the territory of Baden, and finally leaves it at Gutenstein on the frontiers of Sigmaringen.

The natural facilities for internal navigation in the grand duchy bend for the most part towards the W. and N., and merge into one grand channel, the Rhine. With the exception of some cuts to regulate the course of this river between Kehl and Mannheim, the execution of which is regulated by a treaty with Bavaria, according to which those on the left bank are managed by Baden, and those on the right bank by the Bavarians, no navigable canals exist in the grand duchy.

The Lake of Constance is an important feature in the natural facilities for water communication. Part of its northern bank, from Immenstadt to Mersburg, together with the whole shore of its northern branch, the *Weberlingen See*, and the north shore of the *Zeller See*, with the city of Constance on its southern shore, belong to Baden. A considerable trade with Switzerland is carried on across it, and the introduction of steam-boats, which keep up a daily communication between Constance, Lindau, and Rohrschach, in Switzerland, has made it a convenient passage for travellers. The whole lake with its branches, contains, according to Hennitsch, an area of 9¼ German square miles, and its deepest part, between Constance and Lindau, is 85¼ Paris ft. Its level above the sea is 1,255 ft., but at the period of the melting of the snow its waters rise as much as 10 ft. A sudden swell, which takes place at other times, and which is termed the Ruhss, is not easily accounted for. The lake is not unfrequently frozen over in winter, and in 1830 horsemen and carriages passed over it. The Ilmen See, near Pfullendorf, in the Lake circle, and the Möking See, are rather fish-ponds than lakes; and the various meres in the Black Forest, which are found at considerable elevations, the largest of which are the Feldsee at 3,401 ft., the Tittisee 2,598 ft., the Mummelsee 3,130 ft., the Nonnenmattweiher 2,845 ft., and the Eichner See 1,494 Paris ft. above the sea, are neither interesting for their extent, nor for picturesque scenery. The last-mentioned lake dries up occasionally, so that corn is sown in its bed; and in the Nonnenmatt a floating island of turf rises and falls with the water which supports it.

Climate. — The climate in the mountainous parts of the duchy is very severe, the snow lying in some situations for the greater part of the year. But in the lower districts, especially along the Rhine, the Neckar, and the Maine, the temperature is mild and genial, being suitable for the growth of vines, chestnuts, and even almonds. The country is every where healthy.

Observations, as to the fall of rain, give a mean at Freiburg of 28 in. per annum. In Carlsruhe the mean variations of the weather are, 23 clear, 86 sunshine, 161 mixed, 42 partial cloudy, 54 cloudy days in the year. Rain falls 146, snow 26, and fogs occur on 12 days. The mean direction of the winds is, in Carlsruhe S. 88° W. or nearly W., in Mannhem N. 65° W. Thunderstorms in Carlsruhe occur on 26, at Manheim on 21 days in the year.

Productions. — Before the accession of the grand duchy to the Germanic Customs' League, the attention of the inhabitants of the valleys of the Rhine and Neckar was almost exclusively devoted to agriculture, for which the soil and climate of those districts is admirably adapted. Corn is grown with great success; the average return given *for the whole state* by Berghaus, being, for barley 8 to 9 fold, wheat 9 fold, maize 340 to 350 fold, potatoes 28 to 30 fold. The slopes of the hills are every where covered with vineyards, in which excellent wine is grown, although only the N. shore of the Lake of Constance and part of the vale of the Rhine have a S. declivity; and here the vicinity of the Alps, the Jura, and the Black Forest, diminish the warmth. Between the vines, the walnut, chestnut, peach, apricot, plum, and cherry trees produce abundantly the choicest fruit; and the valleys above mentioned resemble one beautiful garden. Tobacco, hemp, of a very fine description, and flax, are extensively cultivated; and the forests send annually a large quantity of excellent fir and oak timber down the Rhine. Mining is also carried on with partial success. Silver is found at St. Anton, in the valley of the Kinzig; copper at Kork and Neustadt; iron is produced at Kandern, near Waldshut, near Hansen, and in other parts of the Black Forest; manganese is dug near Villingen; salt in two chief beds at Rappenau in the circle of Lower Rhine, and at Durrheim, in the Lake circle. Coals in the neighbourhood of Offenburg; besides alum, vitriol, and sulphur, form the principal mineral productions. Upwards of 60 mineral springs are counted in the grand duchy. The thermal springs of Baden are those which are the best known and the most used for medicinal purposes.

The grand duchy is divided into four circles, and contained, according to the census of 1843, a pop. of 1,335,200.

	Area in Ger. sq.m.	Population in 1843.	Communes	Chief Towns.	Population.
Lake Circle -	61·5	191,900	376	Constance	6,230
Upper Rhine Circle	78	351,200	418	Frieburg	12,200
Middle Rhine Circle	77	449,200	389	Rastadt	5,650
Lower Rhine Circle	62	342,900	382	Mannheim	20,600
				Carlsruhe	20,500
Totals -	278·50	1,335,200	1595		

The movement of the Population in the year 1833-34 was as follows: —

	Births.			Marriages.	Deaths.	An. Increase from 1833 to 1834.
	Legit.	Illegit.	Total.			
Lake Circle -	5,720	1,216	6,936	1,289	6,512	1,544
Upper Rhine	8,821	2,192	11,013	2,382	8,771	6,915
Middle Rhine	15,017	2,130	17,147	3,419	15,888	7,122
Lower Rhine	10,907	1,722	12,629	2,751	10,814	7,841
Totals -	40,465	7,560	48,025	9,871	41,985	23,422

Thus the proportion to 1,000 inhabitants is, of births 38, of deaths 34, of marriages 8; and the illegitimate births are to the legitimate as 1 to 5·4. The average annual increase in the 22 years from 1811 to 1833 was 10,600, and for the years 1831, 1832, and 1833, only 2,538.

Religion. — The pop. of 1846, amounting to 1,349,930, comprised 897,040 Roman Catholics, 427,817 Protestants, 1510 Menonites, 305 Moravians, and 23,258 Jews.

Occupations of the People. — *Agriculture.* — The cultivated land is divided, according to Berghaus, as follows: —

Arab. Land, Eng. Acres.	Cul. Meadows, in Acres.	Commons, &c. part cult.	Forests.	Vineyards.
1,212,901	360,791	301,825	1,153,300	60,561

The produce is stated to amount to —

Total Produce of Corn. Quarters.	Potatoes. Quarters.	Wine. In Gals.	Hemp. Quintals.	Tobacco. Quintals.	Hops. Quintals
1,728,965	620,000	13,459,235	48,000	90,000	10,000

Of the Cerealia, wheat is grown, but in a small proportion, not exceeding 1-30th of the whole. Spelt is the grain of which bread is principally made. Maize is extensively cultivated, but chiefly as green food for cattle, being sown thick, and allowed to run up to a great height. Artificial grasses and turnips are in universal use in the vale of the Rhine, in which agriculture, on the whole, is carried on upon the best scale, and far exceeding the cultivation of any other part of Germany. The meadows are irrigated in the Italian style, which the numerous mountain rills assist, while the corn-fields are interspersed with countless fruit-trees, and even the beds are surrounded with plants of hemp, sown singly, which attain a remarkable height and thickness. The best descriptions of wine are those of the Ortenau and of the valleys of the Maine and Neckar. The *Klingenberger* and *Wertheimer* growths are those most admired. The produce of timber and firewood is estimated at 978,000 cubic fathoms, of which a large portion is sent down the Rhine to the ship-builders of Holland, and is known by the name of *Holländerholz*. Masts of 150 feet in length, and oaks of the choicest growth, are yearly felled in great numbers for exportation to the mouth of the Rhine.

The number of head of cattle in the grand duchy is stated to be, 73,183 horses; 480,404 horned cattle; 188,706 sheep; 22,275 goats; 302,800 pigs.

Of the sheep 16,856 are designated as Spanish meri-

noes, and 110,057 as improved breeds. The number of beehives is stated at 14,030. An agricultural association at Carlsruhe has branches in several other towns, and prizes are annually distributed to encourage improvements.

Mining and Manufactures. — Gold-washing was formerly a principal object of industry along the Rhine, from Basel to Mannheim; it is now confined to the district between Philipsburg and Wittenweier. The mines of Teufelsgrund yielded in 1835-6, 794½ mks. of silver. In the year 1836-7 the same mine produced 1,052 mks. of silver. The mines of St. Anthony in the valley of the Kinzig produced, under the management of the same company to which those of Teufelsgrund belong, in 1836-7, 429 mks. of silver, and 900 cwt. of cobalt ore. The salt springs are the next most productive mineral branches, the two principal ones yielding 300,000 cwts. annually. Since the accession of Baden to the Prussian Customs' League the number of factories has very much increased. In 1829 the grand duchy numbered 161 fabrics, with 2,756 workmen, and a capital registered for taxation of 1,777,055 fls. At the end of 1837 the number of fabrics was 294, with 9,281 workmen, and a capital of 2,488,352 fls. The additional manufacturing undertakings are cotton spinning and weaving establishments, riband, and beet-root sugar fabrics, of which last description 8 have been opened within a few years. From the following survey of the employments of the people given by M. Hennitsch, it will be evident that this increased activity, although it may have received a peculiar direction by means of the protecting duties, which amount almost to prohibitions of some articles of colonial produce, was yet, in most respects, the natural result of the peculiar circumstances under which the population have been placed. The forest and mountain tracts, which occupy half the country, scarcely supply food for their scanty inhabitants, whose manufactures of clocks, wooden toys, straw hats, lace, and embroidery, have been sent, from a long date, into all parts of Europe. Crome states the number of wooden clocks annually exported to amount to 187,000, besides musical snuff-boxes, barrel-organs, and other articles for which the forests furnish the materials.

According to Hennitsch, the number of families registered for taxation as manufacturers and tradesmen amounted in 1829 to 95,624.

12,037 families with capital between 400 and 1,000 fl.
4,216 do. do. above 1,500 fl.
70,139 do. without capital.
9,232 do. exempt, as being taxed in another manner, or as paupers.

95,624 families of capitalists, &c.
33,269 do workmen and labourers.

The trading classes were further divided as follows: —

87,131 families; tradesmen; capital 10,680,500 fl.
161 do. manufacturers; do. 1,777,075 fl.
8,332 do. dealers · do. 9,759,200 fl.

95,624 families.

The number of agricultural families at the same period is stated to be 101,792.

The density of the population in the different parts of the grand duchy is shown by the following table: —

Circles.	Level and Lowlands.			Hilly Districts.			Mountainous.		
	Eng. sq. miles.	Population.	Pop. in a sq. m.	Eng. sq. miles.	Population.	Pop. in a sq. m.	Eng. sq. miles.	Population.	Pop. in a sq. m.
Lake -	63	10,000	158	806	105,000	130	467	60,000	128
Up. Rhine -	169	90,000	562	382	110,000	314	976	130,000	133
Mid. Rhine -	382	180,000	471	445	110,000	247	806	122,000	151
Lo. Rhine -	297	130,000	438	721	155,000	215	339	30,000	88
	911	410,000	450	2354	450,000	204	2588	342,000	132

Thus the lowlands of this state rank amongst the most populous districts of Europe, and the transition to manufacturing employments is in every respect a natural one.

Moral Condition of the People. — The restraints upon the obtaining a settlement in a distant parish, which in all German states depends upon the *possession* of a livelihood rather than of the power to gain it, with the impediments thrown in the way of marriage, tend, it is said, to weaken the stimulus to exertion, and to promote immorality. These must be regarded as the true causes why the lower classes in this state do not stand upon an equal footing with their Swiss neighbours, notwithstanding the freedom of the political institutions and the high rank which the upper classes of the grand duchy assume amongst the enlightened nations of Europe. The constitution of Baden is the one which allows the most political influence to the representatives of the nation of all the German governments, and the law establishing the liberty of the press has only been suspended by the decrees of the Frankfort diet of the year 1832.

The legislative functions are exercised in Baden by the sovereign and two chambers. In the upper chamber, besides the members of the royal family, the heads of mediatized princely houses, the bishop of Freiburg as head of the Catholic church, and the chief of the Lutheran consistory, the representatives of the universities of Heidelberg and Freiburg, 8 representatives of the lesser nobility, and 8 members named at pleasure by the grand duke, — the heads of families possessing entailed estates of the value of 300,000 florins (capital) may claim the hereditary peerage.

The second chamber consists of 22 deputies of towns, and 41 deputies from as many districts of the country. The members of the upper chamber must have completed their 25th, those of the lower chamber their 30th year. The latter must prove the possession of an income of 1,500 fl. per an. without any limitation as to the source whence it is derived: they are chosen for 8 years. The chambers meet every second year, and their sittings are public. The parliamentary history of Baden since 1830, when the legislative bodies commenced their career of activity, is that of the present improved and flourishing state of the institutions and finances of the grand duchy. In the session of 1831 the budget was fully controlled for the first time, and the responsibility of the minister established. The annually increasing revenue has occasioned some alleviation of the public burdens, and in 1836, when a reduction of taxes was made, the benefit was allowed to accrue principally to the poorer classes, although the principle of equal taxation of all classes is that upon which the financial system is founded.

Financial System. — The direct taxes are levied as follows: — The *land tax* upon the estimated value of all lands, calculated according to sales of landed property in each district at two periods; viz., between the years 1780-90 and 1800-9, half the average price of the district in the one period being added to half the price in the second, and all lands being classed, according to their quality, in several classes. The *rent* and *revenue* tax is levied upon all dues payable by landholders to their lords, whether as rent or service dues. The capital taxed is calculated at 25 years' purchase for tithes, and 18 years' purchase for other dues; and the cost of collection is deducted. The house tax is rated according to a scale of the value of each tenement, between the years 1800 and 1809. The registered amount of the value of all these descriptions of property, in the estimate for the budget of 1837 and 1838, was 601,530,080 fl., (50,120,000*l.*); and the tax levied was 19 kreutzers on 100 florins, or 8 per cent. on a revenue of 4 per cent. from the capital. The *industry tax* is levied in a particular manner. The personal labour of every tradesman and manufacturer is estimated by a capital sum, varying according to the description of employment. All trades are embraced in 10 classes, and the capital so found is increased by a proportional additional sum for every apprentice or labourer employed. The capital sum registered for this tax in 1837 amounted to 100,864.925 fl., (8,405,000*l.*), and the rate was 23 krs. per 100 florins, or nearly 3-5ths per cent. Another series of 15 classes embraces the capital employed in tools, stock in trade, &c. The personal industry tax is the one which was modified in 1836, when 300 florins were struck off from the registered capital of each individual; by means of which a large proportion of the poor were relieved from this burden. All persons in the service of the state pay a tax upon the salaries they receive, according to a scale of 9 classes. In the first, the income being below 1,000 florins, is rated at 1¼ per cent; but in the last class, which includes the apanages of the members of the royal family, and revenues exceeding 80,000 fl. per ann. (6,000*l.*), it amounts to 16⅔ per cent.

Of the indirect taxes the most important are the excise on beer, wine, and spirits; the slaughtering tax, the stamp duty, and the salt monopoly. The last-named branch of service supplies the inhabitants at 5 fl. 50 kr. per cwt. (10*s.*), while the price at which the salines furnish salt for exportation is 3 fl. 30 kr., or 6*s.* The estimate of the budget for 1837 to 1838 was 13,026,559 fl. a year, of which the direct taxes yielded 2,651,168 fl., the excise 1,495,593 fl., the share received from the Prussian Customs' League 1,495,593.

The military force of the grand duchy amounts nominally to 10,000 men, which form part of the 2d division of the 8th corps of the confederate army. The troops are raised by annual conscription; but after the exercising months are over, the greater part are disbanded, and the whole department is managed with the strictest economy. The cost, including pensions, does not exceed 1,500,000 florins annually. In the session of 1838 the second chamber passed a motion for reducing the number of the cavalry.

In the department of justice, the fees taken from suitors and the fines more than cover the annual expenses. The number of trials in the four principal courts of Mannheim, Freiburg, Rastadt, and Mursburg were —

	Civil	Bankruptcies.	Criminal.			Appeals.
In 1832	3,011	741	1,680 accu.,	642 acq.,	1,038 con.	248
1833	2,994	—	1,629 do.	673 do.	956 do.	305

The sentences were as follows : —

	1832.	1833.
Imprisonment with hard labour	229	206
Hard labour in irons	104	129
Solitary confinement	1	3
Fines, &c.	692	611
Death	12	7
Executed	1	6

The police reports for 1832 give the number of arrests and informations laid at 23,269; but of these 3,377 were for irregularity of passports, and 1,024 for neglect of the regulations concerning travellers, with 5,348 cases of an equally light description. The prisons contained, in 1832, 586 prisoners, of whom 469 were men, and 117 women. An association was formed in 1831 to improve them. The highest judicial tribunal is the Supreme Royal Court at Mannheim, which is the final court of appeal. Under this stand the four courts in the respective chief towns of the circles. In civil cases the trials are public, and the pleadings oral, as in France and England; but the greater part of the criminal proceedings are carried on with closed doors, although the form of pleading and the examination of witnesses is the same. This deviation from the principle of publicity was demanded by the Frankfort diet.

The institutions for education are numerous and good. They consist of—

	No. of Schools.	Teachers.	Scholars.
Elementary schools	1,886	2,301	185,000
Middle class schools	24	111	1,821
Polytechnic schools	1	30	300
Universities	2	- -	1,026

The university of Heidelberg is one of the oldest established in Germany; it was founded in 1386; that of Freiburg in 1454. The faculty of divinity in the former is Lutheran, in the latter Catholic. The school attendance is obligatory on every individual, and the attendance at the Sunday schools continues for two years after dismissal from the elementary school. Every parish has its proportional number of schools. For the formation of schoolmasters two normal schools are founded; for Protestants at Carlsruhe, for Catholics at Ettlingen.

Religion.—Although the reigning family in Baden professes the Protestant religion, yet more than half the inhabitants are, as we have stated, Catholics. According to a treaty entered into with the pope, the bishopric of Constance was suppressed, and by the bull of 11th April, 1834, the bishop of Freiburg was nominated as metropolitan of six German states, viz. Baden, Wirtemberg, the grand duchy, and the electorates of Hesse, Nassau, and Frankfort. The sovereign confirms the prelates, who are chosen by the pope, and the revenues allotted to the church are to be secured on landed property. All bulls, and other religious proclamations, must be sanctioned by the government, and receive its *placet*, previous to publication. The Protestant church is managed by a consistorial court, whose chief has equal rank with the bishop of Freiburg. Its members assemble in a convocation to regulate clerical affairs, the last sitting of which was held in 1834. The foundations of the different religious creeds for religious and charitable purposes are stated by Hennitsch as follows : —

		No. of Foundations.	Annual Revenue.
Catholic	Religious	1,721	996,525 fl.
	Secular	613	430,718
Protestant		603	674,616
Jewish		- -	14,900

In addition to these rich donations all classes of civil and religious functionaries have subscription funds for providing for orphans and widows; and savings' banks are general, to encourage providence amongst the lower classes. Beyond these institutions no formal provision is made for the poor, whose moderate habits keep them from being burdensome. In the larger towns, as Mannheim, for instance, subsidiary relief is generally given in the shape of food, clothing, or fuel, from voluntary subscriptions raised by the inhabitants. The regulations are very strict as regards settlement in the communes, and permission to marry; and the number of tradesmen is every where limited by the magistracy, who also control the price of provisions. The weights and measures used in the grand duchy are — the florin or gulden at par 12 fl. = 1*l.*; 1 fl. = 60 kreutzers; the foot = $\frac{80}{81}$ Engl. ft.; the morgen = $\frac{360}{403}$ acres; the maap = $\frac{150}{137}$ mp. gallons; the pound = $\frac{1}{10}$ lbs. avoirdupois.

The reigning family descends from Berthold, Landgrave of Zähringen, one of the most powerful and meritorious families of the 11th century, whose son acquired the district of Baden. Margrave Augustus George united all the possessions of the two houses of Baden and Durlach, and received, by the treaties at Luneville and Presburg, as additions, the bishopric of Constance; the Austrian Breisgau; part of the palatinate of the bishoprics of Spire, Strasburg, and Basel; the county of Hanau Lichtenberg; the Ortenau; the island of Meinau in the Lake of Constance; seven free imperial cities; a part of the estates of the Teutonic order, and nine abbeys; together with the sovereignty over seven mediatized nobles of the empire, with a territory of 67 sq. Germ. miles, and 222,000 inhabitants. The reigning Grand Duke Leopold succeeded his half-brother, 30th March, 1830, and is married to his cousin Sophia, the daughter of the abdicated King Gustavus IV. of Sweden.

BADEN, a town and celebrated bathing-place of Lower Austria, on the E. bank of an affluent of the Danube, at the entrance of a fine valley, 13 m. S. S.W. Vienna. Resident pop., with the neighbouring townships of Guttenbrunn and Weikersdorf, about 4,000: but increased during the summer months by 3,000 visiters, amongst whom are usually the emperor and other members of the imperial family. The presence of mineral springs here was known to the ancients, by whom they were called *Aquæ Cotiæ*, from the neighbouring mountains; and in 1769, when the modern baths were constructed, the ruins of a Roman vapour-bath and other buildings were discovered. There are at present 16 baths, each capable of at once accommodating from 50 to 100 persons; for here, it is to be observed, both sexes bathe *en masse!* All parties are attired in loose flowing robes, and promenade in the baths, arm in arm, as if at a *soirée;* and as much interest is used with the master of the ceremonies to obtain the honour of being *parboiled* with high-born exclusives, as to obtain an invitation to the most *recherché* assemblies. (*Spencer's Germany and the Germans*, ii. 194.)

The waters, according to the analysis of Volta, contain sulphate and muriate of soda, sulphate and carbonate of lime and magnesia, sulphate of alumina, and considerable quantities of carbonic and hydrosulphuric acid gases: their temperature varies from 88° to 98° Fah. Next to the baths, the most remarkable buildings are, St. Stephen's Church, the palace of the Archduke Anthony, the town-house, theatre, *chiosk*, &c. There are many well-built private houses; several hospitals and other charitable institutions; and a handsome park and public promenade: the neighbourhood abounds with natural beauties, and contains various ancient remains. (*National Encyclopædia*, pp. 159—163.)

BADEN, a town of the g. d. Baden, famous for its hot baths, usually called Baden Baden, to distinguish it from the watering-place of the same name near Vienna, romantically situated in the Middle Rhine Circle, 24 m. S. S.W. Carlsruhe. Resident pop. 4,700. It was formerly the constant residence of the margraves of Baden, and the grand duke still usually passes the summer in a villa here. The mineral springs were well known to, and appreciated by, the Romans, who planted a colony in it, and gave it the name of *Civitas Aurelia Aquensis*. The springs, 13 in number, burst out of the rocks at the foot of the castle terrace. The temperature is not affected by the seasons: the hottest are 54° Reaumur, the coldest 37°. A handsome building, in form of a temple, is erected over the *Ursprung*, as the principal spring is called. Dr. Granville, speaking of this spring, says— "The water is perfectly clear, has a faint animal smell, a taste somewhat saltish, and when drunk as it issues from the spring, approaching to that of weak broth." According to a recent analysis, its specific gravity is 1·030. A pint of the water, containing 7,392 grains, contains 23·3 solid matter, the principal ingredient of which is culinary or common salt (16 grs.); the next in importance are the sulphate, muriate and carbonate of lime (6¼ grs.); the remainder consists of a small portion of magnesia and of traces of iron with about half a cubic inch of carbonic-acid gas in addition. There is here no public building appropriated exclusively to the purpose of bathing. The water is conveyed by pipes to the different hotels, in which there are numerous baths, some of these being very luxuriantly fitted up. Mr. Murray says that this is the most beautifully situated of the German baths, even surpassing, in this respect, the Nassau Brunnen. The surrounding country, without the sublimity and grandeur of Switzerland, is distinguished by a pleasing and romantic wildness, and is, as it were, a prelude to the Alps. July and August are the season when the baths are most frequented; but visiters come and go from May to October. In 1833 they were visited by 13,900 individuals. English visiters have of late years been very numerous; and, but for the prevalence of fogs in winter, it is a desirable residence. A number of handsome buildings, among which, besides the temple over the *Ursprung*, the *Conversationshaus*, with its plantations, is conspicuous. The dungeons under the *Neu Schloss*,

or palace, are supposed to have been the seat and prisons of some secret and dreadful tribunal; but nothing certain is known of their history.

Baden, a town of Switzerland, cant. Argau, on the left bank of the Limmat, 14½ m. N.E. Aarau. Pop. 1,800. It is surrounded by walls; is the seat of a tribunal of original jurisdiction; has a good town-house, a handsome Catholic church, 2 convents, an hospital, and a house of correction. The river is crossed by a wooden bridge. Baden is celebrated for its hot baths, known to the Romans by the name of *Thermæ Helveticæ*: they are at a short distance from the town, on both sides the river: the water in the hottest baths has a temperature of 37° Reaumur: they are much frequented by the inhabitants of Basil, Zurich, &c. The environs are very beautiful; and a number of fine cottages for the use of strangers are scattered over the neighbouring heights. The deputies of the Swiss cantons have often held their diets at Baden. The treaty between France and the Empire in 1714 was signed here.

BADIA, a town of Austrian Italy, prov. Polesina, on the Adige, 16 m. W. by N. Rovigo. Pop. 3,500. It has a fine bridge over the Adige, and two convents for monks; with a manufacture of earthenware, and some trade in corn, silk, firewood, flax, &c.

BADOLATO, a town of Naples, prov. Calabria Ultra, 24 m. S. Catanzaro, situated on a hill near the sea. Pop. 3,000.

BADONVILLER, a town of France, dép. Meurthe, on the Blette, 20 m. E.S.E. Luneville. Pop. 2,218. It has a manufactory of awls, which produces about 1,000,000 a year, with fabrics of cotton and earthenware.

BAEÇA, a town of Spain, prov. Jaen, 20 m. N.E. Jaen. Pop. 10,800. It is situated on a hill, in a fertile and extensive plain; has good streets and squares, one of the latter being adorned with a superb fountain. Among the principal public buildings are the Gothic cathedral, the colleges of the Jesuits and of the oratory, the chapel of the ancient university, and the prison. It has a collegiate church, several parish churches, and convents for both sexes, three hospitals, an economical society, and some tanneries. Baeça is supposed to occupy the site of the ancient *Beatia*; and it was the residence of several Moorish kings, having been wrested from the latter in 1228. At this epoch its population is said to have amounted to 150,000; but this is probably an exaggeration. The bishopric, of which it was once the seat, was transferred to Jaen in 1248; and its university has also been suppressed. (*Miñano*.)

BAENA, a town of Spain, prov. Cordova, 23 m. S.E. Cordova, on the Marbella. Pop. (town and district) 13,860. It has four parish churches and five convents. There are, in its environs, very productive salt-mines.

BAFFA (an. *Paphos*), a sea-port town on the S.W. coast of the island of Cyprus, lat. 34° 47′ 20″ N., long. 32° 26′ 20″ E. This inconsiderable town, not containing more than 1,000 inhab., occupies the site of the famous Paphos of antiquity, which, after being destroyed several times, was rebuilt by Augustus, and was thence called *Augusta*. During the occupation of Cyprus by the Venetians, Baffa was a city of considerable wealth and importance. It is now nearly deserted, and is filled with the ruins of churches and palaces that are every where crumbling to the ground. The bay is large; but the port, commanded by a castle on the beach, is shallow and unsafe. Caves, or rather dwelling-places, have been cut in several of the rocks in the neighbourhood, some of which are inhabited. The country round Baffa is fruitful, and produces considerable supplies of corn, cotton, and silk.

Old Paphos is supposed to have stood about 6 m. S.E. of Paphos or Baffa, at a little distance from the sea. It was the favourite residence of Venus, *Diva potens Cypri*, the place where the sea-born goddess first took up her abode, and was famous from a very remote epoch for its temples appropriated to her worship, and for the rites and processions performed by her votaries. Hence the epithets Paphian and Cyprian applied to Venus:—

"O Venus, regina Gnidi Paphique,
Sperne dilectam Cypron"——

It is worthy of remark that, according to Tacitus, the goddess was not represented at Paphos under the human figure, but under that of a cone. (*Hist.* lib. 2. § 3.) There were also temples and altars where sacrifices were offered to the goddess in New Paphos. The office of high priest of the Paphian Venus was both lucrative and honourable. In proof of this it may be mentioned, that when Cato was sent to Cyprus, he represented to Ptolemy that if he submitted without fighting he should not want either for money or honours, for the Roman people would make him grand priest of the Paphian Venus. (*Larcher*, *Mémoire sur Venus*, p. 42.)

BAFFIN'S or BYLOT'S BAY, a large inland sea, between Greenland and the N.E. coast of America, between 68° and 78° N. lat., and 52° and 80° W. long. It extends, from S.E. to N.W., about 950 m.; its width varying from 350 to something less than 100 m. at its N. end. Its surface may therefore be estimated at about 266,000 sq. m., an area exceeding by more than a half that of the Baltic. In fact, however, it is much larger even than this; its natural boundaries being evidently Cape Farewell, the S. point of Greenland, and Cape Chudleigh, on the coast of Labrador, both nearly on the 60th parallel, and respectively in 45° and 65° W. long. Taking these for its dimensions, its surface will amount to 456,000 sq. m.; but it is usual to take for its limits those first assigned, the additional S. part being denominated Davis's Strait. (*Arrowsmith's Atlas*, pl. 40.; *Baffin's Voy.*; *Purchas's Pilgrims*, iii. 844—848.; *Ross's First Voy.* 34—161.; *Parry's First Voy.* 6—28.)

Modern discovery has shown that the N.E. and N. coasts of America, as far as 120° W., are broken into innumerable islands, and that Baffin's Bay is connected with other great internal gulphs; such as that of Boothia (*Ross's Second Voy.* 93—116.), and the larger basin of Hudson's Bay (*Parry's Second Voy.* 267—347.), and also with the Polar Sea. (*Parry's First Voy.* 29—52.) The term *Mediterranean* cannot be therefore properly applied to this great expanse of water, since, large as it is, it is only one among a number of enormous gulphs in the singularly tortuous channel connecting the N. Atlantic and the Arctic oceans.

The water of this bay attains a great depth, the maximum being 1,050 fathoms, and this was found at no great distance from the land in lat. 72° 23′ N., long. 73° 7½′ W. The bottom must, however, be extremely mountainous, since 15 m. farther N. it was reached in 120 fathoms. The bottom in both cases was mud; and though, from the greater depth, of course, neither insect nor organic matter was procured, yet a small star-fish was found sticking to the line below the point marking 800 fathoms, an extraordinary depth for life in this lat., if the creature were brought up from the point indicated. (*Ross's First Voy.* 191, 192.) In different parts, Parry found no bottom in 260 fath. and 310 fath., while in others his lead reached the ground in 200 fath., 125 fath., and 120 fath. He also, in a high lat. (74⅓°), found the depth to be 1,050 fath., but he imagined that 100 or 200 fath. should be allowed on this for drift and swell. (*First Voy.* 7, 8. 23. 30.) The temperature of the water is, in summer, from 2° to 3° lower than that of the air in the shade; and this temperature decreases with the depth. It would seem, however, that the bottom mud is pretty uniformly at 29° or 29½°. (*Parry's First Voy.* 27.; *Ross's First Voy. Appen.* 133.) The mouth of this bay or sea being towards the S.E., that is, towards the approach of the tidal wave; tides are, of course, experienced in its waters, but they do not appear to rise to any great height, especially towards the N. Six ft. or 8 ft. seems about the average. (*Ross's First Voy.* 41. *et pass.*; *Parry's First Voy.* 27. *et pass.*) The melting of the vast masses of snow and ice produces very sensible differences in the appearance and composition of these waters: under such influence, they become turbid and of a dirty brown colour; their gravity diminishing, at the same time very materially, so that the observed extremes in July, 1819, were 1·0261 and 10·183. (*Parry's First Voy.* 7. 28.) Strong currents, setting towards the S., are experienced in Davis's Straits; and it was this fact which led to the belief that Baffin's Bay was *not* bounded by land upon the N., as marked by its intelligent discoverer; but would yield a direct passage, in the summer, to the Arctic Sea (*Ross's Official Instr.*, *First Voy.* 3.); but these currents were found not only to diminish in intensity with increase of lat., but even to run N. in the upper part of the bay (*Parry's First Voy.* 31.), while the continuity of land round the bay-head was fully demonstrated by Ross, who, in 1818, followed very nearly the identical track which Baffin had sailed over 200 years before. (*First Voy.* 153. *et pass.*) Baffin's Bay is full of indentations upon both its coasts, but only one continuous channel has been discovered; this is the *Sir J. Lancaster's Sound* of Baffin, to the continuation of which to the Polar Sea, Parry gave the name of Barrow's Strait. (*First Voy.* 52.) It runs W. from lat. 74° 30′ 3″ N., long. 78° 1′ W. It is now in the highest degree improbable that any other outlet should exist from this bay in any direction. There are but few islands in these waters. Disco, on the E. coast, in lat. 70° N., long. 58° W. (mean), is a Danish whaling station; and Hare or Waygatt Isle, a little N. of the former, has acquired some celebrity as the place where one of the most modern experiments was made to determine the ellipticity of the earth. The acceleration of the pendulum between London and this place was 65·2386 vibrations in a mean solar day, showing a diminution of gravity from pole to equator, equal to ·0055139, and a compression of the polar axis equal to $\frac{10}{3138}$. (*Parry's First Voy.*, *Appen.* 166.) The land in the neighbourhood is mountainous, and in the last degree barren; wood is totally absent, and the few plants that are found are of the low-growing, hardy kind, fitted to endure the intense cold of these regions. (*Ross's First Voy.*, *Appen.* 141—144.; *Parry's First Voy.*, *pass.*) The com-

position of the rocks is very various, but with an immense preponderance of old formations (granite and gneiss); limestone is found, but not abundantly; and trap *appears* to form a very characteristic feature of these shores. Basalt occurs; and rock of every kind is brought down on the floating ice. (*M'Culloch's Paper; Ross's First Voy., Appen.* 69—82.; *Parry's First Voy.* 26. *et pass.*) The birds and animals are those of the Arctic regions generally (*Edwards's Paper; Ross's First Voy.* 41—64.); and in the water, the whale and seal are particularly numerous. Parry, by showing the possibility of crossing through the ice, which always occupies the centre of the bay, performed an important service to the whalers, whose fisheries had before been confined to the coast of Greenland, where the whales are fewer in number and inferior in quality to those met with on the American shore. (*First Voy.* 18—23. 29.)

The discovery of a N.W. passage to India has been a favourite project for more than three centuries. In this attempt, Sebastian Cabot led the way in 1497, when he approached this sea as nearly as the 58th parallel of lat. He was followed by Martin Frobisher, who, between 1576 and 1578, made three voyages for the same purpose, entered between the shores of Greenland and America, and gave his name to the strait between Resolution and Cumberland islands. John Davis, between 1585 and 1587, made three voyages, and proceeded as high as 68° N. lat.; his name is very properly preserved in that portion of the sea which he traversed; but the term strait (Davis's Strait) is not very appropriately applied to it, the narrowest part of the sea being 160 m. across. Lastly, in 1616, Robert Bylot, or Bilett, commanded an expedition, fitted out by private adventurers, for similar discoveries. Baffin was pilot of this ship; and the result was the exploration of the bay to its very head, and the ascertaining of all its points, sounds, and bearings, with a precision that has not been improved, except in the correction of some errors of longitude. Bylot and Baffin not having been followed by other navigators for more than 200 years, suspicions began to be entertained as to the authenticity of their statements; and Baffin's Bay (N. of 68°), if not actually struck out of the charts, was laid down in the greater number as doubtful. There never, however, was any probable ground for this discredit; and late discoveries have shown how unjust it was, and have placed the names of Baffin and Bylot in the first class of enterprising and trustworthy navigators. (*Hakluyt's Collect. Voy.* iii. 6—9. 29—96. 98—119.; *Purchas's Pilgrims*, iii. 831—848., &c.; *Ross and Parry, passim.*)

BAFRA, a town of Asiatic Turkey, pach. Sivas, on the right bank of the Kizil Ermak, 13 m. above where it falls into the Black Sea; lat. 41° 32′ 52″ N., long. 36° 11′ 45″ E. Pop. 2,000. ? It has a fine bridge, and two mosques. The environs are fruitful of rice and flax, and its bazars are said to be well supplied.

BAGDAD, an important prov. or pachalik of Turkey in Asia, of a triangular form, stretching N. W. from the bottom of the Persian Gulph, in about 30° to 38° N. lat., and lying between the 40th and 48th degree of E. long., having W. and S. the Euphrates and the Arabian desert; E. Kuzistan, mount Zagros, and the Persian prov. of Azerbijan; N. W. the pachalik of Diarbekr; and N., Armenia and the territories of the Kurdish chief of Julamerick. This immense tract extends over an area of above 100,000 sq. m., and comprises the whole of the ancient *Babylonia* and *Chaldea*, and the greater part of *Assyria Proper* and *Susiana*. Except where it is bounded on the W. by the Euphrates, the prov. is traversed in its whole extent by this great river and its rival the Tigris, and by the greater and lesser Zab, the Diala, and other affluents of the latter. It is naturally divided into three portions; viz. 1st the country between the Arabian desert and the Euphrates; 2d, that between the latter and the Tigris, the *Mesopotamia* of the ancients; and, 3d, the country to the E. of the Tigris. That portion of Mesopotamia S. of the city of Bagdad is now called *Irak-Arabi*, and that to the N. of Bagdad, *Algezirah*, or the island. The soil and appearance differs widely in different parts. At present its most fertile portion is that situated between mount Zagros and the Tigris, N. to Mosul. The tract lying between the two great rivers, one of the richest, best-cultivated, and most populous regions of the ancient world is now, in most parts, an absolute desert, through the misgovernment to which it has been subjected. "The mighty cities of Nineveh, Babylon, Seleucia, and Ctesiphon have crumbled into dust: the humble tent of the Arab now occupies the spot formerly adorned with the palaces of kings; and his flocks procure but a scanty pittance of food, amidst the fallen fragments of ancient magnificence. The banks of the Euphrates and Tigris, once so prolific, are, for the most part, covered with impenetrable brushwood; and the interior of the prov. which was traversed and fertilised by innumerable canals, is destitute of either inhabitants or vegetation." (*Kinneir's Persian Emp.*, p. 237.) The country W. of the Euphrates is but of limited extent, and at a short distance from the river becomes an arid waste. The climate in the S. parts in June, July, and August, is exceedingly hot during the day; but the nights are always cool, and fires are absolutely necessary in winter. The prevailing wind is from the N. W. The *Simoom* (*see* Arabia) is more common at Bagdad than in other parts of the prov.; but, in general, it is fatal only to strangers, the Arabs being, in most instances, aware of its approach. It would be easy, were the government not proverbial for imbecility and ignorance, to restore some portion of the ancient prosperity of Mesopotamia. Few countries are blest with a finer soil, or are capable of being cultivated with less labour. The Euphrates and Tigris, which are seldom more than 50 m. apart, approach in the latitude of Bagdad to within 25 m. of each other, and afford an inexhaustible supply of the finest water. They rise twice a year (*see* Euphrates), and as the water is then nearly on a level with the surface of the plain, the irrigation, so indispensable to countries like this, is effected with the utmost facility. But the insecurity of property renders these advantages of no avail. Under the stupid despotism of the Turks, the cultivators, liable at all times to have their fields laid waste and their habitations pillaged by the myrmidons of those in power, avoid, as much as possible, all sorts of labour. Here, as in all similarly situated countries, the natives restrict their tillage to the immediate vicinity of towns and villages; and it is only in rare instances, and under peculiar circumstances, that cultivation is prosecuted on a larger scale, and with any thing like adequate vigour. The products of this naturally fertile region are alike various and valuable. Excellent crops are raised of wheat, barley, rice, maize, and other grains: tobacco, hemp and flax, cotton, &c., are cultivated; dates are an object of much attention, are reckoned of a peculiarly good quality, and are almost as much prized here as in Arabia. The mountains in the E. and N. parts of the prov. are covered with vast forests, consisting principally of oaks, which furnish the best gall nuts brought from the E. The horses of this prov. have been long renowned. They are small, being seldom more than 14 hands high, docile, never known to be vicious, and capable of undergoing a vast deal of fatigue. The camel, however, is at once the most common and most useful of the domesticated animals. Mules and asses are both met with in considerable numbers; buffaloes are kept for the sake of their milk, and oxen for agricultural purposes. Among wild animals are lions, panthers, hyenas, jackalls, wolves, and wild boars. All sorts of poultry are bred except the turkey: ostriches are found in the deserts, and black partridges are common on the banks of rivers. There are no means by which to form any accurate estimate of the pop. of this pachalik; but it probably exceeds 1,300,000 — a number hardly, perhaps, equal to the pop. of either Nineveh or Babylon! The pop. consists of Turks, Arabs, Kurds, Turkmans, Armenians, and Jews. The prov. is only partially subject to the Porte. The chiefs or sheiks of the Arabs and Kurds, who are masters of the whole country beyond the precincts of the towns, are frequently at open war with each other. They are bound to furnish the pacha with a certain number of troops and a certain amount of tribute; but these contingents are always very irregularly paid; and, in many instances, the chiefs acknowledge only a nominal dependence on the Porte. Were this country subject to a vigorous and moderately intelligent government, it would soon become one of the most flourishing in the world. But no improvement need be looked for so long as it continues subject to its present rulers. (*Kinneir's Persian Empire*, pp. 236—312.)

Bagdad, a famous city of Asiatic Turkey, long the cap. of the Caliphate, and now of the above prov., on the Tigris, about 196 m. in a direct line from the junction of the latter with the Euphrates. Lat. 33° 19′ 40″ N., long. 44° 24′ 45″ E. Pop. variously estimated, but may probably amount to about 70,000, principally Arabs and Turks. It stands on both banks of the river, which is here about 620 feet across, but the larger portion is on the E. side: the communication between its two divisions is maintained by means of a bridge of boats. It is of an oblong shape, is surrounded by a high wall of brick and mud, about 5 m. in circ., flanked at regular distances with towers, some of which, of an immense size, were built by the earlier caliphs. There are 6 gates, 3 on each side the river. The castle at the N. corner of the city commands the passage of the Tigris, but is a place of no strength. The town is meanly built; streets so narrow that where two horsemen meet they can hardly pass each other. The bazars, though extensive and well supplied, are far from handsome. Few of the ancient buildings remain; but these few are far superior in elegance and solidity to the more modern structures. Of the former, the most worthy of notice are the gate of the Talisman; a lofty minaret built in 785; the tomb of Zobeida, the most beloved of the wives of Haroun-al-Raschid. The famous *Madrasa Mostanseroi*, or college founded in 1233 by the caliph Mostanser, and long the best attended and most celebrated

seminary in the E., still exists; but *quantum mutatus!* It is converted into a khan or caravansera, and its old kitchen into the custom-house! (*Niebuhr.*) Nothing remains of the far-famed palace of the caliphs; *etiam ruinæ periere;* and the spot where it stood is not even ascertained. The only handsome modern edifice is the tomb and sanctuary of a famous Sooni doctor, the patron saint of the town, who flourished anno Hegira 560.

Bagdad was recently a place of great trade, and the resort of merchants from almost every quarter of the E. It supplied Asia Minor, Syria, and part of Europe with Indian commodities, which were imported at Bassora, brought in boats up the Tigris, and then transported by caravans to Tocat, Constantinople, Aleppo, Damascus, and the W. parts of Persia. The chief imports from India are gold brocade, cloths, sugar, pepper, tin, sandal-wood, iron, china-ware, spices, cutlery, arms, and broad cloth; in return for which they send bullion, copper, gall-nuts, tamarisk, leather, and otto of roses. From Aleppo are imported European silk stuffs, broad cloth, steel, cochineal, gold thread, and several other European articles, brought in Greek vessels to Scanderoon. The imports from Persia are shawls, carpets, silk, cotton, white cloth, leather, and saffron; and those from Constantinople are bullion, furs, gold and silver thread, jewels, brocade, velvets, and otto of roses. The principal manufacture is that of red and yellow leather, which is much esteemed; but silk and cotton stuffs are also produced. Of late years, however, the trade of the city has a good deal declined, in consequence principally of the inability of the government to repress the attacks and exactions of the Arabs.

The climate, notwithstanding its great heat, is admitted to be very healthy; but the natives are, without exception, the ugliest people in the Turkish empire, and are universally subject to a cutaneous disorder similar to that which prevails in Aleppo (which see). In this city, though the former cap. of the scientific world, reading and writing are rare accomplishments; and when Niebuhr was here, there was not a dealer in books in the town, nor any means of procuring a single volume!

Bagdad was founded by Al Mansour, second caliph of the Abassides, A.D. 763, and is said to have been principally formed out of the ruins of the ancient city of Ctesiphon. It was greatly enlarged and adorned by the grandson of its founder, the famous Haroun-al-Raschid. It continued to flourish, and to be the principal seat of learning and the arts, till 1259, when it was taken and sacked by Holakoo, grandson of Gengis Khan. It has since undergone various changes, and has successively fallen into the hands of the Persians and Turks. The latter, however, have held it since 1638, when it surrendered, on capitulation, after a brave resistance. The terms of the capitulation were, that the lives and property of the inhabitants should be saved; but the bloodthirsty conqueror, Amurath IV., regardless of this convention, barbarously massacred a large proportion of the inhabitants. It was ineffectually besieged by Nadir Shah. (*Kinneir's Persia*, pp. 246—252.; *Niebuhr, Voyage en Arabie*, ii. pp. 239—267.)

BAGNA-CAVALLO, a town of the Papal States, leg. Ferrara, on the Sino, 12 m. W. Ravenna. Pop. 10,000. It has establishments for the spinning of silk; and large quantities of hemp are cultivated in its environs, which are also productive of corn, &c.

BAGNA LOUKA, or BANGALUKA, a town of European Turkey, in Bosnia, on the Verbas, cap. sanjiak, 30 m. S. Gradiska; lat. 44° 58′ N., long. 17° 3′ E. Pop. 7,000. It stands in a fertile valley, is defended by a castle, and was for some time the cap. of a pachalik. It has numerous mosques, two public baths, a powder manufactory, which furnishes the best in the country, and various bazars. The inhabitants are partly Turks and partly Greeks and Jews. (*Diction. Géograph.*)

BAGNARA, a town and castle of the Papal States, leg. Ravenna, on the Santerno, 7 m. N.N.W. Faenza. Pop. 2,000.

BAGNARA, a sea-port town of Naples, prov. Calabria Ultra, cant. Scylla, 16 m. N.E. Reggio. Pop. 5,000. It has a considerable trade in excellent muscat wine, produced in the vicinity, and in wood and tar. Bagnara suffered severely from an earthquake in 1783. It is supposed by some geographers to be the Portus Orestis of the ancients.

BAGNAREA, a town of the Papal States, leg. Viterbo, 16 m. N. Viterbo. Pop. 3,500. It is situated on a hill, and is the seat of a bishopric.

BAGNÈRES-DE-LUCHON, a town of France, dép. Haute Garonne, 24 m. S.S.W. St. Gaudens. Pop. 2,385. It is situated in the beautiful valley of the Luchon, at the foot of the Pyrénées, within about 5 m. of the Spanish frontier. It is celebrated for its mineral waters, which, as well as those of Bagnères-en-Bigorre, were known to the Romans. The town is said to be "*triste et chétive;*" but it is increasing and improving, and now possesses almost all the establishments peculiar to a well-frequented watering place. The Hôtel des Thermes is the principal edifice. In winter the climate is very severe, and the town is deserted not merely by visiters, but even by a portion of its inhabitants. There are 9 mineral springs, all of which issue from a rock at the foot of the adjacent mountains; their temperature varies from 26° to 52° of Reaumur; they have a fetid smell, and are said to be very efficacious in a variety of complaints. More invalids resort to Bagnères-de-Luchon than to either Bagnères-en-Bigorre or Bourges. The season lasts from May till October, and upwards of 1,500 strangers may be accommodated. The avenues of trees leading to the baths are as fine as can be imagined. In the neighbourhood of the town, among the Pyrénées, is the wild solitary lake of Seculego. (*Hugo, France Pittoresque*, art. *Haute Garonne; Inglis's Switzerland*, p. 290.)

BAGNÈRES-EN-BIGORRE, a town of France, dép. Hautes Pyrénées, cap. arrond. on the left bank of the Adour, in a delightful situation at the entrance to the valley of Campan, and the foot of a finely wooded hill, 13 m. S.S.E. Tarbes. Pop. 8,108. Bagnères is the Bath or Cheltenham of France, and is indebted for its celebrity and importance to its hot mineral springs, which were known and resorted to by the Romans. The waters have no peculiar taste, but are aperient and tonic. During spring and autumn the town is crowded with invalids and pleasure-hunters from most parts of France, and by many foreigners, particularly Russians and English. As many as 8,000 strangers have been assembled here at the same time; uniting, as has been stated, "*ce qui fait le charme, l'honneur de la société, mais aussi ce qui en fait l'opprobre.*" The town has not been built on any regular plan, but has increased according to the influx of company. In consequence, though it has some good streets, with very excellent houses, and good inns and hotels, it has not a single good square, nor any public building worth notice except the New Bath Hotel, in the Greek style, and of bluish marble. Streets well paved, clean, and well watered. The promenade, called *Coustous*, in the centre of the town, is ornamented with a fountain; there are several delightful drives and promenades in the vicinity; and it also affords the finest excursions for the botanist, mineralogist, and the lovers of the picturesque and the sublime. There are 18 or 20 baths: "Each is under the direction of a medical inspector, who *must* be consulted before any one is permitted to employ the waters. He is paid by government, and, therefore, the consultation costs nothing; and the expense of the bath is not more than a franc." (*Inglis's Switzerland, &c.* p. 264.) The principal bath, or that called *du Salut*, is situated in a ravine about ½ league from the town. Bagnères has a court of original jurisdiction, a college, an hospital, with a theatre, concert-hall, and numerous places of entertainment. It has also fabrics of banios (a kind of woollen stuff), linen, étamines, crape, and paper. On the road to Tarbes is a monument in black and white marble in honour of Count Segur. (*Hugo, France Pittoresque*, art. *Hautes Pyrénées.*)

According to Mr. Inglis, Bagnères is not a very cheap place. "At the public establishments one chamber costs 5 fr.; breakfast of tea or coffee, 2 fr.; dinner, 4 fr. To those who live in private lodgings market prices are also high. Butchers' meat is seldom below 8*d.* per lb.; a fowl costs 1*s.* 3*d.*; milk and butter are both dear; and although *vin ordinaire* may be had at 4*d.* per bottle, tolerable wine costs at least double that sum." (p. 265.)

BAGNOLES, a village of France, dép. Orne, in a solitary valley, 13 m. E. by S. Domfront. This village, celebrated for its mineral springs, was built in the 17th century, the springs having been discovered in the preceding century. During the last twenty years it has been embellished with some new and elegant buildings, and in its environs are extensive plantations that afford fine promenades. In 1822 an establishment for the use of the military was founded here, capable of accommodating about 200 invalids. The temperature of the water is about 26° centigrade. This is the only mineral spring in the ci-devant prov. of Normandy. (*Hugo*, art. *Orne.*)

BAGNOLI, a town of Naples, prov. Sannio, 9 m. S.W. Trivento, on the declivity of a hill. Pop. 3,000. It has five churches, an abbey, and an hospital.

BAGNOLO, a town of Austrian Italy, 8 m. S. Brescia, on the high road from Brescia to Cremona. Pop. 2,600.

BAGNOLO, a town of Naples, prov. Principato Ultra, on the declivity of Monte Calvello, 9 m. S.W. St. Angelo de Lombardi. Pop. 5,000. It has a fine collegiate church, and several convents.

BAGNOLS, a town of France, dép. Gard, cap. cant., near the Ceze, on a rock 25 m. N.N.E. Nismes. Pop. 4,847. It is generally ill-built, but has a good square, adorned with a public fountain. It has a college, an hospital, with filatures of silk, dye-works, hat-makers, tanners, &c.

BAGOLINO, a town of Austrian Italy, prov. Brescia, on the Caffaro, 24 m. N.N.E. Brescia. Pop. 3,000. It has several forges for the manufacture of iron and steel.

BAGULCOT, a subdiv. of the distr. Darwar, Hin-

dostan, prov. Bejapoor, presid. Bombay, including the pergunnahs Bagulcot and Badaumy: shape irregular; length 54 m.; breadth 44 m.: area about 1,230 sq. m. Pop. about 100,000. It is bounded N. E. by the Krishna river, but is badly watered, as well from the want of running streams and large wells, as the general deficiency of rain, which in some years does not exceed 26 inches, a quantity surpassed in one month of the S. W. monsoon near the coast. Garden culture is consequently very limited, and most of the villages are on the banks of the larger rivers. In 1820 these pergunnahs contained 319 inhab. townships, including the towns of Bagulcot, Badaumy, Keroor, Seroor, and Perwatee. Under the Maharattas, who obtained them in 1755, they were the theatre of violence and rapine; but after their transfer to the British gov. in 1818, a rapid and complete change took place, and they soon became singularly noted for the absence of crime. (*Hamilton*, i. p. 101.)

Bagulcot, a town of Hindostan, cap. of the above district, and of a pergunnah. Pop. in 1820, 7,500. It is the residence of the principal merchants and bankers.

BAGUR, an inl. division of Hindostan, anciently described as a separate, though minor prov., but more recently attached to the prov. Malwa and Gujrat, between which it lies, in about 24° N. lat., and 74° E. long. It consists of a hilly country, the several ranges of which run N. and S., decreasing in height from Malwa to Gujrat, and mostly covered with thick low jungle forests of teak, black-wood, &c. It is indifferently watered, and the climate for a considerable part of the year is reckoned unhealthy. From the first cause the ground is comparatively unproductive; the digging of wells, &c., is also attended with great labour and expense, but reservoirs are sometimes constructed by throwing an embankment across the stream of a narrow valley. The pop. consists chiefly of Bheels and Meenas, under various petty chiefs: many vestiges of antiquity lie scattered over its surface; but at present this div. contains no inhabited places of any importance, except the towns of Doongurpooz, Bauswarra, and Sangwara. (*Hamilton's E. I. Gaz.* 102.)

BAHAMAS (THE) consist of several hundred islands, of various magnitudes, extending in a S.E. and N.W. direction, between Hayti and Florida, nearly 600 m. from Turk's Island, in 21° 23′, to the Mantanilla Reef, in 27° 50′ N. lat., and from 71° 5′ to 79° 5′ W. long. They are mostly of coral-line formation, low, flat, and but scantily covered with soil, and the greater number of them uninhabited. They belong to Great Britain. St. Salvador, one of these islands, was the first land discovered by Columbus, on the 12th of Oct. 1492. Like the neighbouring islands, it was densely peopled by Indians, who were harmless and inoffensive. The most important of the group, however, from its harbour and situation with respect to the Florida Channel, is New Providence; and, as this is the residence of the governor, the seat of the legislature, and the head-quarters of the troops, and as it differs from the other islands in no essential degree, we shall confine ourselves to an outline of its geographical features and general appearance, deeming it unnecessary to dwell upon any of the others. It lies in lat. 25° 29′ N., and in long. 76° 34′ W., and extends about 21 m. from E. to W., and 7 from N. to S. It is nearly covered with large trees and brush-wood, and much intersected with marshes and lagunes. A range of slightly elevated hills runs along a part of the island at a very short distance from the sea; and upon the face of this ridge stands Nassau, the capital, and the seat of government. Another range of hills runs parallel to the former, at the distance of about 2½ m.; the whole of the intervening space forms an extensive marsh. The total number of sq. m. in the Bahamas, including all the islands from New Providence to Key Sal and Anguilla, is, according to Porter's Tables, 5,424. The pop., in 1832, was 4,674 whites, 4,069 coloured and free blacks, and 9,765 slaves. In 1837 the total pop. was 19,943. The inhab. are divided into the two classes of residents and *wreckers*. The latter are mostly employed in rescuing vessels, with their crews and cargoes, shipwrecks being very frequent in these intricate, shallow, and dangerous seas. They sail in small flat-bottomed sloops, admirably fitted for the waters they navigate. They are excellent sailors; are familiar with all the keys, shoals, and breakers; and encounter danger with alacrity and courage. Their great places of rendezvous are the Florida Gulph, the Hole in the Wall, and the Hog-sties. Their vessels are very numerous. They are licensed by the governor, and receive a salvage on all property rescued from the waves. The climate varies very considerably, both in temperature and salubrity, according to the geographical position and local peculiarities of the islands. At New Providence the weather, during the cold season, which extends from Nov. to May, is extremely pleasant; the thermometer in the shade being generally from 60° to 70°, the mid-day heat tempered by a constant breeze; and the evenings cool and agreeable. From May to Nov. the heat increases or decreases, as the sun advances or retires from the tropic of Cancer, and during this period the range of the thermometer is from 75° to 85°, seldom rising above 90°. The increase of temperature is generally accompanied by southerly winds or calms, which are described as being very oppressive. A considerable quantity of rain falls during the year, but we possess no exact measurement of it. The spring rains commence about May, and continue for a few weeks: those of autumn commence in Sept., and generally terminate in Nov. or Dec. During the autumnal months fogs are very frequent in the mornings and evenings; but from Dec. to May the weather is generally fine, clear, and dry. It is impossible to ascertain the exact amount of acres cultivated, as, owing to the rocky nature of the islands, spots are generally selected to plant in, without any attention to the regularity observed in more favoured soils; but the number of persons set down in the official tables as employed in agriculture are 3,590. The chief articles of produce are, Indian and Guinea corn, potatoes, yams, beans, peas, pine-apples, cotton, ochres, casada, pumpkins, arrow-root, onions (of which a great quantity are raised), oranges, limes, and lemons. There may be about 12,000 acres of pasturage, which give support to 1,490 horses, 2,765 horned stock, 7,890 sheep and goats, and 3,350 swine. A great quantity of dye and other woods is exported; but the principal export is salt, of which no less than 442,031 bushels, valued at 16,291*l*., were exported in 1834. The gross amount of exports in 1834 was 92,802*l*.; of imports, 142,021*l*.; the principal of which were slops, flour, corn-meal, and oats, cotton wool, cotton manufactures, dye-woods (for exportation), linen manufactures, wood and lumber, woollen manufactures, and hardware. The number of tons of shipping employed inwards was 34,150 in 1834, and the number of men 2,251. Outwards there were 31,607, in which were 2,090 men. The number of vessels built in 1834 were 17; in all, 716 tons burden. The total number of the militia is 367. At the several schools, chiefly supported by the colonial government, except one by the home government, and another by the associates of the late Dr. Bray, there are 1,117 pupils, and the Wesleyans instruct about 630 more of all colours and sexes. The government consists of a governor, a council of 12, and a house of assembly of 30 members. The courts of law are, the Supreme Court, which holds its sessions in terms of 3 weeks, with the powers of the common law at Westminster, and its practice modelled on that of the King's Bench. The revenue of these islands for 1837 was 25,165*l*., and the expenditure 27,193*l*. The historical sketch of the Bahamas will not detain us long. New Providence was settled in 1629 by the English, who kept possession of it till 1641, when they were expelled by the Spaniards, who murdered the governor, and committed many acts of barbarous cruelty. It was recolonised in 1666 by the English a second time; but they were again expelled by the French and Spaniards in 1703, and from that period it became a rendezvous for pirates, till formally ceded to the English in 1783, in whose possession, with the other islands, it has since remained. The proportion of the 20,000,000*l*. of compensation granted by Britain awarded to the inhabitants, was 128,340*l*. 7*s*. 5¼*d*., while the relative value of the slaves was 290,573*l*. 15*s*. 3¾*d*.

The principal islands forming the Bahama group are, New Providence and Keys; Andross Island, Green and Grassy Keys, Grand Bahama, and the Berry Islands; Great and Little Abaco and Keys, Harbour Island, Eleuthera, Royal Island and Keys; St. Salvador and Little Island; Watling's Island and Rum Key; Great and Little Exuma and Keys; Ragged Island and Keys; Long Island; Crooked Island, Fortune Island, and Acklin's Island; Great and Little Heneagua, Mayaguana, French and Attwood's Keys; the Calcoss Turk's Island, Key Sal, and Anguilla.

BAHAR or BEHAR, an inl. prov. of Hindostan, presid. Bengal, one of the largest and most important under the British dominion. It lies chiefly between 22° and 27° N. lat., and 83° and 87° E. long.; having N. Nepaul; W. Oude, Allahabad, and part of Gundwana; S. the latter prov.; and E. Bengal: area about 53,744 sq. m. Pop. (1822) 8,117,700.

The Ganges runs a course of 200 m. through this prov., W. to E., dividing it into two nearly equal parts. The other chief rivers are the Sone, Gunduck, Dummodah, Caramnassa, and Dewah, all tributaries of the former: there are numberless smaller streams, and the prov. generally is well watered, especially its N. portion; in the S. irrigation is artificially effected by means of wells, dams, trenches, &c. It may be described under three divisions; one an uninterrupted flat extending for 70 m. N. of the Ganges, to the forests of Nepaul and Morung; a second, or central div., extending 60 m. S. from the Ganges, consisting only in part of plains, but yielding nearly 2-3ds of the whole annual produce of opium; and a third and more elevated region, S. of the latter, with an area of 18,000 sq. m., less fertile than the others, but said to contain diamond mines, and thence called Nagpoor. Climate temperate, but in the hot seasons parching wind from the W. often prevail during the day. Frosts are

rare, but during the cold seasons the thermometer often ranges from 35° to 70° (Fahr.) in the course of the day, among the hills; and in this district the winds are very bracing to European constitutions. No diseases are peculiar to the prov., but bronchocele is very prevalent on the N. side of the Ganges. Soil fertile, and productive of the drier grains: it also produces large quantities of nitre, with sulphate and muriate of soda, especially N. of the Ganges, where nitre is a gov. monopoly. Agriculture, commerce, and manufactures, have always been in a comparatively flourishing state in this prov.; partly from its central position, easy internal communications, and being a thoroughfare for the trade of Bengal with the upper provinces; and partly from its fruitfulness and natural fitness for tillage. Here, however, as well as in Bengal, only about 1-3d part is supposed to be under cultivation. (*Hamilton's E. I. Gaz.* i. 177.) Opium, a staple commodity of the prov., is perhaps the best in India. It is a gov. monopoly, Bahar and Benares being the only provs. within the Bengal presid. where it is allowed to be cultivated: in 1826-27, the produce of Bahar was 9,981 factory maunds, of the value of 1,387,573*l.* sterling; and it has since increased. (*Rep. Revenue*, iii. p. 701.)

Indigo is very extensively grown in Tirhoot, where much forest land, and land formerly used for grain, has been appropriated to its culture, and where the produce is also manufactured upon a large scale. The planters and cultivators are now on good terms with each other; and since it was agreed that only one planter should settle in a village, quarrels among the latter have also ceased. The people in the indigo districts are said to be in a much better condition than elsewhere. Sugar-cane, betel, tobacco, and grain of all kinds, are cultivated largely, and there is a good stock of cattle. Most part of the lands in Bahar are held in small lots by cultivators or *ryots*, who pay a land tax of half the produce: the permanent settlement has been by no means so widely established as in Bengal; jaghires are there rare, but frequent here; while, on the other hand, there are in Bahar but three large zemindaries, viz. those of Shahabad, Tirhoot, and Tickary. This arises from the circumstance that the zemindars of Bahar were always inferior in power and influence to those of Bengal, and their zemindaries much smaller; so that they were sooner and more easily identified with the body of cultivators.

The chief manufactures are, cotton cloths for exportation, essences, and saltpetre, the manufacture of which scarcely passes the E. limits of the prov. Bahar is divided into 8 districts or collectorates, viz. Bahar, Bhaugulpore, Dhurrumpore, Ramgur, Shahabad, Sarun, Tirhoot, and Patna; and yielded (1830) an annual revenue of 7,167,471 rup., or 716,747*l.* sterl.: the revenue has varied but little since 1813. The chief city is Patna. The natives have a finer physical appearance, but are inferior to their Bengal neighbours in cleanliness and domestic economy. In the S. parts agriculture is wholly carried on by slaves; and many of these consist of individuals who, by a practice peculiar to this prov., mortgage their labour until able to redeem a debt: a third part of the pop. are Mohammedans. This prov. anciently is supposed to have formed two independent sovereignties—that of Mithila in the N., and Magadha in the S.; and distinct languages still continue to be spoken in them. It was acquired from Cossim Ali by the British in 1765, since which it has enjoyed perfect tranquillity. The city of Gaya was the birthplace of Buddha, but no Buddhists now remain in Bahar. (See *Hamilton's E. I. Gaz.* i. 102—106.; *Fleming, W. M., Esq., Letter in Rev. Report*, pp. 282—288.)

BAHAR (DISTR. or ZILLAH OF), occupies the central portion of the above prov.; being bounded N. by the Ganges; E. by the distr. of Bhaugulpore; S. by those of Bhaugulpore and Ramgur; and W. by Shahabad: extreme length, E. to W., 120 m.; breadth, 80 m.; area, 5,235 sq. m. Pop., in 1811, 2,755,000, of whom 725,000 were Mohammedans. Surface generally level, especially in the N., where the banks of the Ganges are highly cultivated: there are, however, many scattered hills, and three principal ranges, in the heart of the distr., of primitive formation, containing granite, gneiss, mica, quartz, jasper, hornstone, silica, &c.; but, except toward the S. boundary, none of them probably exceed 700 ft. in height. Next to the Ganges, the chief river is the Sone, its channel being sometimes nearly as large as that of the former; its E. banks are overwhelmed with sand, blown up from its bed in the dry season: there are no lakes, and few marshes in this distr., although in the wet season much of the country is under water. There are many hot springs in various spots; bituminous and other volcanic substances have been also met with, and in one place an extinct crater is distinctly visible. About 490 sq. m. are covered with woods and thickets, including the bamboo, palm, mango, fig, apple, pomegranate, &c., which are all cultivated (tamarisk and zizyphus bushes in large quantity); the *strychnos, nux vomica*, soap-nut, and the *salhar*, believed by Mr. Colebrook to be the tree yielding gum olibanum. The chief wild animals are a large and formidable black bear, the spotted tiger, ichneumon; a few monkeys, squirrels, foxes, and dogs; many birds of prey; porpoises, and a profusion of fish, are found in the Ganges, as well as alligators; but there are no wild elephants, rhinoceroses, or buffaloes; few tigers, and neither parroquets, &c., nor singing birds. The lands near the river yield two crops in the year, but this is not the case with more than 1-8th part of the arable land in the interior. Rice is by far the most important article of culture, but the ears only are reaped; the straw being abandoned to the cattle, or left uncut, till wanted for thatch. Wheat is next in importance; and with it, or with pulse, barley is often sown: maize is almost wholly confined to the banks of the Ganges. Cruciform plants, linseed, and sesamum, are cultivated for their oil; ginger, coriander, capsicum, the potato and other succulent vegetables, are likewise grown; cotton on 24,000 begas, the sugar-cane on 20,000 b., indigo by itself on 1,500 b., and tobacco on 480 b.; betel only on 265 b., but the poppy is very extensively planted, though generally in conjunction with some other produce. The plough and cattle used are both wretched, though the latter are somewhat better than those more to the E.; the grain is trodden out by cattle, and kept by the more opulent proprietors in hovels of mud and thatch. The *ashraf*, or higher ranks, pay no rent for land occupied by their houses, and no landlord may refuse to grant them land for building; but Europeans, not being dignified with the title of ashraf, find much difficulty in obtaining it. Few of the cultivators are rich. A large portion of the land, perhaps about a half, is exempted from the land tax; and yet it is affirmed, and we believe truly, that the taxed portions are the best cultivated and most productive. Some of the rent-free estates are still large, but, owing to the rules of inheritance, they are rapidly subdividing; and many of the zemindars are reduced to the condition of peasants, or are but little above beggary. Many occupiers are in the habit of receiving advances from their landlords, to enable them to carry on their business; while others borrow money for the same purpose, at 2 per cent. per mo. interest; and, ruinous as such payment may appear, the latter are universally observed to be in the end the best off. The cultivators are not subject to the illegal exactions that press on the tenantry in Bengal, and are in consequence attached to their landlords, and ready to promote their interests. The total land revenue in 1830 amounted to 167,970*l.* sterl. Bahar distr. is divided into 12 pergunnahs; it contains a number of considerable towns, one of which, Gaya, the birth-place of Buddha, is celebrated as a place of pilgrimage, and some years since was annually visited by nearly 30,000 devotees: there are a great many small towns, of from 100 to 500 houses. Cotton stuffs, blankets, and carpets, are manufactured; with paper, soap, leather, bricks, &c.; and there are extensive nitre factories and sugar refineries.

Tradesmen have very little capital; general dealers seldom more than 25 rupees, and many of the dealers in grain no more than 400 rupees. The people are of a warlike disposition, passionate, and jealous; the habits of the women proportionally strict. The great subdivision of property has banished every thing like opulence; and marriages and funerals, by the expenses they cause, often bring families to poverty. The houses are neither so well built nor so clean as those met with in Bengal. Drinking to excess, betel chewing, and smoking, are not, however, pursued so far. Among other customs of this distr., girls are never married till puberty: the feet of dying persons are not put into the Ganges; but the parents and children, not of the vulgar, but of "men of rank and learning," are turned out of doors when they are about to die, exposed to all the inclemency of the weather. This odious custom, which would disgrace a nation of savages, has been in numerous cases perverted to the most infamous purposes. (See *Hamilton's E. I. Gaz.* i. 106—111.; *Martin's Hist. Topog. Antiq., &c. of E. India*, i. 1—389.)

BAHAR (*Vihar*, a monastery of Buddhists), a town in the above prov. and distr., in lat. 25° 13′ N., long. 85° 35′ E.; 35 m. S.E. Patna. It is a large straggling place, containing about 5,000 houses, and probably, therefore, about 30,000 inhab. It has few or no good streets; most of its public buildings are in a state of decay; and it has a ruinous appearance. It is supposed to have been at some remote æra the cap of the prov. The plain on which it stands is well watered, fertile, and well cultivated.

BAHAWULPOOR or DAODPOOTRA, a territ. of Hindostan, formerly belonging to Caubul, but now tributary to the maharajah of the Punjab, between lat. 28° and 30° N., and long. 70° and 74° E.; length N.E. to S.W. 280 m.; greatest breadth 120 m.; having N. the Punjab; E. the Bicanere territ. (Rajpootana); S. and S.W. Jaysulmere and Sinde. Its N.W. boundary is for the most part formed by the Sutleje, but for a certain distance opposite the cap. it includes both banks of that

river, as well as those of the Chinauf. The banks of the rivers are every where fertile; but the rest of the country towards the E. is a mere desert. For 4 or 5 m. on either side the Sutleje, the soil is formed by the slime deposited by that river, and is annually watered by its inundations: some portions of it are highly cultivated; others are covered with a soft turf, and the rest with jungle and coppice of low tamarisk trees, abounding with wild hogs, wild geese, game, &c., but having interspersed many small hamlets. The inhabs. are chiefly Juts and Beloochees, Mohammedans, who came thither from the district of Shikarpore, where they were settled early in the reign of Aurungzebe. They are a fair and handsome race, and apparently in a better condition than some of their neighbours. Lieut. Conolly says, "As soon as we had crossed the frontier (from Shikarpore) into Bahawal Khan's territory, we were struck with the improved appearance of the land; the ground was cleared, and cultivated with the better sorts of grain; the people, also, seemed more orderly and respectable." The principal towns are Bahawulpoor, Ahmedpoor (the residence of the chief), Julalpoor, Seedpoor, and Ooch. Durawul, an ancient fort in the desert, is the only place of strength in the country. The public revenue is about 10 lacs rup. a year. The khan maintains an army of about 2,000 regular troops; but in time of war he can raise more than 20,000 men. The government is despotic; but the late khan, who died three years ago, ruled mildly and paternally, and was much beloved by his subjects. This territory was taken from the Moguls by the Persians, and, after the death of Nadir Shah, belonged to Caubul, to which kingdom it was tributary as long as the monarchy lasted. The three last rulers have been nearly independent; but the political power of the country has been broken by the seikhs, and the rajah of the Punjab only spares it on condition of pecuniary payments. It is at present governed by a son of the late Bahawul Khan. (*Elphinstone's Caubul; Burnes's Trav.; Hamilton's E. I. Gazetteer.*)

Bahawulpoor, the ancient cap. of the above territory, near the S. bank of the Sutledge, 320 m. W.S.W. Delhi., lat. 29° 21′ N., long. 72° 10′ E.; at the point of junction of the road leading from Bombay and Calcutta to Caubul. It is about 4 m. in circ., but includes gardens and mango groves. It is surrounded with a thin wall of mud, the houses being of unburnt bricks, with mud terraces. The inhab. consist chiefly of Hindoos, mostly occupied in the manufacture of the silken girdles and fine turbans for which Bahawulpoor is celebrated. The Hindoo traders are distinguished by their enterprise; they deal extensively in European goods, which they receive by way of Bicaneer, and carry these and the productions of India to Balkh and Bokhara, and sometimes to Astrakhan. The Sutleje is navigable, but not used in the transport of merchandise. Notwithstanding the manufactures and trade of Bahawulpoor, Lieut. Conolly says that it shows symptoms of general decay. (See *Elphinstone's Caubul; Conolly's Journey*, ii. 243.)

BAHIA, a marit. prov. of Brazil, on the E. coast, extending from about 9° to 15° 45′ S. lat. It comprises, as at present divided, nearly all the territory included formerly under the ancient captaincy of the same name, together with a portion of that of Ilheos. It derives its name from *Bahia de Todos os Santos*, and is bounded N. by the provinces of Sergipe and Pernambuco (from the latter of which it is divided by the Rio San Francisco); on the S. by Porto Seguro, and Minas Geraes; on the W. by Pernambuco, though still separated by the Rio San Francisco, and on the E. by the ocean. Its length is estimated at about 480 m., and its breadth at from 150 to 200. The estimates of its area vary from 54,000 to 97,000 sq. m. The latter, we are inclined to think, is nearest the mark. The accounts of the pop. are also very various: perhaps it may amount to about 700,000. It is subdivided into 3 comarcas, viz., Bahia, Jacobina, and Ilheos.

The province of Bahia is traversed from S.W. to N.E. by the Serra Cincora, Giboya, and Itabayana. The Serra de Montequevia forms the chief ridge in the interior. Bays and inlets abound along the coast, among which the most celebrated is All Saints Bay. Numerous rivers traverse the province, and the Rio San Francisco, one of the largest of the Brazilian rivers, flows along its N.W. frontier.

The cultivation of tobacco is peculiar to the province, and its produce is much sought after, not only for the market of Portugal, but also for Spain and the whole of Barbary The soil is admirably adapted to the cultivation of the sugar-cane; and the sugar of Bahia bears a high character for its excellent quality, which is sufficiently proved by the fact that Bahia alone exports more sugar than the whole of the rest of Brazil. (*Malte-Brun*, vi. 552.)

The growth of cotton exhibits an annual increase, and Bahia is already become a formidable rival to Pernambuco. The other productions are, rice, of a superior quality; coffee, much excelled however by that of Rio de Janeiro; and Brazil-wood, equal to that of Pernambuco.

The province of Bahia was one of the first peopled by Europeans, and it is also one of those from which they have most effectually removed all traces of the original inhabitants.

Bahia, or San Salvador, the cap. of the above prov., immediately within Cape St. Antonio, which forms the right or E. side of the noble bay of All Saints (*Bahia de Todos os Santos*), whence the prov. and the city derive their names; lat. (of lighthouse on Cape St. Antonio) 13° 0′ 30″ S., long. 38° 30′ W. It was founded about 1549, by Thomas de Souza, first captain-general of Brazil, and was, until 1763, the capital of the colony. Since that period Rio has been acknowledged as the capital, and it also has been the residence of the court since its emigration to Brazil. But, though now inferior to its rival in population and commercial importance, Bahia is one of the largest and most important cities of S. America. The estimates of the population vary from 120,000 to 160,000, of which a third are supposed to be whites, a third mulattoes, and a third blacks. It is built partly along the ridge, and partly on the declivity, of a very high and steep hill fronting the entrance of the bay. It consists of an upper and a lower town, the former including the suburbs of Bom Fim and Victoria. The upper town stands on the ridge between the sea and a lake on the N., and contains several fine streets, in which reside the principal inhabitants of the city. The lower town is extremely dirty, and although the streets are very narrow, it is no uncommon thing to see them occupied by artificers, with their tools and benches. The city is defended by Fort do Mar, and some other fortifications, but none of them are of any very great strength. The local revenue is derived from direct taxes on land and provisions, excise upon exports and imports, and harbour-dues. Land is subject to a tax of one tenth of its produce, and, since the revolution, church lands have also been rendered subject to the same impost, and the clergy are paid by the government. The taxes on provisions, which include beef, fish, flour, vegetables, &c. &c., are annually farmed out in separate parishes. As respects the number and beauty of its public buildings, Bahia ranks first among the cities of Brazil. In the upper town, amongst the chief may be enumerated the cathedral (formerly the church of the Jesuits), dedicated to San Salvador, built of European marble, and considered the handsomest ecclesiastical building in Brazil. The interior is very richly decorated, and over the high altar are two portraits, one of Ignatius Loyola and San François Xavier, probably the only remarkable objects of art which any of the public buildings of Bahia have to offer. (*Denis Brézil*, p. 234.) The other public buildings are, the ancient college of the Jesuits, now converted into a military hospital and medical school; the palaces of the archbishop and the governor; the town-hall (caza de camarca); the tribunal of appeal (caza de relaço); the theatre, built upon a rock; several hospitals (part of the funds for supporting them are derived from lotteries); a caza de misericordia, a bank, &c. &c.

Bahia contains a great number of religious houses, all of them situated in the upper town, but they offer nothing worthy of observation. It also contains between 30 and 40 churches, scattered through the upper and lower towns. The clergy are very numerous, in consequence of its being the residence of the archbishop, who has the control of the ecclesiastical affairs of the empire.

In the lower town the exchange, a massive building of modern date, is worthy of remark. It is built in a peculiar style, in which it has been attempted to imitate the Grecian. The principal street is the Praya, in which is situated the church of the Conceiçao (conception), remarkable on account of the stones with which it is built having been prepared and *numbered* in Europe, and brought thence in two frigates; so that on their arrival they had merely to be arranged in the order previously allotted to them. (*Denis Brézil*, p. 234.) The houses are chiefly constructed of stone, and, contrary to the usual mode in S. America, many consist of three, four, and even five stories. In the upper town are many handsome houses, constructed with balconies and blinds, instead of windows.

The city of San Salvador is almost destitute of institutions devoted to intellectual improvement. Amongst the seminaries of education is one which furnishes a large number of ecclesiastics. There is a public library, with from 60,000 to 70,000 volumes, among which are a few ancient Portuguese works, and some MSS. The greater portion of the good works are in French.

The vehicles generally used in Bahia are called *cadeiras*, and are a kind of palanquin, supported by negroes, who make a practice of clustering at the corners of the streets, to be hired for that purpose.

The harbour of Bahia is one of the very best that is any where to be met with. It may be entered either by

day or by night, and at any time of the tide. The largest ships anchor close to, and immediately abreast of, the town, in from 6 to 7 fathoms. N. and N.W. of the town the bay expands into a noble basin, studded with islands, and affording safe anchorage for innumerable ships. The trade of Bahia is very extensive. The exports consist principally of sugar, cotton, and coffee; with tobacco, hides and horns, rice, dye and fancy woods, nuts, bullion, diamonds, &c.

Account of the Exports from Bahia in the years ending 30th September, 1847, 1848, and 1849.

	Sugar.			Cotton.	Coffee.	Cocoa.	Hides.
	Cases.	Boxes.	Barrels	Bags.	Bags.	Bags.	
1847	72,620	955	5,447	11,403	23,256	3,913	108,408
1848	79,217	986	6,553	11,258	21,158	4,191	82,780
1849	62,055	1,671	8,277	18,491	19,650	3,481	83,921
	Tobacco.			Rum.	Piassaba.	Tapioca.	Jacaranda.
	Rolls.	Mangotes.	Bales.	Pipes.	Bundles.	Barrels.	Pieces.
1847	2,965	81,597	17,323	6,292	91,658	514	9,339
1848	2,429	57,922	11,491	6,515	78,130	155	18,971
1849	2,357	46,813	10,622	9,223	125,058	365	16,298

Of the imports into Bahia, slaves, notwithstanding the nominal suppression of the trade, continue to be the most important article. It is, indeed, impossible to get any accurate accounts of the numbers imported; but those brought to the city and the other ports of the bay are believed not to fall short of from 12,000 to 15,000 a year! Next to slaves, the most important articles of import are cotton manufactures, woollen and linen stuffs, fish, flour, earthenware, wine, copper, iron, &c. The total value of the articles, ex. slaves, imported into Bahia, may be estimated at about 1,500,000*l*., of which those from the U. K. usually amount to about 900,000*l*.

The country round nearly the whole Bay of Bahia, to the extent of from 12 to 20 m. inland, is known by the name of the Reconcavo, and is the most fertile and productive in the comarca. Its soil, called by the inhabitants *massapé*, is black, and its fertility is proverbial. In this district is situated the town of Cachoeira or Caxoeira, which ranks next Bahia, as regards extent, population, and importance. It carries on an extensive trade with the interior of the province, and has a population of about 16,000 inhabitants. The district called the Reconcavo comprises several flourishing villages and country towns, which owe their prosperity to the abundance of their agricultural productions. Among these Tapagipe, or Nossa Senhora de Penha, may be distinguished on account of its containing the country residence of the archbishop of the prov. It contains also a dock-yard, whence many well-built and substantial vessels are constantly launched.

The island of Itaparica, situated in the Bay of Bahia, is the largest with which it is studded. It is about 14 m. in length and 6 in its greatest width. Fruit-trees are very extensively cultivated throughout the island. The industry consists chiefly of whale-fishing, the distillation of rum, and some rope-making. Several towns in the Reconcavo equip vessels for prosecuting the whale-fishery in the bay, which forms a branch of industry on this line of coast.

In the comarca of Ilheos the chief town is San Jorge dos Ilheos, which was formerly flourishing and comparatively opulent and extensive, but has now the appearance of being deserted. The expulsion of the Jesuits gave the finishing blow to its importance.

BAHLINGEN, a town of Wirtemberg, circ. Black Forest, on the Eyach, 14 m. N.E. Rotweil. Pop. 3,000. It has fabrics of cloth and woollen stuffs, tanneries, and numerous breweries and distilleries. There are mineral springs in the vicinity.

BAHREIN, or AVAL ISLANDS, a group consisting of one large, and several smaller islands, in the Persian Gulph, subject to the imam of Muscat, in a bay near the Arabian shore, between lat. 25° 45′ and 26° 16′ N., and long. 56° 15′ and 50° 20′ W. The largest island (Bahrein) is about 25 m. in length, N. to S., by 6 or 7 m. wide, and 80 or 90 m. in circuit: a hilly tract occupies its centre; 4-5ths of its surface are wastes, but the remainder is well watered, partially cultivated, and thickly inhabited. The pop. of the whole group of islands is, perhaps, 60,000, and composed of several different tribes. The native Bahreins number about 40,000 or 50,000; they are a mixed breed between the Persians and Arabs, but possessing more of the indolence and cunning of the former than of the bold frankness of the latter. They are chiefly cultivators, merchants, and fishermen; and for the most part Mahommedans, of the sect of Omar; the rest of the inhabitants are mostly Arabs. The pearl fishery, for which these islands are chiefly noted, employs, during the season, 30,000 men; and yields pearls of the value of from 300,000*l*. to 300,000*l*. yearly. Most of the fishery boats belong to merchants possessing considerable capital, but the largest proprietor in them is the sheik himself, who has upwards of 2,000 boats, each manned, during the season, with 8 or 10 men: he imposes also a small tax on every other boat. The fishing season is from the beginning of June till October. The diving is conducted pretty much in the same manner as in Ceylon (*see* CEYLON); but the divers attach their oyster-net to their waists, and are in the habit of always stuffing their ears and nose with horn or other substances: they can remain under water nearly two minutes at a time. They are often in the most abject circumstances, and generally in debt to the merchants, who obtain the pearls at their own price. Bahrein has a considerable traffic, and might be rendered valuable under a good government, and made the centre of all the commerce on this part of the Arabian coast. Although the only cultivation consists of date plantations, and a few wheat, barley, and clover fields, at least ¼ part of the soil is very rich; and by irrigation much of the rest is capable of being greatly improved. Pomegranates, mulberries, figs, melons, &c. are produced; and cattle, poultry, and plenty of vegetables obtained from the neighbouring coast. Numerous small villages and towns are scattered over the cultivated parts of the island; and at its N. portion there are two towns, Manama and Ruffar. Manama is the residence of the principal merchants, and contains a fort originally built by the Portuguese; the remains of several fine reservoirs and aqueducts, constructed by the same people, exist on this island. At the N. end are two harbours; that to the N. W. having a depth of four to seven fathoms water near the shore. The principal exports are pearls to India, Persia, Arabia, and Bussorah; dry dates, tortoise-shell, canvass, sharks' fins, &c. to India; and dates, canvass, mats, and coloured cloths to the other countries. The chief imports are rice from Bengal and Mangalore; sugar, pepper, blue and white cloths, planks, iron and other metals, cinnamon, camphor, drugs, indigo, &c. from India; coffee, dry fruits, grain, &c. from Bussorah, Persia, and Muscat. There are 20 merchant-vessels, of 140 to 350 tons, belonging to Bahrein, chiefly employed in the India trade. The islands of Maharag, Arad, and Tamahoy, lie N.E. Bahrein, and contain 7,500 inhabitants. Maharag is the residence of the sheik, and has a town with a pop. of 6,000. The sheik of Bahrein keeps up 5 armed vessels; but, in time of war, can fit out 15 or 20. One of his ships is of 400 tons burden, and mounts 22 guns. He also maintains a body of troops, consisting of a few hundred men; but the best defence of Bahrein is in the multitude of reefs surrounding it; and 500 determined men might oppose the landing of as many thousands. The sheik's authority extends over a few places on the Arabian coast. These islands were known to the ancients by the name of Tylos, and are mentioned by Arrian. The Portuguese established a settlement here soon after Ormuz had been taken by Albuquerque; but they were expelled by the Persians subsequently to the fall of Ormuz. For a long period the Persians and the Alassar sheiks contested the possession of Bahrein; but since 1790 it has been wholly separated from the Persian dominions. (*MSS. belonging to the Royal Geogr. Soc.; M'Culloch's Dict. of Commerce.*)

BAIÆ, a famous marine watering-place of ancient Italy, the Brighton of the Roman world, on the W. shore of the Bay of Naples, 8 m. W. of that city, and 2¼ m. N. Cape Misenum. Baiæ was indebted for its rise and celebrity to a variety of circumstances — to the softness and serenity of its climate, the beauty of its situation, —

Nullus in orbe sinus Baiis prælucet amœnis, —

the abundance of its hot springs, which gave to the Romans, who were passionately fond of the bath, the opportunity of indulging in that luxury in every form that was most acceptable, &c. It seems to have come into fashion previously to, or about, the æra of Lucullus, who had a splendid villa either in the town or its immediate neighbourhood, as had also Cæsar, Pompey, and Augustus; and it continued to increase in popularity, and to be a favourite resort of the emperors and of the affluent voluptuaries of Rome till the irruption of the barbarians under Theodoric the Goth. The town was built originally on the narrow slip of ground between the hills and the sea; but as this space was but of very limited dimensions, after Baiæ became a fashionable resort, the foundations of its streets and palaces were projected into the bay itself! This is alluded to by Horace: —

Marisque Baiis obstrepentis urgues
Sub movere litora,
Parum locuples continente ripa. *II. Od.* 18.

No sooner, however, had opulence withdrawn her powerful hand, than the sea gradually resumed its old domain; moles and buttresses were torn asunder, washed away, or tumbled headlong into the deep, where, several feet below the surface, pavements of streets, foundations of houses, and masses of walls, may still be descried. Earthquakes and other convulsions of nature have also

largely contributed to the destruction of Baiæ, of which only a small portion of the ruins now remain. (*Swinburne's Two Sicilies*, ii. 29.; *Cramer's Ancient Italy*, ii. 157.)

BAIBOUT, a town of Asiatic Turkey, pach. Erzeroum, on the Tchorokhi, 62 m. W. by N. Erzeroum. Pop. 3,000.? It is a straggling ill-built town, supposed to occupy the site of the ancient *Varutha*, with a castle which has some marks of antiquity. Instead of walls and bastions, it is defended by portable towers made of logs of wood. They are musket-proof, of a triangular shape, and have raised turrets at each angle. If required in any distant part of the country, as not unfrequently happens, they may be taken to pieces, or, if the roads permit, transported on wheels! The accumulation of snow in winter is here so great as to cut off all communication between Baibout and the circumjacent villages for four months in the year. Cow dung baked in the sun, and collected during the summer months, is the only fuel the poor can afford to purchase. The natives in this part of Armenia are described as a short, stout, and active race of men; remarkably dark in their complexions, brave and hardy, passionately fond of hunting the stag, with which their mountains abound, and invariably civil. (*Kinneir's Asia Minor, &c.* p. 353.)

BAIKAL (LAKE OF), sometimes called the *Sviatore More*, or Holy Sea, in Siberia, in the gov. of Irkoutsk, between 51° and 56° N. lat., and 103° and 110° E. long. Its greatest length, in a N.N.E. and S.S.W. direction, is nearly 400 m.; but, where greatest, its breadth does not exceed 60 m., and is in most parts much less. It is of very unequal depth, sand-banks and shallows occurring alongside of all but unfathomable abysses. It is situated in a mountainous country, and receives several considerable rivers, while its surplus water is entirely carried off by the Angara, a large and rapid river, an affluent of the Jenissei. The fisheries of this lake are very valuable. Great numbers of seals, of a silvery colour, are captured; the skins of which are sold to the Chinese. Sturgeon, to the extent of about 1,000 poods a year; salmon, &c., are also taken; but the grand object of the fishery is the *omul*, a sort of herring (*Salmo autumnalis, vel migratorius*), taken in vast numbers (about 100,000 poods a year) in Aug. and Sep., when it ascends the rivers. The most singular fish belonging to the Baikal is the *golomynka* (*Callyonimus Baicalensis*), from 4 to 6 inches in length, so very fat that it melts before the fire like butter. The latter is never taken alive; but is cast dead upon the shore, sometimes in immense quantities, after storms. It yields an oil, sold to great advantage to the Chinese. The surface of the lake is frozen over from Nov. to the end of April or the beginning of May. (*Klaproth, Mémoires Relatifs à l'Asie*, iii. 89—108.; *Storch, Tableau de la Russie*, ii. 142.)

BAILLEUL, a town of France, dép. du Nord, cap. cant., on a hill near the Meterbecque, 16 m. W. N. W. Lille, within a short distance of the Belgian frontier. Pop. 9,911. It is open, and is generally well built; it has various fabrics of cloth, cotton and lace, paper and hats, with a large distillery, oil-mills, tanneries, potteries, &c. A species of cheese dit *de Bailleul*, made in the environs, is highly esteemed. Bailleul is the name of several small towns in various parts of France, but all too inconsiderable to deserve notice in this place.

BAIN, a town of France, dep. Ille et Vilaine, cap. cant., 18 m. S. Rennes. Pop. 3,515. It has manufactures of serges and woollen stuffs.

BAIS, a town of France, dép. and arrond. Mayenne, cap. cant. Pop. 2,443. This also is the name of a town of about the same size, in the dép. Ille et Vilaine, arrond. Vitré.

BAJA, a town of Hungary, co. Bacs, near the Danube, 29 m. N. by W. Zombor, lat. 46° 10′ 26″ N., long. 38° 58′ 17″ E. Pop. 12,000. It is the seat of the courts of justice for the co., has a Catholic and a Greek church, a synagogue, and a Catholic gymnasium. It contains the castle of Prince Grassalcovics.

BAKEWELL, a town of England, co. Derby, hund. High Peak, par. Bakewell, 22 m. N.N.W. Derby. Pop. (1821) 1,782; (1831) 1,898. Area of township, 3,380 acres. The town is beautifully situated on the W. bank of the Wye, 2 m. above its confluence with the Derwent. The church, a spacious Gothic structure, on an eminence, contains many fine monuments. The Independents and Wesleyans have each a chapel. There is a free-school, founded in 1636, with a small endowment, and an almshouse for six old men. Over a chalybeate spring (which had a high reputation in the Saxon times), modern baths have, within a recent period, been formed; these are constantly supplied with fresh water, which, on its influx, emits considerable quantities of carbonic acid gas: its temp. is 60° Fahr. There is a news-room, museum, &c., connected with the establishment. Near the entrance to the town, from Ashford, is a cotton manufactory, built by Sir Richard Arkwright: it employs about 300 hands. Many of the other inhabitants are employed in the lead mines and marble quarries of the neighbourhood. The weekly market is held on Friday, but there is little business of any kind transacted. There are annual fairs held, Easter Monday, Whit Monday, Aug. 29th, Monday after Oct. 10th, and Thursday after Nov. 11th. The petty sessions for the hundred are held in the town. It is the chief polling town for the N. division of the county. The living is a vicarage, in the patronage of the dean and chapter of Litchfield. The poor-rates levied in the township in 1836 amounted to 1,064*l.* 4*s.*

Three miles N. E. of the town is Chatsworth, the splendid seat of the Duke of Devonshire, on a gentle rise near the base of a finely wooded hill: the Derwent, spanned by a handsome stone bridge, flows past its principal front. The mansion forms a square of 190 ft., enclosing a spacious court, with a fountain in the centre; it has a flat roof surrounded by balustrades, and is decorated with Ionic columns. At the principal entrance, a grand flight of steps leads to a terrace extending the length of the building. The water-works (with the exception of those of Versailles) are considered the finest in Europe. The present edifice stands on the site of the mansion built by Sir William Cavendish in the 16th century, in which Mary, Queen of Scots, was imprisoned 13 years. It was completed in 1706, but a wing, and other additions have been made to it by the present duke, and many improvements are still in progress. Altogether, it is one of the noblest residences in the kingdom, and contains a very large collection of pictures, statues, and articles of *vertu*. Haddon Hall, the property of the Duke of Rutland, the most perfect of the ancient baronial mansions remaining in the kingdom, is about 2 m. S. of the town, on an eminence overlooking the fine vale of Haddon. It was built at different periods; the most ancient part in Edw. III.'s reign; another, in that of Hen. VI.; and the most modern, in the reign of Eliz.; at which period it came into the possession of the Manners family.

The present name of the town is a contraction of its old Saxon name, derived from the chalybeate spring. The castle stood on a knoll, on the E. bank of the Wye. The parish in which this township is situated is the largest in the co., its area being 43,020 acres; and it includes, besides the towns of Bakewell and Buxton, 8 chapelries, 10 townships, and 4 hamlets. The entire population in 1831 was 9,503. (*Lyson's Mag. Brit.*; *Glover's Hist. of Derbysh.*)

BAKTCHISERAI (palace of the gardens), a town of Russia in Europe, in the Crimea, of which, while under the Tartars, it was the capital and the residence of the khan, 7 m. S.W. Simpheropol. Pop. 9,500. "This," says Dr. Clarke, "is one of the most remarkable towns in Europe; first, in the novelty of its manners and customs; these are strictly oriental, and betray nothing of a European character: secondly, in the site of the town itself, occupying the craggy sides of a prodigious natural fosse, between two high mountains, somewhat like the appearance exhibited by Matlock in Derbyshire. The view breaks all at once upon the traveller, exhibiting a variety of objects in a most irregular and scattered manner; while bubbling fountains, running waters, gardens, terraces, hanging vineyards, and groves of the black poplar, seem to soften the horror of rocks and precipices, and even to make them appear inviting." (vol. ii. p. 170., 8vo. ed.) But, notwithstanding this profusion of fountains and water, Baktchiserai is not distinguished by its cleanliness; on the contrary, its streets are narrow, winding, and filthy. It suffered a good deal after its first occupation by the Russians, but latterly it has improved: it is entirely occupied by Tartars. The ancient palace of the khans has been repaired, and is preserved in all its former magnificence. (*Schnitzler, La Russie, &c.*, p. 734.; *Lyall's Travels*, i. p. 261.)

BAKU, or **BADKU**, a sea-port town of the Russian dominions, prov. Daghestan, on the S. shore of the peninsula of Abscharon, on the W. coast of the Caspian Sea, of which it is one of the best and most frequented ports; lat. 40° 22′ N., long. 51° 10′ E. Pop. 5,000.? It is defended by a double wall and deep ditch, constructed in the reign of Peter the Great. It has some mosques and caravanseras, but is meanly built: the houses, which are flat roofed, are covered with a coating of naphtha. Its excellent harbour, and its central and advanced position, give it great advantages as a trading station. The value of the imports, consisting principally of raw silk and cotton goods from Persia, amounted, in 1831, to 1,702,460 roubles. The exports consist principally of naphtha, saffron, &c.

The peninsula of Abscharon is famous for its naphtha springs and mud volcanoes, and before the Mohammedan conquest was a favourite resort of the Ghebers, or fire-worshippers. "The quantity of naphtha procured in the plain to the S.E. of the city is enormous. It is drawn from wells, some of which have been found to yield from 1,000 to 1,500 lbs. a day. These wells are, in a certain sense, inexhaustible; for they are no sooner emptied

than they again begin to fill, the naphtha continuing to increase till it has attained to its former level. It is used by the natives as a substitute for lamp oil, and, when ignited, emits a clear light, with much smoke, and a disagreeable smell. E. of the naphtha springs the attention is arrested by the Atash-Kudda, or fire-temple of the Ghebers; a remarkable spot, something less than a mile in circ., from the centre of which a bluish flame is seen to arise. Here some small houses have been erected; and the inhabitants, in order to smother the flame, have covered the space enclosed by the walls with a thick loam of earth. When fire is, therefore, required for any culinary purpose, an incision is made in the floor, and on a light being produced, the flame immediately arises, and when necessary is again suppressed by closing the aperture! With the fire a sulphureous gas also arises; and a strong current of inflammable air, with which leathern bottles are frequently filled, invariably continues after the flame has been extinguished. The whole country, indeed, around Baku has, at times, the appearance of being enveloped in flames. It often seems as if the fire rolled down from the mountains in large masses, with incredible velocity; and during the clear moonshine nights of November and December, a bright blue light is observed, at times, to cover the whole western range. This fire does not consume; and if a person finds himself in the middle of it, he is not sensible of any warmth." *Kinneir's Persia*, p. 359.) The mud volcanoes, in the vicinity of the town, often throw up vast quantities of mud. Baku was acquired by the Russians from the Persians, in 1801, and along with Astrakhan carries on the whole trade of the Caspian. (*See* CASPIAN SEA.)

BAKU, or BAKOWA, a town of Moldavia, on the Bistritz, near its confluence with the Sereth, lat. 46° 30′ N., long. 26° 47′ E. It is a poor, miserable, filthy place, but has a considerable trade in cattle, corn, salt, and wood. It occupies the site of a city which was once the residence of a Catholic bishop; the ruins of the cathedral still exist.

BALA, a township, market, and assize town of N. Wales, co. Merioneth, hund. Penllyn, 37 m. N.W. by W. Shrewsbury, at the W. end of the largest of the Welsh lakes, in a wild and mountainous district. Pop. of par., 2,359; of town, about 1,200. The town, which consists of one wide street, with a smaller one branching from it, has a neat and respectable appearance. It has a chapel of ease, and 2 other chapels belonging to Independents and Calvinistic Methodists; an endowed grammar-school, founded in 1712, where 30 boys are clothed and educated each for 4 years; a book society, established in 1828; and a town-hall, to which one of the co. bridewells is attached. The market is held on Saturdays, and is well attended. There are 5 fairs, chiefly for the sale of life stock, on the Saturday before Shrovetide, May 14th, July 10th (a large lamb fair), Oct. 24th, and Nov. 8th. Bala appears to have been anciently incorporated, but at present is merely a nominal borough in the jurisdiction of the co. magistrates. The spring assizes, the summer and winter quarter sessions for the co., are held here, and a co. court for debts under 40*s*. every other month; all the courts being alternately held here and at Dollgelly. The town and neighbourhood have been famous from a remote period for the manufacture of knitted stockings and gloves, esteemed for their strength and softness of texture; but this has of late years declined considerably. At present (1838) about 40,000 dozen stockings and socks, and 5,000 pairs of gloves, are annually made. At the S. E. end of the town is a large artificial mound, supposed to be of Roman construction, from the summit of which is a magnificent view, having the lofty Arrans on one side, and Cader Idris on the other. The lake Bala, Tegid, or Pimblemere, is about 4 m. in length by 1 in width; it abounds with pike, perch, trout, and still more with the white-scaled gwyniaid. The whole is the property of Sir W. W. Wynn, who has a fishing-seat on it. The Dee rises in Arran Penllyn, a mountain at the head of the lake, and emerges from it near Bala, where it is spanned by a bridge, near which, on the E. bank, a castle was erected in 1202, of which some traces are yet visible. A branch of the Roman Watling St. passed through or very near the present town, and at the head of the lake are the remains of a Roman station. The artificial mound above mentioned was occupied by the Welsh as one of a chain of forts across this part of the principality, to prevent the incursions of the English lords marchers: at a subsequent period the place was a dependency of Harlech Castle. Bala is a favourite resort of sportsmen during the grouse season.

BALACHNA, a town of European Russia, gov. Nijni Novgorod, on the Wolga. Pop. 3,000.

BALAGANSKOI, a town of Asiatic Russia, gov. Irkoutsk, 90 m. N. W. Irkoutsk, on the Angara.

BALAGUER (an. *Bergusia*), a town of Spain, Catalonia, on the Segre, 14 m. N. E. Lerida. Pop. 4,000. It is situated at the foot of a steep mountain in a fertile plain, and is defended by a castle.

BALAGHAUT CEDED DISTRICTS, an inl. prov. of S. Hindostan, presid. Madras, between 13° 15′ and 16° 20′ N. lat., and 75° 40′ and 79° 20′ E. long.; consisting of part of the region called Balaghaut, or above the Ghauts (which extends from the Krishna to the S. of Mysore, and formed the anc. Hindoo emp. of Karnata), having N. Kurnool, and the territories of the Nizam; E. Guntoor, Nellore, and Arcot; S. Mysore; and W. Dharwar: length about 200 m., breadth various, area 25,456 sq. m. Pop. (1836-37) 2,176,003. It is almost equally divided between the collectorates of Bellary and Cuddapah. It consists mostly of elevated table-lands stretching out into extensive plains; but large tracts are rugged, and there is a great deficiency of wood. There are no large rivers: the Toombuddra forms part of its N. boundary, and fills some watercourses about Bijanagur, the anc. Hindoo capital; but elsewhere irrigation is scarce, and drought frequently prevails. The soil is in most parts either black or red mould: the former is most common in the W. districts, where it forms an extensive plain: it is deep, without vegetatable remains; and when cleared, broken up, and properly pulverised, is found to be exceedingly fertile, and is afterwards very easily cultivated. But this bringing in of the black soil is a very expensive process; and, in consequence, though the red soil be less fertile, yet, as it is more easily brought into a productive state, the poorer classes are generally settled upon it. Drill husbandry is universal. Rain is uncertain; and if it fail in June, the whole crop is in danger of being lost. The *dry* cultivation is almost universal; the *wet* not being supposed to exceed 7 per cent. of the whole. Plantations of indigo, betel, sugar-cane, red pepper, tobacco, &c., are pretty extensively scattered over the country. In 1807 garden produce paid about 6·8 per cent. of the ground rent. The temperature is much cooler than in the surrounding and less elevated districts. Manufactures inconsiderable.

The land has always been regarded as belonging to government, aud the metayer system was prevalent under both the native and Mohammedan dynasties. Between the conquest of the latter and the reign of Aurungzebe, the class of *poligars*, who were originally either mere collectors of the revenue or heads of villages, having greatly increased in numbers and influence, withheld the revenues, set up for petty chiefs, and having established a kind of feudal system, desolated the country by their mutual wars, and reduced it to a state of anarchy and of the utmost misery. When it came into the possession of the British in 1800, its inhab. generally were the poorest in our dominions: "they were seldom even fixed as tenants, but migrated from farm to farm, and from village to village, where they clubbed together to carry on their cultivation." The judicious administration of Sir T. (then Col.) Munro, who was appointed principal collector, not only averted a famine, in consequence of drought, in 1803, but in seven years raised the revenue, without burdening the cultivators, from 1 million to 1¼ million pagodas. In 1836-37 the land revenue amounted to 4,083,377 rup., the total revenue for the same year being 5,362,738 rup., or 536,273*l*. The average total revenue paid by each inhab. of Bellary is 2 rup. 8 an. 8 pic.; and that paid by each inhab. of Cuddapah, 2 rup. The village settlement is predominant in this prov., especially in Cuddapah. The inhab. are more laborious, hardy, and manly, and their food, dress, and weapons, ruder than those of the people below the Ghauts; they were never thoroughly subdued by the Mohammedans, who settled in this prov. at a comparatively late period, and do not now exceed 1-15th part of the pop. Balaghaut formed part of the last Hindoo empire of Bijanagur; after the fall of the Delhi dynasty, it became separated into several indep. states, was conquered by Hyder before 1780; and after 1792 belonged to the Nizam, by whom, in 1800, it was ceded to the British. (*Hamilton's E. I. Gazetteer*, i. pp. 113—118.; *Madras Almanac for* 1838.)

BALAKLAVA, a small sea-port town of European Russia, at the S.W. extremity of the Crimea; lat. 44° 29′ N., long. 33° 31′ 40″ E. It has a small but excellent harbour, land-locked, and with water sufficient to float the largest ships. It has no trade, and is resorted to only by coasters.

BALAMBANGAN, an isl. of the E. Archip., 4th division, lying off the N. extremity of Borneo; lat. 7° 15′ N., long. 117° 5′ E.; 15 m. long and 3 broad, but uninhabited. It has a rich soil, and two harbours abounding in fish. A settlement, formed in 1774, by the E. I. Company, was soon after destroyed by the Sooloos, and a subsequent settlement planted in 1803 was afterwards abandoned.

BALASORE (*Valeswara*), a sea-port town of Hindostan, presid. Bengal, prov. Orissa, distr. Cuttack, of which it is the chief port; lat. 21° 32′ N., long. 86° 56′ E.; 125 m. S.W. Calcutta. Pop. (1822) 10,000. It is a large straggling place, on the S. bank of the Boori-Balang, and much fallen off. Formerly it was a flourishing town, with Portuguese, Dutch, and English factories. It has dry docks, but is at present frequented only by Maldive vessels, salt boats, and other small craft: its exports are

chiefly rice to Calcutta in winter. (*Hamilton's E. I. Gaz.* i. 120.)

BALATON (LAKE OF), in Hungary. *See* PLATTEN-SEE.

BALBRIGGAN, a marit. town of Ireland, co. Dublin, prov. Leinster, near the mouth of the small river Delvan, forming the co. boundary to the N., 17 m. N. by E. of Dublin. It was the scene of a sanguinary battle in 1329 between the first Earl of Louth and some of the English settlers, who disputed the claim to the palatine dignity of the county, but were defeated. William III. encamped here on his march to Dublin, after the battle of the Boyne. It has been much improved by the exertions of the proprietor, who has succeeded in making it both a respectable manufacturing and commercial mart, and a desirable watering-place. It is well built, and baths of every description have been constructed. It is a chapelry formed from Balrothery parish. The chapel, built in 1816, at an expense of upwards of 3,000*l*., was accidentally burnt down in 1835, and has not yet been rebuilt. There is also here a Rom. Cath. chapel, and a place of worship for Methodists. There is a dispensary, and petty sessions are held every alternate Tuesday. The town is the head quarters of the co. constabulary, and near it is a martello tower, with a coast-guard station. There are two cotton mills here, one only of which is (1838) in action, giving work to 90 persons, of whom 84 are females. The yarn is wrought into cloth chiefly in the town, where there are 250 looms thus employed; besides which, in the village of Garrston, 150 looms are worked for the Balbriggan manufacturers. The finished article is chiefly sold in Dublin and Glasgow. The embroidering of muslin is carried on here and in the neighbourhood so as to give employment to upwards of 1,000 females, at the permanent average wages of 2*s*. a week throughout the year: this department is carried on through Belfast and Glasgow agencies, the cloth being embroidered by the workers in their own dwellings, and is bleached in Belfast. Hosiery is also manufactured here, and sold in Dublin. There are 36 frames, which employ 50 persons. The corn trade is extensive. Four flour mills supply flour, meal, and bran to all the neighbouring places, and to Drogheda. The public markets are held on Mondays, in a market-house erected in 1811. The fairs are on the 29th April and 29th Sept.

The harbour, which is naturally small and much exposed, was considerably improved by a pier built about 1765. The quay, which is now 600 feet long, with a lighthouse at the extremity, is frequently filled with craft. At the pier head there is 14 ft. water at high spring-tides, but the harbour dries at low water. (*Priv Information.*)

BALEARIC ISLANDS. *See* MAJORCA, MINORCA, &c.

BALFRON, a village of Scotland, in the W. part of Stirlingshire, in the parish of the same name, 19 m. N. Glasgow, and 19 m. W. Stirling. Pop. of par. 2,067. The village is neat and well built. The inhab. are principally employed as weavers for the Glasgow manufacturers, and in the Ballindalloch cotton mills in immediate vicinity. The latter employ a great number of hands.

BALFROOSH, a town of Persia, prov. Mazunderan, on the Bawool, about 12 m. from the S. shore of the Caspian Sea, lat 36° 37′ N., long. 52° 42′ E. This is a large flourishing city. There are, however, no accurate details with respect to its population; but that was estimated by Mr. Fraser at 200,000, though we should be disposed to think that this was rather beyond the mark. It is situated in a low, swampy, but rich country; and stands literally in the middle of a forest, it being surrounded and interspersed with fine trees. It has an extensive trade, to be accounted for principally by the comparative immunity it has enjoyed from oppressive imposts, as the roads leading to it are bad, and its port, 12 m. off, little better than an open roadstead. It is, or at least was, when visited by Mr. Fraser, entirely peopled by merchants, mechanics, and their dependents, and learned men; and was prosperous and happy, far beyond any other place he had seen in Persia. Streets broad and straight, but unpaved; houses mostly constructed of bricks, in good repair, and roofed with tiles. It has no public buildings of any consequence; the only places of any interest being the bazars, which extend for a full mile in length, and consist of substantially built ranges of shops covered from the sun and weather by a roofing of wood and tiles, kept in excellent repair. There are about 10 principal caravansaras, several of which are attached to the bazars, and are parcelled out into chambers for the merchants and warehouses for their goods. All the bazars and caravansaras are well filled with various commodities, and present a scene of bustle and business, yet of regularity, very uncommon in this country, and, therefore, the more gratifying. There are between 20 and 30 medrasses or college, Balfroosh being nearly as much celebrated for the number and eminence of its moolahs, or learned men, as for its commerce. The river is crossed by a bridge of 9 arches. (*Fraser's Travels along the Caspian Sea, &c.*, pp. 82—99.)

BALI, BALLY, or LITTLE JAVA, an isl. of the E. Archipelago, W. or 1st division, between 8° 6′ and 8° 50′ S. lat., and 114° 40′ and 115° 42′ E. long.; 70 m. long by 35m. average breadth. Pop. estimated in 1815 at 800,000. Coast rugged and without harbours; surface rising gradually to the centre, where a chain of mountains stretches W. and E. across the isl. terminating in the peak of Bali, which is volcanic; geology the same in other respects as that of Java. The land is productive where well watered, as around the coasts, by numerous streams, and elsewhere by artificial means: irrigation is so necessary, that the sovereigns of Bali impose a tax not on the land but on the water by which it is fertilised. In the lower tracts rice is much cultivated, maize and sweet potatoes in the upper lands; in addition to these articles, the Balese, though mostly Hindoos, eat poultry, hogs' flesh, and even beef, without scruple, excepting the sacerdotal class. The chief exports are rice, coarse cloths, cotton yarn, hides, salted eggs, birds' nests, oil, *dingding* (dried flesh), *gambier* (catechu), &c.: the imports, opium, betel, gold, silver, and ivory. The natives being superior to the Malays and Javanese in size, strength, and intelligence, are preferred by the Chinese as slaves. Bali was divided, in 1815, into eight independent states, governed by despotic chiefs: the village system prevails here as in Java. There are but few Buddhists or Mohammedans; but Hindooism prevails in Bali only, of all the isl. of this archipelago. The mass of the people, however, worship the elements, and the tutelary gods of rivers, forests, mountains. &c. There are no religious mendicants, but suttees and immolations are conducted on a much more aggravated scale than in India. The Sanscrit tongue may be distinctly traced in the language of Bali. (*Hamilton's E. I. Gazetteer*, i. 120—122.; *Crawfurd's Hist. of the Indian Archipelago*, ii. 236—259, &c.)

BALIZE. *See* HONDURAS.

BALKH, or BULKH (an. *Bactra*), a prov. of Central Asia, now subordinate to the khanat of Bokhara, chiefly between lat. 35° and 37° N., and long. 63° and 69° E.; having N. the Oxus; E. Buduk-shun; S. the Hindoo, Koosh, and Paropamisan mnts.; and W. the desert; length, E. to W., about 250 m.; breadth 100 to 120 m.: area 30,000 sq. m. Pop. about 1,000,000. (*Elphinstone*, ii. 195.) The S. part is full of stony hills, but has many good and well-watered valleys; the E. is mountainous, and more valuable than the W., which, as well as the N., is sandy and barren. It formerly comprised several districts, which now belong to separate governments, as Khooloom, Koondooz, and others to the E. Its capital, and the territory subordinate to it, have, since the fall of the Dooraunee monarchy in Caubul, to which state it formerly belonged, been taken possession of by the khan of Bokhara. (*Elphinstone's Caubul; Burne's Trav. into Bokhara.*)

BALKH (the *Zariaspa* and *Bactra* of the Greeks), a decayed city of Central Asia, cap. prov. belonging to the khanat of Bokhara, but gov. by its own chief, who receives the whole of its revenues; on the right bank of the Adirsiah or Balkh riv., in a plain 6 m. N. W., a range of the Paropamisan mountains, 18 m. S. the Oxus, and 250 S.E. Bokhara: lat. 36° 48′ N., long 67° 18′ E. Pop., in 1835, under 2,000. (*Burnes.*) The ruins of Balkh occupy a circuit of 20 m.: they consist chiefly of fallen mosques and decayed tombs, none of an age prior to that of Mohammed. The city, like Babylon, has become to the surrounding country an all but inexhaustible mine of bricks. There are many inequalities on the surface of the plain, probably proceeding from buried ruins, and clumps of trees in many directions. Balkh seems to have enclosed many extensive gardens, but these are now neglected and overgrown with weeds. The aqueducts, of which there are said to be 18, are dried up or choked, and overflow after rains, leaving standing pools, which make the place very unhealthy, though Balkh be not naturally in a marshy position, but on a gentle slope toward the Oxus, about 1,800 feet above the level of the sea. A mud wall, of late construction, surrounds a portion of the present town, excluding the ruins on every side for about 2 m. The town contains 3 large colleges, but empty and decaying; and at its N. side is the citadel, a solid building, but not strong as a fort; it contains a stone of white marble, pointed out as the throne of "Cyrus!" The country round is flat, fertile, and well cultivated, said to contain 360 villages, and is watered by 18 canals, drawn from a celebrated reservoir in the Paropamisan mnts. Its wheat and apricots are remarkably fine. Balkh is said to have been built by Kyamoors, the founder of the Persian monarchy, and is called by the natives *Omm-el-Buldan*, "mother of cities." After its conquest by Alexander the Great, it flourished as the capital of a Grecian kingdom. In the 3rd century of the Christian æra, Artaxerxes held an assembly at Balkh for the recognition of his authority. The Magi were expelled by the Caliphs; Jenghiz, Timour, Aurungzebe,

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Nadir shah, and the Afghans, successively possessed it; within the last 12 years it has belonged, with its territory, to the khan of Bokhara. (*Burne's Travels*, ii. 204. 207.)

BALKHAN. *See* TURKEY.

BALLENSTEDT, a town of the duchy of Anhalt Bernburg, on the Getel, 15 m. S. E. Halberstadt. Pop. 2,600. It is situated at the foot of a hill, and is ill-built. In its environs is a castle, the residence of the duke, which commands a fine view, and has fine gardens. It has fabrics of linen, dyeworks, and an hospital.

BALLINA, an inland town of Ireland, co. Mayo, prov. Connaught, on the Moy, 126 m. W.N.W. Dublin. Its former name was Belleek, "the ford of flags." The pop., including that of Ardnaree, a village on the Sligo side of the Moy, connected with it by a bridge of 16 arches, and which may be regarded as a suburb of Ballina, was, in 1821, 6,243, and in 1831, 7,992: the numbers in both parts of the town not being specified in the census of 1834, but included generally in those of the parish in which they are situate, no satisfactory statement can be made of the proportions of the several religious denominations, but the Roman Catholic appear to outnumber the episcopal Prot. in the ratio of 16 to 1, and the number of Presbyterians is quite insignificant. The town, which occupies a pleasing and healthy position, contains several good streets and houses. The parish church is a plain building; the Rom. Cath. chapel, which is considered as the cathedral of the Rom. Cath. bishop of Killala, is a large and very ornamental edifice; there are also places of worship for Baptists and Methodists. The town contains 8 public schools, in which, and in several private seminaries, about 800 children receive instruction. Here also is a dispensary. A new bridge below the town is now being erected, and arrangements are being made for widening the old bridge, which is inconveniently narrow. Races are held in May, on a fine course in the neighbourhood. General sessions of the peace are held in July, and petty sessions every Tuesday in the court-house, a neat modern building. Here is a station of the constabulary, and a barrack. The market, for which commodious shambles are erected, is held on Mondays; fairs on 12th May and 12th August. There are 2 ale and porter breweries, and 2 large flour mills: 8,399 bushels of malt paid duty in 1836. A tobacco and snuff manufactory has been carried on since 1801, and coarse linen is woven, but not to any extent. Within the last four years the provision trade has been introduced, and is now very flourishing; large quantities of pork and bacon being cured, chiefly for the London market. In the neighbourhood is a very productive salmon fishery, rented at 1,500*l.* per annum: the fish is packed in ice, and exported to London. Eels are also taken in large quantities from September to the beginning of November; the fry is sold at 2*d.* per quart. A branch of the Provincial Bank was opened here in 1828, of the Agricultural in 1835, and of the National in 1837. The post-office revenue increased from 643*l.*, in 1830, to 1,212*l.* in 1836. The communication with the interior is kept up by the mail road between Castlebar and Sligo, which passes through the town; a new line is also opened from Swinford and Foxford to Killala.

The Moy is navigable for vessels drawing 11 feet of water for 5 m. from the sea, but the further passage is checked by a bar 1½ m. below the town. A ship canal was commenced a few years ago, to obviate this defect, and to admit vessels of large draught to discharge at the town quay, but the works have been discontinued.

BALLINASLOE, an inl., town of Ireland, co. Galway and Roscommon, prov. Connaught, on the Suck, 78 m. W. by S. Dublin. It owes its origin to a castle (now fitted up as a private residence) on the Roscommon side of the river, long considered as one of the strongest forts in the prov. The battle of Aughrim, in 1691, in which the army of William III., under Ginkell, afterwards earl of Athlone, completely defeated that of James II., under St. Ruth, who was killed in the action, was fought in its neighbourhood. Pop. in 1821, 1,811; in 1831, 4,615. The proportion of episcopal Protestants to Rom. Cath. is about 1 to 5. The two portions into which the town is divided by the river are connected by a line of road, consisting of a causeway and two bridges between the banks, and an island that intercepts its course, having together 16 arches; the whole line is about 500 yards in length. The private buildings have increased rapidly both in number and respectability, nearly a half having been erected within the last 12 years. The parish church is a plain building, with an octagonal spire springing from scrolls, that give it a very singular appearance; the Rom. Cath. chapel is also a neat unornamented structure. The Methodists have two places of worship. About 700 children of both sexes are instructed in the public and private schools. The district lunatic asylum for the province stands on the Roscommon side of the river. It is built in the form of a cross, with accommodations for 214 patients, and is surrounded by an enclosed area of garden and airing ground of 14 acres. The total expense of the land and buildings was upwards of 27,000*l.* Some statements relative to it, in the return for 1837, call for attention. From them it appears that 16 additional cells then building are defective, from want of ventilation, are exposed to the weather, and have no means of being properly heated; that 4 new rooms, built for incurable patients, are dark, and some feet below the ground level; that there is no sufficient fall for the sewers, and that 4 acres of the garden ground are too wet for cultivation! A very objectionable practice of admitting patients who pay for their accommodation is also noticed. A dispensary is maintained in the town. An agricultural society meets here in October, and a horticultural in March. The town is the head-quarters for the Galway constabulary, and there is a small barrack for infantry. Petty sessions are held on Wednesdays and Saturdays in the court-house, and there is a small bridewell, very defective in its interior arrangements. There are 4 flour and meal mills, 3 tan yards, 2 breweries, a pork and bacon stove, and manufactories of coaches and hats: 5,894 bushels of malt paid duty in 1836. The post-office revenue increased from 601*l.*, in 1830, to 980*l.*, in 1836. Branches of the bank of Ireland, and of the agricultural and national banks, were opened here in the same year. The market is held on Saturdays, in the market-house; there is a large supply of grain, the trade in which, and in other departments, has been materially increased, by a branch of the Grand Canal from the Shannon having been lately carried hither, a distance of 15 m. The principal fair, not only of the district, but of Ireland, for the sale of sheep and black cattle, is held in October, and is numerously attended by buyers and visitors from all parts of the U. Kingdom. It continues from the 5th to the 9th of the month. A field in Lord Clancarty's demesne, of Garbally Park, is opened the day before the fair for the show of sheep, and large enclosed spaces are prepared for the sale of both kinds of stock. We subjoin an account of the numbers exposed for sale and purchased in the following years.

	Sheep.			Horned Cattle.		
Year	Sold.	Unsold.	Total.	Sold.	Unsold.	Total.
1790	59,231	2,700	61,931	7,782	850	8,632
1800	67,007	3,379	70,386	5,275	2,474	7,749
1810	69,481	21,520	91,001	5,331	1,727	7,258
1820	59,943	20,833	80,776	4,504	4,001	8,505
1830	66,874	14,611	81,485	5,894	1,563	7,457
1837	63,129	6,177	69,336	7,735	1,402	9,137
1845	66,661	2,922	69,583	8,423	1,214	9,637
1849	60,256	1,190	61,446	7,844	4,914	12,758

In 1828 the number brought to sale was greater than in any other year between 1790 and 1849: viz. 97,384 sheep, 11,513 horned cattle. The decline in the numbers from 1828 to the present period is principally caused by the establishment of sheep and cattle fairs of a similar kind in other places. Wool was formerly sold in this fair in large quantities, but the trade is now generally managed by factors in the great staple towns; there is, however, a wool fair for 4 days on the 6th of July, in which large purchases are made, and fairs of an inferior description for live stock are held on 6th May and 4th July. The town is a great thoroughfare, a main division of the roads leading into Galway and Mayo branching off from it. The conveyances for passengers are numerous; a mail coach and a stage coach from Dublin to Galway passes through it, another mail coach plies between it and Westport; a stage coach plies to Dublin, another to Tuam, and cars daily to Athlone, Roscrea, Galway, and Tuam, conveying an average of 55 passengers each trip. Passengers are also conveyed by the Grand Canal from Dublin, by boats fitted up for their accommodation. The town is extremely well kept; much attention is paid to external cleanliness; the lower classes are generally employed and comfortable; and the constantly increasing influx of visiters every year, whether for business or pleasure, seems to have acted upon those interested in its welfare as a powerful stimulus for its further improvement.

BALLINROBE, an inl. town of Ireland, co. Mayo, prov. Connaught, on the Robe, 25 m. N.N.W. Galway. Pop., in 1821, 2,191; in 1831, 2,575: that of the entire parish in 1834 was 9,635, of whom 372 were of the Estab. Church, and 9,263 Rom. Cath. The town consists of a main street and two branches of well-built houses. Near it is a turlogh or winter lake, called Lough Shy, which, though flooded to a considerable extent in winter, dries in the summer months, and affords pasturage for sheep. Lough Mask, into which the Robe discharges itself, lies about 3 m. W. of the town. The par. church is a small building; the Rom. Cath. chapel is spacious; the Baptists have a place of worship. 2 schools, supported by subscriptions, and 7 private schools, afford instruction to about 500 children. A dispensary is maintained here.

Barracks of considerable dimensions, both for cavalry and infantry, are now unoccupied. There is a flour-mill, a malt-kiln, in which 2,231 bush. of malt paid duty in 1836, a brewery, and a tan-yard. A brisk trade in corn and potatoes is carried on, for which a Monday market is held. Fairs are held on Whit-Tuesday and 5th Dec. General sessions of the peace take place in June and December, and petty sessions are held on Mondays in the court-house, which is also used as a market-house. The bridewell contains sufficient accommodation for the prisoners confined temporally in it. The post-office revenue in 1830 was 247*l*., and in 1836, 348*l*. A daily car, conveying 3 passengers each trip, plies to Tuam. Though the town does not lie on any of the great lines of internal communication, it is in a state of progressive improvement, attributable chiefly to the increased attention to agriculture in the district, and the general spirit of improvement.

BALLON, a town of France, dép. Sarthe, cap. cant., on the Orne, 14 m. N. N. E. Le Mans. Pop. 2,322. It has manufactures of coarse linens and etamines.

BALLYCASTLE, a marit. town of Ireland, N. coast co. Antrim, prov. Ulster, on a bay to which it gives name, 42 m. N. by W. Belfast. It originated in a castle built here by the Earl of Antrim in the early part of the reign of James I., but was not remarkable as a town until about 1770, when large parl. grants were voted to aid the working of the collieries in its neighbourhood. Pop. in 1821, 1,436; in 1831, 1,683; that of the parish of Ramoan, in which it is situated, was, in 1834, 4,977; of whom 1,718 were of the Estab. Church, 1,549 Prot. diss., and 1,710 Rom. Cath. It lies in a beautiful valley in the inner extremity of the bay, and consists of two detached portions, the upper and lower towns, connected by an avenue bordered by forest trees. The houses are mostly respectable, all slated and kept with much neatness. The church is a handsome building; the Rom. Cath. chapel is small; the Presbyterians and Methodists have each a place of worship. Twenty almshouses, provided for workmen reduced or disabled in the collieries, or their widows, are now tenanted by deserving paupers. A manor court is held monthly by the seneschal, for the recovery of debts under 20*l*.: courts baron are held in April and October, and petty sessions on alternate Tuesdays. For these purposes there is a convenient court-house. Ballycastle was formerly a place of considerable business, having in it a brewery, glass-house, and salt-works, all of which have declined since the stoppage of the mines; and it is now little more than a fishing village and a summer watering-place. The collieries, from which it derived its temporary prosperity, lie an each side the promontory of Fair Head; and the discovery of old workings and rude implements, in a part of the cliff previously unexplored, shows that they had been opened at a very remote period. The seam of coal, which shows itself in the face of the cliff at a considerable height above the sea, forms, in one part, a single bed 4½ feet thick; at another, it appears in six strata from 1 to 2¼ feet each, four of which are of flaming, and the two others of bituminous or blind coal. The workings, after having been carried on for a number of years to a considerable extent, have been relinquished, partly on account of the difficulty of penetrating to the dip of the old excavations, and partly from the want of a safe harbour for shipping. The only existing manufacture is that of linen, carried on in the houses of a few cottiers. The fishery of salmon, taken from February to September, appears, from the official return of 1836, to employ 9 boats and 27 men. The markets are held on Tuesdays, that of the first Tuesday in every month being so numerously attended as to resemble a fair. The regular fairs are held on Easter Tuesday, the last Tuesdays in May, July and Aug., and on 25th Oct. and 22d Nov. Large numbers of a very small breed of horses, called Raghery ponies, are brought for sale from the island of Rathlin or Raghery. This island, which lies about 5 m. off the main land, is remarkable both for the singularity of its geological formation, and for having afforded shelter to Robert Bruce when forced to fly from Scotland. The post-office revenue declined from 325*l*., in 1830, to 267*l*. in 1836. The town is on the extreme N. point of the line of road leading round the coast of Antrim from Belfast to Coleraine, and out of the direction of any great channel of trade. The only public conveyances for passengers, who are chiefly visitors to the Giant's Causeway in the vicinity, are two *caravans* to Coleraine, which ply once a week, each conveying a total average of 12 passengers each trip; and mail cars to Dervock and Cushendall, both which carry an average of 6 passengers daily. The harbour, which was originally capable of admitting vessels of large draught, was unsafe from the heavy seas thrown in from the ocean by the northerly gales; but, after upwards of 150,000*l*. of the public money had been expended in attempting to remedy this defect by the erection of a pier, the harbour was filled up with sand, and the pier having been neglected, has gone to ruin. In consequence of this and of the stoppage of the collieries, the trade of the place is almost extinguished.

BALLYMENA, an inl. town of Ireland, co. Antrim, 23 m. N. N. W. Belfast, on the Braid, an affluent of the Maine, which flows into Lough Neagh. The town was taken by assault by the insurgents in 1798, after a sharp engagement, but was immediately after evacuated. Pop. in 1821, 2,740; in 1831, 4,063: that of the parish in which it is situated amounted, in 1834, to 8,005, of whom 912 were of the Establishment, 5,709 Prot. Diss., and 1,384 R. Cath. The town stands in the midst of an extensive plain of uninviting appearance, though pretty well cultivated, and interspersed with low hills, marsh, and bog. The river is crossed by a large stone bridge; many of the houses are antique, with gabled fronts, but those of modern erection are generally of respectable appearance. The ecclesiastical buildings consist of the par. church, a R. Cath. chapel, two places of worship for Presbyterians, one for Seceders, and one for Methodists. The diocesan school of Connor was removed here from Carrickfergus in 1829, and large schools for boys and girls are maintained on an endowment by John Guy. Courts leet and baron are held annually; a manor court monthly, for the recovery of small debts; the general sessions in January and June, alternately with Ballymoney; and petty sessions on alternate Tuesdays; there is a well-arranged bridewell, and a police constabulary station. The town owes its prosperity chiefly to the linen trade: the brown linen sales average 70,000*l*. annually; and upwards of 14,000 pieces are bleached yearly in 14 bleaching grounds in the neighbourhood. There is a mill for spinning linen yarn. A distillery in the town paid, in 1836, duty on 41,778 gal. spirits; and in the same year 3,393 bush. malt paid duty in the town. The market for linens is held on Saturdays; there are also two other markets in the week for grain and provisions, principally pork, large quantities of which are sent to Belfast. The market-house is a well-built edifice in the middle of the town. The fairs are held on the 26th July and 21st Oct. The post-office revenue in 1830 was 757*l*.; in 1836, 937*l*. A branch of the Provincial Bank was opened here in 1833; of the Belfast and Northern banks, in 1834; and of the Agricultural Bank, in 1836. The town lies on the mail-coach road from Belfast to Londonderry, and maintains a coach, a *caravan*, and a car, to ply to Ballymoney, each six times a week, carrying an aggregate average of 16 passengers each trip. The general appearance of the place, both as to its external aspect, and that of its population in dress and manners, is the same as what is to be seen in most other towns in the N. part of Ireland under similar circumstances.

BALLYMONEY, an inl. town of Ireland, co. Antrim, prov. Ulster, on a small branch of the Lower Bann, 8 m. S. E. Coleraine. Pop. in 1821, 1,949; 1831, 2,222: that of the parish was, in 1834, 12,003, of which number 1,019 were of the Establishment; 9,489 Prot. diss.; and 1,495 Rom. Cath. It is irregularly built on an eminence, about 9 m. E. of the Bann. Its places of worship are, the par. church, a Rom. Cath. chapel, and houses for Presbyterians, Remonstrants, Seceders, and Covenanters. A school, on the foundation of Erasmus Smith, is established, and several others on private endowments, in which, including private seminaries, about 700 children are instructed. There is a dispensary, and a mendicity association. A steeple chase in December for a gold cup has been substituted for races, which had been a favourite sport. A manor court is held on the first Friday of every month; general sessions of the peace in January and June, alternately with Ballymena; and petty sessions on alternate Tuesdays. The court-house is in the centre of the town, and there is a well-arranged bridewell: a chief constabulary station is fixed here. The trade is principally in fine linens, a species of which, called Coleraines, is in great demand: there are two markets for coarse linens. An extensive trade is also carried on in grain, butter, and provisions. In 1836 duty was paid on 102,792 gall. spirits, and 12,992 bush. malt: there is also a tallow manufactory, a brewery, and a tan-yard; a large mill for spinning flax, and a flour-mill. The regular market days are Thursdays; fairs are held on 6th May, 10th July, and 10th Oct. The post office revenue for 1830 was 365*l*.; for 1836, 519*l*. A branch of the Belfast Bank was opened in 1834, and of the Ulster Bank in 1836. The town lies on the mail-coach road from Belfast to Londonderry; a coach and two cars ply each six times a week between it and Ballymena, conveying an aggregate average of 18 passengers each trip.

BALLYSHANNON, a marit. town of Ireland, co. Donegal, prov. Ulster, on the Erne, where it discharges itself into Ballyshannon Bay, 108 m. N. W. Dublin. It consists of three very steep and irregular streets on one side of the river, and a poor suburb, called the Purt, on the other: the communication between them is by a bridge of 14 arches. The parish church stands on the summit of the hill on which the town is built: there are 2 Rom. Cath. chapels, 2 places of worship for Me-

thodists, and 1 for Presbyterians. An artillery barrack adjoins the place, and it is a chief contabulary station. The bor. was incorporated by James I., in 1613, and returned 2 mem. to the Irish H. of C. till the Union, when it was disfranchised. A manor court for pleas to the amount of 2*l*. is held every three weeks, petty sessions once a fortnight. The court sits in an upper apartment of the market-house, which is also used as an assembly-room. In the immediate vicinity of the town is a magnificent cascade formed by the Erne, here 150 yards broad, throwing its waters over a ridge of rock 16 ft. high, with a noise audible for several miles. Salmon and eels are caught in great numbers; the former chiefly for the British markets: the annual produce is upwards of 50 tons. There are no manufactures of any consequence, and the trade is confined chiefly to retail dealings, owing to the badness of the harbour, which, notwithstanding the most spirited exertions of the chief proprietor, is still impracticable for vessels of any draught. There is a distillery, which in 1836 paid duty for 114,631 gallons of spirits; also a brewery: 8,234 bushels of malt paid duty the same year. The post-office revenue in 1833 was 570*l*.; in 1836, 852*l*. A branch of the Provincial Bank was opened in 1835. Markets are held on Tuesdays and Saturdays; fairs on 18th of Sept., and on the 2d of every other month. A mail-coach, conveying an average of 3 passengers each trip, plies between Enniskillen and this town every day in the week; and a car to Sligo carries an average of 3 passengers each trip on every day but Sunday.

BALTA, a town of European Russia, gov. Podolia, on the Kadynia, 160 m. S. E. Kamenetz. Pop. 1,600. Its suburb, on the S. side of the river, now in the gov. of Kherson, was formerly in Turkey, while the bulk of the town, or the portion on the N. side of the river, was in Poland. The latter is comparatively well built, and industrious.

BALTIC SEA, an internal or mediterranean sea, in the N. W. part of Europe, surrounded and very nearly enclosed by Sweden, Finland, Russia, Prussia, Germany, and Denmark. It is usually understood to commence S. of the Danish Islands (Funen, Zealand, and Laland), and thus limited, it is unquestionably the most nearly isolated of any similar body of water in the world. But N. of these islands the Kattegat and the Skager Rack can be regarded only as parts of the Baltic, which may therefore be described as commencing at the Naze of Norway, in long. 7° E., and extending to St. Petersburg on the Gulph of Finland, in long. 30° 28′ 45″ E. Its extreme points in lat. are Wismar, in Mecklenburg, 53° 50′ N., and Tornea, on the Gulph of Bothnia, 65° 51′ N. These points mark also its greatest length, which is consequently about 840 m.; its width varies from 75 to 150 m., and its area is estimated at 155,000 sq. m., without including the Kattegat and Skager Rack, for which an addition of 18,000 or 19,000 sq. m. may be made. (*Catteau, Tableau de la Mer Baltique*, i. 2—37.; *Thomson's Travels in Sweden*, 384.)

The direction in which the Baltic penetrates the land is extremely tortuous. The Skager Rack, the first great gulph of the North Sea, runs N.E. between the shores of Jutland and Norway, for rather more than 150 m., to the W. coast of Sweden; and the Kattegat, from the Skaw (the N.E. point of Jutland), has a direction almost due S. between Jutland and Sweden for about 120 m. The *average* width of these gulphs is nearly equal (70 m.); but the former is much the most uniform, the Kattegat being narrowest at its N. end, between the Skaw and Gottenburg, and widening considerably towards the S. From Laholm Bay to the opposite Danish coast is full 100 m. The 2 belts and the Sound are the 3 straits which connect the Kattegat with the Baltic, properly so called; and their direction is the same as that of the gulph in which they terminate, namely S. This sea has been so long known to Europeans, that its peculiar entrance has ceased to excite attention; yet there is not one, perhaps, where navigation is so intricate. The direct distance between the Kattegat and the *open* sea of the Baltic, is less than 110 m.; that between the shores of Jutland and Sweden is no where more than 130 m.; and in this space, which would not be accounted large, even were it clear, are crowded between 60 and 70 islands, with shoals and sand banks innumerable. Two of these islands, Funen and Zealand, may be called large, and some of the others, as Alten, Langland, Laland, Falster, and Moen, of respectable size, their situation in a close sea being considered. It is the two large islands which, with the Danish and Swedish coasts, form the 3 straits; the smaller isles and sand banks serving to break up their channels, which would otherwise be sufficiently direct, into many small and variable currents. The Little Belt (the strait between Jutland and Funen) is, at its N. end, less than ¾ m. in width. It expands, however, immediately, and between Arroesund and Assens is 8 m. broad. Still further S. the continent recedes into a great bay; and the island becoming broken up into several smaller islets, the greatest width of the Little Belt is, perhaps, not less than 45 m. Its most S. channel contracts again to about 8 m., between the islands of Alten and Æroe. The Great Belt (between Funen and Zealand) is more uniform in its width, which averages about 20 m. Towards the S., however, this strait also stretches out W. into a large bay, formed by the islands of Zealand and Laland, and at its S. termination it is divided into 2 channels by the island of Langland, of which the widest or most E., between Langland and Laland, is about 8 m. across, the other not more than 4 m. The Sound, at its entrance between Elsinore in Zealand, and Helsingburg on the coast of Sweden, is about 4 m. wide; but it spreads into a succession of bays upon the Swedish shore, and towards its S. end, into one of considerable size (Kidge Bay) on that of Zealand. It is here about 28 m. across, but the return of the land contracts its final outlet to about half that amount. (*Catteau*, i. 2—26. *Thomson*, 385.; *Carr., Northern Summer*, 27. 30. 102, &c.)

The direction of the sea from these straits is first E. to Memel (about 300 m.), and then N. as far as the lat. of Stockholm, 59° 21′, a distance of 350 m. It is to these portions that the term BALTIC SEA, in its limited sense is restricted, for at this point it separates into 2 great gulphs; of which one, the Gulph of Finland, runs nearly due E. between the Russian territories of Finland and Revel; the other, the Gulph of Bothnia, a little E. of N., between Finland and Sweden. The Gulph of Finland is 200 m. in length, with a mean breadth of 60 or 70 m.; that of Bothnia is about 400 m. long, and 120 m. in *average* width, but at its narrowest part, the Quarken, opposite Umea, it does not much exceed 40 m. The Gulph of Riga, or Livonia, S. of that of Finland, is also an important inlet, stretching into the countries from which it is named, about 83 m. from E. to W., and about 90 m. from N. to S. (*Catteau*, i. 27—114.; *Thomson*, 326.) Beyond the Danish islands the Baltic is a tolerably clear sea, except on the coasts, where alluvial islands are continually forming. In the main stream the only interruptions to the continuity of water are found in Rugen (which is, however, close to the Pomeranian shore); Bornholm, between the coasts of Prussia and Sweden, but much nearer to the latter than the former; Geland, on the S. E. of Sweden; Gothland, N. E. of Oeland; Oesel, Dago, and several smaller islands between the Gulphs of Riga and Finland; and the Aland archipelago at the mouth of the Gulph of Bothnia. Opposite to these last the S. W. coast of Finland is crowded with an innumerable quantity of islets, which seem as though the main shore were advancing by rapid strides to join the larger islands of Aland, as a stage in its progress towards a junction with the opposite Swedish shore. (*See* ALAND, BORNHOLM, GOTHLAND, &c.)

The Baltic is not, like other close seas, the Mediterranean, Red Sea, &c., shut in by rocks and high mountains. On the N. W. and N., indeed, the mountains of Sweden and Norway form a sufficiently definite boundary; but, towards the E., S. E., S., and even S. W., its borders stretch away in plains occupying much more than half Europe. On the S. the nearest high lands are the Hartz, the Bohemian mountains, and the Karpathians; S. W. lie the flat lands of Jutland, Holstein, and Holland; S. E. the plain is unbroken to the shores of the Black Sea and Caspian; and E. there are no hills except the insignificant elevations of Valdai, between the Baltic and the Oural mountains. The basin of this sea is, therefore, by no means well defined, except towards the N. and N. W. In every other direction it has to be determined by the direction of the running water only, and that on land so level that the basin of the Baltic is constantly combining with those of other seas; with that of the White Sea, for instance, through the lakes of Russian Lapland; with that of the Caspian, by the close approach of many of the affluents of the Wolga to Lakes Onega and Ladoga; and with that of the Black Sea, among the innumerable streams of Lithuania and Poland. It is, therefore, impossible to calculate accurately the amount of land constituting this basin, but it is of very considerable extent, its *extreme* points being in lat. 49° and 69° N., in long. 7° 40′ E. (*Arrowsmith's Atlas*; *Von Buch's Travels*, 337.; *Catteau*, ii. 44. &c.) With the exception, *perhaps*, of some portions of America, there is no part of the world more abundantly watered than this district: upwards of 240 rivers find their way to the Baltic; the lakes in its neighbourhood are all but innumerable, and altogether this sea drains more than a fifth part of the whole surface of Europe. The rivers which flow from

the S. and S. E. run the longest courses, varying from 330 to 750 m. (*See* ODER, VISTULA, NIEMEN, DWINA, &c.) Some of those from the E. appear at first to be much shorter, as the Neva, which *from Lake Ladoga* does not exceed 45 m.; but as this Lake is connected with that of Onega by the Svix, and as Onega receives the Volla, a stream rising close to the 40th meridian, the whole of this water course is not less than 400 m. in length. The other Finnish rivers are not long; but W. of the Gulph of Bothnia the rivers of Sweden vary from 200 to 300 miles. The most peculiar part of this basin is the S. W. corner, where, though the nearest mountains are those of the Hartz, the basin itself does not exceed 20 or 25 m. in width. The Elbe, which runs within 50 m. of the Baltic, and the Eyder, which rises close to its shores, fall into the North Sea, and their affluents belong of course to that system; but such is the flatness of the country in this part of Germany, that the different waters are constantly uniting, and a canal of less than 3 m. has served to connect the Baltic with the Elbe by joining the rivers Trave and Stricknitz, below Lubeck. A similar junction has been effected between the Baltic and the Eyder, a little to the N. of Keil. (*Catteau*, i. 86. ii. 1—81.; *De Luc, Geol. Trav.*, 136. 192. 274. &c.)

The Baltic is extremely shallow, being not more in its W. part, between Keil and Copenhagen, than 16 fathoms deep, and most commonly not more than 8 or 10 (*Von Buch*, 10.); but farther E. it deepens considerably, and midway between Memel and Oeland it is from 60 to 100 fathoms. This is, however, its greatest depth, for the Gulph of Finland suddenly shallows from 50 or 60 fathoms to 16 fath., 4 fath., and, in the Bay of Cronstadt, to even less than this. The average depth of the Gulph of Bothnia is not greater than that of the rest of the sea, but it is less encumbered with sand banks, and its harbours are more convenient: none of those S. and E. of the Gulph of Finland have more than 20 ft. water, and but few have as much as 16. (*Catteau*, i. 39—114.)

The Baltic, being a close sea, with its entrance *from* the approach of the tidal wave, is, of course, not subject to the phenomena of tides. These, so very powerful in the German Ocean, are found to decrease sensibly in the Skager Rack and Kattegat, to be barely perceptible in the entrance of the straits, and entirely to vanish S. of the Danish Islands. (*Catteau*, i. 115–118.) But though tides be wanting, a variation in height equal, frequently, to 3½ ft.* (Swedish) is observed, at irregular intervals, in the waters of this sea. This phenomenon occurs at all seasons, but chiefly in the autumn or winter, or at the time of heavy rains, or when the atmosphere is charged with clouds, though unattended by falling weather. The water maintains its height frequently for several days, sometimes even for weeks, produces considerable agitation in the gulphs and straits, and, except in winter, when its power is restrained by the accumulated snow and ice, inundates the low wastes to a considerable extent. Prevalent winds, flooding rains, melting snows and many other causes, have been assigned for this very remarkable phenomenon, which continued, however, to occur under circumstances totally incompatible with any or all of these; but in 1804 Schulten, a Swedish physician, after collecting all the observations that had been made, found that the greatest height of the water corresponded to the greatest depression of the barometical column and conversely. The extreme variation of the latter amounts in N. Europe to 2½ ins., equivalent to nearly 34 ins. of water; and combining this with the fact that the movement of the water always preceded, by a little, that of the mercury, he concluded that the former was owing to the *unequal* pressure of the atmosphere upon different parts of the surface; the extreme height sometimes attained being dependent upon local and accidental circumstances. It need scarcely be remarked that the almost total absence of oceanic action in this sea leaves the cause, thus assigned, to operate with full power; and if Schulten's hypothesis be confirmed, of which there is now but little doubt, it will, in all probability, serve to explain similar phenomena, observed in other close waters; as the Caspian, Lake Baikal, and the Lake of Geneva, to the similar variations in which Saussure has assigned a cause analogous to that offered by Schulten in the case of the Baltic. (*Mem. Acad. Stock.* 1804.; *Saussure's Voyage dans les Alpes*, i. 15.)

The currents of such a sea as the Baltic must depend, in a great degree, upon its rivers; and as these exist in the greatest number towards the N. and E. parts, the general direction of the water is from N.N.E. to S.S.W., as far, at least, as the latitude of Konigsberg. The impulse from the S. here given by the great rivers of Prussia aids the resistance of the land to turn the current W., towards the Danish Islands, among which it of course becomes broken into many parts, all combining at last in a general N. direction through the Kattegat, and thence S. W. through the Skager Rack into the N. Sea. The currents of the Baltic are, therefore, outwards; and when a W. wind forces the water of the ocean into its gulphs, these currents, always intricate, become extremely complicated, and even dangerous. (*Catteau*, i. 125—132.) This general direction of the water, together with the number of rivers which flow into the Baltic, account for the very slight degree of saltness which it is found to possess. It is well known that the Ocean holds in solution salt, muriate of magnesia, sulphate of lime, and sulphate of soda, to the amount of about 1-27th of its own weight; but at Copenhagen, Von Buch found this proportion reduced to considerably less than 1-100th; and Thomson, at Tunaberg, S. of Stockholm, found it less than 1-210ths — a quantity so slight as scarcely to affect the palate; and it is said that farther to the N. and E. the sailors commonly use the water of the Baltic for their food. The following is the relative gravity of the waters of the Ocean and of the Baltic, under various circumstances; for, it is to be observed, that the latter becomes much salter under a W. wind, when the water of the ocean is forced into it, and that this effect is perceptible for a considerable distance: —

	sp. gr.		*sp. gr.*
Open sea at Helligoland - -	1·0321	Baltic at the Scaw -	1·0203
Frith of Forth - -	1·0290	Sound -	1·0047 to 1·0093
		Tunaberg - -	1·0047

In a N.W. wind the gravity at Copenhagen rose to 1·0189; and near Stockholm the following changes were observed, under the various circumstances: —

	sp. gr.		*sp. gr.*
Wind E. - -	1·0039	Storm at W. - -	1·0118
Wind W. - -	1·0067	Wind N.W. - -	1·0098

Lastly, the quantity of salt procured from 1,000 grains of water, from the following places, was as under: —

	grs.		*grs.*
Frith of Forth . -	36·6	Sound - - -	11·2
Scaw - - -	32·0	Tunaberg - -	7·4

When it is considered that all these experiments were made S. of the lat. of Stockholm (59° 21′), and that an immense number of rivers flow into the Gulph of Bothnia, it seems reasonable to conclude that the N. part of that Gulph should be still less salt, if, indeed, it be not free from any saline mixture whatever. (*Von Buch*, 10.; *Thomson*, 386—390.) The experiments of Von Buch and Thomson, conducted independently, and with every possible care, must be received as satisfactory; but it is, perhaps, necessary to observe that Catteau gives the amount of salt held in solution by the Baltic, generally at 1-30th to 1-40th of the water. (i. 142.) It is not, however, possible to reconcile this statement with others by the same author: such as, that in many bays the water is used for cooking; that in *summer* the Gulph of Bothnia yields only 1 ton of salt from 300 tons of water, and that the specific gravity varies between 1·0126, 1·0047, 1·0041, and 1·0038. (i. 144.) Neither is this quantity of salt consistent with the following table of the relative amount in 3 lbs. (German) of water taken from the N. Sea and Baltic; which is given by Catteau, on the authority of Halem and Vogel (i. 143.): —

	N. Sea.	Baltic.
	gr.	*gr.*
Muriate of Soda - - - -	522	263
—— Magnesia - - -	198 ½	111
Sulphate of Lime - - -	23	12
—— Soda - - -	1 1-3d	1
Residuum - - - -	1 ½	1
Total - -	716 1-3d	388

The German pound is a variable weight, but it is no where lighter than the English, and in most places on the Baltic it is from 400 to 500 *gr.* heavier; taking, however, the English pound of 7,000 grains, the above results give less than 1-5th, and not 1-40th, far less 1-30th as the proportion of salt to the water of the Baltic. The proportion for the N. Sea is about 1-28th, differing very little from that assigned above.

This freshness of the water combines with its shallowness and confined situation to render it peculiarly liable to congelation; in fact, it is every year encumbered with ice, and its straits are usually impassable from December to April. Severe frosts made the sea passable in its widest parts, between Prussia and Denmark, in 1333, 1399, 1423, and 1429. The climate, like that of all Europe, and more especially of Germany, has become more mild under the effects of better drainage and cultivation; but, even within recent times, Charles XII. marched across the Sound and the two belts to the attack of Denmark, and so late as 1809 a Russian army crossed the Gulph of Bothnia on the ice. (*Catteau*, i. 146—158.; *Thomson*, 130. 138.) The temperature in the neighbourhood of this sea does not appear to diminish with increase of lat. so much as might be expected: at Tornea, nearly 66° N., Von Buch affirms that the season does not differ from that of N. Germany by more than a month; and that the polar winter does not set in till the end of November.

The productions, animal and vegetable, of the sur-

* The Swedish foot is 14·69 inches, English.

rounding countries are somewhat modified by the presence of this considerable body of internal water. (*See* SWEDEN, DENMARK, PRUSSIA, FINLAND, &c.) The sea itself is extremely rich in fish of many varieties; the taking of which forms an important branch of industry in all the neighbouring countries. The larger amphibia — morses, lamantins, &c., are absent; but seals are very plentiful, not only in the sea, but in the neighbouring Lakes of Ladoga, Onega, &c.: they do not form a part of human food, as in other less fertile countries of the North, but are chased with great avidity for their oil and skins. Whales are stated to be sometimes of enormous dimensions, but are very rarely found: one was seen in the Gulph of Bothnia, in July 1811; but this, like every other appearance of the animal, was regarded by the inhabitants as an evil omen. Of other and smaller cetacea, the marsouin (*Delphinus Phocæna* of Linnæus) is common enough in the Baltic. (*Catteau*, i. 199—251.)

The Baltic *is decreasing*. Of this there can be now little reasonable doubt, the nature of the surrounding countries and recent observations being taken into consideration. The innumerable lakes that lie between it and the White Sea are nothing but the last remains of a once continuous sea; which may be considered as proved by the appearance of similar animals in these waters, though now fresh, and the broad band of tertiary strata which extends throughout the whole space. (*Lyell, Prin. Geol.* i. 209.) On the S., even within the period of *modern* history, great changes have taken place. Lubeck, which when first built was undoubtedly a sea-port, is now 12 m. from the shore, and incessant pains are requisite to preserve its communication with it by the channel of the Trave. The numerous lakes of N. Germany, like those of Finland, are but the last remnants of the sea, which once and lately lay upon the soil, as is incontestably proved by the continual choking up of some, and the constant detaching of others, from the main body of water by the deposits brought down by the rivers. The Haffs of Prussia are now quite detached; the Isle of Rugen is all but joined to the German Continent; while its former division into several separate islands is attested by the different names bestowed upon its different parts; of which *Rugen Ansich*, in the language of the country, means Rugen Proper. Similar instances might be accumulated all along this coast, all parts of which are full of evidences of the same gradual and rapid changes (*De Luc*, 200. 226. 243. 247. 276. *et pass.*); and were other proof wanting, it would be found in the extensive mosses abounding in marine plants, which constitute so great a part of N. Germany. (*Von Buch*, 2.; *De Luc*, 192. *et pass.*) In the N., on the Gulph of Bothnia, the same decrease is going on with equal, if not greater, rapidity (*Von Buch*, 386.); and though it is certain that the surface of the sea *cannot sink*, this the laws of equilibrium would prevent; yet, from every observation, it is no less evident that its bed is filling up, and that the surrounding land is slowly (perhaps not *very slowly*) rising. Olaf Dalin, a Swedish mathematician of the last century, calculated the change at 1 inch per annum; and judging by the very evident alterations in many parts, this is not probably too high, though the hypothesis was held in scorn when first broached. (*Algarotti's Letters*, 86.) As the same operation may be traced on the shores of the Caspian and Black Seas (*See* CASPIAN and BLACK SEA), there can be little doubt but that these are the last drainings of the European plain towards the S.E., as the Baltic is towards the N. W., or that these waters were once in connection; the very trifling elevation between their basins serving to determine the direction of the rivers, and the consequent deposit of new land. (See *Lyell's Geol. Map of Europe*, i. 209.) One of the most peculiar appearances on the shores of the Baltic consists of the immense number of granite blocks, boulders, as they are called, with which the alluvial soil is every where covered: after all that has been said upon this subject, the appearance of these anomalous masses continue a mystery. The opinion of De Luc, that they were forced by explosion through the superstrata, is perhaps the least objectionable; at all events, it is less violent than the supposition, that they were floated from a distance upon water or ice. (*Geol. Trav.*, 59—76.; *et pass.*)

Commerce. — The Oder, Vistula and other great rivers that have their embouchures in the Baltic, and the many large cities that are built on or near its shores, have made it the theatre of a very extensive commerce. In this respect its importance was much increased by the foundation of Petersburgh, the trade of which is now of great extent and value. Raw products, including corn, timber, hemp and flax, tallow, hides, linseed, bristles, wool, &c., constitute the principal articles of export from the Baltic ports; colonial products, manufactured goods, dry-stuffs, wines, salt, coal, &c., being among the principal articles of import. The leading ports, setting out from the Sound, are Copenhagen, Lubeck, Wismar, Rostock, Swinemunde, Dantzic, (which next to Odessa, is the principal port, not in Europe only but in the world, for the shipment of wheat,) Konigsberg, Memel, Riga, Petersburg, and Stockholm. The U. Kingdom has by far the largest portion of the foreign trade of the Baltic. This is evident from the fact of the British ships passing the Sound greatly exceeding those of any other country. We subjoin an interesting account, shewing the quantities of the principal Articles imported into the U. Kingdom from the Baltic in 1843, 1845, and 1847, specifying the countries whence they came.

		1843.	1845.	1847.
From Russian Ports.*				
Bristles	lbs.	1,724,370	1,908,169	1,278,570
Corn, Wheat	qrs.	3,289	11,221	580,215
— Barley	—	2,655	8	35,731
— Oats	—	45,852	148,347	959,181
Flax and Tow, or Codilla of Hemp and Flax	cwts.	1,089,386	859,627	681,167
Hemp, undressed	—	461,617	603,286	542,857
Hides, untanned	—	32,905	28,333	9,774
Pitch	—	15,781	13,667	12,570
Quills, goose	No.	11,132,200	16,755,900	9,619,000
Seeds, Linseed and Flax seed	qrs.	277,785	314,496	118,190
Tallow	cwts.	779,776	799,121	744,069
Tar	lasts	9,985	8,794	9,656
Wood, Lathwood	fathoms of 216 cubic feet	2,819	4,165	2,396
Wood, not sawn or split	loads	16,603	37,521	59,059
— Deals, Battens, &c. sawn or split	—	136,413	186,706	100,431
Wool, sheep and lambs	lbs.	547,293	3,316,194	805,319
From Swedish Ports.				
Bones of Animals, &c.	tons	1,570	995	1,123
Corn, Wheat	qrs.	601	433	7,817
— Barley	—	7,861	4,568	21,494
— Oats	—	2,457	117,567	69,489
Iron, unwrought in bars	tons	10,919	30,628	29,213
Wood, not sawn or split	loads	5,978	18,490	36,158
— Deals, Battens, &c. sawn or split	—	50,491	77,378	92,045
From Danish Ports.*				
Bark for tanning or dying	cwts.	14,705	8,714	1,701
Bones of Animals, &c.	tons	5,401	4,354	3,012
Butter	cwts.	250	2,215	3,900
Corn, Wheat	qrs.	69,610	73,527	72,221
— Barley	—	130,039	165,120	307,214
— Oats	—	15,518	85,067	228,511
— Pease and Beans	—	16,354	29,157	65,100
Flax and Tow, or Codilla of Flax and Hemp	cwts.	8,852	15,193	6,186
Hides, untanned	—	6,964	1,525	202
Oil seed Cakes	tons	8,828	8,274	9,587
Seeds, Rape	qrs.	53,128	5,751	18,011
Wool, Sheep and Lambs	lbs.	645,555	1,055,371	914,029
From Prussian Ports.				
Beer, Spruce	gall.	131,709	124,590	142,880
Bones of Animals, &c.	tons	1 816	3,389	2,228
Corn, Wheat	qrs.	658,028	423,743	490,435
— Barley	—	31,863	62,900	48,506
— Oats	—	1,769	25,898	81,642
— Rye	—	3,821	- -	58
— Pease and Beans	—	22,503	10,677	25,640
— Wheat, Meal or Flour	cwts.	5,164	2,788	8,726
Flax, and Tow or Codilla of Hemp and Flax	—	173,259	185,019	141,845
Hides, untanned	—	3,153	4,753	3,473
Oil-seed Cakes	tons	15,484	13,394	12,499
Seeds, Linseed and Flax seed	qrs.	65,740	27,664	36,848
— Rape	—	4,773	3,366	10,491
— Tares	—	7,276	3,893	9,667
Spelter Crude in Cakes	—	6,861	6,894	6,758
Wood, Lathwood	fathoms of 216 cubic feet	2,322	3,070	3,095
Wood, Staves	loads	11,745	22,771	17,405
— not sawn or split	—	76,117	187,643	294,699
— Deals, Battens, &c., sawn or split	—	36,305	61,324	71,296
Wool, Sheep or Lambs'	lbs.	132,317	211,844	51,131
From Ports of Mecklenburg Schwerin.				
Bones of Animals, &c.	tons	600	670	617
Corn, Wheat	qrs.	75,446	105,936	60,519
— Barley	—	3,522	28,065	21,087
— Oats	—	- -	1,635	1,518
— Pease and Beans	—	516	10,343	2,343

The ancients were but very slightly acquainted with the Baltic: it is mentioned by them under the title of *Sinus Codanus* (Gulph of the Goth Dane); but it was the theatre of those marvels, which, in ancient geography, always mark imperfect knowledge. Its shores gave forth, however, the warriors who overthrew the Roman empire, and laid the foundations of modern European society. In modern times its straits are more crowded with ships of all nations than those of any other inland sea; and the toll charged by Denmark, on all vessels passing the Sound, is a considerable source of revenue. Large quantities of amber are collected on its shores, especially those of Prussia, and the isle of Rugen. (*Catteau*, i. 189—251.) The origin of the name Baltic has divided etymologists. Some derive it from the Danish *Belt* (a girdle), and others from the word *Balta*, which, in the Lithuanian tongue, signifies White. The

* The exports from Russian ports include those from the White Sea; and the exports from the Danish ports include those from the ports on the W. side of Jutland and of the Duchies; these, however are not very considerable.

great quantity of snow which annually falls in its neighbourhood, renders this last derivation far from improbable, though the former be evidently not less applicable; at all events, the name has existed from very early times, though at present the general designation, used by the inhabitants of its shores, is *Oost-see* (Eastern Sea), as serving to distinguish it from the Atlantic, or *Western Ocean*.

BALTIMORE, a marit. city of N. America, the third in point of size and importance in the United States, and the principal city, though not the cap. of the state of Maryland, on the N. side of Patapsco Bay, 14 m. above its entrance into the Chesapeake, 37 m. N. E. Washington, and 100 m. S.W Philadelphia; lat. 39° 17′ N., long. 76° 36′ W. Pop. in 1800, 23,971; in 1830, 62,738; and in 1840, 134,379. It is pleasantly situated, on slightly undulating ground, and is built round a basin or inner harbour, which affords a spacious, secure, and commodious harbour for vessels of 200 tons, quite close up to the town. The principal part of the city is divided from the portions styled Old Town, and Fell's Point, by a small river called Jones's Falls, over which are erected three handsome stone bridges and four wooden ones: in the outer harbour, near Fell's Point, vessels of 500 or 600 tons lie in perfect safety. The entrance to the harbour is narrow, and effectually commanded and defended by Fort M'Henry. The city is regularly laid out, and well built; streets generally spacious and well paved, and houses neat and commodious. The principal public buildings are the exchange, court-house, college, and university halls; 2 hospitals, a penitentiary, gaol, circus, 2 theatres, 5 market-houses, and 45 places of worship. The exchange is a large and handsome edifice, 366 ft. by 140; the Roman Catholic cathedral is perhaps the finest church in the country, and contains some good paintings; the Unitarian church, St. Paul's church, the court-house, Union Bank, and several other of the public buildings, are both spacious and elegant. St. Mary's College is a Catholic institution, and has a library containing 10,000 vols. The medical college, now the university, received that title with a new charter in 1812: the city contains, besides, a museum, and a gallery of paintings. The houses are mostly of brick; the principal street, about 1 m. long and 80 ft. wide, runs parallel to the water. On an elevation, above the compact part of the city, is the Washington monument, a Doric column of white marble, 140 ft. in height, and 20 ft in diameter, standing upon a base 50 ft. square, and 23 ft. high; containing a circular stair-case, by which visitors ascend to the summit, on which a colossal statue of Washington is placed. It is by far the most splendid structure of its kind in the Union. The Battle monument, an elegant marble obelisk, 35 ft. high, is erected to the memory of those who fell in the defence of the city and Fort M'Henry, in 1814, and is inscribed with their names. The city is supplied with excellent water from four fountains, which are also ornamental structures. Baltimore is admirably situated for commerce, and is a place of considerable wealth and trade; it engrosses most part of the trade of Maryland, together with half that of Pennsylvania, and part of that of W. Virginia and the western states. Its inland communication has been much extended and facilitated by the construction of canals, and of the Baltimore and Ohio Railway. Tonnage belonging to the port, in 1846, 92,143. It is one of the greatest flour and tobacco markets in the world; the annual inspections* of flour amount to from 700,000 to 800,000 barrels; those of tobacco were, in 1838, 28,626 hhds. The other exports are chiefly hemp, flax, flax-seed, Indian corn, and other agricultural products, timber, iron, &c.: the imports are cottons, woollens, sugar, coffee, tea, wine, brandy, silk goods, spices, rum, &c. Total value of the imports into Maryland in 1848, 5,343,643 doll.; exports, 7,129,782 doll., being almost wholly domestic produce. We subjoin an account of the quantities of wheat and wheat flour, Indian corn and Indian meal, tobacco, bacon, pork, beef, and lard, exported from Baltimore in 1847, distinguishing the quantities shipped for the U. Kingdom.

	Wheat.	Flour.	Indian Corn.	Indian Meal.	Tobacco.
Total Exports	*bushels.* 184,614	*brls.* 594,589	*bush.* 1,486,502	*brls.* 102,616	*hh'ds.* 54,574
Whereof to U. Kingdom	83,608	245,315	1,4[illegible],682	68,129	807
	Bacon.	**Pork.**	**Beef.**	**Lard.**	**Manufac. Tobacco.**
Total Exports	*lbs.* 1,756,397	*brls.* 22,928	*brls.* 10,209	*lbs.* 1,429,124	*lbs.* 464,981
Whereof to U. Kingdom	1,280,049	11,136	4,486	405,528	27,830

* Flour is one among numerous other articles not allowed to be exported from the Union till they be inspected and their quality determined by public officers appointed for that purpose.

Arrivals of Shipping at Baltimore in 1848.

	Ships.	Barques.	Brigs.	Sch'ners.
American from foreign ports -	36	69	139	115
Foreign - - - -	23	7	50	32
American Coastwise - -	42	166	233	974
Totals -	101	242	422	1,121

There are in the vicinity numerous cotton manufactories, and flour and other mills in operation. A part of the city is low, and was formerly accounted unhealthy; but this has been obviated by the filling up of the marshy grounds, &c.: to the N. and E. the land rises to a considerable elevation, and affords a beautiful prospect of the city and surrounding country. The citizens of Baltimore are distinguished as well for bold and persevering enterprise, as for hospitality and agreeable manners. Baltimore has had a remarkably rapid growth. It was first laid out as a town in 1729; in 1765 it contained only about 50 houses; it was first erected into a city in 1797. A formidable but unsuccessful attack was made on it in 1814, by a British force under Gen. Ross. (*Encycl. Americana*, i. 537.; *American Official Accounts and Almanac.*)

BALTIMORE, a marit. town of Ireland, co. Cork, prov. Munster, on a bay of the same name, near Cape Clear Island; 46 m. W. S. W. Cork. Pop. in 1831, only 459. In appearance and accommodation it is merely a village, and claims rank as a town only from having been incorporated, and being a port. The houses are built round the remains of the old castle, and have latterly been increased in number and respectability. The church is a new and elegant building on an elevated site; there is an endowed school-house for both sexes, and a dispensary. Baltimore was incorporated by James I., in 1613, and sent 2 mem. to the Irish H. of C. till the Union, when it ceased to be represented, and its other privileges fell into disuse. The jurisdiction of the port extends from Mill Cove to Galley Head, including the creeks of Berehaven, Bantry, Ross, Glendore, and Castle Townshend, in the last named of which (ten miles distant) the custom-house and principal fiscal establishment is held. The customs' duties were, in 1846, 785*l.* The exports in 1835, from Baltimore, with Castle Townshend, Glendore, and Ross, were, corn, &c., 5,681 tons; potatoes, 895 tons; copper ore, 85 tons; swine, 107 head; estimated value, 37,144*l.* The imports, in tons, coals, &c., 697; iron, 113; sugar, 55; salt, 118; herrings, 66; with some minor articles: total estimated value, 17,767*l.* Fisheries, for the protection of which a small pier and quay were erected in 1833, are carried on to some extent.

BALTINGLASS, a par. and town of Ireland, co. Wicklow. The town is situated on the S. side of the Slaney, 34 m. S.W. Dublin. Pop. of par., in 1831, 4,110; of town, 1,670. The latter is remarkable only from a parliament having been once held in it, and from its having formerly returned 2 mem. to the Irish H. of C.

BAMBARRA, a considerable country of interior Africa, the precise position of which is far from being accurately ascertained. On Rennell's map to Park's first expedition, its lat. is given from 12° to 15° 22′ N.; its long. from 15′ E. to 5° 20′ W. The map to the last journal of Park makes the lat. extend from 11° 15′ to 16° 26′ N.; the long. from 1° 35′ E., to 4° 52′ W. (*See also, Advertisement, Park's 2d Journal.*) And, lastly, Caillié appears to place it between 9° 20′ and 14° N. lat., and between 4° 40′ and 9° 20′ W. long. (*Travels, 2d Map*, i. 364. *et seq.*) A mean among these different statements will give about 400 m. for its greatest length, from N. W. to S. E., and about 300 m. for its greatest breadth, in the direction of the meridian. Upon Park's map, the area is about 95,000 sq. m.; but of course little reliance can be placed upon the accuracy of these results. The names of the surrounding countries are known with more certainty; they are, on the E., Gotto, Baedoo, and Maniana; on the S., the Mandingo country, and district of Kong*; on the W., Kaarta; and on the N. and N.E., Beeroo and the tributary kingdom of Masina. (*Park*, pp. 92. 140. 216. &c., and *Map*.) Bambarra is, for the most part, a plain country, with a general inclination to the N. and E. The W. portion is, however, mountainous, or rather hilly, and forms the E. termination of the high lands of Kaarta, Manding, &c. These mountains are of granite and other old formations, but of no great height; and the soil, both on their sides and on the plains, though in the immediate neighbourhood of the Sahara, is generally good. The Niger, Joliba or Quorra, has its rise about 150 m. S. W. from the frontiers of Bambarra, and flows through the whole length of that country from S. W. to N. E. It is an important stream at this early part of its course, but by no means so gigantic as it afterwards becomes. At Sego, the Bambarran capital, it is about the size of the Thames at Westminster. (*Park*, p. 194.) There is no other river of importance in the country, but the smaller

* This term, though the generic appellation for a mountain in the Mandingo language (*Caillié*, i. 366.), appears unquestionably to be the proper name of a kingdom also (*Parke*, p. 240.).

water-courses are innumerable; they all overflow during the rainy season, which lasts full 5½ months, so that the moisture is fully sufficient to render the land in a very high degree productive. The climate is one of intense heat, especially in the N., where the land borders upon the desert; but, upon the whole, the temperature is more endurable in Bambarra than in some of the neighbouring countries; and in the S. parts it is cold enough in the rainy season to render a fire desirable. (*Caillié*, i. 327.) The rainy season extends from June to November, and is ushered in by violent tornadoes. Its termination is usually marked by the dry N.E. wind called Harmattan (*see* ASHANTEE), which is here, however, not cold, as on the coast of Guinea, and so far from being dreaded, is accounted salubrious, particularly to Europeans, from the rapidity with which it absorbs the superabundant moisture of the air.

The mountains are said to be rich in gold, but less so than in Jallonkadoo and other countries further W. They also produce iron, and there can be little doubt but that a well-directed industry would turn their mineral treasures to account. Vegetation is varied and abundant; of trees there are the immense baobab, the bombax (silk cotton), oil palms, dates, tamarind, and a great variety of forest trees. The earth produces, with little labour, yams, cassava, maize, small millet, foigne, rice, &c., many of which yield two crops a year; and the lotus (*rhamnus lotus* of Linnæus) is an important article of food. The tropical fruits, so common in Guinea, are, however, very scarce here; Park (p. 260.) did not meet with the pine-apple, orange, or banana, except near the mouth of the Gambia; and though Caillié (i. 181.) mentions them, their locality is fixed by him also near the coast, and consequently at a considerable distance from Bambarra. It does not appear that the sugar-cane, coffee, or cocoa-tree are met with; but to compensate for this, corn, rice, &c. are so plentiful, that, in the language of the natives, "hunger is never known." This must, however, be received with limitation, since war and neglect of cultivation have sometimes produced destructive famines. The most remarkable production of this country is the shea, or butter-tree, a plant about the size and appearance of the American oak, the oleaginous fruit of which answers every purpose of butter made from cow's milk, combined with the incalculable advantage, in such a climate, of preserving its firmness and sweetness for the whole year without salt. This last is an article peculiarly deficient in Bambarra and the neighbouring countries; so much so as to be a valuable article of foreign commerce, and bought at a high rate with the corn and gold dust of the district. Tobacco is cultivated in many parts with great success. The animals, except monkeys, which are strangers, are the same as those of tropical Africa, generally; lions, tigers, wolves, panthers, elephants, camels, giraffes, antelopes, &c. Cattle are not abundant, and in some few places unknown (*Caillié*, i. 325.); neither do sheep or hogs appear to be plentiful, but goats and dogs are very numerous. There are birds of many species, and a great variety of reptiles, among which are crocodiles, in the river, but these do not appear to be particularly dangerous; the hosts of powerful and venomous insects are regarded with a much greater degree of apprehension.

The natives of Bambarra are a part of the great Mandingo family, which extends from the W. coast to the river Niger (see MANDINGO): they speak the same language, though with a peculiar dialect; and their habits, appearance, and general attainments, are the same. The towns and villages are very populous, some of them containing as many as 30,000 inhabitants; but, on the other hand, the open country is utterly deserted; for which, two reasons may be assigned; viz. the constant danger from wild beasts, and the constant wars between the different states and princes. From Park's account of the pop. of Sego, Sansanding, Wapola, and other towns, combined with the number of such towns which appear on his map, it may perhaps be inferred, that Bambarra contains altogether between 2,000,000 and 3,000,000; of whom 3-4ths at least are slaves. In customs they do not materially differ from other negroes; they are tolerable agriculturists, work in gold and iron, and tan, dress, and manufacture leather. These are the only arts which are held in esteem, as distinct callings; but spinning, weaving, and dyeing, are very diligently performed by the women, and the Bambarran cloth, though coarse, is soft and durable, and generally of a rich, lasting, blue colour.—A pretty extensive trade, at least for a barbarous people, is carried on with the Moors of the desert, the more remote kingdoms of Timbuctoo and Houssa, the territory of Kong, and even with Ashantee and Senegambia. Their exports are iron, cloth, *sometimes grain*, ivory, and, above all, slaves; their imports consist of salt, with a few Manchester goods, some hardware, and arms. In skill, refinement, and cleanliness they are far below the negroes of the Gold Coast; but in moral feeling they appear to be above them: their slaves, who are of two kinds, native born, and foreigners, either purchased, or captured in war, are usually treated with kindness; the disgusting cruelties which mark the festivals of the Guinea Negroes (*see* ASHANTEE) are unknown among them; and they are said to be anxious (especially the women) to assist, to the utmost of their power, the sick and unfortunate: the worst trait in their character is their propensity to theft. The government is rather oligarchical than monarchical; the king is nominally the head of the state, but he appears to have little more power than to recommend certain lines of conduct to the *dooties* (governors) of towns, which recommendation is not always attended to.—The Moors of N. Africa long since introduced Mohammedanism among the tribes S. of the desert: the great majority of these retain, however, their old faith, which, in Bambarra, seems to extend no farther than a general acknowledgement of a supreme being and a future state, with a periodical assembling for worship, only at the time of the full moon. The only religious buildings are the mosques, the ministers of which are also *schoolmasters;* for instruction, to some small extent, is given to the young Negroes, but it is in Arabic, or, perhaps, in some cases, in the native language, written in the Arabic character; there being no Negro tongue which possesses an alphabet. The Moslem Bambarrans are called Bushruns, the Pagans, Kafirs or infidels.—Polygamy is common with both sects, and among their marriage laws is one which is rather peculiar: a woman may refuse to become a wife, but should she, after that, contract marriage with another, the first suitor has the power of seizing her as a slave. The domestic relations are, however, generally maintained with great kindness, and the affection of children to their mothers is touching and peculiar.—The food is usually vegetable; the amusements, music, dancing, and singing; and the effect of simple diet, and cheerful, or rather thoughtless, disposition, is evinced by the fact, that though the climate breeds fevers, fluxes, yaws, elephantiasis, leprosy, and guinea-worm, the Bambarrans, as a people, must be described as healthy, though they do not usually attain to any very great age. (*Park's Travels*, pp. 185—328.; *Caillié*, i. 321—475.)

BAMBERG, a town of Bavaria, circ. Upper Mayne, on a piece of uneven ground on the banks of the Regnitz, about 3 m. above its confluence with the Mayne, 33 m. N. Nuremberg, lat. 49° 53′ N., long. 10° 59′ E. Pop. 21,000. The Regnitz divides it into 3 parts, the communication between them being maintained by two bridges. It is well built, paved, and lighted, and is partially surrounded by ramparts and fossés. Among the public buildings is the cathedral, a noble structure in the Byzantine style, founded in 1004, and finished, after being partially burnt down, in 1110. It contains tombs of its founder, the emperor Henry II., and of his spouse, the empress Cunigunda, with that of Pope Clement II., &c. St. Martin's church, erected by the Jesuits, is a fine building. The church and old convent of St. Michael occupy a height adjoining that on which the cathedral stands. The convent has been converted into a poor-house. There is also a *schloss*, or palace, formerly the residence of the bishops, or princes of Bamberg, a plain building of considerable extent, with a gallery of bad pictures; a town-house, theatre, &c. Bamberg is the residence of an archbishop, a court of appeal for the circle, &c.; and has numerous literary and charitable institutions. At the head of the former may be placed the lyceum and gymnasium, that have replaced the old university, suppressed in 1585, and which furnish a very complete course of instruction for between 700 and 800 pupils; it has also a seminary for the instruction of schoolmasters, a school for mechanics, a museum of natural history, a royal library with nearly 60,000 volumes, and numerous literary societies, and private collections of books and pictures. The infirmary has surgical, anatomical, and other medical schools attached to it, and a botanical garden. Large quantities of beer, in much repute in the surrounding country, are produced here; and there are also manufactures of gloves, jewellery, wax, tobacco, porcelain, &c. A great deal of liquorice is raised in the environs; and its preparation forms a considerable branch of business. Garden seeds are also largely produced. It has two annual fairs, and is the centre of a considerable commerce.

Bamberg was formerly the capital of an independent bishopric, secularised in 1801, and assigned in 1803, to Bavaria. (*Murray's Hand-book for S. Germany; Reichard, Guide des Voyageurs; Penny Cyclopædia, &c.*)

BAMBOROUGH, a small town of England, on the coast of Northumberland, nearly opposite to the Fern Islands, and 17 m. S.E. Berwick-on-Tweed. Though once considerable, it is now so small as to have only about 420 inhab., and would be unworthy notice were it not for its old castle. The latter, which is very extensive, and in good preservation, is built on a basaltic rock, 150 ft. above the level of the sea, from which it is a most conspicuous object. The castle and some other property having been purchased by Lord Crewe, bishop of Durham, he bequeathed it, in 1720, for charitable purposes. In pur-

suance of the benevolent intentions of the founder, the castle has been partially renovated and repaired. Watch is constantly kept, and signals made from the tower in hazy weather, to warn ships of their approach to this dangerous coast; a life-boat is also kept in readiness, and the most efficient measures adopted, not merely for the prevention of shipwreck, but for the relief of those who have undergone that misfortune. A school on the Madras system is established in the castle, in which there are also a library and a dispensary. The income of the Bamborough Castle estates amounted, in 1830, to 8,126*l.* (*Penny Cyclopædia, &c.*)

BAMBOUK, a country in the interior of W. Africa, in about from 12¼° to 14¼° N. lat., and from 10¾° to 12¼° W. long. In form it is nearly a parallelogram, 140 m. in length, and 100 in wid:h, and containing apparently about 14,000 sq. m. in area: but, as the travellers in the country had frequently no better means of determining positions than by estimating distances, and marking courses, the accuracy of these observations cannot be much relied on. The surrounding countries are, Kajaaga, or Galam, and Kasson on the N. W. and N.; Brooko and Fooladoo on the E.; Worada on the S.; and Dentilla and Bondou on the W. (*Voyage au pays de Bambouk*, (*no name*,) Paris, 1789, p. 1.; *Labat*, *Nouvelle Relation de l'Afrique Occi.*, iv. 1.; *Golberry*, *Voy. en Afrique*, i. 380.; *Park*, *1st Journ.*, p. 63. — *2d Journ.*, p. 51.; *Houghton*, *Afric. Assoc.*, cap. xiii. 9. &c.)

Bambouk is a mountain-country, most probably a table-land, near the centre of the Senegal system, with a general inclination towards the N. and N.W. In some places it is very rugged, though the peaks do not appear any where to attain a great elevation: the highest are not more than 600 ft., and those in the S. rarely exceed 300 ft. above the general level of the land, which, however, must itself be considerably higher than the sea. Glens and valleys of the most romantic kind are scattered among these mountains, and they are skirted by plains of some considerable extent. (*Park*, *2d Voy.*, pp. 60. 65. &c.; *Golberry*, i. 412. &c.) Water is very abundant, the Senegal forming the N.E. boundary, and two large affluents of that river, the Fa-leme and the Bar-fing, constituting the W. and E. frontiers of the country. Park considers the latter to be the main stream of the Senegal (*1st Journ.*, p. 336.); and it is certainly much larger than the branch which meets it at the N.E. corner of Bambouk, though the direction of the latter be the same as the after course of the river. Besides these, there are a great abundance of rivulets, more especially towards the W.; and there is one other stream, the Sanon Colez, or Golden River, which is of considerable size. It rises near the capital, and, after traversing the whole country with a N.W. course, is received into the Fa-leme. (*Labat*, iv. 20. &c.; *Golberry*, i. 381. 412. &c.) The climate is extremely hot, and Golberry remarks (i. 412.), that the heat of the interior, which is screened from every wind except that of the desert, is quite insupportable. Towards the S., however, cool days are experienced, and the grass is fresh and verdant throughout the year. The rainy season commences about July or August, and lasts four months: during this period the low country is flooded, the whole rendered frightfully unhealthy for Europeans, and probably not very salubrious to the natives, since their labours seem to be confined to the eight dry months. (*Voy. au pays Bambouc*, p. 37, &c.; *Labat*, iv. 4, &c.; *Golberry*, i. 411.; *Park*, *2d Journ.*, p. 52, &c.) But the effect of the heat, combined with this abundant moisture, is to render Bambouk one of the most prolific countries in the world. The few sterile spots are on the summits of the highest mountains, where, denuded of soil, the bare granite refuses, of course, to nourish vegetable life, but in all other situations the vegetation is rich and varied, almost beyond example. Among trees, there are the majestic boabab, the banyan*, calabash, tamarind, every species of palm, and a great variety of acacias. The vine grows wild and in great luxuriance, but its fruit, like that of all the other trees, is extremely acid, though eaten with great avidity by the natives. As in other countries N. of the Kong mountains (*see* BAMBARRA), the rich fruits of Guinea are absent; but the earth produces in great abundance, and almost without culture, maize, two sorts of millet, manioc, water melons, and nearly every species of leguminous plants. The low lands, also, subject to inundation, are covered with rice of an extremely fine kind, and which grows to the height of eight ft. The Guinea grass is abundant, which, with a great variety of other rich pasture, serves to feed innumerable herds of cattle. (*Golberry*, i. 404—411.; *Voy. au pays Bambouc*, p. 31—45.) This extreme fertility is strangely contrasted with the account given by the Abbé Raynal (*E. and W. Ind.*, iii. 135.) on the authority of a nameless traveller, that the soil was an irredeemable desert, producing nothing but metals, and wholly unfit for the residence of man! The traveller referred to was probably Compagnon, who, according to the author of *Voy. au pays Bambouc*, was never in the country, but had published *les impostures les plus absurdes et les plus punissables*, by confounding soils, people, governments, and manners, the most opposed to each other. (pp. 2. 6.)

* It is supposed, at least, that Golberry means the banyan by the tree which he calls *Benteniérb*. (i. 405.)

The animals of Bambouk are those of tropical Africa generally, and all in great abundance. The number of cattle has already been alluded to; the other domestic animals are horses, sheep, goats, and camels. The lion is not found upon the mountains, but is very numerous in the plains, where also wander immense herds of elephants. The rivers teem with life, and, among other inhabitants, are infested with very powerful crocodiles. Birds of all kinds are numerous, and insects as prolific as in other equinoxial regions; bees, in particular, are so plentiful, that the manufacture of mead is, next to mining and dairy work, the most common occupation of the people. This fact alone is a sufficient proof that Bambouk must abound in trees and plants of the richest kind. (*Golberry*, pp. 405. 408.; *Labat*, iv. pp. 92—99.; *Houghton's Af. Assoc.* xiii. pp. 10. 14.)

But that which has rendered Bambouk a subject of interest for many generations, is its reputed riches in gold and other metals. From the first settlement of Europeans on the coast of Senegambia, now five centuries ago, they heard of an interior country, the centre of all the auriferous mountains in that part of Africa; and, unlike most tales of wonder, the facts seem to have verified all that was related. So abundant indeed is the ore, and so numerous are the mines, that curiosity, even when prompted by interest, seems to have palled, and become insufficient to induce a traveller to delay his journey for the purpose of inspecting a greater number. (*David's Journ. in Golberry*, i. p. 475.) There are four principal mining, or rather gold-producing districts; but the whole soil abounds with gold, which can be collected with very little labour, and hardly any skill; it lies so near the surface, that merely scraping up and washing the earth serves, in many cases, to separate the metal in a pure state; and the more elaborate attempts at artificial operation consist in sinking a few pits, and breaking up the ore, which usually parts from its matrix in such a state that washing only is necessary to render it fit for the market. It need scarcely be remarked, that in such a country, the rivers literally run over golden sands; and should skilled labour be ever brought to bear upon the land, there can be little doubt but that its treasures are inexhaustible. At present, however, the art of mining, properly so called, is quite unknown to the natives. Besides gold, extensive veins of iron exist in Bambouk; and it is extremely probable that most of the other metals would be found if sought for. (*Golberry*, i. p. 434—480.; *Voy. au pays Bam.* p. 21—36.; *Labat*, iv. p. 54 — 58.; *Park's 2d Journ.* p. 55—59.)

The population of Bambouk is dense. The people form a part of the great Mandingo family, from which they do not differ in any respect with regard to appearance, religion, or general manners. (*See* MANDINGO.) The government, though under a king as head, appears to be oligarchical; the farims, or chiefs, exercising almost unlimited authority, each in his own district, but acknowledging a general dependance (perhaps little more) upon the sovereign.

The Bamboukians are inferior in activity and industry to the other Mandingoes, and they have also corrupted their language by a large mixture of Jaloof, Foulah, and Moorish terms. Their arts are extremely few, but their wants still fewer; for though they manufacture nothing but some rude tools and ornaments, their only imports seem to be cotton cloth, ornaments for their women, and salt, of which necessary article, Bambouk, like so many other African countries, is totally destitute. For these they freely give their gold in exchange, and the commerce is one of great profit to their Arab neighbours. (*Golberry*, i. pp. 381. 383—418.; *Voy. au pays Bam.* pp. 45—68.; *Labat*, iv. pp. 2—9. &c.)

Buried in the interior of a burning continent, and surrounded by mountains of difficult passage, Bambouk remained long totally unknown to the rest of the world. It is indeed not a little surprising, that a conquest of the country by a *European* power should have remained unheard of, till communicated by the Negroes themselves 300 years afterwards. In the 15th century the *Portuguese* made themselves masters of the country, and retained it for some considerable time. The natives affirm that they acted very tyrannically, but that becoming reduced in numbers by the unhealthy nature of the climate and their own debaucheries, the ren nant were set upon and destroyed in a single day! This story is confirmed, not only from the fact of many ruinous forts and houses of Portuguese construction still existing, but from the knowledge which the Bamboukians have that such a people as the Portuguese live at a great distance; from the deep-settled hate with which they regard their name; from the terror which they feel lest their former conquerors should return to take vengeance on them;

and from the large mixture of Portuguese words in their language. The expulsion of the Marabouts or Mohammedan priests from their country is another singular event in Bamboukian history. (*Golberry*, i. pp. 419—424.; *Voy. au pays Bam.* p. 7. *et seq.*; *Houghton*, *Af. Assoc.* xiii. p. 11, &c.)

With the exception of the Portuguese, who have left no records of their observations, the first European who reached Bambouk was an English officer, named Gasche, who, ascending the Gambia, contrived to reach the Bamboukian capital in 1690. His stay was short, and his observations merely general and incidental. Compagnon's reported visit was in 1716. Soon after this, M. Brué, a director of the French African Company, formed the project of subduing Bambouk, and securing its mines of gold. To obtain the necessary information as to the practicability of his project, he attempted to enter the country from Kajaaga, on the N.; but it does not appear that he made any great progress in the interior. His impression, however, was, that with a force of 1,200 men his plan could be carried into execution, and the mines secured to European industry. It is indeed more than probable that a less force might succeed in effecting a *first* conquest; but the fate of the Portuguese, and the extreme unhealthiness of the climate, make it also certain that their possession could be retained only by a frightful sacrifice of life, and the most unremitting watchfulness. Between 1730 and 1744 much was done to effect a better knowledge of this country by Messrs. Levens, David, Pilay, and Legrand; the two first governors, the others employés of the French African Company at Senegal: Golberry speaks, also, in high terms of an English journal published in 1782; but this work cannot now be found. Mungo Park, in his first journey outward, reached the W. and N. frontiers of Bambouk (Bondou and Kajaaga); and on his return, as also in his unfortunate second journey, he traversed a considerable part of its S. division: but the traveller from whom the most perfect information might have been obtained was Major Houghton, who not only traversed the interior of the country, but resided in it a considerable time, under terms of the closest friendship with the king. The small remnants of his papers are unquestionably the most valuable documents which exist respecting it.

Such, then, are the scanty sources whence our knowledge of this region is derived; a region the mineral wealth of which is probably not exceeded by that of any other in the world: but which, owing to its climate, will most probably continue in irreclaimable barbarism.

BAMPOORA, an inl. town of Hindostan, prov. Malwah, on the Rewa river, 1,344 ft. above the level of the sea; lat. 24° 31′ N., long. 75° 50′ E. In 1820, it contained 4,000 houses: it possesses an unfinished fort, with well-built walls, inclosing a palace also unfinished, but containing a white marble statue of Jeswunt Row Holcar, by whose order the building was constructed. The town and its territory formerly belonged to Holcar's dominions.

BAMPTON *with Weald*, a parish and town of England, co. Oxford, hund. Bampton, 64 m. W.N.W. London. Area, 8,750 acres. Pop. of par., in 1821, 2,304; 1831, 2,514; of which the town has about 1,600. The latter is built in a level tract of country near the Isis. Its church is an ancient and very fine structure; the living annexed to which is apportioned amongst three vicars. There is an endowed free school, founded in 1635, and a national school for 170 children. The chief trade of the town is fellmongering, which was once considerable, but of late years has greatly declined; its ancient market has also fallen into disuse, but an annual horse fair is still held, Aug. 26. Phillips, author of the *Splendid Shilling*, &c., was a native of Bampton.

BAMPTON, a town and par. of England, co. Devon, hund. of same name, on the confines of Somersetshire. Area, 8,130 acres; pop. of par., in 1831, 1,961. The town is situated on the small river Bathern, an affluent of the Exe, 17 m. W. Taunton. It is built in a straggling manner; and was formerly of more importance than at present, having sent mems. to the H. of C. It has a weekly market on Saturday, and fairs for cattle and sheep, which are well attended, on Whit-Tuesday and the last Thursday of October.

BAN or BANOVICS, a town of Hungary, 16 m. S.E. Trenczen, on a hill near an affluent of the Nentra, lat. 48° 43′ 25″ N., long. 18° 5′ 55″ E. Pop. 2,300. It has a considerable trade in cattle, wood, and iron.

BANAGHER, an inl. town of Ireland, King's co., prov. Leinster, on the Shannon, 68 m. W.S.W. Dublin. The river is here crossed by a bridge of 19 arches, 400 ft. long, and 15 wide, guarded by batteries on each side, this being considered a military pass of some importance. Pop. in 1821, 2,813; in 1831, 2,611: that of the parish of Reynagh, in which it is situated, was, in 1834, 4,793, of whom 516 were of the estab. church, and 4,277 Rom. Cath. The town stands on the side of a hill overlooking the Shannon, and consists of one long street of well-built houses. The church and Rom. Cath. chapel are modern. Near the town is a school of royal foundation, endowed with 370 acres of land: in the town is a national school and a dispensary. An infantry barrack stands near the bridge, and the constabulary has a station here.

The bor. was incorporated by Charles I. in 1628, and sent 2 mem. to the Irish H. of C. till the Union, when it was disfranchised. A court of petty sessions is held on alternate Mondays. It has a distillery, brewery, and some tan-yards. It is well situated, having a great command of inland navigation. Markets, well supplied with corn, are held on Fridays, and fairs on May 1., Sept. 15., which continue for four days; 28th Oct., and 8th Nov. That of Sept. is for live stock, in which it ranks next to Ballinasloe. The post-office revenue in 1830 was 292*l.*, and in 1836, 366*l.*

BANALBUFAR, a town of Spain, Majorca, 10 m. N.W. Palma. Pop. 5,000. It is situated on a mountain cultivated with the greatest care; the ground being supported on terraces, and planted with vines, olives, &c. There is in its environs a quarry of stained marble.

BANBRIDGE, an inl. town of Ireland, co. Down, prov. Ulster, on the Bann, 23 m. S.W. Belfast. Pop. in 1821, 1,715; in 1831, 2,469: that of the par. of Seapatrick, in which it is situated, was, in 1834, 7,718; of whom 1,427 were of the estab. church; 4,897 Prot. diss.; and 1,424 Rom. Cath. It is built on the summit and sides of a hill of some height, and so steep as materially to impede the progress of heavy-loaded carriages. To remedy this inconvenience, the centre of the road was lately cut down for a length of 200 yds., to the depth of 15 ft. in the middle part of the section, so as to form a carriage-way nearly level, while the great breadth of the street still admitted carriage-ways on each side on the original level, a communication being maintained between the houses on the opposite sides of the streets by a bridge or viaduct across the centre of the cut. This is a neat thriving town. A handsome church has lately been erected, partly by voluntary subscription; there are also places of worship for Presbyterians, Remonstrants, and two for Methodists; a public school, and a dispensary. Petty sessions are held every fortnight, and a party of the constabulary is stationed here. This town and neighbourhood is one of the principal seats of the linen manufacture. The great command of water in the vicinage adapts it peculiarly for bleaching, and there are large manufactories of union cloth and thread, and chemical works for the use of the bleachers. The markets are held on Mondays, in a spacious new building: there is also a separate market-place for meal and grain, and a brown linen hall. Fairs are held on the first Monday in every month, and on 12 Jan., first Sat. in March, 9 June, 26 Aug., and 16 Nov.; the last is a great horse-fair. Branches of the Provincial and Ulster banks were opened here in 1833 and 1836. The post office revenue increased from 536*l.* in 1830, to 897*l.* in 1836. The trade of the town is promoted by its vicinity to the canal between Newry and Lough Neagh, which passes at about 3 m. distance. It lies in the line of the mail-coach road from Dublin to Belfast, and coaches and cars ply several times every week between it and Belfast, Lurgan, Newry, and Rathfreland, conveying at an average 33 passengers every trip. Its manufactures have increased with a rapidity seldom experienced. The external appearance of the place, and the habits and manners of its inhab., correspond with this progress. The wealthier classes live in respectable independence; and squalid poverty is not perceptible even among the lowest. The highly cultivated state of the surrounding country, and the calm beauties of its scenery, tend much to heighten the pleasing impressions excited by the contemplation of such a picture of prosperous industry.

BANBURY, a bor., par., and town of England, co. Oxford, hund. Banbury, 64 m. N.W. London. Pop., 1821, 5,247; 1841, 7,366: houses at the latter date, 1,433. The town is situated in a fertile vale, on the banks of the Cherwell; is remarkably clean and well built; and is paved and lighted by gas. The church, a spacious structure, was built in 1790. The Friends, Independents, Presbyterians, and Wesleyans, have chapels. There is a blue-coat school, founded in 1705, and endowed with 80*l.* a year; which was incorporated with a national school in 1817. A free grammar-school, once in high repute, has been given up for many years. There are almshouses, in which 12 poor women reside, and receive a charity called Widows' Groats. The market is held on Thursday; the annual fairs on Jan. 22, March 5, April 9, May 28, June 18, July 9, August 13, September 10, October 5 and 30, and December 17. The principal manufactures of the town were horse-girths and plush, both of which have declined. The place, however, is in a flourishing state, from its numerous fairs and large weekly markets, all very well attended, and causing an extensive retail trade. The Oxford and Birmingham Canal passes close to the town, and gives it also a considerable carrying trade. Many

improvements in the sewerage, footpaths, &c., have been effected within a recent period. Cheese of a superior quality is made in the neighbourhood; and the town has long been noted for a sort of cake that bears its name.

Subsequent to the Municipal Reform Act the limits of the bor. have been extended, for the purposes of local government, so as to include the whole town of Banbury, and the suburbs of Neithrop, Calthorpe, and Waterloo, which are continuations of it; the former at the N.W. end; the latter on the opposite bank of the river, which flows N. and S., along the E. side of the town, with the canal running nearly parallel to it. It was originally incorporated under a charter in 1st of Mary, granted expressly for the whole parish; but the bor. came subsequently to be restricted to a part only of the town. Another charter was obtained in 6th James I.; and a third in 4th Geo. I., which was the governing charter: under it, the corporation consisted of a mayor, 12 aldermen, 6 capital burgesses, and 30 assistants. It was a close, self-elective body, with no freemen, and filled up vacancies for life, either from residents or non-residents. They possessed the exclusive privilege of returning 1 mem. to the H. of C.; but this, of course, they were deprived of by the Reform Act, which opened the franchise to 10*l.* house-holders resident within the limits of the par., which contains 3,150 acres. Registered electors, in 1847, 538. The revenue of the corporation (independent of church trusts) consists of tenements, chief rents, as lords of the manor, tolls of fairs and cattle-market, &c.; in all about 1,200*l.* a year. A court of sessions is held twice a year. There is also a court of record, which had fallen into disuse, but has recently been revived and made effective. The lighting, paving, and police, are managed by commissioners, of whom the corporation form a portion. It is the central town of a union of 38 parishes, and has a union workhouse. There is a chalybeate spring near the town; and on Crouch Hill, 1 m. W. of it, is a circular entrenchment, the site of an encampment of the parliamentary army in 1645, under Sir William Waller. The living is a vicarage, in the patronage of the Bishop of Oxford.

BANCA, an island of the E. or Indian archipelago, first or W. division, lying off the N.E. coast of Sumatra, between lat. 1° 30′ and 3° 8′ S., long. 105° 9′, 106° 5′ E.; length N.W. to S.E. 135 m., average breadth 35 m. Its most remarkable feature is its mines of tin, a mineral found in its common state of oxide, in the alluvial soil between the primary granitic mountains and a range of red iron-stone, of inferior elevation, in its N. W. quarter, but which is also prevalent in other parts. In 1813 the produce of tin amounted to 2,063 tons, and in 1836 there were shipped from Java 47,739 peculs, or 2,834 tons of tin, wholly from Banca. The produce of the Cornwall mines being at present (1839) about 4,500 tons, the importance of those of Banca is obvious. The inhab. are principally of two races, one residing on the shores, the other in the interior, with Malays and Chinese: the latter are the workers of the mines. Previously to 1812 this isl. belonged to the sultan of Palembang, in Sumatra; it was then ceded to the E. I. Company; and in 1816 was transferred to the Dutch. (*Hamilton's E. I. Gazetteer*, i. 129, &c.)

BANCALLAN, a town at the W. end of the island of Madura, E. archipelago; lat. 7° 2′ S., long. 112° 45′ E. It is large and populous, contains the residence of the sultan of the island, and a fort close to the palace. Its environs are pleasant, having good roads, interspersed with country seats and pleasure grounds. (*Hamilton's E. I. Gaz.* vol. i.)

BANDA, an inl. town of Hindostan, prov. Allahabad, cap. of the distr. of S. Bundlecund, on the right bank of the Cane river, 80 m. W. Allahabad; lat. 25° 50′ N., long. 80° 20′ E. A few years ago it was a mere village, but has now become a considerable town; its cotton has of late years obtained a superiority over that of Jaloun in the European market.

BANDA, or NUTMEG ISLANDS, a group of 12 small islands, belonging to the third or E. division of the E. archipelago (see the art.), belonging to the Dutch; the principal, Banda Neira, lying in 4° 30′ S. lat., and 130° E. long., 120 m. E.S.E. Amboyna. Lantoir, the largest of the islands, is only 8 m. long, and 5 broad. Only six of them are inhabited. Pop. about 6,000, most of whom are slaves. These isles are all high, and of volcanic origin; one of them, Goonung Api, contains a volcano, 2,000 feet above the sea, which is continually emitting smoke, and sometimes flame. Climate injurious to strangers: the W. monsoon brings rain and storms in December, and earthquakes occur from October to April. The soil is chiefly a rich black mould. Four of the larger and central islands are almost entirely appropriated to the growth of nutmegs; their growth in the other islands being prohibited. The nutmeg-tree grows to the size of the pear-tree; it yields fruit from the 12th to the 20th year, and perishes at 24 years old. About 2-3ds of the trees planted are barren; the produce of the rest is said to be about 10 lbs. each annually. The produce may be about 100,000 lbs. of nutmegs, and 30,000 lbs. mace. These islands are divided into a number of parks or plantations, each with a certain number of slaves. The people consist mostly of Papuan negroes, Chinese, and Dutch. Sago forms the chief vegetable food, but the cocoa also contributes a part: the seas abound with fish. The imports are various provisions for the Europeans, piece-goods, cutlery, and iron, from Batavia; sago, salted deer, &c., from Ceram; pearls, birds' nests, tortoiseshell, and slaves, for the Chinese and Dutch merchants from Arooe. The chief export is nutmegs. The seat of government is at Banda Neira, which is fortified, and has a good harbour. A Portuguese, named Antonio Abreus, discovered these islands in 1512. In 1524 the Portuguese, in 1599 the Dutch, and in 1810 the English, successively possessed themselves of them. In 1814 they returned under the dominion of the Dutch. (*Crawfurd's Indian Archipelago*, p. 508. &c.; *Hamilton's E. I. Gazetteer*, p. 78, 79.)

BANDON, a river of Ireland, anciently called Glasheen, has its source in the Carberry mountains, 9 or 10 m. W. Bantry. From Dunmanway, where its main branches unite, it flows nearly W. to Bandon; it then winds N.E. to Innis-Shannon, whence it pursues a S.E. course to the sea, with which it unites a little below Kinsale, built on its æstuary. Its course is wholly in the co. Cork. It is described by Spencer, as

"The pleasant Bandon crown'd by many a wood."

But most part of the timber that ornamented the country in the days of Elizabeth has been cut down, and its place is but very indifferently supplied by modern plantations.

BANDON, or BANDONBRIDGE, an inl. town of Ireland, co. Cork, prov. Munster, on the Bandon, 14 m. S. W. Cork. It was founded in the beginning of the reign of James I., and having obtained a charter from that monarch, conferring several valuable privileges, it increased so rapidly in population and wealth, that, on the breaking out of the war of 1641, it maintained four companies of foot and a corps of volunteers; and was the principal garrison of the English in these parts. On Cromwell's approach, in 1649, it declared for the parl., and in the war of 1688 the inhab. expelled the troops of James II., and declared for the Prince of Orange. Pop. (1821) 10,179; (1841) 9,303. It is situated on the declivities of the hills on each side the river, which blend into a richly wooded valley, and consists of three parts, distinguished by the estates on which they are built; the old town being on that of the Duke of Devonshire, the Irish town on that of the Earl of Shannon, and the western portion on those of the Earls of Bandon and Cork. It is watched, and lighted with gas, under the General Municipal Police Act. It has two parish churches, a Rom. Cath. chapel and convent, a meeting-house for Presbyterians, and two for Methodists; a classical school, endowed by the Duke of Devonshire; a school for general instruction, on the foundation of Erasmus Smith, and several others maintained by private contributions or by religious associations. It has also an infirmary, fever hospital, and dispensary; three public libraries, and two reading-rooms. Assemblies and concerts are held in a suite of apartments attached to one of the hotels. Large barracks are built on the hill over the town, and the constabulary have here a station.

By charter dated in 1614, the municipal government is vested in a provost, 12 burgesses, and an unlimited number of freemen, elected at the hundred court by the general body of freemen, who also elect a common council of 12 out of their own body for life. The bor. sent 2 mem. to the Irish H. of C., and now sends *one* to the imperial H. of C. The franchise is vested in the burgesses resident within 7 m. and the 10*l.* householders. The new electoral boundary comprises 439 acres. Constituency (1849), 396. General sessions of the peace for the W. riding of the co. are held here in October in the court-house, a neat building, with a well-arranged bridewell. Petty sessions take place on Mondays, at which, through the courtesy of the corporation, the co. magistrates sit with the provost. Courts, holding pleas under 2*l.*, are held every three weeks for the manors of the Duke of Devonshire, the Earl of Bandon, and the Earl of Shannon.

The woollen manufacture was carried on here to a considerable extent, and was succeeded by that of cotton: both are nearly extinct; but a manufacture of fine stuffs has been lately undertaken. Here are several distilleries, breweries and tan-yards, and 2 large flour-mills. As the Bandon is navigable for small craft to Collier's Quay, within 4 m. of the town, a small external traffic is carried on, by which grain, flour, and other produce, is sent out, and timber, coal, wine, and groceries, received in return; but the domestic consumption is chiefly supplied from Cork, to which much of the agricultural produce of the neighbourhood is sent by land carriage. Markets are held on Wednesdays and Saturdays; and fairs on May 6, the Thursday before Easter-

day, Oct. 29, and Nov. 8. A branch of the Provincial bank was opened in 1834, and a savings bank had, in November 1848, 24,022*l.* of deposits. The post-office revenue in 1841, was 583*l.*, in 1849, 903*l.* The town is on the mail-coach road from Cork to Bantry. Three coaches and a car ply to Innis-Shannon, on the road to Kinsale, six days a week, carrying an aggregate average of 42 passengers each trip; a coach six days in a week, and a mail car every day to Dunmanway, carrying 11 passengers; and a car to Timoleague, on Courtmacherry Bay, every day, carrying 4 passengers.

BANERES, a town of Spain in Valencia, 28 m. N.N.W. Alicant. Pop. 2,000. It has filatures of wool, distilleries, and paper mills.

BANFF a marit. co. of Scotland, having N. the Moray Frith, S. and E. the co. of Aberdeen, and W. Elgin and Inverness. Its length from Ben Macdhu to Portsoy is about 56 m., but its average breadth does not exceed 12 m. Area, 647 sq. m., or 414,080 acres. Along the coast the surface is pretty level, and the soil, consisting of a sandy loam, is in many places well cultivated, and produces early and excellent crops. But with this exception, the surface is mostly rugged and mountainous, with a few valleys interspersed. Oats is the principal crop; but the main dependence of the farmers is on their cattle, sheep being, in this co., comparatively scarce. Property in a very few hands: tillage farms mostly small, and agriculture, though in parts much improved, generally backward. Average rent of land, in 1843, 5*s.* 4½*d.* an acre. There are some thriving plantations, particularly in the vicinity of Gordon Castle, the most magnificent seat in the N. of Scotland. It is partly separated from Elgin by the Spey, on which there are several productive salmon fisheries. (*See* SPEY.) Minerals of little importance; but the crystals and topazes, commonly called cairngorms, are found in the mountains. Manufactures inconsiderable. Banff contains 24 parishes, and had, in 1841, 11,149 inhabited houses, and 49,679 inhab. It returns 1 mem. to the H. of C. for the co.; and the burghs of Banff and Cullen unite with Elgin and others in returning a mem. Parl. constituency of co., in 1849, 626. Valued rent, 79,200*l.* Scotch: annual value of real property, in 1843, 116,968*l.*

BANFF (commonly pronounced, and sometimes written Bamff), a royal burgh of Scotland, cap. of the above co., on the W. bank of the Doveron, near the entrance of that river into the Moray Frith. Pop. in 1841, 3,202, viz., males, 1,371; females, 1,831. It may be said to consist of two parts, completely separated; of which the one is inland, and lies on a plain on the river side; the other (called the sea-town) stands on an elevation which terminates abruptly near the sea, by which it is bounded. The castle of Banff stands on a piece of table-land between these two places. The name of the town, which is found to have assumed different forms at different times — Baineffe, Boineffe, Bainffe, &c. — is supposed to have been derived from the word Boyne, the name of the district in which Banff is situated. A stream named Boyne traverses the district; and the parish of Boyndie is contiguous. The privileges of a royal burgh were conferred on Banff by Robert II. in 1372, and were afterwards successively confirmed by James VI. and Charles II. The streets, though composed of houses of unequal size, are generally straight, and not deficient in width. Within the last few years, many of the older houses have been pulled down and replaced by others, so that there is scarcely a building now remaining to indicate the antiquity of the town. The streets were paved so early as 1551. The Carmelites (an order of friars, so called from Mount Carmel in Syria), or White Friars, had a convent in Banff, but at what precise period it was instituted cannot be ascertained. (*Spottiswood's Religious Houses*, p. 16.) Of the building no vestiges can now be traced, with the exception of some scattered arches and vaults; nor is its original extent, or exact position, known. Of the castle of Banff, alluded to above, nothing remains but the outer wall and the fosse. It was a constabulary, or lodging for the king when visiting this part of his dominions; and, in his absence, it was inhabited by the thane or constable who administered justice in his name. It was essentially royal property, and continued so till the middle of the 15th century, when James Stuart Earl of Buchan, brother of James II., was created heritable thane, the castle of Banff being at the same time bestowed on him, as the official messuage of his family. Banff gave the title of peer to a branch of the family of Ogilvie, which became extinct in 1803, on the death of the eighth Lord Banff without male issue. Banff does not make a great figure in history. The Duke of Montrose plundered it in 1645, "no merchant's goods or gear," according to Spalding, "being left." The Duke of Cumberland's troops passed through the town in 1746, on their way to Culloden. They destroyed the episcopal chapel, and hanged a man, erroneously thinking him a spy. The names of two persons, eminent in very different walks of life, are connected with Banff. The famous James Sharp, who was originally a keen supporter of presbytery, and who, having betrayed that faith, rose to the archiepiscopal see of St. Andrews, was a native of Banff, his father being sheriff-clerk of the county. He was assassinated on Magus Muir, near St. Andrews, in 1679. James Macpherson, having followed the lawless and predatory life of a gipsy, was apprehended (1700), tried, and condemned to be hanged at Banff. While he was a votary of the muses, he was a proficient as a player on the violin; and when brought to the place of execution, he carried his instrument along with him, and played his own march, which had been composed by himself while in prison. This composition was published after his death, and has ever since been a favourite in Scotland. Burns wrote a new and improved version of the song, which is well known under the name of *Macpherson's Lament*, or *Macpherson's Farewell*. (*Chambers's Edit. of Burns's Poetry*, p. 100.)

The trade of Banff is not very considerable. Its harbour, though it can boast of a low-water pier, constructed in 1816, is not so ample, so convenient, or secure, as that of Macduff, a borough of barony situated on the opposite side of the Doveron, at the distance of about a mile. There belonged to Banff and its subsidiary ports in 1849, 134 registered vessels of the burden of 11,158 tons: customs revenue in 1846, 1,849*l.* The exports consist chiefly of grain, cattle, salmon, herring, and cured pork. They are mostly sent to London, and annually amount to a considerable sum. The herring fishery on the coast has not of late years been so productive as formerly. A Greenland whale fishery co., formed in 1819, and a thread and stocking manufactory, established fifty years ago, have been discontinued. Banff has no manufactures, if we except a brewery, an iron-foundry, a distillery, and a small manufactory of ropes and sails. There are four branch banking establishments, with numerous insurance offices. The town supports a weekly newspaper. A weekly market is held on Friday, and there are four annual fairs.

The public buildings are the town-house, built in 1798, with a spire 100 feet high, the jail, the parish-church and the Relief, Free, Episcopal, and Independent churches. The Wesleyan Methodists have also a small chapel. Gas was introduced in 1831. A grammar-school was founded in Banff so early as the year 1544. It has, also, an academy, founded in 1786, at which all the branches of a learned and liberal education are taught; a commercial school, and a charity school founded by funds left (in 1804) by Alexander Pirie, merchant in Banff. There are several seminaries for young ladies, and an educational institution, founded by a legacy left by the late James Wilson, of the Island of Grenada. An infant school has recently been established. Several libraries of considerable extent and value belong to different societies. Various sums have been left in mortmain for charitable purposes; and a legal assessment for the poor is unknown. The average number of prisoners, including criminals, revenue offenders, and debtors, is 45 annually. We are sorry to have to state that the number of inns or shops licensed for the sale of spirits and ale is quite excessive; more than half of them should be shut up.

Banff did not escape the devastations caused by the great flood that took place in the north of Scotland in August 1829. Part of the town was inundated to the height of four or five feet; several houses were undermined and carried away: various kinds of property received serious injury. (*Sir Thomas D. Lauder's Acc. of the Morayshire Floods.*)

Banff unites with Elgin, Cullen, Inverury, Kintore, and Peterhead, in sending a member to the House of Commons. Macduff, which is rapidly rising to importance, chiefly owing to the excellence of its harbour, has, since the passing of the Reform Bill, been united to Banff in forming one parliamentary burgh, the joint constituency, in 1849, being 218. There is a splendid bridge of seven arches over the Doveron, which connects the two towns in question. It is governed by a provost, two bailies, and 17 councillors. Burgh revenue in 1847–8, 935*l.* (*Boundary Reports*, 1832, p. 43.; *New Statistical Account of Scotland*, No. xi. 1836; *Chambers's Gazetteer of Scotland.*)

BANG, an inl. town of Hindostan, prov. Malwah, dom. of Scindia; at the confluence of two tributaries of the Nerbudda river, on the chief road through Gujrat and Malwah; 82 m. S.W. Oozein, and 145 m. N.E. Surat. Iron ore is fused here, and before the present century the town contained 2,000 houses; at present this number is much reduced. Bang is noted for some remarkable cave temples of Buddhic origin, excavated in a range of low sandstone and claystone hills, about 3¼ m. S. of the town. Four caves exist; the most northerly of which is the most perfect, and is reached by a flight of 70 rudely formed stone steps, terminating in a platform overhung by the hill, which has once evidently been formed into a regular verandah supported by columns; and at either end of which, there is a small apartment, containing some ill carved figures of modern workmanship, and one of them a bad representation of the Hindoo Ganesa. The cave within this

vestibule is entered by a rectangular doorway in a plastered and ornamented wall, and is a grand and gloomy apartment 84 ft. square and 14½ ft. in height; the roof, which is flat, and has been once ornamented with paintings, is supported by four ranges of massy columns. Around this apartment, on three sides, are a number of small cells, 9 ft. in depth, as well as several niches, in which have been carved, in bold relief, some draped male and female figures: from one of the cells on the left hand, you enter through narrow excavations, five other similar cells, each in a plane elevated above the former, ascending through the hill. At the farther end of the principal cave, is an oblong recess supported by two hexagonal columns, through the centre of which a small doorway leads to an inner apartment, where the *dagop*, or "churn," supposed to contain a Buddhic relic, is seen, cut out of the rock, with the plain dome forming its summit, reaching nearly to the roof, to which it is joined by a small square ornament. The second and fourth caves of Bang, contain little worth notice; but the third is nearly as large, and has been somewhat similar in its arrangement to the first. The whole of the walls, roof, and columns, have been covered with a fine stucco, and ornamented with paintings in distemper of considerable taste and elegance. It contains the *dagop* in its inner apartment; but wants the recess, and carved sculptures mentioned in the first cave. It is considerably dilapidated; and a fifth cave is so much so at its entrance as to be at present inaccessible. (*Dangerfield in Bombay Trans.* ii. 194—201; *Hamilton's E. I. Gaz.* i.

BANGALORE, an inl. fortif. town of Mysore, S. Hindostan; lat. 12° 57′ N., long. 77° 38′ E., 60 m. N.E. Seringapatam. Pop. (in 1805) said to be 60,000. It is built on a table-land, nearly 3,000 ft. above the sea, and is so salubrious that Europeans often resort thither for the benefit of their health. The thermom. seldom rises above 82°, or sinks below 56° Fahr. The monsoons have their force broken by the Ghauts; but this table-land is constantly refreshed by genial showers. The vine and cypress grow luxuriantly, and apples, peaches, and strawberries are raised in the gardens. The town is enclosed with double walls; but the chief fortress, which contained the palace of Tippoo Saib, is quite detached from the other, and is built in a solid manner, with a deep ditch and spacious glacis. The palace, though of mud, built in the Saracenic style, is still a striking building, and is used by the present rajah for public entertainments. There are good barracks, assembly and reading-rooms, European shops, &c. The houses are large, some being of two stories, built of red earth, and roofed with tiles; the chief bazar is wide, regular, and ornamented with rows of cocoa-nut trees. Most of the inhab. are Hindoos. Silk and cotton are the chief manufactures; the former, which is very strong, is made from raw silk imported, none being produced in the neighbourhood. Bangalore was founded by Hyder Ali, on the site of a small village; and under him it became a place of much importance. It was taken by Lord Cornwallis in 1791. (*Hamilton's E. I. Gaz.* i. 131. 132.)

BANG-KOK, or BANKOK, a city of Siam, having been the cap. of the kingdom, the residence of the sovereign, and seat of gov. since the destruction of Yuthia by the Birmese, in 1766. It stands on a swampy tract on both sides the Menam, lat. 13° 40′ N., long. 101° 10′ E., 15 m. N. from the Gulph of Siam. Pop. probably from 50,000 to 60,000. The Menam is here ¼ m. wide, exclusive of the large space on each side occupied by floating houses, and from 5 to 10 fathoms deep: there is a bar of soft mud at its mouth, but vessels of from 200 to 250 tons burden may always reach Bang-kok without difficulty. The traffic above this city is trifling, though, from the want of roads, all the intercourse is by water. Bang-kok consists of three parts; the palace, the town, and the floating town. The first, built on an island, is of an oblong shape, surrounded by a brick wall of considerable height in some parts, and furnished with some indifferent bastions and many gates; it contains, besides the residences of the king and his chief officers, many temples, gardens, inferior shops, and much waste ground. The town without stretches for some distance along the banks of the river, but a very little way inland. The houses, most of which are of wood, or mere huts of palm leaf, are built on posts driven into the mud, being each provided with a boat. The floating town consists of a number of bamboo rafts bearing rows of 8 or 10 houses, with a platform in front, on which the wares for sale are exposed; and most of the trade is thus conducted on the river, where it is believed that half the pop. reside. There are many temples, all of which are built in a pyramidal form, with much gilding and paltry decorations: each contains a colossal gilded metal statue of Buddha, and a variety of others in clay or wood. The chief temple, or Ra-cheh-tap-pou, which is 200 ft. in height, contains as many as 1,500 of these images. The palace possesses a really handsome audience-hall, 80 ft. long by 40 broad, and 30 ft. in height, painted and gilded, and furnished with English cut-glass lustres: it is surrounded by three different walls, and is built of brick; of which, or of mud, the palaces, temples, and a few of the chief residences only are constructed. Bang-kok has manufactures of tin and iron articles, and leather for mattresses, &c. Its trade is probably more extensive than that of any other emporium in the E., Canton excepted, not occupied by Europeans. It is principally carried on with China and the Malay archipelago, but mostly with the former. The great articles of export are sugar (from 10,000 to 12,000 tons), black pepper (4,000 to 5,000 tons), stick-lac, ivory, sapan wood, hides, &c. The trade with China employs about 130 Chinese junks yearly, some of 1,000 tons burden. The imports are porcelain, tea, quicksilver, lacksoy, dried fruits, silks, fans, and other native manufactures from China; with camphor, edible birds' nests, and other articles for the Chinese market from the Malay archipelago; and British and Indian piece goods, opium, and British woollens and glass from India. Half the pop. consists of Chinese; and besides them there are numerous Birman, Peguan, Laoan, Cambojan, Tavoyan, and Malay foreigners; some Christians of Portuguese descent; and a few Brahmins, who are supported by the king, and have a small temple of their own. (*Crawfurd's Embassy to Siam, &c.; Finlayson's Mission, &c.*)

BANGOR, a city, sea-port, and par. N. Wales, co. Carnarvon, hund. Isgorvac, on the Holyhead road, at the head of Beaumaris Bay, about 2 m. from the Menai bridge. It consists chiefly of one principal street, stretching E. and W. through a romantic vale, bounded on the S. by high precipitous rocks, on the N. by a more gradual acclivity, and opening on the E. over a splendid and extensive prospect, including the rocky shores of Anglesea and the town of Beaumaris. It has been mostly rebuilt, and otherwise very much improved, within the last few years. Pop. (1821) 3,399; (1841) 7,232: houses, last mentioned year, 1,542. The cathedral is an embattled cruciform structure, having a low massive tower crowned with pinnacles. It stands in a spacious area, with a fine avenue, and has a very pleasing effect, from its situation and the just proportion and simplicity of its architecture; near it are some old endowed almshouses for 6 poor persons, and an endowed free school for 100 boys, built in recent times on the site of an ancient friary; it was founded in Elizabeth's reign, and its revenue is upwards of 250*l.* a year. There are also 4 national schools in the parish: 2 in the town (estab. 1822) for 300 boys and girls; 1 at Vaenol for 75, and 1 at Pentir for 60. The Baptists, Independents, Calvinistic and Wesleyan Methodists, have each a chapel; there is a town-hall and shambles in the centre of the town, and near it, on the London road, is the Carnarvon and Anglesea dispensary. The market is held on Fridays: during the summer on Tuesdays also. There are 4 fairs, April 5, June 25, Sept. 16, Oct. 28; besides which 4 large fairs for cattle (called "booth fairs") are held at the Menai bridge (which is in this parish, and about 2 m. S. W. Bangor) Aug. 26, Sept. 26, Oct. 24, Nov. 14. They are the most frequented of any in N. Wales. It is accessible to vessels of 200 to 300 tons, which may enter the bay at any time of the tide: the trade, however, is comparatively insignificant, and is confined to the import of coals and other necessaries. By the Reform Act, Bangor was constituted one of 6 contributory boroughs, which conjointly send 1 mem. to the H. of C.; the bailiffs of Carnarvon being returning officers. There are in Bangor about 195 houses of 10*l.* and upwards. It has been the seat of a bishopric from the remotest period, and was united with that of St. Asaph in 1839. It previously comprised the cos. of Anglesea and Carnarvon (except 4 parishes), about half Merioneth, one deanery in Denbigh, and 7 parishes in Montgomery: in all 179 par. The income of the bishop, at an average of three years, ending with 1831, amounted to 4,464*l.* a year. The church is used both for cathedral and parish services; the former in English, the latter in Welsh. The living is a consolidated vicarage belonging to the vicars choral, the church of the township of Pentir being annexed to it as a chapel of ease. There is an episcopal residence and a deanery. The famous controversy between Drs. Hoadley and Sherlock took its name from this see: the former being its bishop from A. D. 1715 to 1721, when, on being translated to Salisbury, the latter succeeded him. The neighbourhood is for the most part unenclosed, and everywhere presents scenery of surpassing interest, having the Snowdon range on the S., and Penmanmaur on the E., and the Menai Strait and bridges immediately contiguous to the town. The improvement of the Holyhead road, now the best in the kingdom, and the construction of the Menai bridge, have rendered Bangor a great thoroughfare, and made it be resorted to in summer by crowds of visitors. When Dr. Johnson visited the city in 1774, with Mr. and Mrs. Thrale, he complained that they found "*a very mean inn, and had some difficulty of obtaining lodging. I lay in a room where the other bed*

had two men. But modern travellers need fear no such difficulties. The inns in the town are very good; and there is a hotel outside the town, built by Mr. Pennant, that ranks, in respect of size and accommodation, with the best in the kingdom.

Bangor, a marit. town of Ireland, co. Down, prov. Ulster, on the S. shore of Carrickfergus Bay, 12 m. E.N.E. Belfast. Pop., in 1821, 2,943; in 1831, 2,741: pop. of par., in 1831, 9,355, of whom 757 were of the estab. church, 8,295 Prot. diss., and 250 Rom. Cath. The town took the name of Bangor, Beanchoir, or "the White Choir," from a celebrated monastery which, about the year 820, was destroyed by the Danes, when upwards of 900 monks are said to have been massacred. It is much frequented as a sea-bathing place. The public buildings are a church, two Presbyterian, and two Methodist meeting-houses, and a market-house: there is also a dispensary, mendicity institution, savings' bank, and public library. It is a constabulary and coast-guard station. The corporation, under the charter of 1613, consists of a provost and 12 free burgesses. It returned 2 mem. to the Irish H.of C. till the Union, when it was disfranchised. A court leet is held once a year, and a manor court, with jurisdiction to the amount of 20*l.*, every 3 weeks, and petty sessions every fortnight. There are two cotton factories; linen is also made for home consumption. The fishery is carried on to some extent, and in the neighbouring village of Groomsport, where the Duke of Schomberg's army landed in 1689, large oysters are taken in abundance. Markets are held on Tuesdays; fairs on Jan. 12, May 1, Aug. 1, and Nov. 22. Post-office revenue in 1830, 172*l.*; in 1836, 165*l.*

BANG-PA-SOE, a considerable town of Siam, cap. of a distr. on the left bank of the Bang-pa-kung river, near its mouth, 39 m. E.S.E. Bangkok; lat. 13° 30′ N., long. 101° 11′ E. It is populous, has a wooden stockade, and is considered by the Siamese important as a place of defence against the incroachments of the Anamese. The Bang-pa-kung river is here little inferior in size to the Menam: it has the same depth of water on its bar, and within it from 2½ to 3 fathoms. There is said to be a good carriage road from this town to Tung-yai, a distance of nearly 200 m. The distr. of Bang-pa-soë is an alluvial flat, very fertile in rice and sugar cane. (*Crawfurd's Mission to Siam*, p. 441, 442.)

BANJARMASSIN, a town and distr. on the S.E. coast of Borneo; the town is built on the river of the same name, in lat. 3° S., long. 114° 55′ E. The river has a shallow bar at its entrance, over which even a light boat cannot float till after the first quarter's flood. Notwithstanding this, the town enjoys a considerable trade, especially with China; many Chinese being settled in and near it. There is some trade with Singapore, but it is discouraged by the Dutch, who have a factory, forts, and government buildings in Banjarmassin. The imports consist of opium, piece goods, coarse cutlery, gunpowder, and fire arms. The exports are chiefly gold, diamonds, and pepper; rattans to Java, camphor, wax, birds' nests, tripang, spices, and steel, of superior quality. (*Earl, Eastern Seas*, p. 336—338.)

BANN, UPPER and LOWER, two rivers in the N. of Ireland: the first, or Upper Bann, rises in the plain called the Deers or King's Meadow, in the N. part of the Mourne mountains, in Down. Its course, at first, is winding; but its general direction is N.W. After passing Gilford and Portadown, it falls into Lough Neagh at Banfoot Ferry. Near Portadown it is joined by the Newry Canal; and is thence navigable by barges to the lake.

The Lower Bann issues from Lough Beg, connected on the N.W. with Lough Neagh, and flowing N. with a little inclination to the W., falls into the sea 5 m. below Coleraine. The current of the Lower Bann is rapid; and in some places it is precipitated over ledges of rock. The salmon and eel fisheries on this river are important and valuable. It is navigable by boats as far as Coleraine, but only with difficulty.

BANNALEC, a town of France, dep. Finisterre, cap. cant., 9 m. N.W. Quimperle. Pop. 4,377.

BANNOCKBURN, a village of Scotland, co. Stirling, par. St. Ninian's, 3 m. S.S.E. Stirling, on both sides of the small river Bannock, which, after a course of a few miles, falls into the Frith of Forth. The name of this village is imperishably associated with one of the most memorable events in British history. In its immediate vicinity, on the 24th of June, 1314, was fought the great battle between the English under Edward II., and the Scotch under Robert Bruce, which terminated in the total defeat of the former. The loss of the English, in the battle and pursuit, is estimated by the best informed historians at 30,000 men, including a great number of nobles, and persons of distinction. The loss, on the part of the Scotch, whose army was very inferior in respect of numbers to that of the English, did not probably fall short of 8,000. This decisive victory secured the permanent independence of Scotland, and established the family of the conqueror on its throne.

About 1 m. W. from the village, at Sauchie Burn James III. was defeated in 1488 by his rebellious subjects and his son, James IV.; and, after being wounded in the engagement, was assassinated at a mill in the vicinity.

In more recent and tranquil times Bannockburn has been distinguished in a very different department — that of manufactures. Various fabrics of woollen, particularly tartans, are successfully carried on in it; and it has produced all the tartan worn by the Highland regiments in the British army for upwards of half a century past. The manufacture of tartan shawls, so generally worn by females in the middle and lower ranks in Scotland, is also confined to it, and are hence known by the name of Bannockburn shawls. Carpets, particularly Brussels, and hearth-rugs, are produced here to a considerable extent; and of all these no small portion is sent to the English market. The manufacture of *Tweeds*, or coarse striped woollen cloth for trowsers and plaids, such as that for which Galashiels and Hawick are eminent, has of late been introduced into Bannockburn, but is not carried to any great extent. Tanning is also a considerable branch of trade. Various villages in the neighbourhood have been long eminent in the making of nails; but the inhabitants of Bannockburn have never introduced this branch of business, but have confined themselves to the manufactures noticed above. The portion of the parish of St. Ninian's in which this village is situated has recently been erected into a separate parish, under the name of Bannockburn; and a handsome parochial church has been built. It has also a dissenting church, an excellent school, a subscription library, and an annual fair for horses and cattle on the second Tuesday of June, old style. The village is not built on any regular plan. Pop. 750.

BANSTEAD DOWNS, in England, co. Surrey, 1st div. of Copthorne hund., par. Banstead; a tract of land remarkable for its verdure and excellent sheep pasturage, 12 m. S. by W. London, 576 ft. above the sea level. The Epsom Downs are a continuation of these on the W.: their geological position is between the London clay on the N., and the chalk formation on the S. The Brighton lines of road from the metropolis cross them.

BANSWARA, an inland town of Hindostan, prov. Gujrat, and cap. of a small rajpoot principality under British protection; 80 m. E. Ahmednuggur; lat. 23° 31′ N., long. 74° 32′ E. It is a handsome place for this part of India, and its walls include a large circuit: though much of the space is occupied by gardens. There are some handsome temples, and a tolerable bazar: at some distance is a pool of water with a stately flight of steps, overhung by palms, peepuls, and tamarind-trees; and beyond it, on the crown of a woody hill, the towers of a large castle, formerly the palace of Banswara. In 1820, there were 1,000 families of Brahmins, and a considerable number of Mussulmans in the town: in the wilder districts of its territory, the inhabitants are chiefly Bheels. The rajah is a branch of the family of the Odeypoor sovereign, and holds the highest judicial authority in his own hands. In 1820 he had a kind of feudal nobility of 32 subordinate rajpoot chiefs, who each furnished his quota of fighting men. In the same year the Banswara territory yielded a revenue of 20,786*l.* but it was then only recovering from a state of great desolation and misery, from which it had been relieved by the British. (*Hamilton's E. I. Gaz.* i.)

BANTAM, a decayed town of Java belonging to the Dutch, once cap. of a distr., but "now of no greater importance than the smallest residence on the coast." Its bay, formerly a great rendezvous of European shipping, is choked up by coral reefs, and islands formed by the soil washed down into it from the mountains. The Dutch abandoned it in 1817 for the more elevated station of Sirang or Ceram, 7 m. inland. (*Earl, The E. Seas*, 1837, p. 11.)

BANTRY, a marit. town of Ireland, co. Cork, prov. Munster, at the bottom of Bantry Bay, 43 m. W. by S. Cork. Pop. (1821) 3,659; (1831) 4,276: pop. of parish 14,665, of whom 948 are of the estab. church, and 13,717 Rom. Cath. The town is ill built: it has a church, a Rom. Cath. chapel, Methodist meeting-house, and a neat court-house, with a bridewell. General sessions are held in February, and petty sessions on alternate Fridays. A party of the constabulary is stationed here. Manufactures confined to that of flour; and there is a small porter brewery. The fishery of herrings and sprats has been unproductive since 1828: pilchards were once abundant, but have deserted the coast since 1823. The trade of the port, which was once very considerable, is now confined to the export of grain, of which 1,143 tons, of the estimated value of 6,212*l.*, were exported in 1836: the value of the imports of the same year amounted to 17,293*l.*

Bantry Bay, an inlet of the sea, in the S. W. extremity of Ireland, co. Cork, between Crow Point on the N. and Sheep's Head on the S. This is one of the finest and most capacious harbours in Europe. It stretches inwards in a N.E. direction above 25 m., with a breadth

varying from 4 to 6 m. Near the entrance of the bay, on its N.W. side, is Bear Island, separated from the main land by a crooked strait about a mile broad, having from 10 to 30 or 40 fathoms water, and affording a safe retreat for the largest vessels. Farther up the bay is Whiddy Island, on the S. side of which, nearly opposite to Bantry town, there is an admirable roadstead, where ships lie land-locked in from 24 to 40 ft. water. Bear Island forms, as it were, a natural breakwater, protecting the bay from the S.W. winds. There is close to both its shores a considerable depth of water; it is not encumbered by any shoals or rocks that may not be easily avoided, even at night; and the anchoring ground being every where good, it furnishes, throughout its whole expanse, convenient shelter and accommodation for the largest ships.

Having no considerable town on its shores, which are wild and rugged, nor any communication with the interior, this noble bay is but little frequented by shipping. Occasionally, however, it has been resorted to by large fleets, and has been the theatre of naval warfare; an indecisive action having been fought in it on April 30. 1689, between a portion of the French fleet that conveyed King James to Kinsale, and the English fleet under Admiral Herbert, afterwards Earl of Torrington. It was in it, also, that the French fleet, with General Hoche on board, anchored in 1796.

BAPAUME, a town of France, dép. Pas de Calais, cap. cant., 15 m. S.S.E. Arras. Pop. 3,122. This town was originally fortified by Charles V., but having been ceded to France in 1659, its fortifications were enlarged and completed by Vauban. It is neat, well laid out, and well built. The parish church and the hospital are worth notice. There are manufactures of woollens, calicoes, and other cotton stuffs, and of the fine thread used in the manufacture of a species of lace carried to the markets of Lille and Amiens. It is itself the centre of all the lace trade of the vicinity. Being situated in a dry country, Bapaume laboured, for a lengthened period, under a deficiency of water; but in 1723 an Artesian well having been sunk in the vicinity, furnished an abundance of excellent water, which, being conveyed into the town, supplies a handsome fountain. (*Hugo*, art. *Pas de Calais.*)

BAR, a town of European Russia, gov. Podolia, on the Row, 48 m. N. Moghilef. Pop. 2,500. It is defended by a citadel built on a rock. It was called Row, from the river on which it stands, till the reign of Sigismond I., who gave it to his lady, by whom it was called Bar, in honour of her native country, Bari. It is famous in Polish history, from the confederation established in it in 1768, by the Pulawski and other Polish nobles hostile to Russia. (*Encyc. des Gens du Monde*, art. *Bar.*)

BAR, a fortified town of France, dép. Bas-Rhin, cap. cant., 19 m. S.W. Strasburg. It is situated at the foot of the Vosges, surrounded by hills planted with vineyards. An explosion of the arsenal, in 1794, destroyed most part of the houses, so that it is now almost new. It has some manufactures, and a considerable trade in wine, spirits, corn, and cattle.

BAR, an inland town, of considerable extent and trade, in Hindostan, prov. Bahar, on the S. bank of the Ganges, 18 m. N.E. Bahar; lat. 25° 28′ N., lon. 85° 46′ E.

BARAHAT, an inl. town of N. Hindostan, cap. rajah of Gurwal, but some years since a most wretched and paltry place, 48 m. W.N.W. Serinagur.

BARAITCHE, an inland town and district of Hindostan, prov. Oude; the district divided between the King of Oude and the British; the town belonging to the former, and pleasantly situated 50 m. N.E. Lucknow; lat. 27° 33′ N., long. 81° 30′ E. The N. tracts of the district are elevated and covered with forests; the more S. parts open, fertile, and tolerably well cultivated. Many of the old Patan race inhabit the Baraitche district.

BARBADOS, the most easterly of the Caribbee islands; it is 21 m. in length and 14 in breadth, and contains 106,470 acres, of which it is supposed about 90,000 are in cultivation, and that the remainder, 16,470, are occupied by roads, buildings, &c. Bridgetown, the capital, is in lat. 13° 5′ N., long. 59° 41′ W. The time of its discovery is not distinctly known, but the first permanent settlement on it was made by the English in 1625, and it has remained in their possession ever since.

The island, viewed from the sea, has nothing interesting in its appearance, and the land, as compared with the adjoining colonies, is low, not being discernible many miles from the shore. The surface is very irregular: on the N., S., and W. sides the land is low towards the sea, and rises abruptly by precipitous acclivities in terraces of greater and less extent, to the point of highest elevation. On the E. side it rises almost perpendicularly from the sea to a height of 50 and 80 feet. On the windward, or N.E. side, there is a ledge of rocks, called the Cobblers, at a short distance from the shore, which renders the approach to the island dangerous in the extreme, and has doubtless contributed greatly to protect it from hostile attacks in the wars in which Great Britain has been engaged.

It is highly cultivated: scarcely an acre upon it, on which a blade of grass can grow, remains unproductive; and a better system of agriculture is pursued than that followed in the other colonies. The base of the island is calcareous, consisting of the spoils of zoophytes, of which there are several species. These are so cemented together, as in some places to form a hard compact limestone, which is quarried, and very extensively used for building; and in other places they exist as a dry soft marl, on which are found a great variety of shells, many of them in perfect preservation. Upon this formation there is a deposit of a strong stiff clay, in some places of considerable depth, which constitutes the soil of the most fertile districts. On the S. and W. sides, adjoining the sea, the soil is sandy and light; but in other places it is strong, and admirably adapted to the growth of the cane. In one district, on the N.E. side, called Scotland, the scenery and soil are strangely contrasted with the flat and shelving table-land of the other parts. The scenery there is wild, irregular, and picturesque, and the soil composed of mineral substances belonging to the clay genus, particularly loam, potters' clay, and slate clay. Beds of bituminous shale are likewise frequent, and petroleum, or mineral oil, more or less abounds in this district. There are some remarkable instances of the soil in this district becoming detached from its original bed, and slipping down from a considerable elevation, carrying with it whole fields of canes to a position below; in which extraordinary migrations rows of cocoa-nut trees have accompanied the moving masses. The highest point of land in the island is Mount Hillaby, which rises 1,147 feet above the level of Carlisle Bay.

The climate is very healthy. Except the bilious remittent fever, common to all the West India colonies, there is no malignant disease peculiar to it; and the island is free from any venomous reptile. The average quantity of rain amounts to 58 inches. The range of the thermometer, on an average of 5 years, were, —max. 87, med. 81, min. 75. Owing to the flatness of the island, and its being open in almost every part to the sea breezes, the heat is not so oppressive as the maximum range of the thermometer would seem to indicate. The prevailing wind is the N.E. trade. It begins generally about 10 o'clock A.M., and continues till sun-set, but it is very feeble during the night. In Jan., Feb., Mar., April, and May, it is strong and regular, and the climate, in these months, is peculiarly agreeable. In June the rains set in, and from August to October, which is called the hurricane season, and during the month of Nov., the heat is very oppressive. The ratio of deaths among the white troops, according to Captain Tullock, for the last 20 years, were, 58·5 per 1,000 per ann. of mean strength. Among the black troops, only 46. The cane is the chief article of cultivation, but a considerable quantity of corn, arrowroot, cotton, ginger, and aloes, is also raised, and exported.

Barbados has been frequently visited by hurricanes, of which those of Aug. 10, 1674, Oct. 10, 1780, and Aug. 11, 1831, have been the most destructive in their effects. In that of 1674, 300 houses, 8 ships, and most of the sugar-works, were destroyed, and 200 persons killed: in that of 1780 the loss in human life was reckoned between 4,000 and 5,000, and the whole amount of damage, in buildings, cattle, and stock, was estimated at upwards of a million sterling: but the fury and violence of the last hurricane far exceeded that of either of the former; in it 2,500 persons were killed, and considerably more than that number wounded, and the loss in property amounted to two millions and a half sterling. The munificence of parliament, and the industry of the inhabitants, have, however, enabled the planters to recover from these heavy losses; and, except the absence of trees, which gives a bare and naked appearance to the country, the effects of this severe visitation can now be traced only with difficulty. The island is divided into 11 parishes, and 5 districts. It contains, besides the principal town, a smaller town to leeward, called Speights Town, and two other towns, which are scarcely to be described as such; Oistins, or Charlestown, Saint James, or the Holetown, the spot first settled. Bridgetown extends along the shore of Carlisle Bay, and, previously to the hurricane, being skirted with a belt of cocoa-nut trees, it presented a very pretty and interesting appearance to the stranger. The population is large, having amounted in 1848 to 21,384 inhabs. The shops are very good, many of them equal to those to be seen in the second class of towns of England, and some buildings, especially the stores of the wealthier merchants, are equal to corresponding establishments in the city of London. The gaol is a large and airy building, in which formerly the courts of law and equity were held, and the legislature assembled; but it is now exclusively used as a place of confinement. It is in contemplation to build a council-house in some other part of the town. The barracks at St. Peter's, about 2 m. to the S. of the town, are spacious and airy, having been

all rebuilt since the last hurricane; they will contain comfortably 1,200 men. There is an excellent parade-ground, a brigade of guns, and a very complete establishment for warlike purposes. The Government-house is about 1 m. from the town, situate on some rising ground, and commands a beautiful view of the town and bay. The market in Bridgetown is well supplied with poultry, mutton, and pork, of excellent quality, quite equal, if not superior, to the corresponding productions of England. Veal is good, but not in very great plenty. Beef is but indifferent. Many of the esculent vegetables of Europe are common. The quantity of tropical fruits grown in the island is small, but the quality excellent. The supply of fish is in general abundant. One description, the flying-fish, about the size of middling herrings, but firmer, and not so fat, are sometimes so plentiful, as to be undervalued by the opulent, and within the reach of the poorest inhabitants.

The population, as in the adjoining islands, may properly be divided into four classes: Creole or native whites; European whites; Creoles of mixed blood; native blacks. Previously to the abolition of slavery, the population was estimated at 102,521; viz. whites, 12,797, coloured, 6,584, and slaves, 83,140. But it appears from a census taken in 1844, that the population amounted at that date to 122,198; and it is now (1850) estimated at 135,000. Formerly the cultivation of sugar was almost the only thing attended to, and the population depended in great measure on imported provisions. But for several years past, this system has been materially modified. Large supplies of provisions, though still far below the demand, are now raised at home, and a rotation of crops has been introduced into agriculture. Here, as everywhere else in the West Indies, the blacks are extremely desirous to acquire slips of land. Generally they are not well off; and from their large numbers supplies of labour may usually be obtained.

Barbados is the residence of the bishop of Barbados and the Leeward Islands, and of one of the archdeacons. The clerical establishment is fixed upon a very liberal and effective scale. There is a rector resident in each parish, at a stipend of 333*l*. 6*s*. 8*d*. sterling, with an allowance of glebe land, and an excellent parsonage house, kept in repair at the expense of the parish. In Bridgetown, besides the cathedral and parish church, there is St. Mary's Church, and in the neighbourhood three other chapels of ease, with a minister appointed to each, and paid by the British government and the Christian Knowledge Society. The surplice fees, which are received by the rector, are upon a liberal scale. There are two Wesleyan chapels, and two Moravian chapels.

There are several public establishments for the education of the youth of the island: — Codrington College, Codrington Foundation School, Harrison's Free School, and the Central School; the two latter are in Bridgetown. Codrington College is situated 13 or 14 miles E. of Bridgetown, and was founded by Colonel Codrington, a native of the island, who died in 1710. The object of the founder was the education of a certain number of white youths, and the religious instruction of the blacks; for which purposes he bequeathed landed property, capable of clearing 3,000*l*. sterling a year, to the Society for Propagating the Gospel in Foreign Parts. This establishment is under the superintendence of the bishop of the diocese, who is visitor, a principal, and two tutors. It is open to all young men, for whatever profession intended, throughout the West India colonies. There are 12 theological exhibitions. The college expense to each commoner is about 30*l*. sterling per annum. The course of study embraces theology, the classics, logic, and mathematics. All candidates are required to be at least 17 years of age at the time of admission.

At the Central School about 160 white children are educated, upon the plan of the national schools in England. All the children are fed, and the major part clothed. From this class of boys, master tradesmen, mechanics, and overseers, are supplied. A girls' school has also been founded under the auspices of the ladies of Barbados.

The trade of the island has varied very much at different periods, owing to the uncertainty of the crops, occasioned by hurricanes and bad seasons. We subjoin an account of the principal articles of Barbadian produce imported into the U. Kingdom in the following years, viz.: —

		1845.	1846.	1847.	1848.
Sugar	- cwts.	351,487	302,496	469,022	403,317
Rum	- galls.	3,495	197	13,348	21,354
Molasses	- cwts.	70,693	73,462	78,519	67,577
Coffee	- lbs.	1,059	864	750	927

The total value of the exports amounted in 1847 to 881,159*l*., and in 1848 to 659,073*l*.; ditto of imports in 1847, 861,261*l*., in 1848, 432,016*l*. The U. States have, next to the U. Kingdom, the greatest share of the trade of the colony. The imports from the U. K. consist principally of cottons, linens, woollens, and other manufactured goods, haberdashery and millinery, hardware and cutlery, apparel, leather goods, coal, salt, &c. &c. The imports from the U. States consist principally of flour, meal, Indian corn, rice, timber and shingles, &c. Large quantities of cod, dry and wet, are brought from the British N. American colonies. The U. Kingdom supplies about half the imports.

The government of the island is administered by a governor, who is also gov.-gen. of the islands of Grenada, St. Vincent, Tobago, Trinidad, St. Lucia, and their respective dependencies. There is a legislative council, consisting of 12 members, and a representative assembly, constituted by a return of 2 members from each of the parishes,—making 22 members. The duration of the assembly is 12 months. If there be less than 7 members of council resident in the island, the governor may fill up the number to 7 for the despatch of business. The governor is chancellor, but he sits in chancery with the council, who act as judges both in the court of error and in equity. There is a court of common pleas held for each district, monthly, during 8 months of the year, but no court of king's bench. A general sessions of the peace is held twice a year.

The revenue of the island, previously to the abolition of slavery, was raised by a poll-tax upon slaves, and by duties on spirituous liquors, licenses, &c.; but it is now derived principally from duties on imports and exports, on the tonnage of ships, and on spirituous liquors, licenses, &c. In 1848 it amounted to 43,828*l*., and the expenditure to about as much.

A banking establishment has been lately formed by a board of directors in London, incorporated by act of parliament, which is of the greatest utility to the colony.

The proportion of the 20,000,000*l*. voted by parliament for the abolition of slavery paid to the colony was 1,721,345*l*. 19*s* 7*d*. The value of the slaves was estimated at 3,897,276*l*. 19*s*.; and the average value of a slave, from 1822 to 1830, was 47*l*. 1*s*. 3¼*d*.

BARBANTANE, a town of France, dép. Bouches du Rhone, near the confluence of the Durance and the Rhone, 4 m. S. W. Avignon. Pop. 2,926. Its environs produce excellent wine.

BARBARY, the name usually given in modern times to that portion of N. Africa which comprises the various countries between the W. frontier of Egypt and the Atlantic on the one hand, and the N. frontier of the Sahara, or Great Desert, and the Mediterranean on the other; or between 25° E. and 10° W. long., and 30° to 37° N. lat. It consequently includes within its limits the empire of Morocco and Fez, with the regencies of Algiers, Tunis, and Tripoli, including Barca. Under the Roman dominion, it was divided into *Mauritania Tingitana*, corresponding to Morocco and Fez; *Maritania Cæsariensis*, to Algiers; *Africa Propria*, to Tunis; and *Cyrenaica* and the *Regia Syrtica*, to Tripoli. Its extent may be taken at from 650,000 to 700,000 sq. m.; and its population has been variously estimated at from 10,000,000 to 14,000,000.

The name Barbary has not, as has sometimes been supposed, been given to this portion of Africa because it is occupied by a barbarous and ignorant people. It is derived from the name of its ancient inhabitants, usually styled *Berbers* or *Kabyles*, and should, therefore, in strictness, be called Berbery. The Arabians call it *Maghreb*, or the region of the W.; but though this name correctly points out its situation in relation to Arabia, it would be incorrect if used by Europeans. If a new name were now to be adopted, it might be called the *Region of Atlas*, inasmuch as it includes the whole of that great mountain chain, with its numerous ramifications. This designation has, in fact, been given to it by some geographers; but there is but little probability of its displacing the common name; and, when properly explained, it is quite as good as any other.

In antiquity, this part of Africa was distinguished as being the seat of Carthage—that great commercial republic, that waged a lengthened, doubtful, and desperate contest with Rome herself for the empire of the world. After the fall of Carthage, it formed an important part of the Roman empire. It had many large and flourishing cities, and was long regarded as the principal granary of Rome. After being overrun by the N. barbarians, it was subdued by the Saracens; and under their sway acquired a lustre and reputation scarcely inferior to that of the most brilliant period of its ancient history. But the Saracenic governments in Barbary, like those in other countries, gradually lost their vigour, and became a prey to every sort of disorder; and this great country ultimately sunk into the lowest state of barbarism and degradation. A handful of Turks and renegades acquired the government of its finest provinces, and subjected them to the most brutal and revolting despotism. Being unable to contend with the European powers in regular war, they had recourse to a system of piracy and ma-

randing; which, though often partially abated, was not entirely suppressed till the conquest of Algiers by the French.

Barbary has far more of a European than of an African character. Owing to its being pervaded by the great chain of Atlas, it has every diversity of surface, and is remarkably well watered. The climate is excellent; and it produces all the grains and fruits of S. Europe, in the greatest perfection. In ancient times its fertility was such as to be almost proverbial:

> Frumentum quantum metit Africa.
> *Hor. Sat.*, lib. ii. sat. 3.

and notwithstanding the wretched treatment to which it is now subject, the fertility of the soil continues unimpaired, and with no manure, except occasionally burning weeds and stubble, it produces the most luxuriant crops. No wonder, therefore, that the site of the famous gardens of the Hesperides should have been originally placed in Barca; and that they should afterwards have been carried farther W. according as the Greeks became better acquainted with the coast, and with the riches and capabilities of the country. (For a full account of this interesting region, the reader is referred to the articles on the different countries comprised within its limits and to those on ATLAS, CONSTANTINE, &c.)

BARBASTES, a town of Spain, Aragon, near the Cinea, 28 m. S. E. Huesca. Pop. 5,000. It is surrounded by walls, is the seat of a bishopric, and has some tanneries.

BARBEZIEUX, a town of France, dép. Charente, cap. arrond., on the road from Angoulême to Bordeaux, 21 m. S. W. Angoulême. Pop. 3,013. It is advantageously situated on the declivity of a hill, at the extremity of an extensive and fertile plain. It is well built; has a court of original jurisdiction, a linen manufacture, and some trade in wine, corn, cattle, and especially poultry. The *chapons truffés* of Barbezieux are highly esteemed. (*Hugo, Dict. Géog.*, &c.)

BARBUDA, one of the W. Indian islands, belonging to Great Britain, 27 m. N. Antigua, 15 m. in length by 8 m. in breadth. Pop. 400, almost all blacks. It is flat and fertile. It is a proprietary of government, and belongs to the Codrington family. Corn, cotton, pepper, tobacco, are produced in abundance, but no sugar. It has no harbour, but a roadstead on its W. side.

BARBY, a town of Prussian Saxony, on the Elbe, 14 m. S. E. Magdeburg. Pop. 3,100. It is well built, has an old castle, two Lutheran, and one Calvinist church, with fabrics of cloth, cotton, and flax, soap-works, breweries, and distilleries.

BARCA (Βαρκη), a district of N. Africa, forming the E. portion of Tripoli, extending from 26½° to nearly 33° N. lat., and from 19° to 25½° E. long. The limits are, however, very uncertain towards the S. and E., the country, in the former direction, terminating in the Libyan Desert, and being, in the latter, divided from Egypt by wandering tribes of Bedouins, who acknowledge no authority in any settled government. On the N. Barca is bounded by the Mediterranean Sea, and on the W. by the Gulph of Sidra (the *Syrtis Magna* of the ancients), and the government of Sert or Sort. (*Beechy*, 210.; *Pacho*, 19.; *Beechy and Pacho's Maps*.) It extends 500 m. from N. to S., but the cultivated and inhabited portion terminates at about the 31st parallel, or 140 m. only from the farthest N. point of the coast. The greatest width from E. to W. is about 390 m., and the area may be estimated at about 78,000 sq. m. (*Beechy and Pacho's Maps*.)

A mountain range, at a short distance inland, fronts the whole extent of coast line: this range appears to have its greatest elevation near the 22d meridian (at the town of Cyrene), and to decline thence both towards the E. and W., terminating, in the former direction, in the plain of Lower Egypt; in the latter being continued round the gulph till it vanishes in a low swamp S. of Mesurata. The least elevation of these mountains is estimated at 400 or 500 ft., and the greatest at 1,805 ft. It is upon the sides and summits of these hills that the only population and production is found, though the great plain towards the S. is probably preserved from some of the *worst* features of the desert by a range of sand hills extending from the oasis of Ammon to that of Maradeh, which must of necessity form *some* protection from the effects of the sirocco. (*Beechy*, 107. 216. 252. 434. &c.; *Pacho*, 57. 83. 134. 272. &c.)

There are no rivers, but innumerable mountain torrents, and wells are also tolerably abundant, though many of them contain only salt or brackish water. On the whole, however, the *mountain* land is not very badly irrigated. Some years since, the Americans made a temporary settlement at Derna, where, taking advantage of the many flooded ravines, they built a *water-mill* of very simple construction, which, by a little skill in damming up the stream, works nearly all the year. (*Pacho*, 99.) The ancient sacred fountain of Cyrene is permanent (*Beechy*, 424.), and probably the only stream in Barca that is so, with the exception of a subterranean rivulet, near Bengazi, which is supposed by Beechy (329.), on good grounds, to be the Lathon or *Lethe* of Ptolemy (iv. 4.), Pliny (v. 5.), and Strabo (xvii. 836.), and the Ereeus of Scylax. (*Perip.* 111.) Though stretching as far as 33° N., Barca has an equinoctial climate. The rainy season appears to commence sometimes as early as November, and at others to delay its violence till the end of December, or even till January: during such delay, however, the intermediate season is *showery*, and when the rains descend in their strength, the mountain roads become nearly, if not quite, impassable. The ravines pour down torrents, which, in their progress, carry with them earth, trees, and stones of enormous size; and convert the narrow belt of flat land between the mountains and the sea into enormous marshes. The temperature is, of course, generally high, but the powerful evaporation makes that of winter something lower than might be anticipated, and absolutely cold nights are not unknown. The wet season, as in other countries, is ushered in by storms. (*Beechy*, 41. 59. 247. 281. 847, &c.)

Notwithstanding the celebrity of this country in ancient times, it is only within these few years that any thing accurate has been learned concerning it. Its very outline was erroneously marked in every map and chart previously to 1828 (*See* SYRTIS); and every account of its soil, climate, and fertility was nearly the direct reverse of what experience has shown to be the truth. The ancients, with the single exception of Herodotus, have combined to represent the coasts of the Syrtis as an irredeemable desert. At least such is the impression given by Strabo, Pliny, Scylax, and others of all the country W. of Berenice (*Bengazi*); while the moderns, following Leo Africanus and the Arab historians, have extended the same description to all the land between Tripoli and Alexandria, till the term *Barca* became synonymous in European language with barrenness. (*Strabo*, xvii. 838.; *Pliny*, v. 4. &c.; *Scylax*, *Perip.* 113. &c.; *Leo. Afric.* v. 72, &c.) But, to say nothing of the gardens of the Hesperides, situated on this coast, it is impossible to reconcile this idea of utter barrenness with the pastoral life said by Herodotus to be led by the aborigines (*Melp.* 186.), or with the subsequent colonisation of the country by the Greeks. Neither is it likely that Herodotus, who so accurately describes the "*vast sandy desert*" in the interior (*Melp.* 181.), should have omitted all mention of the parched and barren soil, had any such existed on the high lands near the coast. In fact, the prevalent descriptions of Barca have been, for years, little more than fables; the S.W. corner, indeed (joining on the desert), seems fully to justify the accounts of utter desolation given of it; but E. and N. the country rapidly improves, and presents extensive crops of corn and large fields of excellent pasturage. The mountain sides are in most cases thickly wooded, and covered with an excellent soil; and even the sand itself (on the shore) is made, by little labour, luxuriantly productive during the rainy season. The trees consist of pines, olives, laurels, with a great variety of flowering shrubs and climbers; such as roses, laurestinas, honeysuckles, myrtles, &c.; but the trees most in esteem here, as in every other Mohammedan country, are the various species of dates, palms, and figs, which flourish in great variety and abundance. The corn which this country produces is chiefly barley, or dhourra, and oats.* The fruit,—grapes, melons, pumpkins, melonrani (or egg plants), cucumbers, and tomatas; a peculiar plant, called Bauria, is also raised, though not in great abundance; fine artichokes, and green and red pepper, are also very plentiful. But the plant for which this country is the most remarkable is the Silphium, an umbelliferous perennial resembling the hemlock or wild carrot, of which the most marvellous tales are related by the ancients. Its origin was said to be miraculous; it perished under cultivation, but throve in the most savage and neglected deserts. A liquor produced from it was esteemed an almost universal remedy for inward ailments; and various ointments, compounded of the stalk, leaves, and root, were held to be equally efficacious in outward applications. The silphium was an object of public, almost of divine, honour; it was an offering to the deified king of the country, and its figure was stamped upon the coins of Cyrene. (*Pliny*, xix. 3.; xxii. 22.; *Theophrastus*, iv. 3.; *Arrian*, *Hist. Ind.* xliii.; *Exp. Alex.* iii. 28, &c.) It does not, however, appear to differ essentially from other soporific plants of the same family. (*Beechy*, 409—420.; *Pacho*, 247—255.) Thus, though not very varied, the productions of Barca are sufficiently abundant, and nothing but industry seems requisite to restore this country to the state in which Herodotus beheld it, when three successive harvests, on the coast, on the sides, and on the summits of the mountains, occupied the Greek inhabit-

* Captain Beechy saw, in the neighbourhood of Bengazi, large quantities of oats, which he considered to be the *spontaneous* production of the soil. Their situation was, however, in open tracts among forests, apparently deserted cultivations (p. 347.), and the grain was, therefore, probably, the product of the last neglected crops. It is a singular, but, except in a few accidental instances like the present, a universal fact, that the bread corns are NO WHERE INDIGENOUS.

ants eight months in every year. (*Beechy*, 261. 339. 387. *et pass.*; *Pacho*, 59. 99. 153. 235. *et pass.*; *Herod. Melp.* 199.)

The domestic animals, camels, horses, oxen, asses, sheep, and goats, are extremely numerous, and form the riches of the present wandering, as of the ancient settled, population. The hog, forbidden by the Mohammedan law to the faithful, is found only in his savage state; but in this state he exists in great numbers, maintaining his ground against the jackals, hyænas, and other beasts of prey that infest the same locality. From the silence of travellers it may be inferred that birds are scarce; and though several kinds of venomous serpents are unquestionably met with, it seems also as if both the number and power of the reptile tribe had been greatly exaggerated. Insects are exceedingly numerous; and even the locust, which is a frequent visiter, is scarcely more terrible (to strangers at least) than the myriads of flies, beetles, fleas, lice, and other noxious vermin, which the heat of the climate and the filthy negligence of the inhabitants preserve in constant strength and activity. (*Pacho*, 61—64. 235—246. &c.; *Beechy*, 107. 211. 286. 301. *et pass.*)

The inhabitants are exclusively Bedouin Arabs, with the exception of a few Jews in the towns. The Arabs differ in nothing from their countrymen in other parts, except in being dirtier, less active, and exhibiting the worst parts of their national character in a more exaggerated form. The country is governed by a bey, subject to the pacha of Tripoli; and the pop., notwithstanding the resources of the country, is thin. Its amount can only be guessed at; but it probably does not exceed 1,000,000. (*Beechy* and *Pacho*, *passim.*)

The original inhabitants of this district are called by Herodotus (*Melpom. pass.*) Africans (Λιβυες), a term which he seems always to distinguish carefully from Egyptians (Αιγυπτιοι), but which certainly did not mean a black race of men. According to Strabo, it would appear that, even from the earliest times, they were Arabs following the wandering pastoral life, which prevails among them to the present day. (xvii. 835.) The Phœnicians appear to have traded with them at a very early period; and from their description of the country probably arose the first fanciful idea of the Hesperian gardens, which, as already observed, were supposed to have their seat in this country. It is probable that the report of this luxuriance of the district was one inducement to the Greek settlement in Cyrene; but the immediate cause seems to have been the pressure of population in Lacedemon, consequent to the expulsion of the descendants of the Argonauts from Lemnos by the Pelasgian population of Attica. After a troubled residence of some years, these exiles threw off a large body of emigrants, who, under the command of Battus, and by order of the Delphic oracle, established the first Greek colony in Africa of which there is any record. The pressure of population continuing in Lacedemon, and the oracle urging the Greeks to follow their countrymen, a general propensity to emigrate was at last excited; and, about 60 years after the first adventurers had landed, a movement, that might almost be called national, was made toward the African shores. The natives and the Egyptians seem to have been equally alarmed at this irruption; they combined to expel the intruders, but received so decisive a defeat that few of the Egyptians returned to their own country. In the succeeding generation the town of Barca, which subsequently gave name to the whole country, was built. This once famous city has now vanished, and even its site is a matter of dispute. For a generation or two, there were now two Greek kingdoms in Africa, that of Cyrene and that of Barca; both, however, shared the fate of their Egyptian neighbour, and, under Cambyses, became a part of the Persian empire, and so remained, till the conquests of Alexander changed the aspect of Eastern affairs. Under his successors they formed a part of the Greco-Egyptian kingdom; but before its fall they passed into the hands of Rome. With the irruption of the northern nations, Africa fell for awhile beneath the power of the Vandals; but the rapid conquests of the early Mohammedans quickly added this country to their dominions. This was the last important revolution. During the many centuries that the Greek and Roman ruled in Barca, civilisation, arts, and sciences flourished; the remains of aqueducts, temples, and other mighty works, sufficiently attest this fact; but the refinement was entirely foreign, and vanished with the exotic population which introduced it. The Arab is again the sole possessor of the soil; and the description of the shepherd, who held it before the Greek arrived, would in every important particular apply to him at this day. The cities of this country, especially those of Berenice (*Bengazi*), Arsinoe, Barca, Appollonia, and Cyrene, which gave name to the district called Pentapolis (Πεντάπολις), are very famous in antiquity. These towns, however, frequently changed their names, so that it is sometimes difficult to follow the ancient writers; and in the barbarous names bestowed upon them by the present occupiers, it is as impossible to recognise them as it is to identify the heaps of filth and ruins which they now exhibit, with the splendour and luxury that distinguished them in antiquity. The name Barca has, however, undergone no change, and the W. division of the country is still called Cyrenaica. The E. portion is called Marmorica, which is also an ancient denomination. (*Herodotus, Pliny, Strabo, Arrian, Polybius, Abul Feda, An. Mus.*; *Edreisi, Beechy, and Pacho, pass.*)

BARCELONA, a city and sea-port of Spain, on the Mediterranean, cap. prov. Catalonia, on the margin of a fruitful plain, between the rivers Besos and Llobregat, at the foot of Monjouich (*Mons Jovis*), 315 m. E.N.E. Madrid, 194 m. N.E. Valencia; lat. 41° 22′ 58″ N., long. 2° 8′ 11″ E. Pop. in 1826, 120,000 (*Miñano*). It is strongly fortified, being surrounded with strong walls, fosses, and batteries. The citadel to the N.E. of the city, is a regular octagon on the system of Vauban, with accommodation for 7,000 men. The citadel communicates with the fort of San Carlos on the sea, by a double covered way which surrounds the city as far as Barcelonetta. The fortress of Monjouich, on the mountain of that name, is looked upon, if properly garrisoned, as impregnable; it commands the town on the S.W.

The city is divided by the promenade, called La Rambla, into two pretty equal parts; that to the N.W. being called the new, and that to the N.E. the old city. The streets in the latter are narrower and more crooked than than in the former. The houses, which are mostly of brick, are generally from four to five stories high, with numerous windows and balconies. Mr. Townsend says that the old Roman town may still be distinctly traced, occupying a small eminence in the centre of the city, with one of its gates and some of its towers well preserved. With the exception of the cathedral and custom-house, the old palace of the kings of Aragon, &c., few of the public buildings are worth any special notice. The cathedral is a noble structure, in the later Gothic style, with finely painted windows, and a choir of good workmanship and singular delicacy. With the exception of that of the Dominicans, the convents are destitute of any attractions; and the records and pictures of the heretics who had suffered in the city from 1489 to 1726, described by Mr. Townsend as existing in the latter, are no longer to be met with.

Barcelona has a royal junta of government, and is the seat of the provincial authorities. A *Junta de Comercio*, or board of trade, supports public professorships of, navigation, architecture, painting, sculpture, perspective landscape, and ornamental flower-drawing, engraving, chemistry, experimental philosophy, agriculture, and botany; short-hand writing, commerce, and accounts; mechanics, and the English, French, and Italian languages. It has a large cabinet of coins, and awards pensions and rewards for superior attainments and useful inventions. It also maintains some of its students in foreign parts, to perfect themselves in their studies; and has expended large sums in drawing plans and taking levels of the ground for canals and other public works in the province. Mr. Townsend says he counted 500 boys, most of them intended for trades, attending the academy of fine arts, provided with materials, models, and living subjects at the public expense. It has also four public libraries, an ecclesiastical seminary, eight colleges, a college of surgeons, and professorship of practical medicine, a college of pharmacy, academies of arts and sciences, and of *belles lettres*, &c., a school for deaf and dumb, house of industry (*Real Casa de Caridad*), numerous hospitals, a foundling institution, and several other charities. Mr. Townsend says that the general hospital of this city was the best managed institution of the kind he had ever seen. The population of the city has not an exclusively Spanish appearance. Spanish hats are scarcely to be seen, and the mantilla is not indispensable. According to Mr. Inglis, the features of the females are more regular, their forms slighter, their complexions clearer, and their hair less coarse than that of the Andalusian ladies; but their eyes have less expression. The dress of the peasantry is peculiar, their red caps hanging a foot down their backs; crimson girdles, and gaudy coloured plaids, give them a highly grotesque appearance. Barcelona has some fine public walks: the *Rambla*, already referred to, is always crowded, and is hardly inferior to the Boulevards of Paris. There is also a charming walk round the ramparts, with delightful views, particularly towards the sea.

The opera here enjoys a considerable reputation; the interior of the theatre is large and handsome; almost all the boxes are private, and cost from 50*l.* to 60*l.* for the season. Seats in the pit let at 40 dollars for the season. The principal singers are paid from 2,000 to 2,500 dollars, with a benefit night. There are here several valuable libraries and collections of MSS.; especially the royal archives of the kingdom of Aragon, containing 20,000 loose MSS., 8,000 in folio volumes, and 900 papal bulls. The principal manufactures are those of silk, leather, lace, wool, cotton, &c., but none of them are flourishing. Miñano says of the cotton manufacture,

that its progress has been *de mal en peor!* — from bad to worse! — a consequence of oppressive and absurd political and commercial regulations. Mr. Townsend speaks in high terms of the foundry for brass cannon that existed in the city at the epoch of his visit. We are not aware whether it has been abandoned; but it is unlikely that such an establishment should be kept up in the present wretched state of the monarchy.

The trade of Barcelona has greatly declined since the emancipation of Spanish America; but it is still far from inconsiderable. The principal imports are cotton, sugar, fish, hides, cocoa, iron hoops, cinnamon, dye-woods, indigo, staves, cheese, bees' wax, coffee, horns, and specie, mostly from America, Cuba, and Porto Rico. The exports consist of wrought silks, soap, fire-arms, paper, hats, laces, ribands, and steel. The export of shoes, in the manufacture of which about 2,000 hands used to be employed, has entirely ceased. In 1831, 18 English and 110 other vessels, being in all of 15,130 tons burthen, entered the port. The harbour is formed by a mole running to a considerable distance in a S. direction, having a lighthouse and battery at its extremity. The depth of water within the mole is from 18 to 20 feet; but there is a bar outside, which has frequently not more than 10 ft. water. When in the harbour, vessels are pretty well protected; they are, however, exposed to the S. winds, and great damage was done by a dreadful storm in 1821. Large vessels are obliged to anchor outside the mole.

The Barcelonese used to evince more superstition and ignorance than might have been expected in a city having so much intercourse with foreigners. Money is collected to the sound of little bells, at executions, to buy masses for the soul of the criminal; and large processions of masked penitents accompany him to the scaffold. In 1779, most of the insurance companies were ruined by underwriting the French West Indiamen, relying on their partnership with various saints, when nobody else would take the risk at any price! (*Townsend*, i. 153.) And it would seem, from the statements of Mr. Inglis, that matters continue, in this respect, nearly on their old footing.

Barcelona is supposed to have been founded about 200 years before the Christian æra, and 300 after the establishment of the Carthaginians in Spain, and to have been named after its founder, Hamilcar Barcino. After the Romans and the Goths, it was subjugated by the Arabs, in the beginning of the eighth century; and was reconquered from them by the Catalonians, aided by Charlemagne and Ludovico Pio, in 801. It was then governed by counts, who were independent sovereigns, till the end of the 12th century, when it was ceded, by marriage, to the crown of Aragon. Barcelona is distinguished in the history of the middle ages for the zeal, skill, and success with which her citizens prosecuted commercial undertakings. She singly rivalled the maritime towns of Italy in the commerce of the Levant; and was one of the first to establish consuls and factories in distant countries, for the protection and security of trade. She would seem also to be entitled to the honour of having compiled and promulgated the famous code of maritime law, known by the name of the *Consolato del Mare;* and the earliest authentic notices of the practice of marine insurance, and of the negotiation of bills of exchange, are to be found in her annals. She has been more celebrated as a commercial than as a manufacturing town; though in this, also, her progress has been very respectable.

Barcelona has sustained seven regular sieges since its recovery from the Arabs. During the greater part of the war of the succession, it adhered firmly to the party of Charles; but, after a desperate resistance, it was taken, in 1714, by the forces of Philip V., commanded by the Duc de Berwick. The French got possession of it in 1808, and kept it all through the Peninsular war. In 1821 it was attacked by the yellow fever, which is said to have carried off a fifth part of the population. Thirteen councils have been held here, and above 24 assemblies of the Cortes, down to the last, in 1706. It has had, also, many visits from the Spanish monarchs, as they were obliged by the laws of Catalonia to appear here in person to be crowned and take the oaths as sovereigns of this principality and of Aragon; which ceremony was observed down to the time of Philip V. (*Miñano, Diccionario Geografico*, ii. 390—396., and *Suppl.*, art. *Barcelona; Inglis, Spain in* 1820, ii. 364—391.; *Townsend*, i. 114—138.; *Dict. of Com.* p. 119.)

BARCELONA (NEW), a town of Colombia, cap. prov., on the left bank of the Neveri, about 3 m. from the sea, and 40 m. S.W. Cumana; lat. 10° 6′ 52″ N., long. 64° 47′ W. Its pop. in 1807, was 15,000, half of whom were whites; and at the beginning of the present century, it had a considerable trade with the W. India islands. It is still a place of some commerce, being well situated for the exportation of the cattle and other produce of the *llanos* to the W. India islands. Speaking generally, it is badly built; the houses being of mud, and ill furnished. The streets are unpaved, which makes them filthy during the rains, while in dry weather the dust is intolerable. It is said to be one of the most unhealthy places in S. America. It was founded in 1634; previously to which, the cap. of the distr. was Cumanagoto, 2 leagues higher up the river. (*Mod. Trav.* xxvii. 102—104.)

BARCELONETTA, a suburb of Barcelona, on the S.E. side of the river, often considered as a separate town. It was built in 1754, on a uniform plan; the houses are all of red brick. Pop. 5,000. (*Miñano*, i. 392.)

BARCELONETTE, a town of France, dép. Basses Alpes, cap. arrond., on the Ubaye, 30 m. N. E. Digne. Pop. 2,154. It is beautifully situated in a fine valley at the foot of the Alps, above 3,800 feet above the level of the sea. It consists principally of two main streets, which intersect each other at right angles; the houses are neat and good; and, altogether, this is perhaps the handsomest town of the French Alps. It has a court of original jurisdiction, a college, a primary normal school, and an agricultural society. Above 200 silk-looms have recently been established here, and it has also some manufactures of cloth, and fulling mills.

Barcelonette is believed to occupy the site of a Roman town. Being on the frontier of two states frequently at war, it has been repeatedly taken and retaken; but was definitively ceded to France by the treaty of Utrecht. It was the native place of Manuel, the liberal deputy, to whose memory a monument has been constructed in the principal square. It consists of a fountain, surmounted by a funeral urn, and having on one of its sides a bust of Manuel, with the inscription, taken from Beranger, "*Bras, tête et cœur, tout était peuple en lui.*" (*Hugo, France Pittoresque*, art. *Basses Alpes*.)

BARCELOS, a town of Portugal, prov. Minho, on the Cavado, 28 m. N. Oporto. Pop. 3,892. It is surrounded by walls flanked with towers; streets broad and straight, houses well built: it has a fine bridge over the river, a grammar-school, an hospital, and a workhouse. It is very ancient.

BARDSEY, a small island of N. Wales, in the Irish Sea, near the N. point of Cardigan Bay, co. Caernarvon; lat. 52° 45′ N., long. 4° 46′ W. Pop., in 1831, 84. Length about 2 m.; breadth 1 m. It contains 370 acres, ⅓ of which is a mountain ridge, feeding a few sheep and rabbits; the rest a tolerably fertile clay soil, growing good wheat and barley. Its rental does not exceed 100*l.* a year, in three distinct holdings. It is accessible only on the S.E. side, where there is a small well-sheltered harbour for vessels of 30 or 40 tons. On the N. and N.E. it is sheltered by the promontory of Braich-y-Pwll, 2½ m. distant. In the channel between them is a very rapid current, rendering it unsafe, except to experienced hands. The perpendicular and projecting cliffs are a great resort of puffins and other migratory birds in the breeding season, and their eggs form a considerable trade, being gathered by men suspended from the summits of the promontory. There is a lighthouse on the island (with fixed and revolving lights), established in 1821, under the Trinity House, having the lantern elevated 141 ft. above the sea. It is said to owe its present name to its forming a refuge for the last Welsh bards. It had an ancient and celebrated abbey, the annual revenue of which, at the general suppression, was 46*l.* 1*s.* 4½*d.* The site is traceable only from numerous walled graves, and a building called the Abbot's Lodge. In a ruined antique oratory, with an insulated stone altar at the E. end, the church service is read on Sundays by one of the inhab. to the rest, when the weather does not permit them to resort to the pa. church of Aberdaron, on the promontory.

BAREILY, an inl. distr. of Hindostan, prov. Delhi, mostly between 28° and 29° N. lat.; having N. the distr. of Pillibheet, E. and S.E. Shahjehanpore, and W. and S.W. Saiswan and Moradabad: area 6,900 sq. m.; surface generally level and well cultivated: the Ganges bounds it W., and the Ramgunga and many small streams intersect it. In summer the heat is intense, but during winter, with N. winds, the thermometer falls below 30° Fahr., and water freezes in the tents. A few years ago there were said to be 4,458,380 kucha begas of land in cultivation, assessed with a land-tax of 2,266,280 rupees, or a little more than 8 annas per bega; most of which is realised, though the gov. not resorting to sales of land for arrears of taxation, as in the lower provinces it has always been difficult to collect, and much depends upon the decision and judgment of the collector: 3,362,022 begas are fit for culture, but not in actual tillage; and 3,558,899 begas are reported as waste. To the N. there is much jungle, and between Bareily city and Anopsher extensive wastes prevail, consisting of lands which were formerly cultivated, but are now covered with long grass, which parches and inflames in summer, and swarms with foxes, jackals, hogs, and game. Bishop Heber says, that the soil and climate generally are very fine; in most parts date-palms and plantains are common, as well as walnut, apple, and pear-trees, vines, &c. This distr. is noted for a fine species of rice, called *basmati* (pregnant with perfume), superior to the best of Patna. Husbandry, in general, is superior to that of Oude, and the articles produced of a better quality: the sugar, rice, and cotton, are

the highest priced in India. The roads and bridges are better than in most parts of the British provinces; and the cart commonly in use is a larger and more convenient vehicle than that of Bengal. Formerly a great deal of salt, called *kurrah salt*, was made collaterally with nitre, in this distr., and exported in large quantities. The imports from the lower prov. are chiefly chintzes, gudjoes, salt, coarse sugar, and cutlery, cottons, cheap trinkets, coral, beads, and slave-girls: articles from the hill region, and even from Tibet, were formerly imported thither on the backs of goats. The inhab. are pretty equally divided into Hindoos and Mohammedans: the tribe of Banjarees (carriers and bullock drivers), estimated at 14,000, have been all converted from the former to the latter faith. Not long since Bareily distr. was overrun by clans of Mohammedan warriors, or rather banditti, ready to join any leader who chose to hire them, and many thousands of whom served under Holcar, Jeswunt Row, &c.; they were disaffected to the British gov., and for many years disturbed the country by robberies and other crimes: they have at length mostly either dispersed or settled down into more quiet lives; but Bareily is still a distr. from which judicial appeals to the supreme courts are very frequent. In 1827 there were 108 Persian and 105 Hindoo schools in this distr., entirely supported by the pupils. Hindoos and Mussulmans have no scruples as to mixing together in these establishments: reading, writing, arithmetic, and Persian, constitute the principal branches of tuition. The original Sanscrit name of this territory was Kuttair, till incorporated with Rohilcund; with which it was ceded, in 1774, to the nabob of Oude: since 1801 it has been under the British presid. of Bengal. (*Hamilton's E. I Gazetteer*, pp. 137, 138.; *Reports on the Affairs of the E. I. Comp.*, 1830-32.)

BAREILY, a city of Hindostan, cap. of the above distr., seat of a court of circuit and appeal, head of a judicial division, and one of the 6 chief provincial cities in the Bengal presidency; on the banks of the united Jooah and Sunkrah, lat. 28° 23′ N., long. 79° 16′ E., 42 m. N.W. of the Ganges, and 700 m. N.W. Calcutta. Pop. (1822) 66,000. The principal street is nearly 2 m. long, and tolerably well built, but the houses are only one story high. There are several mosques, and an old fort, crumbling to ruin: the British civil station and cantonments, consisting of a quadrangular citadel, surrounded by a ditch, stand S. of the town. The chief manufactures are brazen water-pots, decorated with varnish and a remarkable imitation of gilding; other household articles; with saddlery, cutlery, carpets, embroidery, hookahs, &c. There are 131 Persian and Hindoo schools in Bareily, 300 seminaries, attended by about 3,000 pupils, and an established English college with 60 students; 11 persons teach Arabic, and 2 others medicine, and in the vicinity there are 9 Hindoo, and 13 Persian schools. In 1816 an alarming insurrection broke out in this city, occasioned by an attempt to impose a police tax, which was not quelled without much difficulty and bloodshed. The lands in the vicinity are but 8 feet above the waters of the Ramgunga, and are annually inundated.

BARENTON, a town of France, dép. La Manche, cap. cant., 7 m. S. E. Morlaix. Pop. 3,047.

BARFLEUR, a sea-port town of France, dép. La Manche, 16 m. E. Cherbourg. Pop. 1,158. Its harbour, which was once considerable, is now choked up with sand.

BARGA, a town of Tuscany, cap. vicariat, near the Serchio, 16 m. N. Lucca. Pop. 1,800. There are fine jasper quarries in its environs.

BARGA, a town of the Sardinian States, div. Coni, 28 m. S.S.W. Turin. Pop. 3,700. It is situated at the foot of the Alps, near the left bank of the Grandon. It has a manufactory of arms, and a pretty active commerce. There are slate quarries in its vicinity.

BARGEMONT, a town of France, dep. Var, 7 m. N.N.E. Draguignan. Pop. 1,944. It stands on a hill covered with vines and olives, and sheltered by mountains. Moreri, the original author of the famous historical and biographical dictionary (*Le Grand Dictionnaire Historique*), was born here in 1643. At his death the dictionary was comprised in 1 vol.; whereas, in consequence of successive enlargements, the last and best edition, in 1759, is in 10 vols. folio. Moreri can, therefore, be looked upon merely as the projector of the existing work.

BARI (an. *Barium*), a sea-port and city of Naples, cap. prov. Terra di Bari, on the Adriatic, 50 m. N.N.W. Tarentum; lat. 41° 7′ 52″ N., long. 16° 53′ 2″ E. Pop. 19,000. It occupies a tongue of land of a triangular form, and is defended by double walls and a citadel. The views from the rampart above the harbour are extremely fine. Streets narrow, crooked, and filthy; houses mostly mean; water brackish and bad. Principal public buildings, — cathedral, with a steeple 263 feet high; the old priory of St. Nicholas, founded in 1087, resorted to by thousands of pilgrims; the college, founded in 1817 for the education of nobles; the lyceum, the new theatre, and the vast building of the diocesan seminary, which admits 120 scholars from 4 provinces, who are fed, lodged, clothed, and instructed for 8 ducats a month each. It is the seat of an archbishopric, and of a civil and criminal court. Besides the cathedral, it has several parish churches, and convents for both sexes, an orphan asylum, 2 hospitals, and a large arsenal, including within it corn magazines and a *mont de piété*. It has fabrics of cotton, cloth, silk, hats, soap, glass, &c. The *acqua stomachica*, a liquor made of herbs and spices, and used all over Naples as *chasse caffè*, is prepared here in great perfection. The port, which is encumbered with sand, only admits small vessels; but in the roads there is good anchorage in from 16 to 18 fathoms. Nearer the shore, in from 10 to 12 fathoms, the ground is foul and rocky.

This is a very ancient city. It is referred to by Horace, *Bari mœnia piscosi* (Sat. i. 5.). In more modern times it fell successively into the possession of the Saracens and Normans. It has been three times nearly destroyed, and as often rebuilt on the same place. (*Swinburne's Two Sicilies*, i. p. 191. 4to.; *Craven's Naples*, p. 109.; *Diction. Géographique*, &c.)

BARILE, a town of Naples, prov. Basilicata, 4 m. S.S.E. Melfi. Pop. 3,000. It stands on an agreeable hill, and has 3 churches. It was founded by a Greek colony of the Lower Empire.

BARJAC, a town of France, dep. Gard, cap. cant., 19 m. E. Alais. Pop. 2,186.

BARJOLS, a town of France, dep. Var, cap. cant., 12 m. N.N.W. Brignolles. Pop. 3,470. It has a filature of silk, with fabrics of paper and earthenware, distilleries, and tanneries. The subterranean chapel of the *ci-devant* convent of the barefooted Carmelites has some very curious stalactites.

BARKING, a town and par. of England, co. Essex, hund. Beacontra, on the Roding, 8 m. E. London. Pop. of the town, in 1821, 2,580; in 1831, 3,404: houses at the latter date, 652. Pop. of the entire par. in 1831, 8,036; houses, 1,587. The town is situated at the head of Barking Creek (as the the Roding, below the town, is usually called), where it widens and receives the tide of the Thames, 2 m. above its influx into that river. The Roding contracts much immediately above the town, but has been made navigable for small craft to Ilford. The church was formerly attached to the celebrated abbey, and has many curious monuments. The living is a vicarage, with two chapels (one at Ilford, the other at Epping Forest) annexed: it is in the patronage of All Souls' Coll., Oxford. There is a free school and market-house: a court is held by the lord of the manor every third week, where causes of trespass, and of debts under 40s., are tried. The inhabitants are chiefly fishermen, or engaged as bargemen, and market-carriers to London, &c. The parish contains 10,170 acres, about 1,500 of which are occupied by the forest of Hainault, where is the famous Fairlop Oak, round which an annual fair is held on the first Friday in July. Another portion, called the Level, is so low that high tides are only kept out by an embankment; and it has been subject, in former times, to frequent inundations. The last serious one occurred in 1707, when 1,000 acres of rich land were lost, and a sandbank formed at the breach, 1 m. long, stretching half across the river. After an unsuccessful attempt by the proprietors, parliament took it up, as a national concern, and a fresh embankment was made, which cost 40,000*l*. This has been since kept in repair under commissioners appointed for the purpose. The bank is from 8 to 14 ft. high, and has a pathway on its summit. Great quantities of vegetables are supplied, from this parish, to the London markets. Under the Poor Law Amendment Act, the whole parish is placed in the Romford union, and has eight guardians; its average rates are 4,817*l*.

The abbey was one of the richest and most ancient in the kingdom; it was founded about 677, for nuns of the Benedictine order, and several of its abbesses were canonised. In 870 it was destroyed by the Danes, and in the 10th century rebuilt and restored to its former splendour by Edgar. Subsequent to the Conquest, its government was frequently assumed by the English queens. Its abbess was one of the four who held baronial rank, and lived in great state. At the general suppression, its annual rev. was, according to Speed, 1,084*l*. 6*s*. 2½*d*.; acccording to Dugdale, 862*l*. 12*s*. 3½*d*. The abbess and 30 nuns were pensioned off. There is scarcely a trace left of the building.

BAR-LE-DUC, or BAR-SUR-ORNAIN, a town of France, cap. dép. Meuse, on the Ornain, 128 m. E. Paris. Pop. 12,383. It stands partly on the summit and declivity, and partly at the foot, of a hill. Its castle, of which only the ruins now remain, was burnt down in 1649, and its fortifications were dismantled in 1670. The lower town, traversed by the Ornain, over which there are three stone bridges, is the best built, and is the seat of manufactures and trade. Among the public buildings are the hotel of the prefect, the town-house, college, and theatre. In one of the churches is the celebrated monument of René de Chalons, Prince of Orange, by Richier,

pupil of Michael Angelo. Besides the college, the town has a nunnery, a normal school, a society of agriculture and of arts, and a public library; it is also the seat of tribunals of original jurisdiction and commerce, and of a council of *prudes hommes*. The establishments for spinning cotton produced, in 1834, 500,000 kilogs. yarn; and there are fabrics of cotton stuffs, handkerchiefs, hosiery, hats, and jewellery, with tanneries, works for dyeing Turkey-red, &c. The Ornain being navigable from the town, it has a considerable trade in forwarding timber, wine, and other articles, for the supply of Paris. Its *confitures de groseilles* are highly esteemed. (*Hugo*, art. *Meuse*. &c.)

BARLETTA, a sea port town of Naples, prov. Terra di Bari, on the Adriatic, 34 m. N. W. Bari; lat. 41° 19′ 26″ N., long. 16° 18′ 10″ E. Pop. 18,000. It is encompassed by walls, and defended by a citadel; streets wide and well paved, but slippery; houses large and lofty, built with hewn stone, which, from age, has acquired a polish little inferior to that of marble. Principal public building — the cathedral, a Gothic structure, remarkable for its high steeple, elegant exterior, and the antique granite columns in its interior; there are also several other churches and convents for both sexes; an orphan asylum; a college, founded by Ferdinand IV.; and a handsome theatre. Near the church of St. Stephen, in one of the principal streets, is a colossal bronze statue, 17 ft. 3 in. high, representing, as is supposed, the Emperor Heraclius. Barletta is the residence of a sub-intendant, a *juge d'instruction*, and an inspector-general of the adjoining salt-works. A magnificent gateway communicates from the town to the harbour. This is formed by a mole running out from the shore with a breakwater lying before it. On the latter is a low light-house. The harbour only admits small vessels; but there is good anchorage in the roads, with off-shore winds, at from 1 to 3 m. N. by W. of the light-house, in from 8 to 13 fathoms, soft muddy bottom. It carries on a considerable trade with other ports of the Adriatic, and the Ionian Islands. Principal exports — wine, oil, salt, corn, wool, lamb and kid skins, almonds, and liquorice. Mr. Keppel Craven says that Barletta appeared to him infinitely superior to most Neapolitan towns. In winter the climate is exceedingly mild; but during part of the hot months, it is unhealthy. There are very productive salt springs about 7 m. N. from the town, managed on account of government. (*Swinburne's Two Sicilies*. i. 176., 4to. ed.; *Craven's Naples*, p. 86.; *Purdy's Sailing Directory for the Adriatic*, &c., p. 4. &c.)

BARMEN. See Elberfeldt.

BARMOUTH or ABERMAW, a town and sea-port of N. Wales, co. Merioneth, hund. Edernion, par. Corwen, 55 m. W. Shrewsbury; lat. 52° 43′ N., long. 4° 2′ W. Pop. of par. in 1821, 1,742; in 1841 2,129. It is situated on the N. side the entrance of the Maw, in Cardigan Bay, where that river opens to an æstuary (of about 1 m. in breadth at high water), which forms its harbour. The houses are built in successive ranges up the steep acclivity of a bare rocky mountain, from the base to about the summit, and are sheltered on the N. and E. by other mountains. The whole has a singularly romantic appearance. There is a chapel of the established worship (with 470 sittings, half of them free), built in 1831. The Independents, Calvinists, and Wesleyans, have each a chapel. It ranks high, as a favourite place of resort, among the watering towns of this coast. There is an excellent hotel, with sea-water baths, billiard and assembly-rooms, &c., and numerous respectable lodging-houses. The entrance to the harbour is partially closed by the small island of Ynys-y-Brawd, or Friar's Island, and by a gravel beach, on the S. There are shifting sands, called the N. and S. bars, which make the entrance difficult; and it is accessible only to vessels of any great burden at spring tides. In 1802 it was greatly improved by building a small pier, on which there is a beacon. There are weekly markets on Tuesdays and Fridays, and four fairs, held on Shrove-Monday, Whit-Monday, Oct. 7th, Nov. 21st. Shipbuilding and tanning are carried on to some extent in the port. Previously to the last French war, it traded with Ireland and the Mediterranean, but the coasting trade is now the only one. It exports timber, bark, copper, lead, and manganese ores, and slates; and imports corn and flour, coals, limestone, hides, and groceries. The river is navigable for barges of 20 tons to within 2 m. of Dolgelly. There is a large turbary in the vicinity, through which a walled canal is formed, and by it and the Maw fuel is conveyed to both towns. Barmouth is a creek of the port of Aberystwith: *Abermaw* is the Welsh name, indicative of its locality: the English one was adopted at a meeting of masters of vessels, in 1768. From the harbour to where the Astro joins the sea, there is a smooth sandy beach, the view from which is magnificent. On the W. are the opposite shores of Caernarvon; on the N. high mountains protrude into the sea; above which, in the distance, Snowdon may be seen in clear weather. The line of road to Dolgelly, 10 m. E. of Barmouth, comprises, perhaps, the most magnificent scenery in Wales.

BARNARD CASTLE, a market-to. of England, co. Durham, on the Tees, 227 m. N. N. W. London, and 2 m. S. W. Durham. Pop. in 1821, 3,581; 1841, 4,452. It derives its name from its founder, Barnard, an ancestor of John Baliol, and a native of the place, who erected a strong castle, which afterwards became the property of Rich. III. when Duke of Gloucester, in right of his wife, Anne Neville. During a rebellion in the time of Elizabeth it was taken by the insurgents, after a stubborn defence. The town, situated on a steep acclivity over the Tees, consists principally of one street, nearly a mile long, well paved, and supplied with water, and of a very cheerful appearance, from the houses being built of a white freestone. St. Mary's church is an ancient structure, with a square embattled tower. The Wesleyan and Primitive Methodists and the Independents have places of worship. It has, also, a national school, formed and supported by voluntary subscriptions; an hospital for widows, founded by John Baliol; and a mechanics' institute, with a library. A jury, chosen at the court baron, of Darlington manor, which has jurisdiction for debts under 40*s*., together with the steward of the manor, have the government of the town. It is a station for receiving votes at elections for members for the S. division of the co. The manufacture of Scotch camlets, which was carried on to a considerable extent, has lately declined; but the manufacture of carpets, hats, and thread, for spinning which there are several mills on the river, is in a thriving state. N. of the town was Marwood, once a considerable town, and giving name to an extensive tract of country, but now to be traced only in the ruins of the church, which is converted into a barn. About 2 m. distant there is a chalybeate spring. The corn market, which is one of the largest in the N. of England, is held on Wednesdays, that for cattle on alternate Wednesdays; fairs on the Wednesdays in Easter and Whitsun weeks, and on St. Magdalen's day. Branches of the National Provincial Bank of England, and of the Yorkshire Banking Co., two private banking houses, and a savings' bank, are established here. (*Surtees' Hist. Durham; Hutchinson's Hist. Durham.*)

BARNAUL, a mining town of Siberia, gov. Tobolsk, circ. Tomsk, near the Altai Mountains, lat. 53° 20′ N., long. 83° 26′ E. Pop. 8,000. It is the seat of a board for the administration of the mines, and large quantities of gold and silver ore are melted here. Considerable quantities of gold are obtained from the latter.

BARNET (CHIPPING), a par. and town of England, co. Hertford, hund. Cashio, 11 m. N. N. W. London, Pop., 1821, 1,755; 1841, 2,485. It crowns a hill on the line of the great N. road from the metropolis; and, being a considerable thoroughfare, has usually a bustling appearance. The church is ancient, with an embattled tower. There is also an independent chapel; a free grammar-school, founded by Elizabeth; another free school, founded 1725; and 2 sets of almshouses, each for six poor women. A weekly market on Monday, and fairs April 8, and September 4: the latter being one of the principal cattle fairs in the kingdom. It is the central town of a poor law union of 9 parishes; its own rates amounted in 1847 to 986*l*. assessed upon property of the annual value of 7,691*l*. The enclosure of Barnet Common, subsequent to 1821, is the chief cause of the increased pop.

On the 14th April, 1471, the decisive battle took place between Edward IV. and the Earl of Warwick, on Gladsmuir Heath, in the vicinity of this town; when the latter, at the head of the Lancastrian forces, was totally defeated and slain. An obelisk was erected in 1740, in commemoration of the event.

BARNSLEY, a market-to. of England, W. riding co. York, on the Dearne, 155 m. N. W. by N. London., 34 m. S. W. York, and 9 m. S. Wakefield. Pop., in 1821, 8,284 and in 1841, 12,310. The to. (in Domesday Book called *Berneslcye*) is situated on the side of a hill. Streets generally narrow, and houses old, but latterly it has been much improved, and is paved, lighted with gas, and well supplied with water. It has two episcopal places of worship, with a Rom. Cath. and several dissenting chapels. A free grammar-school was founded in 1665, it has also national and other schools, a subscription library, and a scientific institution. A court baron is held annually, under the Duke of Leeds, lord of the manor; a court leet, for the honour of Pontefract, with jurisdiction to the amount of 5*l*., every third Saturday; and petty sessions on Wednesday. The meetings are held in the new town-hall. This is one of the places for receiving votes at general elections for the riding. Linen is extensively manufactured, as is also steel wire for needles. There are three foundries, in which steam engines are made, and bleaching and dyeing are carried on. The place is surrounded with coal pits. Poor rates in 1847, 2,519*l*: annual value of real property in do. 27,777*l*. Markets on Wednesday and Saturday; fairs on the last Wednesday in Feb., 13th May, and 11th Oct. A canal, connecting the Calder and Don, passes by the

town. (*Allen's Hist. of Yorks.; Baine's Hist. and Direct. of Yorks.*)

BARNSTABLE, a sea-port town of the U. States, Massachusetts, cap. co. same name, on the narrow isthmus bounding Cape Cod Bay to the S., 63 m. S. E. Boston. Pop. 4,301. It has harbours on both sides the isthmus: that on the St. side, called Hyannes Harbour, is protected by a breakwater, formed at the expense of the general government. There are extensive salt marshes in the neighbourhood, whence large quantities of salt are obtained, and the inhabitants are largely engaged in the fishery and coasting trades. In 1848 there belonged to Barnstable 64,309 tons of shipping, of which about 30,000 tons were employed in the coasting trade and about 16,000 in the cod and mackarel fisheries.

BARNSTAPLE, a port of entry, bor., and town of England, co. Devon, hund. Braunton, on the E. bank of the Taw, where it is joined by the Yeo, and at the point where it begins to expand into an æstuary, 172 m. W. by S. London; lat. 51° 5' N., long. 4° 2' W. Pop. in 1821, 5,079; in 1841, 10,259. The town is situated in a vale, sheltered on the E. by a semicircle of hills, and contains many good open streets, and well built houses; it is adequately supplied with water, and paved and lighted under a local act. The communication with the opposite side the river is kept up by means of an ancient bridge of 16 arches, which has been much improved. Besides the estab. church (a spacious old structure with a spire), the Baptists, Independents, and Methodists, have each a chapel. The guildhall is a handsome modern building, the under part of which is occupied as a market-place. There is a good theatre and billiard and assembly-rooms; a free grammar-school endowed in 1649, in which the poet Gay, a native of the vicinity, and some other distinguished individividuals have been educated; two other endowed charity-schools: in one 50 boys and 20 girls are clothed and instructed, in the other 20 girls are taught to read and knit; with national and other schools supported by subscription. There are 3 sets of almshouses in the town for aged poor: Paige's, founded in 1553: Litchdon's in 1624; and Hornwood's: they provide for about 60 individuals. The N. Devon Infirmary is near Barnstaple: it is an extensive establishment, supported by subscription, for the medical relief of the district. The town has a weekly market on Friday; monthly cattle-markets on the same day, which are numerously attended; 2 great markets on the Friday preceding April 21st, and the second Friday in December; and a large annual fair for horses, cattle, and sheep, held on the 19th of Sept. and two following days. In the town are manufactories of serge, inferior broad cloths, and lace, which employ about 800 hands; and in the immediate vicinity 6 or 7 tan-yards, a paper-mill, and an iron-foundry: considerable quantities of earthenware, tiles, and bricks, are also made in the neighbourhood. The quay is only approachable by the smaller classes of vessels; and the only deep water within the bar, for vessels to ride in, is at the Pool of Appledore: this bar, which is at the outer entrance to the æstuary of the Taw (7½ m. W. of Barnstaple), has, at low water springs, not above 2 ft; at high water do., 27 feet.; and at high water neaps, about 14 ft.; so that the passage is somewhat dangerous, and should not be attempted, except in cases of necessity, by vessels drawing more than 12 ft. The imports of the town consist chiefly of timber and deals from Canada and the Baltic, coals and culm from Wales and Bristol, and groceries. The exports consist of the manufactured and agricultural produce of the town and district. Gross customs duties in 1846, 6,421*l*. In Jan. 1850 there belonged to the town 86 vessels, of the burden of 4,383 tons. The new parl. bor. comprises the par. of Barnstaple, and portions of that of Pilton, on the N., and Bishop's Tawton, on the S.: it is divided into 2 wards, and governed by a mayor, 6 aldermen, and 18 councillors. Courts of pleas, and sessions, are held quarterly, in the guildhall; and a county court is established here, before which 942 plaints were entered in 1848. Burgh rev. in do. 1,293*l*., of which 220*l*. was received from town dues, the residue being derived from lands, and other sources. Barnstaple is the central town of a union, containing 39 parishes, under the Poor Law Amendment Act. Sum expended on the relief of the poor in the par. of Barnstaple in 1847. 1945*l*., assessed upon property of the annual value of 17,328*l*. Barnstaple has returned 2 mem. to the H. of C. since the 23d of Edward I.; the right of election, previously to the Reform Act, having been in the corporation and common burgesses of the old bor. which was co-extensive with the parish. In 1848 there were within the limits of the new borough 511 houses of the annual value of 10*l*. and upwards; and 781 regd. electors.

Barnstaple is of great antiquity, having been a burgh in the reign of Athelstan. It had a castle, built in the reign of William I.; at the Domesday survey there were 40 burgesses within, and 9 without, the borough. It furnished 3 ships against the Spanish armada, and in the latter part of Elizabeth's reign, it is mentioned as a considerable depôt for wool, and as trading largely with France and Spain. It had a monastery of Cluniac monks, founded soon after the Conquest, which continued till the general suppression. The present living is a vicarage, in private patronage.

BAROACH or BROACH (*Barigosha*), a marit. British distr. of Hindostan, prov. Gujrat, presid. Bombay, chiefly between lat. 21° 25' and 22° 20' N., and long. 72° 50' and 73° 23' E.; having N. Kairah distr., E. Baroda, S. Surat, and W. the Gulf of Cambay: area 1,600 sq. m. Pop. (1828) 229,500. It is one of the best cultivated and most populous tracts in the W. of India; its aspect is however rendered rather unpleasant from the absence of trees, and the ill-built villages of unburnt bricks. Cotton is one of its chief products. The people are in a tranquil state, and free from any heavy burdens; the revenue of 1829-30 was 157,060*l*. sterl. Three-fourths of the pop. are Hindoos; the rest Mohammedans. It has formed since 1803s part of the British dominions.

BAROACH (an. *Barygaza, water of wealth*), cap. of the above distr., on the N. bank of the Nerbudda, 25m. from its mouth; lat. 21° 46' N., long. 73° 14' E. Pop. (1812) 32,716, but now probably much less, as it has greatly declined. Town poor and mean; streets narrow and dirty; climate hot, and considered unhealthy. The Nerbudda is here 2 m. across, is very shallow, and abounds with carp and other fish. Baroach maintains a considerable trade in cotton, grain, and seeds, with Bombay and Surat. Two-thirds of the inhab. are Hindoos. The Brahmins have a hospital for sick and infirm animals, surported by voluntary gifts, taxes on marriages, &c. The vicinity of Baroach is very fertile. It was taken by storm by the British in 1772. (*Hamilton's E. I. Gaz.*, i. 289, 290.)

BARODA, or BRODERA, an inl. distr. of Hindostan, prov. Gujrat, between lat. 21° 23' and 22° 46' N., and long. 73° 12' and 74° 8' E.; belonging to the Guicowar's dom., but almost wholly enclosed by the British territory, except N. E., where it joins Scindia's dom. Area about 12,000 sq. m. Mr. Forbes observes, "If I were to decide upon the most delightful part of that province (Gujrat), I should without hesitation prefer the pergunnahs of Brodera and Neriad." It is fertile, generally well cultivated, and, down to 1821, was decidedly one of the most flourishing tracts in India. "The crops in other districts," says Mr. Forbes, "may be equal in variety and abundance; but the number of trees which adorn the roads, the richness of the mango-topes round the villages, the size and verdure of the tamarind trees, clothe the country with uncommon beauty." The sugar-cane, tobacco, indigo, corn, oil, pulse, opium, flax, hemp, and cotton are grown; the latter being the staple commodity. Provisions are abundant and cheap; deer, hares, partridges, quails, and water-fowl extremely cheap and plentiful. The fields are divided by high green hedges. The numerous villages look more in the European than the Indian style; and large stacks of hay are piled up and thatched; a custom which increases a resemblance to European scenery, and is not found in E. India.

More than half the inhab. are Coolies; the wilder tracts are peopled by Bheels: the remainder of the pop. are a race of Rajpoots, Hindoo Banyans, and a few Mohammedans around Baroda city. Agriculture is the prevailing occupation, especially of the Coolies; who, though a turbulent race, ranging themselves under different chiefs, yet when properly restrained, are not bad tenants. They wear a petticoat, like the Bheels, round the waist, a cotton cloth round the head and shoulders, and a quilted kirtel, or lebada, which they cover with a shirt of mail; they are armed with sword, buckler, bow and arrows, and the horsemen with a spear and battle-axe: they often undertake secret nocturnal marauding expeditions. They are but little subject to the laws; and the magistrates are obliged to oppose force to force, by maintaining large bodies of armed men in their employ. The local administration of justice, and the collection of the revenue in Baroda are in the hands of *mamlutdars*, or head farmers, subject to the control of the prince or his ministers. Both person and property are more secure, and the cultivation in a better state, in the adjacent districts, which have been ceded to the British. Of late years the produce of this distr. has greatly diminished, the land lost a third part of its former value, and the revenues been considerably depressed, through the misgovernment and rapacity of the reigning prince, Syajee Row Guicowar. In 1802 the turbulence of the Arab soldiery, and the involved state of the finances, induced Anund Row to beg the assistance of the British gov. of Bombay. It continued under British protection, and in a comparatively flourishing state, till 1820 when Syajee ascended the throne. (*Reports on the Affairs of the E. I. Comp.*, 6*th Polit. Divis.* part i. 16—19. 53—56., ii. 160. 189, 190. 349., &c.; *Mod. Trav.* x. 124—126. 132, 133.)

BARODA, an inl. city of Hindostan, cap. of the above distr. and of the Guicowar dominions, and the seat of a

British resident, with a body of troops; lat. 22° 21′ N., long. 73° 23′ E.; 45 m. N.N.W. Baroach, and 230 m. Bombay. The pop., in 1818, was estimated at 100,000. It stands in a marshy situation, on the left bank of the Viswamitra river, and is surrounded (says Tieffenthaler, who calls it a handsome city) by a double wall, the inner existing under the Mogul dynasty, the outer built by the Maharattas when they took the city, in 1725. The walls are low, of mud, have round towers at intervals, and several double gates. It is divided into four equal parts, by two spacious streets, which, intersecting it at right angles, meet in the centre in the market-place, which contains a square pavilion, with three arches on each side, and a flat roof, adorned with seats and fountains. This is a Mogul building, and, like some others of that kind, not devoid of beauty; but the Maharatta structures are all very poor. In the reign of Aurungzebe this was a large and wealthy city, and still enjoys a considerable trade. In its vicinity are many gardens and groves, the latter adorned with the remains of Mohammedan mosques and tombs. In the vicinity is a stone bridge, over the Viswamitra, remarkable as being the only one in Gujrat; and some celebrated wells, with handsome flights of steps and balustrades in the environs: the largest of these, Soliman's well, is famed for the purity of its water, though that obtained within the city is said to be unfit for use. (*Hamilton's E. I. Gazetteer*, i. 139, 140.; *Mod. Trav.* x. 124, 125.)

BARQUESIMETO, an inl. town of Colombia, prov. Venezuela, at the extremity of a table-land enclosed by still higher eminences, 92 m. W.S.W. Valencia, and 90 m. N.E. Truxillo; lat. 9° 55′ N., long. 69° 25′ W. In 1807 it contained 15,000 persons; but it suffered severely from the terrible earthquake of 1812, which scarcely left a house entire, and buried 1,500 individuals in the ruins. The pop. of the town and its environs is now perhaps 10,000 or 12,000; but we have seen no recent account on which much reliance can be placed. (*Mod. Trav.* xxvii. 249.)

BARRA, an island of Scotland, one of the Hebrides, being the most S. of the Outer Hebrides, or group forming what is called the Long Island. (See HEBRIDES.)

BARRA, a village of Naples, 3 or 4 m. E. from the city of that name. It has many country houses belonging to inhabitants of the metropolis.

BARRACKPOOR, a seat of the British gov. gen. of India, and a military cantonment, in a beautiful and healthy spot, on the E. bank of the Hooghly river, 16 m. N. Calcutta. Bishop Heber observes, "It has what is here unexampled, a park of about 250 acres of fine turf, with spreading scattered trees, of a character so European, that if I had not been on an elephant, and had not from time to time seen a great cocoa-tree towering above all the rest, I could have fancied myself on the banks of the Thames instead of the Ganges." The park grounds are four miles in circumference, contain an aviary, menagerie, &c. The cantonment is a large military village, with superior bungalows for the officers.

BARRAMAHL, a subdiv. of the prov. of Salem, Hindostan, presid. of Madras. (See SALEM.)

BARREAH, an inl. town of Hindostan, prov. Gujrat, cap. of a small indep. principality, 75 m. E.N.E. Cambay; lat. 22° 44′ N., long. 74° E. It stands near the right bank of a tributary of the Maye, and is neatly built; many houses are of brick. Its territory is wild, covered with jungle, and inhabited by only a few wandering and predatory Bheels: the revenues of the rajah are almost entirely derived from compensations from his neighbours to abstain from plundering, together with certain moderate duties on trade.

BARREGES, a watering-place in France, dép. Hautes Pyrénées, 12 m. S.S.W. Bagneres-de-Bigorre. It is situated in the narrow valley of the Bastan, in the centre of the Pyrenees, about 4,290 ft. above the level of the sea The valley is gloomy and desolate, being annually devastated by the torrent, or Gave of Bastan, which frequently threatens destruction to the town. This consists of a single street of about 60 houses, mostly temporary fabrics of timber. It is frequented only on account of its hot baths, the most celebrated in Europe for the cure of scrofula, gout, rheumatism, and the effect of wounds. In consequence of this latter property, Barreges is much resorted to by the military, and an hospital is provided for their use capable of accommodating 500 officers and men. The baths did not attain to celebrity till the reign of Louis XIV., when they were visited by Madame de Maintenon and the Duc de Maine. The springs, like those in the other Pyrenean deps., are under the control of government. The supply of water being sometimes insufficient for the demand, it is distributed with the strictest impartiality. The temperature of the water reaches 10° Reaumur: it has a disagreeable smell and taste. The season begins at the end of May, and ends at the beginning of October. The town is then entirely, or all but entirely, deserted; the wooden houses are taken down; and sometimes, indeed, it is buried 15 ft. deep under the snow! Government incurs a considerable expense in the annual repairs of the roads and baths. (*Hugo, France Pittoresque*, art. *Hautes Pyrénées; Inglis's Switzerland, &c.* p. 254.)

BARROW, a river of Ireland, being, next to the Shannon, the most important in that island. It rises in the Sliebhbloom mountains, barony of Tinnehinch, Queen's co.: its course is first N.E. to Portarlington, then E. to Monastereven, and thence nearly due S., past Athy, Carlow, Graig, and New-Ross; about 8 m. below which it falls into the æstuary of Waterford harbour, of which it forms the right arm. Considering its moderate magnitude, the Barrow is navigable to a great distance; large ships ascending it as far as New-Ross, which is its port, and barges as far as Athy (above 60 m. in a direct line from the sea), where it is joined by a branch from the Grand Canal. This length of navigation has been partly effected by artificial means, that is, by removing obstructions and deepening the bed of the river; and notwithstanding it is occasionally liable to impediment, it has been of singular advantage to Kildare, Queen's co., Carlow, and Kilkenny, by giving them access not only to the important markets of New-Ross and Waterford, but also to those of Dublin.

BARROW'S STRAITS, in N.W. America, the SIR JAMES LANCASTER'S SOUND of Baffin, is the connecting channel between Baffin's Bay, on the E., and the Polar Sea, on the W. It lies, in a direction parallel to the equator, between the lats. of 73° 45′ and 74° 40′ N., and is considered by Parry to terminate at Wellington Channel, in long. 91° 47′ W., the mouth, in Baffin's Bay being nearly on the 80th meridian. It is therefore about 200 m. in length from E. to W., and between 60 and 70 m. in average width. Both shores are broken by a great number of inlets, and that of the Prince Regent, on the S., is of very considerable extent. It was found by Ross to terminate in a great gulph, called by him Boothia. Wellington Channel is even wider at its mouth than Prince Regent's Inlet. It divides a large tract of land (North Devon), the W. continuation of Greenland, from Cornwallis Island, the first of a succession of islands terminating at Melville Island. The coasts are generally rugged, consisting of high mountains and sometimes table-lands, with bold bluff headlands, but in all cases extremely sterile. The stratification is horizontal: the composition generally limestone, but mixed with older formations, as clayslate, hornblende, granite, &c. The water of this strait is exceedingly deep, the soundings frequently giving upwards of 200 fathoms, and very often no bottom can be found. The tide upon the shore rises about three or four feet, but of current there is very little appearance in any direction, and what there is does not seem to be uniform in its set. Perhaps the most remarkable circumstance connected with this strait is, the sluggishness of the compass in its waters. This is so great, that after advancing a short distance W., no alteration of course produces a change of more than three or four points in the direction of the needle; a fact the observation of which led first to the conclusion that the magnetic pole would be found in its neighbourhood. Whales and other natives of the northern seas are very abundant; but in this respect, and also in general productions, the strait does not differ from Baffin's Bay, which see. (*Parry's First Voy.* 29—52. 264—269.; *Baffin; Purchas' Pilgrimes*, iii. 847.)

BARSAC, a village of France, dép. Gironde, on the Garonne, 21 m. S.E. Bordeaux. Pop. 2,846. It is famous for its white wines: they are of the same class, and sell for about the same price, as those of Sauternes. "Ils en diffèrent," says Jullien, "par une peu moins de finesse, de sève, et de bouquet; mais ils sont plus spiritueux." (*Topographie de Vignobles*, p. 214.)

BAR-SUR-AUBE, a town of France, dép. Aube, cap. arrond., on the right bank of the Aube, 28 m. E. Troyes. Pop. 3,940. It is agreeably situated at the foot of a mountain, in a fine valley; but is generally ill laid out and ill built. It was formerly much more considerable than at present, as is evinced by the numerous remains of thick walls, and fosses not yet entirely filled up. There is a fine promenade along the river. It has a tribunal of original jurisdiction; manufactures of cotton, cotton hosiery, and serges; with nail-works, tanneries, distilleries, &c. The vineyards in its neighbourhood produce white and red wines in considerable estimation. An obstinate conflict took place here on the 24th May, 1814, between the French, under Mortier, and the allied forces under Prince Schwartzenberg, when the latter were repulsed. (*Hugo*, art. *Aube*.)

BAR-SUR-SEINE, a town of France, dép. Aube, cap arrond., on the Seine, 19 m. S.E. Troyes. Pop. 2,350. It is situated in the middle of rich vineyards, at the extremity of a narrow valley; is well built and well laid out; and has some fine promenades on the banks of the Seine, which is here crossed by a handsome stone bridge. It has a court of original jurisdiction; and has fabrics of paper, cotton, hosiery, cutlery; with tanneries, &c. Its principal trade consists in the corn and wine of the neighbourhood.

This town was formerly fortified, and was, in consequence, repeatedly taken and retaken in the Burgundian wars. In 1596 the inhabitants destroyed the fortifications, and it has since enjoyed comparative tranquillity. (*Hugo*, art. *Aube*.)

BARTEN, a town of the Prussian states, prov. E. Prussia, 10 m. N. Rastenburg. Pop. 1,600. It is well built, and is defended by a fort.

BARTENSTEIN, a town of the Prussian states, prov. E. Prussia, on the Alle, 34 m. S.E. Königsberg. Pop. 3,700. It is the seat of a court of justice and of domains, and of an ecclesiastical inspection; has 3 churches, a college, an hospital, tanneries, and fabrics of cloth, linen, and pottery.

BARTFA, or BARTFELD, a free town of Hungary, co. Sarosch, on the Tope, at the foot of the Carpathian mountains; 15 m. N.N.E. Zeben; lat. 49° 16′ 10″ N., long. 21° 18′ 51″ E. Pop. 6,000. It is well built, has several Catholic churches, and the Lutherans have a church and a school. It formerly enjoyed considerable distinction as a seat of learning; and in the 16th century several esteemed works proceeded from its presses. It has a valuable collection of old records, and is the residence of several noble families. It has some trade in wine, linen, and woollen yarn. In its vicinity are two chalybeate springs much resorted to, and the waters of which are carried to other parts, like those of Seltz.

BARTH, a sea-port town of the Prussian states, prov. Pomerania, reg. Stralsund, on the Binnen-Zee, which communicates with the Baltic, 17 m. W.N.W. Stralsund. Pop. 4,000. It has a chapter for ladies, founded in 1733, and 3 hospitals. It carries on some trade in corn, wool, &c., and in ship-building.

BARTHELEMY DE GRONIN (ST.), a village of France, dép. Isère, 15 m. S.S.W. Grenoble. Near this is the "*burning fountain*," one of the 7 wonders of the *ci-devant* Dauphiné. It is a spring issuing from a calcareous plateau, about 8 ft. long by 4 in breadth. The water, though at the temperature of the atmosphere, is always bubbling and boiling; and when it is stirred, or a burning body is approached to it, it takes fire, as it sometimes does spontaneously after summer rains. This phenomenon is supposed to be produced by the escape of hydrogen gas, generated by the decomposition of iron. The gas is easily collected, and is at first very inflammable, but speedily loses this quality. There are no volcanic phenomena in the vicinity. Of late years spontaneous combustions are said to be rarer than formerly. (*Dict. Géographique*, *Hugo*, art. *Isère*, &c.)

BARTHOLOMEW (ST.), one of the lesser N. Carribee islands, belonging to Sweden, 30 m. N. St. Christophers; lat. 17° 55′ 35″ N., long. 62° 50′ W. It is of an oblong shape, its greatest length being from E. to W., and contains about 25 sq. m. Pop. from 8,000 to 9,000, of whom two thirds are blacks. It is abundantly fertile, producing sugar, tobacco, cotton, and indigo; but it has no springs nor fresh water of any sort, except such as is supplied by the rain. Being surrounded by rocks and shoals, it is difficult of access; but its harbour, Le Carenage, on the W. side of the island, is safe and commodious. Contiguous to the harbour is the principal town, Gustavia. This island was settled by the French in 1648, and was ceded by them to the Swedes in 1784.

BARTIN, a town of Asiatic Turkey, Anatolia, near the mouth of the river of the same name (the anc. *Parthenius*), in the Black Sea; lat. 41° 33′ 52″ N., long. 32° 14′ E. It is surrounded by a ruinous wall, has 12 mosques, 5 khans, and 4 baths. There is deep water in the bay at the river's mouth; but there being no more than 7 ft. water over the bar, small vessels only can come up to the town: these load with timber, fruit, eggs, &c., for Constantinople. The principal import is salt. (*Purdy*, p. 221., &c.)

BARTOLOMEO IN GALDO (ST.), a town of Naples, prov. Capitanata, cap. canton, 27 m. W.S.W. Foggia. Pop. 4,800. It is situated on an elevated hill to the E. of the Fctore; has a collegiate and some other churches, and a diocesan seminary.

BARTON-ON-HUMBER, a market-town of England, co. Lincoln, N. div. wap. of Yarborough, on the S. side of the Humber. It includes the parishes of St. Peter and St. Mary: area, 6,710 acres. Pop. 3,233. The main body of the town is about 1 m. from the river, but a portion called "Barton water-side," is quite contiguous to it. Formerly it was a place of very considerable importance, and was surrounded by a rampart and fosse; but at present it is principally known by the well-frequented ferry on one of the great N. roads, leading hence across the Humber to Hull. It has some pretty good streets and inns, and two churches, St. Peter's and St. Mary's; the former being very ancient. It has some trade in corn, and a considerable portion of the inhabitants are engaged in the making of bricks and tiles, ropes and sacking. The weekly market is held on Monday, and another for cattle is held once a fortnight.

BARWALDE, a town of the Prussian states, prov. Brandenburg, on a lake, 32 m. N. Frankfort, on the Oder. Pop. 2,650. Gustavus Adolphus signed here, in 1631, a secret treaty with France.

BASELICE, a town of Naples, prov. Sannio, cap. cant., 21 m. S.E. Campobasso. Pop. 3,500. It is situated on the declivity of a mountain, has an hospital, and 2 *monts de piété*, established to portion and marry poor girls.

BAS-EN-BASSET, a town of France, dép. Haute Loire, cap. cant., on the Loire, 12 m. N. Issengaux. Pop. 5,418. It has manufactures of blond lace, ribands, and earthenware.

BASHEE ISLANDS, a cluster belonging to the E. Archipelago, 5th division (*Crawfurd*), lying due N. of Luzon (Philippines), between lat. 20° and 21° N. They are rocky, and five in number, with four smaller islets. Dampier visited them, and called the largest Grafton Isle; it is about 13 leagues in circuit, and has good anchorage on the W. side. It produces fine yams, sugar-cane, plantains, and vegetables, besides hogs and goats in plenty. Good water close to the beach is found in abundance. Gold in considerable quantities is washed down by the torrents in the Bashee Island, which the inhabitants work into a thick wire, and wear as an ornament: iron is the favourite medium of exchange. The natives are civil, inoffensive, and social. These islands belong to Spain; the governor resides on Grafton Island, with about 100 soldiers, some artillery, and a few priests.

BASIL, or BASLE, a canton in the N. W. of Switzerland, the 11th in the Confederation, between 47° 25′ and 47° 37′ N. lat.; having N. France and the g. d. of Baden, W. France and Solothurn, S. the latter canton and Berne, and E. Argovia: shape very irregular; the greatest length is 24 m., and the greatest breadth from 13 to 17 m.: area 8 G., or 169·6 E., sq. m. The Jura chain runs through the country, its surface displaying, of course, mountains and valleys, with a level tract in the vicinity of the city of Basil. The mountains reach an elevation of from 2,000 to 3,000 feet above the level of the sea. The most elevated is the Hauenstein, over which there is a much-frequented excellent new road, leading from Basil to Aarau and Zurich. The Rhine flows through the N. part of the canton, separating a small district from its main body. Near the city of Basil the Birse, which rises in the canton of Berne, falls into the Rhine: it is not navigable, but teems with fish. Besides this, there are various rivulets descending from the Jura chain to the Rhine. Climate mild. Since 1831, when the country population revolted successfully against the aristocratic rule of the city, the cant. has been divided into Basil city and Basil country. Pop., cant. of Basil city, 24,321; Basil country, 41,103. The territory of the former comprises, besides the city of Basil, that portion of the canton lying on the right bank of the Rhine. The valleys and the plain near the city are well cultivated, and the country produces corn enough for its consumption. There are 32,560 acres of arable land, 16,817 do. meadows, 3,410 do. vineyards, and 15,520 do. of wood. Wine is made of pretty good quality, the best being that of St. Jacob, called *Schweitzerblut* (Swiss blood). The live stock amounted, in 1829, to 9,540 head of black cattle, 1,814 horses, 6,920 sheep, 6,400 swine, and 1,740 goats. Manufactures form the principal employment of the people. Ribbon making had, so early as the commencement of the 17th century, become an important business in Basil. After the revocation of the edict of Nantes, great numbers of French emigrants settled in the town, who gave a fresh impulse to the manufacture. In 1836 the number of looms amounted to about 4,000; and at present (1838) there are not less than 15,000 persons, principally in the city of Basil, but partly also in other cantons, engaged in this department, on account of the Basil manufacturers. In addition to the riband manufacture, silk thread, taffetas, with satins and cotton ribands, are made on a small scale. Patterns were formerly introduced from France, but now 14 or 15 pattern-drawers are kept to provide designs for the manufacturers. The value of the exports of ribbons amounts to about 400,000*l*., nearly half of which goes to the U. States, and the other half to Germany, France, Holland, Denmark, and Sweden. Salt-springs were discovered in 1838 in Basil country, and salt-works either have been, or are to be, established. Each of the two divisions of the canton has half a vote in the Swiss diet; and each has its independent government, consisting in both of a grand council and a petty council, the former with a president, and the latter, in Basil city, with a burgomaster, and in Basil country, with a president, at the head. About 9-10ths of the inhab. are Prot., and 1-10th Cath. Primary and secondary schools have been generally established. Previously to 1832, the only university of Switzerland was in Basil. It was founded in 1459 by Pope Pius II.; but at present it has no great reputation. The budget of Basil city was, for 1836, — income, 19,810*l*. sterl.; expenditure, 20,110*l*. The public debt amounts to 95,070*l*. The canton contributes 22,950 Sw. fr. to the treasury of the confederacy, and furnishes 918 men to the federal

army. The communes are obliged to provide for those poor persons who have the right of citizenship; but, as charitable institutions and private subscriptions commonly suffice for this purpose, a poor-rate is seldom necessary. The inhab. of Basil city are aristocratical, and attached to their ancient laws, customs, and manners; those of Basil country, on the other hand, have democratical tendencies, and instead of being averse from, are prone to, innovations: violent animosities have existed between the two divisions.

The country which forms the canton of Basil belonged, in the times of the Romans, to the territory of the *Rauraci*. In the middle ages it formed part of the Burgundian empire, till 1026, when it came into the possession of the German emperor Conrad II. Basil was subsequently governed by an imperial bailiff; but the bishop of Basil shared with the citizens in the government. By degrees the city acquired the same immunities as a free city of the empire. Basil assisted the Swiss in the Burgundian war, and was admitted a member of the confederacy in 1501. (See *Helvetick Almanack; Lutz's Description of Basil;* and *Dr. Bowring's Report on the Manufactures of Switzerland.*)

BASIL (city of), one of the principal in Switzerland, cap. of the above canton; lat. 47° 30′ 36″ N., long. 7° 35′ E.; 35 m. N.N.W. Berne; on both sides the Rhine, where its course turns N., near the French frontier. The portion on the S. side the river is called Great, and that on the N. Little Basil, the communication between them being kept up by a bridge 600 ft. long. Pop. of city only 20,450, of city and cant. 24,321, of whom 20,518 are Protestants. This city presents to the visiter a peculiar mixture of the gaiety of a French, with the sombre Gothic air of a German town: "It looks," says Dr. Beattie, "like a stranger lately arrived in a new colony, who, although he may have copied the dress and manner of those with whom he has come to reside, wears still too much of his old costume to pass for a native, and too little to be received as a stranger." It is surrounded by some unimportant fortifications, and is tolerably well built. The cathedral built 1319, on the spot where the Roman emp. Valentinian originally erected the strong fortress called *Basilia*, contains the tombs of Œcolampadius, Erasmus, and the Empress Anne, consort of Rodolph of Hapsburg. The other public buildings are, the arsenal, the town-house, with some fine stained glass windows, the hall where the Council of Basil was held, &c. There is a university (see preceding article), a gymnasium, and numerous other public schools; a pub. library, with 53,000 printed vols. and many valuable MSS., medals, and paintings by Holbein; a botanic garden; museums of natural hist. and anatomy; literary and philanthropic societies, &c. Basil is the richest town in Switzerland; its inhab. are industrious and well instructed. About 1-5th part of the state revenues are applied to pub. education. Its trade is flourishing: manufactures consist chiefly of ribbons and other silks; those of leather, paper, gloves, and stockings, are comparatively inconsiderable. The taxes are heavy, owing to the considerable public debt: the annual cost of the executive gov. is about 2,000*l*. Basil was a distinguished city throughout the middle ages: near it, in 1444, a few hundred Swiss made a heroic resistance to an army of 40,000 French. It was the birth-place of Holbein, Erasmus, Bernouilli, &c. (See *Le Nouvel Ebel.; Lutz's Descr. of Basil; Bowring's Rep.* pp. 54—56.)

BASILICATA, a prov. of the kingdom of Naples, which see.

BASINGSTOKE, a par., bor., and town of England, co. Hants, div. and hund. Basingstoke, 45 m. W.S.W. London. Area 3,970 acres. Pop. par., in 1821, 3,165; 1841, 4,066. It is a neat, respectable town, in the midst of a fertile, well wooded district, at the junction of five roads, one of which is the great W. line from the metropolis. The line of the London and Southampton Railway also passes close to the N. of the town, and will have a station there; so that it usually wears the appearance of much bustle and activity; it is well paved and lighted, and has had many new houses added to it within the last few years. A stream, called the Town-brook, flows past it to join the Loddon, of which it is a principal branch; a canal, formed in 1796, at an expense of 180,000*l*., extends from the town to the Wey: which river communicates with the Thames, and so completes the water-line betwixt Basingstoke and London. The church is a spacious structure of the reign of Henry VIII. The Friends, Independents, Wesleyans, and followers of Whitfield, have chapels in the town. There is a free grammar-school, in which 12 boys are educated; a blue-coat school for the same number, supported by the Skinner's Company, of London; and a national school, for 200 boys and girls: there are also almshouses for 11 poor people, and several charitable benefactions; the principal being an estate left by Sir James Lancaster, the annual proceeds of which amount to to 250*l*. a year. Near the town is a tract of 108 acres, on which every householder has a right of pasture, from May to Christmas. There is a good town-hall, built in 1829; at which period the market-place was enlarged. The weekly market is held on Wednesday, and 4 annual fairs on Easter Tuesday, Whit Wednesday, 23d Sept., and 10th Oct., chiefly for cattle. On the first introduction of the woollen trade into the kingdom, this town obtained a good share of it, and was for a long period noted for druggets and shalloons; but at present there are no manufactures. The malting and corn trades constitute its chief business; and being the centre of a rich agricultural district, its markets are very well attended, and its retail trade considerable. Under the Municipal Reform Act there are 4 aldermen and 12 councillors, and the boundaries of the borough, which were previously co-extensive with the parish, are restricted to the area on which the town stands. It was incorporated by a charter in the 20th James I., confirmed by another in 17 Charles I. Courts of petty and of quarter sessions for the bor. are held, and there is a court of pleas, which has now scarcely any business. The revenues of the corporation are derived from lands and tenements in the parish, and average above 1,000*l*. a year. Under a local assessment for paving, lighting, &c., about 350*l*. are annually collected. The poor-rates of the town, in 1847, were 2,026*l*. It s the central town of a poor law union of 37 parishes, and a polling town for the northern division of Hampshire.

The town is mentioned in Domesday as having a market. From 23 Edward I. to 4 Edward II. it sent 2 mem. to the H. of C., but thenceforth the privilege ceased to be exercised. John de Basingstoke, a distinguished scholar of the 13th century; Sir James Lancaster, the navigator; and Joseph and Thomas Warton, were born in the town. (*Beauties of England and Wales; Warner's Coll. for a Hist. of Hampshire; Camden's Brit.*)

BASQUEVILLE, a town of France, dép. Seine Inférieure, on the Vienne; 10 m. S.S.W. Dieppe. Pop. 2,810. It has fabrics of linen and serge.

BASRAH. See BUSSORA.

BASS, a rocky islet of Scotland, frith of Forth, about 3 m. from Tantallon castle, coast of Haddingtonshire. It is of a circular form, about 300 ft. in diameter, and nearly 400 ft. high. Some parts not less than from 200 to 300 ft. in height, project in lofty terrific precipices over the sea: the summit resembles an obtuse cone. The continual beating of the waves has opened vast excavations all round the lower sides. The sea is of great depth on the N., E., and W., but shallow on the S.; towards which also the rock declines, and is accessible in calm weather. It is perforated by a cavern, running N.W. and S.E.; it is quite dark in the centre, where there is a deep pool of water, whence it widens towards both apertures; that to the S.E. being the highest. There is a spring of water near the centre, high on the rock, and grass for a few sheep kept on it. Various corallines and fuci are produced in the surrounding sea. Vast quantities of solan geese resort to the Bass in March, for the purpose of breeding, and depart in September. There was here formerly a castle, afterwards converted into a state prison, where various individuals have been confined. After the Revolution, a party of the adherents of James VII. having obtained possession of the castle, held out after the rest of the kingdom had surrendered. But their boats being at length seized or lost, and not receiving any supply of provisions, they were compelled to capitulate, when the fortifications were destroyed. This islet is a very conspicuous object, and is visible from a considerable distance.

BASS' STRAITS, the name given to the strait separating New Holland from Van Diemen's Land. It is so called from Mr. Bass, a surgeon, by whom it was explored in 1798, while on a sealing voyage from Port Jackson in an open boat. Where narrowest, it is about 105 m. across, and is much encumbered with islands and coral reefs, so that its navigation requires great attention. The prevailing winds are from the W. The tide rises from 8 to 12 ft., running at from 1½ m. to 3½ m. an hour.

BASSAIN, a marit. town of the Birman empire, cap. of a prov., and resid. of its governor; on the left bank of the Birman river (the right branch of the Irrawadi); lat. 16° 49′ N., long. 94° 45′ E.; 100 m. W. Rangoon, and 360 m. S.S.W. Ava. Pop. (1826) 3,000. It is one of the 3 principal ports of the Birman empire.

BASSANO, a town of Austrian Italy, prov. Vicenza, on the left bank of the Brenta, 17 m. N.N.E. Vicenza, 21 m. N. by W. Padua. Pop. 12,000. It is situated in a salubrious hilly country, suitable for the culture of the vine and the olive; is surrounded by walls, and is well built of stone: it is joined to a suburb on the opposite side of the river by a fine bridge, 180 ft. in length. Some of its churches are handsome, and adorned with pictures by Giacomo da Ponti and his son, natives of the town. There are here 4 convents for nuns, an hospital, a *mont de piété*, and barracks. The mineralogical cabinet and

botanical garden of M. Parolini deserve the traveller's attention. Bassano has manufactures of cloth, straw hats, and copper utensils, with extensive silk filatures, tanneries, &c. But the printing establishment of Remondini is not merely the most important work in the town, but is one of the most extensive establishments of the kind any where to be met with. It employs 50 presses and about 1,000 hands, and has attached to it paper-mills and an engraving department, which has produced Volpato and other distinguished artists. The town carries on an extensive trade in silk, the produce of its territory, cloth, wood, iron, corn, wine, cattle, &c. A great deal of charcoal is shipped here for Venice. There is a great deficiency of spring water, and that of the Brenta is not good.

BASSE'E (LA), a town of France, dép. du Nord, cap. cant., 14 m. W. Lille, on the canal of the same name. Pop. 2,485. It has establishments for spinning cotton, combing wool, with soap-works, distilleries, and potteries. Owing to its position, it is the entrepôt of the arrondissements of Bethune and St. Pol, and has, in consequence, a considerable trade. It was formerly fortified; but Louis XIV. having taken it from the Spaniards, made the works be dismantled.

BASSEIN, a marit. town of Hindostan, prov. Aurungabad, distr. N. Concan; separated from Salsette by a narrow channel, and about 20 m. N. Bombay; lat. 19° 20′ N., long. 72° 56′ E. It was taken possession of by the Portuguese in 1531, who fortified it with ramparts and bastions, and supplied it with no fewer than 7 churches. It was captured by the Mahrattas in 1750; and it was here that the peace with the peishwa, which annihilated their federal empire, was signed, Dec. 31st, 1802, since which it has belonged to the British.

BASTIA, a sea-port town of Corsica, cap. arrond., on its E. coast, within 23 m. of its N.E. extremity; lat. 42° 43′ N., long. 9° 26′ E. Pop. 12,846. This town, which was formerly the cap. of the island, is built amphitheatre-wise on a rising ground, and has a fine appearance from the sea. But on entering, it is found to be ill-built, and the streets narrow and crooked. It is defended by a citadel, and by walls and bastions; but these are of no use, except for the defence of the port, being commanded by the heights, at the foot of which the town is built. The harbour, formed by a mole, is fit only for small vessels; its entrance is narrow and difficult, and vessels are exposed to the land winds, which sometimes blow violently from the N.W. There is anchorage outside the mole, in 10 or 11 fathoms. It is the seat of a royal court for the island, and of tribunals of commerce and of primary jurisdiction; and has a communal college, a model school, a society of public instruction, and a theatre. It produces soap, leather, liqueurs, and wax; and exports oil, wine, goat-skins, coral, wood, and hides. It was taken by the English in 1794, but was soon after recovered by the French, in whose possession it has ever since remained. At the entrance to the port is an insulated rock, called *Il Leone*, from the striking resemblance it bears to a *lion couchant*. (*Dict. Géog.; Hugo*, art. *Corse; Norris's Mediterranean*.)

BATAVIA, a sea-port and city of Java, cap. of that noble isl.; seat of the gov. of the Dutch possessions in the E., and the principal emporium of the E. Archipelago, on an extensive bay on the N. W. coast of the isl.; lat. 6° 8′ S., long. 106° 50′ E. The pop., according to a census taken in 1832, consisted of 2,800 Europeans, 80,000 natives, 25,000 Chinese, 1,000 Moors and Arabs, and 9,500 slaves, making a grand total of 118,300, exclusive of the garrison. As the pop. has increased since, it may now (1850) be estimated at from 130,000 to 140,000. Batavia is built in a marshy situation, at the mouth of the Jaccatra river; several of its streets being intersected by canals, crossed by numerous bridges, and their banks lined with trees in the Dutch fashion. But these canals, being receptacles for the filth of the city, contributed, together with the nature of the ground, to render it very unhealthy. In this respect, however, it has been materially improved since 1815, partly by building a new town on the heights, a little more inland, where the government functionaries and principal merchants have their residences; and partly by the demolition of useless fortifications, the filling up of some of the canals, and the cleaning of others, and the widening of several of the old streets. The older parts of the town are now, in fact, principally occupied by Chinese and natives, and, though intermittent fevers are still said to be prevalent, we doubt whether it be much more unhealthy than most other places on the island. The existing fortifications consist only of a few small batteries and redoubts in and about the city. The houses, of brick and stuccoed, are spacious and neat; the ground floors in the principal houses are formed of marble flags; the chief street lies along both sides of the river, and consists of the offices and warehouses of the principal merchants, none of whom, as already stated, pass the night in Batavia. The Stadthaus, in which the courts of law are held, is on the S. side of the city; at the opposite quarter is the citadel, a square fortress with a bastion at each angle, containing the residence of the gov. and some warehouses: there are 3 churches, and a theatre. The Jaccatra is navigable for 2 m. inland for vessels of 40 tons burden; the harbour, or rather road, which is very extensive, is protected by a range of small islands, and affords good anchorage for ships of from 300 to 500 tons, about 1½ m. from the shore. Batavia is the depôt for the produce of all the Dutch possessions in the E. archipelago; inc. spices from the Molucca islands; coffee and pepper from Celebes and Sumatra; gold-dust and diamonds from Borneo; tin from Banca; tortoise-shell, bees' wax, dye-woods, &c. from Timor and Tumbawa, &c. Originally no Dutch ship was suffered to proceed homeward without first touching here. Many junks from China and Siam formerly traded thither; but since the establishment of the British at Singapore, their trade with Batavia has greatly decreased. The manufactures, inc. those of leather, lime, earthenware, sugar, and arrack, are mostly in the hands of the Chinese: their *campong*, or peculiar quarter, is the chief seat of bustle and activity; and the trade of the town, except in the articles monopolised by Europeans, is wholly in their hands. Many of them are wealthy; they are governed by their own laws and magistrates. The British, according to Mr. Earl, form an important body of merchants here, and possess about 2,000 sq. m. of land on the island, much of which is cultivated with sugar: there are said to be about 200 English subjects in Batavia, including those serving in the Dutch mercantile navy. (There is a good account of Batavia in the valuable work of Temminck, *Sur les Possessions Neerlandaises dans l'Inde Archipelagique*, i. 198., &c.)

Perhaps no colony in the world, not even excepting Cuba, has made so rapid a progress as Java, during the last twenty years, in the production of all the great colonial staples, but especially in those of coffee, sugar, and indigo. The trade of Batavia has, in consequence, been very greatly increased; but the recent statements of the imports and exports that we have seen refer to the island generally, and we have no means of specifying exactly how much belongs to Batavia. At an average of the three years ending with 1830, the value of the imports into Batavia amounted to 18,237,600 fl., and that of the exports to 17,694,900 fl. Since then, however, we have little doubt that the trade of the port has been more than trebled. The value of the exports from Java in 1847, amounted to 60,216,700 fl., or 5,018,058*l.*

A large portion of the trade of Java is in the hands of the Netherlands' Trading Company; and the probability seems to be that it would be still greater, were it left wholly to individual competition. But we must be cautious, in the absence of satisfactory information, how we censure a system that has been productive of such striking results.

A bank has been established at Batavia, with a capital of 2,000,000 fl., divided into 4,000 shares, with branches at Samarang and Sourabaya. It was for a while a most prosperous concern, having realised in 1837 a dividend of no less than 33 per cent. But this prosperity was as brief as it was signal. The offer of exorbitant interest had tempted, in not a few cases, the bank to make advances on doubtful securities. At length, the colony being saturated with the paper of the bank, a revulsion occurred. The entire island was subjected to a severe pecuniary crisis; and but for the intervention of the government in 1840, when notes were made *legal tender* for a limited period, the bank must have stopped payment. It is to be hoped that she has profited by this experience. In Java as well as in England or Holland sound banking principles can never be disregarded with impunity.

Mr. Earl, who is better informed as to the manners and habits than the trade or policy of the Dutch, makes the following statement: — "The mode of life pursued by the European residents at Batavia is rather monotonous, but is easily supported by those who have great pecuniary advantages in view. Early rising is generally practised, the morning being by far the most agreeable part of the day. The time before breakfast is spent in riding or gardening, according to the taste of the individual; and after a substantial meal at 8 o'clock, they repair to their town offices. At the conclusion of the business of the day, they retire to their country houses to a 5 o'clock dinner; and a drive round the suburbs occupies the interval between that repast and the closing in of night; when they either return home, or proceed to spend the evening at the Harmonie, an establishment formed upon the same principle as the large clubs of London, the majority of the European residents, Dutch and foreign, being members. The regulations are particularly favourable to strangers; a resident, who is not a member, cannot be admitted; but a visitor, after being introduced by a member, may resort to it whenever he pleases during his stay at Batavia. The evenings at the Harmonie are spent in conversation, or in playing at cards and billiards, and it is perhaps the more frequented by the gentlemen from their having little intellectual amusement at home. The greater number of the Dutch females have been born on the island, and are rather deficient in point of education. They are often remarkably

fair, owing to their being seldom exposed to the weather; the heat of the climate renders them extremely listless, and they soon attain that embonpoint which we are apt to associate with the idea of Dutch beauty.

"There are few public amusements. On Sunday evenings a military band performs on the Koning's Plain, which attracts the residents, who attend in carriages or on horseback; and the community is occasionally enlivened by an amateur play, or a grand ball given by one of the public functionaries. The annual races, which are always well attended, were established and are principally supported by the English. Some very good half-bred Arabs are occasionally run; but the race between the country horses, ridden by native jockeys, is by far the most amusing, and the riders jockey and are out-jockeyed in a style that would not disgrace Newmarket." (*Eastern Seas.*)

Batavia was built by the Dutch, in 1619; in 1811 it was taken by Sir S. Auchmuty, and belonged to the British till 1816, when it was restored to its former possessors.

Batavia, a town of the U. States, New York, Genesee co., 40 m. N.E. Buffalo. Pop. in 1835, 4,430. This flourishing village was laid out in 1800. It has a court-house, gaol, and other public buildings; a weekly newspaper, &c.

BATE ISLE, an island belonging to Hindostan, prov. Gujrat, and off its W. extremity; lat. 22° 27′ N., long. 69° 19′ E. It has a good harbour, and contains about 2,000 houses; but is chiefly noted for a celebrat temple dedicated to the god Runchor, and much frequented by pilgrims.

BATH, a city of England, N. E. part co. Somerset, 102 m. W. by S. London, on the Avon, along which its buildings extend for upwards of 2 m., ascending the acclivities, and crowning some of the summits of the adjoining range of hills. Pop., in 1801, 33,150; in 1841, 52 346. This city is distinguished for its architectural elegance, and the beauty and extent of its public promenades. The fineness of the free-stone, of which its edifices are mostly built, and the noble scale and symmetrical arrangement of the ground plans, fully equal the taste displayed in their elevations. Amongst the most prominent places are the Circus, in which the Doric, Ionic, and Corinthian orders are combined, and from whence 3 spacious streets, of corresponding character, diverge; the N. and S. parades, which have noble terraces, raised on arches, and commanding extensive views; Kingston Square, and the new streets and fine esplanade formed along the river side, beneath the terraces last named; Queen Square, of the Corinthian order, with an obelisk in the centre; the Royal Crescent, with Ionic columns springing from a rustic basement, and crowned by a rich entablature; with Lansdown and Cavendish crescents; Belle Vue, Portland, and 2 or 3 other places: Paragon buildings, Belvedere and Marlborough buildings: in the level plain, extending on the N.E. side, are the fine ranges of Kensington, Grosvenor Place, and Walcot Terrace; lastly, the structures in the new town, on the river. The latter, which winds through, and adds greatly to the beauty of the city, is spanned by 2 stone bridges (one of ancient, and one of modern construction), a handsome iron bridge, connecting Bathwick with Walcot, and affording a direct access from the London road to the finest parts of the city; another iron bridge, connecting the North Parade with the Pulteney Road, and three suspension bridges.

The famous thermal springs, on which the prosperity of the place is so dependent, rise in the midst of the limited plain skirted on the E. and S. by the Avon, from three distinct sources, at a small distance from each other. The waters of each are received into four extensive reservoirs, to which, suitable baths are attached: that called the King's Bath is the principal, and is supplied by a spring rising about 150 ft. S.W. of the abbey. The Queen's Bath, which is much smaller, adjoins this, and is supplied from the same source. The Cross Bath is supplied from a distinct spring, rising at a short distance S.W. of the former; and the Hot Bath from another, 120 ft. further on, in the same direction. The grand pump-room, connected with the King's Bath, a very handsome building, erected in 1797, forms the principal centre of attraction during the fashionable season: it has an orchestra, and a fine statue of Nash. Like the King's, the Hot Bath has a pump-room, on a smaller scale, and each has a public pump connected with its spring, of which the gratuitous use is allowed during the day. Besides the public baths (which are principally used by the hospital patients and the poorer class of invalids), there are private baths, belonging to the corporation, and others, called the Abbey Baths, belonging to Earl Manvers: these are chiefly resorted to by the wealthier classes, and are amply provided with sudatories, and every accommodation. The medicinal waters of these springs, when fresh drawn, are quite transparent and destitute of colour and smell, the temperatures being—of the King's Bath, 116°; of the Cross Bath, 112°; of the Hot Bath, 117° Fahr. They contain carbonic acid and nitrogen gases, sulphate and muriate of soda, sulphate and carbonate of lime, and siliceous earth, with a minute portion of oxide of iron. Respecting both the gross amount and relative quantities of these there is much discrepancy in the numerous treatises on the subject, by which, occasional variation may be inferred: the impregnation, both chalybeate and saline, is greatest in those of the King's and the Hot Bath; the water of the Cross Bath has most earthy contents. Large quantities of gas pass up with the water, in bubbles of considerable size. Taken internally, the waters act as stimulants, raising the pulse considerably, and exciting the nervous system: they are considered peculiarly efficacious in cases of gout and of biliary obstructions; as baths, they are used for various chronic and cutaneous disorders; their topical application, by forcing a stream on the diseased part (called dry pumping), is also much in request. The morning is the usual time both for drinking and bathing. The reservoirs are discharged, at regular intervals, through channels connected with the Avon.

The principal buildings devoted to religious purposes are,—the abbey church (the latest specimen of the ecclesiastical Gothic in the kingdom), a beautiful structure, once called, from the large size and number of its windows, the lantern of England; it was founded on the site of a more ancient church, A. D. 1495, and was completed in 1606; its tower is 162 ft. in height: St. Michael's Church, a Gothic structure, with a handsome spire, erected in 1836; St. James's Church, re-built in 1768; that of Walcot, a very spacious building, recently much enlarged, with free sittings for the poor; Christ Church, a fine structure, erected by subscription in 1798; with other churches and chapels connected with the established church, and mostly raised within the last century. Catholics, Moravians, Friends, Baptists, Independents, Methodists, and Unitarians, have also places of worship. Of the establishments devoted to charitable purposes, the principal are,—Bath Hospital (completed in 1742), for the reception of sick poor from all parts of the kingdom (except the city itself), who come for the benefit of the waters; it is incorporated by a charter, and supported by donations and subscriptions: the Bath United Hospital, combining the same objects as the previous dispensary and those of a casualty infirmary; it is supported like the last· Bellott's Hospital, endowed in the reign of Jas. II., for the same purpose as the Bath Hospital, but for men only; it provides lodging and bathing for about 18: Black Alms, endowed by Edw. VI., for the support of 10 poor persons of the place: St. John's, endowed in Hen. II.'s reign, for the support of six poor men and as many women: Partis's College (a large quadrangular range on the upper road to Bristol), for the support of 30 decayed gentlewomen, 10 of whom must be widows of clergymen; each has a house, garden, and handsome annuity. The chief establishments for education and literature are,—a free grammar-school, endowed by Edw. VI.; its mastership (which carries with it the rectory of Charlcombe) is in the gift of the corporation: the Blue Coat charity school, founded A. D. 1711, for clothing, and teaching 50 boys and 50 girls reading, writing, and arithmetic; two other free schools for girls only; one, for the instruction of poor children of Bath and Bath-forum; a national school; the Catholic and the Methodist free schools. The Bath and West of England Society, established in 1777 for the encouragement of agriculture, arts, manufactures, and commerce, has devoted itself chiefly to the first of these objects, and published several volumes of transactions: the Bath Literary and Philosophical Institution, established in 1820; it is a handsome Doric building, (occupying the site of the Lower Assembly Rooms, which were then burnt down,) and comprises a library, museum, laboratory, and lecture-room: the Public Subscription Library, established in 1800, has an extensive collection of books; and there are many circulating libraries. A mechanics' institute was established in 1828. The public buildings appropriated to business or amusement are,—the Guildhall, the seat of the quarter sessions and the courts of record and request; the two

first named by the corporation, the last by commissioners appointed under an act of 45th Geo. III., for recovery of debts under 10*l.*; its jurisdiction extends over the city, and several parishes in the hundreds of Bathforum and Wellow: this court, which sits every Wednesday, has nearly absorbed the business of the court of record. The prison is a spacious building in Bathwick, chiefly occupied by debtors, and by delinquents previously to their being fully committed. Commercial Rooms were established in 1839. The market-house is an extensive range of buildings behind the Guildhall; market days, Wednesdays and Saturdays. The theatre, in the Grecian style, finished in 1805, towers over the surrounding structures, in the central part of the city; the Freemason's Lodge (built in 1817) is also conspicuous. The Subscription Club House, and the Bath and West of England Subscription Rooms, are establishments similar to the London club houses. The Upper Assembly Rooms are a superb suite of apartments, in which the subscription balls and concerts of the season are held, under the direction of the master of the ceremonies. The city assemblies are occasionally held in the banqueting room of the Guildhall. These concerts and assemblies constitute the chief amusements of the place; besides which, however, there are two spacious riding-schools, for exercise in bad weather: when fine, Lansdown and Claverton Down are the favourite equestrian resorts. There are annual races on the former, the week subsequent to those of Ascot, and a spring meeting in April for half-bred mares. Besides the various promenades, and the Sidney Gardens previously mentioned, 10 acres of the Bath common have, within the last few years, been laid out in public walks and pleasure grounds, named the Royal Victoria Park.

Bath no longer boasts its ancient pre-eminence in the gay world as a fashionable resort. It is now surpassed by Brighton, and, perhaps, also, by Cheltenham, which attracts a large portion of the company by which it used formerly to be visited. In consequence, its increase has latterly been comparatively slow, and it has become much more a place of permanent residence than formerly; the facilities for education and the numerous *agrémens* which it affords, with its greater cheapness, making it a desirable residence for numerous families whose finances might not bear the greater expenditure of London. It is still, however, much resorted to during its season. It is favourably situated for trade; the Avon being navigable to Bristol on one side, and the Avon and Kennet Canal on the other, enabling it to maintain a water communication with the metropolis, and places intermediate; two branches of this canal extend from Bath into the coal district S.W. of the city. But business and pleasure do not often amalgamate; and the only manufacture is the coarse woollen cloth called Bath coating, and kerseymere, made in the immediate neighbourhood. At Twerton, 1½ mile from the city, are three clothing and one brass mill, worked by the Avon. There are two fairs, one held on the 14th Feb., the other July 10th, but they have lost most of their ancient consequence, which was mainly attributable to the woollen manufacture, first introduced here, under the auspices of the monks, in the reign of Edw. I., who granted the charters by which the fairs are held: the line of the Great Western railway passes through Bath, and will, of course, greatly increase its facilities of communication. It stands on the lias and oolite formations; in the latter (which bounds it on the N.E. and a portion of the S.) the noble freestone quarries occur whence its building materials are derived; both formations also afford lime and fuller's earth, and abound in fossil remains, as well as in fine springs, which rise to within 40 or 50 feet of the summits of the surrounding hills, and furnish an ample supply of water to every part of the city, conducted thither from various reservoirs, by pipes, the greater part of which have been laid by the corporation. The parl. and munic. boundaries of Bath comprise the parishes of St. James, St. Michael, Sts. Peter and Paul, Walcot (the portion S. of Charlcombe), Bathwick, and Lyncombe and Widcombe. Pop., in 1821, 46,700; in 1831, 50,802; of these, at that time, 591 were employed in manufactures, and 4,368 in retail trades and handicraft. The tendency of the city to increase is, at present, chiefly in Walcot, and in Lyncombe and Widcombe: the former constitutes its most extensive and wealthy portion, the latter is the residence of a large portion of the manufacturing population. Bath claims to be a borough by prescription, confirmed by charter: it is now divided into 7 wards, and governed by a mayor, 14 aldermen, and 42 councillors, under the Municipal Reform Act. It has sent 2 members to the H. of Com. since the reign of Edward I. It is supposed to have about 7,500 qualifying tenements, or tenements worth 10*l.* a year and upwards; but owing to a large proportion of these being let as furnished lodgings, it had, in 1847, only 3,059 registered electors. Previously to the Reform Act, the elective franchise was exclusively vested in the mayor, aldermen, and common council, who were also self-elected. Conjointly with Wells, Bath gives name to a diocese, co-extensive (excluding Bedminster) with the co. of Somerset. The see was fixed at the latter A. D. 905, and has since been transferred, successively, to Bath and to Glastonbury, and again restored to Wells, whose dean and chapter now elect the bishop. (*Gibson's ed. Camden's Brit.* pp. 186, 187.; 6 & 7 W. 4. c. 77.) The bishop's revenues amounted, at an average of the three years ending with 1831, to 5,946*l.* a year.

The present city may almost be called a creation of the last and present centuries; for previously it was comprised in an area of about 50 acres (on the limited plain amidst which the hot springs rise), and surrounded by walls in the form of an irregular pentagon, its suburbs consisting then merely of a few detached cottages; so that the parishes now forming its most important and populous portions had, at the close of the 17th century, scarcely an inhabitant; whilst the three small ones within the walls (judging from the church registers) could not have contained a fourth part of their present numbers. Its rapid extension, celebrity, and magnificence, are chiefly attributable to the exertions of two individuals: one, the remarkably adroit and clever person known as *Beau Nash*; the other, Mr. Wood the architect. The former was elected master of the ceremonies in 1710, and thereafter ruled as *arbiter elegantiarum* for upwards of 50 years (the most flourishing period of its fashionable annals); using the influence his peculiar talents gave him in the promotion of objects of permanent importance to the city. The other commenced his architectural labours with Queen's Square, the foundations of which were laid in 1729. This, and the streets diverging from it, as well as the N. and S. parades, he lived to finish, and also to plan and commence the Circus. All these remain as monuments of his genius, unexcelled by any subsequent achievements.

Bath was founded, and its first walls built, by the Romans, in the reign of Claudius: they named it *Aquæ Solis*, and retained the place between 3 and 4 centuries. The walls and gates (which remained till the 18th century) were built during the later Saxon period, on the Roman foundations, and partly from the ruins of their temples, arches, &c. Camden gives many inscriptions from fragments thus imbedded (*Brit.* pp. 188, 189.); and, in Warner's *History of Bath* (pp. 23. 29. 32.), the remains of Roman temples, baths, coins, &c., that have been discovered at various times many feet beneath the present surface, are figured and described. Hand-mills of stone, &c., relics of the British; and coffins, coins, &c., of the Saxon period, are also given by these authors. Its first charter, making it a free borough, was granted by Richard I. The manufacture called Bath beaver had attained much repute at the close of the 15th century, at which time three guilds of artificers — weavers, tailors, and shoemakers — existed, to whom Bath owed its then importance. (*Leland's Itin.* ii. 67.) It was first made a corporate city by a charter of 32d of Eliz. This and the charters of 9th and 34th Geo. III., extending the limits of its jurisdiction, were the governing ones, previously to the late municipal act. The gross revenue of the corporation, in 1848, amounted to 16,957*l.*, chiefly derived from the rents and renewals of their estates, water-rents, market-dues, and profits of the baths. (*Municipal Commiss. Report*, 1835, App. pt. ii. p. 1109., *et seq.*) The immense thickness of its walls must have made it a stronghold in the earlier period of its history; but in later times it has never been a station of any military importance. It was fortified and held for the king at the outbreak of the civil wars; and after being taken and retaken several times, was ultimately ceded to the parliament in 1645. Christopher Anstey, author of the *New Bath Guide*, and John Palmer, author of the plan for conveying mails by coaches, with other distinguished persons, were natives of Bath. (*Solinus, Polyhist.* c. 22.; *Hen. of Huntingdon*, lib. ii.; *Gildas, cap. ult.*; *Leland's Coll.* v. 2.; *Dugdale's Monas.* tome i.; *Maddox's Hist. Excheq.* c. 13., may be referred to for the earlier history and trade of the place. The *Fourth Report*, pp. 369., *et seq.*; and the *Eighth*, pp. 567., *et seq.*, *of Commiss. on Charities*, contain an account of those of Bath.)

Bath, a town and port of the U. States, Maine co., Lincoln, on the W. side of the Kennebec, about 10 m. from the sea, lat. 43° 55′ N., long. 69° 49′ W. Pop. 3,773. It is pleasantly situated, and is one of the most commercial towns in the state. The river, which is seldom frozen over, admits vessels of considerable burden. Bath is the name of several other towns, and also of several countries in the U. States.

BATHGATE, a town and par. of Scotland, co. Linlithgow. Pop. 3,928. The town is situated on the middle road between Edinburgh and Glasgow, 18 m. W.S.W. the former, and 6 m. S. Linlithgow. It stands on the S. declivity of a ridge of hills extending across the co., and comprises an old and a new portion; the former consisting of narrow crooked lanes, on a steep declivity, and the latter of more modern and better built houses, on more level ground. The streets are well paved and lighted, and it is abundantly supplied with good water, brought from a distance. The church, a

clumsy edifice, was erected in 1739; and there are 3 or 4 dissenting meeting houses. Bathgate was created a free burgh of barony in 1824. The inhab. are principally employed in the weaving of cottons for the Glasgow manufacturers, and in the adjacent coal and lime works. It has an excellent academy, liberally endowed by a native of the town, who acquired a fortune in the W. Indies, which furnishes education, of the best sort, gratis, to all natives of the par. It has six annual fairs, two of which, at Whitsuntide and Martinmas, are of very considerable importance, as cattle fairs. A weekly market is held on Wednesday. The par. is generally in a high state of cultivation.

BATHURST TOWN, a town of W. Africa, on the S. side of the mouth of the river Gambia; cap. of the British possessions on that river, and seat of a civil lieut.-governor; lat. 13° 28′ N., lon. 16° 32′ W. It stands on the E. end of St. Mary's Island, a fertile, but low and swampy spot, about 4 m. in length, and 3 m. in breadth. Pop. (1836, of the town and island) 2,825, of whom 36 only are Europeans; the rest being liberated Africans, Mandingoes, Jolofs, &c. The main street facing the river is occupied with European warehouses and private dwellings; the other streets are laid out in straight lines, but unpaved, and are lined mostly with African huts, inclosed within small gardens. The Government-house, like the other European buildings, consists of one floor, raised upon brick pillars, furnished with verandahs, and approached by a long flight of steps. There is a spacious hospital for liberated Africans near the town; there are three Wesleyan chapels and a missionary school: the number of the armed force here, in 1836, was 321. Most of the European settlers are merchants, trading chiefly in gum Senegal, bees' wax, hides, ivory and gold; the other principal exports are tortoise-shell, rice, cotton, African teak, camwood, palm oil, country cloths, &c.: the import duties, in 1834, amounted to 3,016*l.*; and 127 vessels, tonnage 11,758 tons, entered the port. This settlement was established in 1816; it was several years ago threatened by the neighbouring Barra, chieftain, but friendly relations have since been entered into with that nation. (*Alexander's Voyage to the Colonies of W. Africa, in* 1835, pp. 65—72. *Martin's History and Statistics of the Colonies*, 1839.)

BATINDAH, a large inland town of Hindostan, prov. Rajpootana; lat. 30° 12′ N., long. 74° 48′ E. Its vicinity has been celebrated for its breed of horses.

BATLEY, a town and par. of England, W. R. co. York. The par., which contains 6,390 acres and 11,335 inhab., is principally in the wapentake of Aggbrig, but partly also in that of Morley: the town, which has 4,841 inhab., is in the former. The pop., both in the town and the contiguous district, is principally engaged in the woollen trade, especially in the manufacture of what is called white cloth. The church, built in the reign of Henry VI., has several monuments of the Fitzwilliam, Saville, and other principal families in the vicinity. There is here also a well endowed free school, founded in the reign of James I.

BATOUM, a sea-port town of Turkey in Asia, prov. Trebizond, near the Russian frontier, on the E. shore of the Black Sea, 4 m. N. from the mouth of the Tchorok, lat. 41° 38′ 40″ N., long. 41° 38′ 55″ E. Pop. 2,000.? It is built in a straggling manner, and is not fortified. The harbour, which is open to the E.N.E. and N., is defended on the W. by a projecting tongue of land, and has deep water, large ships anchoring within a few ft. of the shore. The contiguous country is fertile in fruits, corn, and rice; but it has very little trade. (*Klaproth, Tableau du Caucase*, p. 162.)

BATTAGLIA, a village of Venetian Lombardy, prov. Padua, on the canal of Monselice, 10 m. S. by W. Padua. Pop. 3,000. It has hot-water baths, which, with commodious buildings and agreeable promenades along the canal, attract a considerable influx of company.

BATTALAH (*Vatala*), a large town of Hindostan, prov. Lahore, considered the healthiest place in the Punjab; in an open plain, 26 m. N.E. Umritsir; lat. 31° 48′ N., lon. 75° 6′ E.

BATTECOLLAH (*Batucala*, the round town), a maritime town of some size in Hindostan, prov. Canara; lat. 13° 56′ N., lon. 74° 37′ E.

BATTERSEA, a par. and town of England, hund. Brixton, co. Surrey, 4 m. S.W. St. Paul's. Pop., 1821, 4,992; 1831, 5,540: houses at the latter date, 1,022. Area, 2,020 acres. It comprises a low level tract on the S. bank of the Thames, and forms one of the suburbs to the metropolis; a wooden bridge connects it with Chelsea: it contains many respectable houses and detached villas. The parish church is a modern brick building, with tower and spire, beside the river; another has been erected within a recent period, by the commissioners appointed for such purposes. There is a free school for 20 boys, and a national school for 180 boys and girls. The Southampton Railway passes through the parish; one part of which (on the E. side) is an undivided tract of pasture, the rest chiefly market-gardens, for the supply of vegetables to the metropolis, for which the parish is noted; especially asparagus, said to have been first cultivated there. The place is called Patricery in Domesday, and the manor was given to the abbey of Westminster, in exchange for that of Windsor, by Wm. I.; hence the present name. It was granted by the crown, in 1627, to the St. John family, and the celebrated Lord Bolingbroke was born and died in their mansion (since removed). It is now the property of Earl Spencer.

BATTLE, a par. and town of England, co. Sussex, rape Hastings, hund. Battle, 52 m. S.E. London. Pop., 1821, 2,852; 1831, 2,999: houses at latter date, 515. The town is pleasantly situated amidst woody knolls, which bound it on the S. and S.E., and enclose it in a vale which winds on to the sea, at Hastings. The principal street (about ½ m. in length) is terminated by the magnificent gateway of the old abbey. There are a few good modern structures, but the greater part of the houses are ancient, and of mean appearance. The church, partly in the Roman and partly in the Gothic style, has many antique devices on the glass of its windows. There is an endowed school for 30 girls and boys, and a charity school for 40 boys, supported by subscription. A weekly market is held on Tuesday; a monthly one, on the same day, for cattle; and 2 annual fairs, on Whit Monday and Nov. 22. Gunpowder is the only manufacture, for which there are several extensive mills in the vicinity: its excellence is surpassed only by that made at Dartford. Battle is the central town of a poor law union of 14 parishes. The ancient name of the town was Epiton: its present name is derived from the great battle between Harold and William of Normandy, in 1066, of which it was the arena. In the following year the Conqueror founded the abbey, in commemoration of his victory, the ruins of which still sufficiently attest its ancient magnificence. On the completion of its church, he deposited in it the famous roll in which the names of all the leaders who had accompanied him on the expedition were inscribed. Copies of it are still extant, though not free from the suspicion of being interpolated and falsified. Benedictine monks from Normandy were its first occupants: their abbot was mitred, and a peer of parliament. The abbey was built on a gentle acclivity, overlooking a fine extent of woods and meadows, and was endowed with all the lands for a league round, besides various manors and churches in other counties. Many subsequent royal and private donations were added to the original endowment, and its prerogatives and immunities were placed on the same footing as those of Christ Church, Canterbury. In the reign of Edw. III. leave was obtained to fortify the abbey. At the general suppression its annual revenue was, according to Speed, 987*l.* 0*s.* 10¾*d.*: Dugdale makes it 880*l.* 14*s.* 7¼*d.* Sixty monks were pensioned off. The remains occupy three sides of a large quadrangle. (*Camden's Brit.; Dugdale's Monas.; Pennant's Tour; Gilpin's Coast of Sussex.*)

BATURIN, a town of European Russia, government of Tchernigoff, beautifully situated on the Seim, an affluent of the Desna. Pop. 5,000.? It is chiefly remarkable for the castle in its vicinity belonging to Count Rasoumofski, who has established manufactures in the town of cloth and wax candles.

BAVARIA (Germ. *Baiern*; Fr. *Bavière*), a country in the S.W. of Germany, anciently a duchy, afterwards an electorate, and now raised to the rank of a kingdom, being one of the principal of the secondary European states. It is composed of two distinct parts, commonly designated the "Territory of the Danube and Maine," and the "Territory of the Rhine." The former, which comprises about 7-8ths of the monarchy, extends from 47° 19′ to 50° 41′ N. lat., and from 8° 51′ to 13° 44′ E. long., and is bounded N. by the kingdom of Saxony, the principalities of Reuss, and the states of ducal Saxony; E. and S. by the states of the Austrian empire; and W. by the territories of Electoral Hesse, Hesse-Darmstadt, Baden, and the kingdom of Würtemberg. The Rhine territory lies on the W. side of that river, by which it is partly bounded, and is completely separated from the rest of the Bavarian dominions by the interposition of the territories of Baden and Hesse-Darmstadt: it extends from 48° 57′ to 49° 50′ N. lat., and from 7° 6′ to 8° 31′ E. long.

Extent. Population.— Considerable discrepancies have prevailed in the statements respecting the superficial extent of Bavaria. According to Hassel, it contains 32,834 Brit. sq. m.; others have reduced it to 28,435 sq. m.; and Berghaus, in his late work, estimates it at 1,398 German, or 29,537 Eng. sq. m.

Provinces, and their former Designation.	Area in sq. m.	Pop. Jan. 1. 1817.	Pop. to sq. m.	Chief Towns and Pop.
Upper Bavaria, formerly Circle of Isar	6,614	705,544	106	Munich - - 113,400
Lower Bavaria — Lower Danube	4,113	513,709	132	Passau - - 10,210
Palatinate — Rhine	2,226	608,470	268	Spires - - 9,300
Upper Palatinate and Ratisbon — Regen	4,198	467,606	111	Ratisbon - - 25,000
Upper Franconia — Upper Maine	2,226	501,163	225	Bayreuth - - 16,500
Middle Franconia — Rezat	2,798	527,866	188	Anspach - - 16,000; Nuremberg - - 45,400
Lower Franconia and Aschaffenburg — Lower Maine	3,604	592,080	164	Würzburg - - 24,500
Swabia and Neuburg — Upper Danube	3,868	558,436	144	Augsburg - - 37,000
Total	29,637	4,501,874	152	

Movement of Population. — An average of 11 years from 1824 to 1835 gave the following results: — Deaths, 116,319; marriages, 27,570; leg. births, 59,190 males, 55,158 females; illeg. births, 14,508 males, 14,995 females: leg. births to 1st March, 4. Legit. to illegit. births, 4·4 to 1. Average annual increase of pop. 23,063.

In 1837 the total pop. was 4,315,469.

Surface — Mountains. — Bohemia has on the whole a mountainous character, being not only walled in by lofty mountains on the N. and S., but having extensive chains running through its interior. The loftiest mountains are the Noric Alps, on the S., which separate it from the Tyrol; their most elevated points are the Zugspitz, circle of Isar, 9,689 ft., and the Wetterschroffen, 9,387. The Allgau-Alps, in the prov. of the Upper Danube, extend from Kempten, in a N.E. direction, to near Mindelheim. The Hochvogel in this range is 8,476, and the Teufelgsiiss, in the same prov., 9,283 ft. The high lands on the N. side of the Danube contain the finely-wooded chain of the Spessart, which commences on the Maine, at the place where that river separates it from the chain of the Odenwald, and traverses the prov. of Lower Maine from N. to S., covering an area of 147 sq. m. The loftiest summits of this range, such as the Engelsberg and the Geyersberg, rise to the height of about 2,000 ft. The most common rocks in the Spessart are granite, gneiss, syenite, and porphyry, which serve as a support for sandstone, argil and calcareous rocks. S of the Maine, and along the frontiers of the Lower and Upper Maine and the Rezat, is the range of the Steiger-Wald, which reaches nearly to the chain of the Spessart, and is only separated from it by the course of the Maine. The Rhœne-Gebirge, a bleak and desolate chain of mountains in the circle of Lower Maine, unite on the W. with the chain of the Vogelsberg, and on the E with the Thuringer-Wald: they are more extensive and more elevated than the range of the Spessart, and are covered half the year with snow. The Fichtel-Gebirge, which connect the Rhœne mountains with the Bœhmer-Wald, lie in the N.E. part of the Upper Maine. They consist chiefly of granite, gneiss, quartz, and clayslate. The highest point in the range is the summit of the Ochsenkopf or Ox's Head (5,280 ft.). The chain of the Bœhmer-Wald, which commences at the sources of the Eger, and running along the E. confines of Bavaria, terminates at the Moravian mountains, throwing out several branches into the circles of the Lower Danube and Regen, may be about 200 m. in length. The most elevated summits are the Asber, 4,824 ft.; the Rocher, 4,720 ft.; and the Dragell, 4,054 ft. The Bavarian mountains are in general well wooded. In the flat country along the Danube there are some very extensive marshes

Rivers. — Bavaria is watered by the largest rivers of Germany. The most considerable of these is the Danube, which, on entering Bavaria from the Würtemberg dominions, is of sufficient size to be navigable, and afterwards flows through the heart of the kingdom, making, with its windings, a course of about 270 Eng. m. In its course through the Bavarian territory, it flows past the towns of Günsburg, Hœchstädt, Donauwœrth, Neuburg, Ingolstadt, Ratisbon, Straubing, Vilshofen, and Passau, and receives no fewer than 38 rivers: the chief of these, on the right bank, are the Iller, the Lech, the Isar, and the Inn, all having their source among the Alps. The Iller, before its junction with the Danube, receives the Bleibach; the Isar is joined by the Loisach, Amper, and Würm, and falls into the Danube below Deggendorf: the Inn, which rises in Switzerland, flows through the Tyrol, and is navigable before it enters Bavaria: it receives the Alz, the large river Salza, &c., and joins the Danube near Passau. The streams on the left or Franconian side, which are by no means so large as those on the opposite bank, are the Würnitz, the Altmühl, which has its source in the Steiger-Wald and falls into the Danube near Kehleim; the Rohrbach, near Babenheim; the Naab, which descends from the Fichtel-Gebirge and discharges itself into the Danube above Ratisbon; and the Regen, that flows from the Bœhmer-Wald, and, traversing the circle to which it gives name, joins the Danube opposite Ratisbon.

The only considerable river in the N. part of Bavaria is the Maine, formed by the junction of the Red and White Maine, the former originating in the vicinity of Neubau, and the latter descending from Ochsenkopf, part of the Fichtel-Gebirge, in the circle of the Upper Danube. These unite near Culmbach, and traverse Franconia in a W. direction, receiving in their progress the Rodach, the Linn, and the Franconian Saale, which flow from the Rhœne-Gebirge, the Regnitz, and many smaller streams. The Rhine forms the E. boundary of the Bavarian province which bears its name.

Lakes. — The lakes are numerous, and some of them large. Besides the Lake of Constance, only a small portion of which is situated in Bavaria, the most extensive are the Ammer, about 12 m. long and 27 in circuit; the Würm, 14 m. in length and 4 in breadth; and the Chiem, about 35 m. in circuit. The Staffen or Staffel, the Walchen, the Kochel, and the King's or Bartholomæus lakes, are also of considerable extent. Most of these lakes abound in fish, and several valuable fisheries have been established on them.

Bavaria possesses few complete canals of any great magnitude. A canal was made in 1807 between Rosenheim, 7,400 ft. long and 36 ft. broad. Another canal was finished in 1818 between Wörth and Knitlingen, 10,624 ft. long and 62 ft. broad. There is a canal in the W. part of the circle of the Isar 13,000 ft. in length, which saves a distance of 5 m., and avoids the dangerous navigation of the Ammer Lake. A grand canal is now in progress for joining the Danube with the Rhine. It is to extend from Dietfurth, on the Altmühl, a navigable affluent of the Danube, to Bamberg on the Maine, a distance of 23½ German, or about 112 Eng. m. It is on a large scale, and is estimated to cost from 800,000*l.* to 900,000*l.* This magnificent undertaking, which appears to be destined to realise the project of Charlemagne for joining the Black Sea to the German Ocean, is carried on at the instigation and with the assistance of the Bavarian government. It is already far advanced; and will, no doubt, when completed, be of the greatest importance, not to Bavaria only, but to Europe.

Climate. — The climate of Bavaria is in general temperate and salubrious, but the temperature is considerably modified by local differences in the elevation of the soil. In the mountainous regions it is cold and bleak, but milder in the low country: in the plains and valleys the summer heats are sometimes oppressive.

Forests. — The Bavarian forests are very extensive and valuable; a considerable portion of the kingdom being still covered with natural woods. The most common trees are oak and beech in the plains, and pine and fir on the mountains. The most extensive forests are situated on the Spessart and Rhœne mountains, and in the neighbourhood of Kempten, where they cover a surface of 258,143 acres. The annual product of the Bavarian forests is estimated at 2,370,000 klafters; and timber is one of the most important articles of export.

The following table exhibits an approximative view of the extent, in acres, of the forests in the different circles, distributed among the classes to whom they belong: —

Circles.	Forests belonging to the State.	To Towns, Burghs, Villages, and Foundations.	To Individuals.	Total Number of Acres.
Isar	521,560	101,096	813,553	1,436,209
Regen	258,010	126,661	411,733	796,404
Lower Danube	173,533	783	481,253	655,569
Upper Danube	217,627	160,699	374,849	753,175
Lower Maine	233,611	337,524	190,576	761,701
Upper Maine	416,515	100,342	197,529	714,716
Rezat	225,386	151,243	165,067	541,696
Rhine	366,067	268,550	70,889	704,706
Total	2,412,339	1,246,898	2,704,649	6,363,876

The gross annual value of the woods and forests belonging to the state amounts to nearly 350,000*l.*; but, in consequence of the heavy expenses attending their management, the nett produce received by the state amounts only to little more than half that sum.

Minerals. — The mineral products of Bavaria are important and valuable; but notwithstanding the encouragement held out by government, they have hitherto been comparatively neglected. The principal products

are salt, coal, and iron. Salt is a royal monopoly, and produces a considerable revenue. According to Rau, the consumption is about 38,745 tons a year, the retail price being 6 fl. 9 ks., or 10s. per cwt. in the country; whereas about 4,200 tons are annually sold to Switzerland, at 2 fl. 29 ks., or about 4s. 6d. per cwt. There are a considerable number of iron-works and coal-mines in operation; but the quantities produced are comparatively inconsiderable, not being a tenth part of what they might easily amount to: they belong partly to the crown, and partly to private individuals. Black lead is obtained in some places; and small quantities of copper and quicksilver are also produced. There are an immense variety of marbles. The porcelain clay of Bavaria is probably the finest in Europe.

Cattle, &c. — The pastures of Bavaria are extensive, and generally good. According to Hoeck, the stock of cattle, horses, and sheep, in the different circles, in 1828, was as follows: —

	Horses.	Horned Cattle.	Sheep.
Isar - - -	103,683	258,388	159,000
Regen - - -	29,160	212,313	91,128
Upper Danube - -	65,667	307,010	97,327
Lower Danube - -	51,102	214,858	135,350
Rezat - - -	31,260	240,000	180,000
Upper Maine - -	7,295	208,659	131,491
Lower Maine - -	11,286	260,000	210,000
Rhine - - -	24,998	164,459	133,804
Total -	324,991	1,895,687	1,138,100
In 1837 -	330,620	2,350,386	1,484,080

This, however, would seem to be a most inadequate stock compared with the extent and capacities of the country. Generally speaking, too, the quality of the stock used to be very inferior. A good deal of improvement has, however, been effected in this respect within the last ten years by the establishment of veterinary schools, the institution of prizes, &c., and more than all, in so far at least as sheep are concerned, by the high price of wool of late years, and the advantages seen to accrue from the improvement of the breed, to the wool-growers of Saxony, Silesia, and other German countries. Although, therefore, neither the stock of cattle, horses, nor sheep, be at present so extensive or good as in some of the contiguous countries, it is satisfactory to know that it is in a progressive state of improvement; and the extensive market that the accession of Bavaria to the German Customs' Union has opened to her products will most probably lead to new efforts for the improvement of this amongst other branches of industry. The stock of hogs is estimated at 870,000. Poultry and wild fowl are plentiful; and in the circles of Rezat and Upper Danube the peasantry carry on a profitable trade in honey. The wolves, that formerly infested the Bavarian forests, are now nearly extinct.

Agriculture. — The soil of Bavaria, where it is not covered by morasses or mountains, is generally good; and, in the plains and valleys it is deep, fertile, and capable of producing all kinds of crops. Owing to the ignorance and prejudices of the peasantry, agriculture is still, in most parts, in a very backward state, and large tracts of arable land continue uncultivated. It was recently, and probably still continues to be customary, in cases of sickness or disease among cattle, for the husbandman, instead of applying to a veterinary surgeon, or administering remedies, to drive them to the shrine of some saint! But, thanks to the spread of education, the confiscation and sale of the greater part of the church lands, and the introduction of a more liberal system of government, the prejudices of the people are rapidly relaxing; a great deal of waste land has been reclaimed; and an improved system of cultivation has been introduced into various districts, and is diffusing itself over the whole country. Government has zealously exerted itself to promote improvement, not merely by the reforms it has effected in the systems of administration and education, but by the drainage of extensive marshes, and by its efforts to improve the breed of sheep, &c.

Agriculture is most improved in the valley of the Danube, the circles of Rezat, and of the Upper and Lower Maine. The plain lying to the S. of Munich has, on account of its productiveness, been styled the granary of Germany. Principal crops—rye, wheat, oats, and barley; but rice, maize, and buckwheat, are also partially cultivated. No accurate estimate can be formed of the productiveness of the crops, varying, as they must necessarily do, not only according to the quality of the soil, but also according to the skill with which it is cultivated, and the nature of the seasons.* But Englishmen who have been in Bavaria state, that under proper culture, the produce of corn and turnips is equal to what it is in the best cultivated districts of England: and notwithstanding the vast consumption of corn in the breweries, Bavaria has invariably a large surplus for exportation.

The following table exhibits the prices of the four principal sorts of grain within each of the circles of Bavaria, at an average of the six years ending with 1836, in shillings and pence sterling per imperial quarter: —

Circles.	Wheat.		Rye.		Barley.		Oats.	
	s.	d.	s.	d.	s.	d.	s.	d.
Isar - - -	30	0	21	10	17	1	10	8
Lower Danube -	25	9	19	4	14	2	9	6
Regen - -	25	0	19	6	15	3	9	8
Upper Danube -	29	6	22	1	16	11	10	4
Rezat - -	27	1	20	10	17	6	10	2
Upper Maine -	28	1	21	9	17	4	8	4
Lower Maine -	27	6	21	3	17	4	10	8
Whole kingdom -	27	7	20	11	16	6	9	11

* The hop-plant is cultivated to a considerable extent, particularly in the circles of Rezat and the Upper Danube: the quantity raised varies from 30,000 to 40,000 cwt. a year, of which about a half is exported. The culture of the vine is well understood in Bavaria. The best vineyards are in the circles of the Lower Maine and the Rhine. The former produces the wines of Franconia, known by the names of the Maine, Were, Saale, and Tauber wines. The famous Steinwein and Liestenwein are produced on the banks of the Leiste, not far from Steinberg, in the mark of Würzburg. The best wines in the circle of the Rhine are those produced near Deidesheim, and Wachenheim. The average yearly produce is estimated at about 800,000 eimers. Hemp and flax are grown in some districts, but the supply is not sufficient for home consumption. Madder and liquorice are very extensively produced, and form considerable articles of export. The culture of the potato has rapidly increased during late years, particularly in the N. provinces, and its produce is now estimated at above 11,280,000 scheffels. Beetroot is raised in considerable quantities, and there are several factories for its conversion into sugar. Tobacco is grown in considerable quantities in the circles of Rezat and Rhine. Silk has been raised of late years, but not to any great extent. Considerable portions of ground have been laid out in nurseries and flower-gardens, and large quantities of fruit are exported from the territories of Maine and the Rhine.

According to Berghaus the average annual amount of the principal articles of agricultural produce in Bavaria, is

Rye - -	2,962,500	scheffel	Wine	798,751	eimer.
Wheat -	1,259,367	—	Hops -	34,902	cetnr.
— (spelt)	1,378,800	—	Hemp and flax -	337,801	—
Barley -	1,927,363	—	Tobacco -	82,537	—
Oats - -	2,750,818	—	Rapeseed -	59,329	scheff'l
Total grain -	16,278,848	—	Poppies -	8,485	—
Potatoes -	11,282,149	—	Madder -	47,365	cetnr.
Peas - -	55,210	—	Fodder -	33,811,131	—
Lentils -	74,992	—	Timber -	2,460,046	fathoms

It has been estimated that 53 per cent. of the entire surface of the kingdom is occupied by tillage and pasture lands, 29 per cent. by forests, and that 18 per cent. is waste. But it is needless to say that these estimates are but little to be depended on; and that at best they are never more than rude approximations.

Bavaria is mostly divided into very small properties. In the circles of Isar, Regen, Lower and Upper Danube, Rezat, and Upper Maine, there are 2,254,603 estates, possessed by 606,989 proprietors; but in the first three circles the land is not so much subdivided as in the others. The property possessed by the state amounts to about a sixth part of the entire value of the landed property of the kingdom. In consequence of this great subdivision of the land, there are but few hired farms and few hired labourers; where, however, the latter are hired, their wages may amount, at an average, to about 8d. a day, with provisions in harvest. In towns wages vary from 8d. to 16d. a day, according to the trade and the skill of the workman. Throughout Bavaria all sorts of field labour are performed indiscriminately by men and women.

Manufactures are generally in a backward state, and manufacturing establishments mostly on a small scale. The beer manufacture, and breweries, must, however, be excepted from this remark. Bavaria would certainly appear to be the paradise of beer-drinkers. "No individual in the world," says Mr. Strang, "not excepting a London coal-heaver, drinks so much beer as a Bavarian. I am credibly informed that the majority of the mechanics of Munich are rarely satisfied with less than 10 or 12 tankards daily. There are two kinds of beer, the brown and the white: it is neither so strong nor so sweet as our Scotch ale, but its hop flavour is more delicate. It is not only a pleasant, but a very wholesome beverage; and from its universal use, you may easily believe that, with the exception of the English metropolis, there is no city where so much beer is brewed as in Munich. The

* It is stated in a very good article on Bavaria, in the Penny Cyclopædia, that the average produce of the Bavarian crops is about 5½ bushels an English acre! But a crop of this sort would do little more than replace the seed: 23 bushels an acre would be nearer to, but probably under, the mark.

establishment of Herr Pschorr, built like a citadel, almost rivals the works of our Meux's, and Barclay and Perkins'. In every corner of the city you find beer-houses; and when you see a Bavarian peasant not working, you are sure to find him with a can of beer in his hand." (*Germany in* 1831, ii. 377.) According to Mr. Murray, the "amount and quality of the annual brewing" is a subject of as earnest discussion among the Bavarians as the vintage or harvest in other countries! We therefore need not be surprised to hear that it is estimated that there are in all about 5,500 breweries in the kingdom; that they consume annually from 750,000 to 800,000 quarters of malt; and that their produce amounts to about 90,000,000 gallons! If this estimate be at all accurate, it gives, supposing 20,000,000 gallons to be exported, an average supply of 17 gallons a year to every individual, young and old, male and female, in the kingdom; and as there is comparatively little beer drunk in the Rhine province, the consumption of Bavaria Proper will be really greater than it appears to be, even on the face of this statement! It may be supposed, perhaps, that this enormous consumption of beer must be injurious to the labouring population; but this does not seem to be the case. The desire to possess this luxury stimulates their industry; and notwithstanding their indulgence in it, they are well clothed and well fed; there is no appearance of abject poverty amongst them, and beggars are never seen.

Next to beer, the staple products of manufacturing industry are coarse linens, woollens, cottons, leather, paper, glass, earthenware, jewellery, iron-ware, basket-ware, and wooden articles. Coarse linens are manufactured to a considerable extent; but the supply of woollen stuffs, worsted hose, and cotton goods, is inadequate to the consumption. The leather manufacture is extensive and important, and leather is largely exported. There are above 130 paper-mills, about 50 glass-houses, 2,000 saw-mills, many establishments for the manufacture of wooden clocks, toys, &c., and of porcelain and earthenware. Ironware, especially nails and needles, is extensively manufactured, and the exports are considerable. The optical, mathematical, surgical, and musical instruments, made at Munich, are highly prized on the Continent, especially the telescopes of Fraüenhofer, which are superior to those made anywhere else. There are also foundries for cannon, and manufactories of muskets and other small arms, &c.; and considerable quantities of jewellery are exported to most European markets. The principal manufacturing towns are Augsburg, Nuremberg, Furth, Schwabach, Hof, Bayreuth, &c.

Commerce. — The central situation of Bavaria renders her well suited for the transit and carrying trade; and to this Augsburg, Nuremberg, Ratisbon, and Spires, owed the greater part of their wealth and celebrity during the middle ages. But in modern times the means of profiting by the natural advantages of the country in this way have been comparatively neglected. Within these few years, however, they have begun to attract the attention they so justly deserve. Besides the great canal already alluded to, for uniting the Danube with the Rhine, a joint stock company established in 1838 a regular steam communication between Ratisbon and Linz, in Austria, which was extended in the present year (1839) to Donauwerth and Ulm. The first railroad with steam carriages introduced upon the Continent was that between Nuremberg and Furth, opened in 1835; but notwithstanding that the decided success of this undertaking called forth many similar projects in many parts of the kingdom, this line continues to be the only one of the kind. Bavaria has a great resource for commercial undertakings, in the credit enjoyed by the bankers of Augsburg, which is still one of the principal places of the Continent for the negotiation of bills. A banking company for the issue of notes, the discounting of bills of exchange, and the advance of loans on mortgage, has been established at Munich. Though sanctioned by government, the latter is not responsible for its engagements.

The exports consist chiefly of corn, timber, wine, cattle, sheep, and hogs, butter, salt, iron, leather, glass, hops, fruit, beer, wool, optical and mathematical instruments, wooden toys, jewellery, maps, &c. Their value is estimated by Hohn at about 14,000,000 fl. (1,225,000*l.*) a year. According to the same authority, the quantities of the principal articles exported are at an average: —

Horned cattle - -	190,000 to 200,000	head
Horses - - -	12,000 13,000	—
Sheep - - - -	225,000	—
Hogs - - - -	565,000	—
Cheese and butter - -	100,000	cwts.
Wool - - - -	19,000	—
Hops - - - -	22,000	—
Dried Fruit - - -	33,000	—
Wheat - - - -	200,000	qrs.
Wine (value) - - -	1,250,000	fl.
Timber (value) - - -	2,500,000	—

The imports consist principally of sugar, coffee and other colonial products; spices and dye stuffs; cotton stuffs, silks, woollens, and fine manufactures of all kinds; drugs, hemp, and flax, &c. The imports of cattle are also extensive, and those of horses exceed the exports. The total value of the imports is estimated at 10,000,000 fl. (875,000*l.*); but every one acquainted with the merest elements of political economy knows, that if the value of the exports amounts to 14,000,000 fl., that of the imports, instead of being less, must, in ordinary years, be considerably greater. Were this not the case, commerce would be a means of impoverishing the country. The duties on goods imported into Bavaria are, with few exceptions, those of the Prussian Customs' Union, of which it forms a part. (*See* PRUSSIA.) Its proportion of the joint revenue of the league is 16·94, or 17 per cent.

Until the formation of the Prussian league, which has opened a vast extent of country to the products of Bavaria, its natural facilities for commercial intercourse were defeated by its own prohibitory regulations, and those of most of its neighbours. Sounder and more enlightened views, as to commerce, are now, however, beginning to prevail all over Germany; and it is but justice to add, that the Bavarian government has given a powerful impulse to industry by establishing mechanics' schools, annual exhibitions, and prizes; and still more by the abolition of the pernicious privileges of guilds and corporations. But a vast deal still remains to be effected before industry can make any real progress in this and most other German states. The English reader will be surprised to learn that here the number of labourers permitted to reside in towns, the number and distribution of trades, the prices of bread and meat, and even the introduction of new machinery, are all determined by artificial arrangements, dependent on the calculations and estimates of the minister of the interior, and enforced by the institution of passports and of a preventive police! The wonder is not, where such regulations prevail, that industry should be in a depressed condition, but that it should exist at all. And, in point of fact, the progress it has made is principally ascribable to the fact of Bavaria having within her limits Augsburg, Nuremberg, and other towns that, being formerly free imperial cities, have been but little injured by these preposterous regulations. The roads in Bavaria are generally bad; and we agree with Mr. Murray in thinking, that how laudable soever the encouragement given by the king to the fine arts, he would confer a much more solid and important benefit on his dominions were he to apply his energies, and divert a portion of his expenditure to their improvement. The public roads, such as they are, extend upwards of 5,500 miles.

The Bavarian florin is equivalent to 21*d.* sterling; the eimer, or measure of wine, to 9¾ gallons; and the scheffel, or measure of corn, to ·761 imp. quart.

Law as to Marriage, &c.—Considering the lengthened period of tranquillity that Bavaria has enjoyed, and the stimulus given to industry by the secularisation of the property of the monasteries, and the abolition of guilds and corporations, the progress of population has been slower than might have been expected. This slow progress would seem to be, in part at least, accounted for by the law which enacts, that "*no marriage between people without capital shall be allowed without the previous permission of the poor institutions*;" that is, of the principal persons in each provincial district elected to superintend the management of the poor, who are bound to refuse such permission, unless they see a reasonable prospect of the parties being able to provide for the children that may be expected to spring from the proposed union. To insure their vigilance, it is enacted, that the members of poor institutions neglecting to enforce this law "*are to answer for the maintenance of the said families*, should they not be able to maintain themselves." Undoubtedly, a law of this sort must tend powerfully to prevent improvident unions; and we are assured that it has retarded the increase of population, and had a most salutary effect in averting extreme poverty and consequent misery. (See *Appendix F. to Poor Inquiry Returns*, p. 22.).

In Bavaria all destitute persons have a legal claim to relief; and no doubt it was the wish to prevent the abuse of this right that led to the institution of the above law. That it has been effectual to this end, is universally admitted; but different opinions are entertained as to its influence on public morals. We are not sure, however, that it can be successfully impeached on this ground. At Munich, indeed, half the births are illegitimate; but the residence of the court, and of a numerous garrison, and the great influx of strangers, seem sufficiently to account for this. In the country, we believe, the morals of the Bavarians are, in this respect, quite on a level with those of the other German states. The proportion of illegitimate to legitimate births is, however, very high, being as 1 to 4·4.

Notwithstanding their immoderate consumption of beer, and in some degree also of spirits, the Bavarians are really sober and industrious; and though ignorance,

superstition, and vice still prevail in some districts, they are fast disappearing, and the Bavarian character is most respectable.

Character, &c. — The Bavarians, though all Germans, differ essentially in character, according to their descent from the different tribes of that people, and the different circumstances under which they have been placed. The inhab. of the Rhenish prov. are the most lively, active, gay, and enterprising. The Swabians are remarkable for a certain good-natured indolence, which has exposed them to much undeserved ridicule. The Franconians are diligent, intelligent, and steady, but vary in their social habits according to the influence which Protestantism has exercised upon the inhab. of the Upper Maine, or the dominion which the Catholic prelates of the empire have had upon their brethren in the fertile valley of the lower portion of that river. The population of the provs. S. of the Danube retain more characteristic peculiarities; and the Bavarians, though equally brave and well disposed with the rest, are heavier, more superstitious, and less active, though not less industrious. In the valleys of the Alps, the dress and manners of the Bavarians and Swabians bear a great resemblance to those of the Tyrolese; and the climate inclines them to prefer pasture to arable husbandry. The women are here more in the fields, and partake more of the out-door labour of the men than is the case in the N. provs. They drive the cattle up to the hills in summer; and their robust health manifests itself in the zeal with which they join in the waltz, and in their peculiar manner of singing, called "*Iodein.*" The character of their songs is not unfrequently rather free; but the indispensable requisites of a favoured lover, according to the "*Schnaderhüpfel,*" are superior agility and skill as a sportsman and wrestler, which must be proved by the possession of sundry trophies of the chase, such as chamois beards or feathers of the rarer birds, which, when worn on his pointed hat, form a challenge to rival heroes, who not unfrequently attempt to wrest them from their owner by force, according to the laws of village chivalry. The wealth of the large towns on the navigable rivers in the middle ages, and the expensive habits which it produced, may yet be traced in the costumes of the wives and daughters of the burghers. The hood of rich gold lace, and the boddice ornamented with gold or silver chains, from which a number of medals hang, form the common dress of the richer portion of this class, and are ambitiously displayed by servants and the poorer tradespeople on Sundays and holidays.

According to Hassel, the taxed houses in the kingdom amount to 652,000; but Rudhart computed them, in 1836, at 619,482. Of these, 484,000, and 447,000 buildings connected with them, were insured against fire in 1834, for 38,573,236 florins. The number of buildings of all descriptions amounted, in 1833, to 1,271,567; and the number insured against fire was 1,136,977; the estimated value of which was 551,026,798 florins.

Constitution and Government.—According to the constitutional act promulgated in 1818, Bavaria is declared an integral part of the Germanic confederation; the domains of the state inalienable, and the crown hereditary. The executive power is in the hands of the king, whose person is inviolable. The legislature consists of two chambers; one of senators, and one of deputies. The former is composed of princes of the royal family, the great officers of state, the two archbishops, the barons, or heads of certain noble families, a bishop nominated by the king, the president of the Protestant consistory, and any other members whom the king may create hereditary peers or members for life; but the latter cannot exceed one third part of the hereditary senators. The lower house consists of a variable number of members, there being 1 deputy to every 7,000 families, or 35,000 persons. At its last meeting it had 123 members, distributed in 5 classes: the first consisted of 14 representatives of knights, or proprietors possessed of territorial jurisdiction, and of all the rights of nobility: the second class consisted of 3 representatives of the universities; 1 for each: the third class consisted of 11 representatives of the Catholic, and 5 of the Protestant clergy: the fourth class comprised the representatives of cities and burghs; Munich sending 2, Augsburg 1, Nuremberg 1, and the others 26 in all: and the fifth class consisted of 60 representatives of landed proprietors, without jurisdiction.

The elections are very complicated, and far from popular. All candidates must be free and independent citizens; have completed their thirtieth year; be members of the Romish or Reformed church; and pay taxes on a property of 8,000 fl. (700*l.*) a year at least. Owing to the extreme sub-division of property in most districts, this last condition narrows the number of candidates extremely.

The members are chosen every six years, unless the king choose to dissolve the chambers in the interim. They are generally convened once a year, and must be assembled at least once in three years. The session usually lasts two months, but it may be extended or adjourned. In case of a dissolution, a new election must take place within three months. No taxes can be levied or augmented, and no law be passed or repealed, without the sanction of the legislature. But the accession of Bavaria to the Prussian customs' league is understood to have exempted the regulation of the customs, duties, and other indirect taxes from the control of the chambers. The king has also (in 1837) denied their right to inquire into the *appropriation* of grants; and the authority to be given to ordinances issued by the king is not well defined.

The cabinet is composed of five members — the presidents of the departments of foreign affairs, justice, home affairs, finance, and the army. The ministers are not necessarily members of the chambers, but they have a right to be present at their deliberations. At the commencement of each session, they must lay before parliament an account of the appropriation of the public revenue; and the national debt cannot be increased without its consent. The privy council which is at the head of public affairs, consists of the king, certain princes of the royal family, the ministers of state, the field marshal, and six counsellors appointed by the king. The king has power to grant pardons and mitigate punishments, but in no case to stop the progress of a civil suit or criminal inquiry. The code Napoleon is in force in Rhenish Bavaria; but in other parts of the kingdom there is an extreme difference in the procedure as to civil matters; and a new, improved, and uniform code, is much wanted. The penal code, introduced in 1813, might be much improved both in its regulations and in the form of its procedure. There is a high court of appeal and cassation at Munich; and in each of the provs. an inferior tribunal, to which an appeal lies from the courts of primary jurisdiction in the towns, and the seignorial and cantonal courts of the country districts. A law has been passed providing for the purchase of the seignorial jurisdictions on paying an equivalent to their proprietors.

Each of the eight circles into which Bavaria is divided is under the superintendence of two provincial boards; one for the management of the police, schools, &c.; the other takes charge of all financial matters. Each circle is subdivided into districts, which have assemblies, whose duties are to decide all local questions respecting public burdens and district rates.

According to the fundamental principles of the constitution, all citizens are eligible to the different offices of the state, without any regard to birth or rank in society; all are liable to personal service in the national defence; religious liberty and freedom of opinion are practically granted to all; and no one can be imprisoned or condemned but by the sentence of a judge. Personal slavery is also abolished, and all religious and charitable endowments are placed under the superintendence of the state. It may also be mentioned that every considerable provincial town has one or more journals; and the *Augsburg Gazette* has the most extensive circulation of all the German newspapers. But unhappily the real palladium of a free government — an unfettered press — is unknown in Bavaria; a rigid and jealous censorship is established; and political discussion, literature, and education feel its emasculating and destructive influence.

Religion.—The classification of the inhabitants, in 1838, according to their religions gives, for the number, of the different sects — Roman Catholics very near 3,000,000, Lutherans about 1,250,000, the remainder being Calvinists, Jews, Moravians, Anabaptists, &c. The small number of Calvinists is explained by the fact of the Calvinists of the Palatinate, where they were most numerous, having united with the Lutherans in 1818, so that they now form one religious community under the designation of "The Protestant, Evangelical, Christian Church." The Catholic is the religion of the court and the state; but the constitution guarantees the perfect equality of the three Christian confessions of Catholics, Lutherans, and Calvinists.

According to the last concordat, Bavaria is divided into the two archbishoprics of Munich and Bamberg, and into six dioceses: Augsburg, Ratisbon, Passau, Würzburg, Eichstädt, and Spires. There are also 111 deaneries, and 2,756 cures of souls, belonging to the Romish church. The incomes of the clergy arise principally from estates and endowments. The Archbishop of Munich receives 20,000 florins (1,700*l.*), and the Archbishop of Bamberg, 15,000 florins (1,354*l.*). The bishops of Augsburgh, Ratisbon, and Würzburg, 10,000 florins (875*l.*) each; and those of Passau, Eichstadt, and Spires, 8,000 florins (700*l.*) each. The dean of Munich has 4,000; of Bamberg, 3,500; in the first set of bishoprics, 3,000; and in the second, 2,500 florins a year. The incomes of the canons vary from 1,400 to 2,000 florins. An annual grant of about 1,000,000 florins is made by the state, for the support of the inferior clergy. It is to be regretted that the present sovereign has allowed a very consider-

able number of convents and monasteries, which had been wholly suppressed, to be re-established: luckily, however, they are deprived of the greater portion of the wealth they once possessed. By the concordat above-mentioned, the right of nominating all the higher orders of the clergy is ceded to the king.

The highest ecclesiastical court among the Lutherans is the general consistory at Munich; the president of which has a seat in the chamber of senators; and they have also consistories at Anspach, Bayreuth, and Spires. The Protestant church has 86 deaconships and 990 par. In the Palatinate, which was left in possession of many valuable privileges at the peace, the Protestant church is a completely organised body with Presbyteries and Synods as in Scotland. It will be seen from the subjoined accounts that the support of the Protestant clergy costs the state above 295,000 florins (25,812*l.*) a year.

Education. — Of late years the Bavarian government has made the most praiseworthy efforts to diffuse knowledge among the mass of the people. The system pursued is similar to that of Prussia. A school has been established in every parish, under the superintendence of the ministers and elders. Over these are the inspectors of district schools, who are subordinate to the chambers of the interior, in the several provincial governments. The superintendence of all the educational institutions in the kingdom is committed to a board attached to the ministry of the interior, entitled, "The Superior Board of Education and Ecclesiastical Affairs." Attendance at school is imperative on all children who have not received permission to be instructed by private tutors. Bavaria has 1 lyceum, 25 gymnasiums, 34 grammar schools, 7 seminaries for the education of teachers, 31 local school commissions, and about 5,000 primary schools. There are 9 seminaries for educating Catholics for the ministry.

Bavaria has three universities — those of Munich, Würzburg, and Erlangen: the two former are Roman Catholic, the latter Protestant. The university of Munich is attended by above 1 300 students, the others, respectively, by about 400 and 300 each. In 1828 a new and improved system of study was adopted in the Bavarian universities, and a number of injurious regulations were suppressed. Besides these seminaries, there are in Munich numerous literary associations: such as the Royal Institute; an academy of arts and sciences; another of the fine arts; an agricultural society; a military and veterinary school, &c.: and there are a number of literary and scientific institutions in Würzburg, Erlangen, Nuremberg, Ratisbon, Augsburg, &c. The National Library in Munich, formed chiefly of those belonging to the suppressed monastic establishments, contains 540,000 volumes, including an extensive collection of curious manuscripts, pamphlets, &c.; and the university library contains 160,000 volumes. In this city there is also an extensive Sunday school, in which there are upwards of 1,600 scholars, with 16 masters, who teach their pupils morals, the principles of physics, geography, natural history, chemistry, and geometry. The whole sum voted annually by the Bavarian legislature for the support of education is 767,811 florins (about 73,600*l.*). Munich, as is well known, has recently become a principal seat of the fine arts.

Prison System. — The system pursued in the prison of Munich is peculiarly worthy of attention. The principle of the establishment is that every one in prison shall support himself. Every prisoner, therefore, is obliged to work at his own trade; and those who have not learnt a trade are permitted to make choice of one, which is taught to them. Whatever the criminal earns by his labour more than is sufficient for his maintenance, is kept until the term of his imprisonment expires, and is then given to him, deducting a quota for the expenses of the establishment. The surplus thus preserved for the benefit of the prisoners themselves, after the expenses of the establishment have been defrayed, usually amounts to nearly 50,000 florins (4,370*l.*) per annum. Instances have been known of persons at the expiry of their term of punishment receiving no less than 800 florins (70*l.*) upon leaving the prison. The number of persons confined in the prison is generally between 600 and 700. It is gratifying to learn that the system has produced the most satisfactory results. In but few cases are offenders committed a second time, and those who have been dismissed with the largest sums have in no instance returned. Many of the young, who have been taught trades in the prison, have afterwards become respectable handicraftsmen and tradesmen; and crime is yearly on the decrease. The proportion of capital punishments in Bavaria is as 1 to 20,000 persons.

Revenue and Expenditure. — At the conclusion of the war in 1815 the financial affairs of Bavaria were in a very embarrassed state; but through the judicious economy and measures of the sovereign and the legislature, they are now greatly improved. In 1819, the excess of the expenditure over the income was 2,007,800 florins; but in 1831-32, the revenue amounted to 29,217,009 florins, while the expenditure was only 27,095,883 florins. The gross annual revenue for the period, from 1831 to 1837, was fixed at 28,145,139 florins. The national debt amounts to about 130,000,000 florins.

Taxation. — The direct taxes are levied as follows; — For the land tax, estates are selected for valuation in every district by royal commissioners and tax assessors, named by the district itself. The estates thus chosen are supposed to represent the *mean* of the surrounding lands, and according to their produce the tax is levied. Land of all kinds is divided into classes, differing from each other, in their ascertained production, by about 1 bushel per acre, and one third being deducted for fallow, a rate called a *simplum*, of 1 kreutzer in the florin, or 1⅔ per cent, is calculated on the remainder. Rents, rent charges, services, and tithes, are considered as part of the produce of the land, and the rate is apportioned between the holders of these charges and the cultivator of the land, who pays a smaller share, in proportion to the heaviness of his burdens. The value of houses is estimated according to existing contracts of rent: where no such contracts exist, the value of a house is found by appraisement, in the same way as the land. The total rate at present levied on land and houses is 5 *simpla*, or 8 1-5th per cent. on the produce. The family, or rather capitation tax, is paid by the whole pop. in 12 classes. The first class embraces the widows of labourers living on their labour, who are rated at 10 kr., or about 4*d.*, annually; labourers paying 8*d.*; the highest class pays 1*l.* per annum. The industry tax is paid by every individual or company carrying on trade or manufactures, according to 5 classes, each with five subdivisions. The classes are fixed according to the number of inhab. in the place where the trade is carried on. The lowest rate is 1*s.* per ann. for common labour in villages; the highest is 15*l.* per ann., paid by bankers, merchants, wholesale dealers, and innkeepers, in towns containing more than 2,000 families. The direct taxes are less heavy in Bavaria than in most of the other German states. For the indirect taxes we refer to the article GERMANY, in which the various customs' duties are treated of.

The expenses of collection are heavy, amounting to about 26 per cent. on the gross revenue. The expenditure nearly corresponds with the income.

Subjoined is an account, from the official returns, of the yearly revenue and expenditure of Bavaria, as fixed by the budget for 1837-43.

Receipts.

	Fl.	Fl.
Direct Taxes.		
Land tax	4,220,342	
House, window tax, &c.	484,907	
Rent-charge tax	321,723	
Industry tax	713,011	
Family and personal taxes	343,481	
Contribution for widows, &c.	53,418	
		6,136,883
Indirect Taxes.		
Customs	3,091,772	
Excise	4,653,612	
Stamps and registry fees	2,793,032	
		10,541,416
Salt monopoly and mines	2,184,026	
Lottery	1,380,569	
Post and government undertakings	456,724	
		4,021,319
Domains, &c.	- -	8,100,692
Special rate	- -	77 100
Accidental sums	- -	145,628
Levied on the circles for special purposes	- -	689,435
Arrears from the former period	- -	300,000
		30,012,473

Disbursements.

	Fl.	Fl.
Public debt	- -	8,746,294
Civil list	- -	3,188,000
Council of state	- -	72,000
Parliamentary expenses	- -	46,500
Foreign affairs	- -	460,000
Justice	- -	1,158,944
Home department	- -	756,460
Provincial administration	- -	1,969,966
Finances	-	770,000
Religion — Catholics	1,059,544	
Protestants	295,672	
		1,355,217
Health	184,504	
Charitable institutions	209,812	
Police	484,150	
Instruction, &c.	791,191	
Public works	2,397,640	
Sundry expenses	470,733	
		4,558,030
Army and military pensions	- -	6,194,976
Agriculture	- -	731,440
Pensions	- -	276,000
		29,583,827

In addition to this, the county rates or special provincial disbursements amount to upwards of 4,500,000 fl.

Army. — The army consists of 16 regiments of infantry, in 2 battalions each, and 4 battalions of sharp-shooters, making in all a force of about 43,000 men. The cavalry consists of 2 regiments of cuirassiers, and 6 of light

cavalry, in 6 squadrons each; making a total of 8,750. The artillery corps consists of 2 regiments, in 2 battalions each, and 2 companies of sappers, 1 of miners, 1 of pontoon men, and 1 of artificers; in all about 4,500. The full war complement of the Bavarian army is, therefore, about 57,000; but of these a large proportion is generally absent on furlough.

The contingent which Bavaria furnishes to the Germanic confederation, has been fixed at 35,800 men.

The army is raised by conscription; every male (the clergy and nobility only excepted) being liable to bear arms in defence of his country. The period of military service is limited to 6 years. Permission is given to serve by substitute, and certain exceptions are usually granted to students and persons indispensable to the maintenance of their families: a curious regulation, which, however, squares well with the law as to marriage already alluded to, provides that all individuals drawn for the military service shall neither marry nor obtain a settlement for a certain number of years. Besides the permanent army, there is a reserve destined to reinforce it. There is also the *landwehr*, or militia, composed of all Bavarians (excepting noblemen and clergymen), between the ages of 19 and 60, who have not been drafted into the army or into the reserve. In cases of emergency, they may be called upon to reinforce the army, but only in the interior. There is a corps of gens d'armes, composed of 9 companies, making in all about 1,700 men.

The military establishment would seem to be disproportioned to the number of inhabitants and the means of the country; but we have not heard that it is complained of. In fact, not more than a third part of the troops are permanently embodied, the rest being disbanded after the drills in spring, return home to their families. The pay of a cavalry soldier is 10½ kr., about 4*d.* a day, with rations; that of an infantry soldier is 9½ kr., also with rations. The total cost of the war department amounts to about 7,000,000 fl. a year.

Principal fortresses: Landau, circle of the Rhine; Passau, on the Danube; Würzburg, with the citadel of Marienberg; and Ingolstadt, at the confluence of the Schütter and the Danube. (*Communication from Munich.*)

History. — The earliest inhabitants of Bavaria of whom tradition has preserved any account were the Boii, a tribe of Celtic origin: from them its old Latin name Boiaria, and the German name Baiern, are derived. About the reign of Augustus it was subdued by the Romans, and formed part of what they termed Rhœtia, Vindelicia, and Noricum. After the downfall of the Roman empire, the Bavarians fell under the dominion of the Ostrogoths and Franks, and after a protracted resistance, it acknowledged the sovereignty of Charlemagne. After the death of that monarch, the kings of the Franks and Germans governed Bavaria by their lieutenants, who bore the title of margrave, till 920, when the ruling margrave was raised to the title of duke. His successors continued to bear this title till 1623, when they were raised to the electoral dignity. In 1070 Bavaria passed into the possession of the family of the Guelphs, and in 1180 it was transferred by imperial grant to Otho, Count of Wittelsbach, whose descendants branched out into two families, the Palatine or Rodolphine, and the Bavarian or Ludovician; the former inheriting the palatine of the Rhine, the latter the duchy of Bavaria. During the war of the Spanish succession, Bavaria suffered severely from following the adverse fortunes of France; but it received a great accession in 1777, when, upon the extinction of the younger line of Wittelsbach, the palatinate, after a short contest with Austria, was added to the Bavarian territory. During the late war with France, Bavaria, being long the firm ally of Napoleon, was rewarded with large accessions of territory from the spoils of Austria and Prussia; and the Bavarian monarch having contrived to change sides at a critical moment, when the fortunes of Napoleon were still doubtful, was confirmed in his extensive acquisitions by the treaties of 1814 and 1815; for though Austria recovered her ancient possessions in the Tyrol and the districts of the Inn and Hansruck, Bavaria received equivalents in Franconia and the vicinity of the Rhine.

BAVAY (an. *Bagacum*), a town of France, dép. du Nord, cap. cant., 13 m. E. S. E. Valenciennes. Pop. 1,650. The streets are neat and clean; and it has fabrics of iron plates, agricultural implements, with tanneries, &c. This is a very ancient town, having been made the cap. of a prov. by Augustus, and destroyed by the Huns in 385. It was formerly surrounded by walls; and in the middle of the market-place is an obelisk with seven faces, indicating the direction of the Roman roads that terminated at this point. This obelisk is modern, but it replaces a Roman column, which is said to have existed in the 17th century. The remains of a circus and an aqueduct are still discoverable. (*Hugo*, art. *Nord.*)

BAUD, a town of France, dép. Morbihan, cap. cant., 14 m. S. by W. Pontivy. Pop. 5,310.

BAUGÉ, a town of France, dép. Maine et Loire, cap. arrond., on the Couanon, or Couernon, 23 m. E.N.E. Angers. Pop. 3,400. It is agreeably situated in a fine valley, and has some good houses, but it is built with the greatest irregularity. The bridge over the Couanon is new and handsome. It has a tribunal of original jurisdiction, a college, or high school, and manufactures of cloth and coarse linen. The English forces, under the Duke of Clarence, were totally defeated in the neighbourhood of this town in 1421, and the duke killed.

Not far from Baugé is the village of Baugé-le-Vieil, with the ruins of an old castle that formerly belonged to the dukes of Anjou.

BAULEAH, an inland town of Hindostan, prov. Bengal; on the N. side of the main trunk of the Ganges, 20 m. N.E. Moorshedabad. It is large, populous, has considerable trade, and is the seat of a commercial resident on the part of the E. I. Company.

BAUMANSHOHLE, a celebrated cavern in the duchy of Brunswick, near Blankenburg. It abounds with stalactites, and is interesting to the geologist from the variety of fossil bones found in it; among which are those of the great cave bear, now extinct.

BAUMEEAN, or BAUMIAN, a town of Caubul, the Thebes of the E., country of the Hazanrehs, on the face of the Koh-i-Baba range of mountains; lat. 34° 34′ N., long. 68° 8′ E., 56 m. W.N.W. Caubul. The valley, on one declivity of which it stands, contains many caves, dug in a soil of indurated clay and pebbles, and in which rings and relics, coins, &c., bearing Cufic inscriptions, are found; but Baumeean is chiefly celebrated for two gigantic male and female figures, cut in *alto relievo*, on the face of the mountain. The male figure is the largest, and about 120 ft. high; it is without much symmetry or elegance, and is considerably mutilated, the Mohammedans that pass that way always firing a shot or two at it. The lips are large, the ears long and pendant, and there appears to have been the resemblance of a tiara on the head; the body is covered by the remains of a mantle, which has been formed of a kind of plaster, and fixed on with wooden pins. The female figure is more perfect than the other, and has been dressed in the same manner; it is about half the size, and cut in the same hill, 200 yards from the former. The niches in which both are situated have been at one time plastered and ornamented with paintings of human figures, but these have nearly disappeared. These images are supposed to be Buddhic. Sir A. Burnes says the head of the large one is not unlike that of the great trifaced idol of Elephanta, and near the celebrated tope of Manikyala (Punjab) he found an antique exactly resembling this head. Another antiquary, from an inscription above the head of one of them, has believed them to have been cut about the 3d century of our æra, while the Sassanides filled the throne of Persia. They are not mentioned by any of the historians of Alexander the Great; but both the idols and excavations of Baumeean are referred to by those of Timour or Tamerlane. (*Elphinstone's Caubul, Introd.; Burnes's Trav.*, ii. 157—162.; *Journal of the Asiatic Society of Bengal.*)

BAUME-LES-DAMES, a town of France, dép. Doubs, cap. arrond., on the Doubs, 18 m. N.E. Besançon. Pop. 2,519. It is a handsome little town, finely situated in a basin formed by hills planted with vines; has a court of original jurisdiction, a college, and a small public library, with paper-mills and tanneries. It derives its name from a rich and celebrated convent for nuns, founded in it during the 5th century, and destroyed at the Revolution.

BAUTZEN, a town of Saxony, cap. Upper Lusatia, on a height at the foot of which is the Spree, 33 m. E.N.E. Dresden; lat. 51° 10′ N., long. 14° 30′ E. Pop. 12,000. It is surrounded by walls, except one of its suburbs on the left of the Spree, and is well built, with straight, broad, and well-paved streets. Its cathedral, founded in 1213, is appropriated partly to Catholics and partly to Protestants: there are four other churches. The *Ortenburg*, formerly a royal palace, is now used for public offices; it has also a fine town-hall, a *landhäuser* or house of assembly for the states, an orphan asylum, and four other hospitals, a house of correction, theatre, &c., with a gymnasium, a catholic chapter-house, a normal school, a mechanics' school, and other establishments for the purpose of education, and two public libraries. There are considerable manufactures of woollen, linen, and cotton stuffs, tobacco, wax, paper, &c.; a brass work, with breweries and distilleries, tanneries, &c. The town is the centre of a considerable commerce, particularly in woollen and linen articles.

Near Bautzen, on the 21st and 22d May, 1813, was fought the battle which bears its name, between the French army under Napoleon, and the army of the allies. The French were victorious; the carnage on both sides was great, and the allies effected their retreat in good order. Duroc, the intimate friend of Napoleon, was killed by his side in this engagement. About 7 m. E. by S. from Bautzen, is Hochkirch, the scene of one of the great battles of the seven-years' war.

BAUX, a small town of France, dép. Bouches du

Rhone, 10 m. N.E. Arles. It stands on the summit of a steep hill, and is remarkable only for the ruins of its castle, formerly the residence of the counts of Baux, who contested the sovereignty of Provence with the counts of Barcelona.

BAWTRY, an inl. town of England, W. R. co. York, on the border of Nottinghamshire, 9 m. S.E. Doncaster. Pop. 1,149. It is situated on a declivity, sloping to the Idle, which is navigable for barges, and is traversed by the great N. road from London to York. It has a national school. Market day, Thursday.

BAYAZID, a city of Armenia, cap. sanjiack, 65 m. N.N.E. Van, and 32 m. S.S.W. Mount Ararat.; lat. 39° 24′ N., long. 44° 26′ E. It stands on the declivity of a high hill, at the top of which is the citadel, containing a well-built mosque, and the palace of the pacha. It is surrounded by a wall and ramparts; and besides 3 mosques and 2 churches, has the monastery of Karu Kileesea, celebrated for the beauty of its architecture, antiquity, and grandeur. Messrs. Smith and Dwight, the American missionaries, by whom it was visited in 1832, represent the town as being in a miserably ruinous state, and without one decent house except the pacha's. "Most of them were constructed like the underground cabins of the villages; the streets were obstructed by every species of filth; and nearly all the shops in the bazar, originally very few, were deserted." (p. 415.) Kinneir estimates the pop. at 30,000 (*Mem. Pers. Empire*, p. 327.), but this, doubtless, is now greatly beyond the mark. The missionaries previously referred to estimate the Moslem inhab. at 300 or 400 families, and the Armenians at 190 families; and if so, the pop. must be considerably under 5,000. Large numbers of the Armenians have emigrated to the territories now occupied by Russia.

BAYERSDORF, a town of Bavaria, circ. Rezat, near the Regnitz, 14 m. N. Nuremberg. Pop. 1,200. It is well built. In its vicinity are considerable copper-works.

BAYEUX, a town of France, dép. Calvados, cap. arrond., 17 m. W. by N. Caen; lat. 49° 17′ N., long. 0° 44′ W. Pop. 9,676. This is a very ancient city, and, with the exception of the principal street, is meanly built, with narrow and crooked streets. The fortifications by which it was formerly surrounded have almost entirely disappeared; and it has been enlarged by the junction of several suburbs. Principal public building — the cathedral, a large and venerable Gothic edifice in the form of a cross. In the ancient episcopal palace, now the Hôtel de Ville, is preserved the famous *tapisserie de Bayeux*, representing the principal incidents in the history of the conquest of England by William the Conqueror. It is supposed to have been executed by Matilda, the Conqueror's wife, or by the empress Matilda, daughter of Henry I. It consists of a linen web 214 ft. in length and 20 in. broad; and is divided into 72 compartments, each having an inscription indicating its subject. The figures are all executed by the needle; and it is valuable alike as a work of art of the period referred to, and as correctly representing the costume of the time. This remarkable monument narrowly escaped destruction during the frenzy of the Revolution. (See an excellent article on the Bayeux Tapestry in the *Penny Cyclopædia*.) Bayeux is the seat of a bishopric, and has tribunals of original jurisdiction and commerce, a college, and a public library containing 7,000 volumes. The lace manufactures in the town and neighbourhood employ a large number of females; and there are also manufactures of table linen, calicoes, serges, hats, earthenware, &c., with establishments for cotton spinning. The country round is undulating, and affords good pasture: large quantities of excellent butter are made in the vicinity, sent partly to Paris, and partly shipped for the French colonies.

Bayeux existed previously to the invasion of Gaul by the Romans. Under their sway it was successively called *Arægenus*, *Bajoca*, and *Civitas Bajocassium*, whence its modern name. It belonged for a considerable period to the English, and was twice burned down in the contests of the latter with the French; it also suffered severely during the religious wars. (*Hugo, France Pittoresque*, art. *Calvados*; *Diction. Géographique*, &c.)

BAYLEN, a town of Spain, prov. Jaen, at the foot of the Sierra Morena, 22 m. N. Jaen. Pop. 4,000. It is surrounded by old walls; commands the road leading from Castile into Andalusia; has a parish church, a palace belonging to Count Baylen, and an hospital. It has also numerous oil mills, with manufactures of coarse cloth, glass, bricks, soap, &c.

Baylen derives its principal celebrity from the events which took place in its vicinity, and which led to the *capitulation of Baylen*, signed the 20th June, 1808, by which General Dupont, and about 16,000 French troops under his command, surrendered to the Spaniards on condition of their being conveyed to France by the Spanish gov.; but the latter part of the capitulation was not carried into effect. The incapacity of Dupont was mainly instrumental in bringing about this result, which inspired the Spaniards with confidence, and was always regarded by Napoleon as the principal source of his disasters in the Peninsula.

BAYONNE, a sea-port town of France, dép. Basses Pyrénées, cap. arrond., at the confluence of the Neve with the Adour, about 4 m. from the embouchure of the latter; lat. 43° 29′ 15″ N., long. 1° 28′ 26″ W. It is divided into three nearly equal parts, which communicate by bridges. On the left bank of the Neve is the great Bayonne; on the right bank of that river, and the left bank of the Adour, is the little Bayonne; and on the right bank of the Adour, in the dép. Landes, is the suburb of St. Esprit, joined by a long wooden drawbridge to the rest of the town. The pop. of the two former is 15,912, and of the latter 5,997, making in all, 21,909. It is strongly fortified; the citadel, one of the finest works of Vauban, in the suburb of St. Esprit, commands the town and harbour; and recently the fortifications have been still further augmented and strengthened. It is well built; the streets, without being regular, are broad, and set off with good houses. There are some fine public places, of which that called de Grammont is the best. Its quays are superb, and though a little interrupted in parts by the new fortifications, afford the finest promenade in France. Principal public buildings — cathedral and mint. Bayonne is the seat of a bishopric, of tribunals of original jurisdiction and of commerce; it has also a chamber of commerce, a diocesan seminary, schools of navigation and design, a public library, theatre, &c. A mint is established here, the coins issued from which are marked L. This mint had coined, from the introduction of the decimal system to the 1st of January, 1832, 90,576,291 fr.: attached to the mint is an assay office. About two thirds of the population of the suburb of St. Esprit consist of Jews, most of whose ancestors had been, at different times, expelled from Spain. They have three synagogues, and there is one in the body of the town. There are here yards for the building of ships of war and merchantmen, with distilleries, sugar refineries, glass works, and fabrics of cream of tartar, chocolate, liqueurs, &c. Exclusive of these articles, the Adour brings down supplies of timber, masts, pitch and tar, cork, and other articles, from the Pyrenees, many of which are largely exported. The hams of Bayonne have long enjoyed a high celebrity, and its wines and brandies are also much esteemed. It used formerly to fit out a considerable number of ships for the cod and whale fisheries, but these sorts of enterprises, though not abandoned, has latterly fallen off. It is the seat of an extensive contraband trade with Spain.

The river is rather dangerous, at least in rough weather, or when there is a strong current of fresh water. It can only be entered at high water, when there is from 13 to 15 feet over the bar at springs, and from 9 to 11 at neaps. The sea without is usually rough; and as the bar is liable to shift, a pilot is always required.

The military weapon called the bayonet takes its name from this city, where it is said to have been first invented, and brought into use during the siege of 1523. Though often besieged, Bayonne has never been taken; and hence the motto, *nunquam polluta*. It was invested by the British in 1814; who sustained considerable loss from a *sortie* made by the garrison. At the castle of Merac, in the vicinity, the transactions took place between Napoleon and Charles IV. and Ferdinand VII. of Spain, that led to the invasion of the Peninsula by the latter. Mr. Inglis was highly pleased with Bayonne, which, he says, he should prefer as a residence to almost any place in the south of France. (*Hugo*, arts. *Basses Pyrénées* and *Landes*; *Dict. Géographique*, &c.)

BAYPOOR (*Vaypoora*), a maritime town of Hindostan, prov. Malabar, 7 m. S. Calicut; lat. 11° 10′ N., long. 75° 52′ E. Teak ships of 400 tons are built here.

BAYREUTH, a town of Bavaria, cap. circ. Upper Mayne, on the Red-Mayne, 26 m. E. Bamberg; lat. 49° 57′ N., long. 11° 40′ E. Pop. 16,500. It is partially surrounded by old walls, and has 6 gates and 2 bridges; is well built, with broad well-paved streets, fountains, and promenades; but it has notwithstanding a "cheerless deserted character" (*Murray*), the absence of the court, on which it formerly depended, not being sufficiently compensated by manufactures or commerce. It has two palaces; the oldest, burnt down in 1753, but again rebuilt, is now converted into public offices; the new palace, a handsome edifice, the residence of Duke Pius of Bavaria, has a gallery of indifferent pictures; in the square before it is an equestrian statue of the Margrave Christian Ernest, and behind it is a public garden. Among the other public buildings is the opera house, the *manège* or riding school, the gymnasium, founded in 1664, &c. It has several churches, and a synagogue; with a public library, hospitals, a lunatic asylum, &c. In its suburb, called the Georgam See, now a dried lake, is a penitentiary, where a great variety of marbles from the Fichtelgebirge are polished and wrought up. Besides being the seat of the administration, and tribunals for the circ., it has a Protestant consistory. The geological cabinet and collection of fossils

belonging to Count Munster, in Bayreuth, is one of the finest in Germany. There is here an extensive manufactory of porcelain, and tobacco-pipe heads; parchment, linen, cottons, &c. are also produced, and there are breweries and tanneries. About 2 m. to the E. is the Hermitage, a fanciful building erected in the early part of last century, at an immense cost, with gardens containing temples, terraces, statues, fountains, &c.; and a fine park, now much out of order. The Margravine, sister to Frederick the Great, wrote her memoirs in the Hermitage.

Bayreuth formerly constituted the cap. of an independent principality,—the margraviat of Bayreuth. On the death of the last margrave without issue, in 1791, his possessions devolved on the King of Prussia, who ceded them to France in 1807. In 1810, Napoleon transferred them to Bavaria; and their possession has been confirmed by subsequent treaties. (*Murray's Handbook; Reichard, Guide des Voyageurs, &c.*)

BAZA, a town of Spain, Granada, near the Guadalquiton, in an extensive, well watered, and fertile valley, 54 m. E. by N. Granada; lat. 37° 30′ N., long. 2° 50′ W. Pop. (including two cants. in its jurisdiction) 9,817. (*Miñano.*) It has a cathedral, 3 parish churches, 6 convents, an ecclesiastical seminary, an hospital, &c. The inhab. are entirely dependent on agriculture, and consequently experience, in bad years, *una estremada miseria.* Baza is either on the site of the *Basti* of the Romans, or very near it, and vases and other interesting Roman remains are dug up in its vicinity. It was taken from the Moors after a long siege, in 1489.

BAZAS, a town of France, dép. Gironde, cap. arrond., on a rock 33 m. S.S.E. Bordeaux. Pop. 4,446. It is old and ill-built. It was formerly the seat of a bishopric; and the ancient cathedral, now the parish church, though not large, is a remarkable monument of Gothic architecture. It has a court of original jurisdiction, and an agricultural society; with a royal saltpetre manufactory, a glass-work, tanneries, &c. Bazas is very ancient. It is the country of the poet Ausonius, who flourished in the 4th century, and was also, for a lengthened period, the residence of the dukes of Gascony. (*Hugo*, art. *Gironde*, &c.)

BAZOCHES-AU-PERCHE-GONET, a village of France, dép. Eure et Loire, 15 m. S.S.E. Nogent-le-Rotrou. Pop. 2,120. Bazoches is the name of several other small towns in France.

BAZZANO, a town of the Papal States, 15 m. W. Bologna, on the Sammoggia. Pop. 1,200.

BEACHY HEAD, a conspicuous bold promontory on the S. coast of England, co. Sussex; lat. 50° 44′ 24″ N., long. 0° 13′ E. It is formed of chalky white cliffs, that project perpendicularly over the beach, whence it derives its name, to the height of 564 ft. A lighthouse of the first class was erected, in 1828, on the summit of the second cliff to the W. of the Head, 285 ft. above the level of the sea, and caverns have been cut in the cliffs, between the Head and Cuckmore Haven, in the view of affording places of refuge to mariners wrecked on this dangerous coast.

BEACONSFIELD, a market town and par. of England, co. Buckingham, hund. Burnham: area of the par. 3,710 acres. Pop. 1,763. The town is situated on an eminence, on the high road from London to Oxford, being 24 m. W. by N. of the former. It consists of 4 streets, arranged in the form of a cross, and its houses are mostly constructed of a mixture of flint and brick. The remains of Edmund Burke are deposited in the church, formerly a part of the monastery of Burnham; and the church-yard has a marble monument in honour of the poet Waller, to whom the manor belonged. Bullstrode, formerly a celebrated seat of the Portland family, is within a short distance of Beaconsfield. Market-day, Wednesday. It has fairs for the sale of cattle, sheep, &c. on Feb. 13. and Holy Thursday, at which a good deal of business is done. (*Beauties of England and Wales.*)

BEAMINSTER, a par. and town of England, co. Dorset, hund. Beaminster-Forum, div. Bridport, on the Birt, 123 m. W.S.W. London. Area of par. 4,350 acres. Pop. of par., 1821, 2,806; 1831, 2,968: houses at latter date, 583. The town is surrounded by hills, whence the springs, forming the river, issue. It has a clean respectable appearance, and is paved, and lighted by gas. The church is a large structure, on an eminence on the N. side, being a chapel of ease to that of Netherbury. A free school, founded in 1684, educates 100 boys: the ann. amount of its endowment is 160*l*. a year. There are almshouses for 6 poor women. The weekly market on Thursday, and ann. fairs Apr. 14., Sep. 10., and Oct. 9. There is a manufactory of sail cloth, and tin and copper wares are made in the town. It is the centre of a union of 26 parishes: the average of its own rates, for the 3 years ending 1835, was 1,437*l*.: it has 3 guardians. Beaminster is a town of considerable antiquity; but it has been several times wholly or partly destroyed by fire; to which its modern appearance is attributable.

BEAR LAKE (GREAT), a very irregularly-shaped and extensive sheet of fresh water, in the N.W. part of N. America; between about 65° and 67° N. lat., and under the 120th deg. of W. long. The Bear Lake river flows from it to the Mackenzie river. Its waters are very pure, and it is said to be well supplied with fish.

BEAT (ST.), a town of France, dép. Haute Garonne, on the Garonne, 13 m. S. St. Gaudens. Pop. 1,403. It is built of marble furnished by the neighbouring quarries; but being situated in a narrow valley, between mountains which conceal the sun for a part of the day, it is *triste*. It is the *entrepôt* of the contiguous valley of Arran, in Spain.

BEAUCAIRE (an. *Ugernum*), a town of France, dép. Gard, cap. cant., on the right bank of the Rhone, opposite to Tarascon, 14 m. E. Nimes; lat. 43° 48′ 32″ N., long. 4° 38′ 50″ E. Pop. 9,601. As a town, Beaucaire is nothing remarkable, and has no public building worth notice; but its command of internal navigation afforded by the Rhone, and its communication with the sea by the canal of Beaucaire, which also unites it with the canal *du Midi*, make it favourably situated for an *entrepôt*. Its entire consequence and celebrity is derived from its fair, which commences on the 22d, and finishes on the 28th, July. This was formerly the greatest of European fairs, and though much fallen off, it is still attended by a vast concourse of people, not from France only, but also from Germany, Switzerland, Italy, Spain, and the Levant. Almost every sort of article, whether of convenience or luxury, is then to be met with in the town. It is said that the influx of visiters still amounts to nearly 100,000, and that the business done exceeds 150 millions of francs; but we suspect that both these estimates are materially exaggerated, and that they would be nearer the mark were they reduced a half. The accommodations in the town and at Tarascon not being nearly sufficient for the great and sudden influx of strangers to the fair, large numbers of them are lodged in tents and other temporary erections in the meadow where the fair is held, along the Rhone. All bills due at this fair are presented on the 27th, and protested on the 28th. A tribunal, instituted for the purpose, takes cognisance of and immediately settles, all disputes that grow out of transactions at the fair. Detachments from the garrisons of Nimes and Tarascon assist in keeping order, and every thing is conducted with the greatest regularity. The prefect of the dep. is always present, and entertains the leading merchants.

The communication between Beaucaire and Tarascon used to be kept up by a bridge of boats, but this has been replaced by a suspension bridge. This great work consists of 4 arches, each 130 mètres (426 ft. 6 in.) in span. This is the statement of Hugo; other authorities say that the bridge has only 3 arches, and that its total length is 441 mètres, and is alike substantial and handsome. There is at Beaucaire a public library, of 14,000 volumes. (See *Hugo*, art. *Gard; Encyc. des Gens du Monde*, art. *Beaucaire.*) The article on this fair in the *Dictionnaire du Commerce, &c.*, is as poor as can well be imagined.

BEAUFORT, a town of France, dép. Maine et Loire, near the Couesnon, 16 m. E. Angers. Pop. 6,000. It has a college, or high school, two workhouses, a large market-place, and manufactures of canvass and coarse linen.

BEAUFORT, a small sea-port town of the U. States, S. Carolina, on Port Royal Island, 75 m. S. Charleston, and 58 m. N. Savannah; lat. 32° 25′ N., long. 80° 32′ W. It has a deep and spacious, but little frequented, harbour. This also is the name of an inconsiderable sea-port town of N. Carolina, on Gore Sound. Its harbour admits vessels drawing 12 ft. water.

BEAUFORT, a town of the Sardinian states, Savoy, cap. mand. near the Doron, 30 m. E.N.E. Chamberry. Pop. 3,000.

BEAUGENCY, a town of France, dép. Loiret, cap. cant., on the right bank of the Loire, 16 m. S.W. Orleans. Pop. 4,849. This is a very ancient town, and occupies a conspicuous place in the history of the foreign, civil, and religious wars of France. It fell successively into the hands of the Huns, Saxons, Normans, and English; but it suffered most from the religious wars of the 16th century. It was surrounded by walls, flanked with towers and bastions, part of which are still standing, the rest having been pulled down, and converted into promenades; it was also defended by a castle, of which nothing now remains but a massive tower, 115 ft. high. It has a bridge over the Loire of 39 arches; with fabrics of cloth, distilleries, and tanneries, and a considerable trade in wine, corn, and wool. (*Hugo*, art. *Loiret.*)

BEAUJEU, a town of France, dép. Rhone, cap. cant., on the Ardière, 30 m. N.N.W. Lyons. Pop. 2,312. It is situated at the foot of a hill, on the top of which are the ruins of an old castle. It has manufactures of casks and lanterns, and is the entrepôt of all the products exchanged between the Saone and the Loiret.

BEAULIEU, a town of France, dép. Correze, cap. cant., on the Dordogne, 22 m. S. Tulle. Pop. 2,547. It

has some trade in wine. Bealieu is the name of at least 24 other small towns in France.

BEAULY, a sea-port and village of Scotland, co. Inverness, on the N. side of the Beauly Water, where it falls into the bottom of the Beauly Frith, 9 m. W. Inverness. It is small, but finely situated. The Beauly is here crossed by a bridge of 5 arches, and the village has some trade.

BEAUMARIS, a bor. and sea-port town of N. Wales, co. Anglesea, hund. Dendaethwy, near the N. entrance to the Menai Strait, in Beaumaris Bay, 4 m. N.N.E. the Menai bridge; lat. 53° 17′ N., long. 4° 5′ W. Pop. (1821) 2,205; (1831) 2,497: houses at the latter date, 427. It is finely situated near the edge of the bay, in a low level tract, which, however, commands some of the finest views in Wales. It is neatly built. The castle, erected by Edward I., though in a dilapidated state, is a fine ruin: it is surrounded by a fosse, flanked by 12 circular bastions. The building is nearly quadrangular, with a round tower at each angle. The par. church is at Llandefan, but there is a chapel of ease in the town, in which service is performed in English and Welsh. There are 4 chapels, belonging to Calvinists, Independents, Baptists, and Wesleyans, all well attended; a free grammar-school, well endowed, the head master of which must be of the Established Church and M.A.; a national school, for 240 boys and girls, in the town, and another in Llandagvan (endowed by the Duchess of Kent), for 60 scholars: each of the religious sects have also large Sunday schools; and in all the English language is now taught. The town-hall is a commodious modern structure, with rooms for the bor. business, courts of justice, and a spacious ball-room. There are also a co. hall, a co. prison, and a custom-house. The weekly markets are held on Sat. and Wed.: annual fairs on Feb. 13., Holy Thurs., Sept. 19., Dec. 19., all for cattle. No particular manufacture or trade is carried on in the town. There is good anchorage in the bay, opposite the town, in 7 fathoms stiff clay; or vessels (as is often done) may be grounded near it on soft mud. The W. passage may be entered at any time of tide. Vessels often resort thither for security in hard gales; and occasionally some are repaired on the beach. Beaumaris is the chief port of the island and of the Menai Strait, and comprises in its jurisdiction those of Conway, Amlwch, Holyhead, Pwlhely, Barmouth, and Caernarvon. What trade the town itself possesses is chiefly coastwise. There is a regular steam-packet communication between Beaumaris, Liverpool, Caernarvon, and Dublin. There belonged to the port, in 1836, 401 ships, of 22,856 tons burden. The pier, quays, and warehouses, are protected by extensive sea walls. The place derives considerable advantage from visiters from Liverpool and elsewhere, who resort to it for sea-bathing, in which respect it can scarcely be surpassed. There are many bathing machines, and the fine firm sands of the beach form a delightful promenade, from whence, as well as from the green, a magnificent prospect presents itself. Baron Hill, the seat of the Bulkeley family, is on an eminence near the town, and its fine grounds slope towards it: there are several other good mansions in the neighbourhood. The hotels and inns in the town are excellent. There is a fine road from the town to the Menai Bridge (4½ m.), which also commands splendid views.

Since the Municipal Reform Act, the limits of the bor. have been restricted so as to comprise only the town and its immediate neighbourhood. The ancient bounds included its own parish, and parts of 6 others, for an extent of upwards of 10 m.: it has now 4 aldermen and 12 councillors. Its governing charter, previously, was granted in the 4th of Eliz.; this quotes, by *inspeximus*, 10 others, the earliest being in 24 Edw. I. The government was vested in a self-elective body, consisting of a mayor, 2 bailiffs, and 21 burgesses, who had the privilege of returning 1 mem. to the H. of C. The Reform Act divested them of this privilege, and made Beaumaris the principal of 5 contributory bors., which jointly return 1 mem. to the H. of C. There are 340 houses of 10*l*. and upwards; and it had, in 1838, 336 registered electors. The poor-rates of the bor., in 1836, amounted to 1,467*l*. 1*s*. The corporation revenues are derived from rents of lands, tenements, &c., oyster-beds, and harbour dues: they average about 556*l*. The town derives its origin from Edw. I., who, after founding the castles of Caernarvon and Conway, built that of Beaumaris, in 1295.

BEAUMONT-DE-LOMAGNE, a town of France, dép. Tarn et Garonne, cap. cant., on the Gimone, 21 m. S.W. Montauban. Pop. 4,211. This little town is alike remarkable by the regularity of its plan, the neatness of its houses, and the beauty and fertility of its territory. It is built round a spacious square, and its streets, which are broad and straight, intersect each other at right angles. It has fabrics of coarse cloth, hats, and tanneries. (*Hugo*, art. *Tarn et Garonne*.)

BEAUMONT-LE-VICOMTE, a town of France, dép. Sarthe, cap. cant., on the Sarthe, 17 m. N. Mans. Pop. 2,378. It has manufactures of druggets and other descriptions of woollen cloth; and has a considerable trade in corn and fat geese. There is a fine promenade on an adjoining hill. Beaumont, either singly or with some addition, is the name of a vast number, at least 45, small towns in France. The most considerable is BEAUMONT SUR OISE, dép. Seine et Oise, 21 m. N. Paris. Pop. 1,874. It stands on a hill, and has glass-works, and a manufactory of saltpetre.

BEAUNE, a town of France, dép. Côte d'Or, cap. arrond., in an agreeable country, at the foot of a hill which produces excellent wine, on the small river Bouzeoise, 20 m. S.S.W. Dijon. Pop. (town ex cant.) 9,958. It is well built; streets broad, straight, and watered by the fountain *de l'Aigue*. The church of Notre Dame is handsome; but the finest building in the town is the magnificent hospital, founded in 1444, and endowed by Nicholas Rollin, chancellor to Philip Duke of Burgundy. Beaune is the seat of tribunals of commerce and primary jurisdiction; has a communal college, and a public library with above 10,000 volumes. Its ramparts, which are planted, afford fine promenades; and it has an extensive public garden, public baths, a theatre, &c. It produces cloth, cutlery, leather, vinegar, casks, &c.; and has dye-works and large nurseries of fruit trees. But the principal celebrity of Beaune is derived from its being the centre of the trade in the wine that bears its name; that is, in the best of the second growths of Burgundy. M. Jullien says, that "*les vins de la côte de Beaune ont la réputation, bien acquise, d'être les plus francs de gout de toute la Bourgogne.*"

BEAUNE-LA-ROLANDE, a town of France, dép. Loiret, cap. cant., 16 m. W. by N. Montargis. Pop. 2,128.

BEAUPREAU, a town of France, dép. Maine et Loire, cap. arrond., on the Evre, 28 m. S.W. Angers. Pop. 3,288. It has a court of original jurisdiction, with dye-works and tanneries. In 1793 the Vendeans obtained, in the vicinity of this town, a complete victory over the republicans under General Ligonnier.

BEAUSSET, a town of France, dép. Var, cap. cant., 9 m. N.W. Toulon. Pop. 3,050. It has fabrics of hats and tiles, with tanneries, a glass-work, and a considerable trade in oil, wine, spirits, soap, and coarse cloth and linen.

BEAUVAIS, a town of France, cap. dép. Oise, on the Thérain, where it is joined by the Avélon, in a valley surrounded by wooded hills, 42 m. N. by W. Paris; lat. 49° 26′ 7″ N., long. 2° 5′ E. Pop. 13,082. This is a very ancient city, and has undergone many vicissitudes. So late as 1803 it was surrounded by ramparts and fossés, but these have been since partly levelled, and converted into agreeable promenades. It is ill built, the houses consisting, for the most part, of wood, clay, and mortar: the streets are not narrow, nor dirty, but they are badly planned. Had the cathedral been finished on its original plan, it would have been the finest Gothic edifice in France, but the choir only is complete. It contains a fine monument of Cardinal de Janson, bishop of Beauvais. The church of St. Stephen, erected in 997, is celebrated for its fine painted glass windows. The episcopal palace, now the hôtel de préfet, is very large and ancient, and has the appearance of a Gothic castle. Previously to the Revolution there were in Beauvais, besides the cathedral, 6 collegiate churches, 12 parish ditto, with 6 convents for men and 2 for women! Now, however, the convents have ceased to exist; and all the churches, save two, and two chapels of ease, have either been pulled down or applied to other purposes. The other public buildings are the college, theatre, hôtel de Dieu, with 40 beds, poor-house, royal manufactory of tapestry, &c. It is the seat of a bishopric, of courts of *première instance*, and, besides the college has a diocesan seminary, with 145 pupils, gratuitous courses of geometry and mechanics applied to the arts, and a public library with 7,500 volumes. Beauvais has considerable advantages, in the command of water-power, and in the cheapness of turf fuel for the prosecution of manufactures; but though those carried on in the town be considerable, they are not flourishing. The principal is that of a sort of flannel (*molleton*); at present, however, it is said to be in a retrograde condition, owing to the want of capital and enterprise in those engaged in it. A good deal of cloth is made of a medium quality. There is also a royal manufactory of tapestry, established in 1664; but these establishments are of little or no use, except as works of art, their products being too dear to come into general demand. The fabrics of printed cottons are much fallen off; but the art of dyeing is still successfully practised, and there are extensive bleach-fields, with flour-mills, tanneries, &c. The trade of Beauvais is extensive. Large quantities of corn, and of linen, called *demi Hollande*, manufactured in its vicinity, are disposed of in its markets.

Beauvais existed under the Romans, and has since been held by the Normans and the English, from the latter of whom it was wrested in the 15th century. In 1477 it was besieged by Charles le Téméraire, duke of

Burgundy, and though without a garrison, the citizens, led on by the famous heroine, Jeanne Hachette, repelled the enemy. An annual festival is still celebrated in honour of this event, when the ladies take the part of the gentlemen. (*Hugo*, art. *Oise; Dictionnaire du Commerce*, art. *Beauvais*.)

BEAUVOIR, a town of France, dép. Vendée, cap. cant. opposite to the island of Noirmutier, about 3 m. from the sea, with which it is united by a canal. Pop. 2,357. Vessels of from 60 to 80 tons come up to the town, to load with corn and salt, produced in the salt marshes in the vicinity. This town was formerly fortified, and had a castle: it was besieged by Henry IV. in 1588, who having fallen into an ambuscade, was involved in the greatest danger.

BECCLES, a bor., par., and town of England, N. E. border, co. Suffolk, on the Waveney, 95 m. N. E. London, 13 m. S. E. Yarmouth. Area of par., 1,740 acres; pop. of par., in 1821, 3,493; 1841, 4,086. The town is well built on the S. side of the river, and consists of several streets, diverging from a central area where the market is held. The church, with a modern detached steeple, is an ancient structure on the edge of a cliff, overlooking the level pastures through which the Waveney flows. There are two dissenting chapels; a free school, founded under James I., for 100 boys; a grammar school, endowed in 1713, which has 10 exhib. to Emanuel Coll., Cambr.; a national school; a good town-hall, theatre, and assembly-rooms. The weekly-market is on Saturday. Annual fairs are held on Whit-Monday, June 29., and Oct. 2.; the last being a horse fair. There are no manufactures, but malting is carried on to a considerable extent. The town has been rendered accessible to vessels of 100 tons burden, partly by deepening the river Waveney, and partly by the aid of the Norwich and Lowestoft navigation. It has, in consequence, some coasting trade, in the importation of coals, timber, &c., and in the exportation of corn and other produce. The shipping belonging to the town is inconsiderable, and is included in that of Yarmouth, of which it is reckoned an out-port. Beccles is included in the Wansford Poor Law Union, its rates in 1847 amounted to 2,030*l*. assessed upon property of the annual value of 9,827*l*.

Since the Municipal Reform Act the limits of the bor. have been contracted so as to include only the part on which the town stands, an area of 350 acres. It was previously co-extensive with the parish, and was first incorporated in 34 Hen. VIII., when Beccles Fen, consisting of 1,400 acres of pasture, was granted. The governing charter was granted in 2 James I. The privilege of depasturing stock on the fen extends to every householder; and, of the original grant, 940 acres remain unalienated. The corporation also possess an estate, called the Hospital Hill, and a lease of the tolls of markets and fairs, &c.; making the average amount of their annual revenue upwards of 1,800*l*. Their business is transacted in the town-hall, where quarterly sessions for the neighbourhood are also held by the co. magistrates. (*Parl. Papers and Reports; Beauties of Eng. and Wales*, ii. 14.)

BEDALE, a market town and par. of England, N. R. co. York, on an affluent of the Swale, 34 m. N. N. W. York. Area of par. 7,070 acres. Pop. of ditto, 2,803; of town, 1,266. The town is well built, and the church is a large and handsome edifice, constructed in the reign of Edward III. The living, which is a rectory, is one of the best in the county, having been worth, at an average of the 3 years ending with 1831, 2,000*l*. a year. It has a grammar-school, and some charities. The country round is very fertile, and it has a well-supplied market.

BEDARRIEUX, a town of France, dép. Herault, cap. cant., on the Orb, 20 m. N. Beziers. Pop. (town ex cant.), 5,760. It is neat, and well built, and is one of the most industrious towns of its size in France. It has manufactures of fine and coarse cloth, of stuffs, of silk and wool, woollen and cotton stockings, hats, oil, paper, and soap, with dye-works and tanneries. (*Dictionnaire du Commerce*.)

BEDFORD, an inland co. of England, having N. and N.W., Huntingdon and Northampton shires; E., Huntingdon and Cambridge; S., Hertford; and W., Buckingham and Northampton. Area, 296,320 acres, of which about 250,000 are supposed to be arable, meadow and pasture. Surface diversified with low hills, valleys, and extensive level tracts. On the S., the Chiltern hills rise to a considerable elevation. Principal rivers, Ouse and Ivell. It has every variety of soil, from the stiffest clay to the lightest sand. In the vale of Bedford, the soil is clayey; the sandy soil is well suited for the turnip husbandry, and garden culture; and, on the whole, the co. may be said to be of about an average degree of fertility. It is chiefly under tillage, which is in a medium state of improvement—not so far advanced as in some counties, nor so backward as in others. Wheat and beans are the principal produce of the clays, and turnips and barley of the sandy soils. Large quantities of vegetables are raised in various places, for the supply of the markets of London and Cambridge. Cattle of a mixed breed. Stock of sheep estimated at about 200,000. There are some large estates; but property is notwithstanding a good deal subdivided. Average size of farms, 150 acres; average rent of land, in 1842-43, 25*s*. 5*d*. an acre. Fullers' earth is dug up in considerable quantities in the vicinity of Woburn. Excellent straw platt for ladies' hats is made at Dunstable: the manufacture of pillow lace, once widely diffused through the county, has much declined, and there is no other manufacture of any importance. Principal towns, Bedford, Biggleswade, Leighton-Buzzard, and Luton. Bedfordshire contains 9 hundreds, and 123 parishes; and had, in 1841, 21,235 inhab. houses, and 107,936 inhabs. It returns 4 members to the H. of C.; viz. 2 for the co., and 2 for the bor. of Bedford. Sum expended for the relief of the poor in 1846-47, 44,447*l*. Annual value of real property in 1815, 364,277*l*.; do. in 1842-43, 517,474*l*.

BEDFORD, a bor. and town of England, cap. co. Bedford, on the Ouse, 45 m. N. N. W. London. Pop., 1821, 5,466; 1841, 9,178: houses at the latter date, 1,880. It is situated in a pleasant vale, on both sides the river, which is spanned by a handsome five-arched stone bridge, built in 1810. It consists chiefly of a wide street, between 1 and 2 m. long, intersected by several smaller streets at right angles. The houses on the S. side of the river are handsome modern structures; the rest, an intermixture of ancient and modern, but mostly well built and neat; the whole is paved, lighted by gas, and amply supplied with water. There are 4 churches: St. Peter's, the most ancient, has a Norman porch and a fine tower; St. John's, St. Mary's, and St. Paul's, are all in the Gothic style, with good towers. The Baptists, Independents, Wesleyans, Jews, and Moravians, have each places of worship; the last have also a female establishment. There is a flourishing grammar-school, founded in 1556, which educates between 70 and 80 of the town boys free; and about the same number who board with the head master, and pay: it has 8 exhib., of 80*l*. a year each, to Oxford, Cambridge, and Dublin: another free school, founded in 1727, for 10 boys and 10 girls; and a blue-coat school, founded in 1760, for clothing and educating 25 boys: this last is now united with the national school, but the endowment is kept distinct. The charities, compared with the size of the town, exceed, in amount, those of any other in the kingdom. The principal charity consists of property in Bedford and London, left by Sir Wm. Harpur, who was born in the former, and became lord mayor of the latter. The rental of this property has increased, so that its annual amount in 1833 was 13,500*l*. The trustees are—the lord-lieut.; the members for the co. and the bor.; the first and second masters of the grammar-school; 18 persons chosen by the inhabitants of Bedford; and the corporation; the last being, in fact virtually its managers. The revenue is distributed amongst the free grammar, English, national, and commercial schools; 58 almshouses; and in marriage portions, apprentice fees, premiums, and donations amongst the poor. Besides this, the principal charity, there is the hospital of St. John, founded in the reign of Edward II., for a master and 10 poor brethren; and 8 almshouses, endowed in 1679, for decayed single folks of either sex. There is a sessions-house, a theatre, and a public library; reading, lecture, billiard, and assembly-rooms, all in one handsome structure, recently built. There is also a new building in the Tudor style, erected by the trustees of the Bedford charity, with rooms for the English and national schools, a committee room, &c. The co. gaol and house of correction are at the N. entrance to the town. The co. lunatic asylum, and the co. infirmary, are also near the town, on the Ampthill road: the infirmary, a large fine building, was erected in 1833, chiefly from funds bequeathed by the late Samuel Whitbread, Esq.; but the Marquis of Tavistock subscribed 2,000*l*. towards its completion. The penitentiary (a large estab.) on the Kettering road. The chief market is held on Saturday: the weekly sale of wheat averages about 600 quarters. There is a smaller market on Monday, chiefly for pigs. Annual fairs are held first Tuesday in Lent, April 21., July 5., Aug. 21., Oct. 12., Nov. 17., and Dec. 19. That in Oct. is called the statute fair, and is the most important: the others are cattle fairs. The Ouse is navigable from hence to Lynn Regis, and a considerable traffic is carried on between the two towns, chiefly in malt, coals, timber, and iron. Lace-making formerly employed a great many of the women and children, and now straw-platting. There are no other manufactures. Here are two private banking companies, and a savings' bank which, in Nov. 1848, had 77,248*l*. of deposits. It supports a weekly newspaper. The bor. is co-extensive with the 5 parishes of Sts. Peter, Paul, Cuthbert, Mary, and John; the area of the whole is 2,164 acres, the town being in the midst, with a fertile belt of land all round. It is divided into 2 wards, and governed by a mayor, 3 aldermen, and 18 councillors. The annual revenue of the corporation, derived from lands and houses in the bor., amounts to about 1,200*l*. a year. There are local courts of petty and quarter sessions, and of pleas. The co. sessions and

assizes are also held in the town. A county court is established in the bor., before which 641 plaints were entered in 1848.

Under the Poor Law Amendment Act Bedford is the union town for 44 parishes. The amount of its own poor-rates for the year ending Lady-day 1847 was 1,292*l*., assessed upon property of the estimated annual value of 37,232*l*. It is represented in the union by 6 guardians. The bor. has returned 2 members to the H. of C. since the 23 Edw. I. Previously to the Reform Act they were elected by the burgesses and freemen, both bodies consisting of an indefinite number. In the contest of 1830 (gained by 1 vote), 160 polled, of whom 61 only were resident. Registered voters for 1847, 1,071, of whom 583 were 10*l*. householders, 65 freemen, 423 potwallers, &c. It is also the principal polling town of the co. A strong castle was built here soon after the Conquest, which, in subsequent reigns, endured many sieges: part of its entrenchments may still be traced. The famous John Bunyan, was imprisoned in Bedford gaol from 1660 till 1672; and in it he wrote the first portion of the *Pilgrim's Progress*. He subsequently continued, for the most part, to reside in the town till his demise in 1688. The Russell family derive their title of duke from the town.

BEDFORD LEVEL, **a distr. on the E. coast of England, comprising the greater portion of a flat marshy tract, called the Fens, which extends into six counties, and is bounded on the N. E. by that great inlet of the German Ocean, known as the Wash; and in all other directions by ranges of hills that enclose it in the form of an ellipse. It includes about 450,000 acres of this fen country, and extends N. and S., from Tydd St. Giles to Milton, 33 m.; and from Peterborough to Brandon, in an E. and W.** direction, 40 m. Its boundaries are irregular; but, commencing from Peterborough northerly, the line extends by Peakirk, Crowland, Whaplode Drove, Parson Drove, Guyhirn, Salter's Lode, and Methwold, to Brandon; and thence, on the S. side, by Mildenhall, Milton, Earith, Ramsay, Wood Walton, and Yaxley, to Peterborough. This comprises the whole Isle of Ely (the N. div. of Cambridgeshire), and a few parishes in the S. div. of that county; 30,000 ac. of Suffolk; 63,000 of Norfolk; 57,000 of Huntingdon; between 7,000 and 8,000 of Northamptonshire; and the S.E. portion of Lincolnshire. The whole tract appears to have been gradually formed, by sedimentary depositions, in an inlet of the ocean, brought thither by the tidal currents, from the *débris* of the coast, and by torrents from the surrounding uplands. Eight principal rivers, or drains originally traversed the level, three of which had their outfalls in the sea: the Welland, in Foss Dyke Wash; the Nene, in the Sutton Wash Way; and the Ouse, at Lynn Regis: of the rest, the Glen joined the Welland, near its outfall; the Wisbeach was a branch of the Nene; the Cam, the Larke, and the Little Ouse, fell into the Great Ouse on its E. side. The Romans appear to have been the first who formed sea embankments, and shut out the tide: subsequently to which, for a prolonged period, it was a very fertile and populous tract. The outfalls of the streams, and the depths of their channels, remained adequate to carry off the superfluous water, and effect a proper drainage, although it is a well-ascertained fact that the average level of the surface was several feet lower than at present (at Spalding and Wisbeach not less than 10 ft., and at Peterborough 5 ft.). This is easily accounted for, from the subsequent changes being of a nature favourable to the formation of peat, and the deposition of matter continuing more and more to silt up the outfalls, and channels, and coast line. The roots of large trees, grass lying in swathes, as when first mowed, boats, shoes of a pattern worn in Rich. II.'s reign, &c., have been discovered in various places at the depth of several feet under silt or peat. At the setting down of Skirbeck sluice, near Boston, a blacksmith's shop was found under 16 ft. of silt. These changes, therefore, were occasioned by the continued operation of the same causes to which the formation of the district is originally attributable; and which are still in ceaseless action on the coast. By shutting out the tide also, its scouring action would be greatly limited; and, consequently, the channels and outfalls of the streams would silt up and contract more rapidly, unless prevented by some artificial means. This process, however, would be gradual; and, down to the time of Stephen, we find the district round Thorney described by Henry of Huntingdon as most beautiful and fertile; whilst, at the period when Francis, Earl of Bedford, and his coadjutors, undertook the drainage of the great level that is named from him, this tract, comprising 18,000 acres, was an inundated morass, with the exception of a small hillock on which the abbey stood. As early, however, as the reign of Edward I., the silting up of the rivers, and the want of adequate drainage, had become an evil of great magnitude; and as a large proportion of the fens then belonged to rich religious establishments, they made many vigorous efforts to obviate the increasing evil. But it was not till the æra of Elizabeth that the drainage of the fens was viewed in its true light, that of an important national concern; and an act was passed for effecting it in the 44th of her reign. In consequence of the queen's death, nothing was attempted till 1634, when a charter was granted by Chas. I. to Francis, Earl of Bedford (who had succeeded to the property of Thorney Abbey), and 13 other adventurers, who undertook to drain the level, on condition of being allowed 95,000 acres of the reclaimed land: this was partially accomplished within three years, at the cost of 100,000*l*. The principal cuts then made were, the Old Bedford River, 6 m. long, 20 ft. wide; Sam's Cut, of the same length and size; Bevil's Loam, 10 m. long, and 40 ft. wide; and Peakirk Drain, of the same length, and 17 ft. wide. The old drains were also repaired and enlarged, and four sluices formed to keep out the tide: two at Tidd, one at Wisbeach, and one at Salter's Lode. After all these works had been accomplished, at so great a cost, by the corporation, the contract was set aside, at the instigation of government, under the plea of the drains being inadequate. An offer was then made by the king to undertake the drainage of the fens, on being allowed 152,000 acres, which was 57,000 more than were to have been allotted to the corporation for effecting it. This disgraceful attempt to swindle the latter out of the advantages likely to result from their outlay and exertions, was, however, defeated by the national disturbances that shortly after broke out. But the neglect consequent on the distracted state of the country rendered what had been effected in a great measure useless, so that the district remained a waste, till 1649, when William, Earl of Bedford, had all his father's rights restored by the Convention parliament: another effort was then made, under his direction; and at the cost of 300,000*l*., the original adventurers were enabled to claim their 95,000 acres. The principal cut last made was that of the New Bedford river, 100 ft. wide, a short distance from, and running nearly parallel with, the old one. In 1668 a corporation was established by an act (15 C. 2. c. 17.), to provide for the maintenance and repair of the works, and to levy assessments on the proprietors for the sums necessary to defray the expenses. The corporation consists of a governor, 6 bailiffs, 20 conservators, and a commonalty, consisting of all who possess 100 acres within the level. The conservators are required to have 200, the bailiffs and governor, 400 each; the officers are elected annually. Several subsequent acts have been passed to explain, alter, and amend the original one; but its main outlines have been preserved, and continue to form the basis of the government of the Fen. In 1697 the level was divided into three parts, — the N., Middle, and S. levels: the first comprises the lands between the Welland and the Nene; the second, those between the Nene and Old Bedford rivers; the third extends from Old Bedford river to the southern limits.

In 1795 an act passed for improving the outfall of the Ouse, and for making a cut from Eaubrink to Lynn: this was not effected till 1820, and has proved highly beneficial. To enumerate the various cuts and drains that have been made at various times would be tedious and useless. The water, in the rivers and great artificial cuts, is mostly above the level of the lands they pass through, and is confined by embankments: the water, therefore, collected in the smaller land-drains and ditches, has to be lifted into these main channels by pumps, which are mostly worked by windmills, but in a few instances by steam-engines. The most recent, and by far the most efficient, improvement that has been made in the drainage and navigation of the Fens, has been accomplished under acts passed in 1827 and 1829, "for improving the outfall of the Nene; for draining the lands which discharge their waters into the Wisbeach river; and for improving the navigation of that river, from Kindersley cut to the sea; and embanking the salt marshes." A new tidal channel was cut for the discharge of the Nene: this begins about 6 m. below Wisbeach, and extends to Crabhole (6¼ m.); thence the river has shaped for itself a natural channel (1¼ m. in length) to the Wash. The surface width of the new cut varies from 200 to 300 ft.; its depth, from the surface of the adjacent land to the bed of the stream, is 24 ft. throughout: the spring tides rise about 22 ft. at the end nearest the sea, and 18 ft. where it joins Kindersley cut. A bridge has been thrown over this channel at Sutton Wash, 8 m. below Wisbeach, and an embankment made across the sands, forming a new and safe line of road between Norfolk and Lincolnshire. Between 7,000 and 8,000 acres of marsh will ultimately have been reclaimed from the sea, and brought to a cultivated state by these operations. An uninterrupted communication with the sea from Wisbeach (the emporium of a large district) has been effected for small vessels at all times of tide, and in any

weather; and at springs, for large vessels; where, previously, those drawing 6 ft. could only reach with a spring tide and favourable wind. But the most important result is, the improved drainage that has been effected. In this new channel the tide ebbs nearly 10 ft. lower than in the old one, immediately opposite the S. Holland and N. Level sluices, which are the outlets for the water of about 100,000 acres of fen-land. A new main drain and sluice has been formed, to take the proper advantage of this; and also several minor drains. The Nene outfall was finished in 1835, at a cost of 200,000*l*. The drainage of the N. Level, under an act obtained in 1830, cost 150,000*l*. Following the example of his ancestors, the Duke of Bedford has been the chief supporter of both those undertakings, which have rendered pumping, either by wind or steam, unnecessary in the N. Level; and proved, that by due skill and exertion, all the waters of this important tract might have an adequate outfall created for them. (*Elstobb's Hist. of Bedford Level; M'Culloch's Statistical Acct. of the British Empire; Smeaton's Tracts; Penny Cyclopædia.*)

BEDNORE, a town of Hindostan, cap. of a district of Mysore, lat. 13° 50′ N.; long. 75° 6′ E.; 150 m. N.W. Seringapatam, 360 m. W.N.W. Madras. It is situated on one of the best roads in the W. Ghauts, which leads from Mangalore. When Hyder Ali took it in 1763, it was said to be 8 m. in circ.: it afforded him considerable plunder. In 1783 it was taken by the English; but in the following year the troops in possession were either destroyed or dislodged by Tippoo. At his death it had but 1,500 houses,—some additions have, however, been made to it since. Its trade is increasing, but it has no manufactures. (*Hamilton's E. I. Gaz.* i. 156.)

BEDWIN (GREAT), a bor. and par. of England, co. Wilts, hund. Kindwardstone, 64 m. W. by S. Lond. Area of par., 10,420 acres. Pop. of par. in 1831, 2,191. The town, which is old, stands on an elevated site, on a chalky soil. Its church exhibits specimens of the style of various æras (from the Norman to Henry VIII.), and is a cruciform structure, with a fine embattled tower rising from the intersection. The market-place (a very old building) is still standing in the principal street; but the market has long been disused. Fairs are held, April 23. and July 26. The place is in the jurisdiction of the county magistrates, being merely a nominal borough, with a portreeve, bailiffs, &c., elected at the manor court leet. It sent 2 mem. to the parliaments of Edward I.; thence, with some interruptions, to 9 Henry V., and thence, continuously, till the Reform Act, by which it was disfranchised. There is a fine relic of Saxon earth-work, called Chisbury Castle, about a mile N.E. of the town; it encloses an area of about 15 acres. Some Roman remains have also been found about ½ a mile S.W. of the town. The Kennet and Avon Canal passes through the parish, and furnishes coals. The living is a vicarage, with the chapel of East Grafton annexed.

BEEDER, a considerable prov. of Hindostan; part of the Deccan; chiefly between lat. 17° and 20° N., having N. Aurungabad and Berar; E. Hyderabad and Gundwana; S. Hyderabad and W. Bejapoor and Aurungabad: it is included in the nizam's domin., and divided into 7 districts; viz. Calberga, Naldroog, Akulcotta, Calliany, Beeder, Nandere, and Patree. It is hilly but not mountainous, and watered by many rivers, of which the Manjera and Godavery are the chief, and is generally fertile. It is but thinly inhabited, the Hindoos being to the Mohammedans as 3 to 1: before the conquest by the latter it was comparatively populous. Three languages, the Telinga, Maharatta, and Canarese, are spoken in this prov., and their mutual point of limit is somewhere in the neighbourhood of the principal town, Beeder. The Bhamenee dynasty reigned here after the Moham. conquest, and other small states were subsequently founded, one of which was fixed in Beeder as the capital. The Moguls conquered it at the end of the 17th, and the nizam early in the 18th century, since which it has always been occupied by the successors of the latter.

BEEDER, a city of Hindostan, cap. of the above prov., in lat. 17° 49′ N., long. 77° 46′ E.; 73 m. N.W. Hyderabad, and 325 m. E.S.E. Bombay. It stands in an open plain, except to the E., where it rests on ground having a declivity; is fortified by a stone wall, with many round towers, and a dry ditch; has remains of some good buildings, and was formerly famous for its tutenague ware. (*Hamilton's E. I. Gaz.* i. 157, 158.)

BEER ALSTON, a bor. of England, co. Devon, hund. Roborough, par. Beer-Ferris, 211 m. W.S.W. London. Pop. of the par., 1821, 2,198; 1831, 1,876: houses, 341; area, 5,850 acres. The village is situated between the Tavy and Tamar, 1 m. from the latter: its market and fair (granted in 1295), have been long discontinued. Silver-lead mines were opened in the reign of Edw. I. contiguous to the place, which owes what importance it possessed to them; they have been worked within the last 20 years, but are now discontinued, though some smaller ones are, or recently were, in work. The bor. claimed by prescription, but did not return mem. to the H. of C. till the reign of Eliz., from which period two were regularly elected, till the passing of the Reform Act, by which it was disfranchised. The ann. val. of prop. in 1815, in the entire parish, was 25,550*l*. In its ancient church are some curious monuments of the old families of Champernowne and Ferrers.

BEERBHOOM, or BIRBOOM, (*Virabhumi*, the land of heroes,) a distr. of Hindostan, prov. Bengal, chiefly between lat. 23° 25′, and 24° 25′ N., and long. 86° and 88° E.; having N. the distr. Bhaugulpore; E. Moorshedabad and Nuddea; S. Burdwan and the Jungle Mehals; and W. Ramgur. Area, 3,870 sq. m. Pop. (1822) 1,267,065. Much of it is hilly, covered with jungle, and thinly inhabited; there are no navigable streams, which impedes its cultivation and trade; but the roads and bridges are kept in good order by government convicts, and its pop. and prosperity are increasing. Good coal and iron ore are found; the latter is worked in numerous native forges, supplied with fuel from extensive forests. The other most important products are rice, sugar, and silk. The land revenue in the year 1829-30 was 691,876 rup. Highway depredations are frequent, especially by the petty hill chiefs in the W.; the head-quarters of the judicial establishment are at Soory; the other chief towns are Nagore, Noony, and Serampore. In 1801 the Hindoos were to the Mohammedans as 30 to 1. (*Hamilton's E. I. Gaz.* i. 246.; *Reports on E. I. Affairs, Append.* iii.; *Revenue Map*, i. 762.)

BEER-REGIS, a par. and market town of England, co. Dorset, hund. of same name. Pop. of par. 1,483. The town is situated on an affluent of the Piddle, 7 m. N.W. Wareham. It has a good church, with some monuments. Its annual fair, held on Woodbury Hill, 18th Sep. and 3 following days, used to be one of the most important in the co. for the sale of cattle, horses, &c.; and is still very considerable.

BEES (ST.) HEAD, a cape of England, being the most westerly point of the co. of Cumberland, about 3 m. S.W. Whitehaven; lat. 54° 30′ 55″ N., long. 3° 37′ 24″ W. It is composed of abrupt, high, rocky cliffs; and is surmounted by a lighthouse, exhibiting a fixed light, having the lantern elevated 338 ft. above high water mark.

BEESKOW, a town of Prussia, prov. Brandenburg, on the Spree, 18 m. S.W. Frankfort on the Oder. Pop. 3,000. It is the seat of a court of justice, and has manufactures of cloth and linen, with breweries, tanneries, and lime-kilns.

BEFORT, or BELFORT, a town of France, dep. Haut-Rhin, cap. arrond., on the Savoureuse, 38 m. S.S.W. Colmar. Pop. 5,687. When this town was ceded by Austria to France, in 1648, it was not fortified; but the importance of its position for the defence of the plain to the E. of the Vosges being obvious, works were constructed on a new principle, by Vauban, which made it a fortress of the second class. It consists of two parts—the high and low town; is well built; has large barracks, a handsome church, a college, a public library, containing 20,000 volumes, and a tribunal *de première instance*. Belfort has iron-foundries, with fabrics of iron-wire, printed calicoes, hats, paper, &c.; and is the entrepôt of most part of the trade of France with Alsace, Lorraine, Germany, and Switzerland. (*Hugo*, art. *Haut-Rhin*.)

BEG (LOUGH), a small lake of Ireland, about 2 m. from the N.W. corner of Lough Neagh, with which it is connected by the river Bann. (*See* LOUGH NEAGH.)

BEGARD, a town of France, dep. Côtes du Nord, cap. cant., 3 m. N.W. Guingcamp. Pop. 3,503.

BEHABAN, a town of Persia, prov. Fars, on an extensive and fruitful plain, about 3 m. E. from the ruins of the ancient city of Aragian, and 130 m. W.N.W. Shiraz. Mr. Kinneir says that the walls are about 3 m. in circumference, and that he was informed by the governor that the pop. amounted to about 10,000. It is the residence of a Beglerbeg. (*Kinneir's Persia*, p. 72.)

BEHRING'S STRAIT, the channel which separates the N.E. corner of Asia from the N.W. corner of America, and which connects the N. Pacific with the Arctic Ocean. It is formed, in its narrowest part, by two remarkable headlands, the extreme points E. and W. of the continents to which they belong; Cape Prince of Wales, on the American coast, in lat. 65° 46′ N., long. 168° 15′ W.; and East Cape, on the shore of Asia, in lat. 66° 6′ N., long. 169° 38′ W. The distance between these points is about 36 m.; but N. and S. of them, the land on both sides rapidly recedes, and, on the N. especially, it trends so sharply, that the name of Strait is not very applicable to any part beyond the Capes in that direction. It is usual, however, to regard it as extending along Asia from Tchukotskoi Noss, in 64° 13′ to Serdre Kumen in 67° 3′ N., which gives it a length of 400 m.: its

width between Tchukotskoi Noss (173° 24′ W.) and Cape Rodney, on the opposite shore of America (166° 3′ W.), is about 250 m.

The land on both sides is considerably indented, the Asiatic shore especially exhibiting several extensive and commodious bays, as St. Lawrence, Metchickma, and others; but the country is not of a kind to tempt navigators to its coasts, which are generally steep and rocky, very bare of wood, and not at all abundant in other vegetation. The water has an equal, but not great depth. Cook remarks, that, on both sides of the Strait, the soundings are the same, at the same distance from the shore: that near land, he never found more than 23 fathoms; and by his chart it appears that he *no where* found more than 30. Shoal water appears to be principally confined to the bays and inlets on the American side. There are a few small islands scattered here and there along the Strait; and one of some size, St. Lawrence or Clerke's Island, lies at a short distance S. from its entrance. The temperature is low; by the end of August the thermometer sinks to the freezing point, and N. of the two Capes, there is always a store of ice which the heat of summer is quite powerless to disperse. It need scarcely be added, that the Strait is frozen over every winter. Fogs, and hazy weather, are very common, almost indeed perpetual; for though the summer sun is above the horizon for a very considerable time, yet he seldom shines for more than a few hours, and often is not seen for several days in succession. The animals on both sides the Strait are similar, as might be expected from the proximity of the continents, and the annual freezing of the water; they consist of the common fur bearing tribes and birds of the Arctic regions, but not in great numbers. It might be reasonably presumed that a corresponding similarity would have been observed in the human race on each side of the channel; but this is not the case: the Tchutski (Asiatics) are long-faced, stout, and well made; while the Americans are of low stature, with round chubby faces, and high cheek bones. The Asiatics, also, appear to possess more arts, to be more refined, in short, to be of a superior race. On both shores, the principal occupations appear to be hunting and fishing, for the latter of which the waters are well fitted, being much more abundant in life than the barren land. Whales frequent the Strait, and the walrus (morse) seems to be more abundant here than in any other part of the world. The flesh of the latter creature is fit for food (*Cook's Third Voy.*, ii. p. 457.), and it appears probable that the natives of the coasts feed also upon the whale.

In 1728, Vitus Behring, a German in the service of the Empress Catherine, sailed from Kamchatka, in the view of discovering whether Asia were or were not terminated by the sea towards the N.E. He reached the Serdre Kumen, and laid down the Asiatic coast in a manner to call forth the unqualified approbation of Cook. In a second voyage to explore the American shore, he unfortunately perished under circumstances of great misery. Behring may be considered as having settled the fact of the existence of this strait, and therefore it is most properly called by his name; but the complete discovery was reserved for Cook, who in 1798 surveyed the whole length of both coasts, with a precision and accuracy which left nothing for after voyagers to perform, and which has made the geography of this remote and barbarous region as precise as that of our own country. It may, perhaps, be interesting to know, that a very old *Japanese* map of the world, now in the British Museum, lays down the leading features of this strait with surprising accuracy. (*Russian Voyages and Discoveries*, p 48.; *Cook's Third Voyage*, p. 438. 467—475, &c.; iii. p. 242., &c.; *Billings*, p. 239—265., &c.)

BEHRING'S ISLAND, a small isl. in the Pacific; lat. 55° N., long. 165½° E., the most W. of the Aleutian chain. It is rocky and desolate, without inhabitants, and only remarkable as the place where the great navigator, whose name it bears, breathed his last. After suffering great hardships in his attempt to explore the coast of America (*see last article*), the scurvy broke out among his men, and in the attempt to return to Kamchatka, he was wrecked on this barren rock, where was neither food, except marine animals, nor covering, except fine sand, in which the captain and crew attempted to screen themselves from the effect of an Eastern winter, and in which the former died worn out by disease and disappointment, Dec. 8. 1741. (*Russian Voy. and Discov.*, p. 97.)

BEILA, or BELA, an inl. town of Beloochistan, cap. prov. Lus, on an elevated rock on the N. bank of the Poorally, lat. 26° 11′ N., long. 66° 36′ E., and 50 m. N. of the Indian Ocean. It contains about 2,000 houses, 300 of which belong to Hindoos. The streets are narrow, but the bazar is neat, and the town generally clean and tidy: on the N.W. it is protected by a tolerably good mud wall; elsewhere it has no external defence. (*Pottinger's Travels*, p. 19.)

BEILAN, a town of Syria, near the sea, 9 m. S.E. Iskenderoon; lat. 36° 29′ 30″ N., long. 36° 17′ E. Pop. uncertain, but, as the town is the residence of many rich families, it cannot be inconsiderable, probably from 4,000 to 5,000.

The houses are of stone, with flat roofs, occupy both sides of a mountain gorge, and are so disposed that the terraces of the lower buildings serve as streets to those above. A large stream rushes through the middle of the town, and in winter cascades pour down on every side. A considerable number of aqueducts, some of them very ancient, conduct this abundant supply of water to the houses of the inhabitants.

Beilan gives name to the mountains among which it stands (an. *Amanus*), the S.W. termination of the Taurus. The summits of these mountains are usually snow-topped; hence the winter cold is very severe, but the summer climate delightful, and, at all times, the atmosphere is pure and salubrious.

The town was formerly much frequented by the inhabitants (especially Europeans) of Aleppo and Iskenderoon, as a refuge from the burning heats and unwholesome vapours of the plains during the summer. The decline of these places has affected Beilan, but its natural advantages have drawn to it a great many wealthy Turks, who find a further inducement to reside here, in the fact, that, though nominally a part of the pachalic of Aleppo, the town is really governed by a sheikh, elected by the inhabitants from among themselves. In 1832 Beilan was the scene of a decisive battle between Ibrahim and Hussein, pachas. (*Volney*, ii. 135, 136.; *Robinson*, ii. 279—281.)

BEJA (an. *Pax Julia*), a town of Portugal, prov. Alentejo, cap. Comarca, 85 m. S.E. Lisbon. Pop. 5,450. It is surrounded by walls, flanked with 40 towers, and defended by a castle. It has a cathedral, a rich hospital, a Latin school, a fabric of earthenware and tanneries.

BEJAPOOR, a large prov. of the Deccan, Hindostan, comprised partly in the British dom. and partly in those of the rajah of Sattarah and the Nizam, and containing the Portuguese territ. of Goa. It extends from 15° to 18° N. lat., and between 73° and 78° E. long., having N. prov. Aurungabad; E. the same prov. and that of Hyderabad; S. the Toombuddra and Wurda rivers, and distr. of Canara; and W. the Indian Ocean: length 320 m., by 200 m. average breadth.

Its W. districts are very mountainous, being intersected by the W. Ghauts; and there are numerous strong hill positions on isolated eminences, with perpendicular sides, often crowned by fortresses. The principal rivers are the Krishna or Kistnah, Toombuddra, and Beema. The Krishna is remarkable as forming the boundary between two regions in which distinct languages and species of building prevail; N. of that stream the Maharatta tongue is spoken, and the roofs of the ordinary houses are pitched and thatched; S. of its banks the Canara language prevails, and the houses are flat-roofed, and covered with mud and clay. The Ramooses, a tribe resembling the lower castes of the Maharattas, with the thievish habits of the Bheels, but more subdued and civilised, inhabit the hills joining the Ghauts in Sattarah, between Poonah on the N., Colapoor S., and Bejapoor E. They are robbers by trade, plundering the country when not kept in subordination; addicted to hunting, &c., and neither tilling the ground, nor disposed to any fixed or laborious employment. They do not eat beef, but are without caste.

After the dissolution of the Bhamenee empire of the Deccan, in 1489, Adil Shah established a dynasty in Bejapoor, which lasted till 1689, and was singular in conferring Hindoo titles of distinction, which, among other Mohammedan governments, were always Arabic. It next became nominally subject to Aurungzebe; then really subject to the Maharattas: after suffering all the evils of anarchy from 1804 to 1818, most part of it became, in the latter year, subject to the British; but portions of it have since that period been again entrusted to the rule of subsidiary native princes. (*Hamilton's E. I. Gaz.*, pp. 159—162.)

BEJAPOOR (*Vijayapura, the impregnable city*), the anc. cap. of the above prov. under the Adil Shah dynasty, stands near the right bank of a tributary of the Krishna, 115 m. S. E. Sattarah, lat. 16° 46′ N., long. 75° 47′ E. In the beginning of the 17th century it was a city of great size and strength; but at present it consists merely of an immense number of mosques and other public buildings, many of which are in a state of partial decay; and a scanty population scattered among their ruins, and occupying miserable huts. "As the traveller approaches the city from the N., the great dome of Mahomed Shah's tomb is discerned from the village of Kunnoor, 14 m. distant. A nearer view gives the idea of a splendid and populous metropolis, from the innumerable domes and spires and buildings which meet the eye." "On entering, the illusion vanishes; jungle has shot up in the partly obliterated streets, and the visiter may now lose himself in the solitude of ruins, where crowds

were formerly the only impediments to a free passage." It comprises an outer fort, or old city, and an inner fort or citadel, partly enclosed by, and lying E. of, the former: the space between the walls of these two is said to have been sufficient for the encampment, in 1689, of 15,000 of Aurungzebo's cavalry. The walls of the outer fort are 8 m. in circ., and but little dilapidated, though the outworks be in great part destroyed; the inner fort, on the contrary, is fast crumbling away. The old city (besides a stone bazar, its only frequented spot) contains the mausoleum and mosque of Ibrahim Adil Shah, built on a basement 130 yds. long, by 52 yds. broad, covered by an immense dome raised on arches, and so elegant as to bear a favourable comparison with the most celebrated Mogul sepulchres of Upper Hindostan. This structure, as well as others in Bejapoor, is distinguished by rich overlapping cornices, and small minarets peculiar to this place, and terminating in a globe or pinnacle, instead of the open square turrets common in the N. of India. The inner fort, the S. walls of which bound Bejapoor in that direction, encloses the ruins of the palace, the great mosque, an imposing edifice in good repair, the celebrated mausoleum of Mahomed Shah, and a multitude of other tombs and mosques. Sir James Mackintosh, who visited this city, says, that the elaborate stonework in some of these is exquisite, and not surpassed by that of any cathedral he had ever seen. Here, also, is a low Hindoo temple, the only building of the kind in or about Bejapoor; it is in the earliest and rudest style of art, and popularly thought to have been raised by the *Pandoos* (a mythological race): the military Khajoos (*treasury*) has massive stone chains cut out of solid blocks suspended from its angles. Excepting the palace, little wood having been used in the construction of the public buildings, they are in tolerable preservation. Two parallel streets (one nearly 3 m. long and 50 ft. wide, paved throughout and regularly built), intersect the inner city, the most populous part of which adjoins the great mosque. Mud hovels are stuck up here and there among the ruins, but the space within the walls is mostly a wilderness covered with grass and shrubs. There are here some enormous brass guns, formerly belonging to the fort, one of which would require a ball weighing 2,646 lbs. For 5 m. W. of the fort the country is studded with ruins, chiefly Mohammedan tombs. (*Hamilton's E. I. Gaz.*, i. 162, 163.; *Mackintosh's Memoirs*, 2d edit. i. 463.)

BEJAR, a town of Spain, prov. Salamanca, 48 m. S. Salamanca. Pop. 4,700. It is distinguished by its woollen manufactures, which have been much improved and extended since 1824. A large fair is held here on the 25th of Sept. and the two following days. (*Miñano.*)

BEJETSK, a town of Russia in Europe, gov. Twer, cap. district, on a lake near the Mologa, 62 m. N.N.E. Twer. Pop. 3,000. It is an old town, *de triste apparence*, with 13 churches and 2 convents. *Schnitzler, La Russie, &c.*)

BEIRA, a prov. of Portugal, which see.

BEIT-EL-FAKIH (vulg. *Beetlefackie*), a town of Arabia, cap. of, and giving name to, one of the 6 depts. of the Tehama of Yemen Proper, about 100 m. E.S.E. Loheia, and 90 m. N. Mocha; lat. 14° 31′ N., long. 43° 23′ E. A large and strong citadel (the residence of the dola), and a mosque, are the only public buildings. A few of the houses are of stone; but the majority are mere huts of wicker-work or clay. It is unwalled. There is no account of the pop.; but it may, perhaps, be estimated at from 7,000 to 8,000. It is the great centre of the coffee trade of Yemen; the berries are brought from the neighbouring mountains half a day's journey distant; the best in May, but the general supply is almost constant throughout the year. The ports of Loheia, Hodeida, and Mocha, are supplied from hence (the last taking annually about 22,000 tons); in addition to which, caravans from El-Hedjaz, Oman, Persia, Syria, Egypt, &c. resort to the town, in which merchants of almost every trading nation are settled. All purchases are made for ready money.

Beit-el-Fakih (that is, *house of a saint*), derives its origin and name from a famous sheikh, whose tomb in this neighbourhood became an object of veneration; and to whose memory an annual festival of three days is observed, during which miracles are sometimes said to be performed. The town, which rose in consequence of pilgrimages to the tomb, gradually drew to itself the coffee trade, which before had centred in Zebid, a town about 20 m. to the S. (*Niebuhr, Descr. de l'Ar.* 197, 198.; *Voy. en Ar.* i. 253—256.)

BEITH, a par. and town of Scotland; the latter is situated in the co. of Ayr, 9 m. S. W. Paisley, but the par. extends into Renfrew. Pop. of par. 5,113, of which about two-thirds belong to the town. The latter, which is pleasantly situated on a rising ground, has grown into importance since the earlier part of last century. It was at one time famous for its manufacture of linen; it was afterwards no less eminent in the department of silk gauze; but cotton has of late constituted its staple manufacture. In this respect it may almost be regarded as a suburb of Glasgow. It has also two flax and three corn mills. A great number of the female inhab. are engaged in tambouring and flowering muslin for the markets of Paisley and Glasgow. The line of the Glasgow, Paisley, Kilmarnock, and Ayr Railway, which is now (1839) being constructed, passes close by Beith; a circumstance which will give a great impulse to the prosperity of the place. The limestone, freestone, ironstone, and coal, with which the neighbourhood abounds, will, when the railway is open, become more available, and find a ready market. The parish of Beith, which borders on that of Dunlop, is famous for its dairies; and the one parish produces as much of what is called *Dunlop* cheese as the other. Beith has a town house, built by subscription, a parish church, and two dissenting chapels, two branch banks, and a subscription library.

BEKES, a town of Hungary, cap. of an extensive co. of the same name, at the confluence of the Black and White Koros, 40 m. S.W. Grosswardein; lat. 46° 46′ 16″ N., long. 21° 7′ 33″ E. Pop. 20,000. It has 3 churches, and a considerable trade in cattle, corn, and wine, the produce of the surrounding country. It was formerly fortified.

BELALCAZAR, a town of Spain, prov. Cordova, 48 m. N.N.W. Cordova. Pop. 2,800.

BELASPOOR, an inl. town of N. Hindostan, cap. of the Cahlore rajah, on the left bank of the Sutleje, 1,465 ft. above the level of the sea; 180 m. N. Delhi, 300 m. N.N. W. Agra; lat. 31° 19′ N., long. 76° 45′ E. In 1810, it contained 3,000 houses: it is regularly built; the houses of stone, cemented with mortar, and the streets roughly paved. The Sutleje is here about 100 yards broad, when its waters are lowest. In 1822, this town, with the rest of the Cahlore territory, devolved to the British government, on the death of its previous sovereign. (*Hamilton's E. I. Gaz.* i. 164.)

BELBEIS, a town of Lower Egypt, on the most W. arm of the Nile, 29 m. N.E. Cairo. It was occupied in 1798 by Napoleon, who repaired its fortifications; but they are now of little importance, the walls consisting chiefly of mud. It is ill built, has several mosques, and its pop. has been estimated at 5,000. It is supposed by D'Anville to occupy the site of the ancient Pharbætus; but the preferable opinion seems to be that the site of Pharbætus is identical with Horbeyt. Belbeis is a place of considerable importance, from its situation on the road to Syria.

BELCASTRO, a town of Naples, prov. Calabria Ultra, 15 m. N.E. Catanzaro. Pop. 3,400. It is situated on a rock, is the seat of a bishopric, has a cathedral, a diocesan seminary, and a *mont de piété*. Large quantities of cattle are bred in its vicinity.

BELEM, a suburb of Lisbon, which see.

BELFAST, a seaport town and parl. bor. of Ireland, cos. Antrim and Down, prov. Ulster, at the confluence of the Lagan with Carrickfergus Bay, 102 m. N. Dublin; lat. 54° 36′ 8·5″ N., long. 5° 55′ 53·7″ W. At a very early period it was known as a fortified station, and on the arrival of the English it was further secured by the erection of a castle, of which, however, no trace now exists. It owes its present importance to its commerce and manufactures, which have raised it to the first rank among the great marts of Ireland. The town comprises an area of 1872 stat. acres, whereof 1296 are in Antrim, and 576 in Down; but the municipal limits comprise only 1572 acres. Pop. in 1821, 37,277, in 1831, 58,287, and in 1841, 75,308, whereof 70,447 were within, and 4,861 without the principal bor., 68,611 being then, also, in Antrim, and 6,697 in the suburb of Ballymacarret, in Down. Pop. of parl. bor. at same period, 63,625. According to a census taken in 1834, there were 16,388 adherents of estab. church; 19,712 R. Catholics; 23,576 Presbyterians; and 1,137 persons belonging to other persuasions. Inhab. houses in 1841, 10,906, giving, at an average, 6·9 persons to a house.

Though lying low, a great portion of the town not being more than 6 feet above high water mark, it is very healthy. The Lagan, by which the suburb of Ballymacarret is separated from the rest of the town, is crossed by 3 bridges; one, the oldest, consisting of 21 small arches, the others of modern construction.

The town has a cheerful and lively appear-

ance. The houses, mostly of modern construction, are of brick; the streets are wide, airy, well paved and flagged, clean, and lighted with gas. Principal ecclesiastical buildings, the parochial church, with a tower of the Ionic order; St. George's Church, or chapel of ease, with a very fine portico, and Christ Church: it has in all 8 places of worship for the adherents of the established church; 4 Rom. Cath. chapels; 21 Presbyterian places of worship, one of very elegant architecture; 3 meeting-houses for Seceders, 2 for Covenanters, 8 for Methodists, 1 for Independents, and 1 for Quakers; exclusive of 5 places of worship in Ballymacarret.

Of the educational establishments, the principal is Queen's College, founded under the 8 & 9 Vict. c. 66, and opened in 1849. It is divided into Faculties of Arts, Medicine, and Law, and has a president, vice-president, and 20 professors. Pupils of all religious denominations are admitted. It has 30 junior scholarships of 24*l.* each, and 10 senior do. of 40*l.* each. Professors' fees vary from 50*s.* to 90*s.* for each class for the season. The building, in the Tudor style, comprising a museum, library, &c., is outside the town, adjacent to the Botanic Gardens. The Royal Academical Institution originated in a subscription of the inhabitants in 1807, by whom a fund of above 25,000*l.* was raised for the erection of the buildings, and the endowment of professors and teachers. It was afterwards incorporated by act of parliament, and receives an annual parliamentary grant of 1,900*l.* It consists of a collegiate or higher, and of a subordinate or elementary department. In the first, the professors of natural philosophy, moral philosophy, logic and belles-lettres, anatomy and physiology, mathematics, church history, Hebrew, and Greek and Latin, receive annual salaries of 150*l.*, besides students' fees; 2 professors of divinity receive 100*l.* each, with fees; while the professors of chemistry, midwifery, materia medica, surgery, botany, and biblical criticism, are left to depend on fees only: in the school department there are classes for Latin and Greek, mathematics, English, French, &c. The number of pupils in both divisions amounts to about 400. The Belfast academy, founded in 1786, comprises an assemblage of highly efficient classical, mathematical, and other schools. There is also an extensive Lancastrian school. And, exclusive of the above, there were, in 1848, 20 national schools in the town and its vicinity, attended by 4,334 pupils, with numerous private seminaries. Among other literary and scientific institutions, supported by the contributions of the members, are the Society for Promoting Knowledge, founded in 1788, with a library of about 10,000 vols.; the Literary Society, for the discussion of subjects of general literature, science, and art, founded in 1801; and the Natural History Society, founded in 1821: the meetings of this institution are held in a handsome building, erected at the cost of the subscribers, who have also formed a large botanic garden near the town. Belfast has four public news rooms, and *seven* newspapers, some of which are ably conducted.

The poor house, for the reception of aged and infirm paupers and destitute children, a large building, in an elevated situation, at the N. extremity of the town, maintains about 500 inmates, of whom those capable of work are employed in useful manufactures, or in its domestic arrangements: attached to it are useful medical and surgical hospitals. The funds amount at an average to about 2,500*l.* per ann. The House of Industry is now superseded by the union workhouse, established under the new poor law. The Fever Hospital, with a dispensary attached to it, has accommodation for 220 patients, and an annual income of about 1,000*l.* A lying-in hospital is maintained by public subscription. The district lunatic asylum, for the cos. of Antrim and Down, and the town of Carrickfergus, situate about 1 m. from the town, in an enclosed area of 33 acres, has accommodation for 250 inmates: total expense of the establishment, including salaries, in 1845, 3,392*l.*, being an average of 13*l.* 10*s.* for each patient. The new Deaf and Dumb Asylum is an elegant building. There are also 2 female penitentiaries. The only places of amusement are a theatre, occasionally opened for dramatic performances, and a suite of rooms in the Commercial Buildings for balls, assemblies, and concerts. The Exchange, erected by one of the Marquises of Donegal, is now used only for the election of magistrates and other corporate purposes. Adjoining the town are barracks for infantry and artillery.

Belfast was incorporated by James I. in 1613. Under the late act, it is governed by a mayor, 9 aldermen, and 30 councillors. The borough returned 2 m. to the Irish parl.: at the Union it obtained leave to send 1 mem. to the H. of C., and in 1832 the Reform Act again conferred on it the privilege of returning 2 m. The right of election, which had been previously confined to the members of the corporation, was at the same time given to the 10*l.* householders, and a new and somewhat more extended boundary was laid down for elective purposes. Parl. constit. in 1850, 4,434. General sessions for the co. are held here 4 times a year; there is also a court of record for pleas of debt to the amount of 20*l.*; a manor court, a court leet, and a petty sessions court twice a week (at which last the sovereign presides). The town is a constabulary station, and is the residence of the stipendiary magistrate for the co., who holds a court of petty sessions twice a week. Persons committed for graver offences are sent to the co. gaol in Carrickfergus; those on lighter charges to the house of correction, where the prisoners are employed chiefly in breaking stones for the roads. This building being inadequate for its purpose, a new and improved Bridewell has been erected. The paving, lighting, and cleaning of the town is superintended by a board of police, empowered to levy a local rate for these purposes, the annual average amount of which is about 9,000*l.*

The linen manufacture has been the chief source of the present prosperous state of Belfast. To accommodate the trade of which it is the centre, the White Linen Hall, a large quadrangular building enclosing a spacious area, was erected by subscription in 1785; and about the same period, the Brown Linen Hall, an uncovered area of smaller dimensions, was opened for the sale of unbleached linens. There were, in 1841, in the town and its vicinity, 21 mills for spinning linen yarn, which employ in all nearly 7,000 hands: and there are several factories for the weaving of linen cloths, employing about 1,000 hands. The cotten manufacture, introduced in 1777, is carried on in four factories, which employ about 1,100 hands; but the business is declining, and the probability seems to be, that at no very distant period it will be entirely abandoned. Four large and several smaller foundries are employed, chiefly in making the machinery and implements for the linen and cotton works. There are two vitriol works. The tanning of leather, formerly one of the chief trades, is on the decline; but the manufacture of ropes, canvass, and sailcloth is carried on with much vigour. There are two large ship-yards, in which vessels of all dimensions, up to 400 or 500 tons, are built. There are 2 distilleries, 12 breweries, several large flour and corn mills, with numerous manufactories for minor articles of consumption, such as soap, candles, starch, &c., and a paper mill. In 1838, 50 steam engines, of the power of 1,274 horses, were employed in Belfast and its immediate neighbourhood.

The increase of trade and commerce has kept pace with that of manufactures. The situation of the town—at the bottom of Carrickfergus Bay—has made it the chief mart for the circulation of foreign produce through the most populous and wealthy portion of Ulster. To improve this advantage, a line of inland navigation was commenced in 1787, to connect the town with Lough Neagh, partly by still water and partly in the bed of the river; but the unavoidable casualties attending this latter mode of conveyance have so retarded the progress of the vessels employed in it as to render it comparatively useless,

and the inland trade has been mostly carried on by the roads, which are kept in an excellent state of repair. A raiload has been formed, for the conveyance of stone from the quarries at Cavehill to the quays; the Ulster railway greatly facilitates the communication of the town with the interior; and other railways have been completed and are in progress. There are two fairs; one on the 1st and 2d August, the other on the 28th and 29th October. Charter market-day Friday, but well-supplied markets are held every day. There are three native banking establishments; the Northern, Belfast, and Ulster; each of which has branches in the country, and branches of the Bank of Ireland, and of the Provincial Bank, have also been established here. The Savings Bank, commenced in 1811, was one of the first institutions of the kind in Ireland: its affairs are now transacted in a building erected in 1830 out of the accumulations of the fund. The deposits amounted, on the 20th November, 1848, to 105,347*l*.

Previously to 1637 Belfast was a creek of the port of Carrickfergus; but the privileges of the latter having been purchased in that year by the crown, the customhouse was transferred to Belfast. The bay is peculiarly favourable to the purposes of commerce, being safe and easy of access. Large vessels formerly lay at the pool of Garmoyle, about 4 m. from the town. But the channel thence was so much deepened and improved in 1840, that vessels drawing 16 feet water reach the quays at neaps, and those drawing 18 feet at springs. It is still, however, susceptible of much improvement; and it is affirmed that the accommodation of shipping, and the facilities for their approach to the town, might both be materially increased without incurring any very great expense. The superintendence of the harbour is vested in the Ballast Corporation, established under an act passed in 1831, which gives it large powers towards the improvement of the quays and harbour. The port dues, which in 1825 were 6,000*l*., had increased in 1846, to 19,213*l*. The Chamber of Commerce, a voluntary association of merchants, founded in 1783, was revived in 1802. Mercantile transactions were formerly carried on in the Exchange, but latterly in the Commercial Buildings, a fine range of apartments erected in 1823, at an expense of 20,000*l*., by a joint-stock company of 200 shareholders: the buildings, as already stated, contain, besides the portion appropriated to commercial purposes, an hotel, news-room, and assembly-rooms.

The trade of Belfast is greater than that of any other port of Ireland. The value of its imports and exports (foreign and coastwise), in 1835, amounted to 8,037,232*l*., while the value of the imports and exports of Dublin, during the same year, was only 6,958,864*l*. Of the exports from Belfast, in 1835, amounting to 4,341,794*l*., the principal articles were —

	Quantity.	Value.
Corn, Meal, and Flour	285,957 cwts.	£148,957
Provisions	340,226	906,597
Linen Yarn	43,525	40,360
Feathers, Flax, and Tow	73,652	186,884
Cotton Manufactures	7,363 pack.	146,260
Linen do.	53,581,000 yards	2,694,000
Horses	2,374	35,580
Eggs	2,850,000	5,930

The imports, amounting, for the same year, to 3,695,438*l*., consisted principally of linen yarn (960,000*l*.) cotton and woollen manufactures, and raw cotton: tea, sugar, and other colonial products, haberdashery, coals, iron, &c. (*Railway Report*, B. 73.)

The most important branch of commerce is the cross channel trade, which, since the introduction of steam navigation, has increased in an extraordinary degree.

Numerous steam-boats ply regularly between Belfast and the principal British ports. The passage to Liverpool, Glasgow, and Dublin, is made by them in about 14 hours, and to London in 140 hours. There is an extensive trade with the U. States and the British colonies in N. America, and with the W. Indies, Mediterranean, Baltic, and Archangel. In 1850, there belonged to the port 164 sailing vessels of under 50 tons, and 295 do. of 50 tons and upwards, the aggregate burden of both classes being 73,864 tons: there then also belonged to the port 7 steamers of the total burden of 1,840 tons. Exclusive of the coasting trade, there entered the port in 1848, 243 ships of the burden of 61,239 tons, engaged in the colonial and foreign trades. The customs duties including those of Larne and Donaghadee, in the under-named years, were —

	£		£
1830	234,044	1840	337,208
1833	357,975	1843	339,989
1838	316,175	1848	341,364

The post-office revenue for 1842 was 4,588*l*., and for 1848, 6,326*l*.

In the Excise department Belfast forms part of the Lisburn district, the amount of duties of which, in the under-named years, were —

	£		£
1835	165,373	1840	177,634
1836	189,590	1841	181,999
1837	199,440	1842	178,919
1838	171,232	1844	198,086
1839	181,774	1848	204,014

In the appearance of the town, and in the habits of the people, the character of Belfast is almost exclusively commercial and manufacturing. There are in it few of the landed aristocracy; its higher classes are formed chiefly of those who have attained an elevated position in society by their personal exertions, or those of their immediate progenitors. There is, therefore, little of external show, but much of internal comfort, in their domestic arrangements. The middling classes enjoy all the comforts, and many of the luxuries of civilisation; the working classes have suffered less from the pressure of distress, arising from temporary stoppages of trade, or manufacturing employment, than those of most of the other great towns similarly circumstanced: on the whole, there is to be seen here little of the aspect of destitution which marks the suburbs of most other Irish towns. The official and other documents, which have supplied the data already given, show, by a review of its condition at different periods, that it is steadily and rapidly advancing in manufacturing, commercial, and literary improvement. (*Thom's Almanac*, and *Private Corresp.*)

Belfast, a sea-port town of the U. States, Maine, on the N.W. angle of Penobscot Bay, 224 m. N. E. Boston. Pop. 3,077. It has an excellent harbour, and is a thriving town.

BELFORD, a market town and par. of England, co. Northumberland, Bamborough ward. The par. contains 9,380 acres, and 2,0..0 inhab.; of which the town has 1,354. The latter is finely situated on the great road from York to Edinburgh, and has a considerable corn-market.

BELGARD, a town of Prussia, prov. Pomerania, cap. circle, 16 m. S.S.W. Coeslin. Pop. 3,000. It is situated at the confluence of the Leitnitz with the Persante, and is almost entirely surrounded by water. It has an old castle, 3 churches, 2 hospitals, and fabrics of cloth.

BELGAUM, an inl. town of Hindostan, prov. Bejapoor, presid. Bombay, distr. Darwar, in a small subdivision of which it is the capital, 105 m. S. W. Bejapoor, 55 m. N. W. Darwar; lat. 15° 52′ N., long. 74° 42′ E. Pop. (1820) 7,650. It is strongly fortified, with massive and solid walls, ramparts flanked by bastions, a broad and deep ditch, and is surrounded by an esplanade. Its interior is extensive, but covered with ruins of native buildings, amongst which are two ancient temples. This town is well supplied with water, and held out against the British longer than any other garrisoned by the peishwa's forces: it was, however, taken in 1818. The subdivision of Belgaum has a healthy climate; but all external trade is stopped for six months a year by the violence of the rains. A third part of the inhab. are Maharattas, and about one sixth Mohammedans, one eighth Jains, and one ninth Brahmins. (*Hamilton's E. I. Gaz.* i. 165.)

BELGERN, a town of Prussia, prov. Saxony, on the Elbe, 7 m. S. E. Torgau. Pop. 2,800. It is very ancient, has an hospital, and a town-house, before which is a triumphal column. It has some trade in corn.

BELGIOJOSO, a town of Austrian Italy, prov. Pavia, cap. distr., 9 m. E. Pavia, and 23 m. S. S. E. Milan. Pop. 3,000. It is situated in a fruitful plain, between the Po and the Olona; it is well built, has a magnificent aqueduct, and a fine castle, in which Francis I. spent the night subsequent to the battle of Pavia.

BELGIUM (KINGDOM OF)

BELGIUM (KINGDOM OF) is situated between France and Holland, and has been established since the separation of its provinces from those of Holland by the revolution of 1830. Its territory is small as compared with the great European states, being only about one eighth of that of Great Britain, while its population but little exceeds four millions. However, the important position which this country has occupied in the political, military, commercial, and agricultural history of Europe — its former celebrity in manufactures and the fine arts — and its present rapid progress in every industrious pursuit and social improvement, give it a peculiar interest.

Extent. Boundaries, Area, &c.—Belgium extends from 49° 27′ to 51° 31′ N. lat. and from 2° 37′ to 6° E. long. On the N. the boundary line is formed by Holland, along a line of 380,000 metres*; on the E. by Prussia,

* A metre=3·281 English feet.

377,000 metres: on the S. by France, 591,000 metres; and on the E. by the North Sea, 69,000 metres.

The general outline of the territory, as determined by the treaty signed in 1831, by the allied courts of Great Britain, Austria, France, Prussia, and Russia, forms a triangular figure, of which the longest side extends on the frontier of France, from a point midway between Furnes and Dunkirk to one 9 m. S.E. of Arlon, or 5 E. from Longwy. The parts agreed by the treaty to be ceded to Holland are, first, a portion of the province of Luxemburg, on the E. of an irregular line drawn from the point just mentioned to one on the Prussian frontier, about 17 m. S. of Malmedy; and, secondly, the portions of Limburg on the W. of the river Meuse, including the city of Maestricht, in a deviating curve, and on the N. of a line from Stevensweert, on the Meuse, to one on the Dutch frontier, 4 m. W. of Weert. Since the revolution of 1830, the Dutch have retained possession of the cities of Maestricht and Luxemburg; of the communes of Bar le Duc, in the province of Antwerp, and of Saint Pierre, in Limburg; also of the forts of Lillo and of Liefkenshoek, on the banks of the Scheldt. If the treaty of the 15th of November, 1831, be executed, the towns of Maestricht, Sittard, Ruremonde, Venloo, and Weert, with 124 communes in Limburg; and the towns of Luxemburg, Grevenmacher, Remich, Diekirk, Echternach, Vianden, and Wiltz, with 119 communes in Luxemburg, will belong to the king of Holland. The greatest length of the territory of Belgium from N.W. to S.E. is 64 leagues, of 5,000 metres, about 193 English miles; and the greatest breadth from N.E. to S.W. is 42 leagues, or about 127 miles. The whole area contains 3,422,574 hectares*, including the portions of Luxemburg and Limburg, which, though claimed by Holland, still continue to be the subject of diplomatic arrangement. The area of these disputed sections contains 477,000 hectares, so that, if appropriated by Holland, the Belgic territory will be reduced to 2,945,574 hectares, or to about two-thirds of its present area.

The kingdom consists of nine provinces — Antwerp in the N., East and West Flanders and Hainault in the W., Brabant in the centre, Limburg and Liege in the E., Namur in the S., and Luxemburg in the S.E. These formerly constituted the duchy of Brabant, the marquisate of Antwerp, the principality of Liege, the seigneurie of Mechlin, the comtés of Flanders, Hainault, Louvain, and Namur, and the duchies of Limburg and Luxemburg. At the time of the Belgic revolution, in 1830, the nine provinces of Belgium formed, in conjunction with those of Holland, the kingdom of the Netherlands, which by that event was dissolved into the present kingdoms of Holland and Belgium.

Civil Divisions. — Brussels is the capital, and seat of government, for the administration of which the kingdom is divided into the 9 provinces above enumerated, 44 arrondissements, 98 towns, and 2,640 rural communes. For military purposes it is divided into 9 commanderes, corresponding to the 9 provinces: and, lastly, for judicial proceedings, it is divided into 29 arrondissements, and 237 cantons.

The following Table exhibits the Numbers of these Divisions in each Province.

Province.	Chief City.	No. of Towns.	No. of Villages.	No. of Administrative Arrond.	No. of Judicial Arrondissements.	No. of Judicial Cantons.	No. of Communes.
Brabant	Brussels	8	388	3	3	34	326
Antwerp	Antwerp	4	138	3	3	19	141
W. Flanders	Bruges	15	225	8	4	36	233
E. Flanders	Ghent	11	279	6	3	34	293
Hainault	Mons	21	398	6	3	32	404
Liege	Liege	7	320	4	3	28	319
Limburg	Maestricht	8	309	3	3	20	311
Luxemburg	Luxemburg	17	940	8	4	. .	290
Namur	Namur	5	342	3	2	21	338
9	9	96	3,339	44	28	224	2,655

Belgium possesses 21 fortified towns, besides forts: viz., in W. Flanders, Ostend, Nieuport, Furnes, Courtrai, Ypres, and Menin; in E. Flanders, Audenarde and Termonde; in Antwerp, the city of that name and Lierre; in Hainault, Mons, Tournai, Ath, and Charleroi; in Namur, the city of that name, Philippeville, and Marianburg; in Limburg, Maestricht, Hasselt, and Venloo; and in Luxemburg, the city of that name. At present the fortresses of Maestricht, Venloo, and Luxemburg, are garrisoned by Dutch and Prussian troops, as being claimed by Holland and the German confederation.

General Aspect of the Country. — The north and west provinces of Belgium, in their flatness, fertility, dykes, and canals, may be regarded as a continuation of Holland. This portion of the kingdom is so densely peopled, that it presents to the traveller the appearance of one vast continuous village. The south and east provinces have an opposite character: they are generally more thinly peopled, and less cultivated, and exhibit a most irregular, mountainous surface, with tracts of marshy land, and extensive forests. With the exception of these hilly districts in the south and east, the whole territory presents a series of nearly level plains, traversed by numerous streams, delightfully diversified by woods, arable lands, and meadows of brilliant verdure, enclosed by hedge-row trees, and thickly studded throughout with towns and villages.

In surveying the general face of the country, and proceeding from W. to E., we observe that the coast is uniformly flat, and formed of fine loose sand, which, by the frequent action of the sea winds, is raised into gently undulating downs, or *dunes*. These banks of sand extend, nearly without interruption, from Dunkirk, along the entire coasts of Belgium and Holland. In breadth they vary from one to three miles, and rise in the highest parts to 40 or 50 feet. They are formed entirely by the operation of the sea winds, in elevating the deep sands of the shore; and since they serve as a natural barrier to the encroachments of the ocean, it is an object of great importance to check their constant tendency to advance inland. For the purpose, therefore, of rendering the sand compact and stationary, the *dunes* are sown with a species of reed, *arundo arenaria*, until a sufficient stratum of vegetable mould is collected to support plantations of firs (*Pinus maritimus*), with which most of the Belgic *dunes* are thickly covered.

Though no part of the surface of Belgium be actually below the sea level, like that of Holland, yet, in common with the latter, its shore, in some parts, is defended from the encroachments of the sea by broad and elevated dykes; and whole districts, which formerly were alluvial morasses, have been drained and embanked, or have been gained entirely from the bed of the ocean. The embanked enclosures of this description are called *polders*. On the sea coast, and along the lower banks of the Scheldt, they are very numerous, and some contain above 1,000 acres of rich alluvial soil, which is appropriated with great advantage to the purposes of agriculture, under which head will be found some further account of them.

To the S.E. of the dunes the provinces of West and East Flanders, and Hainault, form a far-stretching plain, of which the luxuriant vegetation indicates the indefatigable care and labour bestowed upon its cultivation; for the natural soil consists almost wholly of barren sand, and its great fertility is entirely the result of very skilful management, and judicious application of various manures.

The undulations in the surface of the northern districts are so slight that, from the lofty top of the cathedral of Antwerp, the view, on a clear day, extends on every side over a radius of nearly 50 miles, including, on the E., the city of Turnhout; on the W. that of Ghent; and on the S. the city of Mechlin: the whole panorama towards the W. and S. displaying a beautiful succession of vividly verdant fields, varied by masses of wood, streams, and picturesque villages. Around the cities of Antwerp and Mechlin are great numbers of elegant and highly ornamented country mansions, belonging to the wealthy classes. The northern parts of the provinces of Antwerp and Limburg are less varied and fertile than any others. The soil is for the most part composed of pure sand, very partially mixed with argillaceous earth. The largest unbroken plain in the kingdom is called Campine, and comprises the N.E. portion of Antwerp, and the N.W. of Limburg. It consists of marshes, desolate moors, peat bogs, and extensive tracts of sand, covered with heath, broom, and stunted firs. Some parts, however, contain natural prairies, and serve for pasturage to herds of excellent horses; and the portion of Limburg near the banks of the Meuse is fertile and carefully cultivated. The scenic character of Brabant resembles that of Flanders, with respect to its beautiful fields, and gardens, and luxuriant trees; but the surface is more varied by hills and valleys. In the province of Liege the N. bank of the Meuse overlooks a fertile plain, producing all kinds of grain and vegetables, and affording excellent pasturage for cattle, and for dairy husbandry; but the country on the S. bank of the river belongs to the mountainous district which constitutes the provinces of Luxemburg and Namur. Much of this comparatively wild and rugged region is covered with dense forests, which still furnish an asylum for the wild boar, the roe-buck, the bear, and the wolf. The surface is very irregularly varied, in some parts by large tracts of barren heath and marshy lands, and in others by ridges of hills, mantled on the slopes and summits with masses of dark woods, and by precipitous rocks, whose bare escarpments form a striking contrast with the brilliant verdure of the well-cultivated valleys they enclose. The hills are often intersected in different directions by deep ravines and rapid streams; and the romantic beauty of the scenery is much heightened by numerous ruins of old feudal castles. The course of the Meuse, from Dinant to Maestricht, offers some

* A hectare = 2·471143 English acres.

very picturesque combinations of landscape and rock scenery. The river is closely shut in by lofty cliffs of various hues, some of which are surmounted by ruins of modern villas. Here they overhang the river and are beautifully shrouded with bushes of box, wild myrtle, and ivy; there they slope away to its margin, or vertically are cleft asunder, and present through the chasm a delightful view of highly cultivated farms and villages half hidden by trees in the distant uplands. The wild state of nature in Namur, Liege, and Luxemburg; the various fossil and mineral products; and the charms of the scenery, have long made this part of the country a favourite resort of the naturalist, the geologist, and the painter. All around the city of Liege, and the celebrated springs of Spa, ornamental villas of the rich are thickly stationed, where vineyards occupy the declivities of the hills, and hop-gardens flourish in the valleys.

Climate, Meteorology. — The climate of Belgium is less chilly and damp, and more temperate and favourable to health, than that of Holland; however, it is certainly humid, compared with France and Germany, and may be considered as very similar to England, except that it is still more subject to frequent variations, with a tendency to excess. The provinces differ considerably in the character of their atmosphere. In general, the air in the more elevated central and S.E. districts is clear, fresh, and salubrious; but in the low N.W. plains it is damp and hazy. In the provinces of Flanders and Antwerp the N.W. winds from the sea produce a cold and ungenial temperature throughout the winter, which is long and often wet; and their influence upon the currents of the rivers, which are wholly unsheltered by hills, renders the adjacent country liable to disastrous inundations. The great atmospherical humidity produced by fogs from the sea, and the unwholesome miasmata exhaled from extensive tracts of low marshy and alluvial lands, enclosed by dykes and ditches, and from almost stagnant canals, occasion annual visitations of dangerous fevers. The neighbourhood of Furnes, in West Flanders, is rendered especially sickly by the malaria from these sources. The provinces of Hainault, Namur, and Luxemburg are accounted most worthy of preference, with regard to healthiness; and the two Flanders, though first in cultivation, must, in point of salubrity, be placed last. The air of the polders is generally unhealthy, and affects those not inured to it with fever and ague. Speaking of the whole kingdom, it may be stated that the winter, or rather the rainy season, often comes on precociously and continues late; and that the summers are either very hot and dry, or extremely wet. November and April are nearly always rainy; the transitions of temperature are frequent and sudden, so that in the same day are experienced oppressive extremes of heat and cold. The most violent winds are from the S.W., and the most frequent from the N. and the W. A W. wind most frequently, and E. wind most rarely, brings on rain. From observations made at Brussels during three successive years, the medium height of rain which fell in one year was 633 millimètres *; the extremes were 761 and 511. The number of rainy days in 1834 was 166; in 1835, 161; and in 1836, 198. The medium temperature of the year is 10·52 centigrammes, and it is well represented by that of October and April. The temperature of the hottest month is 20° 36′, and of the coldest 0° 85′; difference, 19° 51′. At Brussels, which is nearly the centre of the kingdom, the medium height of the barometer, in 1836, was 754·82.

Mountains. — No elevation in Belgium is properly entitled to the appellation of mountain. A ramification of the chain of the Ardennes extends in a N.E. direction through Luxemburg, Namur, and Liege, and forms a mountainous crest, which separates the waters of the Meuse from those of the Moselle, towards each of which it gradually descends. Another offshoot of the Ardennes rises parallel with this, on the N. banks of the Sambre and Meuse, between Mons and Maestricht. The highest points of elevation are about 2,200 ft. above the sea; and one of these is the hill which overlooks the celebrated springs and town of Spa.

Forests and Woods. — A space of nearly 650,000 hectares, or one fifth of the whole surface of the kingdom, is covered with forests and woods. All the common trees of Europe are abundant; as the oak, poplar, pine, fir, larch, ash, beech, maple, aspen, plane, linden or lime, chestnut, birch, elm, alder, and numerous others. Plantations for hop-poles, oak bark, and firewood, occur frequently throughout the western provinces. Hainault has several forests of fine oaks; but by far the most thickly wooded provinces are Namur and Luxemburg, in many parts of which the soil is less fertile, and better adapted for the growth of timber trees than for the cultivation of corn and grasses. The forests belonging to the state, to the communes, and public institutions, occupy 194,000 hectares, and are submitted to an established system of public management. From the oak timber of the forests of Luxemburg are derived immense supplies of charcoal, for the iron-works in that part of the country. The bark forms a considerable branch of commerce, and is principally exported to England.

The forest of Soignies, between Brussels and Waterloo, so interestingly associated with the memorable battle in that locality, is 9 m. in length by 8 in breadth, and contains 11,983 hectares, or 29,641 acres. The timber is valuable for building, and a thousand acres of it are possessed by the Duke of Wellington, in connection with his title of Prince of Waterloo. The forests in the provinces of Namur, Liege, and Luxemburg, are remains of the immense ancient forest of Ardennes, which covered a great extent of the country between Bonn and Rheims. "Sylva Arduenna, quæ ingenti magnitudini à flumine Rheno ad initium Rhemorum pertinet." (*Cæs. Com.* v. 3.) The romantic forest of St. Hubert, on the W. side of the province of Luxemburg, between Marche and Neufchateau, is Shakspeare's "Forest of Arden." A general woody appearance is given to even the most cultivated parts of Belgium, by the custom of planting trees in the hedge enclosures of the fields: the principal roads are also lined by double rows of majestic lindens, and the canals are usually shaded by rows of poplars, beeches, and willows. The Belgian proprietors of land derive a large and secure income from the produce of timber and underwood, independent of rent; and planting is, therefore, sometimes prosecuted to a greater extent by the landlords than is consistent with the convenience and advantage of the occupiers of farms. The latter, however, are remunerated by the use of a certain share of the wood.

Extensive artificial woods of Scotch pine are created by sowing about six pounds of seed to an acre, generally on the poorest soil, which is prepared by burning the heathy surface, and scattering the ashes. In six years many barren tracts are converted, in this way, to flourishing plantations of firs, from 5 to 9 ft. in height. The preservation of trees is very strictly enjoined, not only by proprietors, but by the government. Every farmer is compelled to destroy caterpillars, and remove every other cause of injury to the trees on his premises. All the trees on the public roads, besides those of the numerous royal forests, belong to the government, and the laws for their management are enforced with great vigilance by inspectors appointed for that purpose.

Rivers. — Belgium is one of the most efficiently watered countries in Europe. All its streams belong to the North Sea. The Scheldt, in the W., and the Meuse, in the E., can alone be properly denominated rivers. They traverse the kingdom generally in a direction from N. to S. Minute descriptions of the country enumerate about 40 rivulets, which form the lateral branches of these two principal streams; but though their utility, in fertilising the soil by irrigation, and as feeders of canals, is highly important, they can hardly be entitled to special notice in a general account of the physical features of the territory.

The Scheldt rises in France; flows through Cambray, Valenciennes, and Conde; and enters Belgium on its confluence with the Scarpe, a few miles S. of Tournay; through which town it passes, and pursues a northerly course to Ghent, where it receives the Lys. Thence it flows tortuously to Termonde, whence, turning northward, it is augmented by large tributary streams on each side, and becomes, before the walls of Antwerp, a majestic river, 2,000 ft. in width, and navigable for fleets of the largest ships. The length of its course in Belgium is 212,000 mètres, and the upper half, and several of its affluents, are navigated by boats of 200 tons. The Meuse also rises in France, and enters Belgium on the S. of Dinant, through which town it flows to Namur, where it receives the Sambre; then turning eastward it passes Andenne and Huy, to the city of Liege: there resuming its northerly course, it continues through Maestricht, and winds across the N. W. of Limburg into Holland and the North Sea. The length of its course in Belgium is about 126,000 mètres. It is navigated by large strong boats, from 100 to 150 tons. From Liege to Venloo the navigation is particularly difficult. The affluents of the Meuse at Liege descend in some parts of their courses at an angle of 40°, and the long narrow boats, which shoot down with the velocity of an arrow, are drawn up by ropes and pulleys. The principal affluents of the Scheldt, on the E., are the Dendré, and the Senne, Dyle, Geete, Demer, and Nethe, which unite below Mechlin, and flow into the Scheldt, in the channel of the Rupel. On the W. it receives the Lys and Durme, and communicates with several canals.

Of these rivers, belonging to the basin of the Scheldt, the following are each navigable to the extent expressed in mètres: —

The Demer,	in Limburg and Brabant	31,000
Dendré,	Hainault and East Flanders	67,650
Durme,	West Flanders	22,200
Dyle,	Brabant and Antwerp	22,200
Scheldt,	Hainault, E. Fland., & Antwerp	212,000

* A millimètre = 0·03937 in. English.

The Lys,	- West and East Flanders	- -	90,000
Nethe,	- Limburg and Antwerp	- -	13,000
Rupel,	- Antwerp	- - - - - -	12,000

The Meuse on the E. is joined by the Semoy, Lesse, Ourthe, Amblève, Vesdre, and Roer; and on the W. by the Sambre, Jaar, and several smaller streams.

The rivers belonging to the basin of the Meuse are navigable as follows: —

The Meuse, in Namur, Liege, & Limburg - - 126,000

The Ourthe,	- Luxemburg and Liege		102,000
Sambre,	- Hainault and Namur	- -	94,356
Vesdre,	- Liege	- - - - - -	30,000
Ambleve,	- Liege	- - - - -	10,000

The Our, Sure, and Azette, in Luxemburg, flow into the Moselle, near the town of Treves, and belong to the basin of the Rhine. The Sure is navigable in Belgium 62,000 mètres, the Moselle 37,000, and the Yser 41,540. The total length of navigable rivers is 962,746 mètres.

The following Table, constructed from recent official documents of the Belgic Government, exhibits, in hectares, the Space occupied by each Division of the Surface, and the different Objects to which the Soil is appropriated: —

	Antwerp.	Brabant.	W. Flanders.	E. Flanders.	Hainault.	Liege.	Namur	Limburg.	Luxemburg.	Whole Kingdom.
Superficial extent -	283,310	328,322	323,449	299,787	372,206	289,319	366,181	460,000	700,000	3,422,574
Arable Lands - -	118,413	227,933	199,114	209,625	236,423	130,620	145,226	250,000	200,000	1,717,354
Prairies and Meadows	35,190	35,792	66,509	34,926	48,256	73,893	30,328	37,000	77,700	439,594
Gardens and planted Grounds - -	6,231	7,681	5,316	7,096	7,870	5,014	5,744	6,700	5,250	56,902
Hop Fields - -	- -	428	- -	40	568	221	5	- -	- -	1,262
Vineyards - -	- -	30	- -	13	- -	184	2	- -	700	929
Forests and Woods -	32,632	42,986	33,546	30,137	60,810	54,300	125,541	55,000	215,000	649,952
Ponds and Reservoirs	1,398	661	279	1,200	770	82	283	1,200	350	6,223
Sites of Buildings, Yards, and Courts -	2·301	2,612	2,916	3,961	3,261	1,675	1,277	1,800	1,600	21,385
Roads, Canals, Streets, and Squares - -	6,787	8,050	5,665	7,388	8,766	7,505	7,523	9,100	14,060	74,844
Rivers and Brooks -	3,027	804	757	2,437	721	2,023	1,658	1,700	2,000	15,126
Spaces devoted to various public purposes	1,777	83	4,740	1,839	1,100	212	251	500	210	10,712
Uncultivated Tracts -	75,554	1,262	4,607	1,126	3,661	13,608	48 343	97,000	183,130	428,291

It hence appears that the whole extent of surface under cultivation is nearly 2,220,000 hectares; that one half is arable, and nearly one eighth is prairie and meadow: that forests and woods cover 650,000 hectares, or above one fifth; the sites of buildings about 1-160th part, and the uncultivated lands about one eighth. Thus 15-17ths of the territory are occupied in a profitable manner, without including roads, canals, &c., which cannot be deemed unproductive.

Geology, Mineral Products. — West and East Flanders are composed of horizontal strata of white, yellow, and grey sand, and clay, separate, and mixed in different proportions. When the stratum of sand forms the surface, the soil is arid, and of difficult cultivation; and it is rich and fertile in proportion to the depth at which the sand lies below the vegetable deposit. Numerous beds of turf prove the ancient existence of marshes. The only mineral product of these provinces is clay, for the manufacture of tiles, bricks, pottery, and pipes. In some localities it contains oxide of iron. The sand stratum, in W. and E. Flanders, is deep, and constitutes one fourth of the area. In deep wells, descending to the primitive granite, alternate beds of sand and clay are found mixed with marine shells, which are evidently deposits of the ocean, and prove that, in remote ages, this whole region was submerged under its waters. Four or eight feet below the surface, where it is of clay, are the beds of peat or turf, varying in depth from 4 to 12 ft. To the poorer classes it supplies a cheap fuel, and its ashes, mixed with sand, are much used as a very successful manure for clover and grains. Turf is also produced plentifully in the province of Luxemburg, and in several other parts of the kingdom. Silicious pebbles, agates, calcedons, and red cornelians, are found in the sand and clay of E. Flanders, and many vegetable and animal petrifactions. Among the latter are large antlers of deer, and horns of oxen; with bones of the horse, ox, dog, and wolf. Vegetable fossils, consisting of various productions of the soil, are frequently obtained by the peasants for fuel. They include numerous trunks of the oak and ash, which are hard, black, and polishable, and yield red ashes in combustion. The geological character of the province of Antwerp and of the N. part of Brabant, is similar to that of the western region; and the ocean apparently once covered the whole northern half of the kingdom, as well as the plains of the W., for the hill on which Brussels is built contains many marine remains.

The rock strata of Hainault exhibit three successive formations: the first, or lowest, is composed of porphyry and quartz; the second of calcareous earths, coal, and schisti; and the third comprehends argillaceous earth, with deep deposits of sand, and various débris.

In the high south-eastern districts strata of red sandstone and limestone, containing organic remains, are incumbent upon rocks of granite, quartz, and slaty schisti, which have generally an inclination or dip from N.E. to S.W. Descending thence towards the N.W., the rocks of sandstone, limestone, quartz, and schisti, containing vast beds of anthracite, form a basin extending about 40 m. around the city of Namur. The strata of these rocks are often nearly vertical, so that the large coal pits in the vicinity of Namur and Mons require to be worked by shafts resembling wells. Namur produces, besides coal, abundance of carbonated lime, silex, excellent clays for the manufacture of porcelain, common pottery, and pipes, and a sand from which crystal is obtained. Pebbles susceptible of a beautiful polish are found about Fleurus. The S. and E. portions of Belgium, comprehending Hainault, Namur, Luxemburg, and Liege, are especially interesting to the mineralogist, as containing almost every article in the geological inventory, especially iron, coal, marble, various kinds of stone and slate, copper, lead, zinc, manganese, calamine, sulphur, alum, &c. Curious animal fossils are found in the province of Liege, where numerous caverns in the hills furnish bones of the bear, hyæna, elephant, rhinoceros, and fragments of the human skeleton. Near Maestricht is a subterranean labyrinth, extending several miles in length and breadth, in rocks of soft yellow stone under the hill of St. Peter, where are found the shells of large crabs and turtles, and the bones of gigantic lizards above 20 ft. in length. The numerous rocky valleys, by which the south-eastern half of the territory is intersected, have apparently been formed, not by the corrosive action of water, but disruption of rocks, which subsequently afforded channels for the present rivers and streams. At the village of Han, on the river Lesse (Han-sur-Lesse), in the S.E. of Namur, an immense cavern extends nearly a mile through the limestone rock, and forms the subterraneous channel of the Lesse. The numerous and spacious compartments of this remarkable cavern are naturally ornamented with clusters of glistening stalactites, and offer combinations of the grotesque and wonderful that remind the spectator of the celebrated grotto of Antiparos. Scientific descriptions of it have been given by Quetelet, Kikx, and Vander Maelen.

The working of mines constitutes a most important part of the national industry of Belgium. The mining districts form three divisions of the territory. The first is in the province of Hainault, and contains 155 mines, occupying an area of 102,415 hectares; the second, in the provinces of Namur and Luxemburg, contains 59 mines, covering an extent of 30,030 hectares; and the third, in the provinces of Liege and Limburg, comprehends 138 mines, and 32,777 hectares: total 352 various mines, occupying 165,222 hectares, or 66 square leagues of 5,000 mètres. In estimating the relative value of the mineral products of Belgium, coal must be considered first in order, and of the highest national importance, as furnishing the greatest amount of advantages to the country. This branch of industry is in full prosperity, and its immense produce amply supplies the manufacturing and domestic consumption of the kingdom, and is largely exported to France. The annual quantity extracted from the coal fields of Hainault alone is larger than the whole produce of France.

The three great centres of the coal mines, which are at Mons, Charleroi, and the city of Liege, produce annually 3,200,000 tons, besides other considerable mines in Namur and in Limburg, where, at Kerkraede, the value of the annual produce of one mine is 240,000 francs. In 1836 the extraction of coal was carried on in Belgium in 457 stations, established on 250 mines, which employed the labour of 31,190 workmen, and produced 22,000,000 hectolitres, worth, at least, 32,000,000 francs. In France,

at the same time, the number of coal mines in operation was 198; workmen, 17,500; quantity produced, 20,000,000 hectolitres; and value, 19,000,000 francs.

Previously to 1836 the maximum price of a ton of coals at Charleroi was 8 francs, and, in 1837, it was 19 francs. The words *houille* and *houillières*, the common Belgic expressions for coal and coal pits, are derived from Houille, the name of a blacksmith, who, in 1798, first discovered coal in the province of Liege.

Mines of iron are numerous, especially in the district between the Sambre and the Meuse; and many are worked in the provinces of Luxemburg, Liege, and Limburg. In quality the metal resembles that of France, but the price is lower. In 1836 the forges of the country wrought up 456,000 tons of prepared ore, which corresponds to double that quantity, or 912,000 tons, as taken from the mines.

Copper is found in the provinces of Hainault and Liege; and lead in Liege, Namur, and Luxemburg. The lead mine of Longvilly, in Luxemburg, is the largest in the kingdom. Zinc is obtained in Namur and Hainault; manganese in Liege; and pyrites, calamine, sulphur, and alum, in Namur and Liege.

The region included between the frontier of France and a line drawn from Ostend to Arlon, in the S. of Luxemburg, abounds in excellent materials for building, — freestone, limestone, granite, paving slabs, slates, &c.: there are also many quarries of excellent marble of various kinds. The black marble of Dinant is highly valued, and a species called *petite granite*, in which are found many marine organic remains. Superior large slates are quarried in the provinces of Namur and Luxemburg. At Herbemont, a little to the W. of Dinant, is the most important slate quarry in the kingdom, producing annually above 8,000,000 slates. The price at the quarries is about 14 francs per thousand. Sandstone is quarried in Liege and Limburg, but chiefly in Hainault. Ample supplies of excellent millstones, grindstones, whetstones, &c., are furnished from the stone quarries of Liege and Luxemburg; and the hones from the quarries near Spa are not exceeded in quality by any in Europe, to all parts of which they are exported.

Mineral Waters. — Belgium possesses several springs of medicinal mineral waters. Those of Spa, on the S.W. of the city of Liege, are celebrated throughout Europe. They issue from seven different sources, of which the one named the Pouhon is the principal. The water is perfectly clear, but gives, after standing, a slight deposit of ochre. It has an acid, ferruginous taste, and bubbles of gas continually escape at the surface. The quantities of iron and carbonic acid which it holds in solution are greater than in any other known mineral water. Its temperature is 50° Fahr., and the specific weight 1·00098. Numerous maladies are believed to be removed by using it for drinking and bathing. About a thousand bottles of it are daily sent to foreign parts, and the annual number of visitants at the spring amounts to between two and three thousand. The establishments for their accommodation are convenient and elegant; and the scenery of the vicinity affords ample amusement for the admirers of the picturesque; but as Spa is the favourite resort of speculating and reckless votaries of fashion, it is too true that the authorised system of gambling produces a great amount of evil to oppose to the good effected by the virtues of the water.

The hot springs of Chaudfontaine, in the same locality, but nearer to Liege, are also much visited, and others at Morimont, near Namur. At the ancient town of Tongres, near Maestricht, is a mineral fountain of a temperature about 60°. Pliny thus describes it, and it still retains its ancient properties: — "Tungri, civitas Galliæ, fontem habet insignem, pluribus bullis stillantem, ferruginei saporis quod ipsum non nisi in fine potûs intelligitur. Purgat hic corpora, tertianas febres discutit, calculorumque vitia."

Animal Productions. — All the domestic animals of the other countries of Europe are found in Belgium. Among the wild animals are a few boars, roebucks, bears, and wolves, which still find refuge in the immense forests of Luxemburg. Foxes are not numerous, but all the common kinds of game, quadrupeds, and birds, are plentiful in the woody parts of the country; especially in Namur, Luxemburg, Liege, and Limburg. The heaths of Verviers, in the province of Liege, are believed to be the only spot in Europe where the great heath cock, *grand coq de bruyère*, can be found.

Horses. — Flanders has long been famous for its breed of work-horses, and by their frequent importation into England, the English draught-horse breed has been much improved. The Suffolk punch-horse very nearly resembles the species most common in Flanders. The colour of the Flemish horses generally is chestnut, in all its shades, and roan. They are of the true working character, remarkably docile, and possessed of superior bulk and strength. The chief defect occasionally observable in their form is, a want of depth in the girth, and a dip behind the withers, but in all other respects they are finely shaped. A small head and pricked ear, rising neck and crest, short back and couples, great strength over the loins, round hips and lengthy quarters, open chest, a good arm, short legs of powerful sinew, short pasterns, semicircular hoofs, with a round frog and open heel — these points, comprised in a compact form, with a height of about 15 hands, constitute a work-horse of great merit, which, when three years old, can be purchased at 20 or 30*l*. They are kept in excellent condition, and are shod with so much care that a defective foot or lame horse is never to be seen. A dietary system is observed with great precision and regularity. Chopped straw is invariably given with oats, and the water is always well whitened with meal of rye, oats, or barley. Clover is the common fodder in summer, and carrots in winter, never omitting the chopped straw and meal-water. Of late the Belgic horses have been materially improved by propagating from select breeds, and judicious crossing. Every farmer in Flanders breeds his own work-horses; but the business of breeding is only a subordinate and accessory branch of husbandry. The polders and prairies of Antwerp afford pasturage to numerous Flemish horses; and there are in E. and W. Flanders a great many fairs, at which they are sold for exportation to France and England. Belgium produces several other varieties of the horse, among which the Luxemburg cob is a valuable breed, and has been imported into England for its excellent qualities, as a very compact and powerful little horse, short-legged, well-boned, about 13 or 14 hands in height, and equal to carrying the heaviest rider, as well as fit for hard work in harness. The Belgic government, with the view of improving the native breeds of horses by crossing them with those of England, has formed, at Tervueren, a beautiful stud of about 40 stallions, and appointed stations for them in all the provinces. The beneficial result of this expedient, which has been in operation since 1834, is already apparent in the production of a very superior race of horses, which in future will prevent the necessity of importing, as hitherto, the greater part of those required for the road and saddle. The government also awards premiums to the proprietors of winning horses at the public races.

In Flanders, the eager thriftiness of the farmer induces him to put his colts to hard work often at the age of 18 months, which is long before the requisite strength is acquired; and the consequence is very injurious. Horses are employed for all kinds of work in harness; but the peasantry commonly prefer making use of asses for riding, especially in the sandy districts along the sea shore. At an average of the last 14 years, the horses in each province were: —

Antwerp	14,396	Liege	23,618
Brabant	31,604	Limburg	25,030
W. Flanders	23,985	Luxemburg	34,386
E. Flanders	27,475	Namur	21,947
Hainault	47,203		

In 1830, the number of draught horses in the whole kingdom was 213,512.

Horned Cattle.—The breeding and management of all kinds of live stock in Belgium are much less exemplary than the culture of the soil. The cattle are the short-horned Dutch breed, but they are not in general so well formed as in Holland. Indeed, but little attention appears to have been devoted to the niceties of breeding, and the advantages of selection. The colour is, for the most part, black, and black and white. Flanders, W. and E., contain more than 252,000, many of which are fattened and sold. The oxen are larger than the cows, and weigh, when fattened, from 6 to 8 cwt.; but the same eagerness for gain which occasions the too early working of the horses, induces the farmer to hurry his oxen to market at about two years of age, before they are perfectly fattened. The same penurious spirit is apparent in the practice of having, in general, only 1 bull to 150 cows; and in some localities to upwards of 200. Numerous herds of cattle are reared on the wild herbage of the large forests in the central, S., and E. parts of the kingdom, and are finally fattened on oil-cake, at a very small expense. No part of Belgium produces better oxen and calves than the prairies of the great Campine plain, between Antwerp and Maestricht. Cows are kept in great numbers on the pastures about Furnes and Dixmude, in W. Flanders, and a large quantity of butter is made for exportation. In their cow stables, the Flemish farmers preserve the temperature of the month of May; indeed, so much attention is paid to the state of these places, that Mr. Ratcliff, in his *Agricultural Survey of Flanders*, speaks of having taken coffee in one of them, with the proprietor, in the middle of winter, without having been in the least incommoded by cold, dirt, or offensive odour. For the preservation of cleanliness, they adopt an odd expedient, which is very common in Holland, keeping the cows' tails erect, by means of a cord which passes over a pulley in the roof. The usual food in summer is

chiefly clover; and in winter, turnips, which are rather poor and small, with carrots, potatoes, a very little hay and straw, and the white soup which is given to horses; consisting of tepid water, thickened with oat, rye, or barley meal, and a small portion of oil-cake. However, not only the breed, but the treatment of cows in Flanders is regarded, by English writers, as very inferior. They are constantly confined to the stalls; and as the clover and other forage crops are there consumed in their green state in the summer, a deficiency of roots in the winter reduces their diet to dry straw, so that, as M. Vandermaelen remarks, they are often so emaciated in the month of May as barely to be able to walk; and Mr. Pryse Gordon, in his work on Belgium, states, that their wretched state in the spring is almost incredible: that they resemble those of Shetland, which, in scanty seasons of the year, are fed on dried stockfish; or the cows of the N. Cape, which are occasionally kept alive on pickled salmon! In the forest of Soignies, and other parts of Brabant, the cattle are large and coarse. The Belgians, in fact, do not yet appear to be generally aware that animals of a moderate size are more profitable than those of larger dimensions; that light, compact, and short-legged horses are most enduring for work requiring not strength alone, but activity; and that small and slight-framed cows, such as the Alderney, Suffolk, and Ayrshire breeds, produce more and richer milk than many larger kinds.

The Belgic government has, for some years, taken much pains to introduce superior breeds of cattle; and the proprietors are gradually becoming convinced of their interest in effecting a change in their kinds of stock, though the characteristic tenacity with which they cling to old-established notions, still greatly retards the beneficial accomplishment of the government plans of improvement.

On an average of the last 14 years, the annual produce of cattle in the whole kingdom was 898,076; and, on the same average, there were in each province the following numbers: —

Antwerp	88,412	Liege	83,576
Brabant	98,234	Limburg	104,340
W. Flanders	132,096	Luxemburg	120,360
E. Flanders	120,317	Namur	58,327
Hainault	92,414		

In 1830, the number of draught oxen employed in agricultural labour was 28,169.

Sheep.—On the farms of Belgium, the sheep stock is generally a secondary object of attention. There are two principal indigenous breeds, the Flemish and the Ardenne. The indigenous Flemish sheep is a tall, thin, long-eared animal, furnishing a coarse long wool, and the worst kind of mutton. The Ardenne breed is smaller, and, from ranging over the sweet wild herbage of the hills of Liege and Luxemburg, the mutton acquires an excellent flavour, but the wool is not of superior quality. The mode of feeding sheep in Flanders accounts for much of their bad qualities: they are housed at night, and during the day are followed by the shepherd and his dogs, along the lanes, pathways, and margins of arable fields, where they barely pick a subsistence, and never enjoy the range of a sweet and wholesome pasture. In winter they are let out, for a short time, but once a day, and are fed upon rye, straw, and hay; and though three or four years would be required to fatten them, they are slaughtered at one year old, in a condition, says Mr. Ratcliff, very nearly that of carrion. The sheep which are fed on the prairies of the Campine plain produce the best wool of the kingdom; and that of the Ardenne breed is next in quality. The wool and mutton of the flocks of Namur are considered comparatively good. Some fine specimens of the Leicester and Cotswold breeds, which have recently been imported from England, are expected to produce a much improved race, that will supersede the present inferior kinds. The total number of sheep in the kingdom is about 750,000; but the country is capable of feeding a much larger number, for, while subject to the dominion of the French empire, when agriculture suffered great disadvantages, it possessed upwards of a million.

The following are the numbers of sheep in each province, on an average of the last 10 years: —

Antwerp	23,719	Liege	115,149
Brabant	34,844	Limburg	127,942
W. Flanders	39,673	Luxemburg	184,929
E. Flanders	36,393	Namur	109,800
Hainault	79,884		

Swine. — The Belgic swine are similar to those of France, and have more resemblance to the greyhounds than the hogs of England. Their long and thin bodies are mounted upon fleet and lengthy legs, and the ridge of their backs describes the arc of a circle. Herds of these animals are turned into the forests, where they feed abundantly upon the beech mast and acorns that strew the ground. They make very good pork and bacon after having been long and well fed; but this kind of meat is the dearest in the market. Better breeds have been imported from England; and, from the prolific nature of the animal, they will probably soon become numerous and beneficial. A few pigs are reared by every farmer in Flanders for domestic supply of pork, which is the common animal food of the working classes; but the markets are supplied by distillers and millers, who have great facilities for feeding with the refuse of their establishments.

Fish. — Fresh-water fish abound in most of the larger streams. Those of the finest quality are found in the S. parts of the kingdom. The principal kinds are pike, trout, carp, perch, tench, eel, lamprey, sturgeon, salmon, barbel, shad, gudgeon, whitebait, anchovy, and ecrevisse, or fresh-water lobster.

In the fishery off the sea-coast, and in the mouth of the Scheldt, are taken skate, plaice, bret, soles, turbot, dab, angels, whiting, smelts, lobsters, crabs, pilchards, shrimps, &c.; and from the deep sea fishery are supplied cod, herrings, oysters, muscles, &c. The dog-fish (*chien de mer*) commits so much injury to the fishery of the Scheldt, that the government gives a reward for its destruction. About 200 boats are employed in the cod and herring fisheries, the produce of which has always been the subject of a considerable commerce. In 1837, the importation of cod at the port of Ostend was 8,175 tons. The national fishery is rapidly increasing, and premiums, amounting to 40,000 francs, are annually awarded by the government for its promotion.

Agriculture. — In consequence of the new political system adopted in Belgium since the Revolution of 1830, every branch of industry has been greatly improved and extended. The construction of numerous roads, railways, and canals, has produced an enormous increase in the value of land and buildings, amounting, in several whole districts, to ¼th of former estimates; and the government has established an especial council, charged with the care of ascertaining the means of promoting the interests of agriculture. At Brussels has been formed a veterinary and agricultural college on a large and liberal scale, which is expected to effect many beneficial improvements, especially in the breeds of live stock. The natural soil of Belgium is composed of mere sand and clay, combined in various proportions. The clay alone contains the nutritive properties required for the support of vegetation, but without a due admixture of sand, to render it porous and friable, it is perfectly sterile, from its too great adhesiveness, retention of water, and liability to become baked by the sun. The artificial soil, in Flanders and many other highly cultivated parts of the country, is rich, black, and loamy, and possessed of great fertility, through the vast quantities of manure, vegetable and animal, which for ages have been constantly intermixed with the natural sand and clay. Although in Belgium the cultivation of the earth is carried to a great extent, 1-11th of the whole surface remains still uncultivated: 1-8th consists of grass-lands, the best of which are in the two Flanders; and the arable lands occupy one-half. The best are in the two Flanders, Hainault, and Brabant. In these provinces no waste land whatever is to be seen; but in Antwerp, Limburg, and Luxemburg, it covers a large extent of country. However, commercial associations are already formed for the purpose of cultivating the waste lands of the great Campine plain in Limburg, and for clearing some of the forests of Luxemburg.

Agriculture of the Polders. — The name polders is given to tracts of low alluvial soil, artificially gained from the sea or the Scheldt, by lofty embankments, and drained by numerous intersecting ditches, from which, in some instances, the superfluous water is continually pumped by the agency of windmills. These embanked enclosures are highly cultivated, and form an extensive chain of square green islands along the muddy banks of the Scheldt and its affluent the Rupel, in the provinces of Antwerp and E. Flanders, and on the sands of the sea-shore. Twice a day the tides reach the broad and high digues or embankments, which bound, on each side of the Scheldt, a wide extent of alluvial ground, and protect the adjacent country from inundation; and while the waters remain upon this surface they deposit a fine argillaceous and calcareous mud, the *débris* of various vegetable and animal substances, collected in their drainage of the loose and rich soils of Flanders, and brought from the ocean. These alluvial accretions, when first enclosed by dykes, become naturally covered by a fine tender grass, and are called in Flemish *schors*. They are first sown with *colza*; that is, oleaginous colewort, *Brassica oleracea arvensis*, not the *Brassica Napus* of Linnæus, but the *Brassica campestris* of De Candolle. The crops of this vegetable on the polders are always very abundant. When these enclosures have been completely brought into cultivation, which requires several years, they consist partly of natural meadow, affording excellent pasturage for numerous herds of cattle, and partly of arable lands, on which are raised the finest crops of all kinds of grain; especially

barley, 8 or 10 quarters per acre, and oats 10 or 12 quarters per acre. Two crops in the year are commonly obtained; no repose is given to the soil, and it needs no manuring; but in the course of time it becomes too compact and adhesive, and greatly decreases in fertility, if not renovated by artificial assistance, so that the older lands of this description are fallowed once in six years, and the rotation is winter barley, beans, wheat, flax, clover, and potatoes. The colour of the soils, in their primitive state, is a bluish grey, which is owing to the presence of a considerable quantity of the oxide of iron. The embankments are made in some instances by the government, in others, by companies, or individuals, under a grant and tenure of the enclosures, from government, for about 20 years, either rent free, or for small annual payments. It is calculated that about 4·5ths of the surface which, in the sixteenth century, was submerged by the Scheldt and the sea, now produces agricultural crops, and is studded with numerous farm establishments. The area of each polder, the chemical analysis of their soils, and various other particulars, are given in M. Vandermaelen's *Geog. Dict. of the Provinces of Belgium*. They vary from 20, 50, and 100 acres, up to 1,000. The polder of Snaerskirke, on the sea-coast, near Ostend, contains 1,300 acres, divided by ditches into rectangular fields of 13 acres each. The bank or dike is 15 ft. high, 30 ft. in breadth, at the base, and 10 ft. at the top. The fatal devastations which have been occasioned by the concurrence of high winds and tides in rupturing the dikes that are reared as barriers to the rivers and the sea, render it an object of great importance with the government to superintend the maintenance of their efficiency. A system of public regulations for this purpose is therefore enforced with great vigilance and promptitude.

Agriculture of the Bruyères. — The sterile heaths which extend over the N.E. parts of the provinces of Antwerp, and the N.W. of Limburg, as well as over many sq. m. of the surface of the S.E. portion of the kingdom, are called *bruyères*, from the fact of their chiefly producing the heath-plant, bruyère, *Erica Brabantica*. It grows spontaneously and abundantly in the most arid sands, as well as in humid marshes; and it naturally possesses so much vitality and prolificness that its complete eradication cannot be effected without considerable trouble. In summer its profusion of flowers very agreeably varies the dreary aspect of the level wastes on which it flourishes; and they also afford plenty of food for the bee; but the honey it produces is not of a good description. The plant is browsed by sheep; gathered for littering cattle; used in tanning; and applied to several other useful purposes. The great obstacle to the cultivation of the heath lands, or bruyères, is the frequent occurrence of beds of ferruginous turf and stiff clay near the surface; however, many extensive tracts have been brought into profitable cultivation by the plentiful application of rich manures, and the laborious attention and management for which the Belgic husbandman is so proverbially distinguished. The surface on which he begins to operate is a very thin external coat of black mould, consisting of vegetable putrefactions. This, in some parts, is sufficiently deep to recompense the labour of ploughing it into the subjacent sand, with copious quantities of dunghill manure; and from this combination are obtained crops of potatoes, barley, oats, clover, and buckwheat. Sheep are remarkably fond of the scattered blades of natural grass on the bruyères, and cattle are fed in great numbers on those parts of them which are laid out in pasture, consisting for the most part of spurry, *Spergula arvensis*, which is their favourite food.

Agricultural Produce and Practice.—Corn, flax, hemp, and timber, constitute the most important materials of the agricultural wealth of Belgium. The soil, artificially enriched, produces commonly more than double the quantity of corn required for the consumption of its inhabitants, which is computed at 6 millions of hectolitres (each 2¾ bushels) per annum. The annual quantity of grain sold in the markets throughout the kingdom represents a value of 2 millions of francs. The following table exhibits the quantity and medium price per hectolitre, of grain and potatoes, sold at the principal markets in 1835.

	Hectolitres.	Francs.
White wheat	371,025	14·03
Red wheat	478,181	15·08
Rye	395,437	9·04
Buckwheat	76,185	10·02
Oats	336,445	6·57
Barley	244,506	8·86
Potatoes	208,756	3·90

The medium price of wheat throughout the year 1836 was 15 fr. 15 ct.; and of rye, 10 fr. 5 ct. per hectolitre.

The kinds of agricultural produce in Belgium are very numerous, including the following grains and plants, all of which are cultivated in Flanders: — Wheat (white and red), rye, barley, oats, colza, buckwheat, hemp, flax, potatoes, tobacco, hops, turnips, red carrots, parsnips, peas, beans, clover, spurry, lucerne madder, saintfoin, chicory, beet, woad, and poppies.

The central part of the kingdom, contained within a line passing through Mecklin, Termond, Tournay, Mons, Namur, and Louvain, includes much of the richest portion of the soil; but it does not, on the whole, exceed the average fertility of the inland counties of England, and must decidedly be considered inferior to the rich alluvial soils denominated the carses, in Scotland. The land in general is not so neatly tilled as in the best English agricultural counties. The husbandry of the central parts differs considerably from that of Flanders. The farms are larger, and less carefully cultivated. The spade is less used in the fields, and they have consequently not the same resemblance to gardens. In Hainault and Antwerp the cultivation of flax and hemp is becoming a primary object; but these valuable crops are produced to far greater extent in the two Flanders, the agriculture of which is so highly reputed as to require a separate notice, which hereafter is given. In the richer parts of Brabant, flax, hemp, and colza, are extensively cultivated, with much manuring, and a succession of wheat. Rye, in this province, is always a large crop, for bread and distillation. The oleaginous plants flourish in all the provinces, and the culture of hops is very successful in Brabant, Flanders, and along the valley of the Meuse, in the province of Liege. Maize has been partially introduced, and found to succeed. Madder is grown chiefly in Flanders and the province of Antwerp. Most of the principal farms throughout the kingdom possess distilleries, and the stalled cattle are fed upon the refuse wash. With the exception of Flanders, no particular rotations of crops are adhered to. The fields are cropped according to the wants of the farmer, and the state of the land. An abundance of manure allows of rapid returns of white straw crops. All the clover, and other forage crops, are used green, in the stalls and stables, as food for cattle and horses. Little hay is made, in proportion to the number of cattle kept throughout the winter; so that, on the failure of green food, the chief recourse is to roots, namely, turnips, carrots, and potatoes. The stall-fed cattle furnish ample supplies of manure, the liquid part of which is collected in large tanks of brickwork, and is either carried out and poured over the land, or is used to moisten and accelerate the fermentation of the dry dung-heaps and composts.

Implements of husbandry are few, and of simple construction. The light Flemish swing plough is generally used, and also the old, heavy, and clumsy turnwrest, or Walloon plough, which is still retained from a prejudiced preference of antiquated disadvantages. The harrows are triangular, with wooden tines, set at an angle of 45 degrees. A stone roller is used for breaking the argillaceous clods; and the machine for winnowing grain is similar to those commonly used in England. The mouldebaert is noticed in the following account of Flemish agriculture, which includes many particulars equally appertaining to the other Belgic provinces.

Flemish Husbandry. — Flanders, in consequence of its great commercial prosperity, was remarkable for the advanced state of its agriculture long before improvement in this important art was observable in any country N. of the Alps and Pyrenees. Bruges and Ghent were important commercial towns in the 11th century, and supplied the various courts of Europe with the rich silks and tapestries which then were their chief luxuries. The commerce and agriculture of Flanders grew together; and in order to account for the remarkable excellence of the Flemish husbandry, which has been celebrated for upwards of 600 years, it is necessary to keep in view the close connection which in that country exists between the farmer, the manufacturer, and the merchant; and the efforts of a continually increasing population, in stimulating the exertions of those who provide the necessaries of life. In Flanders, as in every country densely populated, where the villages are thickly scattered, and where, by means of water carriage on rivers and canals, manure can be transported to the land at a trifling expense, fallowing and laying down to pasture are necessarily superseded by increased tillage and manuring. It is remarkable that, in China, where a similar density of population exists, there prevails the same anxiety as in Flanders to collect every substance and liquid that can possibly serve to increase the fertilising powers of the soil; and that in both these countries ordure of all sorts is carefully collected, sold as a most valuable article of commerce, and applied in the fields and gardens as the *ne plus ultra* of stimulating manure. Were the whole of Flanders laid out in large farms, and a third or fourth part fallowed every year, or a half left in natural grass, the population could not be fed; and instead of exporting agricultural produce, as at present, a great importation would be requisite, to supply the demand of internal consumption. Besides, the poor soils of Flanders could never be recruited by such a course. Without repeated manuring, there could be no vigorous vegetation; and the land left to nature would return to its original state

of heath. The necessity of providing for constantly increasing numbers of inhab. produced the agricultural perfection for which Flanders has long been renowned; and the demands of commerce and manufactures have so multiplied the objects of cultivation, that flax, hemp, the oleaginous seeds, and various other plants required for the arts, very often produce a greater profit to the former than the farinaceous grains. The very large produce obtained by the Flemish farmer is solely attributable to indefatigable industry, for the soil is naturally poor, and the climate is by no means especially favourable, the winters being longer and more severe than in England. Three or four ploughings, and two or three harrowings, are commonly bestowed upon each crop. The collection and application of manure is also a great principle of Flemish husbandry. In Flanders nothing can be effected without abundance of manure; and, consequently, the greatest care is taken to procure it. The maxim is, no forage no cattle; without cattle no manure; and without manure no crops. The stall-fed cattle are the principal source of supply, but every expedient is resorted to, in order to increase the quantity and improve the quality. All kinds of animal and vegetable matters are carefully collected in pits walled with brickwork, where they undergo the putrefactive process, by being mixed with substances already partially decomposed. Another indispensable and universal auxiliary of the Flemish farmer, is the tank of liquid manure, collected from the drainings of the stables, cow stalls, and dunghills, and from sources which in England fill the cesspool (*vidange*). In Ghent, the sum received by house servants, for liquids collected for manure, often amounts to as much as their wages. The liquid manure is carried to the field in water carts, and carefully distributed over the surface of the land shortly previous to the sowing of seed, especially that of flax. Every farm-yard possesses one of these tanks, which are commonly of large dimensions — about 40 ft. in length, by 14 in breadth, and 8 in depth; and usually constructed beneath the stalls for cows. An acre of land destined for flax receives very commonly 2,500 gallons of this animal liquid subsequent to an abundant application of solid manure, which is deeply ploughed into the soil. The efficacy of the liquid is often heightened for flax, by dissolving in it large quantities of rape cake. Every distillery of moderate extent has 50 or 60 head of cattle constantly stalled, and fed upon the grains and refuse wash. These establishments were formerly very numerous; but the duty on spirits, and the interference of the government, have much reduced their number, and consequently occasioned a deficiency of manure and of crops; as it is estimated that every beast produces annually 10 or 12 tons of solid, and 26 hogsheads of liquid manure. Large quantities of peat ashes, imported from Holland, are used as a dressing for clover; and lime, powdered bones, marl, and the dung of pigeons, &c., are used in particular districts.

The Flemings boast of no great discoveries in the art of tillage. Their usages are referred to time immemorial, and they possess neither record nor tradition of the introduction of any particular article of produce, except the potato, which is believed to have been received from England. Clover, rape, and turnips, have been cultivated for several centuries in Flanders, whence they were brought into Britain. The progress of agriculture has been slow and gradual; and while other countries have been constantly adopting new modes and implements of culture, the Flemings have proceeded without any deviation from the old beaten track.

Very few books on husbandry have been published in Flanders; and were there many, they would not be read, for adherence to old-established methods, and repugnance to what is new, are characteristic of the Flemish farmer. No practice has been altered, nor has any new produce been generally introduced since the potato, except the white beet, from which sugar is made. None of the modern complicated machines have been adopted. There are no threshing machines, drills, scarifiers, or horse-hoes; and the common fan and riddle are much more frequently used than the winnowing machine. The spade is one of the most important implements in Flemish agriculture, and is used to a much greater extent than in any other country. The trenching-spade is constantly employed on all the light lands, and the blade of the Flemish hoe, a most efficient instrument, resembles and operates as a substitute for that of the spade. Indeed, the *garden* has evidently been the original model of the Flemish farms, and those of 40 or 50 acres must still be regarded as enlarged gardens. In comparing the cultivation of land in Flanders with that of England, we can only adduce the large gardens in the neighbourhood of London, where the common kinds of vegetables are raised for supplying the markets; where green crops are cut early for horses and cows kept in London, and where the soil is continually enriched with the manure London supplies. By the prosecution of spade husbandry, an industrious Fleming, with 15 acres of good light land, brings up his family in decent independence, and in the course of his life accumulates sufficient means to put them in possession of a little farm of their own. There are many small proprietors who have risen slowly by the labour of their own hands; and their habitations show, by the great care and neatness observed in every particular, that an honest pride is felt in possessing this reward of industrious exertion. Incessant labour of the body, and occupation of the mind, are not regarded by the Flemish peasant with discontent, for to the one they are found to secure good health, and to the other tranquillity.

The farms in the Pays de Waes, between Ghent and Antwerp, are cultivated with astonishing method and neatness, and afford the most perfect specimens of field culture on the principles of gardening. The soil is artificial, and the result of centuries of systematic manuring, which has converted a barren sand into a rich black loamy mould. The fields, as in all parts of Flanders, are enclosed by hedges, and they are remarkably small — from half an acre to an acre; every part of them is kept perfectly free from weeds, and they are elevated in the centre, so as to have a gently inclined slope towards the extremities, where ditches carry off excessive rain, and prevent injury and reduction of the soil. Nearly similar care and preciseness are observable in the whole of W. and E. Flanders; but, while the Flemish farmers are greatly superior to the English, in minute attention to the qualities of the soil and to circumstantial particulars of cultivation, in the systematic economy of land and the judicious succession of crops, they are much inferior in amount of capital, in varied and improved implements of tillage, and especially in the choice and breeding of cattle and sheep.

Agricultural implements are of rude and clumsy construction, the only objects desired being strength and cheapness. Two kinds of ploughs are in use; the old Walloon plough, resembling the heavy turn-wrest wheel plough of Kent; and the light single-handed Belgian swing plough, which has been the model of the Rotheram and other improved swing ploughs adopted in England. The harrows are of light construction, with wooden tines pointing forward at half a right angle with the frame. The *traineau*, or sledge, is an instrument peculiarly Belgian. It consists of a heavy triangular boarded frame, which is drawn by a pair of horses over the surface of the ploughed land, to smooth it, to break the clods, and to press in the seed. The efficiency of its performance is much assisted by the weight of the driver, who generally stands upon it, and keeps it level. Another instrument peculiar to the agriculture of Belgium and Holland, and used for levelling, is the mouldebaert, which is a large wooden, iron-edged shovel, in the form of an English tin dust-pan, with a stout handle about 6 feet in length. A pair of horses draw it by chains fixed at the middle of the sides. It takes up more than 5 cwt. of earth at a time, and, without stopping, the load is discharged in the proper place by letting go the handle, which is pulled back by a rope affixed to its end. In some districts the corn is threshed by a grooved block of hard word, having a long handle. The Hainault scythe has often been described in agricultural publications. It has a broad blade about 20 inches in length, and resembles the fagging hook employed in Surrey and Middlesex, except that it allows the workman to stand upright. It is commonly used for cutting corn; but the cradle scythe is considered a preferable instrument in the hands of a skilful mower.

The *extent of farms* in Flanders, and throughout Belgium, very rarely exceeds 100 acres. The number containing 50 acres is not great, but those of 20, 15, 10, and 5 acres, especially between 10 and 5, are very numerous. The extensive manufactures which formerly flourished in Belgium collected a dense population of artisans in the neighbourhood of the great towns; but when the busy scene of manufacturing industry was transferred to other countries, this population was deprived of its means of handicraft employment, and was obliged to resort to the cultivation of the soil for subsistence. Such appears to have been the chief, though possibly not the sole, origin of the still prevalent system of small farms, which are generally cultivated by the holder and his family without any other assistance. Some particulars of this class of peasant farmers are given below. Although the soil of Belgium, and especially of Flanders, is remarkable for the number of its minute divisions, it is stated by M. Vandermaelen, in his geographical description of the country, that "the prevalent opinion among the most intelligent Flemish agriculturists is in favour of *large* farms, as requiring, in proportion to their extent, a less establishment of buildings than the smaller ones." Indeed, most of the principal writers on agriculture have expressed a decided preference of farms containing several hundred acres, it being obvious that many very important means of facilitating the progress of agricultural improvement are obtainable only by the command of capital and the exercise of that generous spirit of enterprise which arises

from the possession of extensive knowledge and exemption from inherited prejudice. Agriculture always has been, and must be, indebted to the capitalist for the prompt and judicious introduction of new improvements in farm economy, in modes and objects of culture, in the application of the auxiliary sciences of chemistry, geology, botany, and mechanics, and for many valuable practices derived from distant and foreign parts. There is also great advantage in the acquisition of that skill in each department of agricultural business, which results from the necessary division of labour, where numerous hands are systematically employed under the intelligent management and supervision of one well-informed directing head. A large farm requires a large capital; and unless accurate accounts are kept of money paid and received, of work done, of fodder consumed, and of the distribution of the labour of men and horses, so as immediately to detect any extravagance or error, and at all times to show the profit or loss, there can be no inducement to apply capital to the cultivation of land. The most universal disadvantage of small farmers in every country is their contracted range of observation, and consequent inveterate retention of local and hereditary usages, however unfavourable to their own interests, or opposed to the facts of modern improvements. In Flanders, for instance, where the small farm and cottage system is conspicuous, no new facilities, inventions, or scientific discoveries, are ever introduced or attended to: on the contrary, every alteration, however obviously for the better, is invariably regarded with the greatest repugnance. The natural barrenness of the soil has compelled its cultivators to have recourse to indefatigable industry, and their meritorious exertions are amply rewarded by the very superior state of its present artificial fertility; but there are many important particulars in which the adoption of new and improved practices would greatly benefit the farmers and the nation. Turnips, for example, are a very extensive and necessary crop in Flanders, but from being always raised as a second crop after rye or barley, and sown, not with the drill, as they ought to be, but broadcast, and being weeded with the hand instead of the hoe, the produce is singularly small, compared with the extent of surface from which it is obtained, and the root is much inferior to that cultivated in England by the drill. Agricultural weeding in general is performed, not with the hand hoe and horse hoe, but by the hands of women and children, who crawl over the fields upon their knees. Several clumsy and awkward implements of husbandry might, with great advantage in expedition and efficiency, be replaced by modern and more scientific instruments; and were it only for humane considerations, the farmers' horses might well be released from the burden of massive wooden collars, which are five times larger and heavier than is either reasonable or useful. But such is the pertinacity with which old-established customs are adhered to by the small Flemish farmers, that they are often not only willing and content, but determined, to experience every disadvantage that belongs to the routine of comparatively ignorant ages; and this aversion to change has a great influence in retarding the beneficial effects of the efforts of the government to introduce into Belgium the superior English breeds of agricultural animals. Count de Lichtervelde, in his *Mémoire sur la Flandre Orientale*, produces a series of arguments in favour of small farms requiring only one plough and two horses, which are sufficient for about 44 acres; and he more especially insists upon the difficulty of one person supervising the labours of many, so as to secure the requisite assiduity and attention. He also observes, that the best cultivated farms in Flanders are those of about 20 acres. To these objections it may be answered, that abundant experience proves the possibility of many operatives in different localities being very efficiently directed and visited by one intelligent and active proprietor: and that the 20 acre farms in Flanders are more properly extensive gardens, chiefly cultivated, as other gardens, by the spade.

Crops in Flanders. — Great attention is bestowed upon the preparation of the soil, so as to secure the most abundant crop from the smallest quantity of seed. About one third less is used in Flanders, for broadcast, than in England for drilling.

Rye is a very luxuriant, and a principal crop, as it forms an important article of consumption for bread among the working classes. The crops of wheat are uniformly fine, and free from smut and mildew, which are effectually prevented by carefully selecting the seed, by changing it every second year, and by steeping it in a solution of blue vitriol, or copper (sulphate of copper); four ounces in four gallons of water, for three bushels of grain. After thoroughly stirring, skimming off the light grains, and remaining half an hour, the grain is strained off in baskets, washed in pure water, and when dried, is ready for sowing. It is steeped by some in brine, and dried by sifting lime upon it. One bushel of seed wheat produces above 20 bushels. Barley is a crop of much importance, malt liquor being the common beverage of all classes of the population. The winter barley, or sucrion, is the favourite kind. It is sown in autumn, and reaped in July. Oats thrive well, with little manure, in almost every soil of Flanders. Buckwheat is raised chiefly as food for poultry and pigs, and for distillation. Peas, beans, and tares, are commonly cultivated as fodder for cattle. Clover is the glory of Flemish farming, and in no country is it found in such perfect luxuriance. Repeated ploughings, rich manuring, and a vigilant prevention of weeds, serve to produce a vigour and weight of produce which is truly surprising, and to the English farmer the wonder is much increased by knowing that such prodigious crops are raised from six pounds of seed per acre. Peat ashes from Holland, about 40 bushels per acre, are invariably used as a dressing for clover. From Flanders this valuable grass was first introduced into England. It is a crop of great value, and indispensable to the Flemish farmer, who ploughs all his land, and feeds his cows and horses on green food brought to the stall. The common red species is more cultivated in Flanders than the other varieties. The liquid manure from the tank is believed to produce a strong taste, with which the cattle are disgusted. The potato crop, at the season of its full growth, also exhibits a remarkable luxuriance. The stalks exceed a yard in height, and their tops form a surface as level as the land from which they rise. The produce is often 10 tons per acre, and it consitutes one of the principal articles of food of all classes of the population, and of the farmer's live stock, especially cows and horses. This useful root was introduced into Flanders from England at the end of the sixteenth century, and it has long appeared in each rotation of the Flemish crops. Turnips and carrots are extensively cultivated for stall-fed cattle, after rye and barley. The turnips, in size and weight, are much inferior to those of Norfolk, and the carrots also yield a comparatively poor return. The cultivation of the white and yellow beet, for the extraction of sugar, is continually becoming more extensive, and several large factories have been established for the manufacture of this important article of commerce. The chicory-plant, of which the root, when properly torrified, is a very good substitute for coffee, is raised in large quantities in Flanders, where establishments are formed for its preparation. The flax crop is an object of the greatest care and exertion. Its cultivation is thoroughly understood, as well as every process of its preparation for the loom; and the land which produces this plant exhibits all the neatness and precision of a carefully managed garden. Flax is a staple commodity in Flanders, — it serves to employ a great portion of the population, and it is largely exported. The town of St. Nicolas, between Ghent and Antwerp, is considered the largest and best flax-market in Europe. The finest description is raised in the neighbourhood of Courtray. The value of an acre is about 25*l*., and the seed about 5*l*. or 6*l*. additional. Crops of flax produced from native seed are found to be superior in quantity, but inferior in quality, to those produced from the seed of Riga, which is therefore procured by the Flemish farmers every year. Hemp is cultivated with great care, but not to the same extent as flax. Colza (*Brassica campestris*) and a species of poppy, the *oilette* (*Papaver somniferum*), are extensively cultivated for the oil contained in their seeds. Woad is raised for its dye of blue, weld for yellow, and madder for red. The two Flanders, and the province of Antwerp, produce a considerable quantity of madder, but the whole annual produce of the kingdom is insufficient to supply a fourth of the quantity consumed at one of the large factories of cotton and woollen: those of Ghent alone make use of madder to the value of six millions of francs per annum. Woad thrives best on gravelly and sandy soils; but madder requires land of the best description, and abundance of manure. The cultivation of tobacco was common several years ago in nearly all the provinces, but at present it is confined to Flanders; and the produce now is reduced to about one tenth of its former amount. The best tobacco is raised and prepared at Werwick, in the neighbourhood of Ypres. An acre produces about 4,000 lbs. The culture of this plant requires a great amount of labour, attention, expense, and manure. Hops are grown in small patches on almost every farm in Flanders. Pastures of grass are scarcely to be met with, except in the polders, and the vicinity of Dixmude and Furnes, where they are most luxuriant, and afford grazing for numerous cows: stall-feeding, however, is universally practised. One beast for every three acres of arable land is a common proportion, and where spade husbandry prevails, a larger number are found. Chopped turnips, carrots, and potatoes, boiled up with the meal of beans, rye, or buckwheat, constitute the usual food of cattle, and it is called *brassin*. Large quantities of good butter for home consumption and exportation are produced from the milk of cows thus fed, with the addition,

in summer, of clover and other green fodder, cut and brought to the stalls. The churns are ingeniously worked by a horse. Cheese rarely is made in Flanders, almost all the demand for it being supplied by importations from Holland. Some account of the live stock of the Flemish farmers is given under the divisions relating to horses, horned cattle, sheep, and swine.

Rotation of Crops in Flanders.—Experience has long convinced the Flemish farmers of the great advantage of frequently changing the crops on the same land; so that, in the course of time, a system of rules has been established from which they seldom venture to deviate. They have been rotation farmers for centuries; and the properties and present capabilities of every cultivated acre in Flanders are matters perfectly well known and appreciated. The order of succession of each kind of crop depends upon the nature of the soil, and upon various modifying circumstances, which, however, are so clearly understood and estimated that no confusion is known to arise. Every field is successively cropped according to principles discovered by ages of experience and careful attention to different results. It is not possible, in the present place, to present the numerous series of rotations adopted on different soils, and for different purposes: they will be found well explained in a recent work on Flemish husbandry, published by the Society for the Diffusion of Useful Knowledge.

The following is the *average produce* of the principal crops per acre, in the Waes country, the most fertile and highly cultivated part of Flanders:—Wheat, 20¼ bushels; rye, 25¼ bushels; oats, 41 bushels; clover, 13 tons; potatoes, 10 tons; flax, 483 lbs. of yarn, and 6¼ bushels of seed.

The *land* in Flanders is generally freehold, or the property of civil or religious corporations. The estates are small, and if not cultivated by the proprietor himself, which is more frequently the case, they are let on leases generally of 7, 14, or 21 years' duration. The occupier is bound to live on the premises, pay taxes, effect repairs, preserve timber, not sub-let without a written agreement, and to give certain usual accommodations to the next tenant at the end of the lease. The farm establishments are always convenient, and generally more ample, in proportion to the extent of the land, than in England and Scotland. In addition to the usual accommodations, the larger farms are commonly provided with a distillery, a crushing-mill for the preparation of oil from the colza and poppy, and sometimes a mill for grinding corn.

Peasant Farmers.—The small farms, between 5 and 10 acres, which abound in many parts of Belgium, have much resemblance to the small holdings in Ireland; but while the Irish cultivator exists in a state of miserable privation of the common conveniences of civilised life, the Belgian peasant farmer enjoys, comparatively, a great degree of comfort. His cottage is built substantially, with an upper floor for sleeping, and is kept in good repair: it has always a small cellarage for the dairy, a storeroom for the grain, an oven, an outhouse for potatoes, a roomy cattle-stall, a piggery, and a loft for the poultry. The furniture is decent, the bedding amply sufficient, and an air of comfort and propriety pervades the whole establishment. The cows are supplied with straw to lie upon; the dung and its drainings are carefully collected in the tank; and a compost heap is accumulated from every possible source. The premises are kept extremely neat, with a constant observance of the most rigid economy, industry, and regularity. No member of the family is ever seen ragged or slovenly; but all are decently clothed, though it be with the coarsest materials. The men universally work in linen canvass frocks, and both women and men wear wooden shoes. Rye bread and milk principally constitute their diet. Mashed potatoes and onions, with occasionally slices of bacon, are the usual articles for dinner. The great superiority of the Belgian over the Irish peasant farmer is owing not to any advantages of soil or climate, but to a better system of cultivation, and especially to established habits of sobriety, forethought, and prudent economy. The points of his superiority consist—1st, in his keeping as many stall-fed cattle as possible, to secure a supply of manure; 2d, in carefully collecting, and skilfully applying, manure; 3d, in adhering to an advantageous rotation of 6 or 7 crops, by which is obtained the utmost amount of produce without any fallowing. On farms of 6 acres are found no horse, plough, nor cart: the only agricultural implement, besides a spade, fork, and wheelbarrow, is a light wooden harrow, drawn by hand. The whole of the land is dug and deeply trenched with the spade, and the whole farm work is carried on without any assistance beyond that of the family. The live stock commonly consists of two cows, a calf or two, one or two pigs, a goat or two, and some poultry. All the different kinds of crops which have already been noticed are cultivated nupo these small establishments with the same care and success as on the finest farms in the kingdom. The common rent of land is about 20*s*. an acre, and the weekly pay of a day labourer 5*s*. (*Mr. Nicholl's Report on Holland and Belgium*, passim.)

Horticulture.—Numerous and extensive gardens are cultivated in various parts of the kingdom for the supply of the town markets with culinary vegetables, and the common hardy fruits, which are produced in great abundance and excellence. The annual value of this kind of produce is estimated at 8,000,000 francs. Apples and cherries are especially good and plentiful, and are found in every farm-house garden in the kingdom. The culture of the vine is attended with considerable success in several elevated localities on the banks of the Meuse; and some of the wine there produced is far above mediocrity. From Belgium England obtained the cabbage, lettuce, and gooseberry.

Floriculture.—In Belgium the culture of flowers is an object of as much gratification as in Holland, and the climate is far more genial for bringing forth the beauty of these amiable ornaments of civilised life. The last classification of the Belgic population in 1836 shows that, in the whole kingdom, there were then 100 professional florists, of whom two thirds were in E. Flanders and Brabant. The tulip, carnation, and wall-flower, were brought into England from Belgium.

Manufactures.—*Wool*, in Belgium, is the object of an immense industry. The manufactures of all kinds employ a quantity of foreign wool, of which the annual value exceeds 14,000,000 francs. It is imported from Saxony, Prussia, Silesia, Poland, Bohemia, Hungary, Moravia, and the southern provinces of Russia. The annual production of the indigenous wool, of pure and mixed breeds, scarcely amounts in value to 200,000 francs.

Woollen cloths form one of the most important branches of manufacturing industry, and they are greatly superior in quality to those produced in France. The dye of the black cloths, which are made in large quantities, is considered to be more permanent, deep, and beautiful, than that of the best English cloths. The casimirs of the Belgic looms are also as excellent as those of France. The chief seats of the woollen manufacture are at Verviers, Liege, Dolhaim, Limburg, Hodimont, Stavelot, Thuin, Ypres, and Poperinghe.

According to a report of the chamber of commerce of Verviers, in 1833, the woollen manufactures of that city and its environs employed alone a population of 40,000 operatives. They produce annually about 100,000 pieces of cloth, worth 25,000,000 francs, and the capital employed in the purchase of raw material, manual labour, interest of machines, and buildings, &c., is estimated at 75,000,000 francs. The number of looms is double that in 1812; which, considering the introduction of mechanical improvements, implies an amount of production triple that of the time when the whole of Europe was supplied from this locality. However, the cloth manufacture underwent some reduction in 1835-36. Woollen stuffs, such as flannel, coverlets, serge, bolting-cloth, camlet, &c., are made in all the provinces of the kingdom, but principally in Antwerp and Hainault.

Carpets.—The carpet manufactory of Messrs. Schumacher and Co. at Tournay, is the most extensive and important in Europe. It produces all kinds of what are called *Brussels* carpets, from those which adorn the sumptuous palaces of kings, to such as are used for the floor of the cottage. Constant employment is given to 1,600 workmen, who occupy from 80 to 100 looms, and produce annually about 120,000 mètres of carpeting, seven eighths of which are exported. Besides the principal manufacture at Tournay, there are several others of secondary rank in the same town; in Brussels, Antwerp, Ghent, Bruges, and Courtray.

Flax and Linens.—Belgium produces a large quantity of flax. The various manipulations to which this product of the soil is submitted form one of the most ancient and important sources of the manufacturing wealth of the kingdom. The mode of culture, the order of crops, the preparation of the soil, the system of manuring, the careful cultivation of the plant, and the process of steeping, are so well understood in Belgium, that its flax is always in great demand throughout Europe. England and France buy nearly all the flax which is produced in the provinces of Hainault, Brabant, and Namur. The two Flanders supply a very large quantity to the English market.

Linen, Lace, &c.—These manufactures have been long extensively carried on in Belgium, and their products have been deservedly celebrated for their excellence. Of late years, however, they have been, for the most part, far from flourishing. The businesses were diffused over the country, particularly over East and West Flanders, and were carried on in the cottages of the peasantry, much in the same way as the Irish linen trade was formerly diffused over Ulster, and the lace trade over parts of England. But since the successful application of steam to the spinning and weaving of flax and the production of lace, the foreign demand for the linens and laces of Flanders has greatly declined; and the population depending on these branches of industry has been exposed to the greatest privations. In 1840 there were

no fewer than 122,200 female spinners in E. Flanders, and 98,400 ditto in W. Flanders, exclusive of a large number of weavers, all of whom were in a very depressed and impoverished condition. And the difficulties in which they had been previously involved were so much increased by the bad harvests of 1845 and 1846 that government was obliged to come forward to their assistance. But, though somewhat alleviated, the distress of the parties referred to is still very great. There can, indeed, be no manner of doubt, that here as elsewhere the old domestic manufacture of linens and laces will be extinguished; and that the manufacture, if carried on at all, will have to be carried on in factories.

The imports of *cotton wool* into Belgium amount to from 7,000,000 to 8,000,000 kilogrs., or to from 15,440,000 to 18,000,000 lbs. a year. The manufacture is, therefore, of but trifling importance. It is principally carried on at Ghent, St. Nicolas, Antwerp, Turnhout, Mechlin and Lierre.

Silk. — The production and manufacture of silk promise to become an important source of Belgic industry. Already the annual exportations to France exceed the importations from that country. The breeding of the silk-worm was introduced into Belgium in 1826, and this department of business is continually increasing under the fostering care of the government. The mulberry appears to thrive in the soil of the country, and the number of young plants now cultivated exceeds two millions. In the opinion of the best judges, the Belgic silk is quite as beautiful and valuable as the choicest kind produced in the French provinces of Piedmont and Dauphine, which, in fact, is the finest in the world. The most extensive establishments for rearing the silk-worm are at Meslik l'Evêque, near Ath, and at Uccle, near Brussels. Antwerp, which is the principal centre of the manufacture, contains establishments for the production of various kinds of silk fabrics. Velvets, satins, gros de Naples, and other stuffs, obtained formerly from Naples, are made with a beauty of tissue and tints that cannot be surpassed. The silk factory at Uccle is remarkable for excellent dyed and printed fabrics.

Lace. — "Brussels lace," the thread of which is made of the finest flax of the country, is superior to every other description made in Belgium or in foreign countries. Its peculiar qualities are delicate fineness, and a great elegance and variety of design. The patterns are all worked separate, and are stitched on. The flax employed grows near Hal, and the best at Rebecque. The finest description costs from 3,000 to 4,000 fr. a pound, and is worth its weight in gold. The spinning is performed in darkened rooms, with a beam of light admitted only upon the work, through a small aperture. The lace of Mechlin is second in rank, with respect to richness and elegance. It is made also at Antwerp, Lierre, and Turnhout. The cities of Bruges, Menin, Ypres, Courtray, Ghent, Alost, and St. Nicolas, employ a great number of hands in the manufacture of Valencien point. Mons contains a school for special instruction in the art of making the finer kinds of lace.

The principal manufactures of *tulle* are at Ghent, Termonde, Mechlin, Brussels, and Bouillon. The excellence of the Belgic embroidery on tulle is universally acknowledged, and a great number of females are employed in this department, the earnings of each being about 50 cents a day.

The manufacture of *gold and silver lace* was formerly a considerable source of wealth, but it is now much reduced by foreign competition. However, the qualities of this article still produced in Brussels are fully equal to those of the best description manufactured in Paris.

Ribands of every species are made principally at Antwerp, Tournay, and Ypres. This branch of industry formerly employed 1,000 looms, and 12,000 persons, and produced annually about three thousand million yards of riband; but the manufacture, in consequence of large importations of cheaper kinds from France and Germany, has very considerably decreased.

In 1830, the manufacture of elastic stuffs in *caoutchouc* was introduced by M. Vandermaelen. More than 100 looms are employed by a company formed for the purpose, and various articles are produced, as elegant and substantial as those of France and England.

The manufacture of *hosiery* employs about 50,000 persons. Its principal centre is in the arrondissement of Tournay, where 2,500 looms are kept in activity. About the same number are found in other parts of the kingdom. The coarser articles are more successful, and are partly exported. Finer kinds are imported chiefly from Saxony. At Arendonck, in the province of Antwerp, about 220,000 pairs of woollen hose are annually manufactured, and the most beautiful articles of knitting and netting are produced at Brussels and Tournay.

Hats of felt, or beaver, are made sufficiently good to meet the competition of foreign manufacturers, — and those of silk are of very superior quality. The latter kind are made in nearly every city in the kingdom, so that the manufacture of beaver hats has consequently much decreased. Straw hats are abundantly made in Brussels, Ghent, and Antwerp.

Leather. — The preparation and various manufactures of leather are carried on with undiminished success. The principal tanneries are at Stavelot and Liege; there are also many at Brussels, Namur, Antwerp, Ghent, Ypres, and Tournay.

Paper factories exist in every province, and the manufacture of this important article is progressively improving. The produce at present is insufficient for the home supply; and, in 1848, 23,745 kilog. of paper were exported from France to Belgium.

Printing, &c. — All impressions are made upon paper, and with types manufactured in the kingdom. The typographic art is, therefore, an important department of national industry. In Brussels, and several of the other large towns, printing is carried on to a great extent, and with very superior skill. In fact, the printing of Belgium is in no respect inferior to that of Paris, in beauty and neatness of execution, or correctness of text. The number of original works increases every year. One printing establishment at Brussels now produces more than all the presses of the country in the time of its subjection to the French government. This remarkable increase arises from the system of reprinting, or, as it is called, pirating, the best works of Paris, which immediately appear in Belgium commonly at about half the original price. They can be sold at this reduced rate, the paper used in their manufacture being usually inferior, and the publishers having no copyright to pay. But the system is notwithstanding most injurious to the interests of literature, and is discreditable in the extreme to the Belgians. It has been loudly complained of by the French; but hitherto without effect, this piratical business being at present the most flourishing of any in the kingdom.

Lithography has attained a high degree of excellence, and some of the productions of Brussels will bear a comparison with the finest specimens of German artists. The celebrated geographical establishment, founded at Brussels by M. Vandermaelen, possesses a good press for lithography, maps, and charts.

Cabinet-making is, of course, a source of employment to numerous skilful operatives. Brussels is its principal seat; and it exports various articles to Germany and America.

The only establishment for the manufacture of *clocks* is at Chenée, near Liege. The machinery is moved by steam. But all kinds of time-pieces are supplied chiefly from France and Switzerland. With the view of promoting the home production of these useful instruments, the government annually awards premiums and medals for the most perfect specimens produced by native artists.

Mathematical instruments are made with great perfection at Brussels.

Musical instruments, that is, pianos and wind instruments, are very skilfully manufactured at Brussels. The former are preferred to those of Germany, and the latter, which are issued from the establishment of M. Sax, have an European reputation for tone and elegant appearance.

Metallurgy. — The abundance of metals and combustibles in Belgium has occasioned the establishment of several extensive forges for the melting and manufacture of iron, copper, and tin. There are three principal groups of forges. — 1. on the banks of the Meuse, extending from its entrance into Belgium to the limits of Namur and Liege: 2. between the Meuse and the Sambre; and, 3. at Charleroy. Besides these principal groups, there are numerous forges, foundries, and tin-works, along the banks of the Hoyoux, the Ourte, and its affluents.

In 1837, there were in the kingdom 25 coke furnaces, and about 70 of charcoal, each of the former yielding from 3 to 5 times the produce of one of the latter. But at that period the business would appear to have been completely overdone; and in 1838 a reaction commenced, which continued for five or six years, and occasioned the abandonment of various works, and the dismissal of half the work-people employed in the trade. In 1842, for example, there were only 58 blast furnaces in Belgium; and of these 38 were out of blast, and not one of the remaining 20 yielded any profit to its proprietors! Since then, however, the iron trade has again materially improved; and the total product of the Belgian furnaces may now (1850) be probably estimated at from 220,000 to 230,000 tons, or at about a third part of the produce of the Scotch furnaces. The largest iron-works on the Continent are situated near Liege. They were principally constructed by Mr. Cockerill, who unfortunately was overwhelmed by the reaction of 1838. The colossal lion which supports the triumphant pyramid on the battle-field of Waterloo was cast in the foundry of Mr. Cockerill. The works extend above a mile along the banks

of the Meuse, and occupy the site of the palace grounds of the prince prelate of Liege.

The royal cannon foundry at Liege has the requisite apparatus for manufacturing the largest pieces of artillery in iron and bronze, which it produces of the best quality. Establishments for the construction of steam-engines are principally at Liege, Brussels, Charleroy, Tillemont, and Bruges.

Nail-making is an important branch of metallurgy at Liege and Charleroy. In the latter place, about 5,500 hands are employed in this business throughout the winter. Liege is also the centre of a manufacture of *fire-arms*, the produce of which and of various other factories is exported to America, Egypt, Turkey, Germany, Italy, and Spain. The principal kinds manufactured are, — 1. single and double barrelled guns for sporting; 2. muskets for military use; 3. common guns for various purposes; 4. pistols, which, as well as the best description of guns, are made and finished with great care and skill. It is seen from the annexed account that the value of the arms exported in 1846 amounted to 3,807,225 fr.

Cutlery forms a considerable object of manufacturing industry in the province of Namur. Other establishments of this nature are in operation in Brussels, Ghent, Mons, Leuze, and Ath.

Steel implements and edge tools are made in several localities, but the main supply of the kingdom is from Germany and England. The latter supplies large quantities of knives, razors, &c.

The exports of iron and hardware are next to, but very far below, those of England. It appears, for example, from the subjoined account of the exports from Belgium in 1846 and 1847, that in the latter year there were in all 73,340,499 kilog., or 72,032 tons of all sorts of iron and hardware exported from that kingdom. But in 1848 the exports of the same articles from the U. Kingdom amounted to the immense quantity of 644,247 tons, or to about *nine* times the exports from Belgium!

Carriage-building is well executed at Brussels, with respect to strength and cheapness, but elegance of design is very generally deficient.

Porcelain manufactories exist in Brabant, Hainault, Namur, and Luxemburg. At Sept Fontaines, in the last-named province, at Brussels, Andennes, and Tournay, are produced articles which, in delicacy and beauty, may vie with those of every foreign manufacture, excepting Sèvres.

The different kinds of *glass*, in plate and vessels, are made in large establishments at Namur, at Liege, and at Val-St.-Lambert. Four fifths of the produce are exported to Germany, Holland, North and South America, and other countries. Crystal is manufactured at the glass-houses of Namur and Val-St.-Lambert, and is beautifully cut and fashioned in Brussels. Casting of glass employs many hands, at Oignie, in the province of Namur. The same district contains several factories for the preparation of *white-lead*; and at Brussels, Antwerp, Ghent, Mechlin, Courtray, and some other cities, are establishments for the preparation of the various chemical products required for the useful arts and manufactures. *Candles* of tallow are manufactured chiefly in Antwerp and Hainault, and of wax at Ypres and Tournay. Lamps are made principally at Brussels and Liege, but they are now greatly superseded by the introduction of gas, which for some time has been used for lighting the streets and shops of all the large towns. Soap factories are numerous in Belgium, and increase continually. The soap of Tournay is not inferior to the finest soap of Marseilles. Alost, Ninove, Roulers, and other towns of Flanders, possess a great number of mills and presses for the preparation of all kinds of oil, which are partly exported to Germany and England.

The production of *beet-root sugar* is carried on to a considerable extent, and has of late been largely increased, its produce, which in 1836 did not exceed 1,800 tons, having in 1848 amounted to 8,068 tons. The business of sugar refining is also extensively carried on, particularly in the city of Ghent. The exports of refined sugar in 1846 were 4,600,000 kilog. *Café chicorée* is prepared principally at Roulers, in W. Flanders.

Salt refineries are numerous in the provinces of Antwerp, Hainault, and East Flanders. The best are in the cities of Antwerp and Ghent.

The *breweries* in different parts of the kingdom amount to nearly 3,000, besides 150 malt kilns. Beer is the common beverage of all classes; and the best is produced in Brussels, Louvain, Diest, and Haegaerde, in Brabant. Louvain alone has 40 breweries, and produces annually about 200,000 tuns of white beer, *bierre blanche*; a kind for which there is always a great demand.

Distilleries abound most in the provinces of Antwerp, Hainault, and the two Flanders; and their produce, under the appellation of *eau de vie*, or gin, forms an important item in the export trade of the kingdom to every quarter of the globe.

In order to encourage and facilitate improvement in manufactures and industrial pursuits, the government has instituted public exhibitions where only the products of the country and its inhabitants are admitted. The first was opened in Brussels, in 1835, when 2,727 objects were exhibited, and a distribution was made of numerous medals of gold, silver-gilt, silver, and bronze.

Patents. — A very considerable part of the revenue of Belgium is derived from a tax on patents, no one being allowed to exercise any trade or profession without a patent, the price of which depends upon the amount of profit obtained. Reports of income are required from each individual engaged in business, and the government assessors exercise inquisitorial power in assigning the citizens to classes of different degrees. The number of patents granted by the government, in 1837, for new inventions, was 71; for improvements, 21; for importations, 37.

The *Commerce* of Belgium extends its relations to most parts of the world, and includes every species of indigenous and foreign production. Its average annual value may be estimated at 360,000,000 francs; that is, 210,000,000 of imports, and 150,000,000 of exports. We annex an account of the principal articles exported from and imported into Belgium in 1845 and 1846.

Articles exported.		1845.	1846.
Arms	value in francs	3,846,269	3,807,225
Bark for tanning	kilog.	15,461,329	3,807,225
Books, printed	—	299,038	212,540
Cattle, Cows, and Oxen	numb.	12,432	9,312
— Swine	—	88,037	43,730
Coals	tons	1,513,172	1,356,073
Cotton manufactures	kilog.	854,554	746,043
Flax	—	7,2?9,509	5,754,2.6
— Tow	—	484,718	415,7.9
Glass, Flint	—	444,783	321,999
— Broad	—	7,725,509	9,389,528
Horses	numb.	12,076	10,527
— Colts	—	2,732	2,387
Iron, Pig	kilog.	43,453,087	63,388,549
— Rails	—	6,117,635	4,086,520
— Cast	—	396,267	379,269
— Wrought	—	1,418,151	652,988
— Nails	—	5,194,997	4,833,173
Linen, Manufactures	—	2,901,321	2,589,507
— Yarn	—	2,422,025	2,164,311
Machinery and mill work	—	1,835,542	1,868,102
— Parts	—	325,999	964,240
Salt, refined	—	1,067,320	924,532
Sugar, refined	—	4,194,356	4,599,790
Tobacco, manufactured	—	42,655	42,798
— Cigars	—	145,251	154,121
Woollen cloths	—	650,582	664,012
Stuffs	—	48,757	43,434
Zinc, raw	—	4,340,982	4,730,198
— Laminated	—	1,280,475	1,349,042
Articles imported and retained for Consumption.			
Cattle, Cows and Oxen	numb.	7,756	11,473
— Sheep and Lambs	—	18,330	17,698
Coffee	kilog.	16,544,992	13,939,659
Coals	tons	9,419	11,071
Cotton Wool	kilog.	8,691,013	6,152,788
— Manufactures	—	277,365	223,901
Flax	—	955,036	1,731,981
Grain, Wheat *	—	91,829,625	127,593,168
— Rye	—	20,127,877	38,915,612
— Barley	—	36,827,953	22,669,999
— Oats	—	5,515,370	3,660,873
Hides	—	2,000,151	1,376,350
Mercury	value in francs	1,737,302	1,655,337
Rice	kilog.	9,331,469	11,723,230
Salt, raw	—	34,968,777	32,032,473
Seeds, Rape, &c.	lasts	32,258	13,623
Silk, wove	kilog.	72,540	63,099
Sugar, raw	—	10,011,426	15,311,894
Timber, unsawn	tons	26,678	16,457
— Sawn	—	24,130	25,874
Tobacco, unmanufactured	kilog.	3,431,345	4,706,893
— Manufactured	—	28,784	30,674
— Cigars	—	39,300	33,167
Wearing Apparel, Millinery, &c.	value	879,994	945,383
Wine	hect.	71,294	66,835
Wool	kilog.	955,036	1,731,981
Woollen cloths, coatings, kalmucs, friezes, blankets, &c.	—	48,652	47,587
Muslins, Merinos, &c.	—	377,337	295,397
Yarn	—	68,416	75,368

The articles which Belgium supplies to England are bark, flax, cattle, madder, clover-seed, linen, spelter, books, and sheep's wool; in return for which England sends various kinds of East and West India produce, with cotton fabrics and yarn, earthenware, salt, coal, &c. A large portion of the cotton yarn, cotton cloths, and lace which are exported from England to Belgium, are there smuggled across the French frontier by means of large and sagacious dogs, which are carefully trained for the purpose, by being pampered in France, and half starved and ill treated in Belgium. They are taught to

* The imports of wheat and other grain in these years were far above the average. In 1844, for example, only 14,518,000 kilog. of wheat, and 1,073,181 kilog. barley were imported.

avoid all public roads, and when they find themselves noticed, they slink away with their burdens, and lie concealed in the nearest cover until they can venture again on their journey. The commercial and manufacturing cities of Belgium are, Brussels, Ghent, Liege, Namur, Tournay, Ypres, Mons, Louvain, Verviers, Mechlin; to which are to be added the maritime cities of Antwerp, Ostend, Nieuport, and Bruges. Some notice of the great extent of the Belgic commerce in the middle ages is given under the head of *History;* but for more particular accounts of its astonishing prosperity at that remote period, reference must be made to the articles ANTWERP, GHENT, and BRUGES.

Commercl. Shipping, &c.— Belgium communicates with the sea by Ostend, by Antwerp, by Nieuport, by the canal of Bruges to Oostburg, by the canal of Dunkirk to Furnes, by the canal of Ghent to Terneusen, by the canal of Termondt to Hulst, by the Scheldt from Flessingue to Antwerp, by the Scheldt and the canal of Willebroek from Brussels to Antwerp, and by the canal of Louvain and the Scheldt from Louvain to Antwerp.

The principal ports are Antwerp and Ostend. The former is one of the finest in Europe, and affords reception to vessels of the largest tonnage. The situation of Antwerp, between the N. and S. countries of Europe, and the establishment of a railroad communication thence to Cologne, make it a port of great importance.

The number of merchant vessels belonging to the ports of Belgium, excluding those in the fisheries, is but trifling. And this, notwithstanding premiums are given by government for the construction of ships for sea navigation.

Steam-boats are established on all the principal lines of communication by water, as well within the country as to foreign ports. By far the largest proportion of the foreign trade of Belgium centres in Antwerp. The annexed statement shows the great increase in the amount of shipping frequenting that port. The greatest part of its trade is carried on with the U. Kingdom, from which it annually receives from 5,000 to 7,000 passengers by steamers. But it has, also, an extensive intercourse with the Baltic, France, the U. States, the Hanse-towns, &c. Ostend is principally a packet station; and Bruges, which in the middle ages was one of the greatest emporiums in the N. of Europe, is now of very inferior commercial importance as compared with Antwerp. We subjoin an account of the number and tonnage of the vessels which arrived at Antwerp from all parts of the world in the following years, viz.:

1834	1,065 vessels	138,206 tons
1835	1,196	153,764
1836	1,250	176,461
1837	1,426	225,759
1839	1,182	202,038
1845	1,941	287,530
1846	2,214	329,495

Money. — The franc is the monetary unit of Belgium, and its divisions are made according to the decimal system. There are 11 different Belgic coins; namely, 2 of gold, — the piece of 40 francs, and the piece of 20 francs; 5 of silver, — pieces of 5 francs, 2 francs, 1 franc, half a franc, and a quarter of a franc; 4 of copper, — pieces of 10 centimes, of 5, of 2, and of 1 centime. The florin of Brabant is worth 1 franc 81 centimes, and it is divided into 20 sous, each sous being again divided into 12 deniers.

The *Hôtel des Monnaies* is at Brussels. The value of silver and copper coins which were thence issued, during the period 1832-37, was 16,041.668 francs. The monetary capital existing in Belgium is estimated at 200,000,000 francs. The ancient coins of the Pays Bas are still in circulation, but their number daily diminishes.

The value of the English sovereign in Belgic money is 25 francs 20 centimes; and the English shilling, 1 franc 16 centimes.

Banks and Commercial Societies. — Belgium possesses several large financial establishments, devoted to industrial and commercial operations, which render an immense service to the manufactures and commerce of the country. At Brussels an association was formed, by royal authority, on the 28th of August, 1822, with a charter for 27 years. It is entitled the *Société Générale pour favoriser l'Industrie*, and its object is to develope the resources, and promote the prosperity, of agriculture, commerce, and manufactures. Its capital consists, 1st, of 50,000,000 florins (105,820,000 fr.), of which 20,000,000 are vested in real property, and 30,000,000 in 60,000 shares, each of 500 florins, at an interest of 5 per cent.; 2dly, of a reserved fund, formed of a third of the dividends, and which, in 1836, amounted to 20,000,000 francs. It issues notes to the amount of 40,000,000 francs, for sums of 50, 100, 500, and 1,000 francs; and its general operations consist of the discounting of commercial bills, receiving deposits, making loans and advances, and in various ways affording accommodation to facilitate commercial transactions. The administrative body is formed of a governor, who is nominated by the king, six directors, a secretary, and a treasurer.

The Bank of Belgium, at Brussels, was instituted by a royal decree of the 12th of Feb., 1835, with a charter for 25 years. Its capital is 20,000,000 francs, in 20,000 shares, each of 1,000 francs. The rate of interest is 5 per cent. It operates at once as a bank of deposits, of circulation, of discount, and of accommodation to the commercial classes similar to that afforded by the society just described. A director and four administrators are nominated by the king, and the accounts are annually audited by a general assembly of the holders of ten shares.

Among the dependencies of the *Société Générale*, are the *Society of Capitalists*, with a capital of 50,000,000 franks; the *Society of Commerce*, capital 10,000,000; and the *National Society*, with a capital of 15,000,000 francs.

The Bank of Belgium has formed a *Society of United Shares*, with a capital of 40,000,000 francs. Under the same patronage was established, in 1835, the *Bank of Liege*, for 40 years; it has a fund of 4,000,000 francs, in shares, each of 1,000 francs. In 1837, a great financial society was founded, under the title of the *Commercial Bank of Antwerp;* its term is for 25 years, and its capital 25,000,000 francs, in shares each of 1,000 francs. Numerous other institutions of this nature exist in different parts of the kingdom. The amount of capital possessed by anonymous societies authorised by the government since 1833 exceeds 30,000,000 francs. The conditions of success to these societies are that they confine their competition to such industrial operations as the manufacture of the metals and other substances of intrinsic and permanent value.

The amount of property insured against fire, in the year 1837, by 11 insurance companies of Belgium, was 1,786,832,222 francs; in addition to which, an amount, estimated at 20,000,000 francs, was insured by foreign companies.

Weights and Measures. — Belgium has adopted the weights and measures of the French metrical system; the fundamental principle of which is the measure of length. Its unity, the metre, is the ten-millionth part of a quadrant of the meridional circle of the earth. The length of the *mètre* is nearly an inch less than an English yard and half a quarter; that is, 3·289992 ft. The unit of superficial measure, the *are*, is a square, of which the side is 10 mètres. The unit of the measure of capacity, the *litre*, is a cube, of which the side is the tenth part of a mètre. The *stère* is a cubic mètre. The unit of the measure of weight is a *centimètre* cube of distilled water; that is, a cube of which a side is the hundredth part of a mètre. The itinerary measures are the *decamètre*, *kilomètre*, and *myriamètre;* that is, measures containing severally, 10, 1,000, and 10,000 mètres. Measures of length are the *mètre*, or lineal unity, the *decimètre*, *centimètre*, and *millimètre;* which severally represent the tenth, hundredth, and thousandth parts of a mètre. Land is measured by the *hectare*, containing 10,000 square mètres; the *are*, containing 100 square mètres; and the *centiare*, which is 1 square mètre. For liquid and dry measure, are used the *litre*, which, as already described, is a cube of which the side is the tenth part of a mètre; and the *décalitre*, *hectolitre*, and *kilolitre* — decimal multiples of the litre, or 10, 100, and 1,000 litres. The *décalitre* is a tenth part of the litre. For solid measure, are used the stère and décistère; that is, a cubic mètre and its tenth part. For the measure of weight, are used the *gramme*, already explained; the *décagramme*, or 10 grammes; the *kilogramme*, or 1,000 grammes; and the *quintal*, or 100 kilogrammes. The *décigramme* is a tenth part of the gramme. It may be useful to add the correspondent value of a few of these measures with those of England, and for more elaborate explanations, a reference may be made to the *Annuaire de l'Observatoire de Bruxelles*, par M. Quetelet, 1838 and 1839.

Belgic.		English	Belgic.		English.
Mètre	=	3·280 feet	Hectare	=	2·473 acres
Millimètre	=	0·039 inch.	Litre	=	1·760 pint
Centimètre	=	0·393 inch.	Décalitre	=	2·201 gal.
Decimètre	=	3·937 inch.	Hectolitre	=	22·009 gal.
Myriamètre	=	6·213 mil.	Gramme	=	15·438 g. tr.
Mètre carré	=	1·196 sq.y.	Kilogramme	=	2·680 lbs. t. / 2·205 lbs. a.
Are	=	0·098 rood			

The ancient provincial measures which are still partially used, are too numerous for explanation.

Roads of the first class, paved or macadamised, and numerous others of secondary character, intersect the Belgic provinces in every direction. After England, Belgium, in fact, is the next country of Europe in which lines of road exist in the greatest number, and are kept in the best condition. They are broader and more regular than those of England, and are infinitely better managed than the roads of France: they are also capable of sustaining the greatest extremes and changes of weather, without undergoing any injury worthy of notice. The highways of the state, of the first class, have a width of 19 mètres 50 centimètres; those of the second class are made 13 mètres 60 centimètres in width, if they tra-

verse woods and thickets, if not, 11 mètres 70 centimètres. Provincial roads have a width of 9 mètres 75 centimètres. In these dimensions, the lateral banks or ditches are not included. The whole surface occupied by the roads of Belgium is estimated at 70,000 hectares, or 210,000 English acres. Those of the first and second class are made and maintained by the state; the provincial roads are the affair of the provinces; and the smaller byways belong to the communes. It is calculated that, in Belgium, a league of road, or 3 m. English, costs in construction 150,000 francs. Besides several new state roads in course of execution, about 30 new provincial roads have been planned and undertaken; and a company has been formed for the opening of 300 m. of roads, railways, and canals, on the plain of the Campine.

Belgium is the first state in Europe in which a general system of *railways* has been planned and executed by the government at the public cost; and certainly it is an honourable distinction to have given the first example of such a national and systematic provision of the means of rapid communication. The undertaking was first projected in 1833, and the object proposed was to unite the principal commercial towns on one side with the sea, and on the other with the frontiers of France and Prussia. In this respect Belgium is most favourably situated for a general system of railroads. It is compact in form, of moderate extent, is surrounded on three of its sides by active commercial nations, and on the fourth by the sea, by which it is separated by only a few hours' voyage from England. On the W. side are the two large and commodious ports of Antwerp and Ostend, and its E. frontier is distant only a few leagues from the Rhine, which affords a connection with the nations of central and S. Europe. It is therefore in possession of convenient markets for its productions, and of great facilities for an extensive transit trade. The physical nature of the country is also most favourable, being for the most part flat, and requiring but few of those costly works of levelling, tunnelling, and embankment, which serve to increase so enormously the expense of similar undertakings in England. The government first employed skilful engineers to survey the kingdom, and to determine the main lines, with regard not only to the physical circumstances of the surface, but to the interests of the large towns and their various relations, internal and foreign. In May, 1834, a law was passed for the prosecution of the plan proposed, and the city of Mechlin was made the centre of the system, with four principal branches extending, N. to Antwerp; E. to Louvain, Liege, Verviers, and the frontiers of Prussia, to be continued by a private company to Cologne; S. through Brussels and the province of Hainault, to the French frontier near Valenciennes; and W. by Dendermond, Ghent, and Bruges, to Ostend. By adopting the lines that concentrate at Mechlin, a larger number of towns are passed than by taking Brussels for the central station, and the distance from Antwerp to the E. frontier is considerably less; but some regret has been expressed that Brussels, the metropolis of the kingdom, was not chosen as the centre of the system. The Belgian government merely requires that the undertaking should pay its own expenses, — that it should be neither a burden, nor a source of revenue. The expenses consist of the cost of maintenance and repairs, the payment of interest upon, and the gradual redemption of, the capital invested. For the last object, a profit of 5 per cent. per annum is expected upon the original outlay, beyond the current expenses. Besides, it may confidently be anticipated that the increase of commercial traffic throughout the kingdom will repay the outlay of the government by increasing the amount of its revenue. All the railroads established by the government of Belgium have been formed for a double line of rails; but, except in a few instances, only one line is immediately laid down, another being added when required. A similar plan of commencing with a single line is generally adopted in the United States of America. About 327 m. of railway have been constructed, at an average cost of from 12,000*l.* to 13,300*l.* per m. ex. locomotive engines. This hardly amounts to a fourth part of the cost of some of our lines, and does not greatly exceed the cost of constructing lines in the U. States. It is worthy of remark, that the actual cost incurred in Belgium has exceeded the estimate of the engineers by only 10 per cent.; while in England, the estimates, for instance of the London and Birmingham, and of the Great Western railways, were exceeded in the cost by more than 100 per cent. In cheapness of fares, the Belgian railroads far surpass those of England. The length of the line between Antwerp and Brussels is 27½ miles; the fare, in a first class carriage, 2*s.* 6*d.*; while a nearly similar distance in England, from Liverpool to Manchester, is 5*s.* 6*d.* In Belgium there are four kinds of railway carriages; — the Berlin, diligence, char-à-banc, and wagon. The charge in the two first is at the rate of 1½*d.* a mile, and they answer to the English mail and coach, for which the rate of charge per mile is nearly double. The chars-à-banc, which are used by great numbers of the poorer class, are but three farthings a mile, and the wagons are only one halfpenny.

That the adoption of a system of low fares is beneficial to the proprietors of railways, may clearly be seen in the fact that, in Belgium, where the charges are only half those of England, the proportion of the population which travels is much greater. Since the establishment of railway communication between Antwerp and Brussels, and the consequent reduction of the expense of travelling to half the previous charges on the common road, the intercourse has become nearly ten times greater, and it appears that the difference is mainly occasioned by the poorer classes being enabled to avail themselves of this means of locomotion, both for business and recreation; an advantage which the same classes in England do not enjoy to anything like the same extent. The rate of charge per ton for extra luggage and merchandise on the Brussels and Antwerp line is less than 6*d.* a mile. Another point in which the Belgian railway carriages surpass those of England is, that of evenness and uniformity of motion. They move without that offensive thumping and swinging for which the English vehicles of this kind are distinguished. Their speed varies from 20 to 30 miles an hour. The beneficial effect of the government's undertaking the establishment of a general system of railways, is obvious, it is said, in the introduction of this important means of communication much earlier than it could have been accomplished by the separate operations of private companies; and to the objection that the government may exercise a too despotic influence over public travelling, it is replied that, from the experience afforded by the railroads of England, it is not likely that the control of the state will be more absolute than that of the directors of private companies.

Canals. — The length of the canals in Belgium amounts to 460,220 mètres, and that of the navigable rivers to 962,746 mètres. Hence the total extent of inland navigation is 1,422,966 mètres, or 854 English miles. The facilities thus afforded for the transport of heavy merchandise and agricultural produce between the principal places in the kingdom is a great advantage to the prosecution of all industrial and commercial business.

Population. — The population of Belgium, by the last census of 15 Oct. 1846, amounted to 4,335,319. It belongs to three principal races, the Germanic, which comprehends the Flemings and Germans; the Gallic, to which belong the Walloons; and the Semitic, which comprehends only the Jews. The Flemings, who speak in general a dialect of the Dutch language, form the population of the arrondissements of Brussels and Louvain in Brabant, and that of the provinces of Antwerp, the two Flanders, and the greatest portion of the province of Limburg. The Germans occupy a part of the provinces of Luxemburg and Limburg. The Walloons, who amount to about 1,300,000, speak a dialect of the ancient French, and inhabit the provinces of Liege, Namur, Hainault, the arrondissement of Nivelles, in Brabant, and a part of the province of Luxemburg. The Jews are distributed throughout the kingdom.

The French language is used in public affairs and by all the educated and wealthy classes. Among the Flemish and German inhabitants, nearly all speak French, or at least comprehend it. The distribution of the population in Dec. 1836, was as follows: — (See opposite page.)

It appears from this table that the population is very unequally distributed throughout the territory. East Flanders, the richest and best cultivated province, contains, in proportion to its extent, the greatest number of persons. The density of its population is twice as great as that of Antwerp or Liege, four times greater than that of Namur, and six times that of Luxemburg. The Pays de Waes, in the arrondissement of Termonde, in the neighbourhood of Courtray, contains more inhabitants than are to be found in any part of Europe on the same extent of surface. M. Quetelet estimates the number of men in Belgium capable of bearing arms at about 780,000.

The following is the number of inhabitants in the chief towns of each province, taken at three points of time, separated each by an interval of eight years: — (See opposite page.)

In 1836, the total number of births in the towns was 32,644; in the country, 111,570. The number of marriages was 31,441; divorces 15. The number of deaths in the towns was 25,855; and in the country, 75,379.

The number of children found abandoned by their parents (*enfans trouvés*); the number of deaf and dumb; the blind; and the proportion of paupers (*les indigents*) to the whole population, in 1836, are shown in the following columns, with regard to each province: — (See opposite page.)

The annual number of foundlings has continued nearly the same since 1833. Of the 1,900 deaf and dumb, 1,493

	Inhabitants.	No. of Inhab. per 100 hectares.	Inhab. of Towns.	Inhab. of Country.	Relation of Town to Country Inhab. as 1 to
Antwerp	360,180	126·8	124,257	235,923	1·90
Brabant	592,250	180·4	164,577	427,673	2·60
West Flanders	627,128	191	166,994	460,134	2·76
East Flanders	758,906	253·2	184,941	573,965	3·10
Hainault	631,823	175·4	131,829	499,994	3.79
Liege	390,715	135 4	95,425	295,290	3·09
Limburg	331,305	76·9	46,901	284,404	4·16
Luxembourg	323,219	47·8	32,848	290,371	6·59
Namur	227,074	62·5	33,372	193,702	5·80
Total in the whole kingdom	4,242,600	125	981,144	3,261,456	3·22

	1 Jan. 1830.	1 Jan. 1838.	15 Oct 1846.
Antwerp	77,199	77,162	88,487
Brussels	98,279	101,509	123,874
Bruges	42,198	44,374	49,308
Ghent	83,783	91,792	102,977
Mons	23,110	20,144	23,112
Liege	58,087	62,851	75,961
Namur	21,571	20,480	22,218
Hainault	7,393	8,263	9,613
Arlon	3,357	4,083	5,405

were from birth, and 407 from accident; and 960 of the blind were cases of military ophthalmia.

	Children found.	Deaf and Dumb.	Blind.	Paupers to 100 Inhab.
Antwerp	1,218	102	383	7·9
Brabant	2,961	210	614	21·1
West Flanders	388	281	514	20·1
East Flanders	990	312	814	13·3
Hainault	1,548	331	715	21·3
Liege	210	194	403	17·2
Limburg	255	173	328	10
Luxemburg	32	127	197	0·7
Namur	607	140	219	4·4
Whole kingdom	8,207	1,900	4,117	14·8

The following general observations express the results deduced from an examination of several statistical documents respecting the population of Belgium in 1836: — The whole male population may be considered as consisting of two parts, equal in number, namely, those under and those above the age of 23. The same is true of the females, except that the point of division is the age of 25. Of the unmarried, male and female, the number under and over the age of puberty is equal. In the country population, the two sexes are very nearly equal in number; in the towns, there is a uniform excess of females. The proportion of the married to the whole population is as 1 to 2. The proportion of unmarried to married, in an equal number of each, is comparatively greatest among males in the country. The number of widows is double that of the widowers; and this excess is much larger in the town than in the country populations. In 100 houses in the country there are 106 families. In the towns there are 466 persons to 100 families, or something above 4½ to each family; in the country, 503 persons to 100 families, or 5 to each family. The births to the whole population are, in the country, as 1 to 29·9; and in the towns, 1 to 27·7. The deaths to the whole population are, in the country, 1 to 44·3; and in the towns, 1 to 34·9. The total marriages to the total population are as 1 to 134·9; the number divorced, as 1 to 282·84. The proportion of the population of towns to that of the country is as 1 to 3 22. The marriages in the towns are, to those in the country, as 31 to 100, or 1 to 3; which proportion is identical with that between the two kinds of population. The average proportion of births to marriages, in the whole population, is as 4·6 to 1; and of deaths to births, 1 to 1·48 in the country, and 1 to 1·26 in the towns. The excess of the numbers of births to the deaths is 42·980, or 33½ per cent. The greatest number of births was in March, 14,583; the least number, in August, 10,993; the greatest number of deaths was in January, 10,186; the least number, in July, 7,291. The illegitimate births are to the legitimate as 1 to 12 in East Flanders, the richest province; and 1 to 38 in Luxemburg, the poorest province in the kingdom: the general average is 1 to 21. The medium duration of life in Belgium is 31 years. The probable duration of life, immediately after birth, is — males, 21 years in the country; 21 years in the towns; females, 27 years in the country; 28 years in the towns. At the age of 5 years, it is — males, 51 years in the country; 48 years in the towns: females, 51 years in the towns; 48 years in the country. At 40 years of age, 27 for both sexes, in town and country: at 60, 12 to 13; and at 80, only 4. The number of paupers (*les indigents*) constitute 14·8 per cent. or 1 in 7 of the whole population; and it is remarkable that in those provinces where industry and commercial enterprise have produced the greatest wealth and improvement, the proportion of paupers exceeds 21 per cent.; while in Luxemburg, the poorest province of the kingdom, it is only 0·7, or less than 1 per cent. The operative classes form three fourths of the whole population. The number of insane persons, of whom more than one half are paupers, are as 1 to 1,000 of the whole population; and maniacs, to the other classes of insane, as 1 to 5. Of 10 insane persons medically treated, scarcely 1 is cured. The number of deaf and dumb is as 1 to 2,193. The number of blind 1 to 1,012. On an average in 1,000 born, 543 are vaccinated; 22 have the small pox, of which 2 die.

The government census of the population of Belgium is conducted with the most exemplary attention to systematic method. All the useful points of inquiry are included, so that the results exhibit a most valuable assemblage of scientific data, which in satisfactory completeness and precision are not surpassed by similar documents of any other country. A particular of great importance in the calculations of life insurance — the ages of the living and dying, — which in many enumerations of the inhabitants of other countries has been omitted, is ascertained with great care in the population inquiries of Belgium.

Manners and Customs. — The Belgians have been successively subjected to the influence of so many different governments — French, Austrian, Spanish, Dutch — that they possess no distinctive and peculiar national character. The apathy and persevering industry of the Dutch is blended with the vivacity and self-assurance of the French, without producing an agreeable compound. The different provinces exhibit some variety of character and manners. On the borders of Holland the people are generally similar to the Dutch, and adopt their customs, amusements, and dress; but in the southern districts they differ but little from the French in appearance, habits, costume, and language. The Belgian burghers have always displayed a passionate fondness for social liberty, — an impatience of control that embroiled them with their rulers, and involved them in ruinous disasters during successive centuries. Writers of all ages have agreed in describing them as restless and unruly; always treating their best rulers the worst, while the bad overawed them. In the history of no other country do we find so much liberty with so great a disposition to its abuse. They no sooner emancipated themselves from the despotism of their feudal lords, than jealousy of each other's power engaged them in frequent and fatal hostilities; so that "liberty never wore a more unamiable countenance than among these burghers, who abused the strength she gave them by cruelty and insolence." (*Hallam's Middle Ages*, i. 127., ed. 1819.) They confirmed every compact with ceremonious oaths, and broke them under the pretence of encroachments being made upon their liberties; and it is alleged that their descendants are still rather deficient in good faith. "A facility for making promises and breaking them is said to run through the Belgian people, in all the channels of business, wholesale or retail, of the bureau or in the workshop." But it is at the same time said that "this general want of veracity does not extend to great national transactions,

nor to the proceedings of diplomacy." The most obvious peculiarity by which the Belgians are now distinguished is their devout observance of religious rites and ceremonies. Long and imposing processions of the priesthood in their sacerdotal dresses are frequently parading the streets of the principal towns. Every native salutes the consecrated host with the deepest reverence as it passes by, and it would be dangerous for the traveller to manifest, even by a gesture, the slightest disposition to ridicule. It is evident, indeed, in the whole conduct and customs of the Belgians, as described by writers of every party, that the higher classes are greatly influenced by bigotry, and the lower classes by superstition. In the rural districts the clergy are regarded with fanatical veneration, and they every where exercise, and endeavour to maintain, a powerful dominion over the great mass of workmen and peasants. The churches are opened at five or six o'clock every morning, when every good Catholic attends to repeat his prayers before entering upon the business or pleasure of the day; but the afternoon and evening of every Sunday are enlivened by the entertainments of tavern gardens, grounds for shooting with the cross-bow, ball-rooms, theatres, and other public places of amusement. Another remarkable trait in the Belgic character is a pertinacious adherence to long-established notions, habits, and customs, with an aversion to proposed improvements, however worthy of consideration and adoption. This, however, is more especially true of the rural population; for the middle classes of the towns are distinguished by a spirit of enterprise, and readiness to act upon every suggestion of advantage, in the prosecution of industrial and commercial business. Hence, while the apathy of the former, and their preference for what has been established, are favourable to the cause of order and of public tranquillity, the enterprise and ingenuity of the latter conspire to develope the national resources, and enable Belgium to maintain her position in the European commonwealth. The wealthy inhabitants of the cities have very generally adopted the language, fashions, dress, manners, and amusements of the French, so that Brussels may be regarded as Paris in miniature — with much of the dulness of a mere provincial town.

Music and dancing are very favourite amusements, especially with the middle and lower classes. On every fine summer evening balls are given in the tavern gardens, which are numerous in the outskirts of every large town. The price of admission varies from 3 or 4 sous to a franc. Musical festivals are annually celebrated at Bruges, Ghent, and Antwerp, by amateur performers. Prizes are given on these occasions; and the display of musical skill is quite astonishing. These contests excite the greatest interest in the localities of the different competitors, who are accompanied to the places of meeting by processions, banners, &c. Music, in fact, is so commonly and carefully learnt, even by the labouring classes, that the harmony of the airs which are sung by groups of peasants while at work, is often delightful to the most cultivated musical ear. The national taste for music is farther manifested in the numerous and singularly excellent chimes of 50 or 100 bells, called *carillons*, which are placed in the church steeples and towers of the town-halls. Those in the large cities are not always played by means of a revolving barrel worked by machinery, but by keys, similar to those of an organ, though of far greater dimensions. The performers are paid a considerable salary for amusing the citizens during an hour or two every day, with the finest musical compositions. Their hands are cased with thick leather, and the physical force required is so severe as to exhaust the strength of a powerful man in a quarter of an hour. In some localities, the different chimes are so inconveniently numerous, as scarcely to leave an interval of silence, day or night. At a distance, the sounds float as softly as the notes of an Æolian harp.

The half Dutchman of the province of Antwerp loves to indulge his constitutional apathy in sedately sitting over his pitcher of beer, and watching the circles of smoke that issue from his pipe of tobacco. He is roused to extravagant mirth only once a year, when the carnival licenses every one to commit any kind of foolery for three days, under the disguise of masks and harlequin dresses. In winter, the wealthy classes are fond of driving about in ornamental sledges constructed in very fanciful forms, and painted with the gaudiest colours. The *treckschuit*, or canal fly-boat for passengers, is also a peculiar picturesque object in the scenery of Belgium, as it glides, gorgeously painted, between vividly green banks, shaded with rows of fine trees. A common recreation throughout the country is the shooting with a cross-bow at a wooden bird fixed upon the top of a lofty pole. The rustic inhabitants of the great plain of heathy sand, between Antwerp and Maestricht, are lower in the scale of civilisation than similar classes in the western and central districts of the kingdom. The necessity for ceaseless manual toil precludes all opportunity of mental culture; and leaves them rude, rough, and ignorant. Their food consists wholly of potatoes, buttermilk, and the coarsest rye bread. Of a similar character are many portions of the numerous Walloon population, inhabiting the country S. of a line drawn from Courtray in the W. to Maestricht in the E. Their language, a vulgar patois derived from the old French of the 13th century, is called by themselves *Köeter Walsch*, and is not understood by the Flemings, Dutch, or French of the present age. These hardy and illiterate people have a natural propensity for war, and in former times they served, like the Swiss, in the armies of Austria, Spain, and France. They are now chiefly employed in working the mines of the hilly districts in which they live. Their coarseness of character, and deficient sense of delicacy, especially of females, have often been observed by Englishmen who have had opportunities of making observations upon their habits. The disgust of travellers in Belgium has also been frequently excited by a barbarous, but common practice, of throwing domestic slops from the upper windows in the town and city streets.

In general the labouring classes in Belgium are ruder and less instructed than in Holland, but industrious and provident habits are observable in every part of the kingdom, especially in Flanders. The Flemings possess the distinctive characteristics of the Saxon race: talents for agriculture and commerce, perseverance without vivacity, and a spirit of enduring courage in war. An account of the character and condition of the small peasant farmer has already been given. The following description of the domestic economy of the superior class of Flemish farmers is condensed from the Agric. Survey of Mr. Ratcliff: — It is pleasing, he says, to observe his laborious industry recruited by decent and comfortable refreshment, and his farm servants treated with kindness and respect. He does not aspire to be a gentleman, and his ser-

vants feel the benefit. They uniformly dine in a plentiful and orderly manner with the farmer and his family at the same table, which is covered with a clean cloth, and well supplied with spoons, four-pronged forks, and every other convenient article. A standing dish is soup, composed of buttermilk boiled and thickened with flour or rye bread. Potatoes, salt pork, salt fish, various vegetables, and eggs are the articles of daily consumption, with occasionally fresh meat and fresh fish, and always an abundance of butter or rendered lard. All these provisions are made palatable by tolerable cooking. The potatoes are always peeled, and generally stewed in milk. A kind of kidney bean, sliced and stewed in milk, is a constant dish. No respectable farmer is without a well-cultivated garden, full of the best culinary vegetables and apples, all of which appear at his own table. He is particularly attentive to the preservation of a neat and comfortable appearance, personal and domestic. Health and cleanliness are greatly promoted by an ample supply of good linen apparel; and few, even of the labourers, are without several changes. In home work, the farmer wears a blue linen frock. His house is ornamented outside by flowering creepers, or fruit trees trained against the walls: and within, the neatness of every arrangement is highly pleasing. Each article of furniture is highly polished; the service of pewter is displayed in glittering rows, and the tiled floor is kept perfectly clean by frequent ablutions. The Flemish farmer seldom amasses riches, and as rarely is afflicted by poverty. Industry and frugality secure for him the enjoyment of moderate comforts, and beyond these he has no anxiety. He abstains from the excitement of spirituous liquors, though easily procured; he never exceeds his available means; punctually pays his rent, and, in case of emergency, he has always something at command beyond his necessary expenses.

Sciences and Arts. — Since the provinces of Belgium have formed an independent nation, a spirit of emulation, and desire of improvement, have arisen among all classes of the population. Energies have been awakened that already have achieved much in the cause of social and intellectual advancement, and that promise to accomplish still more in the same honourable career. Not only the physical, but the intellectual resources of the country, are becoming more and more developed. It appears, from a work published in 1837, (*Dictionnaire des Hommes de Lettres, des Savans, et des Artistes de la Belgique*, par M. Van der Maelen,) that there were then in Belgium 613 men of literature and learning, professors, &c., and 483 artists, all born in the kingdom, or permanently settled in it, especially at Brussels, Ghent, Antwerp, and Liege; but it is probable that the claims of this array to the titles by which they are distinguished were not very carefully scrutinised. Original works, and compositions of ability, contribute towards the formation of a national literature. The government encourages the progress of science, learning, the fine arts, and literary taste: pensions are given to young men of talent to enable them to develope the powers of their genius in foreign countries, by studying the works of the great masters; and a national exhibition is opened every year, in which are displayed the paintings, sculptures, engravings, and designs of the best artists. It is alternately held at Brussels, Antwerp, and Ghent, so that each of these cities becomes a centre of attraction to the lovers of art every third year. The exhibition at Brussels in 1836 was formed of the contributions of more than 160 artists, nearly all natives of Belgium. The most meritorious performances are rewarded by medals of gold, silver, and bronze.

Architecture has been carried to a high degree of perfection in the construction of the cathedrals and town halls of Belgium, which display the finest specimens of the ornamental Gothic style of the middle ages. The cathedrals of Antwerp, Ghent, and Mechlin, are magnificent Gothic structures. The open work tower of the latter is of the 12th century, and though unfinished, it is higher than the dome of St. Paul's. In England, Gothic architecture is chiefly confined to churches, but in Belgium it has been successfully applied to civic edifices and private houses. Fronts richly decorated with quaint and fantastic sculptures, lofty sloping roofs, full of windows, pointed gables, castellated towers, battlements, and projecting windows, combine to produce a general effect, which, from its grandeur and intricacy, delights and amuses the spectator. The town halls, or rather municipal palaces of Brussels, Louvain, Ghent, Ypres, and Bruges, are unequalled in magnitude and elaborate ornament by any similar edifices in Europe.

Belgium possesses several public *libraries*, containing rich collections; and the government exerts the greatest care to increase and preserve them. At Brussels, the library of Bourgogne, founded about 1560, consists exclusively of a collection of 1,500 mss. The Royal Library has 133,500 printed and 18,000 mss. vols. The Town Library of Bruges has 10,000 vols. At Louvain, the University Library has 105,000 printed vols.; and that of the Jesuits 22,000 vols. At Liege, the library of the university has 56,000 printed volumes, and 437 mss. The University Library of Ghent has 51,600 printed and 556 mss. vols. The Public Library in the town-house of Antwerp contains 15,000 volumes. At Tournay, the Town Library, opened to the public in 1818, contains 27,000 printed volumes, and 58 mss. The state also possesses several valuable depôts of archives. That at Liege includes the archives of the ancient principality of Liege, which are very numerous and interesting. In the depôt of Mons are the archives of the sovereign court of Hainault, and other curious antiquarian documents. That of Tournay includes the archives of the ancient provincial council, and states of Tournay. The depôt of Ghent is very extensive and important, as containing many historical documents, such as the charters of the counts of Flanders, of the abbeys of St. Bavon, &c. &c.

Learned societies devoted to general or particular objects are very numerous. The most important, as well as the most ancient, is the Academy of Sciences and Belles Lettres of Brussels, the operations of which commenced in the reign of Marie Thérèse.

Among the establishments which have taken an honourable place in the annals of science, is the Observatory of Brussels, the construction of which was projected before the revolution; but its execution and efficient operation are attributable to the present government. Its precise geographical position is lat. 50° 51′ 10·8″ N., and its long. 8′ 7″E. from Paris. The ground-floor is 58 mètres above the level of the North Sea. This observatory is furnished with the most excellent instruments; and, under the able direction of M. Quetelet, it is useful, not only in the practice and improvement of the science of astronomy, but in affording advantages for the study of other ma-

thematical and physical sciences, as meteorology, navigation, geography, and especially dialling, and the exact notation of time. With the view of precisely determining the measure of time, a small lunette meridian has been constructed in each of the cities of Antwerp, Ostend, Bruges, Ghent, and Liege; and grand meridians are placed in the walls of the cathedrals and hôtels de ville, or other public edifices of numerous other cities. The Observatory publishes annually a scientific annuaire, similar to that of the Bureau of Longitude in Paris.

The geographical establishment of Brussels is a private institution, unique in its kind. Its founder, M. Vander Maelen, to whom geographical science is much indebted, is connected with the principal scientific societies in Belgium and other countries. The edifice, situated in the centre of pleasure-grounds, contains a library, a museum of natural history, conservatories replete with rare and curious plants, and a large school, in which is taught the whole process of drawing and engraving maps. Some valuable publications have issued from this institution, comprising elaborate geographical dictionaries of the Belgic provinces, a cadastral or statistical atlas of Belgium, a large map of the environs of Brussels, a geometrical plan of Brussels, a topographical chart of Belgium, &c. &c.

Public Instruction.—Belgium possesses 4 universities, devoted to the higher range of scientific and literary studies; two belonging to the state, at Ghent and Liege; the Catholic university of Louvain, founded by the clergy; and the free university of Brussels, founded by association. In the 16th century the university of Louvain was the first in Europe as a school of Catholic theology, and was attended by 6,000 students. Besides the usual faculties of law, medicine, science, philosophy and literature, the university of Liege contains a school for teaching the useful arts, manufactures and mining. That of Ghent gives a course of civil engineering; and the university of Louvain a course of theology. Each of the universities possesses a chemical laboratory, cabinets of physical science, of mineralogy, zoology, and comparative anatomy, a theatre of anatomy, botanic garden, and chambers for clinical practice. The number of students who attend the collegiate courses at Liege is usually about 400, at Ghent 300, and at Brussels about 320. The largest classes are those of law and medicine. About 420 students of divinity attend the Catholic university of Louvain, which is opposed to the liberal university of Brussels.

Academical Degrees.—Belgium has established a system for examining students and conferring degrees, similar to that lately adopted by the university of London. A body of examiners, composed of professors and other highly distinguished men of learning and science, holds its sessions in Brussels, and awards honourable certificates and titles to those possessed of the greatest scientific and literary knowledge and ability, without inquiring whether these requisite qualifications have been acquired from professional teachers in the public halls of a chartered college, or from solitary perseverance in a private study. To ascertain and reward the highest merit is considered, as in reason it ought to be, sufficient for the purpose of encouraging the pursuit of useful knowledge; the questions about *where* and *how* being relatively unimportant.

There are two degrees in each department of knowledge — *candidate*, or graduate, and *doctor*, which is understood and applied simply in its original and abstract signification of a person competent to teach; that is, learned. The body of examiners consists of several separate committees or juries (*jurys d'examen*), each composed of 7 examiners and 7 supplementary members (*suppléants*). The class of moral and mental philosophy, and that of polite literature, have each a jury appropriated to examine and confer degrees, as have also those of law and medicine. The members of the examining body are appointed for one year: 2 of each jury are nominated by the chamber of representatives, 2 by the senate, and 3 by the ministers of the government. In 1838, the four universities of the kingdom were represented in the examining body as follows:—

	Examiners.	Supplementary.	Total.
University of Liege	7	12	19
Ghent	8	10	18
Louvain	10	3	13
Brussels	5	3	8
Total	30	28	58

There are two sessions in each year. Those of 1837 conferred degrees upon 414 students, of whom 121 belonged to the university of Liege, 79 to that of Ghent, 94 to that of Louvain, 76 to that of Brussels, and 41 had prepared themselves by private study. Classical studies are discouraged throughout Belgium, with a disposition to banish them for more obviously useful acquirements.

A *military school* at Brussels annually furnishes well-instructed officers to the army; and the government has taken measures for the re-organisation of this establishment, in order to form it into a polytechnic academy.

There are two *veterinary schools*, one at Brussels, the other at Liege. That at Brussels belongs to the government; and although it is designated a veterinary school, its arrangements afford the means of complete instruction, not only in that department of science, but in all the different branches of agricultural knowledge, theoretical and practical; together with the chemical principles of brewing, distilling, &c. &c.

Several of the larger towns possess each an *Athenæum* or a *gymnasium*, for supplying a middle course of instruction between that of the school and the university, comprehending, however, the ancient and modern languages, history, geography, and the elements of the mathematical and physical sciences. The Athenæum at Brussels has a theatre for lecturing, capable of accommodating 1,200 persons. Each student has a furnished room, at the expense of the government; and all the lectures are gratuitous.

Besides these establishments, which are supported by the state, or by the communes, some of the provinces have *Catholic colleges*, which, as well as the university of Louvain, are under the direction of the clergy. Four of these ecclesiastical institutions are possessed by the corporation of Jesuits; namely, one at Brussels, one at Namur, one at Alost, and one at Ghent. There is also a theological seminary in the diocese of each Catholic bishop; that is, at Mechlin, Bruges, Ghent, Liege, Namur, and Tournay; and smaller schools of the same nature in each diocese; at Mechlin, Roulers, St. Nicolas, Rolduc, Bonne-Espérance, Bastogne, and Floreffe. Belgium may, therefore, be considered as amply provided with the means of maintaining and propagating ecclesiastical doctrines.

Industrial and commercial schools are established at Brussels, and at Verviers, where courses of instruction are given in mathematics, mechanical science, chemistry, geography, book-keeping; in short, in every department of science and practical knowledge that is or may be subservient to the purposes of commerce and the manual arts. At Tournay, a school has been especially formed for teaching the most useful arts and trades; and in the cities of Mons and Namur, schools are opened for giving instruction in the various operations appertaining to mining. The fine arts are still an object of much emulation in Belgium, and academies of painting are very numerously attended in Brussels, Antwerp, Liege, Ghent, Louvain, and Tournay. The total average number of young men who are constantly receiving gratuitous instruction in the different academies of painting and schools of design throughout the kingdom is 5,550, and their numbers, with regard to each province, are as follows:—

Antwerp	1,065	W. Flanders	886
Brabant	991	Namur	80
Hainault	460	Limburg	30
E. Flanders	1,100	Liege	900

The Royal Academy of Fine Arts at Antwerp is the principal school of painting, and it produces every year several artists of the highest distinction. It is supported by the public, and is usually attended by at least a thousand students.

Belgium has had the rare honour of producing two different *schools of painting*, known by the appellation of "Flemish." The first arose under Hubert and John Van Eyck, or John of Bruges, about the year 1440. To the latter artist is attributed the discovery, or at least a remarkable improvement, of oil painting; and the remaining specimens of his skill display a most wonderful richness and brilliancy of colouring. In the days of the Van Eycks, the Flemish painters were enrolled in a guild at Bruges, and exceeded 300. The works of this early Flemish school exhibit generally a great stiffness and formality of design, and deficiency of good taste and refinement; but their representation of truth and nature, their skilful execution, and vivid colouring, with the fact of their being the earliest efforts of original art, unassisted by the relics of classic antiquity, give them a very peculiar interest. A long succession of artists, of whom the principal were Hans Hemling, Quentin Matsys, Floris, De Vos, the Breughels, and Otto Vennius, extend to the commencement of the second school of painting, the ruling spirits of which were Reubens, and his pupil Vandyke. The style of Reubens resembles that of his predecessors in brilliancy and contrast of colouring, but he is no less remarkable for liberty and facility of drawing than they for confinement and difficulty. All his principal paintings exhibit the power of very superior genius, in spite of many faults, one of which is that of women without beauty or grace; and the concourse of strangers who visit the galleries, churches, and public halls, in which his works are exhibited, at Antwerp, and the other great cities of the kingdom, are a source of considerable wealth to the inhabitants.

Brussels possesses a royal establishment for *lithography*, and an excellent school of engraving, where designing is taught, and the different kinds of engraving on copper and wood.

Belgium is remarkable for its large and numerous schools of music, called *conservatoires*. The most important is that of Brussels, which is commonly attended by 400 pupils; and the most ancient is at Liege, with 200 pupils. The Ghent Conservatory of Music, though a very recent establishment, contains above 160 pupils. There are several others, numerously attended, at Mons, Louvain, and Namur. The Grand Harmonic Society of Brussels, which is accounted the first of the kind in existence, includes among its best performers many who were taught in the Brussels conservatory.

Schools for teaching navigation are established at Ostend, Antwerp, and Nieuport. The one at Ostend has about 60 students.

Primary instruction in Belgium has made no perceptible progress during the last nine years, that is, since the revolution by which the Belgic provinces became independent of the Dutch government, an event which, however beneficial and desirable for other national objects, has doubtless been greatly injurious to the cause of national education. The *compulsory* and *normal* system of Holland was then rejected by the Belgic authorities, who adopted, in its stead, the *voluntary* principle; but this has not secured either the competency of teachers or the attendance of scholars; so that general confusion and ignorance have succeeded to that order and intelligence which was steadily extending under the dominion of the Dutch. The Catholic clergy and monastic orders have made energetic and very successful exertions to possess the ground which the Belgic government left unoccupied, especially the Brotherhood of the Christian Doctrine.

Public instruction in the Belgic provinces, down to the time of their union with those of Holland in 1815, was in a very backward and depressed state. Primary education had been systematically and very successfully established in Holland since 1805, and it is due to the government of that country to acknowledge that its anxious attention was at once bestowed upon the great deficiencies and abuses of the school system of Belgium, on its union with Holland. In 1817, the Dutch normal and compulsory system first began to operate generally throughout the southern provinces of the kingdom of the Netherlands, now constituting Belgium; and during the 12 years from that time to 1829, the progress and value of primary instruction was far greater than at any period before or since. The number of children who attended the elementary schools in the winter of 1817 was 152,898, and in the winter of 1828 they amounted to 247,496, being an increase of 94,598. In 1817, the salaries paid by the government to teachers in the rural communes was 157,580 francs; in 1828 it was 488,150 francs, showing an increase of 330,570 francs, appropriated to the supportand extens on of the Dutch normal and compulsory system. In that period, there were 1,146 school-rooms, and 668 houses for teachers, newly erected, or refitted; and 1,977 male and 168 female teachers received certificates of competent qualification. Well arranged schools, and able teachers, were established in almost every commune, and improvement was rapidly and universally extending. Antiquated and awkward routine was replaced by more rational and advantageous methods of teaching; uniformity was observed in the use of class-books; normal schools were opened for the instruction and training of masters; courses of lectures were given in the principal towns on the required qualifications and duties of teachers; funds were supplied in advance for the construction of school-houses; societies of masters were formed for circulating useful books and professional knowledge. Other important societies were established for the purpose of extending, in various ways, the beneficial effects of the normal system; and fines were inflicted upon any persons who presumed to teach without the requisite testimonials and certificates of competency. In short, the whole plan of proceeding fulfilled the most desirable conditions of securing the regular attendance of children, and the able and efficient performance of the duties of teachers, by the responsible superintendence of government, frequent inspection, examinations, reports, and full publicity. Notwithstanding the obvious advantages of this system, a spirit of opposition began to be generally manifested in 1828, and it appears to have been mainly attributable to ecclesiastical partisanship. The people and institutions of Holland are chiefly Protestant, while those of Belgium, with little exception, are Catholic. The Belgians are, moreover, most rigid adherents to the rights and dogmas of the church of Rome, and are remarkably subject to the influence of their spiritual pastors. They consequently never heartily concurred in the establishment of the educational system introduced by the Dutch, and eventually they charged it with being instrumental in propagating Protestant doctrines, at variance with those of the Catholic church. The refusal of several Catholic congregations to submit to the rules respecting examinations and certificates, which led to their proscription by the government; the rebellious disposition of teachers, who would not, or could not, undergo the required proof of their qualifications, and the offence often unavoidably given by the district inspectors in the execution of their functions, served at length to create an amount of opposition and perplexity that induced the government to propose, in 1829, before the revolution, a return to the principle of "freedom of teaching." Since 1830, as stated already, the adoption of that principle, whatever may be its ultimate effect, has been productive of great immediate injury to the primary schools, a large number of which have fallen back to the use of bad old methods and the employment of miserably incompetent teachers. A few primary schools receive subsidies from the present government, but most of the excellent societies which arose under the normal system for the encouragement of good teachers, the use of superior books, and the adoption of improved methods, have disappeared, and the government neither exercises any superintendence, nor makes any inspection, even of the mode of appropriating the insufficient sums which are voted by the legislature for the schools still dependent upon the national funds. A comparison of the returns for 1826, when the Dutch system was in operation, with those for 1836, when it had been discontinued six years, shows that the schools had increased to more than double the number, in consequence of no test of qualifications being required for becoming a teacher; but the proportion of scholars to the population remained exactly the same, and the instruction received may safely be considered as not half so good. The total number of schools in 1826 was 2,541, and the scholars 353,342; in 1836, the schools were 5,622, and scholars 421,303. In 100 scholars, the average number of boys is 57, and of girls 43.

A comparison of the number of scholars, with the population of each province, gives the following results:—

Provinces.	1826.	1836.
	One scholar to	One scholar to
Antwerp - - -	10·0	9·7
Brabant - - -	11·5	9·4
E. Flanders - -	12·3	12·6
W. Flanders - -	10·0	13·9
Hainault - - -	9·0	9·5
Liege - - -	14·0	16·2
Limburg - - -	16·6	10·2
Luxemburg - -	8·4	7·1
Namur - - -	8·7	6·8
Whole kingdom -	10·7	10·7

The following ratios of scholars to inhabitants, in several other countries, are stated on the authority of M. Ducpetiaux, and will afford the means of comparing the state of popular instruction in Belgium:—

Countries.	Years.	One scholar to
Holland - - -	1835	8·8
England - - -	1833	11·0
Ireland - - -	1831	13·2
Scotland - - -	1834	8·0
France - - -	1834	13·3
Austria - - -	1832	10·0
Switzerland - -	1834	9·0
Norway - - -	1834	7·0
Denmark - -	1834	7·0
Prussia - - -	1831	6·0
Saxony - - -	1834	5·5
New England States -	1834	4·0

The results of numerical documents relating to primary instruction in Belgium exhibit the following facts: — The number of scholars is far from being equal to that of the individuals requiring elementary education: with regard to which the population may be divided into four parts. The *first* consists of children under the age of 2 years, who form about *one eighteenth* of the whole population, and whose education is merely maternal. The *second* consists of children between the ages of 2 and 6 years, who form about *one twelfth* part, and who ought to be for the most part committed to the guardian or asylum schools, to be prepared to receive instruction. Schools of this description are at present established only in some of the large towns, and the total number of children belonging to them does not exceed 3,000, which is scarcely a hundredth part of the requisite amount. The *third* part consists of children between 6 and 15, who form about *one sixth* of the whole pop., and should all receive the instruction which is afforded in primary schools, but it appears that only about one half of this class have that advantage. The *fourth* and last part comprises all above the age of 15. In 1836, more than half the young men who were enlisted for the militia in the metropolitan province of Brabant were entirely unable to read. Applying the same proportion to the other provinces, it results that about 1,500,000 young men in Belgium are wholly destitute of the simplest elementary knowledge of reading. It further appears that the total mass of individuals destitute of primary instruction, consisting of adults and children above two years of age, is to the whole pop. as 53 to 100, or more than one half. The instruction given to children is far from being adequate to their wants; it is limited to reading, writing, and a very little of arithmetic. The scholars are often merely kept in charge, and learn nothing; and commonly, in the country districts, the attendance of more than one half is discontinued throughout the summer, in order that something may be earned by their services in the fields. The education of girls is more neglected than that of boys, and both sexes are generally taught together on the same benches, by male teachers. Two thirds of all the schoolmasters in the kingdom are self-appointed, and unwarranted by any certificate of competency.

Catholic Sunday schools for religious instruction are very numerously attended in the provinces of Flanders and Antwerp. The principal Sunday school in Ghent contains about 3,000 children—1,400 boys, and 1,600 girls; and the annual cost of its maintenance is defrayed by voluntary contributions to the amount of 8,500 francs. Evening schools for the working classes are established in several of the principal towns; and also some excellent institutions for instructing the deaf and dumb.

Religion.—The Roman Catholic religion is professed by nearly the whole population, which, in 1836, was 4,242,600. The Protestants do not amount to 13,000, and the Jews are about 1,100. The fullest liberty is allowed in the expression of religious opinions, and the choice of modes of worship. The incomes of the ministers of each denomination of religionists are derived from the national treasury. In 1834, they amounted to 3,427,900 francs, or 137,116*l.*; namely, 134,116*l.* to the Catholics, 2,600*l.* to the Protestants, and 400*l.* to the Jews. The Catholics are under the spiritual charge of the Archbishop of Mechlin, and of 5 bishops, namely, of Bruges, Ghent, Liege, Namur, and Tournay. The salary of the archbishop is 100,420 francs, or 4,016*l.* The salaries of the bishops vary from 2,252*l.* to 3,092*l.* From these incomes, large payments are made to vicars, canons, and ecclesiastical schools, which reduce the annual income of the archbishop to 840*l.*, and those of the bishops to about 580*l.* each. Catholic rectors of the first class receive annually from the public treasury 82*l.*, and the second class 55*l.* Of the first, there were 80 in the year 1838, and of the second 170. The number of the inferior clergy is 4,730; and their annual allowances vary from 8 to 30 guineas. The Catholic clergy is also composed of a great number of men and women belonging to endowed religious houses, and whose lives are devoted to pious contemplation, teaching, and visiting the sick. The number of convents inhabited by these classes is 333, of which 42 are for males, and 291 for females. The Protestant ministers amount only to 28: their annual allowances from the treasury vary from 16 guineas to 168*l.*; the greater number have about 84*l.* The sum of 12,000 francs has been granted by the government for the celebration of worship according to the church of England. The general consistory of the Jews is held at Brussels. The high priest receives from the public treasury 96*l.* per annum, and each of the priests 50*l.* The Béguinage, or convent of Beguin nuns, at Ghent, is of great extent, comprising streets, squares, and gates, surrounded by a wall and moat, and containing 600 of the sisterhood. The Beguins are not bound by any vow, but no sister ever quitted the order. They visit the sick and afflicted, attend the poor at the hospitals, and seek to alleviate misery as the pitying ministers of religious consolation.

Public Charities.—Belgium possesses a great number of charitable institutions, consisting of richly-endowed hospitals and almshouses, for the relief of every kind of misfortune, misery, and want, and for individuals of all ages. The annual amount of money devoted to public charities exceeds 10,500,000 francs, as follows:—

	Francs.
Hospitals or asylums for the poor and sick (1832) - - - -	4,246,503
Bureaux of charity (1832) - - -	5,308,099
Institutions for foundlings (1834) - -	614,609
Poor-houses (1834) - - - - -	421,644
Total -	10,590,855

Each commune has its bureau of charity for the distribution of money, food, or clothing, permanently, to the sick poor, and occasionally to those in health. Private establishments are formed at Brussels, Verviers, and Liege, for the employment of indigent artisans. *Ateliers de Charité*, at Antwerp, Ghent, and other cities, afford work and maintenance to numerous destitute operatives. The one at Ghent constantly contains, on an average, 450 inmates. A particular account of this establishment is given in the proceedings of the Statistical Society of London, No. XIV. Asylums for the aged poor, and hospitals for gratuitous medical treatment, are found in every town, and lying-in charities in the principal cities: they are supported partly by the communes, and by means of private endowments. The amount of donations and legacies to hospitals and bureaux of charity in the five years from 1830 to 1834, was 2,131,004 fr. There are 318 hospitals for the poor; and the average annual number of individuals maintained therein, during four years, from 1831 to 1834, was 22,880; which is 1 to 182 of the total inhabitants; and the average expense of each person was 186 francs. The annual average number of persons relieved by the bureaux of charity, in the same period, was 617,128; and the average expense of each 8·60 francs.

Numerous hospitals and asylums for lunatics are established in the principal cities of the kingdom; and in general the arrangements and the treatment, physical and moral, are very judicious and commendable. It is estimated that the total number of lunatics in the asylums of Belgium amounts to 2,000, and that this is about half the number existing in the kingdom. There are several ancient endowed institutions for the maintenance of orphans; and in Antwerp, Flanders, Brabant, and Hainault, are several foundling hospitals. During the 10 years from 1821 to 1832, the average annual number of children found abandoned was 8,849. In 1836, the number was 8,207. The annual average expense of maintaining each child is 72·40 fr.

The number of *Monts-de-piété*, or establishments for lending money upon the security of pledged property, amounted, in 1838, to 23. The following table exhibits the progress of their operations during the five years from 1832 to 1836:—

Years.	Amount lent.	Amount of Pledges redeemed.	Average Amount of each Loan.
	Fr.	*Fr.*	*Fr.*
1832	8,336,972	6,692,912	7·40
1833	7,218,172	6,326,464	6·20
1834	7,340,262	6,939,335	6·46
1835	10,692,462	7,111,213	8·85
1836	8,716,658	7,582,544	7·23

In 1831, immediately after the revolution, the amount advanced was 6,916,620 fr., and the average upon each pledge 5 fr. 90 cent.; and it is worthy of remark, that in that year, when all industrial and commercial operations were stagnant and suffering, the recourse to this means of assistance was far less than in 1835 and in 1836, when trade and manufactures were flourishing in the highest state of activity. Besides provident institutions, which exist in various localities, there are banks for savings in almost every town, which are connected with a central savings bank for the whole kingdom, established in Brussels by the general society for the encouragement of industrial pursuits. The deposits, which, in 1833, were only between 3,000,000 and 4,000,000 fr., amounted, in 1836,

to 13,707,348 fr.; of which, 10,170,385 fr. were from 8,480 private individuals, averaging each 1,200 fr.; 3,457,715 fr. were from public offices, and 79,248 fr. were from the inmates of prisons. The amount of deposits has subsequently undergone a considerable increase. In March, 1838, it was 40,000,000 fr.

Poor. — Belgium has five great workhouse establishments, for the reception, confinement, and maintenance of the poor. They are situated at la Cambré, near Brussels, for the province of Brabant; at Bruges, for the two Flanders; at Hoogstraeten, for the province of Antwerp; at Mons, for Hainault, Namur, and Luxemburg; and at Reickheim, for the provinces of Liege and Limburg; and they are not only asylums for indigent persons either sick or in health, but prisons for condemned vagabonds and beggars. It is stated by Mr. Nicholls, in his Report on the condition of the poor in Holland and Belgium, that, under the present regulations, these provincial workhouses, or *dépôts de mendicité*, are very defective institutions,—nurseries of idleness and promoters of pauperism; and that hence the necessity arose for resorting to more rigorous measures, which ended in the establishment of the poor colonies, to which all persons found begging are sent, if able to work, and are compelled to labour for subsistence, under strict discipline and low diet. He remarks that, had the old workhouses been rendered efficient by the introduction of regulations calculated to make them tests for distinguishing between *poverty* and *destitution* — providing only for the latter,—there would have been no necessity for the poor colonies, where the test of strict discipline, hard labour, and scanty diet, is so applied as to be held in the greatest dread by the vagrant classes. All beggars are apprehended by the police. If able to work, they are sent to the penal colony; if aged or infirm, or unable to perform out-door work, they are sent to the workhouses; and although the discipline of the latter is defective, and their management in many respects faulty in principle, they serve, with the aid of the coercive colonies, to secure the repression of public mendicity. The establishment at la Cambré, near Brussels, is superior, in its internal arrangements, to the great workhouse at Amsterdam, particularly in the separate classification of the aged, the children, and adults, and also in the good arrangement and cleanliness of the sleeping-rooms. The sexes are strictly separated in all the Belgic institutions of this nature. By the penal code, a mendicant once condemned to the workhouse for public begging may be kept there during the remainder of his life; but in practice he is allowed to leave it whenever the commission of superintendence are satisfied that he is disposed and able to labour for his subsistence without resorting again to mendicancy.

The pauper colony of Belgium is near Hoogstraeten, in the N. extremity of the province of Antwerp; it was established in 1823, by a charitable society, which entered into a contract with the government at that time, to provide for 1,000 mendicants, on receiving for each 35 florins per annum, or 2*l.* 13*s.* The tract of bruyère, or poor heathy land, which the society purchased to form the colony, extends to about 1,800 acres in the communes of Merxplas and Rykevorsel.

The cultivation of this land is carried on by the paupers, and its crops of potatoes and other vegetable produce are generally as abundant as those of the surrounding communes. The buildings are spacious and well ventilated, and the arrangements and discipline are such as to secure the general healthiness of the inmates. There is a school for elementary instruction, an infirmary, with various workshops, stores, and machinery for spinning and weaving. One ward is used in common as workshop, refectory, and dormitory. The inmates sleep in hammocks, and are clad in a very coarse uniform. They labour with the spade in the fields, or in making bricks, or at manufactures in the house, under the superintendence of an inspector. All particulars respecting the work, food, clothes, and expenses of each individual are entered daily, in books kept in the military manner. Mounted guards patrol the boundaries of the colony, to prevent the escape of deserters, and rewards are given for bringing back those who succeed in getting away, for each is compelled to remain at least one year. These rigorous measures for the suppression of mendicancy have been adopted in the absence of any acknowledgment of a right to relief, and notwithstanding that a large portion of the relief actually administered arises from endowments and voluntary contributions. No right to relief exists either in Holland or Belgium, yet in both these countries mendicancy is suppressed. The following table shows the number of pauper colonists at Hoogstraeten, during four years subsequent to the revolution in 1830, with the amount of receipts and expenses of the establishment.

	Paupers.	Receipts.	Expenses.
1831	465	174,770 fr.	286,573 fr.
1832	412	200.873	263,394
1833	342	153,751	234,800
1834	256	175,343	274,269

The number of inmates of all the workhouse establishments in the kingdom during the same period, and their expense, were as follows: —

	Inmates.	Expenses.
1831	2,996	477,948 fr.
1832	3,258	494,709
1833	2,647	480,455
1834	2,575	421,644

Which shows that the average cost of each inmate is 163·54 fr. per annum, or 6*l.* 16*s.* In November, 1831, there were, in all the workhouses, 1,871 voluntary inmates, and 657 by order — 1,138 men, 1,018 women, 372 children; 1,502 unemployed, and 1,026 employed.

Prisons and Criminals. — In Belgium, the punishments of death, and of branding, although still written in her laws, are practically abolished. Criminals are placed in four central prisons; namely, at Ghent, for those condemned to forced labour; at Vilvorde, solely for confinement; at St. Bernard, near Antwerp, for correction; and at Alost, for military offences. There is also in the chief town of each prov. having a court of assize, and of each arrond., a prison for persons arrested, or condemned to less than 6 months' confinement, and for debtors. The number of these places in the whole kingdom is 149. A separate penitentiary for female criminals is about to be established at Namur, and a school of reform for criminals under the age of 18. Hitherto, the superintendence and instruction of female prisoners have been confided to the religious order of the Sisters of Providence. The average pop. of the four central prisons in each year, from 1831 to 1836, was as follows: —

Years.	Prisoners.	No. kept at work.
1831	3,217	2,501
1832	3,358	2,726
1833	3,185	2,587
1834	3,444	2,957
1835	3,639	3,137
1836	3,691	3,366

The average total expense of each prisoner to the state is 150 fr. per ann. They work exclusively for the equipment of the army, and for the supply of necessary clothing, &c. for prison use. The annual number of articles manufactured exceeds 1,000,000. Criminals, on their liberation, are placed under the inspection of the prison commissioners, in order to facilitate the obtainment of honest occupation, and prevent a relapse into crime.

In Belgium, the amount of crime with regard to the pop., and to the criminal records of France and England, is comparatively small. M. Ducpetiaux, in a work published in 1835, entitled *Statique comparée de la Criminalité en France, en Belgique, en Angleterre, et en Allemagne*, gives the following results of the several official returns: of England, from 1827 to 1833, taking the pop. at 13,500,000; of France, from 1825 to 1832, pop. 32,500,000; and of Belgium, from 1826 to 1832, pop. 4,000,000: —

Countries.	Annual Average.			Pop. to 1 accused.
	Total accused.	Acquitted.	Condemned.	
England -	16,924	3,556	13,368	797
France -	7,340	2,954	4,386	4,427
Belgium -	766	142	624	5,222

In Belgium, the annual average number of persons accused and arraigned, during the period subsequent to the revolution, from 1831 to 1834, was only 620, or 1 in 6,724 of the whole pop.; and it certainly redounds highly to the honour of the moral character and governmental institutions of that kingdom, that the proportion of criminal offenders is constantly diminishing, while in England it is greatly augmenting.

The proportion of accused to the pop. varies very considerably in the different provinces, but all have experienced a diminution, as exhibited in the following table: —

Provinces.	Pop. to 1 accused.		Dimin. per cent.
	1826—1829.	1831—1834.	
Brabant - -	3,266	5,617	42
Limburg -	3,568	5,924	40
Namur - -	3,976	6,369	38
Antwerp -	4,229	6,138	31
Liege - -	4,828	5,440	11
W. Flanders -	5,282	6,686	21
E. Flanders -	5,410	5,734	6
Luxemburg -	8,072	8,407	4
Hainault -	11,346	17,111	34

With respect to the relative amount of different offences, a comparison of the returns for the period

1826-29 with those for 1831-34, shows that, with the exception of an increase of 2 in the annual average number of murders, and of 3 in that of forgeries of money, there had been a diminution in every species of criminal offence, from 9 to 47 per cent.

In general, there is in Belgium, 1 person accused of crime among 5,000 inhabitants, and 1 of misdemeanour among 170. In 100 accused of crime against the person, 20 are acquitted; and of the same number accused of crime against property, 15 are acquitted. The number of crimes against property is three times greater than that of crimes against persons.

The amount of military offences in 1837 compared with that of 1836, shows a considerable decrease of acts of insubordination and quarrelsome assaults, but a slight increase of robberies, and more than double the number of desertions. From the reports of the central prisons in 1832, it appears that in 100 individuals there confined, 61 were utterly ignorant of reading and writing, 15 could read only, but were otherwise extremely ignorant, and 24 could read and write with some degree of facility.

Government. — Belgium is governed by a constitutional monarchy — under a dynasty freely elected by the constituents of the nation. Its independence was first proclaimed, in an absolute manner, by a provisional government, on the 4th of Oct., 1830, and on the 18th of the following Nov., it was again proclaimed by the national congress. By the terms of the treaty of the 15th of Nov., 1831, Belgium forms a state perpetually neuter with regard to all other states. The Belgian constitution, decreed by the national congress on the 7th of Feb. 1831, places all governmental power in the nation, operating by means of the representative system. It establishes individual liberty, the inviolability of every man's house and property, the perfect liberty and independence of religious worship and opinions, the right of assembling and associating, the liberty of the press, the liberty of teaching, ministerial responsibility, and the independence of the judicial power. In short, the whole system of government is based upon the broadest principles of rational freedom and liberality. The entire draft of the constitution is too long for insertion in this place, but the following particulars comprise all the most essential points of this admirable document. A copy of the original, in the French language, is inserted in the *Annuaire Historique Universel*, for 1831. The order of the several subjects is as follows: — Territory and divisions. Rights of Belgians. Powers of government. Legislative chambers. Senate. King. Ministers. Judiciary powers. Provincial and communal administration. Finance. Military and police forces; and finally, various general and temporary arrangements, and provision for the future amendment of the constitution. It declares that no distinction of orders shall be observed — that Belgians are all equal in the presence of the laws. Individual personal liberty is guaranteed. No one can be prosecuted, nor have his house entered, but by the authority and forms of the law. Punishment by death is abolished, and cannot be re-established. Universal toleration, liberty of public religious worship, and the liberty of publishing opinions on all subjects, are guaranteed. No state church is recognised, and no one can be compelled to conform in any way whatever to the forms and ceremonies of any ecclesiastical system, nor to observe any of the holy days which they enjoin. The state has no right to interfere in the nomination or appointment of the ministers of any religious denomination, nor to prevent the publication of their acts, except as far as it is responsible for the preservation of the liberty of the press from obvious abuse. The form of marriage, as a civil compact, is required to precede the act of religious benediction. Liberty of teaching is established. (Vide *Primary Education.*) No persons can be prevented from giving instruction; but their misdemeanours, as teachers, are cognisable by the law. The press is free, and no censorship can be established. When the author is known, and resident in Belgium, the publisher, printer, or distributor, cannot be prosecuted. Belgians have the right to assemble peaceably and unarmed; but assemblages in the open air are subject to the laws of the police. The right of associating cannot be annulled by any preventive measure. Every one can address petitions to the public authorities, signed by one or more persons. The post-office is responsible for all letters committed to it, and the contents of letters are inviolable. All power emanates from the people, and must be exercised in the manner established by the constitution.

The legislative power is exercised collectively by the king, the chamber of representatives, and the senate. Each branch possesses the power of first moving the adoption of laws; but such as relate to the state expenses and receipts must be first voted by the chamber of representatives. The interpretation of the laws, with respect to authority, belongs only to the legislature. The executive power is exercised by the king, as directed by the constitution, and the judiciary power by the courts and tribunals. All decrees (*arrêts*) and judgments are executed in the name of the king. Questions relating exclusively to provincial and communal matters are determined by the councils of the provinces and communes.

The members of the two chambers represent the nation, and not merely the province or subdivision of a province by which they are nominated. The sittings of the chambers are public, but each chamber can form itself into a secret committee on the demand of its president and 10 members. Members of either chamber cannot receive any pension, or hold any paid office under the government, and during the session they cannot be arrested or detained, except for any flagrant misdemeanour. The chamber of representatives is composed of deputies chosen directly by citizens who pay taxes to the amount of at least 20 florins, about 33 shillings. The number of deputies cannot exceed the proportion of 1 to 40,000 inhabitants. To become a deputy, it is necessary to be a Belgian by birth or by naturalisation; to be in possession of the civil and political rights of the kingdom; to have attained the age of 25; and to be resident in Belgium. No other condition of eligibility can be required. The representatives are elected for four years, and one half of the whole are renewed every two years. On a dissolution, the whole chamber is renewed. Each representative, except those who live in Brussels, receives 200 florins (16 guineas) each month of the session, as indemnity of expenses. The senate is composed of half as many members as the chamber of representatives, and they are elected by the same citizens for eight years. Half are renewed every four years, and the whole on a dissolution. The qualifications are the same as for the representatives, except that the age must be at least 40 years, and the amount paid in direct taxes must be at least 1,000 florins (84*l.*) The senators receive no payment, on account of indemnity of expenses. The session of the chambers must last at least 40 days. The number of representatives is 102, and of senators 51. The constitutional powers of the king are hereditary in a direct male line, natural and legitimate, in the order of primogeniture, to the perpetual exclusion of females and their descendants. In default of male issue, the king may nominate his successor, with the assent of the two chambers, and if no nomination be made, the throne is vacant. The person of the king is inviolable. His ministers alone are responsible. No act of the king is valid unless counter-signed by a minister, who thereby becomes responsible. The king nominates and dismisses his ministers at will, confers gradations of rank in the army, and appoints all persons employed in the general administration, with some exceptions, indicated by the law. He sanctions the laws, and issues the orders and decrees for their execution, without possessing any power either of suspending the laws themselves, or of dispensing with their execution. He commands the land and sea forces, declares war, negotiates treaties of peace, of alliance, and of commerce; but treaties of commerce, and others involving important consequences, are of no effect without the sanction of the chambers. The king may especially convoke or adjourn and dissolve the chambers, and he can mitigate or remit the sentences of punishment pronounced by the judges. He can also confer titles of nobility, but he has no power to attach to them any privileges whatever, all Belgians being absolutely equal in the eye of the law. The nobility enjoy only a personal title, without constituting a social order. No member of the royal family can be a minister, and no one who is not a Belgian by birth or naturalisation. Ministers have no deliberative voice in the chambers unless they are members. They can enter, however, and demand a hearing; and the chambers can demand their presence when required. They are liable to be accused by the chamber of representatives, who can bring them before the court of cassation, which alone is empowered to judge them. The king cannot withdraw a minister from responsibility, nor pardon him when condemned, without a demand for pardon from one of the chambers. There are five ministers; namely, a minister of justice, of the interior, of foreign affairs, of public works, of war, and of finance. The king is declared of age at 18 years. Before he can exercise the functions of royalty, he must take the following oath in the presence of the two legislative chambers: — "I swear to observe the constitution and the laws of the Belgian people; to maintain the independence of the nation, and the integrity of its territory." Judges receive their appointments directly from the king, and hold them for life, so that they cannot be superseded but by their own consent, or by a judgment and for reasons pronounced in open court. The trial by jury is established for all criminal and political charges, and for offences of the press. No extraordinary judicial commission, or tribunal, can be created under any denomination whatever. No taxes can be levied by the state unless ordained by a law of the legislative chambers; and all taxes, as well as the extent of the army, must be voted annually. The civil list is fixed for the duration of each reign. For that of the present king it is 2,751,323 francs, besides the appropriation of the royal edifices.

The number of citizens registered in the electoral lists in 1833 was 47,253, of whom 14,835 were in the cities, and 33,018 in the rural communes. It hence results that, in Belgium, there is one representative to 39,958 inhabitants, and to 478 electors; one senator to 79,325 inhabitants, and to 972 electors; and one elector to 85 inhabitants. To a thousand inhabitants there are 16 electors in the cities, and 11 in the country. Great Britain has one representative to 36,520 inhabitants, and France one to 70,980. Belgium, with respect to electors, is between Great Britain, which, in 1832, had 1 to 29, and France, which, in 1834, had 1 to 177 inhabitants. The national arms are the Belgic Lion, with the motto, *L'union fait la force*, and the national colours are red, yellow, and black, in three vertical divisions. Two decorative orders have been instituted, — the civil and military order of Leopold, and the order of the Iron Cross. The first was created in 1832 to recompense all eminent services to the country. It has four classes, consisting of grands-cordons, commanders, officers, and chevaliers, or knights. The Iron Cross was instituted in 1833, to reward the patriotism of those who were signally distinguished in the revolutionary period from Aug. 1830 to Feb. 1831.

In each province a governor is appointed, directly amenable to the Minister of the Interior, for the purpose of superintending and securing the due execution of the laws, and each administrative arrondissement is superintended by a commissary, under the provincial governor. The exclusive interests of each province are committed to a provincial council, elected by the citizens, who elect the national representatives. The number of councillors in each province is from 50 to 70. Each commune has also its council to manage the affairs which belong exclusively to its inhabitants. The members are elected as those of the provincial councils, in the proportion of 1, on an average, to 187 inhabitants. The total number of communal councillors in the kingdom was, in 1838, 22,285. Each commune has from 2 to 4 bailiffs, and a burgomaster, who is the principal local officer for the administration of justice, and the direction of police affairs.

Judicial system. — A *tribunal de paix* in each canton, a *tribunal de première instance* in each arrondissement, and 3 courts of appeal,—at Brussels, Ghent, and Liege,—form 3 degrees of civil jurisdiction. Misdemeanours belonging to the correctional police are judged by a section of the *tribunal de première instance;* crimes and graver misdemeanours, political offences, and abuses of the press, are judged by a court of assizes in each province, with a jury of citizens possessing certain qualifications indicated by the law. A *Cour de Cassation*, or annulment, at Brussels, decides upon demands against judgments pronounced in the other courts and tribunals. Commercial affairs are judged by 13 tribunals of commerce, in the principal commercial towns. Military laws are administered by councils of war, and by a high court at Brussels for final decisions.

The Court of Cassation pronounces only upon the validity of legal forms, and refers all cases of violation or misapplication of the law to another tribunal. The courts of appeal decide upon appeals respecting the judgments tendered in the tribunals *de première instance* in civil matters, and affairs of commerce and correctional police. The tribunals *de première instance* give definitive judgments upon all civil affairs involving sums under a thousand francs; and the tribunals *de paix* determine cases extending to 50 fr. or to 100 fr. with appeal to superior courts. The tribunals of municipal police are composed of a justice of peace, a commissary of police, and of the burgomaster or bailiff of the commune. The highest degree of judicial proceedings is exercised by the courts of assize, which, in the cities of Brussels, Ghent, and Liege, are composed of a president and 4 assessors, chosen from the councillors of the courts of appeal. In the other chief provincial cities they are formed of 4 judges *de première instance*, and a councillor of the courts of appeal as president. Twelve jurymen, chosen for each case by ballot, from qualified citizens, decide upon the question of guilt, and according to their decision the court acquits or applies the punishment which the law declares. It is calculated that the business of the courts requires annually the services of 2,160 jurymen, and that the kingdom contains 26,359 citizens qualified as the law demands for the performance of that important office.

Finances. — The total revenue of Belgium for the year 1848, as shown by the *Budget Général*, amounted to 117,462,256 fr. The average sum, for each inhabitant, calculating the population at 4,300,000, was therefore 32.5 fr.

The *National Debt* amounted on the 1st May 1848 to 602,968,026 fr., bearing an average annual interest, as seen above, of about 5 per cent. It consists in part of the old debt of the country, of a payment made to Holland to cancel obligations she had contracted on account of Belgium, and of sums borrowed to construct railways, and for other public purposes.

The Belgian budgets for 1847 and 1848 have been as under, viz,

Revenue in 1847 and 1848.

	1847.	1848.
	fr.	*fr.*
Land tax	18,559,750	18,559,750
Personal Taxes	9,149,800	9,200,100
Tax on Patents	3,005,000	3,096,500
Rent of Mines	180,180	180,180
Customs Duties	11,397,000	11,577,000
Excise do.	20,910,000	20,920,000
Stamp Duties	20,670,000	20,750,000
Domains, Forests, &c.	5,950,000	6,100,000
Post-Office	3,575,000	3,625,000
Railways	13,900,000	16,010,000
Packet Boats	312,000	312,000
Arrears received	8,036,920	7,481,120
Totals	115,478,650	117,162,250

The total expenses for the same years, including the sums appropriated for the construction and repair of railways and canals, were, in 1847, 126,653,724 fr. and 139,412,777 fr. as is seen below.

Expenditure in 1847 and 1848.

	1817.	1848.
	fr.	*fr.*
Public Debt	32,557,707	31,813,472
Pensions	3,338,673	3,412,888
Ministry of Justice	13,151,995	12,707,895
— Foreign Affairs	1,468,968	2,719,714
— Interior	7,199,811	8,295,422
— Public Works	18,649,014	17,595,415
— Marine	1,416,562	
— War	27,482,607	37,690,000
— Finances	15,180,357	13,522,750
Deficiencies and repayments	2,026,000	1,951,000
Railways and Canals	1,882,000	9,805,611
Totals	126,653,724	139,412,777

Army. — The quota of the Belgic army is determined every year by a law. The expenses of the war department in 1830-31, were 86,643,275 fr. In 1838, it had fallen to 42,078,786 fr., or less than half; and it continued to decrease till, in 1847, it amounted to only 27,482,607 fr.; but in consequence of the revolution in France, and the commotions in the other parts of the Continent, by which the tranquillity of Belgium was seriously threatened, the war expenditure for 1848 rose to about 38,000,000 fr.

In 1846 the regular army on foot in Belgium comprised 2,449 commissioned officers and 29,487 non-commissioned officers and men. But its numbers have since been increased. In addition to the regular troops there is, in imitation of the French system (which ill deserves to be taken for a model) a national or civic guard amounting in all to about 600,000 men.

It was generally supposed, when the late revolution took place in France, that Belgium would be the country most likely to feel its influence, and to follow its example. But the result has shown the futility of these anticipations. And Belgium has been, in fact, less agitated with revolutionary principles and movements during the last two years than any other state on the continent, Russia, perhaps, excepted. In this instance, at least, the aversion to change of the Belgian peasantry has been highly conducive to their interests.

Marine. — Belgium, on her separation from Holland, was left entirely without an armed navy. She has only a flotilla of gun boats.

History. — In the ages immediately preceding and subsequent to the Christian æra, much of the great plain which now comprises the provinces of W. and E. Flanders and Antwerp, was partially overflowed by the ocean. The soil was so marshy that an inundation or a tempest threw down whole forests, such as are still discovered below the surface. The sea and rivers had no limits, and the earth no solidity. Many of the inhabitants of this low plain lived in huts placed upon the mounds of sand, or elevated above the reach of the tides upon stakes. They had fish for food, rain water for drink, and peat for fuel. (*Pliny's Nat. Hist.* lib. 16.) The higher S. and E. parts, forming at present the Walloon country, were covered by the immense forest of the Ardennes, which extended from the Rhine to the Scheldt, and afforded shelter to numerous tribes of the German race (*Cæs.* lib. 2. 4.), who lived by hunting, and by rudely cultivating the earth. They formed a part of the third division of Gaul, which, by the Romans was called Belgia, Bel-

gium, or Gallia Belgica, and were the least civilised and most courageous of all the Gallic nations. (*Cæs.* lib. 1. 1.) They had cities, surrounded by lofty stone walls and fortified gates, requiring the use of the Roman battering-rams and moving towers. Their armies contained troops of cavalry: the country produced supplies of corn, and abundant herds of cattle. The people consisted of two classes, chiefs and slaves; and Druidism from Britain was universally predominant. Flanders was occupied by the Menapii and Morini, Brabant by the Atuatici, Hainault and Namur by the Nervii, and Luxemburg and Limburg by the Eburones. &c. In the great confederacy of these clans against the Romans they levied about 120,000 fighting men, 60,000 of whom were reduced by Cæsar to 500, in his battle with the Nervii near Namur (*Cæs.* lib. ii. c. 28.), and of the Atuatici he sold 53,000 for slaves, on taking the town of Tongres. In stature and bulk they surpassed the Romans. Cæsar does full justice to their bravery. Speaking of the Nervii he says, "Fame, therefore, deceived not in proclaiming so loudly the bravery of a people, who thus adventured to cross a very broad river, climb the steepest banks, and rush upon an enemy possessed of all the advantages of ground. Difficulties which, though seemingly insurmountable, appeared yet as nothing to men of their resolution and magnanimity." (*De Bello Gallico*, lib. ii. c. 27.) The highland tribes soon became amalgamated with their Roman conquerors, adopted their manners and language, and during the long dominion of Rome in those regions, they served in her armies, and were greatly distinguished for their intrepidity; so that many of Cæsar's subsequent victories, especially that of Pharsalia, were decided by the cavalry and light infantry of Belgium. The lowland or maritime people, on the contrary, continued faithful to their ancient manners, customs, and language, and sought only to secure national independence by maritime commerce and agricultural industry. Pliny, who speaks from personal observation, says that, in his time, their fruits were abundant and excellent.

In the 3d, 4th, and 5th centuries, the character of the Belgic population was greatly changed by successive invasions of Salian Franks from the north, whose progress westward terminated in the establishment of the Frankish or French empire in Gaul, and under whose dominion the ancient inhabitants of the Ardennes were either destroyed or reduced to slavery. Christianity was introduced, and monasteries were founded in the immense forests and solitudes of the higher country, which the French nobles visited only for the sake of hunting bears. The maritime lowland descendants of the Menapii, now blended with Saxons and Frisians, and known by the name of Flemings, continued to prosper in commerce and agriculture. In the time of Charlemagne, A. D. 800, the physical state of the country had become much improved. In the W. embankments were raised against the encroachments of the sea, and in the E. large tracts of forest were cleared; but the fierce and valiant warriors who formerly occupied the soil, were succeeded by an abject race of serfs, who cultivated the domains of haughty lords and imperious priests. The clergy enjoyed immense possessions: 14,000 families of vassals belonged to the single Abbey of Nivelle, and the income of the Abbey of Alne exceeded 1,300,000 dollars. The Flemings formed associations called *Gilden* (the English guilds) for protection against the despotic violence of the Franks, as well as for social assistance. These were the origin of all the ancient municipal corporations, and within a century after the time of Charlemagne, Flanders was covered with corporate towns. At the end of the 9th century, the Normans, that is, rapacious inhabitants of Denmark, Sweden, and Norway, commenced a series of piratical irruptions into Belgium, and continued to plunder and devastate the whole country during 150 years. In 1070 Flemish maritime commerce had made a great progress with Spain and England, from whence wool was largely imported. Woollen stuffs and the herring fishery were the principal source of wealth, with corn, salt, and jewellery. The men of Flanders were so highly reputed for martial spirit that many foreign sovereigns obtained them to form their best troops. They constituted an important part of the Norman army in the conquest of England; and a Flemish princess, daughter of Baldwin, Count of Flanders, and wife of William the Conqueror, embroidered with her own hands the celebrated tapestry of Bayeux, which represents the whole history of that event.

The country had long been divided into provinces, belonging to different families, and governed by different laws. Hence the counties or earldoms of Flanders, Namur, and Hainault; the duchies of Brabant, Limburg, and Luxemburg; the principality of Liege; the marquisate of Antwerp; and the seignory of Mechlin. At the end of the 11th century, when all the states except Flanders were reduced, by the fierce quarrels of the feudal lords and prince bishops, to a cheerless waste of bondage, the fanatical phrensy of the crusades induced many of the nobles to part with lands, and to grant great privileges and political powers, in order to obtain the means of equipping armies to fight the Saracens. Their wealthy vassals, the Flemish burghers, were thus enabled to purchase independence, and a jurisdiction of their own. They consequently formed themselves into communes, elected bailiffs, directed their own affairs, and built magnificent town halls with huge belfries, as temples and trophies of their liberties. The people, conscious of their power, gradually extorted from their rulers so many concessions, that the provinces formed, in reality, a democracy, and were only nominally subject to the monarch of France and his nobles. When the rest of Europe was subject to despotism, and involved in comparative ignorance and barbarism, the court of the counts of Flanders was the chosen residence of liberty, civilization, and useful knowledge; and when the ships of other nations scarcely ventured beyond the sight of land, those of the Flemish merchants traversed the ocean, and Bruges and Antwerp possessed all the commerce and wealth of the north of Europe. In this state the provinces long continued, until they came under the dominion of the Duke of Burgundy, about the middle of the 15th century. Previous to this event, we find only unconnected duchies, counties, lordships, and towns, with innumerable rights, claims, and privileges, advanced and enforced now by subjects and vassals against each other or against their lords; and now by lords and vassals against the monarch, without the expression of any collective idea of Belgium as a nation. Under the Burgundian dynasty the commercial and manufacturing towns of the low country enjoyed a remarkable prosperity. The famous order of the Golden Fleece was instituted in 1430; and before the end of the 15th century the city of Ypres had 4,000 looms, and the city of Ghent, 50,000 weavers. Bruges and Antwerp were the great marts of the commercial world, and contained each about 200,000 inhab. In the Flemish court of the duke of Burgundy, named Philip the Good, about 1455, luxurious living was carried to a vicious and foolish excess. The wealthy were clad in gorgeous velvets, satins, and jewellery, and their banquets were given with almost incredible splendour.

This luxury produced depravity and crime to such an

extent, that in one year 1,400 murders were committed in Ghent, in the gambling-houses and other resorts of debauchery. The arts were cultivated with great success. Van Eyck invented the beautiful oil colours for which the Flemish school is renowned. Painting on glass, polishing diamonds, lace, tapestry, and chimes were also invented in Belgium, at this period. Most of the magnificent cathedrals and town-halls in the country were built in the 13th and 14th centuries. History, poetry, and learning were much cultivated; and the university of Louvain was the most celebrated in Europe. In 1477 Belgium passed under the dynasty of the empire of Austria; and after many years of contest between the despotic Maximilian and the democratic Flemings, the government, in 1519, descended to his grandson, Charles V., King of Spain and Emperor of Germany. In his reign the affluence of the Flemish burghers attained its highest point. The city of Ghent contained 175,000 inhabitants, of whom 100,000 were employed in weaving and other industrial arts. Bruges annually exported stuffs of English and Spanish wool to the value of 8,000,000 of florins. The Scheldt at Antwerp often contained 2,500 vessels, waiting their turn to come to the wharfs; her gates were daily entered by 500 loaded waggons; and her exchange was attended, twice a day, by 5,000 merchants, who expended 130,000 golden crowns in a single banquet given to Philip, the son of Charles V. The value of the wool annually imported from England and Spain exceeded 4,000,000 pieces of gold. This amazing prosperity experienced a rapid and fatal decline under the malignant tyranny and bigotry of Philip II., son of Charles V. The doctrines of the protestant reformation had found very numerous adherents in Belgium. Lutheranism was preached with phrensied zeal by several popular fanatics, who drew around them crowds amounting sometimes to 10,000 or 15,000. Parties of iconoclasts also appeared, and demolished the ornamental property of 400 churches. Protestant persecution by the Inquisition had been commenced by Charles V.; but by Philip II. it was established in its most diabolical extravagance. He filled the country with Spanish soldiers, and commissioned the Duke of Alva to extirpate, without mercy, every protestant heretic in Belgium. Volumes have been written to describe the proceedings of this able soldier, but sanguinary persecutor, who boasted that in less than 6 years he had put to death 18,000 men and women by the sword, the gibbet, the rack, and the flames. Ruin and dread of death in its most hideous forms drove thousands of artisans to England, where they introduced the manufacturing skill of Bruges and Ghent. Commerce and trade in Flanders dwindled away, many of the rich merchants were reduced to beg for bread, the great cities were half deserted, and forest wolves often devoured the scattered inhabitants of desolated villages. Belgium remained under Spanish dominion until the memorable victory of Ramillies, in 1706, after which it was subject again to Austria; and having been several times conquered by, and reconquered from, the French, it was incorporated, in 1795, with the French republic, and divided into departments. By this union, Belgium secured a suppression of all the old feudal privileges, exemption from territorial contributions, the abolition of tithes, a more extensive division of real property, a repeal of the game laws, an admirable registry law, a cheap system of tax collection, the advancement of education in central schools and lyceums, a uniform system of legislation by the creation of codes, publicity of judicial proceedings, trial by jury, and the general use of the French language. In the centre of Belgium was fought the great battle of Waterloo, in 1815. It is not necessary to add a word upon this memorable event, except to remark, that Belgium has so often been the scene on which the surrounding nations have settled their quarrels, that it has long been styled the cockpit of Europe. By the congress of Vienna, the provinces of Belgium were annexed to those of Holland, to form the kingdom of the Netherlands, which existed until the revolution in 1830, when Belgium became an independent nation. Her union with Holland was one of convenience on the part of those by whom it was negotiated, and not attributable to any congeniality of the people joined together, who differ in national character, in religion, and in language. The Belgians complained of being forced into a union which they would not have sought, and that its terms were unequal. The French revolution, which had recently transpired, excited the predisposition to insurrectionary movement, and the result was a declaration, and, finally, a general recognition, of independence. (Vide *Government*, *Constitution*, &c.)

Antiquities.—No part of Europe contains, within the same extent of area, so many objects, and furnishes so many associations, to interest the antiquarian, the political, ecclesiastical, or military historian, the artist, and the poet. Numerous ancient cities and towns, some of which existed long before the Christian era, still are adorned with magnificent Gothic structures of the middle ages, that recall to the imagination the gorgeous pageantry of the days of chivalry; and on many a lone hill, and forest solitude, stand the ruins of castles, abbeys, and châteaux, whose lordly owners have been the heroes of romantic legends. In the S. and E. provinces are found lithoi, tumuli, and other remains of the Celtic Druids, to whom is attributed the excavation of numerous apartments and passages in several subterranean caverns, particularly that of the hill of St. Peter, near Maestricht, which contains above 100,000 different avenues, 12 ft. in width, and from 6 to 24 in height. Numerous coins and medals of the Romans have been found on the sites of their camps and roads; and Roman masonry, containing inscriptions in honour of the Menapian divinities, has been discovered among the relics of ancient towns, in places now overflowed by the sea. Near Charleroy, in the midst of beautiful scenery, are the ruins of the celebrated Abbey of Alne, the cloisters of which were formed by 300 columns of the finest marble. But any attempt even to mention particular objects of curiosity would require more than allowable space. We will therefore only observe, that the old castles of the 15th century, in the neighbourhood of Liege, are described in Sir Walter Scott's novel of Quentin Durward.

It would be equally impracticable to enumerate the eminent and remarkable individuals who have received their birth, or have flourished in Belgium, throughout the course of her history. It is the land which furnished many of the ablest generals and most valiant soldiers of the emperor Charles V., who himself was born at Ghent; the land where the noble counts Egmont and Horn were beheaded by Spanish tyranny, for defending social liberty; and where William Tyndale was strangled and burnt by Catholic bigotry, for translating the Gospels. It is the birthplace of Scaliger, Lipsius, and Van Helmont; of the geographers Ortelius, and Mercator; of John of Gaunt, or Ghent; of Perkin Warbeck, who was the son of a Jew of Tournay; of the painters Van Eyck, Quentin Matsys, Rubens, Vandyke, Teniers, Jordaens, Snyders, and many others who have sustained the high reputation of the Flemish school.

Authorities.— The statements of the preceding article are made chiefly upon the authority of the following works, and partly on the writer's personal observation:— *Heuschling, Statistique Générale de la B.*, 1838; *Documents Statistiques de la B.* (*official*), 1839; *Vander Maelen Dict. Geog. des Provinces de la B.; Baron d'Huart, Statistique Territoriale de la B.*, 1839; *Arendt, Belgische Zustaende*, 1837; *Briavoinere, De l'Industrie en B.*, 1839; *Van Aelbroek, Agric. de la Flandre*, 1830; *Rham, Outlines of Flemish Husbandry*, 1839; *Ratcliff, Agricultural Survey of Flanders; Nicholls, Reports on B.*, 1839; *Journal of the Statistical Soc. of Lon.; Article B. in Penny Cyclopædia; Grattan's Hist. of the Netherlands; Des Roches, Hist de la B.; Syphorien, Voyage Historique et Pittoresque dans les Pays Bas; Guicciardini, Descriptio Belgii; Annuaire de l'Observatoire de Bruxelles*, 1839; *Ducpetiaux, Education en B.*, 1839; articles in the *Annual Register* for 1830; in the *British and Foreign Quarterly Rev.*, *Foreign Quarterly*, and *London and Westminster Rev.* for April, 1839; *Murray's Hand-book of the Netherlands*, 1839; *Coglan's Guide to B.*, 1837; *Boyce's Belgian Traveller; Traveller's Guide through B.*, &c.

BELGRADE (an. *Singidunum*), a fortified town of the principality of Servia, on the right bank of the Danube, at the point where it is joined by the Save; lat. 44° 47′ 46″ N., long. 20° 39′ E. Pop. 20,000. From its position, on the limits of the Austrian and Turkish empire, at the confluence of two great rivers, its great strength, and the numerous sieges it has sustained, much interest has long been attached to Belgrade. Its citadel, on a steep hill, 100 feet high, near the centre of the town, occupies a most formidable position. It has been very strongly fortified; and if it were properly repaired and garrisoned, with the fortifications on the low ground at the junction of the rivers sweeping as they do every approach by land and water, it would be all but impregnable. Latterly, however, its works have been neglected, and they are now going fast to ruin. Within the citadel are the arsenal and magazines, the principal mosque, and the palace of the pacha; the latter constructed of wood and mud! The town lies principally to the W. and S.W. of the fortress, partly along the Save, and partly on higher ground, and is surrounded by walls and palisades, generally in a ruinous state. The situation of the town is no better than that of the citadel. Many of its houses are in ruins; most of them are of the meanest possible description, "worse even than the cabins of the Irish;" and the streets are disgustingly filthy, and infested with herds of half-starved dogs. The bazar consists of several rows of miserable wooden booths, entirely open towards the street: their assortment of goods corresponds with their appearance. Prince Milosch has

hitherto resided at Kragugewats, but he has built here a handsome house in the upper part of the town, a Greek church, and barracks. The manufactures are inconsiderable, consisting principally of carpets, silk goods, some descriptions of hardware and cutlery, with saddlery, &c. It has a good port on the Danube, and it is admirably situated for trade, of which, in consequence, it still preserves some small share.

The Turks, under Solyman the Magnificent, took Belgrade in 1522, and held it till 1688, when it was taken by the Imperialists. Two years after, it again fell into the hands of the Turks; and though it has since been repeatedly taken by the Imperialists, they have, in most instances, soon after restored it to its Ottoman masters, of whose miserable government its present abject and degraded condition is a striking, though, unhappily, not a rare example. It was taken, in 1807, by the Servian insurgents, who, on being obliged to abandon it, in 1813, burnt the suburbs, and partly destroyed the fortifications. The town was placed, in 1815, along with Servia, under the sovereignty of Prince Milosch; but its citadel is still occupied by a Turkish garrison, which, in 1836, amounted to only 600 half-disciplined troops. (*Murray's Handbook; Elliott's Travels*, i. 103, &c.)

BELIDA, an inl. town of the regency of Algiers, prov. Titteri, at the foot of the Lesser Atlas, near the plain of Metidjah; 25 m. S. Algiers, and 10 m. N.E. Medeah; lat. 36° 18′ N., long. 2° 45′ E. It is surrounded by a wall 12 to 16 feet high, which has 4 gates, one at each of the cardinal points. Its streets are wider, and more agreeable than those of Algiers: the town is well supplied with water, and contains many gardens. It suffered much from the violent earthquake of 1825, since which the houses have been with only a ground-floor. Belida has some trade in grocery, spices, and other natural produce: its vicinity is fertile and picturesque. In July, 1830, the inhab. invited the French to defend them against the Kabyles; but after their arrival the Bedouins compelled the citizens to take up arms against them. Next year, however, the French took and still hold Belida.—(*Rozet. Voyage, &c.*, iii. 195—202.)

BELINZONA. A town of Switzerland, cant. Ticino, of which it is the cap., in a deep valley on the banks of the Ticino, 5 m. above where it falls into the Lago Maggiore, and 15 m. N. Lugano; lat. 46° 10′ 35″ N., long. 8° 55′ 30″ E.; pop. 1,600. Being situated near the S. extremity of the great road from Italy to Switzerland, by the St. Gothard pass, it is a depôt for the merchandise passing between them. It has a handsome church, and a bridge over the Ticinio, 714 ft. long, and 24 ft. wide.

BELITZ, a town of Prussia, prov. Brandenburg, 12 m. S. by W. Potsdam. Pop. 2,000. It is surrounded by old walls and fosses; and is the seat of a board of ecclesiastical inspection. Flax is grown extensively in its vicinity, and it has manufactures of linen.

BELLA, a town of Naples, prov. Basilicata, cap. cant., 15 m. S. by W. Melfi. Pop. 5,000. It is situated on a hill; has a collegiate, and one other church, an hospital, and three charitable foundations.

BELLAC, a town of France, dép. Haute Vienne, cap. arrond., on the declivity of a steep hill, near the confluence of the Vincou and the Gartempe, 24 m. N.N.W. Limoges. Pop. 3,037. It has a tribunal of original jurisdiction, an agricultural society, with various manufactures, and a considerable trade in cattle, oak timber, and chestnuts.

BELLARY (*Valahari*), a distr. or collectorate of Hindostan, presid. Madras, part of the Balaghaut ceded distr. (See BALAGHAUT.)

BELLARY, the cap. of the above collectorate, and the head-quarters of a civil estab. and a military division, 280 m. N.E. Madras; lat. 15° 5′ N., long. 76° 59′ E. It consists of a square fortress on an isolated rock, with a pettah or small town below it, containing the best military bazar in India. This also is the name of a ruined town of Allahabad, formerly of great extent, and having some fine Hindoo temples in its vicinity.

BELLE-FONTAINE, a village of France, dép. Vosges, 7 m. W. Remiremont. Pop. 2,650. Some cutlery is made here.

BELLEGARDE, a fortress of France, dép. Pyrénées Orientales, on the Spanish frontier, 18 m. S. Perpignan. This is a fortress of the first class, constructed in the reign of Louis XIV., to command the pass of Perthus. It was taken in 1793 by the Spaniards, and retaken the following year by the French. Bellegarde is also the name of several small towns in different parts of France.

BELLEISLE, an isl. at the N. entrance to the straits of the same name, between the country of the Esquimaux, or New Britain, and the N. end of Newfoundland. It is 21 m. in circuit, and 16 m. from the coast of Labrador. On the N.W. side it has a harbour for fishing vessels, or small craft.

BELLE-ISLE-EN-MER, an island of France, in the Atlantic, 8 m. S. of Quiberon Point, being included in the dép. Morbihan. It is almost every where surrounded by high steep rocks. Its N.W. end is in lat. 47° 32′ N., and its S. part in lat. 47° 16′ N. It is about 11 m. in length, its greatest breadth being about 6 m. It is accessible only at three havens or ports, all of which are dry at low water. Of these Palais, on the E. coast, is the principal, as well as the capital. The haven here is formed by a stone pier, 200 ft. in length, and is protected by a strong citadel: it has only 5 ft. at high water, but the road is generally safe. The two other accessible points, Sauzon and Loc Maria, are also both fortified. Pop. about 6,000. It is fertile, producing excellent wheat and horses. The inhabitants are extensively engaged in the sardine fishery, and make excellent pilots.

This island was purchased in 1658 by Fouquet, intendant of finance to Louis XIV., and was exchanged in 1718 by his descendant for the comté of Gisors. In 1761 it was taken by the English, but was restored to France in 1763. (*Hugo*, art. *Morbihan; Purdy's Sailing Directions for the Bay of Biscay*, p. 8.)

BELLESME, a town of France, dép. Orne, cap. cant., on a hill which commands the environs, near the forest of the same name, 22 m. E.S.E. Alençon. Pop. 3,263. Houses well built; streets straight, neat, and well paved. The want of running water is supplied by wells. It has fabrics of coarse linens and cottons, and a considerable trade in wood and horses.

BELLEVILLE-SUR-SAONE, a town of France, dép. Rhone, cap. cant., on the Rhone, 8½ m. N. Villefranche. Pop. 2,448. It has a manufacture of stuffs, called *coton brochée*, and muslins.

BELLEY, a town of France, dép. Ain, cap. arrond., between two hills, within 4 m. of the Rhone, 42 m. E. Lyons; lat. 45° 45′ 29″ N., long. 5° 41′ 19″ E. Pop 3,970. It is the seat of a bishopric; has a tribunal of first instance, a director of customs, a secondary ecclesiastical school, a public library, and a museum of antiquities. The episcopal palace, finished only a few years before the Revolution, is one of the most remarkable edifices in the department. It is very ancient. The bishopric was founded in 412. (*Hugo*, art. *Ain*.)

BELLINGHAM, a market to. of England, co. Northumberland, on the Tyne, 22 m. W. Morpeth, and 28 m. W.N.W. Newcastle. Pop., in 1821, 404; 1831, 464. It is supposed to occupy the site of a Roman station, and several circular intrenchments of the fortified villages of the Britons are in the neighbourhood. The entire parish belonged to the Earl of Derwentwater, and was given to Greenwich Hospital, with the other estates of that nobleman, on his attainder in 1715. The church, dedicated to St. Cuthbert, is small and old. There are places of worship for Seceders and Rom. Catholics; a free school, poorly endowed; and a book club, formed in 1809. It is a station for receiving votes at elections for members for the S. div. of the co. Markets are held on Saturdays; fairs on the first Saturday after 15th Sept., and the Wednesday before Good Friday; also "hirings" for servants on the Saturdays before 12th May and 12th Nov.

BELL-ROCK, a dangerous ledge of rocks, off the coast of Scotland, in the German Ocean, opposite to the Frith of Tay, 12 m. E. Buttonness Point. The ledge is about 850 yards in length by about 110 in breadth. At low water, some of its summits appear from 4 to 8 ft. above the level of the sea, but at high water they are always covered. Many vessels have been lost on this rock, over which the sea breaks with tremendous fury. To lessen the chance of such disasters, a magnificent lighthouse, constructed on the model of the Eddystone, was erected, on one of its points, in 1808-10. The total height of the building, including the light-room, is 115 ft., the lantern being elevated 90 ft. above the sea at high-water mark. The light is revolving, the flashes succeeding each other every two minutes. Lat. of lighthouse 56° 26′ N., long. 2° 23′ W. During foggy weather, bells are tolled every half minute.

BELLUNO (an. *Bellunum*), a city of Austrian Italy, cap. prov. same name, in the valley, and on the S. bank, of the Piave, at the place where it is joined by the Ordo, on the great road connecting Vienna with Venice, 48 m. N. of the latter; lat. 46° 7′ 46″ N., long. 12° 13′ 51″ E. Pop. 9,800. It is surrounded by an old wall; is well built; has a cathedral, designed by Palladio, and several churches and convents; a rich hospital, a gymnasium, with various other educational establishments; a valuable public library, &c. Water is conveyed into the town from a distance by a fine aqueduct. It is the seat of the provincial authorities, and has fabrics of silk, wax, leather, hats, and earthenware; with a considerable trade in timber, and large fairs in February and April. Napoleon conferred on Marshal Victor the title of Duke of Belluno.

BELMONT, a town of France, dép. Loire, cap. cant., 16 m. N.E. Roanne. Pop. 3,390.

BELMONTE, a town of Naples, prov. Calabria Citra, on a mountain not far from the Mediterranean, 14 m. W.S.W. Cosensa. Pop. 3,400. It has a castle, 4 churches, and some trade in silk. This is also the name of a small Neapolitan town, prov. Sannio.

BELOOCHISTAN (an. *Gedrosia*, and the countries of the Ichthyophagi, Oritæ, Arabitæ, &c., *Arrian*), a country of S. Asia, lying between 24° 55′ and 30° 15′ N. lat., and 57° 50′ and 69° 15′ E. long.; having N. Afghanistan, Seistan, and the sandy desert of Caubul; E. Upper and Lower Sinde; W. Persia; and S. the Indian Ocean: length, E. to W., 700 miles; breadth, on either side, 350 m., and 190 in the centre: area 200,000 sq. m. (Eng.) Pop. has been estimated at 3 millions, but this, no doubt, is far beyond the mark: we incline to think that 500,000 would be nearer the truth.

Mr. Pottinger describes this country under the following divisions: —

		Ch. T.	No. of Inhab.
1. Prov. of	Sarawan	Kelat	20,000
—	Jhalawan	Zuhree	2,500
2. —	Mukran	Kedje	
—	Lus	Bela	2,000
3. —	Cutch Gundava (and Hurrund Dajel)	Gundava (Hurrund.)	
4. Kohistan		Puhra, Surhud.	
5. The Desert.			
6. Sinde.			

We shall only notice the first four divisions; the 5th belongs properly to Caubul, and the 6th will be treated of separately.

By far the greater part of Beloochistan is mountainous, and especially its E. and W. divisions, which consist of two table-lands; those of Kelat and Kohistan (*the land of mountains*), whose ranges run mostly N. and S., and communicate with each other by several other extensive ranges running E. and W. across the central prov. of Mukran. Those in the E., which separate Beloochistan from Sinde, and bound Cutch Gundava W., are a lateral branch from the Hindoo-Koosh, by which the country is so intersected in various directions "as to resemble a piece of network:" it varies greatly in width; in lat. 30° being 275 m., but at Cape Monze, which is formed by it, it is only 40 m. across: the height of the range has not been measured; but Kelat, the most elevated point, is thought by Pottinger to be 8,000 ft., and by Bell (*Notes on Rollin's Anc. Hist.*) to be 10,000 ft. above the level of the sea. These "Brahooick mountains" terminate S. W. in a remarkable range running N.W. to about 28° N. lat., where it divides; one arm passing N.E. toward the Afghan hills, the other, the Wushatee, or Much mountains, direct W. for two degrees, bounding the desert S., and then uniting with the W. table-land, or that of Kohistan. This latter communicates N., by a long chain, with the Paropamisan mountains W. of Herat, and after enclosing the deserts of Bunpoor and Bushkurd by another chain, W., with those of Kerman (Persia). A considerable range passes in a waving manner E., to meet the Brahooic mountains, varying in its distance from the sea from 25 to 100 m., and dividing Mukran into 2 parts, the coast and the interior. The height of the W. is somewhat inferior to that of the E. mountains.

Excepting those of Lus and Cutch Gundava, which provs. are entirely flat, and that of Wudd, in Jhalawan, there are but few plains of any fertility. The coast division of Mukran is covered by flat barren sands destitute of water, and, excepting date trees, of all vegetation. The desert of Bunpoor, a sandy waste, 155 m. long by 80 m. broad, is a continuation of the deserts which prevail in the middle of Persia and the S.W. of Afghanistan.*

Cutch Gundava, intersected by some of the W. tributaries of the Indus, is the only well-watered province. The remainder of Beloochistan suffers from want of water, excepting, perhaps, a few rice grounds in the prov. of Lus. There is not a rivulet in the N., and only a few along the coast, which, although sometimes swollen in a few minutes to torrents, by profuse rains, are for the most part of the year nearly dry. The principal stream is the Dust or Mooleedanee (probably the Boodoor of the desert, and, if so, rising N. of the Wushatee mountains, and running a course of 1,000 m. before reaching the sea, in 61° 45′ E. long.); the Poorally (an. *Arabis*), the second in size, rises in Lus, N. of Bela, and falls into the Bay of Soumeany: for 25 m. this stream is navigable for small boats. (*Pottinger*, p. 297.)

The geology of this region is nearly unknown: the rocks in the mountainous parts are grey or black; the soil is commonly stony, but consisting mostly of a black loam in the valleys; in Kohistan some of the lofty hill tracts are covered by a vegetable mould. Former volcanic action is evident in this province, which yields most of the minerals found in Beloochistan, viz., sal ammoniac, brimstone, alum, nitre, rock salt, lead, iron, copper, tin, naphtha, &c. (*Pottinger*, pp. 322. &c.) Gold and silver are found only in Jhalawan, 150 m. S. S.W. of Kelat; antimony in vast quantity S. of Kelat, sulphur, alum, and a red aperient salt in the hills between Kelat and Cutch Gundava; white and grey marble near Nooshky on the borders of the desert; salt in efflorescence on the plains of Lus, &c.

The climate is healthy except in Mukran. In the mountainous provinces there are 4 different seasons in the year, as in Europe; the spring from the middle of February to the middle of April; the summer thenceforward to the beginning of August, the heats of which are intense only towards the latter end: the autumn lasts till the October snows; and the winter, which is very severe, for the rest of the year. In the spring there are snow, hail, and violent winds, and the weather is quite as fluctuating generally as in England. In Mukran and Lus there are 4 seasons; 2 wet, and a cold and a hot: the cold one is much milder on the coast; the hot one lasts from March to October. (*Pottinger*, pp. 319—321.) In February and March there are rains with N. W. winds for a fortnight or three weeks; but in June, July, and part of August, they prevail with all the fury of the S.W. monsoon. In Kohistan the June rains are often very partial, and a famine not unfrequently ensues from drought. Cutch Gundava enjoys a much milder climate than any other province, and is resorted to in the winter by many neighbouring chieftains.

The best timber is that of the *Zizyphus jujuba*, which is similar to teak; the palm tree grows in the W.; the tamarind, neem, peepul (*Ficus religiosa*), sissoo, chinar (*Platanus orientalis*), mango, walnut, and sycamore, grow in this and other parts of the country. Fruits of almost all kinds known in Europe, as apples, pears, apricots, peaches, pistachio nuts, mulberries, pomegranates, &c., with the plantain, guava, &c., are common in many districts. Mukran is famous for its dates, which are exported in large quantities: N. of Kelat the almonds are so fine that they may be blanched with a dry cloth; and melons often grow so large that a man is scarcely able to lift them. (*Pottinger*, pp. 327, 328.)

Lions and tigers are rare, but both are found on the E. border; hyenas, wolves, and jackals, prevail over the whole country, and wild dogs, which hunt in packs of 20 or 30. Leopards, wild cats, foxes, &c., infest the jungles; and wild asses, antelopes, elks, red and moose deer, hares, mongooses, and mountain goats, are common; eagles, kites, magpies, are found round Kelat: water-fowl, herons, flamingoes, bustards, partridges, lapwings, snipes, &c., are natives: fish abound on the coasts; where they form the chief food of both man and beast, but not in the rivers: *Chelonia* and *Testacea* are also abundant; vermin and venomous animals are by no means so common as in Hindostan. (*Pottinger*, pp. 328, 329.)

Pasture being considerably more abundant than arable land, and the population consisting chiefly of wandering shepherd tribes, the number of cattle is considerable. The sheep are of the fat-tailed kind; the goats have rough and black hair: the large cattle are mostly of the black breed, or buffaloes. The horses of Cutch Gundava, and the country S. of Kelat, which are those chiefly sent to India, are large, strong, and bony, but vicious; those of Mukran and Lus are small and spiritless: there are mules and asses; but camels and dromedaries are preferred as beasts of burden. Camel-grass and straw are the chief food of the cattle: in the S. of Mukran and Lus there are two crops of the former yearly, owing to the two wet seasons. Greyhounds and shepherds' dogs, of a ferocious kind, are both much valued: fowls and pigeons are the only domesticated birds. (*Ibid.* pp. 327, 328.)

Excepting in Cutch Gundava, which is fertile, well cultivated, and said to be capable of producing enough of grain for all the inhab. of Beloochistan, not a hundredth part of the country is cultivated: the table-lands yield only the coarser produce of Afghanistan. All the kinds of grain known in India are, however, grown; viz., rice, in the marshes on the coast (but it will not thrive in Cutch Gundava, though it be abundantly moist), wheat, barley, *Holcus spicatus* and *sorghum*, maize, sesamum, &c. The wheat and barley do not ripen so soon as in Britain: in the upper parts of Sarawan and Jhalawan the former is sown in August and September, and reaped in June; barley sown a month later comes to maturity in about 8 months; maize, in warm and sheltered places, in 3 or 4 months. In Cutch Gundava, Lus, and a part of Mukran, wheat ripens in 6 months, barley in 5 months, and oriental grain in from 2 to 5 months. Cotton, indigo, and madder, are grown, but the indigo does not thrive: all the pulse and vegetables common with us are grown near Kelat. (*Pottinger*, pp. 324—326.; *Elphinstone, Caubul*, p. 495.)

Manufactures are very few and rude; most of the articles, beyond what are absolutely necessary to the support of life, being imported from neighbouring countries, in exchange for the few natural products. Sugar is prepared near Bela, the canes being pressed in a mill, the juice boiled in flat copper pans, and the article afterwards packed in bags of palmyra-leaf, and

* It was through the plains of Mukran and the succeeding desert of Bunpoor that Alexander the Great led his army into Persia, during, which march so much was suffered from thirst and famine. It is not now believed that his loss of men was so great as has been represented, but the troops kept too near the hills: had they been close to the shore they would have found *fresh* water on digging a foot or two below the surface.

exported: the sediment is used for manure. Gum assafœtida is extracted from the stalk of the *Ferula assaf.*, by incisions near the root, which permit the escape of the juice: about 1 lb. is obtained from each plant. The gold and silver ores are never worked, but pass into the hands of the Hindoo traders in their rough state. At Kelat there is an armoury belonging to the khan, for swords, spears, and matchlocks; but their workmanship is very clumsy and inferior. (*Pottinger*, pp. 26—109.)

The principal exports are horses, and other cattle, skins, dates, grain, some rice, cotton, silk, oil, indigo, salt, borax, nitre, &c.; from Lus, grain, felt, and coarse carpets, are sent into Mukran and Arabia. From the latter country almonds and Caffre slaves are imported, the Caffres being deemed very valuable; from India, iron, tin, lead, steel, copper, indigo, betel-nut, cochineal, sugar, spices, silks, gold-cloths, chintzes, and coarse woollens, fruit, &c.; from Caubul and Khorassan, steel and copper; from Seistan, white cloths, loongees, turbans, &c.; from Sinde, Shikarpoor, &c., porcelain, tobacco, coffee, opium, &c. Broad cloth, Scotch plaids, and other European manufactures, are highly prized. (*Pottinger*, p. 295.)

The Hindoos pay for exports in silver rupees: at Kelat the currency is in Kureem Khanee rupees, one of which is equivalent to 48 copper pice; a gold sequin to 6, and 4 Zeman shahees to 5 K. K. rupees. (*Ibid.* 295. 317.)

The people are nearly equally divided between two distinct nations, the Belooches, occupying the W., and the Brahoośs inhabiting the E. division of the country. The former are desirous to be thought descendants of the Arabs, but are not physically like them, and are considered by Pottinger to have been originally Seljukés. They are tall, long-faced, but with not unpleasant features, and have generally strong, active, and athletic frames. They are subdivided into three tribes; the Nharooés, who live W. of the Great Desert, and Rinds and Mughsees, in Cutch Gundava, and near the Desert of Kelat. They are brave, impetuous, inured to fatigue, freebooters, abhorring petty thefts, but applauding wholesale plunder; often wasting and destroying whole districts, yet curiously blending an "ingenuous hospitality with this predatory ferocity." Like all pastoral nations, they have no permanent residence, but live in *kheils*, or societies of four or five tents, moving about as pasture is found suitable for their flocks and herds. Their food consists of wheaten and barley cakes, rice, dates, cheese, sweet and sour milk, legume soup, onions, garlic, assafœtida, red pepper, and occasionally flesh. All the Belooches are Mussulmans of the sect of Omar, and their customs are those of other Mohammedans, mixed with some plainly derived from the ancient Jews. Polygamy is allowed, but they treat their women with respect and attention; they have often numerous slaves, and in many respects behave to them with great kindness. They are armed with a matchlock, sword, spear, dagger, and shield, which they commonly derive from foreign traders. They are good marksmen, invariably hitting a target 6 inches square, while on horseback, at full gallop; a popular sport with them is to remove and carry away on the top of a spear, while at full gallop, a stake driven deep into the ground; an operation which requires much dexterity. Cudgel playing, wrestling, warlike exercises, and field-sports, form the rest of their amusements. The dress of the men is a white or blue calico shirt, buttoned round the neck, and reaching below the knees; trowsers of the same, puckered round the ankles; slippers; a close quilted cotton cap or turban, and scarf. The women wear long garments of red or brown cotton, reaching to the ankles, but open in front from the bosom downwards; very wide trowsers of silk; and the hair either parted in separate locks in front, and then tied up together in a knot on the crown of the head, or covered by a handkerchief. The language of the Belooches is a dialect of the Persian, corruptly pronounced, but from which tongue half the words are borrowed. (*Pottinger*, pp. 55—67. 270.; *Elphinstone*, p. 495.)

The Brahoośs are inferior in height to the Belooches, have short thigh-bones, a round face, flat features, and often brown hair and beards. Their habits are still more unsettled than those of the Belooches, but they are not so predatory, rapacious, avaricious, revengeful, or cruel. Pottinger prefers their general character very much to that of the former, and represents them as active, industrious, laborious, quiet, hospitable, faithful, and more under the control of their chiefs. They live chiefly on animal food, of which they are very voracious, and are admitted by the Belooches to be better marksmen than themselves. They live either in tents, about 12 yards long by as many feet wide, built of sticks, and covered with coarse blankets, or in houses, which in the towns, as well as the open country, are built of tamarisk or other wooden framework, flanked with mud, or bricks of unburnt clay, and ill-thatched with grass. The men are occupied in the outdoor and the women in the indoor employments, but the latter are not kept secluded, and all mix and eat together. Their religion is Mohammedan; their dress very similar to that of the Belooches, except that felt for caps, and garments of felt, are often worn by the men. Their language is like the Hindoo of the Punjab. (*Pottinger*, pp. 12—54. 70—76.)

A race called Dewahrs inhabit different parts of the country, who are probably descendants of the Guebres, driven from Persia by the Arabs in the 38th year of the Hegira; they are below the middle height, with blunt features, and high cheek-bones; are civil and obliging, though not hospitable; being faithful and trustworthy, the guard of the palace of the khan of Kelat is entirely composed of them. Their language is pure Persian; their treatment of females better than that of any other Moslem people. (*Ibid.* pp. 80—274.)

Hindoos are tolerated, and monopolise most of the trade in Kelat and the neighbouring provinces, but they are not allowed to settle in Beloochistan with their wives and families. There is a considerable infusion of Hindoo blood and manners among the inhabitants of Cutch Gundava and Lus, where the people are indolent in their habits, and incessantly smoking. In Mukran the people are larger built and darker in colour, from intermarriages with Caffre slaves; the women in this prov. are ill-favoured, and none of them long-lived. (*Ibid.* pp. 11—30. 78—311.)

The government is nominally under the khan of Kelat, but chiefly in the hands of the sirdars of each individual tribe. The khan, however, can oblige each sirdar or chief to furnish him with a contingent of troops in case of need. The public revenues are perhaps about 350,000 rupees a year (35,000*l.*), a large part of which is paid in produce, which the khan afterwards disposes of to the Hindoo merchants. The taxes are moderate; 1-20th of the produce is paid for lands requiring irrigation and much labour; from 1-16th to 1-10th for other lands: the respective sirdars stop a part of this, in payment of collection. Five rupees is paid for a camel-load of goods entering Kelat, and 1½ per cent. on goods sold, excepting cattle. The khan generally sits in judgment in cases of murder. This crime may sometimes be compromised with the friends of the deceased, but in the event of the murder of a foreigner, immediate execution waits upon the criminal. Adultery may be punished by the death of both, by the hand of the offended party. Burglary and night robbery are capital crimes. Petty differences are adjusted or disposed of by the sirdars, and minor offences are punished by flogging and imprisonment. (*Ibid.* 289—294.)

Almost all the inhabitants of Beloochistan are nearly barbarous and uncivilised: neither the Beloocheekee nor Brahoośkee are written tongues, and he is greatly honoured, and called "moollee," who can read the Koran. They are quite ignorant of all the countries in their neighbourhood, and fancy the British E. I. Company (of which they have heard from the Hindoos) to be "an old woman with plenty of money." Medicine they are totally unacquainted with; and to cure a fever they will shampoo or thump the body all over. (*Ibid.* pp. 26—140. &c.)

This country was quite unknown to Europeans until the time of Alexander the Great: the hills were then inhabited by a race of savages, the shore by people who subsisted as at present on fish, thence called by the Greeks *Ichthyophagi*. For nearly 10 centuries afterwards there are no records of Beloochistan. A caliph of Bagdad, in the year 92 of the Hegira, led an army through it to Sinde; it was afterwards taken possession of by Musaood, son of the Emp. Mahmood, and remained governed by his dynasty till 1739, when Nadir Shah having conquered it, bestowed it, with the title of beglerbeg, on an ancestor of the present khan of Kelat. Until 1758 it was tributary to the khan of Caubul, but is now quite independent. (*Ibid.* pp. 263—276.)

BELP, a village of Switzerland, cant. Berne, on the Gurben, at the foot of the Belperg, near the S. bank of the Aar, 5 m. S.E. Berne. Pop. 2,600.

BELPECH, a town of France, dép. Aude, cap. cant., at the confluence of the Lers and the Vixiege, 15 m. S.W. Castelnaudary. Pop. 2,429.

BELPER, a market town and chapelry of England, co. Derby, par. Duffield, and hund. Appletree, 8 m. N. Derby, 54 m. S.E. Manchester, and 134 m. N.W. London. Pop. (1841) 9,885. It is situated in a valley, through which the Derwent flows. This river is crossed, at the N. end of the town, by a stone bridge of 3 arches, near which is a fine wear, for working the mills of the Messrs. Strutt. The town, though irregular, is well built. The market-place, in an elevated situation, is surrounded by handsome shops. A new church has recently been erected. Courts leet are held here at Easter and Michaelmas, when the officers of the town, comprising a constable, and other public officers, are elected and sworn. Belper is one of the places for taking votes at the election of M. P. for the S. division of the co. The living is a curacy, in the archdeaconry of Derby, diocese of Lichfield and Coventry: patron, vicar of Duffield. There are places of worship for dissenters,

and also Sunday and infant schools, and almshouses. From an inconsiderable village, this place has risen, in a comparatively brief period, to be one of the most populous towns in the co. Its present (1850) pop. is estimated at about 12,000. It is much indebted to the public spirit and enlightened benevolence of the Messrs. Strutt, whose cotton works give employment to 2,000 people. The manufacture of silk and cotton hosiery in the town and neighbourhood, is also very extensive: and nails, earthenware, and other articles, are produced upon a large scale, and give employment to a great number of hands. There are also in the neighbourhood, potteries, bleaching-grounds, and coal-works. The Cromford Canal passes within 2 m. of the town; but its most important channel of communication will doubtless be the North Midland Railway, now in progress. This railway, which is intended to join Derby and Leeds, passes through Belper; and being made to connect at Derby with other railways communicating with London and the W. of England, will open an easy access to the principal markets of the empire to Belper, and the other places on its line. The surrounding scenery is very beautiful and picturesque, particularly that near the bridge. Market-day, Saturday. Fairs, 12 May and 31 Oct., for sheep, cattle, &c. &c.

BELT (Great and Little), two of the entrances into the Baltic, which see.

BELTURBET, a town of Ireland, co. Cavan, on the Erne, 61 m. N.W. by W. Dublin, 6¼ m. N. by W. Cavan. Pop. 2,026. It is a corporate town, has a good market house, and a spacious church; but it has no staple manufacture or trade, and is not increasing. There is a considerable distillery within the modern limits of the bor. It returned 2 mem. to the Irish H. of C., but was disfranchised at the Union. Its trade is injured from there being a rapid or fall in the river on its one side, and a shallow on the other. (*Municipal Boundary Reports, &c.*)

BELVEDERE, a town of Naples, prov. Calabria Citra, on a hill washed by the Mediterranean, 26 m. N.N.W. Cosenza. Pop. 5,600. It has a fort, several churches and convents, and 3 *monts-de-piété*, the revenues of which are appropriated to the portioning of poor girls on their marriage. Its wine and raisins are in considerable repute.

BELVEZ, a town of France, dép. Dordogne, cap. cant., 14 m. S.W. Sarlat. Pop. 2,513. It has mills for extracting oil from nuts; and its fairs and markets are well frequented.

BELVOIR, an extra-parochial district of England, partly in co. Leicester, partly in that of Lincoln, in hund. Framland of the former, and soke of Grantham of the latter; 98 m. N. by W. London. Pop. (1831) 105; area, 170 acres. The inhabitants are connected with the establishment at Belvoir Castle, the splendid seat of the Duke of Rutland, which crowns the summit of an eminence overlooking the beautiful vale whence its name is derived. The site was first occupied by Robert de Todeni, standard-bearer of Wm. the Conqueror, and remained with his lineal descendants till the reign of Hen. III., when it passed, by marriage, to the Manners family, in whose possession it has since remained. The structure, which had been destroyed in the wars of the Roses, was rebuilt by the first Earl of Rutland, whose title dates 12 Hen. VIII. In the last civil war it was alternately garrisoned by the royal and parliamentary forces, and was much injured: after the Restoration it was again repaired by the first Duke of Rutland. Great improvements and additions have been made to this magnificent pile, by the present duke, under the direction of Wyatt. Whilst they were in progress a fire nearly destroyed the whole: the irreparable injury was the destruction of the fine picture gallery, in which were several of Sir J. Reynolds's paintings; and amongst others that of the Nativity. The castle is now restored to more than its former magnificence, still preserving the style of an ancient baronial residence.

BENARES, a prov. of Hindostan, formerly included in that of Allahabad, presid. of Bengal; containing the districts of Benares, Mirzapore, Ghazepore, and Juanpore; chiefly between lat. 24° and 26° N., and long. 82° and 84° 30′ E.; having N. Goruckpore; E. Bahar; S. the Berar ceded distr.; and W. the territ. of the rajah of Rewah, and the districts of Allahabad and Juanpore. Area 8,670 sq. m. Pop. estimated at about 3,000,000. It consists, for the most part, of a cultivated flat, on both sides of the Ganges, and is, besides, well watered by the Goompty, Sone, Caramnassa, &c. It chiefly produces the drier grains, as wheat and barley, legumes, flax, &c., indigo, sugar, and large quantities of opium. The latter is a government monopoly, and Bahar and Benares are the only provinces in the Bengal presid. in which it is permitted to be grown. This prov. is amongst the most flourishing in India, and increasing greatly in trade and prosperity; the total land revenues in 1829-30 amounted to 410,270*l.* sterling. Muslins, gauzes, brocades, and some salt of an inferior kind, are among the manufactures. 1-10th of the pop. in the cities, and 1-20th in the rest of the prov., are Mohammedans; the judicial and other regulations of Bengal extend to this prov. Before 1775 Benares belonged to the nabob of Oude, who, in that year, ceded it to the British.

BENARES (*Varanashi* Sanscr., or *Kasi*, the splendid), a large and celebrated city of Hindostan, presid. Bengal, cap. prov. and distr. of same name, seat of a court of circuit and appeal, and one of the 6 chief provincial cities in the presid., at the head of a judicial division. Lat. 25° 30′ N., long. 83° 1′ E.; on the N.W. bank of the Ganges, about 300 ft. above the level of the sea; 65 m. E. Allahabad, and 400 m. N.W. Calcutta. Pop. 630,000. (*Hamilton*, 1828.) It is the "most holy" city of the Hindoos; the ecclesiastical metropolis, in fact, of India, and is resorted to by pilgrims from all quarters, especially from the Maharatta countries, and from even Tibet and Birmah. According to Bishop Heber, it "is certainly the richest, as well as probably the most populous, city in the peninsula." Its first view is extremely fine; it extends about 4 m. along the bank of the river, which is considerably elevated, and adorned with large ghauts, or landing-places, with long and handsome flights of steps. "Its buildings, which are crowded, built of stone or brick, and uniquely lofty; here and there the sculptured pyramidal tops of small pagodas; and the great mosque of Aurungzebe, with its gilded dome glittering in the sunbeam, and two minarets towering one above the other, form a grand and imposing *coup-d'œil*." The streets are extremely narrow, and the opposite sides approach in some parts so near each other as to be united by galleries; the only open space is the market-place, constructed by the present gov., but the city is well drained and healthy. In 1801 there were upwards of 12,000 houses, from 1 to 6 stories high, built of brick or stone, and 16,000 more of mud, with tiled roofs. The former lodge, at an average, about 15 persons on a floor; those of 6 stories often containing from 150 to 200 individuals each: they are built round a court-yard, and have small windows, many verandahs, galleries, &c.; much painting, carving, and elaborate stone-work; and are "often not unlike those represented in Canaletti's 'Views of Venice.'" The causeways are much lower than the lower floors of the houses, which have mostly arched rows in front, with little shops behind them: each street, or bazar, is devoted to a separate trade. The principal public building is the mosque, built by Aurungzebe, on the highest point, and in the centre of the city, which it completely overlooks. A Hindoo temple was destroyed to make room for it. Many other mosques, which remain, are built on equally holy spots, much to the annoyance of the Hindoo population. There are numerous Hindoo temples; and fakirs' houses, as they are called, adorned with idols, occur at every turn. Benares is crowded with mendicant priests; there are said to be 8,000 houses occupied by Brahmins, who live upon the alms and offerings of the pilgrims; only 1-10th of the pop. are Mohammedans; and Europeans, who are few in number, reside not in the city, but at Seroli, a little way off. Turks, Persians, Armenians, Tartars, &c., are settled in Benares. Its trade is considerable in shawls, diamonds of Bundlecund, Dacca and other muslins; in silks, cottons, and fine woollens of its own manufacture, and in European articles. The Hindoo Sanscrit college of this city is the chief seat of native learning in India. In 1830 it was attended by 287 pupils: an English college, established in 1832, has from 140 to 150 pupils. Numerous Christian missions have been established here, and there are private teachers of both the Mohammedan and Hindoo law. One of the greatest curiosities at Benares is an ancient observatory, built before the Mussulman conquest, by the celebrated Rajah Jeh-singh. It is of stone, and contains a large square tower, in which are preserved many instruments, chiefly of stone, some of them having been evidently used for judicial astrology: a few miles to the E. there is a solid stone ruin, similar in appearance to the Buddhist temples in the W. of India, called the Saranath. The country around Benares is fertile and well cultivated, but bare of wood: fuel is, therefore, very dear, and *suttees*, in consequence of this scarcity, are said to have been less common than in many parts of India. This city is believed by the Hindoos to form no part of the terrestrial globe, but to rest upon the point of Siva's trident: hence, they say, no earthquake ever affects it. In 1017 it was taken by Sultan Mahmoud, and from 1190 followed the fortunes of the Delhi sovereigns: since 1775 it has enjoyed tranquillity under the British, interrupted only on one occasion by a religious conflict between the Hindoos and Mussulmans, on the latter breaking down a pillar, called "Siva's walking-stick." The rajah of Benares is a pensioner on English bounty to the extent of 13,428*l.* annually, and without any political power. (*Hamilton's E. I. Gaz.*; *Ibid., Hindostan*; *Mod. Trav.* ix. 243—268.; *Reports, &c. and Appendixes.*)

BENCOOLEN, a marit. town of Sumatra (E. archi-

pelago), and the principal settlement of the Dutch, as formerly of the British, on that island. It stands on the S.W. coast, in lat. 3° 49′ N., long. 102° 16′ E. The town, which is small and well built, is said to be unhealthy; but Fort Marlborough, originally constructed by the British, in 1685, stands a little farther inland, in a healthier situation. The pop. is composed of Dutch and other Europeans, or their descendants, Ooloos, Chinese, Balinese, Malays, &c. The trade of Bencoolen had greatly declined previously to our parting with it in 1825. The imports consist chiefly of cloths, rice, and salt, tobacco, sugar, handkerchiefs, &c. from Batavia; opium and various fabrics from Bengal and the Coromandel coast; printed cottons, cutlery, and metallic articles, from Europe; and salted fish, roes, eggs, poultry, oil, and timber, from other parts of the island. The English endeavoured to cultivate the clove and nutmeg here, but the produce was very inferior to that of Amboyna and the Banda Islands. Bencoolen was always an unprofitable settlement to the British, the expenses of its government having uniformly exceeded its revenue. During the five years preceding its cession to the Dutch, the excess of expenditure over revenue amounted to about 85,000*l.* a year. It was ceded in 1825 to the Dutch, in part exchange for the town and fortress of Malacca and other settlements. (*Hamilton's E. I. Gaz.* i. 172.; *Reports on the Affairs of the E. I. Comp.*)

BENDER, a town of European Russia, prov. Bessarabia, on the Dniester, about 58 m. from the Black Sea. Pop. 1,700. (*Schnitzler.*) It is fortified by a wall and ditch, and has a citadel on an eminence. In 1770, the Russians took this town by storm, and reduced it to ashes. They again took it in 1809, and it was finally ceded to them, with the prov. of Bessarabia, by the treaty of Buchorest in 1812. It was formerly a place of much greater consequence than at present; and is said, previously to its capture in 1770, to have had 20,000 inhabitants. In its vicinity is Varnitza, the retreat of Charles XII. after the battle of Poltava.

BENE, a town of the Sardinian States, prov. Mondovi, on a hill between the Stura and Tanaro, 16 m. N. E. Coni. Pop. 5,000. It is defended by an old castle; has a collegiate church, and an hospital.

BENEVENTO (an. *Beneventum*), a city of Italy, cap. of a small surrounding territory or deleg., within the Principato Ultra, in the kingdom of Naples, but belonging to the states of the Church, on the declivity of a hill between and near the confluence of the Calore and Sabato, 32 m. N.E. Naples; lat. 41° 7′ N., long. 14° 43′ E. Pop. of deleg. 23,000; of town, perhaps 16,000. It is surrounded by walls, and defended by a castle. The modern town occupies the site of the ancient one, and is almost entirely constructed out of the ruins of the latter. In fact, with the exception of Rome, hardly any Italian town can boast of so many remains of antiquity as Benevento. Of these the most perfect, and by far the most worthy of notice, is the arch of Trajan, now the *Porta Aurea*, erected in honour of the great emperor whose name it bears, about A. C. 114. This singularly beautiful structure is of white marble, of the composite order, and consists of a single arch. Its total height is 52 ft., the intercolumniations and friezes being covered with basso relievos, representing the battles and triumphs of the Dacian war. These, which are of the most exquisite workmanship, are a good deal mutilated; but otherwise this noble fabric is nearly entire. The cathedral is a clumsy edifice, in the walls of which the finest remains of antiquity are huddled together without any regard to order. The cupola of the church of St. Sophia rests on a circular colonnade of antique marble; and scarcely a wall is to be seen that is not filled with fragments of altars, tombs, columns, and other relics of the old city. Benevento is the seat of an archbishopric, and has a fine *palazzo publico*, or town-hall, a seminary with a good library, a college, an orphan hospital, three other hospitals, and two *monti di pieta*. Considerable fairs are held at different periods of the year. It suffered severely from the plague in 1656, and from an earthquake in 1688.

Benevento is very ancient, its origin being ascribed to Diomed. It was first called Maleventum; but, on being taken and colonised by the Romans, it was called Beneventum. In its vicinity, in 1266, was fought the great battle between Charles of Anjou and his rival Manfred, in which the latter was killed, and his army totally defeated. During the ascendancy of Napoleon, Benevento was formed into a principality, conferred on M. de Talleyrand; but, on the downfall of Napoleon, it again reverted to the pope. (*Swinburne's Two Sicilies*, i. 410. 4to ed.; *Serristori, Statistica di Stati Pontefici, &c.*)

BENGAL (PRESIDENCY OF), a very extensive territory of Asia, being by far the most important and extensive of the three presidencies into which the British dominions in the East are divided. It consists principally of territories in India to the S. of the Indus and the Himmalaya mountains, comprising the Punjab, acquired in 1848, with the whole of the large and fertile provinces of Bengal and Behar, with very considerable portions of those of Delhi, Allahabad, Oude, Gundwanah, Berar, Orissa, and Rajpootana. E. of the Ganges it comprises Assam, Arracan, Ye, Tavoy, and Mergui, with Malacca, Singapore, and Prince of Wales' Island; but these latter districts should rather be considered as dependencies on, than as parts of, the presidency. Its territories in and adjacent to India lie between lat. 20° and 35° N., and long 74° to 95° E., having N., Bootan, Nepaul, the Himmalaya mountains, and the Indus; W., the latter, the territories included in the Bombay presidency, and Rajpootana; S., the territories of Berar, the Madras presidency, and the Bay of Bengal; and E., the Birmese dominions. The distr. of Ajmeer and another detached and smaller distr. are enclosed in Rajpootana. The dom. of this presid entirely surround those of the rajah of Rewah, and nearly so those of Oude. The farthest E. boundary of the Assamese territories is not 100 m. from the frontier of China. The total area of the territories inc. in the Bengal Presidency has been estimated at about 483,000 sq. m. and the total pop. at 74,450,000.

It is divided into the Upper or Western, the Central, and the Lower provinces: the former including the Punjab, Delhi, and others W. of 80° long.; the Central, Allahabad, Behar, and others as far E. as 87° long.; and the Lower prov., Bengal, and the rest still farther E. These provs. are divided into numerous districts, which have mostly the same limits as they had under the Mohammedan government: the following is the official report of their extent, population, and land revenue. (See *Rep. on the Affairs of the E. I. Comp.*, 1831, pp. 762, 763.; and *Appendix — Revenue*, par. ii. pp. 2—4.)

Division and District.	Extent of each Dist. in Eng. sq. m.	Pop. in 1822.	Land Revenue 1829-30
			In Sicca Rupees.
Calcutta.			
Burdwan	2,000	1,187,580	2,847,168
Jungle Mehals	6,990	1,304,740	449,422
Midnapore	8,260	1,914,060	1,307,614
Cuttack	9,040	1,984,620	789,701
Jessore	5,180	1,183,590	1,209,355
Nuddea	3,105	1,187,160	1,166,951
Hooghly	2,260	1,239,150	1,102,874
24 Pergunnahs	3,610	599,595	1,139,888
Suburbs of Calcutta	1,105	360,360 }	65,569
Calcutta City	7	265,000 } (1837.) 229,714	
Patna.			
Ramghur	22,430	2,252,985	161,293
Behar	5,235	1,340,610	1,679,696
Tirhoot	7,732	1,697,700	352,868
Sarun	5,760	1,461,075	1,560,563
Shahabad	4,650	908,850	1,480,183
Patna	667	255,705	352,868
Moorshedabad.			
Bhaugulpore	7,270	797,790	413,733
Purneah	7,460	1,362,165	1,035,411
Dinagepore	5,920	2,341,420	1,756,538
Rungpore	7,856	1,340,350	1,063,178
Rajeshaye	3,950	4,087,155	1,461,299
Beerbhoom	3,870	1,267,065	691,876
Moorshedabad	1,870	762,690	1,195,562
Dacca.			
Dacca	1,870	512,385 }	408,362
Dacca Jelalpore	2,585	588,375 }	
Tipperah	6,850	1,372,260	810,417
Chittagong	2,980	706,800	533,797
Backergunge	2,780	686,610	781,809
Sylhet	3,532	1,083,720	303,516
Mymensing	6,998	1,454,670	728,615
Separate collectorates of Dhurrumpore, Couch Behar, Rajmahal, Bhulwa, Boggree, Sherapore, and Balasore, included in the distr. above.	- -	- -	1,337,878
Upper or W. Provinces.			
Benares.			
Allahabad	2,650		1,870,813
Futtehpore	1,780		1,330,206
Bundlecund, N. and S.	4,680		
Benares	3,350		
Ghazeepore	2,850		
Goruckpore	9,520		1,696,893
Juanpore	1,820		1,323,199
Azimghur	2,240		790,061
Mirzapore	3,650		1,084,391
Bareilly.			
Agra	3,500	32,206,806	1,683,187
Allyghur	3,400		1,479,366
Furruckabad	1,850		1,736,854
Bareilly	6,900		1,329,274
Shahjehanpore	1,120		1,124,136
Seharunpore	3,800		1,158,051
Meerut	2,250		1,404,216
Cawnpore	2,650		3,175,746
Etawah	3,450		1,825,284
Moradabad	5,800		965,110
Boolundshahur	1,950		839,313
Collectorates of Phillibheet, Suheswan, Nugeenah, Saidabad, Bandah, Kalpee, Moozuffernugger, and Delhi, included in above district	- -	- -	11,614,154

TABLE *continued.*

Division and District.	Extent of each Dist. in Eng. sq. m.	Pop. in 1822.	Land Revenue 1829-30
Punjab - - -	125,000	4,740,000	
Ceded Districts.			*In Sicca Rupees.*
1. On the Nerbudda -	29,800	No returns.	
2. By the Rajah of Berar in 1826 - -	55,900		
3. *Birmese Prov.*			
Assam - - -	15,900		
Arracan - - -	11,500		
Cachar - - -	6,507		
Jynteah - - -	3,850		
Ye, Tavoy, Mergui, &c. -	15,000		After certain deduc., see Rep., —
Total -	358,769	74,450,071	7,171,470*l.*

The principal cities are Calcutta, the British cap. of India; Delhi, the Mohammedan capital; with Benares, Moorshedabad, Dacca, Behar, Patna, Allahabad, Agra, and Lahore. N. B. — The Punjab is described in a separate article, and is not referred to in the following statements.

The surface of this vast territory has, in different parts, every variety of elevation and aspect. But by far the larger portion consists, notwithstanding, of immense plains, including those of the Ganges and Brahmaputra. Exclusive of the Himmalaya and Garrows mountains, which bound it N. and E., it has no mountains of any importance, with the exception of the Vindhyan range, S. of the Ganges.

Rivers.— No part of India is so well watered, or has so many great rivers. The Ganges flows in a S.E. direction through the whole extent of the presidency, being joined in its progress by numerous tributaries, some of them, as the Jumna, Chumbul, Gogra, Gunduck, Sone, &c., of great magnitude and importance. It is also traversed in its E. parts by the Brahmaputra, which, as well as the Ganges, falls into the N. part of the Bay of Bengal, near each other. Both of them, but especially the Ganges, divide into numerous arms before reaching the sea; and their united deltas form a tract of alluvial soil of above 30,000 sq. m. in extent, and great natural fertility, but mostly overrun with jungle. There are no lakes similar to those in Tibet, or other parts of Asia; but many extensive lagunes, or *jeels*, especially in the lower prov., and above all in the districts of Dacca and Rajeshaye. (*See* BENGAL, PROV. OF.)

Scenery, &c.— Every kind of scenery is met with in this presidency. Kumaon, the most N. part, is a "vast and tumultuous ocean of mountains," elevated in successive ridges to 7,000 ft. in height, backed by the snowy ridge of the Himalaya, and covered in great part with an uninterrupted forest of both Asiatic and European vegetation. The W. parts of Delhi trench on the Indian desert, and have an arid look, and thirsty soil; other portions of this prov. are also flat, but fertile and highly cultivated. The Doab is flat, and abounds in long grass, but is singularly deficient in timber. Allahabad is amongst the most productive provs. in Hindostan; its surface is unequal, the S. part rising progressively into a hill tract, which extends through Bandah and part of Kalpee districts. Bundlecund and the ceded distr. on the Nerbudda, form part of the high central table land of India; they abound in deep ravines, fertile valleys, and extensive forests; but are in many parts sterile, as are also some of the distr. even in the neighbourhood of the Ganges. The central prov. are undulating, often well cultivated, intersected by rivers, and adorned in many parts by groves and forests. Bahar, N. the Ganges, is flat and waste; but is very fertile on the S. side of that river; its height also increases as it advances more to the S., so that in Ramghur we find a mountainous and rocky country two thirds waste, participating in the natural features of the Gundwanah districts, joining those on the Nerbudda. Orissa, near the sea coast, is low and swampy; but its interior contains cultivated plains and dense jungles, backed W. by a mountainous forest region, which descends gradually through the Jungle Mehals and Beerbhoom, into the lowlands of Bengal. The latter are inclosed, both toward the sea and the N. border, by immense belts of jungle, and have E. the noble valley of the Brahmaputra, which constitutes the prov. of Assam. From Sylhet to Aracan the interior is extremely hilly, the coast swampy, but the surface often very fertile and well cultivated: the other ceded Birmese provinces have dense forests and jungles, rice-plains, and a rocky coast, preceded by low islands.

Geology and Minerals.— The Himalaya, in Kumaon, is composed of granite, gneiss, porphyry, quartz, mica, hornblende, &c.; and its lower ranges contain sandstone, brecciated limestone, copper, and iron ores. The Vindhyan mountains betray a volcanic character throughout, and the Garrows mountains, on the opposite side of the delta of the Ganges, exhibit a similar structure. Tertiary beds are met with in Sylhet and where the Brahmaputra issues from the Assam valley, containing organic remains of crocodiles, *Testacea*, &c. The Bhaugulpore distr. is peculiarly rich in iron, and considerable mines have formerly been worked; the ore is nodular, and yields 20 to 25 per cent. metal. In the Sylhet hills there is a fine granular iron; and in Ramghur, on the banks of the Jumna, and in the Himalaya, ore is found yielding 30 to 60 per cent. Coal, in conjunction with iron, is found in considerable quantity both in Burdwan and Sylhet; that of the former distr. is preferred, and is largely consumed at Calcutta: some has recently been discovered in the Saugor distr., on the Nerbudda, which showed near the surface. The upper soil is dry, light, and sandy, in the N.W.; clayey in the Doab and its neighbourhood; sandy again in Allahabad, and a shallow alluvium in the delta of Bengal. In Behar, and elsewhere, it affords efflorescences of nitre and muriate of soda, in immense quantities; the former in greater abundance than in any other part of the world. The annual export of nitre from Calcutta has, of late years, been 170,000 bags, chiefly to Great Britain, China, America, and France. The manufacture of salt is a gov. monopoly, within the provs. of Bengal and Bahar, and the district of Cuttack: its annual produce may be about 1,600,000*l.*; in 1837, 4,682,723 maunds were sold, realising 15,404,803 rup. The upper provs. are supplied with salt, partly from the lower ones, and partly from salt mines in the W. of India. Diamonds are found in Bundlecund, the matrix being a conglomerate bed, with quartzose pebbles; silver, and gold dust, in many rivers.

The Climate, in so wide an extent of country is, of course, very varied; at Calcutta, the annual mean temp. was found, by three years' observations, to be 78° 39′ F.; at Benares, for two years, 77° 81′; and at Saharunpore (Delhi), 73° 5′: the barometer, at each of these places, for like periods, averaged respectively 29·764, 29·464, and 28·766 inches. June is the dampest, January the driest month; drought is often experienced in the upper prov., where the depression of the moistened thermometer sometimes exceeds 35°; but at Calcutta the average fall of rain for three recent years was 59·83 inches. Bengal prov. is subject to fogs; from these Tirhoot (Behar) is free, and is temperate, producing almost every European fruit and vegetable; the upper provinces are also temperate, excepting in the hottest season, when burning winds prevail, occasionally obliging the inhab. to resort to underground habitations. In Kumaon the surface is wholly covered with snow from September to April, although, during the rest of the year, the thermom. in the sun often rises to 110° Fah.

Vegetable Products.—Teak, saul, sissoo, banyan, ebony, rattans, bamboos, and a large number of trees, yielding material for cordage; oaks and pines in the hill forests; and along the coasts of the Bay of Bengal, cocoa, areca, and other palms, are met with in profusion. (*See* HINDOSTAN.) The lower provinces are highly favourable to the production of rice, the staple article of food, and consequently of production; the central and upper provs. to that of the drier grains; European products, and those peculiar to the tropics, being raised in alternate seasons. Grain forms a valuable export from Bengal. Indigo is cultivated from Dacca to Delhi, and occupies more than 1,000,000 statute acres; its annual produce being worth from 2 to 3 mill. sterl., half of which is expended in its production. There are 900 indigo factories in the presid., and the exports to Europe of the article amount, in some years, to 9,000,000 lbs. The culture of opium is monopolised by the government, and is carried on only in parts of Bahar and Benares. The opium grown in these provs. is considered by the Chinese, by whom it is mostly all made use of, to be much superior in flavour to the opium of Malwah. The opium sold at the public sales in 1836-37 was 16,916 chests, worth 2,539,510*l.* The nett revenue from it is about 1,000,000*l.* Cotton, in every variety, is largely grown; but the imports into England do not amount to 1 per cent. of the imports of American cotton. The soil of Benares is especially adapted to the sugar-cane, and sugar might, perhaps, be produced, were sufficient care taken in its manufacture, of as good quality as that of the W. Indies, though hitherto it has been inferior. (See next article.) Coffee, pepper, and tobacco, the latter chiefly in Bhaugulpore and Bundlecund, are staple exports; the rare spices of the E. archipelago have been naturalised at Calcutta, and a multitude of trees, fruits, and other vegetables of China, Caubul, Europe, and America, are grown in different parts of the presid.

Animals.— Alligators abound in the Ganges and Brahmaputra; tigers infest the jungles; and we meet with wild elephants, rhinoceroses, leopards, wolves, bears, jackals, a great variety of birds, a profusion of fish, and

different species of serpents, both innocent and noxious. (*See* HINDOSTAN.) Silk is procured from both the native and the Chinese or annular worm; the mulberry and castor oil plants being cultivated for the purpose. The produce is, perhaps, inferior to that of Italy, though the best Indian silk fetches a very high price: the silk distrs. lie chiefly between 22° and 26° lat., and 86° and 90° long.

Races of Men. — A number of widely differing tribes inhabit the territ. under this presid.: Hindoos, differing in physical and mental qualities in almost every prov., the hill-people in Bhaugulpore, and Gonds in Gundwanah, of which tracts they are believed to be the aborigines, Mahrattas, Moguls, Seiks, Rajpoots, especially in Delhi, Bundlecund, and Oude; Cooshes, Khyens, Garrows, Coosyahs, Mughs, &c., ultra Gangetic nations, all apparently of a different family from the Hindoos; with quite different usages and religion.

The *Government* is vested in the gov.-general of India, at Calcutta, and five councillors; three of whom are appointed by the comp., the fourth also by the comp., but not of their body, and subject to the approbation of the sovereign; the fifth, the commander-in-chief, with precedence after the gov.-general. Though in case of vacancy he never succeeds to the government, the senior civil member always doing so. There is a lieutenant-governor at Agra, with authority over the upper prov., subject to the control of the central gov. of India (*see* AGRA); and Prince of Wales's Island has a separate governor.

Public Revenues.—149,782 sq. m. of territory, under the Bengal presid., embracing the whole provinces of Bengal, Bahar, Benares, and Bengalese Orissa (excepting Cuttack), are assessed under what is called the *perpetual* settlement, at a permanent revenue of 3,247,085*l.* (*See* BENGAL PROV.) The upper or W. prov., and the ceded distr. on the Nerbudda, with an area of 96,310 sq. m., are assessed on the village system (*see* BOMBAY PRESID.); and the ryotwarry system (*see* MADRAS PRESID.) prevails in some of the central provs. and in Cuttack. The taxation, on account of land, averaged, in 1827, 1*s.* 10*d.* per head; a portion of the public revenue is besides derived from taxes on houses, professions, salt, sales, and licenses, opium and tobacco; tributes from protected and other states; customs, excise, post-office, stamps, judicial fees and fines; sayer and abkaree duties, pilotage fees, &c. The revenue and expenditure of the presid., in the undermentioned years, was —

Revenues.	1841-42.	1842-43.
Mint Duties - *Co.'s Rupees.*	4,95,391	4,90,723
Post Office Collections - -	6,08,320	6,30,730
Stamp Duties - - -	22,58,604	22,77,370
House Tax in Calcutta - -	- -	- -
Excise Duties in ditto - -	3,55,120	2,83,391
Judicial Fees and Fines - -	7,06,950	6,92,724
Miscellaneous Civil Receipts -	12,17,230	12,17,953
Land Revenue - - -	3,73,49,358	3,56,76,045
Sayer and Akbarree ditto - -	22,07,384	23,24,751
Miscellaneous Revenue Receipts -	1,14,816	1,10,468
Receipts from Territory ceded by the Burmese - - -	15,94,355	16,68,153
Ditto from Scinde - -	- -	- -
Customs - - -	50,00,382	53,13,379
Sale of Salt - - -	1,92,51,092	1,86,83,043
Sale of Opium - - -	1,37,71,557	1,82,79,955
Marine and Pilotage Receipts -	7,66,577	8,13,873
Revenues of Prince of Wales' Island, Singapore, and Malacca - -	7,11,347	7,29,088
Subsidies from the Nagpoor Gov., the Nizam, Rajpoot, and other States - - -	13,64,021	11,99,618
Interest on Arrears of Revenue, &c.	4,48,149	4,44,300
Total Gross Revenue - -	8,82,20,653	9,08,35,565
Deduct — Allowances and Assignments payable to Native Princes, &c. - -	26,49,913	25,03,890
	8,55,70,740	8,83,31,675
Charge of collecting Revenue -	1,63,18,161	1,50,75,516
	6,92,52,579	7,32,56,159
Total nett Revenue - -	=6,925,257*l.*	=7,325,615*l.*
Extraordinary Receipts from Produce of Commercial Assets -	40,766	7,308
	6,92,93,345	7,32,63,467
Total nett Revenue and Receipts - - -	=6,929,334*l.*	=7,326,316*l.*

Charges.	1841-42.	1842-43.
Civil and Political *Co.'s Rupees.*	1,14,57,448	1,05,87,574
Judicial and Police - -	63,46,164	63,26,824
Charges in Burmese ceded Territory	10,50,871	10,96,790
Ditto Scinde Territory - -	- -	53,969
Marine and Pilotage - -	21,35,192	18,63,687
Buildings, Roads, &c. - -	6,06,016	3,58,370
Charges on Prince of Wales' Island, Singapore, and Malacca -	6,12,133	6,55,065
Military Charges - - -	3,84,23,597	4,85,02,858
War Charges - - -	1,04,14,738	93,48,700
Mission and Measures for the support of Schah Soojah - -	16,74,509	27,77,028
	7,56,80,668	8,15,50,863
Deduct — Amount of unclaimed Deposits of Seven Years' standing, &c. -	- -	13,099
Add — Ditto repaid - - -	1,935	
Total Charges, exclusive of Interest on Debt - - -	7,56,82,603	8,15,37,764
Interest on Debt - - -	1,56,54,913	1,61,26,894
Total Charges of Bengal Presidency	9,13,37,516 =9,133,751*l.*	9,76,64,658 =9,766,465*l.*

In 1834 the Bengal Presidency was divided into the Presidencies of Bengal and Agra. The nett Revenues and Charges of both in 1841-42 and 1842-43 were as under: —

	Nett Rev.	Charges.
Bengal - *Co.'s Rupees.*	7,32,56,159	9,76,64,658
N. W. Provs. (late Agra)	4,22,59,728	83,06,020
Totals - -	11,55,15,887 10,59,70,678	
Surplus - -	95,45,209 =954,520*l.*	

The Bengal debt bearing interest amounts to 34,035,117*l.*, 20,212,419*l.* of which are at 5, 12,769,907*l.* at 4, and the residue at 6 per cent. There is also a debt of about 8 mill. which does not pay interest. The Bank of Bengal was established 1809, and has a capital of 7½ mill. rup.; the Union Bank has a capital of 8 mill. rup.; and there is a bank at Agra with a capital of 2 mill. rup., chiefly supported by European officers. A new bank, called the Bank of India, is being formed at Calcutta, and savings' banks are about to be established. There is little gold in circulation, and the highest silver coins are rupees. These formerly varied a little, but the company's rupee, worth about 2*s.*, is now the only one that is coined. The gold mohur is equal to 16 rupees. Cowries are fast disappearing.

Weights, Measures, &c. — The chief weights in use are the seer (2 lbs.), the factory maund (74 lbs. 10 oz.), and the bazar maund (82 lbs. 2 oz.); the measure of length, coss (1¼ mile square), the bega varying from about 2 to 3¼ to the English acre.

Justice. — The supreme court of justice is the sudder dewanny, and nizamut adawlut, in Calcutta. Its functionares — administering, under its first title, justice in civil, and under the second, in criminal cases — are a chief justice and 3 puisne judges, who have lately been personally vested with all the powers of the court; the concurrence of one colleague only being necessary in sentences of death. The only appeal from these judges is to the queen in council. The courts next in rank are the six prov. courts of appeal, viz. Calcutta, Moorshedabad, Dacca, Patna, Benares, and Bareilly, for suits above the value of 5,000 rup., the decisions of which are final, except in cases of special appeal. There are 49 zillah courts, with power to try suits to the amount of 20,000 rup., and decide appeals from decisions of registrars, sudder ameems, moonsiffs, and other native judges. Native judges have been, during the last year, established in zillah and city courts, and native assessors now sit on the bench with European judges.

Police. — There are about 15 or 20 police stations in each distr., with 20 or 30 well-armed men at each, at whose head is an officer, who holds inquests, &c.; in addition to these each village has its watchman, and all together form a body of 164,000 men; besides which there are a mounted and river police, both conducted by natives. The police force is now much more efficient than formerly.

Crime. — Crimes are more numerous and aggravated in the W. and ceded districts than in the lower provs.: in the central provinces they exist to a middle extent, between the two extremes. Crime is now greatly on the decrease; in one year the total decrease of offences in the lower and western provinces was 14,211, and under a mild and equitable system murders decreased 576 in two years. Dacoity, an atrocious system of gang robbery (*see* BENGAL PROV.), did not, in 1830, exceed 1-7th part of its amount 30 years previously.

Military Force. — The total military force in this presid. consists of 96,897 men, 13,254 of whom are Europeans, including 2 regiments of British cavalry and 8 of infantry. The Bengal, of all our native Indian armies, contains the greatest number of men of high caste. The yearly cost of the army is 3,450,000*l.*

Pilot Service. — There is a pilot service at the mouths of the Ganges, consisting of 12 schooners of 200 tons each, which put a European pilot and leadsman on board each ship as it appears in sight. The cost of this service, including buoy vessels, light houses, &c., is about 150,000*l.* a year.

Religion, &c. — The Hindoo and Mohammedan are the prevailing religions. In the prov. Bengal, the Mohammedans constitute about 1-7th of the pop., but their distribution is remarkable, as in the W. of that prov.

(and in Bahar) they are to the former but as 1 to 4, while they equal their numbers in the E., although more distant from the original seat of Mohammedan power. The Mussulmans live mostly in the cities and towns, where they sometimes even outnumber the Hindoos. The Gonds have a rude idolatry peculiar to themselves; Buddhism is confined to Aracan and the Birmese provs. In 1830 there were upwards of 10,000 native Christians, attending the different Protestant churches stationed in the presid. The church establishment consists of the Lord Bishop of Calcutta (to whom the other bishops in India are subordinate), an archdeacon, and 37 chaplains: the total annual expenditure on this account in 1835 was 52,300*l*. There is also a small public establishment of the Scotch kirk. The Roman Catholic estab. receives the countenance and support of gov.; its members are subordinate to a vicar apostolic at Agra, with direct authority from the pope, and a legate at Calcutta, under the authority of the R. C. bishop of Madras. Christianity is said to be increasing: and it is affirmed that, in 1832, 50,000 children attended the Protestant schools.

Education, &c. — Education and the study of the English language are also rapidly spreading. Seminaries and private schools, receiving the aid of government, have been established in many places, and superior colleges planted or revived in the principal cities. In 1830 the Bengal gov. spent 44,830*l*. in forwarding these objects.

Charitable Institutions. — Public dispensaries have been established in Agra, Delhi, and Cawnpore; and those in Moorshedabad, Dacca, Patna, and Chittagong districts have been revived or remodelled.

History. — In 1707 Calcutta, which had previously been subordinate to Madras, was made a separate presid.; and in 1726 a charter was granted to the comp. enabling them to establish a penal court there, as well as at the other presid. In 1760, by a treaty with Meer Cosim, the soubahdar of Bengal, the revenues of Burdwan, Midnapore, and Chittagong, were assigned to the E. I. Comp., and in 1765, an imperial grant from Shah Allum to the English to receive the revenues of the dewanny of Bengal, Bahar, and Orissa, gave them the virtual sovereignty of those provinces, which they actually assumed in 1772. In 1773 a governor-general was appointed to reside in Bengal, to which presid. the two others were made subordinate, and a supreme court of judicature established, with judges appointed by the crown; in 1775 the comp. became possessed of Benares and its territory. In 1793, under the administration of Lord Cornwallis, the Perpetual Settlement was introduced into Bengal, Bahar, &c.; prov. courts of appeal were at the same time established in Calcutta, Patna, Moorshedabad, and Dacca, with the courts of sudder dewanny, and nizamut adawlut: in 1798 the English took possession of Allahabad; in 1801 the soubahdar of Oude relinquished Rohilcund, Goruckpoor, and the Doab, to the British; and in 1802, the nabob of Furruckabad ceded his territory on receipt of a pension. In 1805, the empire of Delhi finally fell before the British arms. Kumaon was obtained from Nepaul in 1815; Saugor and the territories on the Nerbudda were ceded in 1818; in 1824, Singapore and Malacca, the latter ceded by the Dutch, were acquired; and in 1826, large distr. in Gundwanah were ceded by the rajah of Berar; Aracan, Martaban, Ye, Tavoy, and Mergui, were ceded also in 1826 by the Birmese, as well as all dominion over Assam; and finally, within the last few months, British officers have been sent from Calcutta to take upon themselves the government of the most easterly parts of the last named prov. The governors-general of India, since 1758, have been as follows: —

1758	Col. R. Clive.	1798	Marq. Wellesley.
1760	J. L. Holwell, Esq.	1805	Marq. Cornwallis.
1760	H. Vansittart, Esq.	1805	Sir G. Barlow.
1764	J. Spencer, Esq.	1807	Earl of Minto.
1765	Lord Clive.	1813	Marquis of Hastings.
1767	Harry Verelst, Esq.	1823	Lord Amherst.
1769	J. Cartier, Esq.	1828	Lord W. Bentinck.
1772	War. Hastings, Esq.	1835	Lord Auckland.
1785	Sir J. Macpherson.	1842	Lord Ellenborough.
1786	Marq. Cornwallis.	1844	Sir Henry Hardinge.
1793	Lord Teignmouth.	1847	Marq. Dalhousie.

(*Hamilton's Hindostan, and Gazetteer; Reports on the Affairs of the E. I. Comp.*, 1830—1832; *Bengal Almanac*, 18[illegible].)

BENGAL, one of the largest and most important provinces of Hindostan, the principal seat of the British power in India, between 21° and 27° N. lat., and, for the most part, between 80° and 93° E. long.; it has N. Nepaul, Sikkim, and Bootan; E. Assam, Jynteah, Cachar, and the Khyen districts of Birmah; S. the Bay of Bengal, and parts of Orissa and Aracan; and W. Bahar: area 82,700 sq. m.; pop. (1822) 24,887,000. Bengal is protected on the N. by a thick jungle of *augeah* grass, sometimes 30 feet high, and by tall forest-trees covering a belt of lowland country from 10 to 20 m. broad, backed by the Himalaya ranges; E. by the Garrows mountains, and their prolongations; the sea coast on the S. is fenced by shallows, and is difficult of access; and on the W. frontier, which is most exposed, the country is not favourable to an invading force, being in parts mountainous, sterile, and thinly inhabited; and were an invading army to penetrate from the W. as far as the Ganges, that river would be a formidable obstacle to its progress eastward. Excepting towards its E. and W. frontiers, Bengal presents only a dead level, broken by occasional undulations of ground, and is every where exceedingly fertile. The two greatest rivers of India, the Ganges and Brahmaputra, flow through the prov.; and it is so intersected by their numerous arms and tributaries, that in its central and western parts, even in the dry season, few places are more than 20 miles distant from a navigable river; while, during the period of the inundation, most part of it is laid under water, the towns appearing like so many islands in the surrounding sea. Many extensive lagunes or marshes, called jeels, are produced by rivers altering their channels during the dry season, in consequence of obstructions formed during the inundations.

Climate. — It is less subject than any other part of India to fluctuations of the seasons; which may be divided into the cold, hot, and rainy: the natives, however, divide the year into 6 seasons, each occupying 2 months; viz., 1-2, the spring and dry season, toward the end of which the heat becomes oppressive, though reduced in the eastern by occasional showers, and in the middle districts by frequent thunderstorms: the sudden and violent squalls incident to this season render navigation dangerous on the rivers. 3-4. Early in June the rains commence almost simultaneously over the whole prov.: for the first 2 mo. they are incessant and heavy, sometimes from 3 to 5 inches falling in a day; during the succeeding 2 mo. there are intermissions of fine weather, and the increase of heat is again rapid: should the rains cease early in September, the heat becomes intense and injurious to natives as well as Europeans; but they commonly last till about the middle of October. The annual average of rain is from 70 to 80 inches. The inundations usually begin, conjointly with the wet season, in the 3d mo. of which, the Ganges reaches its highest level. Its delta is then entirely overflowed, and the whole region exhibits a singular scene; the ears of rice floating on the surface, and the habitations of the peasantry insulated amidst the waste of waters, while they are seen passing from place to place in boats, with their families and movable property, lest a sudden rise of the river should sweep the latter away in their absence. About the middle of autumn the rivers begin to subside, and the land is completely drained previously to the setting in of winter, when heavy fogs and dews prevail in the lower, and frosts in the upper, districts. Although within the range of the tropical winds, the mountain chains and the rivers materially influence their currents and effects. In the central distr. the winds blow mostly N. and S., following the course of the Ganges.

Geology and Minerals.—Granite, whinstone, and other primary rocks are met with in the bed of the Dummodah and the Jungle Mehals distr.; whinstone and hornblende in the Rajemahal hills (Bhaugulpore); nummulite limestone and some tertiary deposits in Silhet and below the Garrows hills; coal and iron are found both in Silhet and Burdwan. Soil, generally clay, with a considerable proportion of siliceous material, and fertilised by various salts and by decayed animal and vegetable substances. Bengal is not generally rich in minerals or mineral springs. Fresh water is not obtained at Calcutta at a depth of 140 feet; but nitre there and elsewhere effloresces on the surface in large quantities.

Vegetable Products. — The bamboo, date-palm, areca, in the central parts, cocoa in the S., and bassia on poor soils and in the hilly tracts, grow wild in profusion, as well as the plantain, mango, orange, lemon, and many other fruits. The peasants have generally orchards, and entertain a superstitious veneration for the trees planted by their ancestors. Different kinds of grain, indigo, cotton, sugar-cane, and tobacco, are objects of culture; the hills in the N.E. yield red jarool wood and betel, and thick jungles spread themselves over great part of the country.

Animals.—Tigers infest the jungles; and these, with elephants, buffaloes, gyals, wild deer, and boars, jackals, apes of many kinds, &c., are natives of Bengal; pariah dogs and adjutants swarm in the towns, where they perform the function of scavengers; the *Vultur bengalensis*, and other kinds of vultures, kites, crows, &c., and various birds, abound. Crocodiles and gavials in the larger rivers; the cobra-de-capello, and other formidable serpents, turtles, frogs, lizards, &c.; plenty of fish, and swarms of musquitoes, are every where met with.

Bengal is distributed into three divisions; viz., those of its three principal cities, Calcutta, Moorshedabad, and Dacca, which have subordinate to them the following districts or collectorates: —

1.	2.	3.
Burdwan,	Purneah,	Dacca Jelalpore,
Jungle Mehals,	Dinajepore,	Tipperah,
Jessore,	Rungpore,	Chittagong,
Nuddea,	Rajeshahye,	Backergunge,
Hoogly,	Beerbhoom,	Sylhet,
24 Pergunnahs,	Moorshedabad.	Mymensing,
Calcutta City and Suburbs.		Dacca.

The chief cities, besides those already mentioned, are Burdwan, Hoogly, Chandernagore, Purneah, Rajemahal, and Dinajepore.

Agriculture, &c. — Mill (*Report on E. I. Affairs*, 1831.) supposes that one third part of this prov. is under tillage, one third jungle, and the remaining third in an intermediate state. The best and most productive lands are in the Burdwan, Nuddea, 24 Pergunnahs, and Calcutta distr.; the worst and least productive in Silhet, Tipperah, and Cooch-Bahar. Rice, the principal grain in all the S. districts, yields two crops a year, one in August and one in December; and each crop may, when good, be taken at 5 quarters an acre, or 15 for 1. Farther up the Ganges, wheat and barley predominate; they are sown at the beginning of winter, and reaped in the spring. In general the supply of rice and grain is so abundant as to render Bengal the granary of India; but when a season of drought, and consequently of deficient produce, intervenes, the inhabitants, too poor and too improvident to keep a reserve stock of grain, suffer the greatest privations. Pulse of various kinds is grown, some for cattle, but not in any great quantity, as the latter are generally fed upon chaff and straw. Millet, &c., are sown sometimes for second crops; linseed, mustard, palma Christi, and sesamum largely for their oil, and maize is less grown than in most countries adapted to its culture, and chiefly on poor soils towards the W. Indigo succeeds best on newly cleared lands, and the great increase of its culture has caused large tracts of waste land to be brought into tillage. It is principally raised in the Dacca Jelalpore, Jessore, Mymensing, and Burdwan districts; and though it be true that a good deal of tyranny has often been exercised by the planters over those under them (see *Evid. of Rammohun Roy, in Report for* 1832, pp. 364—368, and *Rep. for* 1831, pp. 232, 233.), and that disputes respecting boundaries, limits of culture, &c., have often led to disturbance and bloodshed; still the people are uniformly best clothed and fed where indigo is grown. Its culture and preparation is mostly in the hands of European capitalists: the natives, even when they have the intelligence, being generally without the means of carrying it on upon any thing like an extensive scale. The sugar-cane grows luxuriantly in many parts of the prov., and especially in the Rungpore, Beerbhoom, and Burdwan districts; its growth and manufacture, as well as that of tobacco, being mostly carried on by the natives, are both, consequently, in a very rude state; but there is little doubt that were European capital and skill applied to this department, sugar might be rendered one of the staples of India. The mulberry (*Morus Indicus*) ceases suddenly where it meets the poppy, the culture of which is restricted to the border of Behar. Silk, an important product, is obtained from five different varieties of worms, including the Italian: about 1,000,000 lbs. are annually exported, mostly for Europe, at an average price of about 13*s*. per pound. Both silk and sugar have evidently been known in Bengal from the earliest times: the Sanscrit has names for every object and occupation connected with the former, and the original name of this prov., *Gour*, appears to be directly derived from *gur*, which signifies sugar in both ancient and modern Indian tongues. The cotton of Bengal is not generally much sought after; a great deal of a coarse kind is produced, which is used for home consumption; a better sort is produced in the E., but that which is made into the finest manufactures is brought from the Doab. The Dacca muslins are made from a fine cotton cultivated on the banks of the Magna, that is, of the river formed by the junction of the Ganges and Brahmaputra. Sun-hemp and coffee have both been tried, but with little success; potatoes are well suited to the soil; but most other esculent vegetables introduced from Europe have become tasteless and insipid. Husbandry is in a very low state. Farms are generally small, varying from 2 to 40 begas or bigahs (the bigah = ⅓ to ½ acre), and are burdened, as will be afterwards seen, with an oppressively high rent. It is almost unnecessary to add, that the *ryots* or cultivators are immersed in poverty; and are usually without the means, even if they had the inclination, of attempting any improvement. The common plough, drawn by a pair of oxen, costs less than a rupee (2*s*.): it is a very rude instrument; and, as it merely scratches the ground, several ploughs follow in succession, to make the furrows of sufficient depth: the plough is succeeded by a kind of harrow, a heavier implement, and similar to the worse sort in use in the S. of Europe. Manures are applied only to the sugar-cane, tobacco, mulberry, and poppy. Dung (especially that of the cow) is, from superstitious motives, almost exclusively used for fuel. The rotation of crops and the use of fallows are unknown, and the land is generally in an impoverished and exhausted state. Much grain is lost by birds, and the irruptions of wild animals or cattle, in consequence of bad enclosures, as well as from suffering the crop to get over-ripe before it be cut down. Grain is trodden out by oxen; stacking corn, or preserving it under ground, is unusual, and it is often left exposed, like rice (which, however, is not equally injured), to the weather.

Of all departments connected with agriculture, that of irrigation is best understood and practised. In the hilly districts the preservation and regular distribution of water is, in fact, essential; and there it is collected in wells and dams, the construction of which has at all times been deemed an act of singular piety and merit, whence it is distributed as occasion requires. Animal food being but little used, sufficient attention is not paid to the breeds of cattle and sheep; the profits of the former consisting chiefly in their milk and labour, and of the latter in their wool. The Bengal horse is ill-shaped, vicious, and is not used in field labour, in which oxen or buffaloes are exclusively employed: the sheep are small, lank, and thin, but, if well fed, yield tolerable mutton. The property and profit of the small farmers and cultivators is mostly in their cattle, which are grazed at a very trifling expense. Cows are usually fed near home, on reserved pastures, or on the waste lands of the village: buffaloes, needing more nutriment, and thriving on rank vegetation, do not find sufficient pasturage in populous districts. Herds of this sort of cattle are most numerous in the northern and western provinces, where, in the rainy season, they find pasturage on downs which are never submerged; and in the dry season on forest lands, which are mostly inundated during the rains; but many herds of buffaloes travel in the dry season into the vast forests which border on Bengal.

The wants of the natives being few, and necessaries cheap, wages are extremely low. Ploughmen receive only 1 rupee per month; reapers, 1 sheaf in 16; or, if they carry also, which is usual, 1 in 8; weeding labourers are also paid in grain instead of money; rice is cleared by a wooden pestle and mortar, 5-8ths of the original quantity of clean rice being delivered in, the surplus with the chaff paying for the labour.

Perpetual Land Settlement. — Landed property in Bengal is held under what has been called the *perpetual* or *Mokurruree settlement*. When the E. I. Comp. came into possession of Bengal, Behar, and Orissa, they found the land revenue collected in the most summary method by officers who had charge of districts of unequal extent, with various titles, as zemindars, talookdars, &c., and who received for their trouble a per centage on their collections. The question whether these superior officers or zemindars were originally the proprietors of the soil, and, as such, made accountable to government for the land-tax laid on it, or whether they had been at first merely collectors of the tax, which office having become hereditary in their families, gave them the appearance of being proprietors, was keenly discussed after the British acquired the sovereignty of Bengal. Specious reasonings were adduced in favour of both opinions; but it is now pretty universally allowed by those best acquainted with the subject, that the zemindars had originally been only tax-collectors; that the government, by the gradual usurpation of nearly all subordinate rights, had become the real proprietor of the soil; but that the ryots or cultivators were a sort of *quasi* proprietors, and could not be, or at all events, were not, dispossessed, provided they paid the tax imposed by government. Lord Cornwallis, however, decided otherwise, and, in 1793, the zemindars, whether cultivators or officers in actual charge of districts, were recognised as the hereditary possessors of the soil; but with a reservation of power on the part of the government to step in between the zemindar and the ryots in behalf of the rights of the latter, should they ever be infringed. The sum which the zemindar had been in the habit of paying was ascertained from the returns of a few prior years; the assessment or tax was *fixed for ever* at that amount, and an engagement was made that it should not be levied on him individually. Upon this basis, a system in some respects similar to that of the *metayer system*, prevalent in the S. of Europe (*see* FRANCE, PAPAL STATES, TUSCANY, *&c.*), was adopted: the cultivator pays to the zemindar a money rent (unless otherwise specified), estimated at *half* the produce of his land; 9-10ths of which rent or land-tax goes to the government, the other 1-10th remaining in the hands of the zemindar for his remuneration; he being, as formerly, head collector of, and responsible for, the tax. We shall not stop to inquire into the principles of this plan; but it is quite clear that, how advantageous soever in other respects, the exorbitant amount of the land-tax could hardly fail to render it a source of poverty and ruin. The practice of letting lands on the metayer system is one of the worst that can be adopted (*M'Culloch's Principles of Political*

Economy, p. 463.); but in European countries the tenant is never called upon to pay half the produce, unless the landlord supply him not merely with the land, but also with the stock and implements of husbandry. A claim of half the produce on account of the land only is no where enforced unless in India; and it is unnecessary to go farther for an explanation of the abject condition of the cultivators. Within a few years after the introduction of the perpetual settlement, the greater number of the original zemindars having fallen into arrears of rent, their estates were sold, and the purchasers having contrived, under one pretence or another, to dispossess the cultivators of the rights reserved to them by Lord Cornwallis, the latter are now become, in effect, mere *tenants at will* under irresponsible landlords.

The fixing of the assessment has, however, had the good effect of causing the cultivation of a considerable extent of waste land, and many of the zemindars are now opulent. But the ryots or cultivators, that is, the vast majority of the people, have gained little or nothing by this extension, and poverty is universal.

"The condition of the cultivators," says Rammohun Roy, "is very miserable; in short, such is the melancholy condition of the agricultural labourers, that it always gives me the greatest pain to allude to it. They have no means of accumulating capital: very often when grain is abundant, and therefore cheap, they are obliged to sell their whole produce to satisfy the demands of their landlords, and to subsist themselves by their own labour. In scarce and dear years they may be able to retain some portion of the crop to form a part of their subsistence, but by no means enough for the whole." (*Appendix*, pp. 719—721.) The total amount of the land revenue for 1829-30, was 1,958,800*l*.

Manufactures.— The want of capital, which has so injurious an influence over agriculture, is still more hostile to manufactures: it prevents the division of labour, and renders the acquisition and employment of improved tools and machines all but impossible. Manufactures have, however, been long prosecuted, and have made considerable progress here and in most parts of India. Muslins of the finest texture were formerly made at Dacca, but the manufacture is now lost, owing to the want of demand, there being no wealthy native nobility, and no native court. They were always, in fact, a mere object of curious luxury. It is commonly supposed that the manufacture was destroyed by the importation of cheaper fabrics from England; but this is an entire mistake: it was extinct before a yard of Manchester calico had been imported. The principal existing manufactures are, cotton piece-goods, and diaper, at Dacca; packthread and sail cloth, on the N. frontier; chintzes in Calcutta; woven silks and taffetas at Moorshedabad; union fabrics in Burdwan; and calicoes and blanketing universally. The production of salt is monopolised by the government; its average price has been about 5 rupees (11s. 6*d*.) per maund (80lbs.), and the E. I. Company have realised from it an average annual rev. of 22,694,900 rupees (2,269,450*l*.). The increase of the revenue of Bengal is principally due, in fact, to the monopolies of salt and opium, and not to the permanent settlement. The exchange of grain for salt, cotton and sugar; and the exchange of tobacco for betel nut, &c., constitute the chief branches of the internal trade. The foreign exports to Europe and America are indigo, silk, sugar, saltpetre, rice, lac, cotton, &c., with the produce of China, Persia, and the E. Archipelago; to China and the East, opium, grain, saltpetre, gunpowder, iron, fire-arms, cotton and silk goods; the same articles, with nails, naval and military stores, and a variety of other European goods, to the Birman empire; grain, sugar, silk, and cotton piece-goods, to the gulphs of Persia and Arabia; and home produce to the Bombay and Madras presidencies; but the trade with the latter has greatly decreased since the conquest of Mysore. The imports from Europe are metals of all sorts, wrought and unwrought, especially copper, cotton goods and yarn, woollens, silk goods, wines and ales; haberdashery, and a host of smaller articles. Bullion used formerly to be a leading article of export from Europe; but latterly large quantities have been brought from Bengal. The imports from Madras and the Coromandel coast are salt, red wood, long cloths, chintzes, &c. China supplies spices, tea, porcelain, lacquered ware, bullion, &c. (For a detailed account of the foreign trade of Bengal, *see* CALCUTTA.)

The Bengalese, when young, are handsome, of middling height, varying in colour from light olive to dark brown, according to rank, with an oval face, frequently aquiline noses, and universally black eyes and hair. Their constitution is weak and ill fitted to support changes of climate. Though generally healthy, they rarely attain to any great age: they marry young; and it is by no means uncommon to see women of 12 and 14 years of age with children in their arms. They are lively, inquisitive, and polite; but deficient in energy, and, speaking generally, are remarkable for duplicity, extreme bad faith, and proneness to litigation. They are, however, less corrupt at a distance from Calcutta than in the vicinity of that capital. Domestic slavery exists very partially; the slaves are treated kindly, and more as members of the family than otherwise, not being employed in the labours of husbandry.

The Bengalese are mostly very abstemious; rice, seasoned with salt, and sometimes spice, being their chief food. The slaughter of kine, and the eating of cows' flesh, are considered by the Hindoos as sinful. They do not, however, scruple to eat different kinds of animal food, as fish, ducks, and geese; but all castes hold it an abomination to eat the common fowl. They rarely indulge in spirituous liquors; but they drink the juice of the palm, which rapidly ferments, and the intoxicating extracts of poppy and hemp; chew betel and tobacco, and smoke. In the upper parts of the prov., they live in mud hovels; in the lower distr. in huts of bamboo sticks, mats, and straw, sometimes neatly thatched. None but the opulent classes inhabit houses of brick and lime. (*Evid. of Ramm. Roy. Rep.* 1831, pp. 740, 741.) The male dress of the classes above poverty is a piece of cotton cloth around the chest, and another reaching from the loins to the ankle; the labourers have only a piece of cloth round the loins. The Mohammedans wear a turban; but the Hindoos, except men of rank, who dress like Mohammedans, are both bareheaded and barefooted. The female dress is generally composed of one long piece of cloth rolled round the waist, one end flowing in folds to the ankle, and the other drawn round the head and chest, and then serving for a veil: they paint their foreheads, fingers, and feet, red, and wear a profusion of rings and other ornaments. The upper classes, and especially the zemindars living in Calcutta, are gradually adopting European tastes and luxuries; and a knowledge of European arts and sciences has been diffused by means of schools in various parts, and of colleges in Calcutta and other chief cities. The Bengalese are apt and quick scholars, and the English language and literature have become familiar to many, though native learning has long been retrograde, owing, most likely, to the want of encouragement for men of literary distinction since the breaking up of the native governments. Justice is administered as in the contiguous prov. by moonsiffs, sudder ameens, and judges of the zillah courts, the prov. courts of Calcutta, Moorshedabad, and Dacca; the supreme court discharging the functions of the *Sudder Dewanny Adawlut*, or supreme civil court, and *Sudder Nizamut Adawlut*, or supreme criminal court: the proceedings of the latter are governed by the Koran and the laws of Menu. The peculiar crime of this prov. is *dacoity*, a kind of brigandage, by gangs of robbers, attended by every species of cruelty upon their victims. The Mohammedan exactions probably first gave rise to it: at all events, it was very prevalent during their ascendancy, but it is now much less frequent. Mohammedans and Hindoos are subject to their respective codes of justice: Europeans, indeed, and every one else, natives and foreigners, within the liberty of Calcutta, are exclusively amenable to the English law; but beyond those limits, there is no separate provision for foreigners. In no prov. of India has the creed of Mohammed made so much progress, though at such a distance from the former seat of Moslem empire. In the E. distr. Mohammedans are nearly as numerous as Hindoos; in the central parts they constitute scarcely 1-4th of the pop., and in the W. still less. There are about 40 Jewish families in Calcutta.

In 1203 the greater part of Bengal was conquered by the Mohammedans, and governed by viceroys from Delhi till 1340, when it was erected into a separate kingdom. From 1538 to 1740 Bengal was again an appendage to the throne of Delhi: in 1765 the British acquired, from the Emperor Shah Allum, possession of Bengal, Behar, and Orissa, which has ever since been the nucleus and principal seat of our possessions in the East. The present nabob of Bengal, the descendant of the last sovereigns, deprived of all political power, receives a pension from the British gov. of 224,035*l*. a year. (*Hamilton's E. I. Gaz.*, pp. 173—216.; *Ibid.*, *Descr. of Hindostan*, 1—123.; *Reports on E. I. Affairs and Append.*, 1830—1832; *Colebrooke's Remarks on the Husbandry and Internal Commerce of Bengal*, 1806, an excellent work; *Mod. Trav.* vol. viii., &c.)

BENGAZY (an. *Hesperis* and *Berenice*), a marit. town of N. Africa, district Barca, reg. Tripoli, on the E. coast of the Gulph of Sidra (an. *Syrtis Major*); lat. 32° 7′ 30″ N., long. 20° 2′ E. Pop. 2,500.? It is finely situated on the margin of an extensive and very fertile plain, but is miserably built, filthy in the extreme, and infested to an almost intolerable extent with flies. The harbour, which seems to have formerly had deep water, is filled up, so that it cannot now be entered by vessels drawing more than 7 or 8 ft. water; and that only in moderate weather. At the entrance to the port is a castle, the residence of the bey, but worthless as a means of defence. Notwithstanding its poverty, and the indolence

of its Arab inhabitants, Bengazy has some trade, principally carried on by Jews. According to a statement furnished by the French consul, the value of the exports in 1836, consisting principally of wool, oxen, and sheep, salted butter, and corn, amounted to about 12,000*l*. The trade is mostly carried on with the other Barbary states and Malta.

Such is the present abject condition of a city that occupies the site of the ancient Berenice*, which had the gardens of the Hesperides in its vicinity. It is singular, that though its walls were completely repaired under Justinian, hardly a trace of them is now to be met with. In fact, scarce a vestige of the old city is to be found above the surface of the plain; but very extensive remains are found on digging a foot or two below the surface. Captain Beechey has given a very full account of Bengazy and the surrounding country, in his voyage to N. Africa; and to it the reader is referred for further particulars.

BENGORE HEAD, a promontory of Ireland, N. coast co. Antrim, adjoining the Giant's Causeway; lat. 55° 16′ 10″ N., long. 6° 23′ 20″ W. This remarkable promontory is made up of a number of capes. Of these the most perfect and striking is Pleaskin. "Its summit," to use the words of the Rev. Mr. Hamilton, "is covered with a thin grassy sod, under which lies the natural rock, having generally a uniform hard surface, somewhat cracked and shivered. At the depth of 10 or 12 ft. from the summit, this rock begins to assume a columnar tendency, and forms a range of massy pillars of basalt, which stand perpendicular to the horizon, presenting, in the sharp face of the promontory, the appearance of a magnificent gallery or colonnade, of upwards of 60 ft. in height. This colonnade is supported on a solid base of coarse black, irregular rock, nearly 60 ft. thick, abounding in blebs or air-holes; but though comparatively irregular, it may be evidently observed to affect a peculiar figure, tending, in many places, to run into regular forms, resembling the shooting of salt and many other substances, during a hasty crystallisation.

"Under this great bed of stone stands a second range of pillars, between 40 and 50 ft. in height, less gross and more sharply defined than those of the upper story; many of them, on a close view, emulating even the neatness of the columns in the Giant's Causeway. This lower range is borne on a layer of red ochre-stone, which serves as a relief to show it to great advantage.

"These two admirable natural galleries, together with the interjacent mass of irregular rock, form a perpendicular height of 170 ft.; from the base of which, the promontory, covered with rock and grass, slopes down to the sea for the space of 200 ft. more, making, in all, a mass of near 400 ft. in height, which, in beauty and variety of colouring, in elegance and novelty of arrangement, and in the extraordinary magnitude of its objects, cannot readily be rivalled by any thing of the kind at present known." (*Letters on the Coast of Antrim*, 12mo ed. p. 91.)

BENGUELA, a country of W. Africa, the limits of which are usually considered to be the Coawra river on the N., the Cumene river on the E., the mountains behind Cape Negro on the S., and the shore from that cape to the mouth of the Coawra on the W. According to this outline, it extends from 9° to 16° N. lat., and from 12° to 17° E. long., having a mean length of 460 m., a breadth of 270 m., and an area of considerably more than 1,000,000 sq. m. (*Labat, Relat. Hist. de l'Ethiop. Or.* i. 67.; *Barbol, Voyage to Congo River*, p. 501.; *Bowditch's Map of the Coast and Interior of Congo, Angola and Benguela*, corrected from *Captain Owen's Observations*.†)

Face of the country. — Benguela appears to be mountainous throughout its whole extent; the land rising sometimes so high that, if it do not actually reach the snow-line, a very great degree of cold is experienced. (*Battel, Purchas' Pilgrims*, ii. 275.; *Bowditch's Portuguese Discoveries*, p. 62.) These mountains come down to the sea, are in general very difficult of passage, but, like other African elevations, rise in masses rather than peaks, and abound in terraces, table-lands, and valleys, to their very summits. The rivers are numerous and important, and as the direction of the mountains is from N.E. to S.W., the chief of them run a N.W. course to the Atlantic. This is the case with the large river, without a name, which falls into the ocean at Cape Negro, and with the Cobal, Coporao, Catumbela, and Cuvo. Besides these, which are very large, there are an immense number of small streams running short and almost straight courses from the W. flanks of the mountains, and the various affluents of the principal rivers are almost innumerable; in addition to which, springs of sweet water are so abundant, that in almost every part of the country, they may be found by digging to the depth of two feet. The natural consequence of this abundant moisture in tropical countries is observed in Benguela, and nowhere is vegetation more abundant or more varied. Dense forests of cedars, palms, boobash, date-trees, tamarinds, with every other tropical tree, — and some that belong to more temperate climates, clothe the sides and tops of the mountains, intermixed with vines, bananas, ananas, and all the finest species of tropical fruit. Grain is not very abundant; but this arises from the want of skill or industry in the natives, since there is no species of corn that might not be successfully cultivated upon some part of the high or low lands. Lions, tigers, elephants, rhinoceroses, hippopotami, and other large animals, are extremely numerous; in addition to which, the zebra is very commonly met with, and, in short, every wild animal for which Africa is noted is found within the limits of Benguela. The elk (which is also a native here) is particularly prized, from its being supposed that one of his hoofs has power to cure the epilepsy; deer and antelopes, of course, are abundant. Cattle, sheep, and goats, are very numerous, but it does not seem that horses are at all plentiful. Of birds, Battel reports that peacocks are found wild in the interior as numerously as any other kind — that they are accounted sacred, and kept tame about the graves of the great chiefs. The ostrich is also found here, with all the reptiles, dangerous and harmless, for which this part of Africa is so much reputed; crocodiles being especially numerous and powerful. The mountains are known to yield copper, sulphur, petroleum, and crystals; and are supposed to possess gold and silver. Some of the rivers unquestionably bring down the former, but probably in small quantities, which the natives work into the handles of their hatchets.

The rainy season is accounted, in Benguela, to last through May and June; but it is extremely irregular, and sometimes no rain falls for the space of three years. (*Bowditch*, vol. ii.) The coast is, by all accounts, excessively unhealthy; but the interior is salubrious, and apparently well fitted for cultivation of all kinds; every degree of temperature seems to be experienced at different elevations, and it probably is not exposed to the uncertainty of rain, which exists on the coast. Battel, who resided in different parts of the interior for a considerable time, never, amongst all his miseries, complains of the climate.

It is not to be supposed that Benguela, through all its great extent, comprises but one kingdom; the much larger portion is inhabited by petty tribes of independent and very savage barbarians, whose habits and manners do not differ from those of other negroes, with the exception of one — the Gagas, or Gigas, a wandering herd of robbers, which appear to approximate nearer to perfect barbarism than any other, even of the African races. They are of no tribe nor nation, destroy all their own children, and keep up their strength and numbers by stealing those of 12 or 13 years of age from the countries which they overrun. They are bold and skilful soldiers, but ruthless cannibals, without the slightest idea of art or industry, so that wherever they encamp, they destroy all around, and then depart, to inflict the same desolation on some other district. They appear frequently to cause a famine, where such a calamity would otherwise seem to be impossible, verifying the animated description of the locust: — "Before them is a garden, behind them a barren desert." Battel, who was their prisoner for more than two years, has left a full and curious account of these savages, which carries the impress of truth on every line. Benguela was formerly subject to Angola, at least nominally, and was accounted one of the 17 provinces of that kingdom. The Portuguese have long had settlements on the coast and the interior, but their power does not seem to extend far beyond their forts. *See* ANGOLA. (*Battel's Purchas*, ii. 974—977.; *Barbol*, p. 501.; *Merolla*, pp. 60—68.; *Labat*, i. 66—70.; *Bowditch*, pp. 26—64.; *Capt. Owen's Nar. of Voy.* ii. 271—275.)

BENGUELA VELHA (*Old Benguela*), the native capital of the country above described, lat. 10° 45′ S., long. 15° 5′ E. It is well situated on the coast, between the rivers Cuve and Lonja, in a very fruitful champaign country, and about 3 m. to the S. is a convenient harbour, called by the sailors Hen's Bay, from the number of domestic fowl which are collected about it. There are no accounts preserved of the pop. or other statistics of Old Benguela; its trade, if it ever had any, having long since been transferred to

BENGUELA (ST. FILIPPE DE), the Portuguese capital of the same country, lat. 12° 12′ S., long. 15° E., about 100 m. S. of the old town. Pop. about 3,000, the greater portion being free blacks or slaves; it is a wretched place, built of half-baked bricks and so

* This name was given to it under the Ptolemies, being that of the queen of Ptolemy Philadelphus.

† Bowditch's map was constructed from the Portuguese survey of the coast and interior, in 1790, and is by far the best existing of this part of Africa. Captain Owen's survey of the coast was performed in 1825. According to the first, Cape Negro, the most S. and W. point of Benguela, lies in 16° S. lat., 13° 30′ E. long.; according to the last, in 15° 40′ 7″ S., 11° 53′ 3″ E.

slightly that no tenements are ever repaired, but as soon as they begin to decay, others are built by their sides. It stands on an open bay, and is watered by a tolerable stream, formed by the junction of two small rivers. Its site is a marsh, full of stagnant pools, and so extremely unhealthy, that the Portuguese affirm none of their countrywomen could endure it three months. It was lately nearly destroyed by an invasion of *elephants*, a number of them having entered it in search of water during the dry season; and danger always threatens the inhabitants from the alligators and hippopotami in the river. To compensate these evils, it was, if it be not still, a good *slaving* station, the exports formerly averaging 20,000 a year! This traffic is said to have diminished of late years; but such does not really appear to be the case. (See *Burton on the Slave Trade*, p. 30.)

BENICARLO, a marit. town of Spain, in Valencia, on the Mediterranean, 25 m. S. Tortosa. Pop. 5,500. It is defended by walls, a ditch, and an old castle. Streets narrow and dirty, and the houses mean. The surrounding territory is very fruitful, particularly in wine. Large quantities of which, of a dark red colour, considerable strength and flavour, are shipped from this town, whence it has its name, principally for Cette. It is thence conveyed, by the canal of Languedoc, to Bordeaux, where it is employed to give body and colour to the clarets, especially to those exported to the English markets. (*Miñano; Henderson on Wines*, p. 194. &c.)

BENIN, a country of Africa, near the E. extremity of the Gulph of Guinea, between 4° and 9° N. lat., and 4° and 8½° E. long. It has S. the Gulph, W. Dahomey, N.W. Yarriba, and N.E. and E. the lower Niger, which separates it from the states of Nyffe, Jacoba, Funda, and Calabar. It has something of a triangular form, is about 340 m. in length by 300 m. in extreme width, and contains probably not less than 50,000 sq. m. (*Adams' Remarks on Coast from E. Palmas to N. Congo*, pp. 109—128.; *Clapperton's Second Exped.* pp. 1—37.; *Lander's Travels*, pp.632—694.) On the coast, the country is level, but it rises gradually, till, in the central parts, the continuation of the Korg mountains attains an elevation of 2,500 ft. It is well watered, for the delta of the Niger comprises more than 140 m., that is, more than 7-10ths, of the whole sea-board. The W. branch of this delta is the stream which has always been called the river of Benin; the farthest E. is the main limb, formerly called the Nun; but demonstrated by Lander to be the Niger. (*See* NIGER.) Besides these, there are several other streams upon the coast, nor can there be any doubt but that the mountains give forth many affluents to the great river in the interior. (*Smith's Voyage to Guinea*, p. 227.; *Lander*, p. 467, *et seq.*; *Adams*, pp. 109. 119. &c.) Under the influence of abundant irrigation, and a tropical sun, the productions of the earth are very numerous. They do not, however, differ from those of other parts of the same coast, except that wood is rather more abundant. (*Adams*, p. 111.) The hippopotamus is more common than in other countries of Guinea (*Lander*, p. 639.), in proportion to the more magnificent scale of the hydrography; but in other respects, the animals of Benin are also described in those of Guinea generally; and the same remark will apply to the habits and customs of the natives: the same arts, with the exception of gold working, for gold is not found in Benin (*Adams*, p. 170.); the same government; the same religion (Feticism); the same festivals, marked by the same disgusting cruelties, are observed here as in Ashantee (*see* ASHANTEE), with one additional aggravation, namely, the annual sacrifice of human victims to the power of the sea (*Adams*, p. 115.) Benin is well peopled; the capital contains 15,000 inhab., and the town of Warre 5,000. (*Adams*, iii. 123.) Clapperton also found the N. frontier, on the Akinga river, very populous, as did Lander that of the E., upon the banks of the Niger. Previously to the nominal abolition of the slave-trade, this country was the great theatre of that traffic; and it is now (1839) carried on to a greater extent than ever. An annual fair is held at Bonny, on the coast, at which not fewer than 20,000 slaves are sold, of whom it is alleged 16,000 are brought from the single district of Heebe or Eboe, a port of Benin, on the right bank of the Niger. Some few of these are sold to native masters, as the kings of New and Old Calabar, but the vast majority are disposed of to foreign traders, and are shipped principally for Brazil and Cuba. (*Adams*, p. 129.; *Burton*, *passim*, &c.) A more harmless trade, and to a considerable extent, is carried on in salt, palm oil, and blue coral.

BENIN, a large town of Africa, cap. of the above kingdom; lat. 6° 15′ N., long. 5° 53′ E. Pop. 15,000.? It stands on the right bank of a large stream, hitherto called the river of Benin, but now known to be one of the numerous mouths of the Niger; it is built without any order, the houses being detached from each other, and consequently occupying a great deal of ground. They are large, constructed of clay, and neatly thatched with reeds, straw, or leaves. There is an almost continual market for cattle, sheep, goats, pigs, poultry, yams, cotton, ivory, and European wares; it was also formerly the great emporium for slaves; but the river not being navigable for large ships higher than 40 m. below Benin, this traffic is now carried on nearer the coast, and chiefly at Brass, the outlet of the main branch of the Niger. For a negro town, Benin is extremely clean, and it has a system of municipal government resembling in many respects that of more civilised communities: every district is under the control of a *street king*, whose office is not much unlike that of our aldermen, and who are sometimes powerful enough to hold the monarch at defiance. Gatto, or Agatton, is the port of Benin; it lies about 40 m. down the river, or rather on a large creek which the former gives out from its bank, and is accessible to craft of the burden of 60 tons. It is said to be larger and more populous than Benin itself. The surrounding country is well wooded, fertile; but low, flat, swampy, and very unhealthy. It was here that Belzoni died of dysentery in 1823, on his road to Houssa and Timbuctoo. (*Smith's Voyage to Guinea*, p. 234, &c.; *Adams's Remarks on the Country from Cape Palmas*, p. 111. &c.; *Nouvelles Annales des Voyages*, xxii. 142.; *Gent.'s Mag.* pp. 94. 462.)

BENIN (BIGHT OF). The coast of Benin is so called. It is a considerable indentation of the Gulph of Guinea, extending from the Akinga to the Niger. It is an iron-bound coast, offering no entrance to vessels, except at the mouths of rivers, and scarcely there, if the vessels be of much burden. (*Adams*, p. 227.)

BENIN, (RIVER OF), called also the FORMOSA, falls into the Gulph of Guinea, about 180 m. below Benin, in lat. 5° 40′ N., long. 5° E. It is a deltoid branch of the Niger, commencing at Kirree, about 100 m. above Benin, and its whole course, inclusive of windings, may be about 210 m. (*See* NIGER.)

BENISUEFF, a town of Egypt, cap. prov. same name, on the W. bank of the Nile, 64 m. S. Cairo. Pop. 5,000. This is a pretty well built, important town, being the entrepôt for all the produce of the fertile valley of Fayoum, which is brought here for shipment to Cairo. It had, in 1835, a large cotton-mill at work, which gave employment to several hundreds of poor people; with large barracks for cavalry, &c. It is well supplied with provisions of all sorts; and quarries of alabaster have recently been discovered in its vicinity. (*Scott's Egypt and Candia*, p. 265.)

BENNECKENSTEIN, a town of Prussia, prov. Saxony, reg. Erfurth, on the Rapbode, at the foot of the Harz, in an *enclave* situated in the duchy of Brunswick, 13 m. N.N.W. Nordhausen. Pop. 2,700. It has an iron-foundry, a nail-work, a brewery, and a manufactory of baskets.

BEN NEVIS, a mountain of Scotland, in Dumbartonshire, the second, in point of altitude, of the British mountains. It lies immediately to the E. of Fort William, being separated from the Grampians by the desolate tract called the Moor of Rannoch. It rises 4,370 ft. above the level of the sea; being only 20 ft. lower than Ben Macdhu, the highest mountain in Scotland, while it is 799 ft. higher than Snowdon, the most elevated of the Welsh mountains. Its circumference at the base exceeds 24 m. Its outline all round is well defined. Its N. front consists of two grand ascents or terraces: the level top of the lowest of which, at an elevation of about 1,700 ft., contains a wild *tarn* or mountain lake. "The outer acclivities of this, the lower part of the mountain, are very steep, though covered with a short grassy sward, intermixed with heath; but at the lake, this general vegetable clothing ceases. The surface of the upper and higher part of the mountain, where not absolutely precipitous, is strewed with angular fragments of stone, of various sizes, wedged together, and forming a singularly rugged covering, among which we look in vain for any symptom of vegetable life. On the N. E. side, a broad, terrific, and tremendous precipice, commencing at the summit, reaches down to a depth of not less than 1,500 ft. The furrows and chasms in the black beetling rocks of this precipice are constantly filled with snow, and the brow of the mountain is also encircled with an icy diadem. From the summit, the view is remarkably grand and sublime: it commands most of the W. islands, from the Pass of Jura to Cuchullin, in Skye; and on the E., the view extends to Schieballion Cairngorm and Ben Macdhu." (*Anderson's Highlands*, p. 266. &c.)

Ben being a term used in the Gaelic to signify a high summit, is applied to several of the Scotch mountains, as Ben Lomond, on the E. side of Loch Lomond, 3,195 ft. above the level of the sea, and the best known of all the Highland mountains; Ben Macdhu, on the confines of Banff, Inverness, and Aberdeen, 4,390 ft. above the sea, being, as already stated, 20 ft. higher than Ben Nevis; Ben Sawers, Ben Gloe, Ben Wyvis, &c. (*See* SCOTLAND.)

BENOIT (ST.), a town of the Isle de Bourbon, on the E. coast of the island, at the mouth of the Marsouins. The products of the district are shipped in

small vessels at the creek, or bay, for St. Denis, the cap. of the island.

BENSHEIM, a town of the grand duchy of Hesse Darmstadt, 15 m. S. Darmstadt. Pop. 4,000. It has a church, a college, and an hospital.

BERAR (DOM. OF RAJAH OF), a territ. of India, in the Deccan, under British protection, comprising Nagpoor, part of Berar prov., and a considerable portion of Gundwanah; between lat. 17° 48′ and 22° 43′ N., long. 78° 20′ to 80° 43′ E.: having N. the ceded distr. on the Nerbudda; E. parts of the Bengal and Madras presid., and S. and W. the nizam's dom.: greatest length, N. to S., 330 m.; breadth, 300 m.; area, 56,723 sq. m. (*Capt. Sutherland.*) Pop. early in the present century, about 2,500,000, exclusive of some of the wilder districts. In the N. its boundary is a high table-land; its S.W. limit is for the most part identical with the course of the Wurda; the other chief rivers are, the Pain-Gunga, its tributary the Khahan, and the Mahanuddy. The land is fertile in dry grains; peas, vetches, flax, sugar, betel, and tobacco, are also raised. The Nagpoor wheat is reckoned the most nutritious in India; it comes to perfection in three months, and with maize, which is sown after it as a second crop, forms the chief subsistence of the inhab. A large proportion of the land has been brought into cultivation since the British have had the superintendence of this country; the capital of the cultivators generally has increased, and irrigation and the state of the wells are better attended to. Additional bullocks are now used in agriculture, but no improvement has taken place in the implements of husbandry: the plough is a crooked instrument, of the coarsest wood, with a little bit of iron at the end of it, costing but 3 or 4 rupees, and sufficient only for scratching the ground. Sugar, betel, and tobacco are largely manured, but not with cow dung, which is used by the Hindoos for the floors of houses, and for fuel, though plenty of wood suitable for the latter purpose is scattered over the country. Indigo grows wild, but is not cultivated to any extent, and opium very little. A great portion of the country belongs to zemindars, who pay nothing but a quit-rent to government, and are in other respects independent of any superior authority: but these are less numerous in the central districts, which, a few years since, were placed under the immediate superintendence of the rajah. In the more civilised parts the revenue is collected under the village settlement; the chief farmer of the village being the *potail*, responsible for the payment of the ryots under him; receiving their rents; advancing them money when necessary, and receiving for his own remuneration 1-6th part of the whole sum collected. Cowls, or agreements between the government and the potail, or between the potail and the ryot, that only so much shall be collected from the land in a certain term (generally 5 or 7 years), are very common, and were introduced by the Maharattas when they conquered this territory, in order to promote cultivation, which at that time had been greatly neglected: the system is said to be advantageous, and if the assessant were moderate, and the term of agreement extended, and the conditions abided by, it perhaps would be as good a system as the principle on which it is bottomed will admit of.

The office of potail is usually considered hereditary, but is dependent on the pleasure of the government. The revenue is about 46 or 47 lacs, and the civil expenditure 7 or 8 lacs rupees a year. The ascending ranks of judicial authorities are the potail, the native pergunnah collector, the soubahdar of the district, and the rajah himself, who holds all the soubahdar jurisdiction round the capital. The *punchayet*, a body of five judges, two of whom are chosen by each of the contending parties, and the fifth by the potail, decides most civil suits, and its decision is final. This system is said to work well, except near Nagpoor, where corruption is common. It is always, however, resorted to; for, when the rajah decides, he exacts ¼ of the sum in dispute as a fine from the loser, and another ¼ as a compensation for the decision, from the winner. There are no statute laws: succession to property is commonly determined by the Hindoo code, and there are a few men of learning in the cap. versed in this; but where one of these is not called in, most matters are determined by the *punchayet*. Education is not much countenanced either by the government or the people at large; it is mostly confined to the children of the Brahmins and mercantile classes, and amongst these extends little beyond reading, writing, and accounts. All other classes are very illiterate, and it is rare that a cultivator can write his own name. There are no schools for Mohammedans only; they forming but a very small part of the pop. Domestic slavery is not very prevalent, and is more common in the cap. than elsewhere; it chiefly occurs from persons pressed by poverty disposing of their children, who are treated more as members of the families of their owners than otherwise: none are exclusively employed as agricultural slaves, nor are any attached to the soil. The public roads are few; there are no canals; communication is very trifling generally, and in bad weather there is none at all. The trade of Berar with other provs. is very insignificant, and from all these causes the knowledge of the state of this country is, of necessity, very imperfect. Commerce is said to be promoted in a most singular manner, that is, by a belief amongst the lower tribes, that suicide is acceptable to their divinities, and they accordingly immolate themselves at fairs, &c., to which merchants and other classes resort to witness the spectacle! In 1830, 816 European, and 4,000 native troops, formed the military establishment.

After the fall of the Mogul empire, the Maharattas overran this country, and under the second Maharatta rajah, Jenjee, who lived about the middle of last century, it is said to have been in a more flourishing condition than at any other period. The rajah of Nagpoor, however, at the beginning of the present century, having become hostile to the British, was deprived of the prov. of Cuttack, which had previously belonged to him, and some territories adjoining Hyderabad, which were given to the nizam. In 1817 the rajah was again in arms against the English, who then took upon themselves the administration of his territory. This continued for 8½ years, during which time much improvement to the general satisfaction of the people was effected. The annual revenue had risen from 37 to 47 lacs of rupees, when the central parts were delivered up to the young rajah Bajee Rao Booslah, on his majority in 1826, at which time he ceded to us a territory on both banks of the Nerbudda, and those parts of Gundwanah now belonging to the Bengal presid., together with an annual tribute of 8 lacs; the whole of our acquisition by this treaty being estimated at 30 lacs rup. a year. In 1829 the rajah was put in possession of the rest of his prov., with an agreement that instead of a force of 3,000 horse and 2,000 foot, he should, for the future, maintain a standing army of 1,000 horse only. (*Hamilton's E. I. Gaz.* i. 217—221.; *Reports on the Affairs of the E. I. Comp., Evid. of Mr. Jenkins*, pp. 140—150.; *Append.* vi. 163.)

BERAT, a town of Turkey in Europe, in the N. part of Albania, on the Tuberathi (an. *Apsus*), 28 m. N.E. Aulona; lat. 40° 48′ N., long. 19° 52′ E. Pop. 8,000?* It consists of an acropolis or citadel, on the summit of a pretty high hill, and of a lower town. The former, which was repaired and strengthened by Ali Pacha, is very extensive, and contains within it the palace of the vizier, several Greek churches, and about 250 houses. Being commanded by the neighbouring heights, and without either springs or cisterns (*Pouqueville*), it could oppose no effectual resistance to an invading army properly supplied with artillery, or strong enough effectually to blockade it. The lower town, at the foot of the acropolis, is intersected by the river, over which there is a good bridge of 8 arches. It has numerous mosques, and a large and handsome bazar. Merchants import British and other foreign goods through the port of Aulona. Scanderbeg failed in an attempt to take this town, which has always been regarded as an important post, and the key, in fact, of this part of the country. (*Pouqueville, Voyage de la Grèce*, i. 301. ed. 1820; *Hughes' Albania*, ii. 385.)

BERAUN, a walled town of Bohemia, cap. circ. same name, on the Beraun, 2,200 m. W.S.W. Prague. Pop. 2,200. It has fabrics of earthenware and fire-arms; and in its vicinity are quarries of marble and coal mines. In the vicinity of this town, the Austrians, in 1746, gained a signal victory over the Prussians.

BERBERA, a sea-port town of Africa, in the country of the Somaulis, on the Sea of Bab-el-Mandeb, at the bottom of a narrow and deep bay; lat. 10° 24′ N., long. 45° 8′ E. It is rather an encampment than a town, the inhab. dwelling mostly in tents or huts constructed of a few sticks, and covered with skins. It has few permanent residents; but from September to April, during which period a great annual fair is held, there is a large concourse of visiters, sometimes to the amount of 7,000 or 10,000. The Somaulis bring with them, from the interior, ghee or butter, coffee, sheep, various descriptions of gums, myrrh, ostrich feathers, gold dust, hides, slaves of both sexes, &c., which they exchange for iron, lead, cotton, cloth, rice, dhourrah, &c., brought from the Arabian ports of Mocha, Hodeida, Makullah, &c. The trade is almost wholly in the hands of Banian merchants, who are said to realise large profits. (*Wellsted's Arabia*, ii. 360. &c.)

BERBICE. *See* GUIANA.

BERDITCHEF, a town of Russia in Europe, gov. Volhynia, on its S.E. confines, 25 m. S. Jitomir. Pop. 9,000.? It is dirty and ill built, and is principally inhabited by Jews. It is, however, the centre of a considerable trade. Its fair, called *Onoufrief fricfskaïa*, is much frequented. In 1832 there were brought to it Russian merchandise of the value of 3,108,755 roubles; foreign and colonial do. 1,518,195 r.; Asiatic do., 347,000 r.;

* Pouqueville says that the lower town has 6,000 inhab., and the upper 250 houses.

with horses of the value of 710,000 r., and cattle, 150,000 r. (*Schnitzler*, *La Russie*, *&c.*, p. 508.)

BEREZINA, a river of Russia in Europe: it rises in the district of Dissna, gov. Minsk, which it traverses from N. to S.: after receiving various affluents, and being joined by a canal with the Dun, it falls into the Dnieper a little below Ritchitza. This river has become celebrated from the difficulties and disasters attending the passage over it of the army under Napoleon, when retreating from Moscow in 1812. The above river must not be confounded with another and smaller river of the same name, which also rises in the gov. Minsk, and which, having divided, during a part of its course, the govts. of Grodno and Wilna, falls into the Niemen, at Nikolaef.

BERGAMO, a town of Austrian Italy, cap. prov. and distr. same name, on some low hills between the Serio and the Brembo, 29 m. N.E. Milan; lat. 45° 41′ 51″ N., long. 9° 40′ 26″ E. Pop. 30,500. It is surrounded by walls, and has an old castle; but these are now useless as means of defence. It is well built; has a massive cathedral, 14 churches, 12 monasteries, 10 nunneries, a large hospital, a *mont-de-piété*, an orphan asylum, and other charitable institutions, a lyceum, and a *seminario*; the Carrarese school, founded by Count Carrara, where gratuitous instruction is given in music, painting, and architecture; a public library, with 60,000 vols., 2 theatres, &c. There are here extensive establishments for the spinning and weaving of silk, great quantities of which are produced in the vicinity, with woollen and cotton fabrics, iron-foundries, &c. A great fair is annually held on the 22d of August, and 14 following days, in a large quadrangular building, called the *fiera*, containing 540 booths or shops. All the products of Lombardy are exposed to sale at this fair; but silk is the staple article, and next to it are iron, wine, &c. It has also a considerable trade in grindstones, quarried in the neighbourhood. The value of the goods disposed of at the fair is said sometimes to amount to 1,200,000*l*. It has also other, but less considerable, fairs, and cattle-markets. It is the seat of a bishopric, of the provincial assembly, and of a judicial tribunal.

Bergamo is very ancient, having existed under the Romans. In 1428, the inhab. placed themselves under the protection of the republic of Venice, of which it continued to form an integral part till the subversion of the latter in 1796, with the exception of about 7 years after the battle of Agnadello, in 1509, when it was taken by Louis XII. During the French ascendancy, it was the cap. of the dep. of Serio.

Bergamo has given birth to some very eminent men. Among others, to Bernardo Tasso, the father of Torquato (a colossal statue has been erected in the *Piazza Grande*, in honour of the latter); Tiraboschi, the author of the learned, elaborate, and invaluable work on the history of Italian literature (*Storia della Letteratura Italiana*); the Abbé Serassi, author of the Life of Tasso, &c. The Bergamesque dialect is peculiar, and one of the most corrupted forms of the language spoken in Italy. (*Osterreichen Encyc.*; *Rampoldi*, *Corografia Italiana*, *&c.*)

BERGEDORF, a town of the distr. or ter. of Hamburg, at the confluence of the Rille with a canal that joins the Elbe, 9 m. S.E. Hamburg. Pop. 2,000.

BERGEN, a town and sea-port of Norway, cap. of the diocese of S. Bergenshuus, at the bottom of a deep bay, 365 m. W.N.W. Christiania; lat. 60° 24′ N., long. 5° 20′ E. Pop. in 1845, 25,611. It is built on a promontory, and surrounded on every side by water, except N.E., where it is enclosed by mountains considerably above 2,000 ft. in height; and is protected, besides, by lofty walls, and several forts, mounting in all about 100 guns. The harbour is safe and commodious, and the water deep; but the bay all round is so beset with rocks as to render its navigation dangerous without a pilot. Bergen is generally well built, though some of its streets be narrow and crooked; viewed from the sea, it appears remarkably picturesque, being built amphitheatrewise round the harbour. It contains a cathedral and 4 other churches, 3 hospitals, a prison, a house of correction, 6 establishments for the poor, a national museum, 5 public libraries, a naval academy, a superior college, established by Bishop Pontoppidan in 1750, and various schools. It is the seat of a tribunal of secondary jurisdiction, the residence of the high sheriff and bishop of the diocese: one of the three public treasuries of the kingdom, and a division of the National Bank, are established at Bergen. It has a governor, and a garrison of 300 men; and a squadron of the navy is stationed here. There are manufactories of tobacco and porcelain, many distilleries, and some rope-yards.

The fishery is the principal business carried on here; but both the internal and foreign trade are considerable. The imports from the N. provinces consist of cod-fish, roes, fish-oil, tallow, skins, feathers, &c., which are brought by fleets of 50 to 80 small vessels, twice a year during the summer; and which take back in return the other necessaries and some of the luxuries of life. The articles brought from the other parts of Norway are less important: they consist chiefly of iron manufactures, glass, tiles, millstones, &c., and fir timber; but the planks and deals of Bergen are not equal in quality to those of Christiania. The foreign trade is chiefly with the Baltic, Denmark, Sweden, Holland, Hamburg, England, France, and the Mediterranean. The imports from Hamburg far exceed the exports thence from Bergen, and consist of fabrics and colonial goods of every description. England supplies her manufactures and colonial products; but the trade with this country has much decreased. France sends thither salt, wine, and brandy; and receives most of the salted fish roes. The dried cod, or stockfish, a staple commodity of the place, is sent to most Catholic countries. We subjoin a statement of the quantities of the principal articles imported into, and exported from, Bergen, in 1834.

Imports.		Exports.	
Brandy - -	15,152 gals.	Bones - -	295,960 lbs.
Corn - -	97,310 qrs.	Stockfish -	19,421,508
Flour - -	274,679 lbs.	Salted do. -	5,592,967
Barley meal -	102,481	Herrings -	174,796 brs.
Cotton manuf. -	51,556	Cod roes -	17,942
Woollen do. -	38,751	Oil - -	17,229
Coffee - -	267,154	Lobsters - -	368,097 no.
Flax - -	137,431	Horns - -	15,619 lbs.
Hemp - -	1,333,298	Iron - -	11,546
Molasses -	364,895	Rock moss -	66,958
Sugar - -	497,057	Skins, various -	94,609
Soap - -	100,266	Wood - -	32,476 c.ft.
Tobacco -	391,967	Anchovies -	3,264 kgs.
Wine - -	27,442 gals.		

During the same year, 1,032 vessels entered, and 985 cleared out of, the port: of those entering it, 539 were Norwegian, 184 Danish, and 71 British. The inhab. are industrious, and several of the mercantile houses are believed to be wealthy. The modern town was founded by one of the kings of Norway in the 11th century. In the 13th, traders from the Hanse towns began to settle; and, in the succeeding centuries, acquired an almost sovereign supremacy in Bergen, until checked by an act of the Danish government in 1560. The principal part of the trade is now in the hands of natives. (*Board of Trade Papers*, part v.; *Dict. of Commerce*; and *Penny Cycl.*)

BERGEN, a town of the Prussian States, cap. island of Rugen, 15 m. N.E. Stralsund. Pop. 3,000. It stands almost in the centre of the island; has a court of justice, a castle, and a convent of noble ladies.

BERGEN-OP-ZOOM, a strongly fortified town of the king. of Holland, prov. Brabant, 23 m. W.S.W. Breda, near the left bank of the E. Scheldе, with which it communicates by a canal; lat. 51° 29′ 44″ N., long. 4° 17′ 23″ E. Pop. 6,000. Besides its fortifications, which are exceedingly strong, it is surrounded by marshes that render the access to it very difficult. It has a grammar-school, and a school of design and architecture, with numerous fabrics of earthenware. Its anchovies, taken in the river, are in considerable demand.

This was one of the first towns occupied by the States General. In 1622 it stood a memorable siege by the Spaniards, who were compelled to retire, after losing 10,000 men. In 1747 it was taken by the French by stratagem. In 1814 it was nearly taken by the British by a *coup de main*; but they were finally repulsed with considerable loss.

BERGERAC, a town of France, dép. Dordogne, cap. arrond., in an extensive and fertile plain, on the Dordogne, 27 m. S.S.W. Périgueux. Pop. 9,285. It is neat, well laid out, generally well built, and thriving. It has a magnificent bridge of five arches over the Dordogne, a theatre, and some fine promenades. The fortifications by which it was once surrounded were demolished by order of Louis XIII., in 1621. It has a court of original jurisdiction, a college, and a secondary ecclesiastical school. Excellent paper is made here; and there are manufactures of different sorts of iron and copper goods, serges, hosiery, hats, and earthenware; with tanneries, distilleries, iron-foundries, &c. It maintains an intercourse with Bordeaux and Libourne, and is the principal entrepôt for the trade of the dep. Bergerac suffered much from the religious wars, and still more from the revocation of the edict of Nantes. (*Hugo*, art. *Dordogne*, &c.)

BERGUES, a town of France, dép. du Nord, cap. cant., at the foot of a hill, on the Colme, 5 m. S.S.E. Dunkirk. Pop. 5,968. It was strongly fortified by Vauban, and has the means of laying the adjoining plain under water. Though old, it is pretty well built. In one of its squares are two high towers, the remains of two ancient churches destroyed during the revolution. It has a communal college, an hospital, and a small public library. It has distilleries, refineries of salt and sugar, with potteries, and fabrics of soap and tobacco. Owing to its favourable situation on the canals of Bergues and Hondscoote, it is the entrepôt of

the corn, cheese, and lace, produced in the adjoining country. (*Hugo* art. *Nord*, *Diction. Géographique*.)

BERKELEY, a bor. and par. of England, co. Gloucester, hund. Berkeley. Area of par. 14,680 acres. Pop. par., in 1821, 3,835; in 1831, 3,899; pop. of the town only, 901: houses, 196. The town is situated amidst rich pasture lands, in the vale of Berkeley, on the Avon (which joins the Severn 1½ m. below), 101 m. W. by N. London. It consists mostly of 4 streets, diverging from the market-place; houses but indifferent. The church is a large handsome building, in the pointed style, with a modern tower at some distance from it. There is also a chapel of ease at Stone; 4 dissenting chapels in the town, and 2 in the tithing. There is a free grammar-school, endowed with about 40*l*. a year, in which 26 boys are educated. The town-hall (a handsome structure built in 1825) is now used as a chapel by the Independents; the market-house is beneath it. The market is held on Tuesday, and two annual fairs on May 14. and Dec. 1.: there are also cattle-markets on the first Tuesday in Sept. and in Nov. The Gloucester and Berkeley Canal (navigable for vessels of 600 tons) has its entrance 2½ m. from Berkeley, but the place can only be considered as a large agricultural village. The corporation exists by prescription only; there are no charters, nor has it now any duties to perform.

Berkeley Castle on an eminence S.E. of the town, is amongst the most perfect specimens of its kind remaining in the kingdom, being in complete repair and occupied: it is an irregular pile, with a keep and many castellated buildings, enclosing a spacious court. There is a fine baronial hall, a chapel, and a dungeon chamber 28 ft. deep. The other apartments are numerous and gloomy: in one of these Edw. II. is supposed to have been murdered, in 1327: this castle is nearly surrounded by a fine terrace. The date of its foundation is uncertain, but it was granted, in 1150, by Henry II. to Robert Fitzharding; and in the last civil war it was garrisoned for the king, and for a time awed the surrounding district; it was subsequently surrendered to the parliamentary army, after a nine days' siege. (*Losbrook's Hist. of Gloucestershire; Atkins's Ditto; Smythe's Hist. of the Berkeleys; Parl. Reports.*)

BERKHAMSTEAD (GREAT), a par. and town of England, co. Hertford, hund. Dacorum, 26 m. N.W. London. Area of par. 4,250 acres. Pop. of par., 1821, 2,310; 1831, 2,369: houses at the latter date, 477. The town is in a deep vale, on the S.W. side of the Bulborn and the Grand Junction Canal, which here run in a line together, parallel with the high road, which passes through the town. It forms the principal street, about ½ m. in length; a smaller street branches from the church in the middle of the town, towards the old castle. Houses irregular brick buildings, but many of them very respectable. The church is a Gothic cruciform structure, with a tower, and several small chantries, and curious monuments. There is a free school, established in the reign of Henry VIII.; ann. amount of its revenue, 634*l*.; but it has long been unavailable to the town: All Souls college has the patronage. Another school, founded in 1727, has an ann. revenue of 279*l*.: in it 20 boys and 10 girls are clothed and educated. The castle, on an eminence E. of the town, enclosed a space of 11 acres, and was very strong: it originated in the Saxon period; was strengthened in the reign of Wm. I., and rebuilt in that of Hen. II., who, at one time held his court in it, and conferred many privileges on the town. Cowper the poet was born here, his father being rector of the parish.

BERKS, or BERKSHIRE, an inland co. of England, having N. Oxford and Bucks, from which it is separated by the Thames, E. Surrey, S. Hampshire, and W. Wiltshire, and a part of Gloucestershire. It is very irregularly shaped, and contains 481,280 acres, of which about 260,000 are tillage land, 72,000 meadow and dairy land, and 30,000 waste, consisting of part of Bagshot Heath, &c. It is a very beautiful co.; has every variety of soil and surface; and is well stocked with timber, particularly oak and beach. Exclusive of the Thames, it is watered by the Kennet, Loddon, Ock, and other rivers. It is about equally divided between tillage and stock and dairy husbandry. The Berkshire breed of pigs is much celebrated. Agriculture in a rather backward state; 4 or 5 horses are generally yoked to the plough; and from the want of proper covenants in leases, land is often left in a bad and exhausted state at their termination. Property much divided; a third part of the co. is supposed to be occupied by proprietors. Farms of all sizes, under 1,200 or 1,400 acres; but few above 500 acres, or under 50*l*. a year. Average rent of land, 24*s*. 8½*d*. an acre. Windsor Castle, the ancient and only magnificent residence of the English sovereigns, is in this co. This was formerly one of the principal seats of the woollen manufacture; but it has entirely disappeared, and the manufactures now carried on are but of trifling importance. Principal towns, Reading, Windsor, and Abingdon. Berkshire is divided into 20 hunds. and 151 pars. In 1841, it had 31,653 inhab. houses, and 161,147 persons. It returns 9 mem. to the H. of C.; viz. 3 for the co., 2 each for the bors. of Reading and Windsor, and 1 each for Abingdon and Wallingford. Co. constituency in 1849-50, 4,804. Sum expended on the poor in 1848, 85,252*l*. Annual value of real property in 1815, 719,890*l*.; ditto in 1843, 967,475*l*.

BERLEBURG, a town of the Prussian States, prov. Westphalia, cap. circ. Wittgenstein, 27 m. S.S.E. Arnsberg. Pop. 2,200. It is the residence of the prince of Wittgenstein. Berleburg has a castle, a haras, or *depôt de chevaux*, and some forges.

BERLICHINGEN, a village of Wirtemberg, on the Jaxt, 9 m. W.N.W. Kunzelsau. Pop. 1,400. It has a castle, a Catholic church, and a synagogue.

BERLINCHEN, a town of the Prussian states, prov. Brandenburg, on a small lake, 52 m. N.N E. Frankfort on the Oder. Pop. 2,200. It has an hospital, distilleries, and fabrics of linen.

BERLIN, the capital of the Prussian States, and the ordinary residence of the monarch, on the Spree, 127 ft. above the level of the sea, in the middle mark of Brandenburg: lat. 52° 31′ 45″ N., long. 13° 22′ 45″ E. Streets broad and straight, some of them being ornamented with rows of trees; squares regular and spacious; houses all of brick, and mostly stuccoed over; public buildings and monuments numerous and magnificent; so that, notwithstanding its sameness, the want of bustle and liveliness, and the poverty of its environs, Berlin is one of the finest cities of Europe. It was founded about the middle of the 12th century. In 1688 the population was about 18,000; in 1775 it had increased to 135,500; in 1816 it was 182.387; in 1838 it amounted to 290,797, and in 1846 to 408,502, inc. military.

The births in 1838 were 10,045, the marriages 2,929, and the deaths 8,554. In 1838 the city contained 7,614 front and 6,606 back houses, or 14,220 in all, giving an average pop. of 20·21 individuals to every house. In Edinburgh, where the pop. to a house is greater than in any other large town in Great Britain, each house has, at an average, about 16 inhab., so that, in this respect, it is inferior to Berlin. This density of pop. arises in both cities from the same cause; that is, from the appropriation of different stories (Edinburgh, *flats*) and parts of the house to the accommodation of different families. Some of the houses in Berlin have 50, 70, 80, and 100 inhab. The back houses are built round court-yards, one of which is attached to almost all the principal houses, and do not front the streets. The city is surrounded by ramparts; but they serve only for purposes of police and revenue, and are quite useless as a means of defence.

Berlin owes much to the taste and munificence of its sovereigns. The quarter called the new town (Neustadt) was built by the great elector, Frederick William (1640—1688), who also planned the *Unter den Linden* street, and otherwise greatly enlarged and beautified the city. The succeeding monarchs, especially Frederick I., Frederick the Great, and the late monarch, have added many new streets, squares, and suburbs, and have embellished the city with many splendid buildings and monuments. Among the principal of these is the royal palace, imposing by its vast magnitude. It is sumptuously furnished; and in the White-hall, recently fitted up at a cost of 120,000*l*., the Prussian parliament held its first meeting in 1847. The museum, begun in 1823 and finished in 1830, is undoubtedly the finest building in the city. It is in the form of a parallelogram, 280 ft. in length by 182 ft. in width. It has some noble apartments, and very extensive collections of pictures, vases, statues, coins, &c. Opposite the grand entrance is an immense granite vase, or basin, 22 ft. in diameter. It was formed out of a huge boulder, or isolated

block, found about 30 m. from the city, to which it was conveyed by the Spree. The opera-house, burnt down in 1843, has since been rebuilt; and there are also two fine theatres. The Royal Library is a large heavy looking building. The collection of books comprises about 410,000 printed, and 5,000 MSS. vols., many of the former, inc. Luther's Hebrew Bible, being both scarce and valuable. This library is entitled to a copy of every work published in the Prussian states. —(*Edwards.*) The arsenal forms a square, each side of which is 268 ft. in length. It was formerly reckoned the finest building in the city, and contained, previously to the revolutionary disturbances in 1848, a very large stock of all sorts of warlike implements. It was then, however, taken possession of by the mob, who carried off large quantities of the fire-arms and other *munitions de guerre* with which it was furnished. Among the other public buildings may be specified the Royal Academy; the Joachimsthal, one of the royal gymnasiums; the university; the old palace, formerly belonging to the Knights of St. John, now the residence of Prince Charles; the palace of Monbijou, occupied by Peter the Great when he visited the city, &c. The Brandenburg gate, one of the most colossal structures of the kind in Europe, and a principal ornament of the city, was erected in 1790, after the Propylæum at Athens, but on a much larger scale; it is surmounted by a statue of Victory, in a chariot drawn by 4 horses, carried away by the French in 1807, and brought back in triumph in 1814. The monument to the brave men who fell in the campaigns of 1813, 1814, 1815, is immediately outside the Halle gate. Opposite the guard-house are the statues of Scharnhorst, Bulow, and Marshal Blucher. When we formerly noticed these statues, we took occasion to express our surprise that no monument had been erected in honour of Frederick the Great. But in this respect justice is at length about being done to his memory. An equestrian statue in bronze, by Rauch, of the philosophic hero, either has been, or is immediately to be, erected in the *Unter den Linden* street opposite to the University. It will be one of the grandest monuments of its kind in Europe. The horse, 16 ft. high, is to be raised on a pedestal, and at each of its corners is to be an equestrian statue of one of Frederick's generals.—(*Murray's Handbook for N. Germany*, ed. 1850.) The churches, which are very numerous, are generally inferior; the principal are the cathedral; St. Mary's, with a steeple 292 ft. in height; the church of St. Nicholas, consecrated in 1223; the church of the garrison; and the church of St. Hedewige. The Spree, which intersects the city, and insulates one of its quarters, is crossed by above 40 bridges, principally of stone, but partly also of iron. Some of them are handsome structures. The "Long Bridge," of stone, has a fine equestrian statue of the "Great Elector." The *Unter den Linden* street is the finest in Berlin, and one of the finest in Europe. "It is ¾ m. in length, from the Brandenburg gate to the royal palace; the five noble avenues in the centre being composed of chestnuts, linden, aspen, acacia, and plantain, whose varied foliage contrasts beautifully with the numerous elegant palaces and public buildings that line each side of the street. It is the corso of Berlin; for here the fashionable and the wealthy exhibit themselves and their equipages: here are several palaces; the seminaries of the artillery and engineers, the Academy of the Fine Arts, the opera house, the arsenal, and the king's palace. In short, in whatever direction we turn our eyes, whether to the Brandenburg gate or the museum, majestic structures seem vying in magnificence with each other, intermingled with the statues of Prussian heroes, presenting altogether one of the finest architectural vistas of any city in Europe." (*Germany and the Germans*, i. 58.) Frederick Street is above 2 m. in length, and there are some other fine streets: the Schloss Platz, or square of the palace, the Gens-d'armes-market, Wilhelm Platz, the most fashionable square in the city, the square of *La Belle Alliance*, &c., are all well built, and most of them highly ornamented; but, unluckily, they are not planted inside, and, consequently, notwithstanding the fineness of the buildings, have not half the effect they would have were they properly laid out.

Besides its military and judicial establishments, Berlin has to boast of many celebrated literary institutions. The university, established in 1809, enjoys a high degree of reputation, especially its medical school. It has many distinguished professors and teachers; and was attended, before the late disturbances, by nearly 1,800 students. Its library contains above 50,000 vols. There are also 6 royal gymnasiums or high schools, with many inferior academies and schools; among others one (*Gewerbe Institut*) in which young artisans of promise receive gratuitous instruction in drawing, modelling, &c. The military seminary has above 300 pupils. The hospitals and other charitable institutions are numerous and well conducted. The orphan asylum supports about 400 children in the house, exclusive of about 700 boarded out of doors.

Berlin may be regarded as the political and literary metropolis of N. Germany; and is distinguished alike for the number and celebrity of her statesmen, philosophers, scholars, and artists. Her press is very active and annually gives birth to a great many books, scientific and literary journals, newspapers, &c. But it must notwithstanding be confessed that the results of all this reputation and activity are not exactly what might have been expected. The newspaper press of Berlin, and of Prussia and Germany generally, does not rank high. And whether it be owing to the restraints so long imposed on the freedom of public discussion, to the little acquaintance of the people with practical politics, or to some other cause, it is not to be denied that all classes, high and low, have evinced no great amount of discretion or of good sense in their political views; and a disposition to indulge in projects and theories which are alike hazardous and visionary.

Berlin is one of the principal manufacturing cities of Germany. Among other branches are included the manufacture of woollens, silk stuffs and ribands, cottons, porcelain, cast-iron goods, paper, coaches and light carriages, jewellery, watches and clocks, hats, snuff and tobacco, refined sugar, &c. The cast-iron goods, manufactured at the foundry outside the Oranienburg gate, comprise all sorts of articles, from colossal pillars and statues, down to the minute furniture of a lady's toilet. In delicacy of impression they are unequalled by those made in any other country. The casts in relief of some of the finest pictures are particularly admired. The porcelain, for which the town has some celebrity, is not of the first quality: it is the produce of a royal manufactory, and, as was to be expected, annually costs the government a considerable sum. There were in the town, in 1838, 29 steam-engines—of which *one* only was employed in the spinning of wool, and not one in the spinning of cotton. There are numerous cotton-spinning establishments in the city, but they are

all moved by water-power. Printing is, as already stated, carried on to a great extent.

All the great roads of the kingdom centre in Berlin. She has a large command of inland navigation, extending to the Elbe and Hamburgh on the W., to Stettin and Swinemunde on the N., and to the Vistula on the E. And within the last dozen years she has been connected by railways with Kiel and Hamburgh, Cologne and Antwerp, Breslau and Vienna, &c.

Owing to the flatness of the ground on which it is built, the drainage of the city is very imperfect; and, instead of running off, the water in the streets, in wet weather, stops and stagnates on the surface. The Spree, too, being more like a great canal than a river, conveys so slowly away the filth that is poured into it, that in hot weather the odours are alike unpleasant and unwholesome. But the greatest annoyance in summer arises from the heat of the sun, which, being reflected by the arid sandy soil, becomes very oppressive. The streets used to be badly provided with *trottoirs*, but this is no longer the case; the change in this respect has been a very advantageous one, for the streets being mostly paved with small sharp stones, were very unpleasant, and (to a stranger at least) even painful to walk upon. There are numerous hackney coaches and other street carriages, placed under judicious regulations, and as superior to those of London as can be well imagined. The principal streets are lighted with gas, and the houses are all heated by stoves. The rent of shops and houses varies so very greatly, that no general average can be given.

A traveller visiting Berlin in search of amusement, and without introductions, will, perhaps, exhaust the *sights* in a fortnight, and may then find it dull. But a stranger, provided with good introductions, will meet in society with many of the ablest men of Germany, most of whom government has attracted to the capital by bestowing upon them official situations or chairs in the university. Berlin is in fact the centre of intelligence, the Athens, as it were, of the N. of Germany. There are but few people in Berlin who would be called rich in England, but large numbers have revenues of from 2,000 to 3,000 rixdollars a year. It is not the habit among the middle classes to ask strangers to dine at their houses, but to take them to clubs. All classes are extremely well informed. In 1825 there were in the town 416 authors; and their number has not certainly declined in the interval. The theatres, dedicated to the regular drama, are generally well attended. The pieces performed in the new playhouse are alternately German and French. A subscription room for balls and concerts, attached to the latter, used to be frequently attended by the royal family. With the exception of Vienna, and probably Munich, there is no city where music is more universally patronised, or where the opera is better performed or more heartily appreciated, than in Berlin. "Here," says Mr. Strang, "it is not fashion, but a passion for the art, that prompts the crowd of admiring listeners to congregate in the opera-house — listeners, whose judicious applause is at once illustrative of their taste for, and knowledge of, good music." The fashionable dinner-hour is 3 or 4.

The *condittoris* are much frequented by the upper classes. They resemble our confectioners' shops; but are far more spacious, and fitted up with greater attention to comfort and elegance. Besides refreshments of all sorts, they are well supplied with domestic and foreign newspapers, literary and scientific journals, &c. Tea and coffee constitute the favourite beverage of the higher classes; and the latter, when they can afford it, is popular with all ranks. Chiccory and roasted acorns are not unfrequently used as substitutes for coffee. The gin palaces of Berlin are nowise inferior, if they be not superior, to those of London, and are quite as much, or rather more frequented. Dram-drinking is, in fact, very prevalent, not only in Berlin, but throughout all the N. of Germany. The custom of smoking prevails among all classes; and the consumption of tobacco is immense. Prostitutes are licensed, and are but few in number.

Berlin is the seat of an extensive commerce, and the centre of the pecuniary transactions of the monarchy. The Royal Bank was founded in 1765, upon the model of that of Hamburgh; and so it existed until 1846, when it was re-organised under a new charter, by which more extension was given to its operations. In accordance with this new constitution, the issue of notes has been raised since 1850, to 21,000,000 thalers, the thaler being equal to 2*s.* 10¼*d.* The capital of the bank is always to be, in proportion to the notes in circulation, 2-6ths in silver, 3-6ths in bills discounted, and the rest in loans on securities. The bank notes are from 25 to 50 thalers each. The share of the government in the bank amounts, at most, to 500,000 thalers. The shareholders are entitled to an annual interest of 3½ per cent. upon the capital, and, after deduction of the sum set apart for the reserve or rest, which is not to exceed 30 per cent. of the capital, one moiety of the surplus profits is apportioned to them in addition, and the other goes to the treasury. The bank has branches in a great number of cities, as Breslau, Königsberg, Dantzic, Stettin, Magdeburg, Munster, Cologne, Memel, Posen, Stolpe, Elberfeld, Treves, Aix-la-Chapelle, Dusseldorf, Coblentz, Minden, Erfurt, Frankfort-sur-Oder, Stralsund, Kestin, Liegnitz, and Oppeln, and thus forms a vast network of financial operations through all the kingdom. Here, also, is the seat of the association for maritime commerce, and of numerous insurance and other offices. The town revenues amount to from 600,000 to 700,000 rixdollars a year, of which about 100,000 rixd. (14,500*l.*) are expended upon the relief of the poor. The country round the city is uninteresting, sandy, and miserably poor; so that most part of the provisions and fuel (timber) required for the use of the inhab. has to be brought from a distance. The annual consumption, at an average of the population, is estimated for each individual, at 100 to 110 lbs. butchers' meat, (ex. game, poultry, and fish); 88 to 98 lbs. wheat; and about 180 lbs. rye.

The police is strict, and sometimes carries interference to what would be reckoned in England an unwarrantable extent. But the public tranquillity, previously to the revolutionary disturbances, was seldom interrupted. Outrages of all sorts are rare; and the persons and property of natives and strangers are better protected than in most large towns.

Owing to circumstances already alluded to, Berlin is but indifferently healthy, particularly in summer.

Outside the town, about ½ m. from the Halle-gate, on a low sandhill, which, however, is almost the only eminence near Berlin, is the People's Monument. It consists of a Gothic cross erected by the late king to commemorate the expulsion of the French, and the recovery of the national independence. It is of cast-iron from the royal foundry, and was designed by Schinkel. The statues in the niches are the work of Rauch and Tieck.

BERMEO, a sea-port town of Spain, on its N. coast, prov. Biscay, on a rather shallow bay, 16 m. N.E. Bilboa. Pop. 4,250. The inhab. are principally dependent on the fishery, which they carry on to a considerable extent. This town gave birth to the only distinguished epic poët whom Spain has to boast, Don Alonzo d'Ercilla, the author of the *Araucana*, born here in 1528.

BERMUDAS (THE), or **SOMER'S ISLANDS**, a very numerous group of small islands in the N. Atlantic Ocean, belonging to Great Britain, stretching N.E. by E. and S.W. by W. about 16 m., the light-house on Gibb's Hill being in lat. 32° 14′ 54″ N., long. 64° 52′ W., about 350 m. S. E. by E. Cape Hatteras. They are estimated to contain about 20 sq. m., or from 12,000 to 13,000 acres. White pop. in 1837, 4,033; coloured and free blacks, 4,422. When viewed from the sea, their elevation is trifling, the highest land scarce attaining to a height of 200 ft. Their general aspect is similar to the West Indian islands, except that they remind the voyager (from their proximity, and the sea flowing between them,) of the lake scenery of European climates. They are almost everywhere surrounded by extensive coral reefs, the channels through which are extremely intricate, and can only be safely navigated by native pilots.

The principal islands are those of Bermuda, St. George, Ireland, and Somerset. The protection afforded to shipping by their numerous bays, their position in the track of the homeward bound W. India ships, and in the most advantageous locality for refitting the ships of war employed in the W. Indian and American seas, have led to the conversion of the Bermudas into a principal maritime station. The harbour of St. George's island, one of the most easterly of the group, has water enough to float, and space to accommodate, the whole British navy. Unluckily, however, its entrance was so narrow and encumbered with reefs that it was rendered in a considerable degree useless; and it was determined, partly in the view of deepening and enlarging this channel, and partly of accomplishing other important public works, to send convicts to Bermuda; and for some years past a considerable convict force, amounting at present (1850) to 1,750 individuals, has been employed on the islands. By their means the channel leading to St. George's harbour has been greatly improved; a dock yard, with a breakwater for its protection, have been constructed on the E. side of Ireland island; and some very strong fortifications have been constructed on it and St. George's, for the security of the islands and of the shipping. The cost of the convict establishment amounts to about 40,000*l.* a year. It is to be discontinued when the works are completed.

Bermuda, the principal island (or main land, as it is called) is about 20 m. in length, but it rarely exceeds 1½ m. in width. In the centre of this island, and on the N. side of a beautiful bay, is the town of Hamilton, now the seat of government. The town of St. George's, on the island of that name, is, however, the largest on the group. A new gaol and hospital have lately been added to it.

The legislature is composed of 8 members of council, named by the crown, and 36 of assembly: each parish, of which there are 9, returns 4 of the latter, who are elected every seven years, or whenever a new sovereign ascends the throne.

There are numerous churches and chapels; and, in 1847, 24 free schools had been established, which were attended by 1,064 children, partly whites and partly coloured. The Admiralty have established a school on Ireland island, and there are various private schools.

The cultivation carried on in the islands is rather horticultural than agricultural. Most sorts of fruits and vegetables may be raised. The arrow-root grown here is said to be superior to that of any other place, and large quantities of it (261,200 lbs. in 1844) are exported. The oranges are also very fine; and sweet potatoes, onions, and other articles are exported. They derive their supplies of flour, rice, Indian corn, &c., from the U. States, and of manufactured goods from the U. K. The seas around the islands abound in fish, and the inhabs. are expert fishermen. They possess about 100 sail of vessels, of from 100 to 150 tons burden. An inconsiderable whale-fishery employs a few boats and their crews three months in the year: the number of whales seldom exceeds 20 in the season, yielding about 1000 barrels of oil. The islands abound in poultry of the best kind. Beef and mutton may generally be procured, but the only meat that is plentiful is veal. The climate almost realises the idea of a perpetual spring. And the islands are celebrated alike for their salubrity, and for the beauty and richness of their vegetable products. The air, however, is extremely damp, especially during S. W. winds, which are the most common; and it is said that if the constitution have any consumptive tendency, it is then sure to manifest itself. During the winter season, which commences in November and terminates in April, the islands are subject to strong gales from the N.W., which often do great damage to the shipping in these seas. The total value of the imports in 1844, amounted to 141,171*l.*; exports, 84,589*l.* The revenue in 1847 was 18,239*l.* The legislatures of these islands and Antigua were the only colonial legislative bodies that abolished slavery without the intervention of apprenticeship. The proportion of the 20,000,000*l.* voted by parliament for compensation, received by Bermuda, was 50,584*l.*, being, for 4,203 slaves, 27*l.* 4*s.* 11*d.* each.

BERN (Canton of), the largest and the second in rank in the Swiss Confederation, in the W. part of Switzerland, between lat. 46° 19′ and 47° 30′ N., long. 6° 50′ and 8° 28′ E., having N. W. France; N. and N. E. the cant. of Basle, Soleure, and Aargau; E. Lucerne, Unterwalden, and Uri; S. the Valais; S.W. Vaud; and W. Fribourg and Neufchatel: length, N.W. to S. E., 82 m.; greatest breadth at its S. part 62 m.: area, 2,562 sq. m. Pop. (1837) 407,913, three-fourths of whom are Protestants, the rest Catholics. Most part of this cant. is mountainous, especially the S., which is intersected by the Bernese Alps, to which belong the Finsteraarhorn, Monch, Jungfrau, Schreckhorn, &c., some of the highest summits in Switzerland: in the N. the ranges belong to the Jura, and are considerably lower. The region between these two mountain systems contains the valley of the Aar, the Emmenthal, and other fertile valleys, but in no part presents anything like an extensive plain: S. of the lakes of Thun and Brienz, begins what is called the Bernese Oberland, a mountainous region, including the four celebrated valleys of the Simmen, Lauterbrunnen, Grindelwald, and Hasli. The chief rivers are the Aar and its tributaries, Dirse and Doubs: the lakes those of Thun, Brienz, and Bienne; between the two former of these is the small but highly cultivated plain of Interlachen. The climate varies with the elevation, and is, besides, remarkably subject to sudden changes of temperature: even in the Interlachen, where it is the mildest, after a warm day, very severe frosts often occur at night. Rains and fogs are frequent; but the canton, as a whole, is generally healthy. It is divided into 28 prefectures, under 4 principal divisions; viz., the Oberland, country of Bern, Emmenthal, and the old bishopric of Basle, united to Bern by the allies in 1815. Iron ore is found in great abundance in the Jura mountains; gold dust is met with in the sands of the Aar and the Emmen, and crystals in the Grimsel rocks; and there are many mineral springs, some used as baths, and much frequented. The soil is in great part stony and barren, and the arable land occupies but a small proportion of the whole surface, and, though well cultivated, the produce of corn is insufficent for the supply of the inhab., and large quantities are imported. There are in parts plantations of fruit-trees: white mulberry, chestnut, peach, fig, &c., and a few vines are raised on the shores of Lakes Thun and Bienne, but not to any considerable extent: in the Lauterbrunnen, wheat is treated as an exotic, cultivated in small beds, and trained on sticks. Cattle of a superior breed form the chief wealth of the canton, and breeding, grazing, and dairying are the principal branches of industry. In 1830, the live stock was 158,320 head of black cattle, 107,380 do. sheep, 55,870 goats, 26,880 horses, and 55,210 swine. The pastures in the Oberland and Emmenthal are excellent, and produce the finest cattle; the latter valley has also a strong and active breed of horses, exported to France for draught and heavy-armed cavalry. The cheese made in this cant. is, next to that of Fribourg, the best in Switzerland; the average produce is estimated at 50,000 cwt. a year: a great deal is sent from the Emmenthal into Germany and Italy. The houses in the Oberland are generally of wood, but in the Jura, and round Bern, of stone: the Bernese are, for the most part, well lodged. The estate of a father is every where divided into equal shares among his children without respect to sex or seniority, except in the Emmenthal, where, by a peculiar law, landed property descends to the youngest son. Hence, in the greater part of the canton, land is very much subdivided, and the holders in very depressed circumstances; there are but very few estates that reach to 150 acres, unless they belong to village or town communities; but the possessions of the latter are frequently sufficiently large not only to defray the annual expenses of the community, including the relief of the poor, but sometimes to yield a surplus revenue, after all outgoings are deducted, which is divided amongst the citizens. Each commune is obliged to support its own poor, who do not become chargeable upon other communes, or upon the state; they generally receive out-door relief, but if subsequently prosperous, are bound to return what they have received. Manufactures and trade are of little importance; linen and woollen cloths are made in the Emmenthal: paper, around Bern; watches, jewellery, and fire-arms are made in Bern, Porentrui, &c.; thread and printed calico, near Bienne; silk, especially for umbrellas, and leather, in the bishopric of Basle. There is also an extensive manufactory of agricultural implements at Hofwyl. The exports consist chiefly of cattle, cheese, &c.; iron from the Jura, and a few manufactured goods: the imports are corn

salt, colonial produce, and articles of luxury. The revenue, in 1836, amounted to 2,608,268 Swiss francs, and the expenditure to 2,183,862 do., leaving a surplus of 424,902 do.

The government is entrusted to a grand and an executive council; the former consists of 240 members, 200 of whom are chosen by the people in the primitive assemblies of the 27 prefectures, and 40 by the Grand Council itself; and is presided over by the landamann, who is the first magistrate of the cant.: it meets once a month, if necessary, but determines on nothing without the co-operation of the Executive Council, which consists of 16 members, chosen from among the former. From the latter the Council of State is selected, whenever Bern has the directorial power of the Confederacy. Members of the Grand Council must be 29 years old, and have landed property to the value, at least, of 5,000 Swiss fr., excepting professors of the university, advocates, and physicians, of whom such qualification is not required. The salary of the landamann is 4,000 Swiss fr.; that of a memb. of the Executive Council 3,000 fr. a year; memb. of the Grand Council are allowed 2½ fr. a day during the time they are assembled. Every male from 16 to 50 years of age is liable to serve in the army. The contingent of troops furnished to the Confederacy is 5,158 men, and of money 104,080 Swiss fr. a year. There is a judicial tribunal in each distr., and a court of appeal in Bern; the latter consisting of 10 memb., with a president; and besides these, a *matrimonial tribunal* in every parish. Savings' banks are general, and education well attended to. In 1831 there were no fewer than 700 country schools, in which 65,000 children were instructed; and since then education has made a considerable progress. In 1834, a university, a gymnasium or preparatory school for the university, and a normal school for the instruction of schoolmasters, were established. The university has faculties of theology, jurisprudence, medicine, and philosophy, each having 3 ordinary, and from 2 to 5 extraordinary professors; the salary of the former is from 2,400 to 3,000 Swiss francs, and of the latter from 1,200 to 1,400 do. There is also a veterinary school, and some distinguished private educational establishments, especially that of M. Von Fellenberg, at Hofwyl. Dr. Bowring reports (1836) that when he visited the prison in Bern, which contained 320 convicts, 315 could read; and those unable to write, most of whom were strangers, did not amount to 50. Except about 50,000 individuals of French extraction, in the ancient bishopric of Basle, the inhab. are of German stock; and German is the prevalent language. The German part of the pop. are generally much superior in their physical appearance to the French portion, especially those in the Oberland. The Bernese are brave, hospitable, public-spirited, and really good-tempered, notwithstanding they are subject to violent fits of passion, which sometimes occasion the effusion of blood. Catholics are less industrious than the Protestants. This cant. entered the Swiss Confederation in 1353: at first its territory was very limited, but afterwards, by conquest and purchase, it acquired nearly the whole of the now existing cant. of Vaud and Aargau, which, in addition to its present extent, it held till 1798, when it was taken by the French. In 1815, in indemnification of Vaud and Aargau, the Congress of Vienna added to its dom. the town of Bienne with its territory, and the greater part of the ancient bishopric of Basle, otherwise entitled the bailliages of the Jura. (See *Helvetic Almanac, Lutz's Switzerland; Dr. Bowring's Report, &c.*)

Bern, a town of Switzerland, cap. of the above cant., and, alternately with Zurich and Lucerne, of the Swiss Confederation, on the Aar, 52 m. S. Basle, and 60 m. S.W. Zurich; lat. 46° 57′ 15″ N., long. 7° 26′. E. Pop. 20,500. It stands 1,708 feet above the level of the sea, on a hill, which, except on the W., is surrounded on all sides by the Aar. A stone bridge, 260 feet long, is erected over the river, and three gates lead to the interior of the town. The fortifications, by which it was formerly surrounded, were demolished in 1835. It is the finest town in Switzerland, and one of the finest of its size in Europe. Three principal streets extend in a parallel line from E. to W., and are intersected by a number of lateral streets. The houses are massive structures of freestone. Piazzas run along the houses on both sides the principal streets, which are also adorned with handsome fountains. Principal public edifices:—The cathedral, a fine Gothic structure, founded in 1421, and finished in 1502, 160 feet long, and 80 feet broad; the steeple, though unfinished, is 190 feet high. It has some fine glass paintings, and various trophies and monuments. The church of the Holy Ghost, founded in 1722, is also a fine structure, as well as the Mint, built in 1790; the general *burgerspital* (hospital of the citizens), built from 1730 to 1740; another magnificent hospital, called the *Insel* (island), founded in 1718, occupying one whole street, and affording a splendid prospect from the Aar; the state-house of the avoyer, previously to 1831 the residence of, and now partly occupied by, the French embassy; the house of correction, the largest building of the kind in Switzerland, and one of the best contrived in Europe, finished in 1833, at an expense of 1,200,000 Swiss fr.; the corn magazine, a large and massive edifice, having on the floor an extensive open hall, with 43 pillars, in which the corn-market is held twice a week: the *Hôtel de Musique*, in which a theatre is established for the winter season, is also worth notice. Bern has also an arsenal and a large town-hall, both old edifices. The charitable institutions are—two large hospitals; two orphan houses, one for boys and another for girls; a fund for the support of poor students; a lunatic asylum, situated about 2 m. from Bern; and an asylum for old poor persons. The university, gymnasium, &c., noticed in the preceding article, are situated in the town. There are also a Swiss economical and a Swiss historical society; with societies of natural history, medicine, and arts; a botanic garden; a public library, with valuable MSS. relating to Swiss history, and a collection of Roman, Greek, Gothic, and Swiss medals, Roman antiquities, and portraits of the Bernese avoyers, &c. There is also a museum of natural history, with bas-reliefs of the Bernese *Oberland*, of the cantons of Vaud and Valais, and of St. Gothard; and many private scientific collections well worth notice. The trade of the town is of little importance. Three newspapers are published. Two fairs are annually held; one after Easter, and another in November. Some woollen cloth, and stockings are manufactured, and there are tanneries, breweries, &c. About 2 m. from Berne there is a gunpowder mill, the powder made in it being formerly reckoned the best in Europe. The corporate property of the citizens is large, amounting, it is said, to 30 millions of Swiss fr.; and the revenue, besides defraying the municipal expenditure, supplies every citizen, gratis, with fuel, and leaves, over and above all this, a surplus sum, which is annually distributed among the citizens! House-keeping in Bern is less cheap than in Zurich, but not so dear as in Geneva. The price of a pound of meat is 3½*d.* sterl.; bread 1½*d.* to 1¾*d.*; wine 4*d.* to 8*d.* a bottle; cheese 4*d.* to 8*d.* per lb. The inhab. are serious and reserved, and proud of the ancient glory of their city. The aristocracy live secluded from the other classes. Bern is the birth-place of Haller; it has not, however, to boast of so many distinguished men as Zurich, Basle, and Geneva. The town has bears for its arms; and some of these animals are maintained in a place called *Bärengrabra* (bear's ditch), on funds appropriated to that special purpose.

Bern was founded in 1191, by the Duke Berthold V. of Zaehringen. Its history is the same as that of the canton. The environs are beautiful, affording the most splendid views of the Alps on one hand, and the Jura on the other. There are many fine public walks; amongst which are the *Platform*, a terrace near the cathedral, 180 feet above the Aar; and the *Engi*, a magnificent walk, affording a fine prospect over the river, the city, and the lower mountains, to the high Alps. Hofwyl (which see) is about 4 m. from Bern. There are also several mineral baths in the vicinity, such as Blumenstein and Gurnigel.

Mr. Inglis speaks very favourably of the advantages of Bern as a place of residence. "It is," says he, "greatly superior to Basle, Lucerne, or Geneva. It is a pleasant thing to walk in wide airy streets, and at the same time to have the advantage of shade, if required. Where there are arcades one may always choose between bustle and quiet — bustle under the arcades — quiet in the centre of the streets; and in the *agrémens* of a city, Bern has decidedly the advantage of its rivals. It possesses all those public establishments which make a place agreeable as a residence. It has excellent libraries, excellent academies, delightful promenades, convenient and well ordered baths; a theatre; concerts and balls during winter; clever lecturers upon most of the sciences; eloquent and pious clergymen of almost every denomination; and to this list may be added abundance of shops, where all that contributes either to comfort or luxury may be found." (See *Description of Bern*, by Wagner; *History of Bern*, by Stapfer, late Minister of the Helvetic Republic; *Inglis's Switzerland*.)

BERNARD (GREAT ST.), the name given to a famous pass of the Pennine Alps, leading over the mountains from Martigny to Aosta. In its highest part it attains to an elevation of above 8,000 ft., being almost impassable in winter, and very dangerous in spring, from the avalanches. Very near the summit of the pass, and on the edge of a small lake; is the famous hospice founded in 962, by St. Bernard, and occupied by brethren of the order of St. Augustine, whose especial duty it is to assist and relieve travellers crossing the mountain. In searching for travellers who have lost their way, or been buried in the snow, they avail themselves of the assistance of a peculiar breed of dogs of extraordinary size and sagacity. The brethren have faithfully discharged the arduous duties imposed on them, and have rescued hundreds of travellers from a premature death. The

hospice is a massive stone building; it possesses some, but not much, independent property, and is principally dependent on collections made in the Swiss cantons and other states, and on donations from the richer class of travellers. In 1800, when the road was not nearly so good as it has since been made, Napoleon led an army of 30,000 men, with its artillery and cavalry, into Italy by this pass. The hospice contains a monument, erected by order of Napoleon, in honour of Dessaix, who fell at the battle of Marengo. (*Brockedon's Passes of the Alps; Murray's Handbook, &c.*)

BERNAU, a town of the Prussian States, prov. Brandenburg, on the Panko, 15 m. N.E. Berlin. Pop. 3,000. It is in part fortified, and has fabrics of silk, velvet, calicoes, linen, &c., with numerous and celebrated breweries. In the church and town-house are tents, bows, arrows, &c., taken from the Hussites.

BERNAY, a town of France, dép. Eure, cap. arrond., on the Charentonne, 26 m. W. N. W. Evreux. Pop. (town *ex* cant.) 5,062. This is a thriving town, and has latterly been a good deal improved. It has a court of primary jurisdiction, a commercial tribunal, a communal college, and a theatre*; with manufactures of woollen goods, linens, cotton yarn, paper, wax, &c., and bleach-fields and tanneries. The arrond. of Bernay was estimated by M. Dupin, in 1827, to have 8,714 manufacturing work-people, the yearly value of whose produce amounted to 5,651,152 frs.; and if this estimate was nearly accurate when framed, both these sums must now be considerably greater. The greatest of the French fairs for horses is held here on the Wednesday of the fifth week of Lent. It is said to be attended by from 40,000 to 50,000 jockeys, amateurs, and other individuals, some of them from great distances. There is an immense show of Normandy horses. (*Hugo*, art. *Eure*.)

BERNBURG, a town of Germany, cap. duchy Anhalt Bernburg, on the Saale, by which it is intersected, 23 m. S. Magdeburg. Pop. 6,000. It consists of three parts; two on the left, and the other on a hill on the right, bank of the river, which is here crossed by a bridge. The first two parts are surrounded by walls; the other, or the Mount town, has a castle on its summit, and is open. Bernburg is well built, well paved, and clean. It is the seat of the ducal government, and has several literary and charitable institutions, with some manufactures and trade.

BERNE, a town of France, dép. Bouches du Rhone, cap. cant., on the E. side of the lagune of the same name, 16 m. N.W. Marseilles. Pop. 1,928. It is agreeably situated, and is regularly built, but the vicinity of the lagune makes it unhealthy. It was formerly fortified, and its ramparts still exist.

BERNECASTEL, a town of the Prussian States, prov. Lower Rhine, on the Moselle, 21 m. N.E. Treves. Pop. 2,000.

BERNESTADT, a town of the Prussian States, prov. Silesia, reg. Breslau, on the Wida, 24 m. E. Breslau. Pop. 3,300. It has an old castle, two churches, an hospital, and manufactures of cloth and linen.

BERTHOUD, or BURGDORF, a town of Switzerland, cant. Berne, on a hill on the bank of the Emmen, 13 m. N.E. Berne. Pop. 2,000. There is a public library and a castle, in which Pestalozzi laid the foundations of his establishment. A newspaper called the *Volksfreund* (Friend of the People) is published here. The commercial business of the place is rather important, it being the dépôt for the Emmenthal cheese.

BERTINORO, a town of the Papal States, prov. Romagna, on a mountain having the Ronco at its foot, 7 m. S.E. Forli; lat. 44° 10′ N., long. 12° 9′ 15″ E. Pop. 4,000. It is the seat of a bishopric; has a cathedral, and four parish churches. The wines produced in its environs have a considerable reputation.

BERVIE, or INVERBERVIE, a royal bor. and seaport of Scotland, co. Kincardine, on the coast-road from Dundee to Aberdeen, on the S. bank of the small river Bervie, where it joins the sea. Pop. (including Gourdon), 1,342. It was created a royal burgh in 1362 by David II., who, after having narrowly escaped shipwreck on the coast, and having been kindly treated by the inhabitants of this small fishing village, testified his gratitude by conferring on it the honour in question. The inhabitants have from the earliest period been employed chiefly as fishers. They engage not only in the salmon and whale fishings in the mouth of the river and on the coast, but in the herring fishery on the N. shores of Scotland. Manufactures, also, have been introduced into the burgh; namely, the duck and dowlas linen weaving, which affords employment to 112 persons. This employment is furnished by manufacturers of Montrose, Arbroath, and Aberdeen. In addition to periodical markets, there is a grain-market, which is well attended. The quantity of grain annually purchased here is about 40,000 qrs., of which nearly the whole is shipped at Gourdon, a port about 1 m. S. of the town, where have lately been erected large and excellent granaries. The harbour at the mouth of the Bervie is very inferior to that at Gourdon, and admits only small vessels and boats. The staple business of this latter place, however, is fishing. Bervie joins with Montrose, Arbroath, Forfar, and Brechin, in sending a mem. to the H. of C. Registered electors in 1849-50, 38.

BERWICK, a marit. co. of Scotland, having N. and N.E. East Lothian and the German Ocean, and on the S.E., S., and W., part of England, and the cos. of Roxburgh and Mid-Lothian. Area, 282,880 acres, of which about 120,000 are arable. The N. parts of the co. are occupied by the cold, bleak, unproductive range of the Lammermoor hills; but the Merse, or level portion, lying between the Lammermoor hills and the Tweed, by which the co. is separated from England, comprising about 100,000 acres, is one of the most fertile and best cultivated districts in the empire. The farms in the Merse are large, the farmers opulent and intelligent, and the land cultivated according to the most approved principles of modern husbandry. Wheat and turnips are here the great objects of attention; but barley and oats are also raised in considerable quantities. Steam power is employed in several thrashing-mills in this co. Few small, but no very large estates. Average rent of land in 1842-43, 16s 9¾d. an acre. The Lammermoor hills are principally depastured by sheep of the Cheviot breed. The co. is rather scantily supplied with wood, but some proprietors have made considerable plantations. Manufactures and minerals, of no importance. Principal rivers, Tweed, Whittadder, Blackadder, and Leader. Berwickshire contains 33 pars.; and had, in 1841, 7,408 inhab. houses and 34,438 inhab. The co. returns 1 mem. to the H. of C. Registered electors, 1849-50, 1,050. The bor. of Lauder joins with Haddington and other bors. in returning a mem. Greenlaw is the co. town. Valued rent, 178,366*l*., Scotch. Ann. val. of real prop. in 1842-43, 254,169*l*.

BERWICK-UPON-TWEED, a fortified town and sea-port of England, N. E. extremity of the kingdom, on the N. bank of the Tweed, and close to its mouth, 306 m. N. by W. London; lat. of lighthouse, 55° 46′ 21″ N., long. 1° 59′ 41″ W. Pop. in 1821, 8,723; in 1841, 8,494: houses at the latter date, 1,297. It is built on the declivity and flat summit of an elevation rising abruptly from the æstuary of the river; many of its streets are narrow and irregular, but the principal one is spacious, well paved, and lighted with gas; and, on the whole, the town has a respectable appearance, and contains many well-built houses. The Tweed is here crossed by an old bridge of 15 arches built in the reign of Charles II., and by a splendid new bridge forming part of the N. British railway. The suburbs of Tweedmouth and Spittal, on the S. side of the river, are meanly built villages, the inhab. being almost wholly employed in the fisheries, or the businesses connected with them. Spittal, however, is occasionally resorted to by visiters for sea-bathing, and it has a few respectable lodging-houses. The pop. of these suburbs, in 1841, amounted to 4,084, and as they are now included in the parl. bor., the pop. of the latter, at the above-mentioned date, was 12,578; and it is believed to have undergone very little change in the interim. The present fortifications of Berwick were erected in the reign of Elizabeth, and are about 1¾ m. in circ., forming an irregular pentagon: a battery of 22 guns commands the English side, and a 4 and 6 gun battery defends the entrance of the harbour. The ramparts form an agreeable promenade. The Tweed is navigable as far as the old bridge, beyond which the tide flows about 7 m. The harbour is defended by a pier ½ m. in length, with a lighthouse at the head, projecting, in a S. E. direction from the N. extremity of the river's mouth. But notwithstanding the protection afforded by this barrier, and though there be 18 ft. water over the bar at ordinary tides, and 26 at springs, the harbour is very indifferent: the channel is very narrow: a large portion of the harbour, particularly on the Berwick side, dries at low water, and is rocky and incapable of being deepened; and after heavy rains the *freshes* run out with great violence. The chief public structures are, the church (in the decorated Gothic style), built in the time of the Commonwealth, and, consequently, without a tower; sundry dissenting chapels; a free grammar-school; and 6 other free-schools, supported by the corporation, and educating in all about 300 children. The town-hall, in the centre of the high street, with a spire and ring of bells; the under part of which (called the Exchange) is used as a market-place; over it are halls for the courts of justice and corporation meetings; and above these is the gaol: a pauper lunatic asylum; a dispensary, through which medical relief is afforded to the poor resident within 12 m.; a theatre; a public library; and assembly rooms. There are annual races in July, the course being at Lamberton, 5 m. distant. There is a good supply of water, brought from a spring 1¼ m. off, to several public conduits, conveyed by pipes to the more

* Hugo says nothing of the theatre, nor is it mentioned by some other authorities, but it is specified in the *Dict. Géographique*.

respectable houses. At the N.W. end of the town are infantry barracks. There is an iron foundry near the bridge, on the Tweedmouth side, which employs a good many hands, and at which steam-engines, mill machinery, &c., are made. This is the only manufactory of any kind in the place or neighbourhood, although there are several coal mines within 2 or 3 m. of the town, on that side the river, and also available water-power. The fisheries form the principal business of the place. Those of salmon in the Tweed have long been amongst the most celebrated and productive of any in the empire. Latterly, indeed, both their produce and rental, though still very considerable, have greatly declined. The principal fisheries are within a short distance of Berwick; and the fish, excepting a small portion retained for home consumption, is all packed in ice, and shipped for the metropolis. (*See* Tweed.) Trout, whiting, &c. also abound in the Tweed.

The sea fishery of the bay consists chiefly of cod, ling, holibut, haddock, and whiting: crabs and lobsters also abound, and these last are forwarded to the London market. The imports consist chiefly of timber, staves, iron, hemp, and tallow, from Norway and the Baltic, and of groceries, &c., coastwise: the exports, of salmon, corn, wool, and other agricultural products, coals to London and a few other ports, coastwise. Ale, from the Ednam brewery, and whisky, from the distilleries of Gunsgreen and Kelso, have also, of late years, formed part of its exports to the metropolis. There used also to be a large export of eggs, but it has been nearly annihilated in consequence of their being obtained cheaper from the Continent. There belonged to the port, on the 1st January, 1850, 61 vessels of 3,883 tons burden. Gross customs duties, in 1846, 15,728*l.* 14*s.* By a treaty between Edward VI. and Mary II., of Scotland, it was made a free town, independent of both kingdoms; but, by the recent Municipal Reform Act, it is constituted an English co. for all purposes except parliamentary elections. Its present municipal limits comprise that portion of the par. on which the town stands and the suburbs of Tweedmouth and Spittal, excluding all the agricultural portions. It is divided into 3 wards, and has 18 councillors. A county court is established in the town, before which 465 plaints were entered in 1848.

The revenue of the corporation is derived from town and harbour dues; rental of the fisheries, tenements, and tithes in Berwick; lands (including collieries) on the W. side of the river, and a tract called Meadows and Stints; the whole amounting, in 1847, to 11,364*l.* Their debt, in 1835, amounted to 55,411*l.* The tract last named lies near the town, and was granted to the corporation by James I. It is divided in 3 portions: the first is let in farms, and the rent appropriated to defray the general expenses of the corporation; the second is sub-divided in parcels of 1½ to 2½ acres, whose value varies from 1*l.* 14*s.* to 9*l.*: there are 954 of these, called meadows; the third is parted in farms of about 40 acres each, the rents of which are each divided in 11 or 22 equal parts, called stints; of those, there are 561. These meadows and stints are allotted to the burgesses for life, with remainder to their widows; and, as vacancies occur, are allotted to others at annual public meetings held for the purpose, and called "meadow and stint guilds." The first English charter of Berwick was in 30th Edw. I., by which it was made a free borough, with a market and fair: others, in 30th Edw. III. and 22d Edw. IV., confirm the laws and privileges originally enjoyed under Alexander I. of Scotland. The governing charter, previously to the Municipal Reform Act, was granted in 2d James I. The assessment of the town for lighting, paving, &c., averages about 450*l.* a year. The annual value of real property in Berwick, in 1847, was 28,280*l.*; in Tweedmouth township, 12,989*l.* Under the Poor Law Amendment Act, Berwick is the central town of a union of 17 parishes; its own rates amounted, in 1847, to 2,436*l.* The town has returned 2 mems. to the H. of C. since the reign of Mary. Previously to the Reform Act, the privilege was restricted within the limits of the ancient bor., and to the free burgesses. It had, in 1849-50, 810 registered electors.

The first authentic notice of Berwick occurs in the early part of the 12th century, when it belonged to Scotland, and was the chief town of Lothian. During the reigns of Alex. I., David I., and Malcolm IV., it had a castle and several churches and religious establishments. It was at that period the chief sea-port of Scotland, and one of the four royal burghs. Its castle was surrendered to England in 1174, under a treaty for the ransom of Wm. the Lion; subsequently to which it was repeatedly taken and re-taken, being, from its frontier situation, almost invariably the first object of attack at every renewal of hostilities, till, on the accession of James VI. of Scotland to the English throne, its importance in this respect ceased. During the last civil war it was garrisoned by the parliamentary forces. (*Redpath's Border Hist.; Baines's Hist. North Durham; Parliamentary Reports and Papers.*)

BERWICK (NORTH), a royal burgh, par., and sea-port of Scotland, co. Haddington, at the S. entrance to the Frith of Forth. 22 m. E. Edinburgh. It was created a burgh by James VI. Pop. of burgh and par. in 1841, 1,708. The burgh consists of two main streets, one running E and W., the other leading N. to the harbour. It is a place of little or no trade, and has no manufactures. Its pier is good; but its harbour, which is dry at low water, is difficult of access. From its being in the neighbourhood of one of the best corn-growing districts of Scotland, grain is a considerable article of export. It is a good deal frequented in summer as a bathing-place. It joins with Haddington, Dunbar, Lauder, and Jedburgh, in sending a mem. to the H. of C. Registered electors, 1849-50, 42. About 2 m. to the E. of the burgh stands the famous castle of Tantallan, one of the strongholds of the Douglas family; and nearly opposite Tantallan is the Bass, which see.

BESANCON, a town of France, cap. dép. Doubs, on the river of that name, by which it is intersected, 47 m. E. Dijon. Lat. 47° 13′ 45″ N., long. 6° 2′ 45″ E. Pop. (town *ex* cant.) 24,720. It is very strongly fortified, and is one of the bulwarks of France on the side of Switzerland. The works were improved by Vauban; but they have been since much extended and strengthened. Exclusive of the fortifications round the city, it has an extremely strong citadel, on an almost inaccessible rock, and outworks on some of the adjoining heights. The town is generally well built; but its streets are narrow and gloomy, "*et ses constructions ont une sévérité, une uniformité de style, qui leur donne une grande monotonie.*" The part, called the city, is almost surrounded by the Doubs; the communication with the suburb on the opposite bank, called Arènes, being kept up by an old, narrow, inconvenient bridge. Principal buildings, the cathedral, hotel of the prefect, hall of the courts of justice, the royal college, erected in 1697, the arsenal, hôtel de ville, barracks, theatre, public library, containing 50,000 volumes, exclusive of manuscripts, and several fine public fountains. The hospital of St. Jacques is a vast establishment, with 500 beds, and is said to be extremely well managed. A Roman triumphal arch, though a good deal mutilated, still exists, and serves as a sort of portico to the cathedral. Besançon is the seat of an archbishopric, of a royal court for the depts. of Doubs, Jura, and Haute Saone, with tribunals of primary jurisdiction and commerce. The university, which existed previously to the revolution, has been replaced by an *académie universitaire*, or *faculté des lettres*; and it has also a royal college of the second class, with about 250 pupils; a diocesan seminary, a secondary medical school, a primary model school, two schools for the instruction of deaf and dumb, a royal academy of science and belles-lettres, a lyceum, a society of agriculture and arts, a museum of antiquities, and a free school of design and sculpture for 120 pupils. There is, adjoining to the town, a house of correction and refuge. Watch-making introduced from Switzerland about 45 years ago, is the most important branch of industry carried on here. It employs about 2,000 hands, who annually furnish above 60,000 watches. About 200 work-people are employed in the carpet manufacture, and there are besides fabrics of jewellery, hosiery, hats, hardware, including coach and carriage springs, gloves, &c. Its breweries and tanneries are both on an extensive scale. Among other articles, is annually furnishes about 600,000 bottles of Seltzer water: it is also the seat of a considerable and growing commerce.

Besançon is very ancient. It was laid waste by Attila; and has since undergone many vicissitudes. It came, along with Franche Comté, into the possession of France in 1674. (*Hugo*, art. *Doubs; Diction. du Commerce; Dict. Géog.*)

BESSARABIA, or EASTERN MOLDAVIA, the most south-westerly prov. of Russia in Europe, having E. the Dniester, S. the Black Sea and the Danube, W. the Pruth, and N. Gallicia. The estimates of its area differ exceedingly, Hassel giving it 891, and later authorities only 433 Germ. sq. m.! Perhaps it may amount in all to from 12,000 to 14,000 Brit. sq. m. Pop. in 1830, 504,000. Exclusive of the great rivers by which it is nearly surrounded, it is intersected by several considerable streams, most of which, however, are either wholly dried up, or greatly diminished during the heats of summer. The N. W. portion, contiguous to Gallicia, is hilly, or rather mountainous, and is occupied by extensive forests, but elsewhere the surface is nearly flat; soil abundantly fertile, and, with the exception of the tract along the Danube, which is marshy and encumbered with lakes, it is suitable for most agricultural purposes. "No trees, a few shrubs only, are observed near the rivers; the lakes, or stagnant waters, are covered with reeds, and in the plains between the marshes, the ox, buffalo, and bison, wander among pastures where the herbage rises to the height of their horns. In the cultivated land millet yields 100, and

barley 60 fold. The horse and the sheep exist in a wild state." (*Malte-Brun*, vi. 379., Eng. trans.) But there can be no question that these returns are very greatly exaggerated. Wheat, barley, and millet, are the only species of corn that are raised; and, according to Hassel, they yield from 8 to 20 for 1; and even this, we have little doubt, is decidedly beyond the mark. According to the official accounts, 139,141 chetwerts, sown in 1829, produced a return of 651,320 chetwerts, that is, of about 5 to 1; and in 1830 the return was not so great. Hemp, flax, and tobacco, are produced in considerable quantities. The breeding of cattle is the principal business of the inhabitants; and they are largely exported with hides, tallow, &c. With the exception of tanneries, distilleries, and tallow and soap-works, there are either no manufacturing establishments in the country, or none worth notice. Large quantities of salt are produced from the lakes contiguous to Akerman (which see). A good deal of inferior wine is made. Education is at the very lowest ebb; there being in 1830 only 838 pupils at all the seminaries in the prov. (*Schnitzler, La Russie, &c.; Russian Official Returns.*)

BESSE, a town of France, dép. Puy de Dôme, cap. cant., 20 m. S.S.W. Clermont. Pop. 2,027. It is built of basalt, in the middle of a volcanic country; and the environs offer several natural curiosities. It has some trade in cattle and cheese.

BESSINES, a town of France, dép. Haute Vienne, cap. cant., on the Gartempe, 10 m. E. Bellac. Pop. 2,713.

BETHLEHEM, (*Beit-el-Lehm, House of Bread*,) a famous town of Palestine, 6 m. S. Jerusalem: lat. 31° 44′ N., long. 35° 15′ E. Pop. from 3,000 to 4,000, of whom by far the greater part are Catholic, Greek, and Armenian Christians. A splendid church, erected by the empress Helena, stands over a grotto or cave, said to be the birth-place of Christ. Connected with the church are convents for the three sects of Christians noticed above, of which that belonging to the Latins is a fine building; but more resembling, externally, a fortress than a religious establishment. Some remains of an old aqueduct, formerly 16 or 18 m. in length, exist on the W. side of the town; but the chief buildings consist of almost innumerable chapels, and other memorials of holy persons, and of the events for which the place and neighbourhood are celebrated in sacred history. The houses of the inhab. are mean in the extreme.

The country round Bethlehem is extremely fruitful, yielding figs, grapes, olives, and sesamum in great abundance; but here, as in other parts of this neglected land, cultivation is wanting. There is no deficiency of water; three extensive reservoirs, called the pools of Solomon (Eccles. ii. 6.), and a copious fountain, said to be the "*sealed fountain*" of the same prince (Sol. Song, iv. 12.), lie on the S., on the N.W. is a large cistern of rain water, said to be the "well by the gate," whence David's mighty men drew water, while the place was in the hands of the Philistines (2 Sam. xxiii. 16.); and the whole neighbourhood abounds in springs and rills.

The tract between Bethlehem and Jerusalem is the valley of Rephaim (*Giant's Valley*, Josh. xv. 8.), the scene of many combats between the Jews and Philistines. (2 Sam. v. 18. *et. al.*) Here are shown many pretended relics of the scriptural age; as the house of Simeon, the tomb of Rachel, the village of Rama, the cave of Engadi, the well in which was seen the star of the Messiah, and many others. The original name of Bethlehem was Ephrath (Gen. xxxv. 19.): a term which, like its present designation, referred to the fertility of its soil. It was never very considerable in respect of size (Micah, v. 2.), but seems to have been always regarded as important; and being the scene of the pastoral tale of Ruth, and the birth-place of David and Jesus Christ, it has acquired a celebrity hardly surpassed even by that of Jerusalem. It was fortified by Rehoboam (2 Chron. xi. 6.), and, in a subsequent age, the emperor Hadrian is said to have built a temple here to Adonis. Of this, however, no vestige remains. The present inhab. enjoy a considerable share of liberty: they are bold and hardy, and successfully resist every attempt at oppression by their governors. They are consequently stigmatised, by the Turks, as of a rebellious spirit. There was formerly another Bethlehem, more to the N., belonging to the tribe of Zabulon, Josh. xix. 15. (*Maundrell*, 116—123.; *Volney*, ii. 270, 271.; *Robinson*, i. 138—166.; *Abul-Feda, Tab. Syr.* 183.)

BETHUNE, a town of France, dép. Pas de Calais, cap. arrond., on a rock, at the foot of which is the Brette, 18 m. N.N.W. Arras. Pop. (town *ex.* cant.) 4,495. It is well fortified, by works partly constructed by Vauban. Its plan is that of an irregular triangle; the citadel, which is isolated, occupying one of the angles. It has a tribunal of primary jurisdiction, a communal college, two hospitals, manufactures of linen and cloth, breweries, and a considerable trade in linen, cheese, and rape oil, the canal of the Lave, which unites with the Lys, facilitating its trade. It was taken by the allies in 1710; but was restored to France by the treaty of Utrecht. (*Hugo*, art. *Pas de Calais*.)

BETLIS, or BITLIS, a town of Turkish Armenia, 18 m. W. from the W. extremity of Lake Van, and about 130 m. E. by N. Diarbekr; in probably about lat. 38° 35′ N., long. 42° 50′ E.* It stands in a wide ravine, open to the E., but closed by high mountains to the W.; the houses being dispersed over the steep banks of a stream which runs through it, and on several of the neighbouring hills; it is, therefore, most irregular. The houses are built of red stone, and are generally of two stories, with grated windows to the streets, the latter being paved with round stones. The houses being much scattered and intermingled with gardens, the town covers a large extent of ground: it is not enclosed by a wall, and this is hardly necessary; each house being, in fact, a pretty strong fortress. It is said to contain 1,500 houses, of which 500 belong to Armenians; and if so, its pop. may amount to about 9,000. It contains 4 caravanseras, 3 large and 12 small mosques, 3 baths, 8 Armenian churches, and 1 Nestorian. The most remarkable object in the town is the old castle, in its centre, on a rock 30 ft. in height, and built up with thick walls to an elevation of 100 ft. There are a considerable number of butchers, bakers, gunsmiths, and silversmiths; but the principal manufacture consists of coarse cotton cloth, and tobacco. The territory produces fruits and vegetables in perfection. The army of the Turkish sultan, Solyman the Magnificent, sustained a signal defeat by the Persians, near Betlis, in 1554. (These particulars have been derived from Colonel Shiel's paper in the *Journal of the Geographical Society*, viii. 72.; see also *Kinneir's Persia*, p. 330., &c.)

BEUTHEN, a town of the Prussian States, prov. Silesia, reg. Oppeln, cap. circ. 35 m. N.E. Ratibor. Pop. 3,300. It has 3 Catholic churches, 3 convents, with fabrics of coarse cloth, pottery, zinc, and calamine, and breweries. There is another town of the same name in Silesia, reg. Liegnitz, on the Oder, 12 m. W. by N. Glogau. Pop. 2,600. It has fabrics of cloth, earthenware, and straw hats, and some boat building. Its environs are very fertile.

BEVEREN, a town of Belgium, prov. E. Flanders, 6 m. W. Antwerp. Pop. 6,050, com. included. It stands on the road from Antwerp to Ghent, is well built, and has a fine church, with a lofty spire. About 2,000 women are employed in the lace manufacture, and there are several breweries, tanneries, &c.

BEVERLEY, a parl. bor. and market town of England, E. riding co. York, of which it is the cap., near the Hull river, to which it is united by a canal, 157 m. N. London, 28 m. E.S.E. York, and 9 m. N.N.W. Hull. Pop. of parl. bor., that is, of the old bor. and liberties, 1821, 7,503; 1841, 8,409. It is believed to owe its origin to an ancient monastery, which, after having been sacked by the Danes in 867, was restored by Athelstan, who granted the place several privileges, and made the monastery a sanctuary for criminals. It is a well built, handsome town; in fact, "very few towns in England can compare with Beverley in cleanliness and general neatness of appearance. It deserves to be represented as most respectable and substantial." (*Boundary Report.*) The great glory of Beverley is the minster, or collegiate church of St. John, which, in size and beauty of architecture, is far superior to many cathedrals. This splendid in structure, which has been erected at different periods, what are called the decorated and perpendicular English styles, is 334 ft. from E. to W., the length of the great cross aisle is 167 ft., and the two towers at the W. end are each 200 ft. in height. The W. front is said by Mr. Rickman to be the finest of its kind in England. Near the altar is the seat of refuge, with an inscription assuring criminals of their safety while there, and a tablet with effigies of St. John of Beverley and Athelstan. The parishes of St. John and St. Martin have the minster as a church common to both. It is kept in excellent repair by the rent of estates appropriated to that purpose by Queen Elizabeth and Sir Michael Warton. St. Mary's church is also a magnificent structure in the old Norman style; and lands producing above 800*l*. a year have been left for its support. The churches of St. Martin and St. Nicholas are in ruins. The Primitive and Wesleyan Methodists, Independents, Baptists, and Society of Friends, have chapels here. The sessions-house, and house of correction for the E. riding, are situated in the immediate vicinity of the town: the latter, which is a very large establishment, and constructed on the most approved principles, cost above 40,000*l*. Here also is the Register-office for the E. riding. The endowed schools are, a grammar-school, of great antiquity, to which is attached 2 fellowships, 6 scholarships, and 3 exhibitions to St. John's, Cambridge; a Blue-coat School, founded in 1709; Graves's School, founded in 1804; and schools on the systems of Lancaster and Bell. There are also several almshouses, an hospital, dispensary, mechanics' institute, public reading-rooms, a savings' bank, a theatre, open occasionally, and assembly-rooms. Races are held

* There is a great discrepancy in the statements as to the latitude and longitude.

near the town every June. The corporation of "the town and liberties of Beverley," consisting of a mayor, recorder, 12 aldermen, 13 capital burgesses, and freemen, who hold by birth, apprenticeship, purchase, or gift, enjoys several valuable privileges; the principal are, exemption from tolls throughout England, from sitting on juries without the borough, and from the jurisdiction of the sheriffs of York; the burgesses have also the right of pasture for 13 head of cattle each, on a common of about 1,200 acres. The corporation holds a criminal court, with power of life and death, which however is never exercised; a court of session, called the Provost's Court, for all pleas to any amount, except those for landed property; and a court of requests for debts under 5*l.* The public business is transacted in the Hallgarth or Guildhall, where the quarter sessions for the riding are held. The elective franchise, granted by Edw. I., was not exercised till the beginning of Eliz., since which time the borough has continued to return 2 members to the H. of C., the right of election, previously to the Reform Act, being vested in the freemen, whether resident or not. The electoral boundaries comprise the parishes of St. Mary, St. Martin, and St. Nicholas, and the part of St. John's within the liberties. Constituency, in 1849-50, 1,187. The election for the members of the E. riding is held here. The town is situated in a fertile country, and has an extensive retail trade; tanning is also extensively carried on. Near the town is a large factory for paints, cement, and Paris white, which last is made from the cliff-stone raised at Queen's Gate, and found to be peculiarly adapted to the purpose: there are also factories for patent wrought-iron wheels, and for fancy ironwork and agricultural implements of all descriptions. A brisk corn trade is carried on. Markets for general purposes on Saturdays, and for cattle on alternate Wednesdays, held in an enclosed area of four acres, ornamented by a stately cross resting on eight columns. There are here eight great cattle fairs. Two private banking-houses, a branch of the Hull Banking Co., and a savings' bank, have been opened here. Fisher, bishop of Rochester, who suffered martyrdom under Henry VIII., was a native of the town. (*Allen's Hist. of Yorks.*; *Bigland's Yorks.*; *Sessional Papers.*)

BEWDLEY, an ancient market town, bor., and chapelry of England, co. Worcester, 14 m. N.N.W. Worcester, 19 m. S.W. Birmingham, 108 m. N.W. London. Pop., 1841, 3,400. It is locally in the hund. of Doddingtree, but has separate jurisdiction. It is built on the descent of a hill, on the W. bank of the Severn, over which there is a fine stone bridge. The more ancient part of the town was built at some distance from the river. It had formerly 4 gates, 2 of which were standing in 1811, but they have been since pulled down: the principal street is well built and paved. The town-hall is a fine modern building, erected on 3 arches, with handsome iron gates leading to the market-place. The church is a neat stone edifice, with a tower. A charter was granted by Edward IV., but the governing charter was given by James I., and confirmed by Anne. The corporation hold a court of session annually, and a court of record for all pleas, and for the recovery of debts not exceeding 100*l.* The lord of the manor holds an annual court leet, at which constables and other officers are appointed. In the reign of Henry VI., Bewdley enjoyed many privileges; among them, that of being a sanctuary for persons who had shed blood. This town has sent 1 member to the H. of C. since 3 James I., who, previously to the Reform Act, was returned by the corporation, a self-elected body. The new boundary act defines the limits of the bor. to be the par. of Ribbesford, and the hamlets of Wribbenhall, Hoarstone, Blackstone, Netherton, and Lower Mitton, with Lickhill, having in 1841 a pop. of 7,458, and about 450 qualifying tenements. Registered electors, in 1849-50, 375. There are several well-endowed charities. The manufacture of woollen caps, called Dutch caps, formerly flourished here, but has many years since disappeared. The principal trades and manufactures now existing are in salt, ironware, malt, tanning and currying leather, and making combs; besides which there are some rope-works and a brass-foundry. There is also a considerable carrying trade, connected with the Severn: near the town is a mineral spring. Market-day, Saturday. Fairs, 23d April, 24th July, and 11th Dec., for cattle, pedlary, &c. (*Boundary Report, &c.*)

BEX, a town of Switzerland, cant. Vaud, cap. circ., in the fertile plain of the Rhone, on the Avençon, 26 m. S.E. Lausanne. Pop. 3,000. It is chiefly celebrated for the salt springs and salt mines in its vicinity.

BEYROUT, or BEIROUT (an. *Berytus*, Βηρυτος), a sea-port town of Syria, on the S. side of an extensive bay open to the N., 48 m. S.S.W. Tripoli, 19 m. N.N.W. Sidon, and about 3 m. E. from Cape Beyrout, the latter being in lat. 33° 49′ 45″ N., long. 35° 27′ 54″ E. Pop. 12,000 or 15,000. There are here no public buildings of any beauty or importance, nor are many remains of antiquity to be met with; for though the modern town occupies the site of the ancient one, the latter was long since destroyed by repeated earthquakes, and the recent buildings are erected over the ruins of those which they have superseded. Along the shore, however, and in part under the water, are some mosaic pavements, fragments of columns, and (W. of the town) a thick wall, supposed to be of the time of Herod the Great. The bazars are large and well frequented; but there seems to be a deficiency of private shops, and the streets are, in general, narrow and crooked. A plentiful supply of water from a tolerably large river (*Nahr-Beyrout*), and a great number of wells, modify, in some degree, the heat of the atmosphere, and render the town much cleaner than the generality of those in the E. The walls (of a soft sandstone) are about 3 m. in circ., and the suburbs are perhaps equal in extent to the town itself. The neighbourhood is very fertile, producing all kinds of fruit; but the chief article of cultivation is the mulberry tree, an extensive and important manufacture being carried on here of silk goods, especially of sashes. Beyrout had formerly a small port, formed by a strong mole, but its present mole or jetty is of very inferior dimensions, and is scarcely sufficient to shelter boats. There is, however, good anchorage 1 m. from the town, in six or seven fathoms; and large ships may anchor a little farther out in 10 or 11 fathoms. After centuries of neglect, it seems to be again rising into some importance as a place of trade. Its exports are — galls, madder, gums, silk (raw and wrought), wine, and oil. The imports are—muslins, cottons, tin, hardware, cloths, and West India produce: there are about 12 European establishments in the place, and previously to 1832 the only English consul in Syria was resident here.

Berytus was a very ancient town of the Phœnicians, deriving its name, according to Stephen of Byzantium (art. Βηρυτος), from the number of its wells, the prefix *beer* signifying *a well* in the language of the country. Under the Romans it rose to great eminence, notwithstanding it had been entirely destroyed in the wars of Alexander's successors, about 80 years before the Roman conquest of Syria. Augustus planted in it a colony, gave it his daughter's name, with the addition of the epithet Felix (*Berytus Colonia Julia Felix*), (*Plin.* v. 20.) A school of law, established here in the beginning of the third century (probably by Alexander Severus), continued for 300 years, or till the town was overwhelmed by an earthquake in 551, to be the most celebrated institution of the kind in the empire (*Gibbon*, cap. 17.). But the town again revived; and, under the Saracens, attained to considerable importance. It was frequently captured and recaptured during the crusades, at which period the mole, forming its port, was destroyed. In the 17th century it was, for a short while, the capital of the famous Druse Emir, Fakr-ed-Din, and latterly it fell into the hands of Djezzar, pasha of Acre, who built its present walls, cut a canal from the river to the town, erected several fountains, and otherwise improved and beautified the place. At present it is the capital of a small pashalic, the pasha being a French renegade, formerly a colonel in Napoleon's army. The Phœnician deity Baal-Boerith (Lord of Wells) is said to have been named from, or to have given name to, this place, which is also famous in Christian legends as the scene of St. George's victory over the dragon. (*Maundrell*, 50—57.; *Volney*, ii. 156—159.; *Robinson*, ii. 1—6. 35.; *Addison*, ii. 4—12. 36—41.)

BEZIERS, a city of France, dép. Herault, cap. arrond., agreeably situated on a fertile hill, in a rich country, at the junction of the *Canal du Midi* with the Orb, 38 m. S.W. Montpelier: lat. 43° 20′ 31″ N., long. 3° 13′ E. Pop. (town *ex.* com.) 14,710. At a distance the city has a fine appearance, but on entering the illusion vanishes. The houses are mean, and the streets narrow, crooked, and filthy. Its citadel has been demolished; but it is still surrounded by old walls, flanked with towers, round which is a newly-planted promenade. The cathedral, a Gothic building, has a noble interior, and its sharp towers and castellated walls give it at a distance the appearance of a superb Gothic mansion. The view from its terrace is extensive and delightful. One of the churches that existed previously to the revolution is now the corn-market, and the ancient episcopal palace is the seat of the courts and government offices. Its convents have all been abolished. Beziers has tribunals of primary jurisdiction and commerce, a communal college, an agricultural society, a public library with 5,000 volumes, and a theatre. It produces silk stockings, dimities, parchment, verdigris, starch, gloves, glass, and highly-esteemed sweetmeats; but it is principally distinguished by its distilleries, which are extensive, and produce brandy, little, if at all, inferior to that of Cognac. Its situation makes it the centre of a considerable trade.

Beziers is very ancient; and the remains of an amphitheatre, and of cisterns and other Roman works, may still be recognised. In 1209, during the first crusade against the Albigenses, Beziers having afforded protection to numbers of the fugitives, was besieged by the Catholic army, who, having carried it by assault, committed, at the instigation of the pope's legate, an indiscriminate mas-

sacre of those found within its walls, whether heretics or not! It also suffered severely during the religious wars of the 16th century.

Barbeyrac, the learned translator and annotator of Grotius and Puffendorf; and Riquet, the engineer of the *Canal du Midi*, were both natives of Beziers. (*Hugo*, art. *Herault; Dictionnaire Géographique, &c.*)

BHADRINATH (*Vadarinatha*), a small to. in N. Hindostan, prov. Kumaon, in a valley of the Himalaya, 80 m. N. Almorah, and 10,294 ft. above the level of the sea; lat. 30° 43′ N., long. 79° 39′ E. It is remarkable only for a temple, much venerated by the Hindoos; said to possess 700 villages, in different parts of Gurwal and Kumaon, and visited annually by 50,000 pilgrims, from all parts of India. It has warm, sulphureous, and cold springs. (*Hamilton's E. I. Gaz.* i. 224.)

BHAMO, or BANMO, one of the chief towns in the Birman emp., cap. of a Shan principality, and chief seat of the Chinese trade with Birmah; on an elevated bank of the Irrawadi, 170 m. N.N.E. Ava, and 20 m. W. the Chinese border; lat. 24° 10′ N., long. 96° 45′ E. Next to Ava and Rangoon it is the largest place in the empire, and contains 2,000 houses, inhabited mostly by Chinese; is surrounded by numerous well-peopled villages, and defended by a wooden stockade. The houses in Bhamo and its district are better then those in most parts of the Birman dominions; those of the Chinese are built of brick, and those of the natives, of reeds, thatched with grass, and separately railed in: there is a good bazar. The trade in woollens, cottons, and silks, is wholly in the hands of the Chinese, who mostly arrive here in caravans in December and January, but 500 of them live constantly in the town, as well as many other foreigners.

The Shans, Singphos, and others, purchase salt, *gnapee* (dried fish), and rice, in large quantities, especially salt, which fetches a very high price. All payments are made in silver; and, were it not for a prohibition of the export of bullion from the Birman empire, it might answer the purpose of some European merchants to settle here. The people appear opulent; have adopted in great part the Chinese costume; and wear more ornaments than in any town in Birmah. The revenue of the district, which is of no great extent, is said to amount to 3 lacs of rupees a year. Old Bhamo, the original Shan town, is situated 2 days' journey up the Tapan, the nearest tributary of the Irrawadi. (*Crawfurd's Embassy; Asiat. Journal, Calcutta*, No. lxiv. April, 1837.)

BHATGONG, a city of N. Hindostan (*Nepaul*), said formerly to contain 12,000 houses; once the seat of an indep. chief, and, though much decayed, still the favourite residence of the Nepaulese Brahmins; 8 m. E.S.E. Catmandoo; lat. 27° 40′ N., long. 85° 8′ E. The palace and other buildings have a striking appearance, owing to the excellent quality of the bricks and tiles.

BHATNEER, a to. of Hindostan, prov. Rajpootana, the mod. cap. of the Bhatty country, and the most E. town in the presid. Bengal, 195 m. W.S.W. Delhi; lat. 29° 36′ N., long. 74° 12′ E. It was taken and destroyed by Timour, in 1398, and again taken by the rajah of Bicanere in 1807, who retained possession of it for several years.

BHAUGULPORE, or BOGLIPOOR, a distr. of Hindostan, principally in prov. Bahar, but the E. portion (Rajemahal) in Bengal, between lat. 23° 4′ and 25° 49′ N. and long. 86° 15′ and 87° 31′ E., having N. Tirhoot and Purneah distr.; E. the latter and Moorshedabad; S. that of Beerbhoom; and W. Bahar and Ramghur: length, N.W. to S.E., 133 m.; breadth 80 m.; area, 8,225 sq. m. Pop. 2,020,000. It comprises a territory on both sides the Ganges, is divided into 22 thannahs, and contains the towns of Mungger, Rajemahal, and Bhaugulpore. S. of the Ganges it is hilly, and its hills are connected with the Vindhyan chain; they are in two separate clusters, one in the E., the other in the W., and connected by a third lateral range: the E. hills approach nearer than any other to the Ganges. Besides this river, which runs through Bhaugulpore for 60 m., the chief rivers are the Goggree and Gandahi. To the S. of the Ganges the streams are mere hill torrents, which, though wide, are usually fordable. The *jheels*, or marshes, are neither large nor numerous. In the dry season their beds are often partly overgrown with the wild rose, a sign of the fertility of the soil, which is, however, not universal, much of Bhaugulpore, even in the plains, being stony and bare. The climate is warmer than in Purneah, the hills hotter than the plains. E. and W. winds are the most prevalent: night frosts with the latter often occur to the S. of the Ganges; but, for a warm climate, the W. part is remarkably healthy, and fevers are common only in the E. Vegetation very similar to that about Calcutta. There are a few wild elephants on the E. hills, but the most remarkable quadruped is the Hanuman ape, which abounds in immense numbers. Some tribes of people inhabit the E. hills, differing greatly from the rest of the population, and thought to be descendants of the aborigines. In person they resemble the other tribes of the Vindhyan inhabitants; their faces are oval, but not lozenge-shaped, as in the Chinese; eyes similar to those of Europeans; noses obtuse, seldom arched, but not flat; lips full, but not like the negro's. They call themselves *Maler*, and number about 58,000; divided into two sections, called the N. and S. mountaineers, who differ materially in many of their manners and customs, and do not intermarry. They are good-natured, but not hospitable; less civilised, but in quite as comfortable a condition as the inhabitants of the low country; their houses are neater, and the ornaments of their women more numerous and valuable. Their chiefs were formerly much addicted to predatory descents, but have been pensioned by the government to refrain from them. Such is the fondness of this people for ardent liquors, that they generally spend all they receive in drink at Bhaugulpore. They respect Brahmins, although of a different religion: their own deities have neither images nor temples. Another rude tribe, called *Maiyas*, of about 100 families, live on the W. hills, and subsist by felling and selling timber. The land in the E. parts of this district is more fertile than that in the W.: rice, wheat, garden produce, at Mungger; legumes, *ricinus*, cotton, and sugar-cane, are the chief objects of culture; about 3,000 sq. m. are under tillage. The high rice-lands are manured, and drill husbandry practised; and some of the implements of agriculture are a decided improvement upon those of Bengal. The farms are small, and sometimes cultivated by several farmers clubbing together: most of the zemindars cultivate their own estates, employing their poorer relatives in the operative duties. 234,000 begas were once purchased by government, to afford a land settlement to veteran and invalid soldiers; but the plan was not found to answer, and has been given up. The total land-revenue, in 1829-30, was 45,760*l.* Cottons, mixed cloth (silk and cotton), sugar, fire-arms, and metallic and domestic articles, are the principal manufactures; but trade is impeded by bad roads, and the want of a few bridges. The Mohammedans form about a sixth part of the population.

Portions of the four ancient countries of Augga, Gaur, Mithila, and Magadha, are comprised in this district, which contains many Buddhic, Brahminical, and Mohammedan antiquities. In the 12th century W. Bhaugulpore was seized by the Moslems, and the E. by the Bengalese, and down to the time of British supremacy both were in a state of constant anarchy. Cossim Ali intrenched himself in this district; but after his works were destroyed, in 1763, the British dominion was soon quietly established. (*Martin's Hist. of E. India*, ii. 1—290.; *Hamilton's E. I. Gaz.* i. 251—256.; *Rep. on E. I. Affairs*, 1832.)

BHAUGULPORE (*the abode of refugees*), cap. of the above distr., seat of a gov. resident and court of circuit; beautifully situated, 2 m. S. of the Ganges; 110 m. N.W. Moorshedabad; 240 m. N.W. Calcutta: lat. 25° 13′ N., long. 86° 58′ E. Pop. about 30,000, chiefly Mohammedans. It covers a great extent of ground, but is meanly built, consisting of scattered market-places, badly supplied, and inconveniently placed on declivities. Its greatest ornaments are the European and Moslem places of worship; the latter are of brick, and amongst the handsomest in the prov., although small and some of them ruinous: the monument of Hoseyn Khan, a square building with five neat domes, is worth notice. There are a gaol and hospital, a Mohammedan Arabic college, with about 40 pupils, and an English school, with (1829-30) 134 scholars, chiefly belonging to the mountain tribes. The Roman Catholics, of whom there are about 50 individuals, partly descendants of the Portugese and partly native Hindoos, have a small church. A monument to the memory of Mr. Cleveland, by the council of Bengal and the inhab. of Bhaugulpore, has been erected about 1 m. from the town. A little to the N.W. are two remarkable round towers, respecting which no tradition exists, but they continue to be visited by the Jain sect. Bhaugulpore is embosomed in groves of palmyra, tamarind, and mango; its vicinity abounds with swelling hills, and is extremely fertile, well cultivated, and healthy, though said to be infested with serpents. (*Hamilton's E. I. Gaz.* i. 206.; *Mod. Trav.* ix. 170—173.)

BHOOJ, a city of Hindostan, prov. Cutch, of which it is the modern cap.; built about 2 centuries ago, in a plain S.W. of a hill called Bhoojan, 50 m. N.E. the Indian Ocean; lat. 23° 15′ N., long. 69° 52′ E. Pop. (1818) about 20,000, which, owing to bad and oppressive government, is much less than its amount at the beginning of the present century. From the N. the city has an imposing appearance; its white buildings, mosques, and pagodas, being intermixed with plantations of date-trees; but the interior has a very different appearance. It is surrounded by a high, thick, and well built stone wall, flanked with round and square towers, mounted with artillery. Streets narrow and dirty, and turning at sharp angles: houses generally within strong walled enclosures, provided with loopholes, and each forming in itself a complete fort. The palace is a well-built castle, adorned with several cupolas, and domes covered with

enamel in the Chinese style; temples numerous, many of them large, and presenting a multitude of elaborate decorations. Every where are seen memorials of *suttee* and other immolations: the mausoleum of Row Lacka, grandfather of the present ruler, and of a lady who ascended his funeral pile, is the most remarkable, and would be considered a beautiful ornament in any European city. Some others are in Moorish architecture, worked up with stucco to resemble marble. The hill Bhoojan is surmounted by extensive but ill built fortifications, which are no protection to the town; they enclose a temple dedicated to the *Nag*, or cobra-de-capello. This fort was taken by escalade by the British, in 1819. W. of the city, and close to the walls, there is a large tank or pool containing an elevated terrace, formerly a place of recreation for the chiefs; but the buildings are now in ruins. Bhooj is celebrated for its gold and silver works. (*Trans. Bombay Lit. Soc.* ii. 217.; *Mod. Trav.* x. 172–175.)

BHOPAUL, a state of Hindostan, tributary to the British, prov. Malwa and Gundwanah; between lat. 22° 30′ and 23° 40′ N., and long. 76° 40′ and 79° E., having N. and W. Scindia's dom.; E. and S. those of the presid. of Bengal and the Nerbudda river, which forms its entire S. boundary: length, E. to W., 145 m., greatest breadth 80 m.; area, 6,772 sq. m. (*Sutherland.*) The country is full of jungles, and uneven; the chief range of the Vindhyan mountains intersects its S. portion; but the soil is generally fertile, especially in the valleys, and watered by numerous streams. The ruling people are Patans, established here by Aurungzebe early in the 18th century, and of course Mohammedans. In 1812, the vizier Mahomed made a vigorous defence against Scindia, the rajah of Berar, and the Pindarries; but on his death, in 1816, the British interfered to protect his dom., and the Marquis of Hastings conferred on his successor, Nusseer Mahomed, in 1817, a considerable part of the present territory in reward for his hearty co-operation with the British. It was then calculated that in five years the revenue of the rajah would increase to nearly 30 lacs a year. Bhopaul continues in a tranquil, and evidently prosperous condition.

Bhopaul, the cap. of the above state, placed on the boundary between Malwa and Gundwanah, lat. 23° 17′ N., long. 77° 30′ E.; 110 m. E. Oojein; 310 m. S.W. Allahabad. It is surrounded by a stone wall, but is in a dilapidated state, as well as its suburb, and a Hindoo fortress at its S.W. extremity. There are two considerable tanks immediately adjoining it, from which two rivers take their rise.

BHURTPORE, a small territory of Hindostan, prov. Agra, including the small pergunnah Tanna; shape somewhat triangular, having N.E. the British dom.; S.E. those of Scindia; and W. the rajpoot state of Macherry: area, 1,946 sq. m. (*Sutherland.*) It is inhabited by Jauts, who migrated from the banks of the Indus, and settled here about 1700, and who have assumed to themselves the title of the military caste, and their chief that of rajah. The soil of Bhurtpore is light, but well watered and cultivated: cotton, corn, and sugar, are the chief agricultural products. Wood is very scarce and dear; the houses are all of red sandstone, and the villages in good condition and repair. Wells are numerous, and constructed by building the masonry first, which is afterwards undermined and sunk. The peacock is an object of veneration. The chief towns are Bhurtpore and Deeg. Large quantities of salt are produced from brine springs at Combher. In 1768 this territory was at its greatest extent; stretching along the course of the Jumna river, from near Delhi to Etawah; but the greater portion was soon after conquered by Nudjiff Khan. In 1826, having been usurped from its rightful sovereign, the British interfered and took the capital, since which it has been under their protection.

Bhurtpore, the cap. of the above territory, and seat of its rajah, 31 m. N.W. Agra; lat. 27° 17′ N., long. 77° 23′ E. It is about 8 m. in circum., and was formerly surrounded by a mud wall 60 feet thick, flanked by many bastions, and defended by a strong fort; but these fortifications have been mostly blown up and demolished. This city was built with part of the spoil pillaged by the Jauts from the baggage of Aurungzebe's army during his last march to the Deccan, and became afterwards a celebrated mart for military stores. It resisted with great vigour the forces of Lord Lake, who lost, in 1805, 3,100 men under its walls; but it at last capitulated to him. In 1826 it was stormed and taken by Lord Combermere from the usurper Doorjun Sâl, when the present rajah Bulwunt Sing, was established in its possession. (*Hamilton's E. I. Gaz.* i. 232–234.; *Heber's Narrative*, ii. 357–360.)

BIAGGIO (ST.), a town of Naples, prov. Calabria Ultra, 3 m. W. Nicastro. Pop. 3,000. Its situation is insalubrious, and it suffered severely from an earthquake in 1783. Its territory produces good wine, and has some mineral springs.

BIALYSTOCK, a prov. of Russia in Europe, formerly belonging to Poland, having the government of Grodno on the E., and being surrounded on all the other sides by the modern kingdom of Poland. Area, 3,436 sq. m. Pop. variously estimated, but probably about 260,000. Surface flat, with some slight undulations; soil generally sandy, but not infertile. It is bounded on the S. by the W. Bug, a navigable affluent of the Vistula, which is its principal channel of communication. Forests extensive and valuable, but much dilapidated, through want of proper regulations as to their management. Agriculture is almost the only employment; and considerable quantities of corn (especially rye and wheat), with linseed, hops, and timber, are sent to Dantzic and Elbing. The nobles are very numerous, being estimated to amount to 9,000 families, or nearly 50,000 individuals; but the great bulk of them are steeped in poverty, many being compelled to cultivate their little patches of land with their own hands, or hire themselves to others. Manufacturing industry is all but unknown, and only the most common and indispensable trades are carried on. (*Schnitzler, La Russie, &c.* p. 557.)

Bialystock, a town of Russia in Europe, cap. prov. same name; lat. 53° 7′ 35″ N., long. 23° 18′ E. Pop. 8,218. It is a handsome town; houses of brick, with the gables to the streets, which are straight and well paved. The castle of Count Branicki, grand hetman of the crown, called the Versailles of Poland, is the distinguishing feature of the town. (*Schnitzler, La Russie &c.*, p. 558.)

BIANA, a to. of Hindostan, prov. Agra, territ. Bhurtpore, 50 m. W.S.W. Agra, lat. 26° 57′ N., long. 77° 8′ E. It stands at the foot of a hill, the ridge of which is covered with the remains of buildings, including a fort and a high pillar, conspicuous at a great distance. The town is large, contains many stone houses, and a good bazar. It preceded Agra as the cap. of the prov., and is often mentioned in the memoirs of the Emp. Baber.

BIBERACH, a town of Wirtemberg, circ. Danube, cap. bailiwick, in a fertile valley, on the Riess, 22 m. S.S.W. Ulm. Pop. 4,600. It is encircled by walls flanked with towers, and has a town-house, 4 churches, one of which is common to Catholics and Protestants; a college, 3 schools, a well endowed hospital, &c. Some branches of the linen and woollen manufactures are carried on, and there are numerous tanneries and breweries, and a bell-foundry. The mineral waters of Jordansbad are at a short distance from the town. It is the birthplace of Wieland; and in 1796 the French, under Moreau, defeated the Austrians in its vicinity.

BICANERE, or BICKANEER, a territ. of Hindostan, prov. Rajpootana, divis. Marwar, chiefly between lat. 27° and 29° N.; having N. the Bhatty country; S. the Jondpoor and Seypoor dom.; E. Hurriana and the Shehawutty country, and W. Jesselmere and the great desert, of which it forms a part: area, 18,000 sq. m. (*Sutherland*). The surface is elevated, but flat, sandy, and destitute of water where not irrigated by wells, which are from 100 to 200 ft. deep. The crops are very precarious, and greatly dependent on the periodical rains: rain-water is carefully preserved in cisterns. *Bajurah* and other Indian pulse are almost the only articles grown, other necessaries being supplied from the contiguous prov. Coarse and fine rice are imported from Lahore; wheat from Jeypoor; salt from Combher; spices, copper, and coarse cloth from Jesselmere. The other imports are sugar, opium, and indigo: horses and bullocks of an inferior breed are nearly the sole exports. Bicanere and Chooro are the chief towns. In 1818 the rajah was admitted under British protection, without a subsidiary allowance.

Bicanere, the cap. of the above dom., and residence of its rajah, in the Indian desert; 240 m. W. S.W. Delhi, and 145 m. N.N.W. Ajmeer; lat. 27° 57′ N., long. 73° 2′ E. It is fortified by a strong wall strengthened with many round towers, and contrasts imposingly with the desolation around it, which is as great as that of the wildest tract of Arabia, except on its N. side, where there is a wooded valley. Most of the dwellings in the town are mere mud huts painted red: there are some lofty white houses and temples; and at one corner a citadel about ¼ m. sq., encompassed by a wall 30 ft. high, and a good dry ditch, a confused assemblage of towers and battlements, overtopped by crowded houses. Its best security is in the scarcity of water in the country around. (*Hamilton's E. I. Gaz.* i. 237, 238.; *Elphinstone's Account of Caubul*, i. 15–20.)

BICESTER, a par. and town of England, co. Oxford, hund. Ploughley, 52 m. N. W. by N. London. Area of par., 2,520 acres. Pop. of par. in 1821, 2,544; 1831, 2,868. The town is well built on a small stream, that joins the Charwell at Islip. The church, built in 1400, on the site of an older one, contains many ancient monuments, and has a lofty tower. There is a charity school, where 30 boys are clothed and educated; and another for the instruction of 60 girls. The weekly market is held on Friday, and annual fairs on Easter Friday, 1st Friday in June, Aug. 5., Friday after old Michaelmas, and 2 fol-

lowing Fridays, and the 1st Friday in Dec.; they are for cattle, and both fairs and market are well attended. Its proximity to the Oxford Canal gives it some business, but no particular manufactures are carried on, except that of bone lace by a few of the females, and the brewing of ale, noted for its excellence. The par. is divided into 2 townships, King's End, and Market End. In the latter the town is situated.

BIDACHE, a town of France, dép. Basses Pyrenées, cap. cant., on the Bidouze, 18 m. E. Bayonne. Pop. 2,722.

BIDEFORD, a sea-port, bor., and par. of England, co. Devon, hund. Shebbeare, on the Torridge, about 1¼ m. above where it unites with the æstuary of the Taw: 180 m. W. by S. London. Pop. in 1821, 4,053; in 1841, 5,211; houses at last census, 1,050. The greater part of the town stands on an acclivity on the W. of the river, and is connected with its E. division by a stone bridge of 24 arches, built in the 14th century. It consists chiefly of 2 spacious streets, paved, and partially lighted: the houses, though improved, are, for the most part, but indifferent structures of timber framing, filled up with bricks. Besides the church (in the earlier Gothic style), the Baptists, Independents, and Wesleyans, have each a chapel. There is a neat town-hall, and another hall, with a school, is attached, belonging to the trustees of the Bridge estate. Being a place of frequent resort from the neighbouring watering-town of Appledore, it has public assembly-rooms. The river is faced by a fine quay, 1,200 ft. in length, broad and convenient. It has an ancient endowed grammar-school, a national school for 200 children, and a school supported by the dissenters. An endowed hospital maintains 7 aged poor. Ropes, sails, and a considerable quantity of common earthenware, are manufactured; it has also a small lace manufactory, and several docks, in which the smaller class of vessels are built: in the vicinity are several tan-yards. The port is within Barnstaple bar (*see* Barnstaple), and is accessible for vessels of 200 tons as far as the bridge; about 2½ m. above which the Torrington Canal unites with the river. Ships of larger size unload at Appledore. Its principal imports consist of timber, from the Baltic and from Canada; coals, from Bristol and Wales; and groceries and other colonial produce, from Bristol and other ports. Its chief exports are sails, cordage, and articles of general supply, for the Newfoundland fisheries; oak bark, to Ireland; earthenware, to Wales; and corn and flour, to Bristol. It had, on the 1st of January 1836, 115 registered vessels, of the burden of 9,509 tons, manned by 545 seamen, mostly employed in the coasting trade; and about 160 licensed boats, employed in the coast fishery. The port comprises those of Clovelly and Hartland in its jurisdiction. The market days are — Tuesday for corn; Saturday for general provisions. There are 3 fairs; Feb. 14., July 18., Nov. 13.

Its municipal affairs are managed by a mayor, 3 aldermen, and 12 councillors. Previously to the municipal act (5 & 6 W. 4. c. 76.), it was governed by a charter of 16 James I., confirming and extending a previous one (16 Elizabeth). The corporation revenue does not exceed 50*l*. a year, derived from tenements in the bor.: the quay dues belong to the lord of the manor, and are regulated by an act passed in 1828. The living is a rectory in private patronage. Bideford is styled a bor. in the Saxon records. It sent members to the H. of C. during the reigns of Edward I. and II., but grudging the expense which this occasioned, it got relieved from the obligation, and has not since been represented! In 1271 it obtained a market and fair. The expeditions under Raleigh and Grenville, to Carolina, appear to have originated its foreign commerce. Silk weaving was introduced in 1650, and in 1685 many French refugees settled in it, and increased its trade. At the close of this century its Newfoundland trade had become extensive; and for the first half of the 18th century its imports of tobacco were only exceeded by those of London. Dr. Shebbeare, of pamphleteering notoriety, was a native of Bideford.

BIDSCHOW, or BICZOW, a town of Bohemia, cap. circ., on the Czidlina, 16 m. W. Konigratz. Pop. 4,000.

BIELEF, a town of Russia in Europe, gov. Toula, on the Oka, 56 m. S.W. Toula. Pop. 7,000. This, which is an ancient town, is, after Toula, the most important in the government. The inhab. carry on a considerable commerce.

BIELEFELD, a thriving town of Prussian Westphalia, cap. circ., 38 m. E. Munster. Pop. 5,800. It has excellent bleaching grounds and extensive manufactures of thread and linen. It is defended by a rampart and ditch; and, besides Catholic and Protestant churches, has a synagogue, and an orphan asylum. It is celebrated for its tobacco pipes made of carbonated magnesia, and known in commerce by the name of *écume de mer*, or *meerschaum*.

BIELGOROD, a town of European Russia, gov. Koursk, cap. district, on the Donitz, 80 m. S. Koursk. Pop. nearly 8,000. It consists of an old and new town and three suburbs. Houses mostly of wood. Its name *White town* is derived from a chalk-hill in the neighbourhood. (*Schnitzler, La Russie, &c.* p. 360.)

BIELITZ, a town of the Austrian States, in Moravia, on the Biala, 16 m. E.N.E. Teschen. Pop. 6,000. It is well built, and is the seat of a Protestant consistory, which has under its jurisdiction Moravia and Austrian Silesia.

BIELLA, a town of the Sardinian States, div. Turin, cap. prov. and mand., on the Cervo, partly on the summit and partly on the declivity of a mountain, 12 m. N. E. Ivrea. Pop. 7,700. It is the seat of a bishopric; has 4 parish churches, 2 hospitals, and a college; and produces linens, silks, and paper.

BIELO OZERO, or WHITE LAKE, a lake of Russia in Europe, gov. Novgorod, about 240 m. E. Petersburg. It is of an elliptical shape, its greatest length being nearly 30, and its greatest breadth 20 m. Its bottom consists of a whitish clay, which, during tempestuous weather, communicates its colour to the water, whence, doubtless, its name is derived. It receives numerous small rivers; its surplus waters are carried off by the Chexna, an affluent of the Wolga. It is deep, and generally limpid, and is well stocked with fish.

BIELOZERSK, a town of Russia in Europe, gov. Novgorod, S. side of the above lake. It is fortified, and has some trade.

BIELSK, a town of European Russia, prov. Bialystok, 70 m. S.S.W. Grodno. Pop. 2,000. It is well built, paved, has a handsome custom-house, and gave its name to the palatinate of Bielsk, of which it was the cap. till 1795. This is one of the towns from which Jews are excluded.

BIENNE, or BIEL, a town of Switzerland, cant. Berne, in a fertile little plain at the E. foot of the Jura, near the lake of Bienne, and on the road from Basil to Berne, 16 m. W. of the latter. The Suze flows through the town. Pop. 2,150; houses, 304. It has a good gymnasium, with 6 professors. The public library, which was plundered in the revolution, contains at present only 2,500 volumes. Bienne is very ancient: previously to 1798, it was a free and independent city; but in that year it was united to France, and, in 1815, to the cant. of Berne.

The lake of Bienne extends along the Jura chain; being about 10 m. in length by 3 in breadth. It is not pre-eminent for beauty of scenery, and owes its celebrity principally to its having within it the *Isle de St. Pierre*, the retreat of Rousseau.

BIGGAR, a burgh of barony, Scotland, co. Lanark, 27 m. S.W. Edinburgh. Pop. in 1835, 1,454. The barony of Biggar has for centuries been the property of the Flemings, formerly Earls of Wigton, to which family the greater part of it still belongs. It consists chiefly of one wide and spacious street. The chief employment of the inhab. is cotton weaving for the Glasgow market. This species of business afforded work, in 1835, to 210 persons. The burgh also contains 28 shoemakers, 26 masons, 20 tailors, 20 carters, 16 spirit-dealers, of whom 5 are innkeepers, 4 surgeons, &c. The quantity of excisable articles sold in 1835 was 2,608 gallons of British spirits, 80 gallons of brandy, 136 gallons of ginger-wine, 88 doz. of foreign wine, 2,528 lbs. of tea, and 1,876 lbs. of tobacco and snuff. The par. church is a venerable Gothic edifice, built in 1560. There are also 2 dissenting chapels, a savings' bank, and 3 public subscription libraries.

BIGGLESWADE, a par. and town of England, co. Bedford, hund. Biggleswade, 41 m. N.N.W. London. Area of par., 4,220 acres; pop. of do., in 1821, 2,778; 1841, 3,807. The town is situated on the great North road, by the Ivel, over which there is a stone bridge. Houses chiefly brick, and have a neat, modern appearance. The church is a Gothic building, founded in 1230, and extensively repaired in 1832. There are 2 free schools, one for 12, the other for 8 boys: a charity, producing 300*l*. a year, supports them, and is applied also in various other specified modes. The river is navigable to the town, by which means it is supplied with coals, timber, corn, &c. The weekly market, on Wednesday, is one of the largest in England for corn. There are 5 annual fairs; Feb. 14., Saturday in Easter week, Whit-Monday, Aug. 2., and Nov. 8. There is a small manufacture of thread lace, employing some females, and a steam flour-mill; but the chief support of the place are its markets and fairs, and the travellers who resort to it. A petty sessions for the three neighbouring hundreds is held in the town. It has several good inns.

BIJANAGUR (*Vijayanagura*, the city of triumph), Annagoondy (Canarese), or Alpatna, an anc. and celeb. city of Hindostan, prov. Bejapoor, occupying both banks of the Toombuddra; that part of it on the S.E. bank only being properly called Bijanagur, and belonging to the British dom., presid. Madras; 117 m. S.S.E. Bejapoor, 27 m. N.W. Bellary; lat. 15° 14′ N., long. 76° 37′ E. It was formerly the metropolis of a kingdom, which, in 1515, comprised the two Carnatics, above and

below the Ghauts, and is said to have then been 24 m. in circ.: this portion of the conjoined cities is now about 8 m. in circ., nearly uninhabited, and in ruins; these however, are all of granite, and far excel in extent and grandeur those of any other Hindoo city. Bijanagur has a most remarkable site. "It is built," says Hamilton, "in a plain, enclosed by and encumbered with stupendous masses of granite, which, in some places, swell up from the surface to the form and magnitude of hills, and in others present detached blocks of various forms, piled over one another in all sorts of fantastical combinations; occasionally surrounding little isolated valleys, and elsewhere obstructing all passage except through the narrow winding defiles which separate the fragments. The communications from street to street, and in some cases the streets also, follow the mazes of these chasms, and in one quarter the principal thoroughfare is under a naturally covered passage formed by the rocks; the ancient battlements, turrets, and gateways are still in a high state of preservation: the main streets paved with immense flags of granite, are intersected at intervals by aqueducts; and tanks and wells are excavated in the rock. Temples, choultries (hotels), and many other edifices, public and private, of the purest style of Hindoo architecture and great dimensions, are seen perched on the most conspicuous eminences of the naked rock, or ranged in long lines on the plain.... There is a continued succession of paved streets, now nearly uninhabited, for three miles, from the Toombuddra ferry to Humpa, at the W. extremity; and the appearance of the ruins about Camlapoor, on the S.W., indicate that they also were once included within the city boundaries.... The walls, pillars, arches, and even the flat roofs and beams of all these structures are composed of granite.... Some blocks are from 12 to 15 feet broad, and thick in proportion; and though of unequal bulk and various shapes, are universally well cut, fitted to each other with the greatest nicety, and display at this day an exterior lustre surpassing that of most buildings of 20 years' standing." The Toombuddra is about one third of a mile broad, but at the upper part of the city contracts greatly, and here there was once a stone bridge: its bed is clogged by detached granite rocks, which rise above its surface, and are generally surmounted by some religious edifice. It forms the N. and E. boundary of the city, which is enclosed S. and E. partly by its natural barriers, partly by strong stone walls. The chief edifices are — the temple of Wittoba (an incarnation of Vishnu), nearly in the centre of the city, which consists of one central and four subordinate buildings, surrounded by several smaller pagodas and numerous cells, and occupying an area 400 feet long by 20 wide; this temple contains a chariot cut entirely out of granite, on which the image of the god is exposed on holidays: the temple of Mahadeva, at Humpa, with a pyramidical portico of 10 stories, and 160 feet high, well endowed, and attended by many Brahmins, faces a fine street 90 feet wide, lined with handsome stone buildings decorated with sculptures, running nearly parallel to the Toombuddra, from which it is separated by rows of trees, and leading to another temple, where there is an image of the bull Nundy, 12 feet high, carved out of the solid rock. Between Humpa and Camlapoor the rocks are studded with pagodas, the principal of which are the great temple of Krishna, and a smaller one dedicated to Ganesa, but which contains also a colossal granite image of the former, 16 feet high by 10 feet broad. The inner city near this is the residence of the rajah, and contains the remains of four different palaces. Bijanagur has a temple of Rama, with pillars of black hornblende, and amongst a group of temples near the ferry is a gigantic figure of Huniman, carved in bas-relief. This city was built by two brothers, between A. D. 1336 and 1343: in 1564 it was taken and completely sacked by the Mohammedans. (*Hamilton's E. I. Gaz.*, i. 239, 240.)

BIJNEE, or KHUNTAGHAUT, a territory of Hindostan, prov. Bengal, bordering on Assam, and belonging partly to Britain and partly to Bootan. It lies on both sides the Brahmaputra, extending S. as far as the Garrows mountains, and consists chiefly of a level country, well fitted for the production of rice, especially that portion S. of the Brahmaputra, which is the most valuable, and besides wheat, produces barley, mustard, pulse, betel, sugar-cane, and mulberry-trees. The villages are generally neater than those in Bengal, and have sugar-cane and betel plantations. For a considerable period Bijnee was not known to be included in the Dewanny territories, but was considered to belong to Bootan; presents of elephants, &c. were, however, made yearly to both the Deb. rajah and the British government, and a kind of dependence on either or both of them, acknowledged by the Bijnee rajah. In 1785 the payment in elephants was commuted by the British government into a tribute of 2,000 rupees: the Bootan tribute consists chiefly of dried fish. Half the rents of the rajah are paid in coarse cotton cloth woven by females. His affairs generally are very ill managed; his country plundered by needy retainers; its trade ruined by exactions and monopolies; and some years since he was so poor as to be obliged once in three years to raise loans by absolute begging. The people are divided into two sections, the Bhakat, or worshippers of Krishna, and the Gorami, who eat pork and other meats, and drink liquors. The British gov. claim the right of investiture to the zemindary.

BIJNEE, a town of Hindostan, cap. of the above rajahship, 23 m. N. Goalpara; lat. 26° 29′, long. 90° 47′ E. It contains a fort defended by a brick wall, the residence of the rajah, some small brick temples, and about 100 thatched huts. It appears at present to belong to Bootan. (*Hamilton's E. I. Gaz.* i. 241—243.)

BILBAO, a sea-port town of Spain, the ancient cap. of Biscay, in a fine plain, on the Nervion or Ibaizabal, about 10 m. above its confluence with the sea at Portugalete; lat. 43° 15′ 47″ N., long. 2° 45′ W. Pop. 12,000. It is said to be healthy, notwithstanding the climate is remarkable for humidity. Houses lofty, uniform, and well-built, with projecting roofs, that afford shelter from the sun and rain. Streets well paved and level; several of them may be washed at pleasure with water conveyed by an aqueduct from a mountain a league distant. Bowles describes it as a paragon of cleanliness; but its pre-eminence in this respect is questioned by Mr. Inglis. No wheeled carriages are allowed to pass along the streets, but all goods are carried in panniers on mules, or in sledges, which have a contrivance by which they constantly moisten their path with water. There is a fine promenade by the river's side, over which a suspension-bridge is thrown in lieu of the old wooden one that formerly existed. There is also a stone bridge of 3 arches, and a handsome cemetery, formed by the corporation, at an expense of 30,000*l.* Convents and monasteries are here very conspicuous. They are immense piles, of little architectural beauty, having strong gratings to all the windows. Some of them are very rich; and a nun must take about 30,000 reals (300*l.*) into the convent on admission. The *abattoirs*, or slaughter houses, in the Tuscan style, in the centre of the town, are well contrived, well ventilated, and copiously supplied with fresh water. The corporation is extremely rich. On the occasion of the visit of Ferdinand VII. no less than 2,000,000 of reals (20,000*l.*) were expended in feasts, decorations, and bull-fights. Their funds arise from octrois, or tolls, upon the various necessaries imported by sea or land, and the monopoly of the supply of beef, which is farmed to the butchers. They maintain an elementary school for teaching reading, writing, and Latin, by an impost of 4 reals per ton on foreign vessels entering the port. The Consulado, or Tribunal of Commerce, supports schools of drawing, architecture, mathematics, and the French and English languages, for the children of the town and neighbourhood. There is an hospital calculated to accommodate 250 patients; it has a ward for the reception of strangers or persons above the lower class, who may wish for good advice at a moderate expense, without troubling their relations or friends. These pay half-a-dollar a day, and have the comforts of a private house, and the best hospital attendance. The manufactures consist of various descriptions of hardware, anchors, leather, paper, hats, tobacco, and earthenware. There are several docks for building merchant vessels; two large rope manufactories, &c. Bilbao is the principal port for the N. of Spain. The exports principally consist of iron and steel, wool, fish, fruits, chestnuts, &c., and sometimes large quantities of corn from the interior; but the trade of the port has declined ever since Saxon wools began to be preferred to those of Spain in foreign markets. The clearances are not now above half their former number. Some houses have still considerable returns from the fish trade, and one or two from the exportation of iron; but this also has fallen off, from the greater cheapness of Swedish iron. The imports consist principally of cotton and woollen fabrics, colonial products, &c. Large vessels usually stop at Portugalete, near the mouth of the river, or at Olaviaga, about 4 m. below the town. Spring tides rise about 13 ft.; and by taking advantage of them, vessels of considerable burden occasionally reach the town.

There are no public amusements, excepting occasional bull fights. Two attempts to establish a theatre have failed; partly, as Mr. Inglis supposes, through the agency of the priests. One or two houses are said to realise from 2,000*l.* to 3,000*l.* a year; but Mr. Inglis thinks no one spends 300*l.* Beef costs about 10 quartos (3*d.*) per lb.; mutton, 3½*d.*; and the best bread, 1½*d.* Labourers earn from 10*d.* to 1*s.* a day; masons, carpenters, &c., from 20*d.* to 2*s.* Good wine is 3*d.* a bottle. The markets are well supplied with vegetables and fruit, particularly the *tomata*, or love apple, a principal ingredient in Spanish cookery. There is plenty of game, among which the small birds called *chimbos* are great dainties. The cuttle fish, and a particular kind of eels are also highly esteemed. Circles of from 6 to 10 families agree to meet together every evening during the winter, at the house of one of the party, changing the rendezvous

every week. They take chocolate before leaving home, and sup on their return. Cards, dancing, and music fill up the evening's amusements. They eat together only at the end of the season, when all the money won at cards is spent upon a dinner in the country, of which the members of the circle partake.

Bilbao was founded under a charter granted by a lord of Biscay, in 1300; from whom, and succeeding sovereigns, it obtained several privileges. The Consulado of Burgos was transferred thither at the end of the 15th century; and its decisions in matters of commerce were referred to throughout Spain, and regarded as of the highest authority out of it. It has been alternately occupied by the different victorious parties in the late and present civil war. (*Diccionario Geografico Historico por la Real Academia de Madrid*, 1802, i. 178.; *Miñano Diccionario Geografico*, ii. 118., and *Supplement*; *Bowles, Introduccion a la Geografia de la España*, 1778; *Inglis, Spain in* 1830, i. 18—39.)

BILEDULGERID, the name given to an extensive territory of Africa, embracing the country lying between the S. declivity of Atlas and the Sahara, or Great Desert; and between Fezzan on the E., and Cape Non, on the Atlantic, on the W. It mostly consists of vast deserts, differing but little from the Great Desert, with which it insensibly intermingles. In parts, however, where there is water, extensive plantations of the date palm, which here flourishes in great luxuriance, are met with. It is said by some, that its real name, *Blaid-el-Jerid*, means country of the date-palm; while others, among whom is Shaw, interpret *Blaid-el-Jerid* as meaning dry or parched country. (*Shaw's Travels*, p. 4. 4to. ed.)

BILLERICAY, a chapelry and town of England, co. Essex, hund. Barnstable, par. Great Burstead, 24 m. E.N.E. London. Its pop. is returned with that of the parish, which was, in 1821, 1,861; 1831, 1,977: houses, 387; area, 4,420 acres. The town is on an eminence overlooking a rich vale, and commanding extensive views. Silk braid and laces are the only manufactures, and these are declining. There is a weekly market, Tuesd., and fairs Aug. 2. and Oct. 9., for cattle. The parish church is about 2 m. from Billericay, but there is an episcopal chapel in the centre of the town, and three dissenting chapels; there is also an endowed school for 10 poor children. The ann. val. of prop. of the par. in 1815 was 7,169*l.*; its average poor-rates, 1,031*l.* Billericay is the central town of a poor union of 26 pars. About 1 m. from the church are some earth-works, called Blunt's Walls, where Roman remains have been dug up.

BILLITON, a rocky sterile island of the Eastern Archipelago (1st div.), between Sumatra and Borneo. It is of a circular form, about 50 m. in length and 45 in breadth. The pop. is very scanty, not being supposed to exceed 2,000 or 3,000. Iron ore, which in tropical countries is usually scarce, is found here in great abundance, and the metal produced from it is said to be of excellent quality. The produce of rice is not sufficient even for the consumption of the pop. The Dutch maintain a garrison in the island, and some cruisers on the surrounding seas, to check the piracy in which the natives are prone to indulge. The interior has not been explored. It is, however, believed to contain mines of tin.

BILLOM, a town of France, dép. Puy de Dôme, cap. cant., on a hill, 14 m. E.S.E. Clermont. Pop. 4,467. This is one of the most ancient towns in Auvergne. The walls, by which it was formerly surrounded, have disappeared, and its manufactures and commerce have also declined. A university, founded here in 1455, continued to flourish till 1555, at which epoch it was made over to the Jesuits, by whom it was administered till the suppression of their order, when it also ceased to exist. At present the town has a departmental college. During the period of the League, Billom was a principal focus of the disorders that agitated Auvergne. Storms are very frequent in this district; and, in consequence of the prevalence of rainy weather, the town has sometimes been called *l'égout de la Basse Auvergne*. (*Hugo*, art. *Puy de Dôme*.)

BILSA, a town of Hindostan, prov. Malwa, belonging to Scindia, on the E. side of the Betwa, near its confluence with the Russ, 32 m. N.E. Bhopaul. It is surrounded by a stone wall, and had, in 1820, 5,000 houses. The contiguous country is celebrated for the excellence of its tobacco.

BILSEN, a town of Belgium, prov. Limburg, cap. cant., on the Demer, 7 m. W. Maestricht. Pop. 2,700. It produces earthenware and cutlery.

BILSTON, a market town and chapelry of England, co. Stafford, N. div., hund. Seisdon, par. Wolverhampton, 2½ m. S.E. Wolverhampton, 11 m. N.W. Birmingham, and 107 m. N.W. London. Pop. (1841) 20,181; houses, 2,580. It stands on rising ground, and is very irregularly built. The principal streets contain some substantial and handsome houses, and, within the last few years, its appearance has been much improved; though, from the number of forges, collieries, and such like works, it has a sombre aspect. The principal buildings are — the episcopal chapel, a neat edifice, rebuilt in 1825; St. Mary's chapel, a fine structure, built in the Gothic style of architecture, in 1830; and the Rom. Cath. chapel, a handsome structure in the same style, erected in 1833. The gov. of the town is vested in 2 constables, appointed annually at the court leet held by the lord of the manor. Under the Reform Act, Bilston forms part of the borough of Wolverhampton, with which it is intimately connected; but for all parochial purposes, it is independent. Petty sessions are held on Tuesday in each week; and a court of requests, for the recovery of debts not exceeding 5*l.*, is held every second month, alternately with Willenhall. The living is a curacy, within the jurisdiction of the dean of Wolverhampton; the patronage is in the inhab. at large; every householder, whether male or female, being entitled to vote at the election of the minister. There are places of worship for Independents, Baptists, Primitive and Wesleyan Methodists, and Roman Catholics. There is a blue-coat school, founded and endowed by Humphrey Perry, Esq., of Stafford, for clothing and educating 6 boys; since extended to the admission of two or three more, by additional small bequests; 2 schools under the British or national system; and an "Orphan Cholera School," erected and endowed in 1833, for the instruction of 450 orphans, left destitute by the cholera, which prevailed in the previous year. This disease raged here with such desolating effect, as nearly to clear several entire streets of their inhabitants, and to oblige many large manufactories to stop working, from the number of hands that fell victims to its violence. There were, between Aug. 4. and Sep. 29., as many as 3,568 cases, of which 742, or about 1-20th of the pop., proved fatal.

Bilston which, down to a comparatively recent period, was but an inconsiderable place, is wholly indebted for its growth and importance to the iron trade carried on in it and its immediate vicinity. Its advantages in this respect are not surpassed by those of any other place. Round the town are all but inexhaustible mines of coal and ironstone, the main bed of coal being 30 ft. thick, with strata of ironstone both above and below; and large supplies of the finest sand used in the casting of metals, are also found in the vicinity. Bilston has the farther advantage of being connected, by numerous canals and river navigation, with London, Liverpool, Bristol, Hull, &c. The importance of these improved means of communication may be judged of from the fact that, previously to the opening of the first canal in 1772, there was only *one* blast furnace for smelting iron at Bilston! Their subsequent increase has been quite extraordinary; and there are now great numbers of furnaces, forges, rolling and slitting mills, &c., which, with the coal trade, furnish employment to a large population. The manufacture of japanned and enamelled goods is very extensively carried on in the town, of which it may be said to be the staple trade. In the neighbourhood is a remarkable quarry, the stones in which lie upon each other in 12 distinct layers, increasing in thickness from the surface, the lowest being about 3 ft. thick. This stone is used for various purposes, and is formed into grindstones, whetstones, millstones, and cisterns. At Bradley, a small adjoining village (in the W. div. of Cuttlestone hund.), a fire rises from a stratum of coal about 4 ft. thick and 30 ft. deep, which has been burning for above half a century, and has reduced several acres of land to a calx or cinder, used in the making of roads. This place formerly belonged to the portionists or prebendaries of Wolverhampton, and in their charter was called Bilsreton. It was a royal demesne at the time of the Conquest; and in the reign of Edward III., under the name of "Billestune," was certified to be free of toll. In 1824, an act of parliament was obtained for a market, now held on the Monday and Saturday of each week, independently of the toll-free markets, or fairs for cattle, which are held on Whit-Monday, and the Monday next before Michaelmas-day.

BINCH, a town of Belgium, prov. Hainault, cap. cant., on the Haine, 9 m. E.S.E. Mons. Pop. 4,500. It produces earthenware and cutlery, and has tanneries, glass-works, and tile-works, with a considerable trade in lace, paper, and marble and coal procured in the vicinity.

BINDRABUND, a town of Hindostan, prov. Agra, on the Jumna, 35 m. N.N.W. Agra. The place is famous in the history of Krishna, to whom many temples are dedicated. The principal pagoda is one of the most elaborate and massive works of Brahminical architecture. There are also numerous sacred pools, where pilgrims perform ablution.

BINGEN, a town of the grand duchy of Hesse Darmstadt, prov. Rhine, cap. cant., at the confluence of the Nahe with the Rhine, 14 m. W. Mentz. Pop. 4,300. It has some manufactures, and a considerable trade in corn and wine. Near it is the Bingerloch, a rapid in the Rhine, which is dangerous when the water is low; and on the removal of which large sums have been at different times expended. Bingen is very ancient, having existed under the Romans.

BINGLEY, a market-to. of England, W. R. co. York, 178 m. N. W. by N. London, 32 m. W. by S. York, near the Aire. Pop. in 1821, 6,176; 1841, 11,850. It consists chiefly of one long street, tolerably built, and well supplied with water. All Saints Church is a neat edifice, in the later English style: the Baptists, Independents, and Methodists, have places of worship. A free grammar-school was endowed by Henry VIII.; there is also a national school and some almshouses. The worsted, cotton, and paper manufactures are carried on, and there is some trade in malt, which is conveyed to other parts, chiefly by the Leeds and Liverpool canal, that passes by the town. Public meetings are held in a new court-house; petty sessions weekly; markets on Tuesday; fairs on 25 Jan., and 25, 26, 27 Aug. A branch of the Yorkshire District Banking Company is established here. (*Allen and Bigland's Histories of Yorkshire.*)

BIR, or **BEER** (an. *Birtha*), a town of Asiatic Turkey, on the declivity of a steep hill, on the E. bank of the Euphrates, 75 m. N.E. Aleppo, and 38 m. W.S.W. Orfa; lat. 36° 59′ N., long. 38° 7′ 15″ E. Pop. 4,000? It is surrounded on the land side by a well-built wall. Within the town, on a steep rock, is the citadel or castle, now in a state of dilapidation. It has several mosques, a public bath, and a caravansera. The rocks on which the town is built consist of chalk; and the houses being also formed of this material, its whiteness, during sun-shine, powerfully affects the eyes, which are also injured by the dust that is blown about. Bir is the point at which travellers and caravans between Aleppo, on the one side, and Orfa, Diarbekr, &c. on the other, usually cross the Euphrates, which they do in boats of a peculiar description. It is also the nearest point on the Euphrates to Iskenderoun, and has latterly acquired considerable celebrity from its being the point at which Colonel Chesney has proposed to begin and terminate the navigation of the Euphrates by steam. (*See* EUPHRATES.)

BIRKENHEAD, a sea-port town of England, co. Chester, hund. Wirrall, on the W. shore of the Mersey, directly opposite to and about 1,110 yards from Liverpool. Pop. in 1841, 8,223, but now (1850) estimated at 15,000. This extraordinary increase has taken place partly from the surplus pop. of Liverpool coming here to reside, and partly from the construction of docks for the accommodation of the shipping frequenting the Mersey, commenced in 1843. The advantages of Birkenhead in this respect, from its contiguity to Liverpool, and from the peculiar aptitude of the ground for docks, are striking and obvious. Exclusive of others of less magnitude, a creek, or arm of the sea, is to be formed into a floating dock of 150 acres; and the accommodations of all sorts, for shipping and goods, are to be on the largest, most complete, and perfect scale. But though these docks can hardly fail to be in the end of vast importance to the trade of these districts, and consequently, to the empire generally, they have hitherto been productive of little except loss. (See LIVERPOOL.)

BIRMAH, or THE BIRMAN EMPIRE, an extensive country of India beyond the Ganges, formerly the most powerful state of that peninsula, and considerably larger than at present; extending between the lat. of 9° and 27° N., upwards of 1,000 m. in length, and nearly 600 m. in breadth. At present it comprises the territory between lat. 15° 45′ and 27° 22′ 30″ N., and long. 92° 43′ and 99° E.; having W. the British prov. of Aracan, Chittagong, and Cassay; N. Upper Assam and Tibet; E. the Chinese prov. of Yun-nan, Laos, the country of the indep. Shans, and that part of the prov. of Martaban belonging to the British (which, together with those of Tavoy, Mergui, Aracan, Assam, &c., was taken from the Birmese in the war of 1824-5), and S. the Indian Ocean: length, N. to S., 710 m. (Engl.), greatest

	Sq. Miles.	Chief Towns.	Inhabitants.
The provinces under the actual dominion of the king of Ava are—			
1. Ava (Miamma Pyee)	53,466	Ava - - Amarapura - Sa-kaing - Monchobo - Yandabo -	354,000 (Ava, Amarapura, Sa-kaing)
2. Pegu (Fa-lain Pyee) Bassain, Sarawadi, &c. - -	22,540	Pegu - Rangoon - Prome (Pri) - Bassain -	 40,000 5,000 3,000
Mrelap Shan and Kathée Shan -	69,250	Bhamo -	
4. Cassay (Kathée, part of) - -	16,240	Tummoo -	
5. Yo-pyee -	6,300	Yó - -	
6. Martaban (part of) -	4,240	Martaban - (Montaunma)	1,500
7. Kingdom of Pong, Singphos, Borkhamti tribes, &c. -	30 : 50	Mongmaorong	
8. Khyens, Kookies, &c., tribes nominally subject to the king of Ava - -	9,100		

breadth, E. to W., 370 m. Area, about 200,000 sq. m. Pop. perhaps about 4,000,000.* (See foot of previous column.)

Mountains.— Birmah is enclosed E. and W. by two principal offsets from the Himalaya chain: in the N. and central parts of the country there are also many subordinate mountain ranges, running mostly parallel to the former, and like them decreasing gradually in height toward the S. From lat. 16° (Cape Negrais) to 23° N., the Anopectomoo, or Yoomadong mountains constitute the W. boundary. At the latter point of lat. this range is 200 m. in breadth, and from 2,000 to 5,000 ft. in height: in lat. 21° the elevation is considerably greater, but thenceforward it rapidly declines, and the breadth becomes so much less that, in 17° lat., it scarcely exceeds 20 m.; this chain terminates in a rocky promontory, bounding S.E. the Bay of Bengal. On the E. border a succession of ranges, inhabited by wild and half-subjected tribes, but little known to Europeans, stretch from the Gulph of Martaban to the Chinese frontier. *Zingyet-Thoung*, the highest point of the southernmost of these ranges, is no more than 3,000 ft. above the level of the sea; but between lat. 18° and 22° N., they rise much higher, and in the N. attain a very considerable elevation, the Phungan mountain in about 27° 15′ N. and 97° 15′ E., being 12,474 ft. high, and covered with perpetual snow. W. of the vale of Kubo, the Muring range now bounds the Birmese and Munneepoor territories; and E. of these, four hill-ranges extend in parallel lines, for a long distance S., enclosing three extensive valleys of the Khyendwen, Moo, and Irrawadi rivers. Ranges running E. and W. are unfrequent, but there is one in 20° N. lat., about 50 m. S.E. of Ava; and a small range, the Galladzet hills, in about 18° 20′ N., bounding N. the great plain of Pegu.

Plains, &c. — That of Pegu is the principal, and consists chiefly of the delta of the Irrawadi. It is a perfect flat, of most fertile alluvial soil, annually overflowed by its rivers, producing an abundance of rice, and constituting the granary of the empire. The valley of Húkong, in the N., is an extensive plain, 50 m. long, and varying from 15 to 45 m. in breadth; bounded on all sides by hills, and which probably, like that of Munneepoor, at one period formed the bed of an alpine lake. (*Asiat. Journ.*) Excepting these, there are few plains of any size; but numerous valleys, of the highest fertility and beauty, as Kubo, Bhamo, and those of the larger rivers: these are chiefly in the S. and central parts of the country; in the N. they are mostly rocky defiles, or narrow steppes.

Rivers. — The principal are the Irrawadi (*Eriwate*), with its affluents, the Ningthee, Moo, and Lung-tchuen; and the Than-lweng, and Si-tang. The Irrawadi, an Asiatic river of the first class, rises in Tibet, and runs generally S. through the whole length of the Birman empire, falling, after a course of 600 m., into the sea, by a great number of mouths in the kingdom of Pegu. (*See* IRRAWADI.) The Than-lweng, or Sauluen, is also a river of the first class, and rises in Tibet, beyond the sources of the Irrawadi: it descends in a nearly uniform S. direction in almost all its course, bounding the Birman empire E., and falls into the sea between Martaban and Moulmein.

The Sitang rises from the Lake of Guanngrue, in lat. 20° 20′ N., runs S., and disgorges itself, after a course of about 200 m., by a large mouth, but nearly useless as an harbour, or for navigation, because blocked up by an island and many dangerous shoals, with no more than a fathom water during the efflux of the tides, and not available for any vessels drawing 6 ft. water. This river communicates by cross branches with both the Irrawadi and Than-lweng. The Ningthee rises in the Patkoi chain, on the borders of Assam; and running in a S.W. direction, constitutes for some distance the boundary between Birmah and the Munneepoor territory, and falls into the Irrawadi, opposite Yandabo, in 21° 40′ N. lat., under the name of the Khyen-dwen. It is navigable for the largest class of boats as far as Kingnao, in 23° 45′ N. lat.: almost all the streams which fall into it on the E. side are auriferous. The Aracan river for the greatest part of its course flows through the country of the half-subjected Khyens; and the Kuladyne, its chief tributary, is considered one of the boundaries between the Birmese territory and the British prov. of Chittagong.

Lakes are very numerous in the prov. of Pegu: in the distr. of Bassein as many as 127 have been enumerated. The largest lake, however, is that of Kandangyee, or the Great Royal Lake, 25 m. N. Ava, which is 30 m. long, 8 or 9 m. broad, and traversed by the Moo river, a tributary of the Irrawadi. There are other smaller lakes in its neighbourhood, but none of any importance.

Coast and Harbours. — There are 240 m. of sea-coast from the mouth of the Than lweng to Cape Negrais with three good harbours: viz., those of Bassein, Rangoon, and Martaban: that of Rangoon is the best, but

* Some estimates differ widely from this; but this is of the highest authority, being that of Mr. Crawfurd.

is infested by a worm, which destroys all wood except ebony and tamarind.

Minerals. — The N. provinces are the richest in valuable minerals. Besides fine marble, which might be advantageously imported into England, as dead weight, serpentine, and nephrite, and amber mines are worked by the Chinese. Amber is found in immense quantities in the valley of Hukong; gold to the value of 100,000*l*., and silver to that of 120,000*l*. per annum; all the varieties of the sapphire, with spinelle rubies, are found in great abundance at about five days' journey E.S.E. from the capital, and are an important article of export; topazes, a few emeralds and diamonds, though of an inferior quality; iron, copper, tin, lead, antimony, arsenic, vitriol, sulphur, nitre, &c., are found. Petroleum is obtained in large quantities on the Irrawadi, above Prome. The wells, about 2 m. from the river, produce each a daily average of 150 gallons, which sells on the spot for about 1*s*. 8*d*. per cwt. The gross annual produce is about 80,000,000 lbs., and might be greatly increased. It is used for lights, paying boats, &c.; and is said to have the valuable property of securing wood from the attacks of insects. Coal is said to have been met with in various spots. A monopoly exists of gold, silver, and precious stones. (*Crawfurd's Journ.* pp. 441, 442.; *Pemberton*, pp. 13. 133—142.; *Malcom's Travels*, i. 169.)

The Climate is generally healthy, especially in the hilly tracts; but even in the plain of Rangoon, &c., it is infinitely more so than in Aracan or the valley of the Brahmaputra, a fact proved by the Peguans being amongst the most active, healthy, and vigorous inhabitants of the empire. The extremes of heat and cold are seldom experienced, except before the periodical rains. In Pegu, as high as Prome, there are but two seasons in the year, the rainy and the dry; the former lasting from the end of April to the end of Oct.; and the cold season immediately succeeding, the rains are heavier in this than in any other part of India. In Birmah Proper, or from Prome to lat. 26° or 27° N., there are three seasons; a cold, lasting from Nov. to Feb.; a hot, from March to June; and rain falling during the remaining months. Heavy mists occur in Nov. and Dec., but no snow falls; and only a little hail in April or the beginning of May. Earthquakes are not unfrequent, and in Pegu, violent rains, with thunder and lightning, &c., often usher in and conclude the wet season. The transitions of the seasons are extremely sudden; the greatest heats are in March and April: the trees shed their leaves in May, but only to be immediately clothed with new ones. In June, July, and August, the inundations from the mountains raise the river at Ava to 32 ft. above its lowest level (Feb.); but all the waters are drained off again by Oct. (*Sangermano's Descr.* pp. 164, 165.; *Pemberton's (Capt.) Report, &c.* pp. 154, 155.; *Dictionnaire Géog. Univer.* ii. 127.)

Vegetable Products.—Sixteen thousand different species of plants, natives of the Birmese dominions, were collected by Dr. Wallich when he visited the empire in 1826: amongst them were the teak, saul, 7 kinds of oak, 2 kinds of walnut, 3 species of willow, a rose; the almost unique *Amherstia nobilis*, near Martaban, a magnificent species of *Leguminosa*, 20 ft. high, handfuls of whose fine deep scarlet flowers are offered by the natives before the images of Boodh; the *Hibiscus Lindlei*; many new genera of Orchideæ, Scitamineæ, Liliaceæ, &c. &c. (See *Wallich's Plantæ Rariores, &c.*) The teak-tree abounds in forests along the hills skirting the Irrawadi, and in the N. provinces, both on hills and in valleys; in lat. 23° 30′ it approaches closely to the banks of the river, though it does not grow in Pegu within the influence of the tide. The most convenient and accessible forest in the country is that of Sarawadi, which furnishes nearly the whole of what is exported to foreign countries. The teak of Ava is said to be less durable than that of the coast of Malabar, but it has been ascertained by experiment to be stronger than the last, and therefore fitter for machinery, gun carriages, &c. In the vale of Kubo the saul and varnish-tree are most plentiful; bamboo grows to the circumference of 24 in. in the jungles, which contain whatever other underwoods are prevalent in India. The *mimosa catechu*, sugar-cane, indigo, and cotton-plant, are common; and the tea-plant, of a genuine character, besides inferior sorts, flourishes on the heights of the N. and central provinces. Every month produces some fresh fruit; the banana, cocoa, palm, pine-apple, guava jambo, mango, &c., are abundant, but citrons, pomegranates, and oranges, are the only fruit shared in common with Europe. Pulse of all kinds, wheat, maize, millet, rice, &c., and many pot-herbs, are usual articles of culture. Firs, &c., are rare, but junipers, rhododendron, and other European plants, grow on the upper region of Mount Phuyen and other considerable heights in the N.

Animals. — Elephants of three different varieties, the single-horned rhinoceros, wild boar, tiger, leopard, &c., inhabit the jungles; buffaloes, porcupines, civet and wild cats, and great numbers of apes, deer, and antelopes, are found. Occasionally a white elephant is met with, which is much prized, and one is always kept as part of the royal establishment at Ava, where he is treated with great care and attention. There are no jackals, or foxes, but dogs are numerous. There are no asses, except a few at the capital, obtained from the Chinese caravan; and, consequently, there are no mules. Game is not so abundant as in Hindostan: there is a small species of hare, but very inferior, and found only in the high lands. Snipes quails, pigeons, our common fowl in the wild state, three species of peafowl, with one species of pheasant, are found; parrots, and other birds of rich plumage, are plentiful: the gavial, in the Irrawadi, chameleon, many lizards and formidable serpents, as the *cobra-de-capello*, *cobra ceras*, &c.; tortoises, the mango fish, sable, and many others; scorpions, spiders, and centipedes, leeches, which abound in dangerous numbers in the marshes, mosquitoes, and a very voracious ant, destructive to house furniture, are among the animals. (*Crawfurd*, pp. 454—457.)

People. — Several distinct tribes inhabit the Birman territories; viz., 1. the *Mranma* (Birmans), between 19° and 24° N. lat.; 2. *Talain* (Peguans), between the Than-lweng river and the Galladzet and Anopectomoo hills; 3. *Shans*, with more affinity to the Siamese than other races, and spreading over the E. and N. provinces; 4. *Cassayers*, chiefly in the capital; 5. *Khyens*, a rude people scattered among the other population, but living in the mildest parts of the country; 6. the *Yó*, probably a Chinese tribe who have adopted Birmese customs, residing between the latter and the Irrawadi; 7. *Karyens*, inhabiting an extensive hilly tract between the Than-lweng and Sitang, good cultivators, but unsubjected, and bearing great enmity to the Birmese: the *Zabaings*, Taong-su, &c.; the Khamti, Singphos, and other Tibetan or Tartar tribes in the N. Mr. Crawfurd estimates the Karaens and Khyens in Bassein prov. at 46,600, and the whole of the wild tribes at 880,000. Most of these nations, though differing in language, manners, &c., are of the physical type common to all those situated between India and China. They differ from the natives of both these regions in certain particulars, and are said by Crawfurd to resemble more the Malays. The Birmese are short and stout, but well proportioned; with coarse lank black hair, and an olive complexion: the women are fairer than the men, who have more beard generally than the Siamese; the physiognomy of both sexes is open, cheerful, and not unpleasing, and very few of them are in any way deformed. They are robust, active, inquisitive, not deficient in courage, and form a total contrast to their neighbours of Bengal in habits and disposition. They are said to be lively, and impatient; much addicted to theft and lying, deceitful, servile, and proud; but at the same time courteous, benevolent, and religious—though it be difficult to imagine religion linked with thieving and lying. The foreigners settled here consist of about 16,000 Siamese slaves; 1,000 Anamese, descendants of some who were formerly in a state of slavery; about 3,000 Chinese, chiefly from Yunnan, settled in the towns or working the mines; many Hindoos from Bengal; Mohammedans, and a few Europeans. Though fond of repose, when an inducement to exertion offers, the Birmese exhibit not only great strength, but courage and perseverance, and often accomplish what we should think scarcely possible. But the mildness of the climate, the fertility of the soil, and the badness of the government, render these valuable qualities of little avail. In countries like Birmah, the customary standard of competence is easily attained. The poorest classes obtain the necessaries which they require with comparatively little labour; and those who should go further, and attempt to make a display, or to improve their lands and houses, would expose themselves to extortion, and perhaps to personal danger. Sloth is, in consequence, the solace of the poor, and the principal enjoyment of the rich. (*Crawfurd*, pp. 371, 372. 465—470. &c.; *Malcom*, i. 220. &c.)

Occupations. — *Agriculture.* — Excepting near the towns, most of the land is waste and unappropriated, unless occasionally by wandering tribes, who raise crops with little labour on the virgin soil. The cultivated lands are assigned, with their inhabitants, by the sovereign, in large districts, to his various favourites, who are not unaptly entitled their "eaters," and who grind down the cultivators by the most oppressive exactions. The farms generally consist of only a few acres each; and agriculture, except, perhaps, among the Karyens, is in its rudest and most imperfect state. Rice is the chief article of produce, and forms the main food of the people: it is mostly grown in the S., where, although the plough is seldom used, and the soil only trodden by cattle, a single crop is said to yield 50 or 60 fold. In the N. provinces a plough, similar to that of India, is used, and the soil is afterwards pulverised by means of a wooden cylinder, and a rough harrow dragged over it: 2 or 3 crops a year are here obtained, but they are not so productive as the single crop of the lower provinces. Pulse of various kinds, Indian millet, and maize, are grown in the N. prov., the latter yield-

ing (but such statements are almost always exaggerated) 100 fold. Good wheat is grown in the neighbourhood of the capital, but it is little used for bread; and we have been assured by Mr. Crawfurd, that all the wheat produced in the empire would not feed 50 families! *Sesamum* is universally cultivated for its oil and oil-cake, which is given to the cattle. Cotton (*gossypium herbaceum*, Wallich) of a firm and silky texture, but of short staple, is grown in every part of the empire and of its dependences, but principally in the upper provinces. Indigo is also generally grown, and is naturally of good quality; but the culture and manufacture of the plant are both so very rude, as to render the produce wholly unfit for exportation. The potato and pot-herbs of Europe are quite unknown; but yams, and a species of sweet potato, are, as well as tobacco, very general articles of culture in the N. There are no melons, cucumbers, or egg-plants; but the banana, tamarind, &c., are extensively grown; and in some tracts the number of fruit-trees forms the basis of taxation. The sugar-cane is cultivated, and the stalk eaten when ripe, the manufacture of sugar, except a very coarse sort, being unknown. An inferior kind of tea, with a large leaf, is grown on the hills, and eaten by the natives with garlic and onions, which are also produced there. Capsicum, next to salt, forms the chief condiment; from the highest to the lowest, all season their rice with this plant, and its consumption is "incredibly great:" betel-nut is raised for home consumption; and the piper betel is cultivated largely, and of excellent quality. In addition to rice, pumpkins and pulse, *gnapee** and oil, compose the main food of the peasantry. Animal food being prohibited by the Buddhistical religion, is not generally eaten, excepting poultry or fish which have died a natural death, lizards, serpents, iguanas, &c., by the lower classes; or game, &c., by some individuals privately. Many of the hill tribes do not, however, regard the injunction, and kill bullocks and other cattle for food, or to sacrifice to their deities: many others also, by one means or other, evade the law of not spilling the blood of animals, or openly break it. The common beverage of the people is water; but spirits, though prohibited, are imported or distilled from rice, and toddy is made from the juice of the palmyra, date, or cocoa-tree.

Cows, buffaloes, goats, and a very few sheep, are kept; but neither for their flesh or milk. Oxen are used only for draught, and prevail chiefly in the upper country, the buffalo being more common in the lower. The Birman horse is not more than 13 hands high, but strong, active, esteemed in the country, and used only for the saddle. The elephant is domesticated and used for carriage; the camel is altogether unknown. Hogs are plentiful, but commonly used only as scavengers.

Arts and Manufactures are in the most backward state. Ploughing, cleaning cotton, spinning, weaving, and dyeing, are operations mostly performed by women or captive Cassays: the loom used is like that of Bengal. Silk and cotton goods are woven, the former chiefly in the capital and the large towns in its vicinity, but are very inferior to those of India and China. The Khyens, however, though considerably less civilised than the Birmese, surpass them greatly in the manufacture of silk, and produce some superior crimson scarfs, embroidered with gold, and narrow shawls. The Khyen looms can only make fabrics 1 cubit, while those of the Birmese produce some 2 cubits in width. Printing on cotton, &c., is unknown; but dyeing with indigo, turmeric, &c., is practised; and the colours of the Birmese fabrics are much admired for their brilliancy: alum is the only mordaunt used. No fine linen is manufactured; and British goods of all qualities are commonly imported, and sold cheaper than any produced by the natives. Some coarse earthenware is made; the large Pegu jars are well known, and somewhat celebrated, but seem no longer to be manufactured: all the porcelain used is imported from China. The Birmese cast bells, and execute filagree, &c. in gold and silver respectably; but otherwise they do not work well in metals. Some rude cutlery and matchlocks are made at Ava, &c.; but their swords are chiefly bought from the Shans, and old muskets from the English: the latter fetch from 37*s*. to 50*s*. each, while new Birmese muskets are only considered worth 25*s*. Lacquered ware for trays, betel boxes, &c., is amongst their best manufactures. Their gunpowder is very bad. Their paper is of three sorts, one of which is made of bamboo fibres, covered over with a mixture of charcoal and rice-water, and written on with a piece of steatite, as we do on a slate. Nearly all their manufactures are domestic. Excepting carpenters, smiths, masons, carvers, and gilders, who work for the palace, temples, and priests, there are but few public artisans, and these reside only in the larger cities. The Birmese war-boats are very well built, and adapted for their purpose: they consist of the trunk of a long teak-tree, expanded by heat so as to admit two rowers abreast; the gunwale is raised a foot above the side, and elaborately carved and gilded, as well as the prow, which is much raised: each boat holds from 20 to 100 men, and in velocity they very far transcend our swiftest men-of-war boats. The common trading boats are mere canoes, decked with split bamboo, and partly covered in with mats, with one bamboo for a mast and another for a yard.

Houses, Temples, &c. — The ordinary houses consist wholly of bamboos and matting, badly thatched with leaves or grass, very soon built or removed, and in the lower situations raised 3 or 4 ft. from the ground on wooden posts; those of the priests are of a superior kind, and somewhat similar to those of the Chinese, or those of the Shans in the N. provinces, having a long roof rounded at the ends, matting walls, and being divided into several compartments. The ordinary beds of the people consist of merely a small mat laid on the ground. The temples are of different styles in different provinces; at Pugan, in Birmah Proper, they are heavy, broad, and surmounted by a small spire; in Pegu, pyramidal, and adorned with many figures of griffins, sphinxes, crocodiles, &c. They are all much gilt and decorated, and often contain very solid masonry: many are, however, in ruins, since most of them are built and endowed by wealthy individuals, and it is deemed more meritorious to build a new, than to repair an old one.

Commerce, &c. — In the lower provinces the traffic is almost wholly by water conveyance; in other parts goods and passengers travel by carts or waggons drawn by oxen, or on the backs of these animals: the upper districts send to the lower petroleum, nitre, paper, lacquered wares, silks and cottons, cutlery and metal wares, palm-sugar, onions, tamarinds, &c., and receive from Rangoon, Tongho, and Bassein, which are the chief trading places, rice, salt, pickled and dried fish, and foreign commodities. The Shans export cottons, silks, ivory, bees' wax, stick-lac, varnish, lacquered wares, swords, and metals, to Ava, and take back salt, dried fish, &c. The red Karyens traffic in slaves with the Siamese, which may, it is said, be put an end to by the British authorities, our possessions in Martaban intervening between the two territories. The principal foreign trade is with China, and its chief seat the town of Bhamo, whither the Chinese caravans come and meet the Birmese and Mohammedan merchants; and from Dec. to April this town "presents a most animated scene of active industry, and a greater variety of tribes than is, perhaps, found at any other fair in Asia." The principal articles of import from China are silk (to the amount of about 27,000 bundles, worth 81,000*l*. a year), copper, carpets, fur jackets, orpiment, quicksilver, vermilion, verdigris, drugs, tea, fresh and dried fruits, dogs, birds, &c. The tea, of a coarse quality, is sold at about $6\frac{1}{2}$*d*. per lb. The exports to China are chiefly raw cotton, averaging (14,000,000 lbs., and worth 228,000*l*. a year); feathers, ivory, wax, edible birds' nests from the Mergui archipelago, rhinoceros' and deer's horns, sapphires, and some British manufactures; chiefly broad cloths and carpets. The total value of the trade with China is variously estimated at from 400,000*l*. to 700,000*l*., of which, as already seen, silk and cotton amount, in ordinary years, to about 309,000*l*. The principal foreign trade of the Birmese by sea is carried on from Rangoon, with Calcutta, Chittagong, Dacca, &c. By far the most important article of export in this way is teak timber, of which about 7,500 full-grown trees used to be annually shipped, principally for Calcutta. Among the secondary articles of export are cotton, of a superior quality, formerly used in the manufacture of the fine muslins of Dacca; with gold and silver, catechu, stick-lac, ivory, glue, &c. The imports by sea are British cotton goods, which have nearly superseded those of India, areca and cocoa-nuts, tobacco, iron (wrought and unwrought), copper, lead, quicksilver, borax, nitre, gunpowder, fire-arms, opium, sugar, arrack, rum, English glass and earthenware, steel, &c. (For further information as to the trade of the Birmese, see *Crawfurd's Journal*, ii. 189—199.; *Malcolm*, i. 265.; and the art. RANGOON in this work.)

Measures, Weights, &c.—The chief measure of *capacity* for rice is the basket = $58\frac{3}{4}$ lbs. avoird.; — *of length*, the finger-breadth, hand-breadth, span, cubit (2 spans, or 19·1 Eng. inches), bamboo = 28 cubits ($14\frac{1}{4}$ yds.), taing = 7,000 cubits (2 m. 1 furl., nearly); — the chief *weights*, the tical (nearly $\frac{1}{2}$ oz. avoird.), viss = 100 ticals, or 3 catties (3 lb. 2 oz.).

Money. — There is no coined money, excepting some of very base quality, and of lead, struck at Amarapúra and Rangoon; gold and silver ingots, of a tical weight, and various degrees of purity, form the rest of the currency. Gold is valued at about 17 times the worth of silver, a tical of which latter, nearly pure, is worth 2*s*. $8\frac{1}{10}$*d*. (*Trant.*)

Revenue and Taxation. — One tenth part of the products of the cultivator, which is often taken in kind,

* Gnapee is made of prawns, shrimps, or any cheap fish, pounded into a consistent mass, and frequently allowed to become partially putrid. It is known in commerce by the name of *Balachong*. (*Malcom*, i. 266.)

and 10 per cent. on all imports, &c. (12½ per cent. is exacted at Rangoon, 2½ per cent. of which go to the underlings of the government), 5 per cent. on exports and on the petroleum collected; the monopoly of marble, amber, the precious metals, and gems above a certain size, of wrecks, and the property of certain foreigners dying in the country, all belong to the king. The fiscal system is "replete with uncertainty, rapacity, and violence;" there is no direct land-tax, but parties are assessed in proportion to their supposed means, or rather inversely, as to their ability to pay, since it is often according to the number of persons in a family; in other places, it is as the number of fruit-trees; or a house-tax is resorted to. The revenue derived from the Karyens, by a personal or poll-tax, is 3,000 rupees a year. These, together with imposts on salt, fisheries, &c., and duties from the Chinese workers of the mines, are the chief sources of the royal wealth. Most of the provinces are considered the property of the royal family or principal court favourites; the king, as he grasps at more money, assesses each of his viceroys in a certain sum; these assess their subordinate district governors for a larger sum, and these again force still more out of the unhappy peasantry, who generally are made to pay double the sum originally demanded by the king. The gold and silver that thus reaches the royal treasury is never, except on urgent occasions, disbursed again; the only channels of its expenditure are in presents to favourites, gilding temples (for which most of the gold in the country is used), and making ornaments. The obligation to make presents to obtain favour or justice prevails universally, and from the top to the bottom of the social scale, there is one uniform system of extortion and rapacity, which has so completely crushed the spirit of the people, that, although few are in beggary, all fear to be rich, lest they should be marked out and impoverished by the harpies of the state. (*Crawfurd's Journ.* pp. 415—432.)

The Government is an hereditary and absolute despotism, the sovereign being "lord of life and limb" over his subjects, who style him "golden;" speak of informing the "golden ear," throwing themselves at the "golden feet," &c. They approach him with their hands joined above their heads, and even make obeisance to the palace walls, before which all must dismount and take off their shoes. The sovereign is assisted by 4 woongees, or chief public ministers; 4 atween-woons, or private counsellors; 4 woon-docks, ministers of the interior; 4 state secretaries; 4 reporters; 4 officers, to regulate ceremonies; 9 to read petitions, &c. Their several ranks are determined by their dresses, coronets, and number of gold chains; the monarch himself only being privileged to wear 24. The whole nation is divided into the royal family, nobles, and commonalty, and none dare assume the dress of a superior grade. The Birmese have no farther distinctions of *caste*, as in India, nor any hereditary distinctions; although, in other respects, a kind of feudal system prevails; and the king can command the appearance of his nobles in the field, with their quota of vassals. (*Hamilton's Gaz.* pp. 48—50.; *Sangermano*, p. 58.; *Wilson's Docum.*, Append. p. 38.; *Crawfurd*, p. 491.; *Trant*, pp. 247—268.)

Armed Force.—The Birmese are not, as a nation, a military people, but would make good soldiers under able officers. There is no regular system of conscription; every man is liable to serve, but no large force is ever disposable; and it is believed that the whole levies raised to oppose the English in the last war (when the government was in such alarm that 150 ticals, nearly 20*l.*, bounty was given to each man), did not amount to more than 50,000 men. (*Capt. Low's Hist. &c.*) Excepting a small body of Cassay horse, and one of artillery, all are infantry, and armed with long spears, two-handed swords, old muskets, and the jinjal, a kind of carbine, carrying large balls, which, as they are good marksmen, is a formidable weapon, except in close combat. They are adepts at raising stockades, which they do wherever they take up a position; but these are not generally defended with much vigour. The war-boats, which have each a nine-pounder, or small piece of ordnance at the prow, constitute the best portion of the armed force.

Jurisprudence.—Each large city has its judicial tribunal, and townships (*myo*) have each a governor, called *myo-su-gi*, who is assisted by inferior police officers, placed over the several wards: from the decisions of the *myo-su-gi*, there is appeal to the provincial governors, and from the latter to a higher law officer in the capital. The code of laws (which may be found at length in Sangermano's "Description of the Birman Empire,") is derived from the "Institutes of Menû," and contains many salutary regulations; but through a most corrupt administration, the aims of justice are frequently perverted, and the greatest tyranny is exercised. The slavery of a debtor, or his children, in discharge of a debt, is common; and females, in such a case, may be used as concubines. Trial by ordeal often takes place, and in criminal cases the punishments are marked by the greatest cruelty. The Birmese seem to have taxed their ingenuity to invent terrific and revolting modes of death. These they bear with an intrepidity or indifference common to all Asiatics; but owing to the extreme corruption of the Birmese officers, there are very few offences that may not be expiated, or their punishment materially alleviated, by a pecuniary sacrifice. (*Crawfurd*, pp. 413. 491. &c.; *Sangermano*, pp. 65—70.; *Wilson's Docum.*, Append. p. 44.)

Religion is Buddhism, believed to have been introduced by Gaudma, the chief deity himself, in the 6th century B.C. This faith is universal here—except among foreigners; individuals who have been converted to Christianity; a few Zodi, believed by Sangermano to be Jews; and some hill tribes, as the Khyens, Karyens, and Cassays, in the lowest stage of idolatry. Those who are curious in religious creeds may find that of Boodh at full length in the translation of Sangermano. The priests, called Rhahaans, are much respected; they are bred up like monks to their calling from an early age, and observe celibacy: but may at any time renounce their vows and marry. They are voluntarily maintained by the population, and not suffered to engage in manual labour; their chief occupation being the instruction of youth. All foreigners are allowed the fullest exercise of their religion; and may build places of worship any where, and have their public festivals and processions without molestation. But, though thus tolerant to strangers, they are most intolerant to their own people. No Birman dare join any of these religions, under the severest penalties; and the most rigorous measures are adopted for suppressing all religious innovations. It is a curious fact, that the inhab. of the conquered Birmese provinces in our possession seem to be now more attached to their religion than ever. A notion that it was in danger, seems to have awakened new zeal in its favour. (*Malcom*, i. 320.)

Education is so far diffused that almost every male Birman can read and write; and this is the case with many of the females. The Khyens have no knowledge of books or reading, &c., and hold medicine in contempt: the Birmans themselves are grossly ignorant of physic; blood-letting is unknown, and whether for fever or rheumatism, they shampoo the patient, treading him till he is in a profuse perspiration: any one may practise this profession. Diseases of the digestive organs, and of the skin, cholera, leprosy, &c., are the most frequent: inflammations are not generally acute, and wounds of a very severe character are said to heal with singular rapidity.

The Birmese are possessed of some knowledge of the heavenly bodies, and the signs of their zodiac are the same as ours: their year consists of 354 days, the errors in which computation they partially rectify every third year. They have 12 months, of 29 and 30 days alternately, and 7 days in the week, named from the planets, in the same order as ours. There are 70 hours between sunrise and sun-set, calculated at the capital by the successive filling of cups by dropping water; but as the length of the days changes, these cups must, of course, be also continually changed. Their common epoch begins from the year A.D. 638, making our year 1839 the Birmese year 1201. (*Sangermano*, p. 162.; *Trant*, p. 267.; *Hamilton's E. I. Gaz.* p. 51.)

Language.—There are two languages spoken by the bulk of the people; viz. the *Birmese* by the *Birmans*, and the *Peguan* or *Mon* by the *Peguans*; exclusive of many rude dialects. Besides these, there is the *Pali*, or sacred language, which has a distinct written character. In the common *Birmese*, the letters are formed of circles and segments of circles, probably derived from the *Pali* alphabet, but differing wholly from the *Dewanagari*. The structure of the language is exceedingly simple. There is no inflection of any part of speech. Relation, number, mode, and time, are all indicated by prefixing or affixing certain articles. The words follow each other in their natural order, an arrangement indispensably necessary to a dialect so inartificial. (*Crawfurd's Journ.* p. 387.)

Dress.—That of the men is a covering from the loins reaching half way down the leg; over this a frock with wide sleeves, tied all the way to the knee; on the head, a square handkerchief of English or Madras manufacture, or a turban of English book muslin. The women wear a somewhat similar dress, but shorter than that of the men; and the petticoat being open in front, permits the thigh to be seen at every step: they wear no head-dress. The hair of both sexes is worn long, and tied in a knot on the top of the head: the men pluck out their beard; but the practice of blackening the teeth is not followed as it was formerly, and still is, by some neighbouring nations: sandals, but neither boots, shoes, nor stockings, are worn. The dress of the peasantry, Khyen tribes, &c., is mostly black; yellow is a sacred colour, and only used by the priests and upper classes: a quilted jacket is sometimes worn; and in the N.E. the Chinese costume is adopted. The court dress of the nobility is handsome,

consisting of a long robe of flowered satin or velvet, reaching to the ancles, with an open collar and loose sleeves; velvet caps with gold circlets, many ornaments, &c.

Habits, Customs, &c. — Chewing betel is common, and smoking universal, even with children. The Birmese eat twice a day; viz., early in the morning, and in the evening: their food is served up on trays, in red lacquered plates, and small cups: spoons are used, but not so much as fingers: knives and forks are unknown. The people are very superstitious, consult the stars, believe in fortunate or evil times, wear talismans, practise alchemy, &c. If any member of their small communities of 4 or 5 houses chance to die, the Khyens believe the evil spirit has taken possession of the place, break up their settlement, and remove to another spot; and, when an earthquake happens, shout and beat their houses, to expel the fiend.

Slavery, and especially the selling of women, is general; polygamy is allowed; marriage, although a mere civil contract, is universally respected; and the sovereign himself has no right to seize for his harem a married woman. Divorces are exceedingly common. Females are allowed as much liberty, usually, as males; they are engaged in all sorts of drudgery and continual occupation, yet infidelity among those who are married is rare, though chastity among the others is a virtue little practised or appreciated. To avoid, it is pretended, the seizure of their females, who have naturally some beauty, the Khyens have long adopted the custom of tattooing their countenances: a tattooing of their bodies in all kinds of figures also prevails amongst the Birmese. Corpses are either burned or buried; persons of rank are publicly laid out in state; and amongst all classes visits of condolence and presents are received by the survivors of deceased persons, and musicians attend to play before the body till the funeral, which is conducted with as much magnificence as the friends can afford. The funerals of priests are public festivals, and many accidents are caused by timber, and other heavy bodies, that are fired up in the air on those occasions, falling on the crowd that has collected: the Khyens also treat deaths as matters of public rejoicing. Many *bizarre* customs prevail amongst the Birmese; such as the privilege that every one has to throw water over any others, of whatever rank, during the last three days of the year, which produces much sport; the privilege that *friends* of new married people have to come into the house on the wedding night and break every thing they can find, for which reason weddings are often kept secret, &c.

Amusements, Taste, &c. — Boxing, cockfighting, football, throwing a quoit of bamboo, a few games of chance, chess, and dancing, are among the chief recreations. The Birmese are good mimics, and very fond of acting; their drama is by far the best among the Indo-Chinese nations. Their music (several specimens of which are given in Mr. Trant's *Two Years in Ava*) possesses decided melody; they are much attached to it, and usually sing at their work. Their principal instruments are, a drum of bamboo or cane, covered with skin, a kind of hurdy-gurdy, oboe, lute, &c.: in their dances they exhibit many contortions of the body. They have several epic and religious poems, besides some other literary productions.

History. — The earliest records go back to the year B.C. 543. The first kings are said to have come from Bahar, and fixed the seat of government at Prome, where it continued for 336 years. In A.D. 107 it was removed to Pugan (Pagahm Mew) where it remained for 12 centuries, and where are still to be seen extensive ruins, including many temples, and some relics of Hindoo worship. In 1322, the court was removed to Sa-kaing; in 1364, to Ava; in 1752, Alompra transferred it to his native place, Monchobo; one of his sons carried it back to Ava; another to Amarapura: from 1822 to 1837, Ava again became the capital, when the revolution that placed the Prince of Sarawadi on the throne, restored that honour to Monchobo.

In the 18th century the Birmese became the most powerful nation of the E. peninsula of Asia. Ava had been governed by the King of Pegu for some time previous to 1753, when Alompra, the founder of the present dynasty, expelled the Peguans from Ava and Prome, and in 1756 effected the conquest of Pegu. The Shan country was conquered by his son in 1768; Cassay in 1774; Aracan in 1783; in 1790, the Tenasserim provinces taken from the Siamese; and Assam conquered in 1823. Emboldened by these successes, the court of Ava entertained designs on the neighbouring British territories; our frontiers were subject to continual irruptions, and our ambassadors to all kinds of contempt and insolence; until, after a hostile invasion of Cachar, a state with which we were allied, and renewed outrages on our possessions in Chittagong, Sir A. Campbell was sent with an army up the Irrawadi. After a variety of engagements, in which the British were always successful, a treaty was concluded Feb. 24. 1826, at Yandabo, 50 m. from the capital, by which the provinces of Aracan, Yé, Tavoy, Mergui, and part of Martaban, were ceded to the British, together with 5,000,000 rupees to defray the expenses of the war; and the King of Ava ceased to have dominion over Assam, Jyntea, Cachar, and Cassay. In April 1837 the Prince of Sarawadi, brother to the former king, seized the throne; put to death or otherwise disposed of the courtiers who had been opposed to him; and removed the seat of government from Ava to Monchobo.

It is worthy of remark that, in our late invasion, the country people displayed no vigorous opposition or enmity towards the British troops; indeed, so far from it, when they found that their property was respected, and themselves treated with humanity and kindness, they flocked back to their deserted habitations; freely supplied the soldiers with provisions; expressed their wishes for the success of our arms, and our permanent occupation of the country; and, in some instances, openly declared in our favour.

The contrast between the present and former state of the Birmese provinces occupied by the British, is most creditable to our government. An unexceptionable witness, Mr. Malcom, the American missionary, says that "coin is being introduced, instead of masses of lead and silver; manufactures are improving; implements of improved construction are used; justice is better administered; life is secure; property is sacred; religion is free; taxes, though heavy, are more equitably imposed; and courts of justice are pure, generally. Formerly, men were deterred from gathering round them comforts superior to their neighbours, or building better houses, for fear of exactions: now, being secure in their earnings, the newly-built houses are much improved in size, materials, and workmanship. Every where, in British Birmah, people praise British justice." (i. 74.) It is to be hoped that this striking change may lead the Birmese to reflect on the gross defects of their institutions, and thus pave the way for their improvement. (*Crawfurd's Embassy to Ava*, the best work by far that has hitherto appeared on the country; *Malcom's Travels; Pemberton's Report on the E. Frontier; Sangermano's Desc. of the Birman Emp.; Wilson's (H. H.) Documents, &c.; Trant, Symes, Foley, Hanway, Richardson, &c.*, in *Calc. Asiat. Journal, Asiat. Researches, &c. &c.*)

BIRMINGHAM, a parl. bor., and the principal hardware manufacturing town of England, co. Warwick, at the N. W. extremity of the co., and nearly in the centre of the kingd., 18 miles N. W. Coventry; 57 N. N. W. Oxford; 69 S. S. E. Manchester; 102 N.W. London; lat. 52° 29′ N., long. 1° 52½′ W. The parl bor., which includes the contiguous townships of Aston and Edgbaston, extends over an area of 18,780 acres and had in 1801 a pop. of 73,670; in 1831 of 146,986; and in 1841 of 182,922; viz. 88,572 males, and 94,350 females. At present (1850) the pop. is probably not under 220,000. Birmingham stands on undulating ground sloping down to the river Rea. The older portion of the town, in a low and damp situation, exhibits some curious specimens of ancient domestic architecture. But the more modern part, on higher ground, especially the centre of the town, contains some magnificent and costly buildings, a great number of spacious and well laid out streets, with houses, principally of brick, though many of those more recently erected have stone fronts. At a distance the appearance of Birmingham is not prepossessing, from the immense number of tall chimnies belonging to its various factories, the smoke with which the atmosphere is loaded, and the dirty blackened colour of the buildings.

Among the public buildings may be specified the town-hall, modelled on the temple of Jupiter Stator at Rome. It consists of a rustic basement about 20 ft in height, on which is raised a second story having 13 Corinthian columns on each side, and 8 in the principal front. It is built of brick faced with Anglesea marble, the columns being of the latter; length externally, 195 ft., width 102 ft., and height 83 ft.: the grand saloon, in which the musical festivals are held, is a noble apartment 140 ft. in length, 65 ft. in width, and 65 ft. in height, with a very powerful organ, and sitting room for about 4000 visitors. The market hall is the finest of its kind in the U.

Kingdom. Length 260 ft., breadth 108 ft., height 60 ft. Total cost, ex. site, 30,000*l.*; rent of the stalls into which it is distributed from 5,000*l.* to 6,000*l.* a year. The Free Grammar School referred to below is, perhaps, the finest public building in Birmingham; and the public prison, the lunatic asylum, school of design, general hospital, &c., are all worthy of notice. The churches and chapels are particularly handsome; that of St Philip, on the summit of the highest eminence in the town, is justly admired for its architectural beauty: the church of St. George, in the early English decorated style, has 1400 free sittings; Trinity chapel, Bordesley, a fine edifice, cost 14,225*l.*; St. Peters nearly destroyed by fire in 1831, but since restored. &c. The barracks, erected in 1793, at the N. E. extremity of the town, cost 13,000*l.* The theatre, on the site of similar fabrics, burnt down in 1791 and 1820, is a handsome building well suited to its purposes. The buildings connected with the railway station cover and enclose 10 acres of ground. And there are some very superior hotels and shops. A bronze statue of Nelson, by Westmacott, stands nearly opposite the market-hall. It must, however, be admitted that it confers but little credit on the town, though quite as much as the statues of the hero in Liverpool, and in Trafalgar Place, London, confer on them.

Birmingham is but newly incorporated, and previously to 1676, it was not even a market town. It was formerly governed by two constables, a head-borough, a high and low bailiff, with other inferior officers chosen annually at the court leet of the lord of the manor. Under its present charter of incorporation, granted in 1838, it is divided into 13 wards, and is governed by a mayor, a recorder, 16 aldermen, and 48 common-councilmen. Revenues of corporation, 1846-47, 82,258*l.* The charter constitutes the corporate body a court of record for the borough, to be held on Wednesday for the recovery of debts under 20*l.* A court of Quarter Sessions is, also, held in it; and it is the seat of a co. court, before which 6,525 plaints were entered in 1848. There is a board of officers, under a local act, for the administration of relief to the poor. The streets are mostly paved, drained, and lighted with gas. But those of an inferior description, and the greater number of the courts are, in these respects, still very deficient, and will require the expenditure of a large sum to obviate the existing defects in their sanitary condition.

Prior to 1751, Birmingham formed only one parish. and for all civil purposes is still so considered. In that year, however, a portion of the parish of St. Martin was formed into that of St. Philip; and in 1829 two other parishes were formed, viz. St. George and St. Thomas. There are, also, various district and other churches, some of which have been built by the Parliamentary Commissioners with several chapels of ease, and places of worship for Protestant dissenters, Roman Catholics, Swedenborgians, Unitarians, Jews, &c. The living of St. Martin's parish is a rectory, charged in K. B. 19*l.* 3*s.* 6½*d.*, but really worth about 1200*l.* a year; St. Philip is a rectory, not in charge; to which is joined the prebend of Lawley, including the dignities of canon residentiary and treasurer in the cathedral of Lichfield, and is in the gift of the bishop of Worcester; St. George is a rectory, in the gift of a private individual. The remainder are curacies, either in the gift of the bishop of Worcester, or of peculiar trustees. The Roman Catholic cathedral, consecrated in 1838, is a very large but unfinished structure. There are numerous charitable institutions, both medical and educational. The General Hospital, Queen's Hospital, and General Dispensary are supported by voluntary contributions, legacies, and other donations. The cost of erecting the General Hospital, exceeded 10,000*l.* It was begun in 1776, and completed in 1778; but in 1791 it was enlarged by the addition of wings: it is divided into 14 wards, and has 165 beds. Queen's Hospital, founded in 1840, was completed in 1847 at a cost of 8,746*l.* The General dispensary, instituted for the medical assistance of poor, sick, and midwifery patients, at their own houses, was established in 1794. Besides these benevolent establishments, there is an institution for the relief of bodily deformity, an infirmary for diseases of the eye, a Magdalen asylum, and several sets of alms-houses, founded by W. Lench in the reign of Henry VIII.

A history of the schools of Birmingham would fill a volume. The 20th report of the charity commissioners contains 114 closely printed folio pages, solely upon the charities of this town. The grammar-school was founded in 1552, "for the education, institution, and instruction of boys and youths in grammar," and endowed with the revenues of the ancient guild of the Holy Cross; which, with those arising from other sources, amount at present (1850), to from 8,000*l.* to 10,000*l.* a year. It has ten exhibitions of 50*l.* a year each. They are given for four years to the most distinguished scholars, and are open to any college in either university. The building attached to the school having become unseemly and dilapidated, the governors were empowered by an act of 1831 to expend 50,000*l.* upon a new and suitable school-house, &c. And, under the powers so given, Mr. Barry has since erected one of the most complete and extensive structures of its kind in the U. Kingdom. It is in the style of the new houses of parliament, and is, perhaps, the most magnificent of all the buildings of which the town can boast. The classical school is attended by about 240, and the commercial by about 215 boys. It has also 5 branch or subsidiary schools to which girls as well as boys are admitted. At present (1850) it may have in all about 1200 pupils. In the Blue-coat school, (founded in the early part of last century, and supported by voluntary contributions, rents of lands, funded stock, &c.) about 300 children of both sexes are taught writing, reading, sewing, and other useful arts. The other principal schools are, the Birmingham and Edgbaston Proprietary school; various National schools; the Protestant Dissenters' Girls' Charity-school, the Royal Lancastrian, the Female Lancastrian, and Madras school, on the principles of Dr. Bell's system, St. Philip's Industrial school, &c. There are also infant, ragged, and Sunday schools; a school for deaf and dumb; a college for the education of young men, established by the Independents; a philosophical institution; an athenæum, for the diffusion of literature and science; a society of arts, and a mechanic's institute. An important institution, called Queen's College, established by subscription, was incorporated by Royal Charter in 1843. It is intended to furnish complete courses of academical instruction in languages; natural, moral, and political philosophy; medicine; civil-engineering; law, and theology. It occupies a handsome building opposite the town-hall; and has accommodation for 70 resident students, with museums, libraries, &c. This institution, which promises to be of the greatest service to the town and neighbourhood, owes its existence principally to the exertions and influence of Mr. Cox, surgeon. Birmingham has 2 public libraries. The Old Library, a neat struc-

ture, has about 700 subscribers; and a collection of books, comprising upwards of 27,000 vols. The New Library is a smaller building, containing about 7,000 vols.

Though so distinguished by its population, industry, and wealth, Birmingham did not, till after the passing of the Reform Act, enjoy the privilege of sending representatives to the H. of C But the statute referred to put an end to this indefensible anomaly, and conferred on it the right to send 2 mems. to parliament. The parl. bor. comprises, as already seen, a considerable extent of country, including the parishes of Birmingham and Edgbaston, with the hamlets of Deritend and Bordesley and Duddeston cum Nechills. Parl. const. in 1850, 7,311, being universally 10*l.* householders. Annual value of property assessed to the poor rate in 1847, 441,142*l.*

Manufactures. — As a place of manufacture Birmingham has long held an important position, and has never been surpassed in the production of articles of ingenuity and utility: most articles in gold, silver, iron, copper, brass, steel, mixed metals, and glass, are produced here, from the most trifling trinket to the most ponderous and powerful machine. Of the early history of its manufactures we know nothing certain. It is supposed, and with great probability, to have been the place where the arms with which the early inhabitants defended their shores from the invaders under Julius Cæsar were manufactured: a supposition favoured by the fact of moulds for spear, arrow, and axe heads having been found either in the neighbourhood, or at no great distance from it, added to the proof afforded by the enormous mountain of calx or cinder which borders on the parish of Aston, and with regard to which Hutton (*Hist. Birmingham*) remarks, "From an attentive survey the observer would suppose so prodigious a heap could not accumulate in a hundred generations; however, it shows no perceptible addition in the age of man." So far back as the 12th century it was noted for the tanning of leather; but this branch of trade gradually subsided, until at length it became all but extinct under the advance of other and more extensive enterprises, so that in 1795 there was but one person who followed that ancient occupation. Leland, in his *Itinerary* (1540), describes the town as a place inhabited by "smithes that used to make knives and all manners of cutting tooles, lorimers that make bittes, and a great many nailours." Previously to the revolution (1668) the articles chiefly manufactured were heavy iron goods, whereas the principal existing manufacture of Birmingham is hardware. The great growth of this trade may be dated from about 1740, at which epoch the quantity of pig iron made in England and Wales amounted to only about 17,000 tons, whereas it has since increased to at least 1,200,000 tons. The growth of Birmingham to its present pitch of opulence, celebrity and magnitude, is principally ascribable to the invaluable resources of iron, stone, and coal, with which the district abounds, aided by the improvements which have progressively been effected in the means of transit, and in some degree also by its freedom from corporation restraints. The manufacture of the larger description of articles is carried on with increasing vigour and efficiency. Most sorts of cast-iron articles are made; and the largest manufactory for steam engines in the world was established at Soho, in the immediate vicinity of the town, though in the co. of Stafford, by Boulton, the partner of James Watt, the great improver of the steam engine. These works consist of 4 squares, with connecting links of shops. They are not however restricted to the manufacture of those gigantic "steam-labourers," but also produce immense quantities of vases, candelabras, and other descriptions of goods in bronze and or-molu, of exquisite workmanship, with articles of plate and Birmingham ware generally. At these works, too, the principal part of the copper coinage of the country was wont to be executed. There are many iron and brass founderies in the neighbourhood, and there are metallic hot-house manufactories; in one of which a hot-house was made for the late Duke of Northumberland, at an expense of 50,000*l.* Casting, modelling, die-sinking, engraving, staining and cutting glass, and many other branches of manufacture, have been brought to great perfection. There are upwards of 200 distinct occupations pursued in this town (*Committee on Artizans and Machinery*). There are no means of stating the total value of the articles produced, inasmuch as "the manufacture of plated goods, which is carried on in Sheffield and Birmingham, is one of those branches of industry the progress of which we have no means of ascertaining." (*Porter's Progress of the Nation.*) It appears, however, that the exports of hardware from England, principally from these two towns, have risen from 4,288 tons in 1805 to 18,105 in 1848. The value of the articles produced here is, undoubtedly, very great, and probably (including gold and silver plate) does not fall short of 4,000,000*l.*, if it do not exceed that sum. The value of the material, it is to be observed, in most of the Birmingham goods, bears a very small proportion to that of the labour expended upon them; as, for example, in the article of watch springs, where the value of the raw material is not a 200,000th part of the value of the finished article. It is from the extreme subdivision of employment that the superior skill of the workmen and the excellence of the manufacture is mainly deducible. Of the present manufactures, that of muskets is the most ancient, having been introduced in the reign of William III.: since that epoch this branch has been gradually, but greatly, augmenting; and of late years the manufacture of fowling-pieces has been added to it. Until the close of last war the government contract for muskets extended, upon an average, to 30,000 per month. On the cessation of hostilities, this department seriously declined; but it is still of great value and importance. In 1813 an act of parliament was passed, requiring the gun-makers to raise a proof-house; in which, under a heavy penalty, all fire-arms, after being subjected to a severe test, are stamped by the masters and wardens, under whose inpection the business is conducted. The manufacture employs 2,000 persons. Swords also are a principal article of manufacture; but of course the demand for them is not now so great as during war. The metal button and buckle trades were introduced into Birmingham shortly after the revolution, and continued to flourish for nearly a century. But these trades have been greatly impaired; partly in consequence of the emigration of artizans to the Continent, who carried with them a knowledge of the art (*vide Report on Artizans and Machinery*), and partly, and principally, from a change of fashion. The button manufacture is still, however, most extensive; in proof of which may be adduced the fact, that a single manufacturer had in his workshop, in 1834, no fewer than 10,000 double sets of cut-steel dies, for livery buttons only. (*Treatise on Manufactures in Metal, Lardner's Cyclopædia*, vol. iii. p. 393.) The manufacture of Florentine buttons has also been introduced, and is now extensively carried on. In 1841, the various branches of the button manufacture employed 1324 persons in Birmingham, and 1637 in the co. Warwick. The decline of the buckle manufacture may be dated from 1781, at which period shoe-ties began generally to be worn; and notwithstanding the efforts of his late majesty George IV., when prince of Wales, to stem the tide of fashion, it proved too strong for him, and the manufacture was gradually, but completely, destroyed. The file trade, which at one time flourished in Birmingham, has nearly all gone to Sheffield, in consequence of the superior advantages possessed by the latter for that manufacture; while, on the other hand, and from a similar cause, much of the plated trade of Sheffield has migrated to Birmingham. The making of silver pencil-cases is carried on to a great extent, and the number produced is increasing every year. The manufacture of goods in brass, or brass founding, introduced about 1748, has been greatly extended and improved within the present century, and comprises a large number of articles both useful and ornamental; including, among others, lamps, chandeliers, candlesticks, vases, fenders, fire-screens, handles for locks, doors, knockers, and many other articles. It may, perhaps, be now reckoned the staple trade of the town, and employed in 1841 no fewer than 3,268 individuals, almost all males. Of lamps and chandeliers Birmingham has almost the exclusive manufacture. In 1772, in consequence of the great amount of her plated manufactures, an act of parliament was passed, appointing wardens and an assay master. It has been reckoned that the consumption of silver in the plating of spoons, knives, forks, plates, dishes, sugar-basins, bread-baskets, buttons, chains, thimbles, and a variety of other articles, cannot be less than about 25,000 ounces a year, while a much greater weight, perhaps, at least 130,000 oz., is used in the manufacture of pencil-cases, thimbles, and an infinite variety of trinkets. The quantity of silver plate made is comparatively small. Latterly, the plating business has experienced a check by the substitution of articles made of albata and other factitious metals; which are not only very cheap, but often very beautiful. The production of gold plate is limited, amounting, in 1836, to 1,792 oz., and in 1838, to above 2,000 oz.; but, like silver, gold is extensively used in gilding the various articles before enumerated. Indeed, to such a pitch had the art of gilding been carried in 1818, that, according to Hutton, three pennyworth of gold was sufficient to cover a gross of buttons. It may interest our fair readers to know that upwards of 25,000 wedding-rings have been marked at the assay office in a single year. There is a considerable trade, too, in the manufacture of pins, Mr. Phipson being the largest producer of them in the kingdom. Any article, indeed, how trivial soever it may appear, if it get into extensive demand, may become the subject of a large business. The steel pen is an example of this.

We are not aware of the exact period when pens made of steel began to be substituted for quills; but down to 1818, the manufacture was confined within very narrow limits. Since then, however, the quality of the pens has been vastly improved, and their price very greatly reduced, and the demand has in consequence been extended in a degree not easily to be imagined. At present (1850) it is believed by the best informed parties that above 220,000,000 pens are annually manufactured in Birmingham. The principal manufacturer employs about 400 hands, and consumes annually 85 tons of fine sheet steel, each ton producing about 10,000 gross of pens! The art of making nails by hand still keeps its ground; those so made being considered superior to those made by steam-power. The wages paid for this work are low, and the employment slavish. Japanned articles, of great beauty and variety, are extensively manufactured. The best trays, baskets, and other articles of a similar description, are made of *papier maché*, the making of which is very largely carried on at the works of Messrs. Jennens and Bettridge, where may be seen every article in this department of manufacture. The glass trade is also very extensive. Messrs. Chance and Hartley have the largest manufactory of crown glass in the empire; and there are other factories on a smaller scale.

Mr. Burke said that Birmingham was the "toy-shop of Europe," and the statement seems to be perfectly well founded. An immense quantity of very beautiful articles, as seals, brooches, clasps, and other trinkets, are made of gold, silver, gilt and plated metal, and polished steel. The impressions on the seals, especially those made on glass, in imitation of engraving on stone, are very well executed. The expense of engraving them on real stones would not be less than 30*s*.: but they are thus produced for the trifling sum of 1½*d*.; and their production affords employment to great numbers of hands. This trade, which has not existed more than 50 or 60 years, has greatly increased within the last 30 years. The toy and trinket trade is astonishingly great; and the transactions are often immense, in articles of comparative insignificance. This is evinced by the fact of one manufacturer having received an order for the *eyes of dolls* to the extent of no less than 500*l*.

The manufacturing district, of which Birmingham is the centre, includes a considerable tract to the N.W. of the town, embracing the southern part of Staffordshire, with the extreme northern border of Worcestershire and a detached part of Salop. Within this district are the populous towns of Dudley, Wolverhampton, Bilston, Walsall, Wednesbury, and Stourbridge. Independently of the production of the crude material, in which most of these towns are extensively engaged, different branches of the hardware manufacture are carried on in them, as the nail and japan-ware trade, bridles, and stirrup plating, coach and harness ornament making, and saddlers' ironmongery. The japan ware is mostly confined to Bilston and Wolverhampton, as is the lock trade to the latter, and the saddlers' ironmongery to Walsall, Wolverhampton, and Wednesbury. But all these departments are carried on in Birmingham, though not to so great an extent as in these separate places. The inhabitants are distinguished by industry, ingenuity, and invention. The mode of conducting business in Birmingham has undergone a considerable change from what it formerly was. There are now but few large capitalists. With the exception of the Soho works, and a few other large manufactories, the business is conducted on a small scale in innumerable divisions. The greater number of the manufacturers have only very limited capitals; and many of them are merely agents, or middle men, possessing a capital of not more than 500*l*. or 600*l*. The system generally acted upon is as follows: — The workmen, each in their particular line, undertake to execute the orders received by the merchants and agents settled in the town; which they accomplish by the following means: A building, containing a great number of rooms of different sizes, is furnished with a steam-engine. These rooms or shops being all supplied with shafts, lathes, benches, and such other necessary conveniences as are requisite for the work to be done; and when an order is given to one of these workmen to execute, he hires such one or more of these rooms as the occasion requires, and stipulates for a certain amount of steam-power, and continues the occupant of this apartment till the order be finished. (*Porter, on the Progress of the Nation.*) In 1786 there was only 1 steam-engine at work, which was of 25 horse-power, and was used for grinding flour. In 1803 there were 10 engines, producing 379 horse-power, of which 260 horse-power was used in manufactures. In 1823, the number of engines was 66, the horse power 1,222. In 1835 the number of engines was 169, and the horse-power 2,700; of which 275 was used in grinding flour, 1,770 in working metals, 279 in pumping water, 87 in glass grinding, 97 in working wood, 44 in paper-making, 37 in grinding clay, 61 in grinding colours, and 50 in sundry other occupations. In 1849 the steam power employed in the town was estimated as equal to 5,400 horses, exclusive of that employed in its vicinity. Women are extensively employed in polishing the goods in the glass toy branch, and in all parts of the manufactures of the town except brass-founding. Boys are principally engaged by the outworkmen and undertakers, as apprentices, and receive a progressive amount of wages, varying from 3*s*. to 10*s*. per week, according to their ages and occupations; they get their food at home, and in some instances work in the houses of their parents. Some of the small manufacturers have accumulated large fortunes. The condition of the work people is, on the whole, favourable. It is impossible to give an average of the wages paid in different trades, they are so very various; for instance, in the making of buttons, a great number of hands are employed, — as, the piercer, the cutter, the stamper, the gilder, and the burnisher, — who all receive different wages; and so also in the other departments. For work, which 20 or 30 years ago from 24*s*. to 30*s*. a week wages were paid, not more than 12*s*. to 14*s*. are now received; but as the workman executes more work, and as provisions are now much lower than during the war, he is probably better off.

Birmingham has three large joint stock banks with numerous bodies of proprietors. They issue notes of the Bank of England, which has a branch in the town. It supports four weekly newspapers. Like all manufacturing towns, Birmingham has suffered more or less at different times from pauperism. The amounts that have been paid in poor-rates were, in 1776, 5,895*l*. Medium average, for 1783-4-5, 11,385*l*.; 1803, 18,680*l*.; 1831, 55,825*l*.; 1834, 59,512*l*.; 1837, 39,658*l*.; and 1849, 81,871*l*. Friendly societies have existed for a lengthened period in this town. In 1848, 213 of these societies were enrolled, comprising about 30,000 members. In 1827, a savings' bank was opened, and in 1829 it had deposits to the amount of 43,881*l*. In 1848, the depositors were 18,252, and the sum invested 321,165*l*. The police force consisted in 1849 of a superior intendent, 5 inspectors, 6 sub-inspectors, and 282 constables. In 1845 a new borough gaol was commenced, a little way out of town. It is on a large scale, and cost 50,000*l*.

This town is of great antiquity. In *Domesday-book*, in which occurs the first authentic notice of the place, it is spelt Bermengeham. Its history, previously to the Norman conquest, is extremely obscure. Indeed, until the time of Charles I., little is recorded of it, and that little of scarcely any interest. In the reign of that monarch it took the side of the parliament, and warmly defended the cause it espoused. In 1665 or 1666, the plague committed frightful ravages. In 1791, high church and tory politics seem to have been very prevalent; and a riot having arisen out of a festival in commemoration of the French revolution, much property was destroyed, including the houses and libraries of the celebrated, but then obnoxious, Dr. Priestley, and of Mr. Hutton the historian. The loss on this occasion, amounting to 60,000*l*., was partially made good to the sufferers by act of parl. The sentiments of its inhabitants have, however, undergone a great revolution in the interval, and from one extreme they appear to have gone to the other. Of late years they have stood prominently forward as the advocates of ultra-liberal opinions, and have identified themselves as the supporters of those dangerous and easily abused institutions, called political unions. The opinions of those who think that the standard of the currency should be degraded, have also, strange to say, found favour in this town; and their principal expounders have latterly been said to belong to the "Birmingham School." The canals, the construction of which began in the latter half of last century, that connect the town with the metropolis, Liverpool, Hull, Bristol, &c., have done a great deal to increase the wealth, manufactures, and population of the town.

Birmingham is now become a grand centre of railway travelling. It communicates with the metropolis by the Great North Western line in from 3 to 4½ hours, with Dublin in from 10½ to 13 hours, and with Edinburgh and Glasgow in from 9 to 10¾ hours. It may be worth while to mention, as evincing the vast importance of the communication by railways to the trade and accommodation of the district, that while in 1829, only 400 tons of fish were brought to Birmingham, the imports of fish in 1845 amounted to 3,910 tons! Markets on Mondays, Thursdays, and Saturdays, and fairs on the Thursday in Whitsun-week, and on the Thursday next before Michaelmas-day, for cattle, sheep, horses, and hardware generally. Notwithstanding the smoke of its innumerable furnaces and forges, Birmingham, owing, perhaps, to the dry, sandy, soil on which it stands, is eminently salubrious. The deaths, in proportion to the number of the inhabitants, are fewer than in Liverpool or Manchester. The botanical gardens in the vicinity, supported by public subscription, cover a space of 14 acres, and are extremely well laid out. The most celebrated seats in the vicinity are Hagley, the seat of Lord Lyttleton, 12 miles distant; Enville, the seat of the Earl of Stamford, 18; and the Leasowes, the creation of Shenstone, 6. (*Hutton's Hist. Birmingham; Parl. Papers; Allen's Excellent Guide to Birmingham;* and *Private Inform.*)

BISACCIA, a town of Naples, prov. Princip. Ultra, on a hill, 12 m. N.E. St. Angelo de' Lombardi. Pop. 5,000

It has several churches and an hospital; and is supposed to occupy the site of the ancient Romulea, mentioned by Livy (lib. x. cap. 17.). The bishopric, of which Bisaccia was formerly the seat, has been united to that of St. Angelo de' Lombardi.

BISCARI, a town of Sicily, prov. Syracuse, m. N.W. Modica. Pop. 2,447, having declined 253 between 1798 and 1831. It is of modern date, having been founded in the 15th century.

BISCAY, a district in the N. of Spain, comprising Biscay Proper, Guipuzcoa, and Alava, the three Basque provinces, called by the Spaniards Pais Vascongadas, being part of the Roman provs. of Vasconia and Cantabria. These provs. extend from 1° 46′ to 3° 20′ W. long., and from 42° 25′ to 43° 27′ N. lat., having E. France and Navarre; W. and S. Burgos, and other parts of Old Castile; and on the N. the Bay of Biscay. Their mean length is about 60 m., and their breadth about 50 m. Area estimated at 2,963 sq. m.; but their limits have varied considerably at different periods. The country may be considered as a prolongation of the declivity of the Pyrenees to the boundaries of Castile. It is broken into highly picturesque glens and valleys, interspersed with some fertile plains. The district has marble of various colours, lime and sandstone, a profusion of iron ore, and some copper and gypsum of good quality, as well as salt-mines, and saline and sulphurous cold and hot springs.

The following is an account of the area of each prov., and of its pop. in 1803, and (according to Miñano) in 1826: —

Provinces.	Area.	Pop.	
		1803.	1826.
Biscay Proper -	1,264 sq. m.	111,433	132,001
Guipuzcoa - -	620	108,599	126,789
Alava - - -	1,079	67,523	84,139
Total - -	2,963	287,555	342,929

1. Biscay Proper, or the lordship of Biscay, has on the N. the ocean; on the E. Guipuzcoa; on the S. Alava and Old Castille; and on the W. also Old Castile. Under the new division of Spain, made by the Cortes in 1822, it forms part of the province of Bilbao. The city and territory of Orduña, which are insulated by Alava and Old Castile, belong to it. Bilbao is the seat of government; and there are also Durango, Guernica, Balmaseda, and a few other small towns. Some of the mountains look as if they consisted of a congeries of hills heaped on each other. Gorvega is of this description: it has, on its summit, a considerable extent of level land. Principal rivers, Nerva, Ansa or Ibaizabal, Cadagua, Mundaca, and Lequeitio. The coast is abrupt, and deeply indented by bays formed by the mouths of the rivers, and by a number of small harbours. The iron mines, which are frequent, and produce some of the best metal in Europe, particularly that at Somorrostro, the ore of which yields above a third part of iron. According to Antillon, the annual produce of this mine used to be 800,000 quintals. Climate humid, but not insalubrious. Houses good, and conveniently built; the upper parts, which were anciently of wood, are now of stone. There are many very ancient châteaux, mostly flanked with strong towers, that belong to the heads of families. With the exception of the towns named above, and a few others, the inhab. live dispersed in *caserios* of five or six houses each, with lands attached, which are mostly cultivated by the owners, in whose families they have remained for centuries, it being reckoned discreditable to part with the paternal property. Where land is hired, the rent, which is paid in money, usually amounts to about a third part of the value of the produce. The soil is mostly a stiff clay, and would produce little but pasturage or wood, were it not for the patient industry of the inhabitants, who break it up with a curiously shaped implement called a *laya;* but in lighter soils, where wheat only is grown, they use a strong plough. As arable land is scarce, they break up patches on the slopes of the mountains, where the ground, not being deep enough for the growth of large trees, is covered with thick shrubs. These they grub up and burn, and spreading out the ashes, get fertile crops of wheat the first three years; barley, or rye, the fourth; flax, the fifth; and good pasturage till the ground be again overgrown by brambles. They do not, however, notwithstanding their industry, reap grain enough for their consumption, but supply the deficiency by importations from Alava. Next to agriculture, the chief employment of the peasantry is in the making of charcoal for the iron foundries, from the wood cut in the forests, with which the sides of the mountains are covered. These contain plantations of excellent white oak, and in the glens and valleys are numerous groves of grafted chestnuts, which furnish a considerable article of export. The grapes are not good: there is a great profusion of apples, with pears, cherries, figs, &c. Cattle small and hardy; sheep difficult to rear, from their getting entangled in the brambles; the wild boar is occasionally seen, as are wolves and bears; though both are very rare, especially the last. Fish abundant and excellent.

The staple business of Biscay Proper, and the other two provs., is the manufacture of iron, which is made into a great variety of tools and implements; but owing to the suspension of work in the royal arsenals, the loss of the American colonies, and the introduction of foreign iron, as well as the long wars of which this country has been the theatre, this important branch of industry has greatly fallen off. The Spanish Academy of History say that, in 1802, when their account of Biscay was compiled, there were 180 iron works, producing annually 80,000 quintals of iron, of 155lbs. each, which, when Miñano wrote (1826), were reduced to 117 works, yielding only 45,000 quintals. Copper boilers were also made at Balmaseda, and factories for cordage and rigging, made of hemp brought from Aragon and Navarre, were established in various parts; and tanneries at Balmaseda and Bilbao; but these, also, are much fallen off. The other manufactures are those of coarse porcelain, table and other household linen, fine and coarse hats, braziery, carpentry and joiners' and cabinet work, straw and rush chairs, tallow candles, &c. The people near the coast occupy themselves a good deal in fishing, and the exports of dried fish are sometimes very considerable. (See *Diccionario por la Real Academia*, ii. 487.; *Miñano*, x. 41—44.)

2. Guipuzcoa has the seignory of Biscay on the W.; Alava on the S.; Navarre and the Bidassoa, which separates it from France, on the E.; and the Bay of Biscay on the N. Since 1822 it has been called the prov. of St. Sebastian. The country is rough and mountainous. The highest mountain on the frontiers of Alava rises 1,800 ft. above the sea, and contains some salt mines and saline springs. The prov. is watered by the Deva, Urola, Oria, &c., and the Bidassoa, which all run N. into the Bay of Biscay. The coast is rocky, and the ports insecure, with bars at their entrances, except Pasages, which has deep water, and is spacious and well fortified. At Mondragon, on the Deva, is a celebrated iron mine; the ore yields no less than 40 per cent. of metal. At Vergara is a college, where the young nobility are educated, and other useful institutions. On the N. of this, at Placencia, is a royal manufactroy of fire-arms.

Guipuzcoa yields to no part of Spain in the magnificence of its ecclesiastical and other buildings. The roads are well paved, and kept in good repair; the inns commodious, and well conducted. Climate soft and temperate; but, like the other provs., it is subject to heavy rains and violent storms, both in summer and winter. The prov. produces most kinds of grain and other necessaries, but not in nearly sufficient quantities for the support of its inhab. Fruits and other natural products nearly the same as in Biscay. The fish, including salmon, are excellent; and tunny, rays, and sardines, are supplied to the neighbouring provs. The grapes, though indifferent, furnish the light wine called *chacoli*. A good deal of cider is also produced. The growth of timber in the woods and plantations is not equal to the consumption of the iron works. Agriculture nearly the same as in Biscay.

Iron may be had in any quantity. According to Antillon (*Géographie Physique*, p. 85.), 100,000 quintals used to be annually wrought up into hinges, nails, horse-shoes, boilers, kitchen utensils, arms, anchors, working tools, &c. They make, also, fishing tackle, rigging, tanned leather, coarse cloths of goats' hair, coarse linen and sail-cloth. Ship-building has lost its activity, but some vessels are fitted out for the cod and whale fisheries.

Guipuzcoa imports what grain it wants from Alava; wine, from Navarre and Rioja; soap, oil, flax, &c., from Castile and Andalusia; woollens, cottons, cloths, silks, jewellery, and articles of fashion, from England, Holland, and France. It exports little native produce but iron, hardware, and fruits; but wool, and sometimes corn, are brought from the interior to its ports for shipment. Formerly, it had a considerable coasting trade to the shores of the Mediterranean, and a large share of the whale fishery and the cod fishery at Newfoundland. The famous Caracas Company originated here. Its commerce has fallen off since 1809. Being a frontier prov., it admits the royal troops to garrison its strong posts. (*Diccionario por la Academia*, i. 321.; *Miñano*, iv.; *Antillon*, p. 85.)

3. Alava has the seignory of Biscay and Guipuzcoa on the N.; Navarre on the E.; and Old Castile, from which it is divided by the Ebro, on the S. and W. It now forms a principal part of the prov. of Vitoria, the name of its chief town. The other towns are Salvatierra, Lequiana, and Gamboa. It is surrounded and intersected by mountains, similar to those in the other Basque provs.,

and affording the same products of iron, black and red marble, gypsum, &c. They are covered with oaks, wild apple trees, thorns, box, yews, limes, hollies, &c. The crops of grain exceed the demand of the inhab. Climate cold and damp, with long winters, frequent and heavy rains, snow, frosts, fogs, and mists; but it is healthy, and the inhab. strong and long-lived. Agriculture is the chief pursuit. In some parts they plough with oxen, as in Navarre; and in others, use the *laya*, as in Biscay and Guipuzcoa, weeding the ground repeatedly till it looks like a garden. The iron-works are greatly reduced in consequence of the destruction of the forests which supplied them with fuel, and of the weight of the duties paid on iron taken into Castile. The manufactories of hats, shoes, boxes, &c., are also in a state of decay; but a good many hands are occupied in the manufacture of table linen and coarse cloths. They also make a good deal of salt. (*Diccionario por la Academia*, i. 13.; *Miñano*, i. 54.; *Antillon*, p. 92.; *Journal of the British Legion by a Staff Officer*, p. 155.)

The Basques have a peculiar language, which is undoubtedly of great antiquity. Lécluse, in his *Grammaire Basque*, endeavours to trace it to the Hebrew, as a dialect of the Phœnician, brought to Carthage, and thence to Spain; and attempts by its means to interpret the speech of Hanno in Plautus! From the supposed prevalence of Basque names of mountains, plains, forests, rivers, and towns in every part of Spain and Portugal, it has been concluded that the Basques once pervaded the whole peninsula. They have no alphabet of their own, but learned men write the language with Roman letters. Its chief characteristics are its similarity to the Hungarian and Turkish, in its inversion of the order of its particles, and its unparalleled variety of verbal inflections. Their only books are the New Testament, printed at Rochelle in 1571, some devotional tracts, catechisms, national poetry, dictionaries, and vocabularies. They count by twenties up to a hundred, and seem originally to have had but three days in their week, there not being ancient names for more. Few natives, except the gentry, know any language other than the Basque. It is also spoken, with some variation, in part of Navarre, as well as by the French Basques. (*Lécluse, Grammaire Basque*, p. 2, 3. 14. 26. 28. 219.; *W. Humboldt, Prüfung der Untersuchungen über die Urbewohner Hispaniens, &c.*)

The government of these provinces has had, from the earliest times, a republican form. The people choose the members of the *ayuntamientos*, or municipal corporations, who, again, elect the deputies to the provincial assemblies, which meet every two years in Biscay, once a year in Guipuzcoa, and twice a year in Alava, to provide for the interior administration of their respective provinces, to vote the supplies, and to determine the appropriation of the money granted. Each assembly chooses a magistrate, in whose hands the executive power is placed when the *juntas* are not sitting, and who treats on equal terms with the *corregidores*, or ambassadors, appointed by the king of Spain to reside in each prov., but who must not, on any account, be natives of these provinces, nor exercise any authority in them. The people choose, also, the tax-collectors, and pay their civil officers moderate salaries for their services. Their taxes are light, and levied according to a valuation, which is frequently modified. Their ancient privileges, or *fueros*, order that they shall not be taxed by the Spanish government, except in a small sum, paid by Guipuzcoa and Alava, continuing at about 540*l.* sterling, the amount paid in the 14th century. But Biscay is free from this, and pays a larger sum every four or five years under the name of *donativo* or gift. They have no monopolies nor custom-houses, every article being imported duty free. They are also free from the conscription and impressment to which every other part of Spain is subject; but, in case of foreign invasion, they are bound to defend their frontiers without the king's troops. Another of their important privileges is that of being exempted from torture, or threat of torture, direct or indirect, on any pretence whatever, within Biscay or out of it. (*Fuero Sit. Ley*, xii.) On the other hand, they have always been prohibited from trading directly with the Spanish colonies, and are shut out from a free trade with the rest of Spain, by heavy duties and a line of custom-houses all along the Ebro; and are also obliged to resort to the court of chancery at Valladolid, for the decision of their lawsuits. Their financial system seems to have been well managed, since the price of the Alava 3 per cent. debt. before the breaking out of the present civil war, was 93; and in Biscay and Guipuzcoa, the extra taxes imposed during the French invasion were being refunded to the contributors. Foreigners, not of the Catholic religion, cannot establish themselves in any line of business in the Biscay provinces. (*Diccionario Geografico por la Real Academia de la Historia*, Madrid, 1802, ii. 488--510.; *El Fuero Privilegios, &c. de Vizcaya*, Medina del Campo, 1575; *Spain past and present, Monthly Chronicle*, November, 1838, p. 440.)

The Biscayans being devoted to agriculture, navigation, and commerce, and having little inequality of condition, possess those virtues that are seldom found united with ease and riches acquired without toil. They are honourable, brave, cheerful, and courteous, without being mean. They are also docile, when well treated; but, if roused by ill usage, are stubborn and inflexible. In general, they retain the dress, customs, and simplicity of manners, as well as the institutions of the 13th century; and pride themselves on their independence, and the antiquity of their lineage. The women, who are robust, assist the men in their severest labours. Not only the in-door, but the out-door, work of the house is done by female servants; and even señoras, delicately brought up, may be seen in their walks climbing the rocks with no other protection than a parasol. (*Diccionario por la Real Academia*, ii. 484.; *Miñano*, i. 326.)

They are very fond of dancing, and assemble every Sunday afternoon to enjoy that amusement. Some of their dances are of a grave, majestic, and ceremonious character; others, gay and lively. They also delight in bull-fights, and play much at a game with a ball, called *pelota*, for which public sites are every where appropriated. At their weddings they discharge guns and pistols, on entering and quitting the church. Some villages distribute bread and cheese, wine and walnuts, at their funerals; some beg money for masses for the soul of the deceased. They are sober, but are fond of good living. They dress with a blue cap, red sash, and *alpargates*, or hempen sandals, tied on with blue or red ribands; and in wet weather, *espadillos*, or brogues of hide. The women dress as in Castile; the married wear a thin muslin handkerchief, tied on the head, like the Irish; the girls wear their hair braided down their backs. There are theatres at Bilbao and Vittoria, where plays and operas are performed; and the upper classes follow the fashions of France and the rest of Europe. (*Diccionario por la Real Academia de la Historia*, i. 326.; *Bowles*, p. 306.; *Henningson's Campaign in Navarre and the Basque Provinces*, p. 72.)

Little is known of the early history of the Basques before the time of the Romans, or during the ascendancy of the Goths and Saracens; by all of whom the country was partially over-run. The Spanish Academy of History says, there is no reason to suppose that any family ever had that absolute sovereignty over it that has been supposed, but that its rulers were subject to the Spanish kings of Asturias, Navarre, and Castile, like the rest of the principal señors of the kingdom, with the exception of that difference which arose from the great power of the family of Haro, who held the lordship for many years. In 1332, the deputies of the three provinces offered the dignity to Alphonso XI., king of Castile, who accepted the lordship; but before the grant was executed, the most formal reserves were made of their franchises and privileges, and the king was obliged to sign a treaty, one of the articles of which was, that the Castilian monarch should never possess any village, fortress, or house, on the Basque territory. Their country has been the scene of frequent and long-continued wars with foreign nations, and is now the principal theatre of a destructive civil conflict. Though republican in all their institutions, they are much attached to the Spanish dominion. (*Diccionario por la Academia*, ii. 488—508.; *Monthly Chronicle*, art. *Spain past and present*, Nov. 1838.)

BISCEGLIA, a sea-port town of Naples, prov. Terra di Bari, on a rocky promontory, on the Adriatic, 12 m. E.S.E. Barletta; lat. 41° 14′ 34″ N., long. 16° 31′ E. Pop. 10,000. It is surrounded by lofty stone walls, and is ill built: it is the seat of a bishopric, has a cathedral, 2 collegiate and some other churches, convents for both sexes, a public school, an hospital, a *mont-de-piété*, and a fine theatre. Its port admits only small vessels, and it has little trade. It has numerous reservoirs and cisterns cut in the solid rock, and arched over, for the collection and preservation of the rain water, the place being entirely destitute of springs. It is supposed by some to be the *Natiolum* of the Peutingerian tables, but other critics contend that its ancient name was *Vigiliæ*. Swinburne says that it is destitute of any remains of antiquity. (*Swinburne's Two Sicilies*, i. 185. 4to. ed.; *Craven's Naples*, p. 93.; *Dict. Géographique, &c.*)

BISCHOFSBURG, a village of the Prussian States prov. E. Prussia, on the Dimmer, 15 m. S.S.W. Rossel. Pop. 2,000.

BISCHOFSTEIN, or BISCHSTEIN, a town of the Prussian States, prov. E. Prussia, reg. Königsberg, on a marshy lake, 47 m. S. by E. Königsberg. Pop. 2,200. It has 2 Catholic churches, a high school, fabrics of cloth and stockings, with distilleries, breweries, &c.

BISCHWEILLER, a town of France, dép. Bas Rhin, cap. cant., on the Moder, 15 m. N. Strasburg. Pop. 5,854. It was once fortified; but the works were destroyed by the Imperialists in 1706. It manufactures coarse woollen and linen cloths, woollen gloves, pottery, tiles, and bricks, and has woollen mills, madder mills, tanneries, &c.

BISENTO, a town of Naples, prov. Abruzzo Ultra I., cap. cant., in a valley, 10 m. N.W. Civita-di-Penne. Pop. 2,000. It has several churches, a dyework for cloth, and fairs on May 16. and 17.

BISHOPS-AUCKLAND, a market-town and township of England, co. Durham, N.W. div. Darlington ward, par. St. Andrew Auckland, 10 m. S.W. Durham. Area of township, 2,570 acres. Pop. 2,859, of which the town may have about 2,000. The latter, which is well built, stands on an eminence, having the Wear on the N., and the Gaunless on the S. E. The par. church is about 1 m. distant; but there is a chapel of ease in the town, and the Methodists, Independents, Quakers, &c. have also chapels. There is here a grammar-school founded by James I., and farther endowed by several prelates; a school on the Madras system for 200 boys, and a school for girls, both founded by Bishop Barrington, &c. The town owes its importance, and, perhaps, existence, to its having at its N.E. end the magnificent castle or episcopal palace of the bishop of Durham. The building is of great extent, has a fine chapel built by Bishop Cosins, and some good pictures. The park includes about 800 acres.

BISHOP'S CASTLE, a par., bor., and town of England, co. Salop, hund. Parslow, 144 m. N.W. by W. London. Area, 6,000 acres. Pop. of par., 1821, 1,870; 1831, 2,007; of which the town had 1,729. It stands on the slope of a hill, near a small branch of the Clare. There are some good houses, in detached situations; but the greater part of the town is irregularly, and meanly built, of unhewn stone. The church (originally a fine structure of the Norman period) was partly destroyed in the last civil war, and subsequently restored. There are several dissenting places of worship, and a free school, educating 50 boys and girls. The town-hall, built in 1750, contains prisons for criminals and debtors: both this and the market-house are good brick buildings. A weekly market is held on Friday, and annual fairs, Feb. 13., Friday before Good Friday, Friday after May 1., July 5., Sept. 9., and Nov. 13. That in May is a pleasure, and that in July a wool fair; the rest are for cattle. Both the fairs and markets are much resorted to by the Welsh, who are the chief supporters of the town. The ann. value of the real prop. in 1843 was 10,532*l.* A charter of the 26th of Elizabeth conferred on the corporation the privilege of returning 2 mem. to the H. of C., which it exercised till the passing of the Reform Act, when it was disfranchised. Its local limits were extensive, having a circ. of 15 m. Its name is derived from an ancient castle of the bishops of Hereford, which has been long demolished: the site of it, however, may still be traced.

BISHOP'S STORTFORD, a par. and town of England, co. Hertford, hund. Braughin, on the Stort, 26 m. N.N.E. London. Area, 3,080 acres. Pop. of par., 1821, 3,358; 1831, 3,958. The greater part of the town stands on the slope of a hill, on the W. side of the river, and consists of two lines of street, intersecting each other at right angles, and forming a cross. It is on the whole well built, and has several good inns. The church stands on an eminence, and has a fine tower. There is a national school for 300 children, and a public library. It has an excellent market-house (built at the intersection of the streets, in 1828, with an Ionic front), which contains a large hall, used as a corn-exchange, over which are assembly and magistrates' rooms. The weekly market is on Thursday, and three annual fairs are held on Holy Thursday; Thursday after Trinity Sunday, and 10th October. The malting and corn trades constitute the chief business of the town, for which there are convenient wharfs along the river and the canal (both of which are contiguous to it); and being in the centre of a good corn district, the trade is considerable. There is also a silk-mill, which employs many hands. The ann. value of real prop. in 1815 was 8,930*l.* Under the Poor Law Amendment Act it is the union town for 20 pars.: its own rates average 1,231*l.* 1*s.* Petty sessions are held every fortnight by the co. magistrates: it is also a polling town for Herts.

BISHOP'S WALTHAM, a par. and town of England, co. Southampton, div. Portsdown, hund. of Bishop's Waltham, 62 m. S.W. by W. London. Pop., in 1821, 2,126; 1831, 2,181: houses at the latter date, 438. It is situated by the Hamble (a small stream rising 1 m. from the town) in the vicinity of Waltham Forest. It has a good church, an endowed charity school for 36 boys, and a national school for 160 boys and girls. It has a weekly market on Friday, and annual fairs, on 2d Friday in May, July 30., and Friday following Old Michaelmas-day. Leather-dressing is the chief trade of the town, which is mostly disposed of at its own fairs, and those of the neighbourhood. There is also some malting business carried on. It is a polling town for the northern division of the county. The ann. value of real prop., in 1815, was 4,809*l.* The ivy-covered ruins to a fine old castle are in the immediate vicinity. It originated in the reign of Stephen, but owed its subsequent magnificence to William of Wykeham. It was demolished by the parliamentary army in the last civil war.

BISHOP-WEARMOUTH. (*See* SUNDERLAND.)

BISIGNANO (an. *Besidiæ*), a town of Naples, prov. Calabria Citra, cap. cant., 15 m. N. Cosenza. Pop. 10,000. It is defended by a castle situated on the highest of the 7 hills by which it is surrounded; is the seat of a bishopric; has a fine cathedral, numerous churches, a nunnery, several convents, 2 hospitals, and a house of refuge. Large quantities of silk-worms are reared in the vicinity.

BISSAGOS, a group of small volcanic islands, on the W. coast of Africa, opposite the embouchure of the Rio Grande, between 10° and 12° N. lat., and 15½° and 16½° W. long. The largest is about 15 m. in length, and some of them are uninhabited. The inhab., who are described as brave and treacherous, raise some maize, but are principally dependent on their cattle, goats, and fishery.

BISZTRITZ, a free royal town of Transylvania, cap. district, in a fine valley, on the Bisztritz; lat. 47° 5′ 46″ N., long. 24° 32′ 18″ E. Pop. 6,500. It is fortified, has a gymnasium, two schools, and two hospitals, with a considerable trade in cattle.

BITCHE, a town and fortress of France, dép. Moselle, cap. cant., at the foot of the Vosges, 15 m. E.S.E. Sarguemines. Pop. 3,077. The fortress or citadel stands on an almost inaccessible rock rising from the middle of the town. The interior of the rock is vaulted and casemated; the fort mounts 80 pieces of cannon, may be garrisoned by 1,000 men, is well supplied with water, and is looked upon as next to impregnable. The town, formerly called Kaltenhausen, is built at the foot of the rock, surmounted by the citadel, near a large shallow lake or mere, where the Horne has its source. It produces different sorts of fine pottery. The glass-works of Munsthal, in the vicinity, furnish flint glass of the value of 600,000 fr. a year. (*Hugo*, art. *Moselle*.)

BITETTO, a town of Naples, prov. Terra di Bari, in a very fertile plain on the Adriatic, 10 m. S.W. Bari. Pop. 5,000. It is the seat of a bishopric; has a cathedral, remarkable for its pictures and marbles, and several convents.

BITONTO (an. *Butuntum*), a town of Naples, prov. Terra di Bari, cap. cant., in a fine plain, 10 m. W.S.W. Bari; lat. 41° 13′ N., long. 16° 42′ E. Pop. 12,000. Swinburne says that it is a fine town, and that the inhabitants are much easier in their fortunes, and more polished and improved in their manners, than those that dwell in the cities along the coast. It is the seat of a bishopric; has a fine cathedral, 12 parish churches, convents for both sexes, an hospital, and a nunnery. The environs produce a wine called *sagarillo*, said to be excellent, and in which the town trades extensively. In 1734 the Spaniards, under the Count de Mortemar, gained, in the vicinity of this town, an important victory over the Austrians. (*Swinburne's Two Sicilies*, i. 397.; *Rampoldi*, &c.)

BITRITTO, a town of Naples, prov. Terra di Bari, 7 m. S. Bari. Pop. 2,500. It has a fine collegiate church, and its territory is celebrated for its wines and almonds.

BITTBURG, a town of the Prussian States, prov. Lower Rhine, cap. circle, 18 m. N.N.W. Treves. Pop. 2,000. It has a castle, two Catholic churches, and some trade in corn and cattle.

BITTERFELD, a town of the Prussian States, prov. Saxony, reg. Mersebourg, cap. circle, 16 m. S. Dessau. Pop. 3,400. It was founded by a colony of Flemings, whose descendants are said to hold their property in common, and to be governed by peculiar laws. It has fabrics of cloth and earthenware.

BIZERTA, or BENZART (an. *Hippo Diarrhytus*, or *Zaritus*), a sea-port town of Tunis, at the bottom of a deep gulph or bay (*Sinus Hipponensis*), on a channel uniting the gulph with an internal lake or lagoon, 40 m. N.W. Tunis; lat. 37° 17′ 20″ N., long. 9° 50′ 35″ E. Pop. variously estimated at from 8,000 to 14,000. It is about 1 m. in circ., and is defended by walls, and two castles; but as the latter are commanded by a height within a short distance, it could oppose no effectual resistance to an army attacking it by land. Though it has a good appearance at a distance, it is, like most other Turkish towns, really mean and filthy. Its port, which now only admits small vessels, was formerly one of the best in the Mediterranean, and might easily be restored, in this respect, to its ancient pre-eminence. The channel on which the town is built has in parts five and six fathoms water, and it might, with no great labour, be every where deepened to that extent. The lake, or inner harbour, is of great extent, with a depth of water varying from ten to fifty fathoms, and is capable of accommodating the largest navies. The country round is also exceedingly fertile; so much so that, notwithstanding its neglected state, large quantities of corn are occasionally exported from Bizerta. There cannot therefore be a doubt that

were this town and the adjacent country in the possession of any European power, it would speedily become one of the greatest emporiums and most flourishing districts on the Mediterranean. But no improvement need be looked for so long as it is permitted to remain in the power of its present barbarous masters. (*Shaw's Travels*, p. 75.; *Modern Traveller*, xx. 265. &c.)

BLACKBURN, a market-town and parl. bor. of England, co. Lancaster, hund. and par. of Blackburn, on an affluent of the Ribble; 183 m. N.W. by N. London, 31 m. N. E. Liverpool, 21 m. N. W. by N. Manchester, 12 m. N. by W. Bolton, and 9 m. E. by S. Preston. The progress of pop. has been as follows: —

	1801.	1811.	1821.	1831.	1841.
Town -	11,980	15,083	21,940	27,391	36,629
Parish -	33,631	39,899	53,350	59,791	71,711

The town, situated on a rivulet, called in Domesday Book "Blackeburne," was, with the surrounding district, a manor during the reign of William the Conqueror, who granted it to Ilbert de Lacy. A castle, of which no trace exists at present, is said by Whitaker to have been a station of the Romans, and of the Saxons. Camden and Blome both notice it as a thriving market-town in their days. The eminences in the vicinity are naked, and in winter the place has a dreary aspect. It is irregularly built, owing partly to its antiquity, and partly to the intermixture of glebe and other lands, the tenures of which interfered with a better arrangement of the avenues. It is well paved and lighted, under the provisions of a late act; but is badly supplied with water. The parish church of St. Mary, originally built before the Conquest, was rebuilt on a new site in 1819, at an expense of 26,000*l*.; it is in the Gothic style, contains 2,000 sittings, of which 700 are free; and in boldness, symmetry, and correctness of design, is said to be surpassed by but few ecclesiastical structures. It sustained some injury, which was soon after repaired, from a fire in 1831. There are three other episcopal churches, viz. St. John's, built by subscription; St. Peter's, by a parl. grant; and St. Paul's, originally a dissenting chapel of Lady Huntingdon's connection. The Methodists, Baptists, and Independents, and Roman Catholics, have each two places of worship; the Swedenborgians and Society of Friends, one each. The educational establishments comprise a grammar school founded and endowed *temp.* Elizabeth; Leyland's school for the education of girls; with National, British and Foreign, and other schools. The public buildings, with the exception of those applied to theological purposes, are few in number, and consist principally of a small neat theatre, and a cloth-hall. It has a dispensary and a lying-in institution, a horticultural society, and two weekly papers.

The Reform Act conferred on Blackburn the privilege of returning 2 mem. to the H. of C. The bor., which is identical with the township, comprises 3,610 acres; and had, in 1850, 1,333 registered electors, being, of course, all occupiers of 10*l*. houses. The government of the town is vested in commissioners; and the magistrates of the hundred hold petty sessions in it. A county court is established here, before which 1,548 plaints were entered in 1848. The assessment for the relief of the poor in Blackburn Union amounted in 1847 to 13,002*l*., raised upon property valued at 316,062*l*. a year.

The manufacture of a kind of cloth made of linen warp and cotton woof, each partly of dyed thread, giving the web a chequered appearance, and thence called Blackburn cheque, was carried on here in 1650. It was afterwards superseded by that of Blackburn greys, consisting also of linen and cotton, so called from their being printed in an unbleached state. James Hargreaves, a working carpenter, the inventor of the spinning-jenny, the first great step in that wonderful career of invention and discovery that has raised the cotton manufacture to its present unexampled state of prosperity, was a native of Blackburn. In 1767 he produced the jenny; but instead of meeting with the countenance and support due to his singular deserts, he was driven out of the town, and eventually out of the county; and it was not till about 1810 or 1812 that the people of Blackburn began largely to embark in the cotton trade, and to avail themselves of the discoveries that had originated in their town. Now, however, spinning of the coarser kind of calicoes, and their weaving by the power-loom, constitute the staple trade of the place: coarse muslins continue to be wrought by the hand-loom. In 1841, 2,823 males and 4,882 females were employed in the township in the different branches of the cotton manufacture.

The abundance of coal raised from the coal field a few m. to the S. has largely contributed to the progress of manufactures. They have also been much facilitated by the Liverpool and Leeds Canal, which passes close to the town, and more recently by the opening of railways. Markets are held on Wednesdays and Saturdays, in an inconvenient place: fairs for cloth, in the cloth-hall, on Easter-Monday, 11th, 12 May, and 17th Oct.; and for cattle, on the alternate Wednesdays from the beginning of February to Michaelmas. The banking establishments are branches of the Commercial Bank of England, of the Manchester and Liverpool District Bank, and a private banking-house. A savings' bank established in the town had, on the 20th November, 1848, 50,094*l*. of deposits.

"In the early stages of the cotton manufacture," says Mr. Baines, "the inhabitants, in general, were indigent, and scantily provided (and this is still the case so far as the hand-loom weavers are concerned); but decisive proofs of wealth now appear in this place on every hand; handsome new erections are continually rising up; public institutions for the improvement of the mind, and the extension of human happiness, are rapidly increasing; and this place, at one time proverbial for its rudeness and want of civilisation, may now fairly rank, in point of opulence and intelligence, with many of the principal towns in the kingdom."

The parish of Blackburn extends over 45,620 acres; it includes 23 townships and chapelries; and had, in 1841, 71,711 inhabitants. (See *Baine's Hist. Lancashire; Parl. Reports and Returns*.)

BLACKHEATH, an elevated moory tract, in the vicinity of the British metropolis, which gives name to the hund. in which it is situated, in the lath of Sutton-at-Holme, co. Kent. The greater portion is in the parish of Greenwich, but it also extends into those of Charlton, Lewisham, and Lee, and is 1½ m. in an E. and W. direction, and about half that N. and S.; from St. Paul's to the nearest part is about 5 m. S.E. It commands many fine prospects, and has numerous elegant villas. There are two episcopal chapels, one in the parish of Lewisham and one in the liberty of Kidbrook, also two preparatory and several private schools. On the E. side is Morden College, a quadrangular structure, founded in 1708, for decayed merchants; its revenue is about 5,000*l*. a year, in the hands of seven trustees, who nominate the pensioners, and appoint the treasurer and chaplain: there are about 40 supported, each of whom receives 5*l*. a month, and has a separate apartment; but they eat at a common table: none are admissible under 50 years of age. A Roman road (Watling Street), from London to Dover, traverses the heath, nearly in the direction of the modern line: there are some large ancient tumuli on it. In the 11th century the Danes (whose fleet lay off Greenwich) were encamped on the heath some months, whence they made many excursions; in one of which Canterbury was sacked, and the archbishop carried off, and afterwards killed. Wat Tyler, and subsequently Jack Cade, took up positions with their followers on it; as did the Cornish rebels, under Lord Audley, defeated with great slaughter by Henry VII. Thither also, in former times, the lord mayor and corporation, and, occasionally the king and his court, were wont to go, when illustrious personages were to be welcomed to the capital. (*Hasted's Kent, &c.*)

BLACK SEA (the Euxine, or Πόντος Εὔξεινος of the Greeks and Romans), a large internal sea lying between the S.W. provinces of Russia in Europe and Asia Minor, extending from 40° 50′ to 46° 45′ N. lat., and from 27° 25′ to 40° 48′ E. long. It is bounded on the N. and N.W. by the Russian provinces of Taurida, Kherson, and Bessarabia; on the N.E. and E. by the Caucasian countries Circassia, Mingrelia, and Imeritia; on the S.E. and S. by Armenia and Asia Minor; and on the W. by the Turkish governments of Rumelia and Bulgaria. Its extreme length from E. to W. is upwards of 700 m.; its greatest width, on the 31st meridian, 400 m.: E. from this it narrows by the projection of the Crimea, and the advance of the opposite shore of Asia Minor, to 154 m.; again it widens to 265 m. between the Strait of Yenikalé and the Gulph of Samsun, but from the last point it constantly and rapidly diminishes, till its E. coast (running due N. and S.) does not exceed 60 m. in width. Its surface is estimated at about 160,000 sq. m., and its coast line, including its sinuosities, considerably exceeds 2,000 m. (*Chevalier, Voy. de la Propon. et du Pont Eux.* p. 3.0; *Jones's Travels*, ii. 383.; *Rennell's Comp. Geog. of W. Asia*, ii. 277.; *Arrowsmith's Atlas*.)

The Black Sea is connected with the Sea of Azoph by the Strait of Yenikalé (an. *Bosphorus Cimmerius*), and with the Sea of Marmara, by the Channel of Constantinople (an. *Bosphorus Thracius*). With these exceptions it is wholly isolated. It is also much more compact in form than most other large bodies of water; giving off no great limbs, like the Baltic, Mediterranean, &c., and having very few even moderately-sized gulphs. The most important, that of Kirkinit (the *Carcinitus Sinus* of the ancients) lies between the N. W. shore of the Crimea and the opposite shore of S. Russia, extending as far E. as the Isthmus of Perekop. The coast of the sea is, however, by no means iron-bound; small bays and harbours innumerable occur at short distances, through all its circuit, but none of them is in the least comparable, as to size.

with the Gulph of Kirkinit, unless, indeed, the Sea of Azoph and the Sea of Marmara be reckoned gulphs of the Black Sea. The straits of the Black Sea are very remarkable; they scarcely break the continuity of the land, for at their narrowest part, that of Yenikailé, is not more than 2 m. across, and that of Constantinople less than 1½ m. (*Pallas's Travels, in S. Russia*, ii. 288.; *Chevalier*, p. 44.) The former, indeed, spreads out in low and swampy grounds into a kind of marshy bay, the greatest width of which, measured transversely, is about 34 m. (*Pallas*, ii. 300.); but the Thracian Bosphorus flows through its whole length of about 17 m., like a magnificent river, between mountainous banks, and in no part attains a width of more than 2 m. or 2½ m. (*Jones*, ii. 448.)

The depth of water in this sea is variable, but the variations appear to be extremely regular, depending generally upon the proximity of the land; so much so, indeed that in many places (off the mouths of the Danube in particular) the distance of the shore may be known within ¼ m. from the soundings only. (*Eton, Commerce of the Black Sea*, p. 6.) In the Strait of Yenikalé, the depth, in its shallowest part, does not exceed 11 ft., nor in its deepest is it more than 22 ft.; but passing this, the sea itself is found, in the neighbourhood of the strait, to have a general depth of 4 fathoms, deepening rapidly to 20 fathoms or more; while, in the S. parts, 48 fathoms are found at the entrance of the Thracian Bosphorus; an equal or greater depth along the W. shore, at a little distance from the land, as far as the mouths of the Danube; and in the main sea, between the Bosphorus and Sebastopol, in the Crimea, no bottom is found at 100, 120, 140, and 160 fathoms. The sea upon the S. coast, from Constantinople to Sinope (long. 35°), is tolerably deep; thence to the E. coast, it is known only that vessels of any draught may navigate its waters; and the N.E. shore, between the rivers Phasis and Kuban, may be regarded as yet unknown to Europeans. (*Voy. of the Blonde*, 1829; *Geog. Journal*, i. 106.; *Eton*, pp. 7—15.; *Admiralty Charts*, sect. iv. pl. 73.)

The Euxine is enclosed on the N.E., E., S., and S.W., by high mountains, which run down close to its margin; even on the W., the Carpathians approach its shores to within 170 m.; but towards the N.W. and N., it opens on the great European plain, which includes Russia, Poland, Prussia, N. Germany, the Netherlands, and Denmark. Not a mountain, not a hill, rises near its bed, in these directions, except the small range in the S. of the Crimea. It might be reasonably imagined, that, in consequence of such a formation, its basin would consist exclusively of the countries stretching from its N.W. and W. shores. This is, however, far from being the case. It is true that its N.E. coast, bound closely in by the Caucasus, receives only the torrents that run their short courses from the W. slopes of that mountain system, but from the S.E. and S., the supply yielded by Asia Minor is by no means niggardly, several very considerable rivers having their embouchure in its waters.

The basin of the Euxine expands, in this direction, from about 40 m. to nearly or quite 260 m. in width; but immediately N. of the Caucasian mountains, it suddenly stretches E. 390 m., the sea receiving, through the Kuban, nearly all the water that flows from the N.E. face of the Caucasus, and by various other channels, considerably the larger part of all the drainage from the low and swampy lands W. of the Caspian. (*See* CASPIAN SEA.) On its N. coast, the Black Sea receives the waters of some of the first class European rivers from a distance of 700 m. from its shores. (*See* DON, DNIESTR, DNIEPR.) The Don, indeed, falls into the Sea of Azoph; but this is, physically considered, only a part of the larger body with which it is connected. But by far the most remarkable part of the basin of the Euxine is that towards the W. It has been already stated, that the Carpathians approach, in this direction, to within a comparatively short distance of its shores; but notwithstanding this, the Danube, after breaking through the mountains at Orsova, reaches the Euxine charged with all the surplus waters of the E. and N.E. declivities of the Alps, the S. and part of the N.E. declivities of the Carpathians, the S. declivities of the Sudetes, and the N. declivities of the Balkhan; in other words, the whole water of N. Turkey, of the Austrian empire, with the exception of Bohemia and Lombardy; together with a great part of that of Bavaria and Wirtemberg. (*See* DANUBE.) These countries extend above 1,000 m. W. from the Black Sea; their surface is equal to more than 1-11th part of the whole of Europe, and their running water to almost 1-8th part. (*Lichtenstein, Cosmog.* i. 328. *et seq.*) When to this is added the supply from the N.E. and S., it will be evident that the basin of the Euxine is of very great extent. The much larger portion belongs to Europe, of which it drains almost 1-3d part; and the amount of water received by the sea is equal to that given from the same division of the world to the Mediterranean (*direct*) and Baltic together. It is indeed by far the largest of the European basins, nor is there any where a similar tract of country so abundantly irrigated.

There are, of course, no tides in this close sea, but from the vast quantity of water received, the currents are very marked, powerful, and regular; a little variation is caused by winds, and some trifling complexity near the mouths of rivers, but in general the direction is from all points towards the Channel of Constantinople, through which a very constant flow is kept up to the Sea of Marmara. Within this strait, however, the currents become rather more variable, being thrown from side to side by the inequalities of the coasts, and the narrowness of the channel. (*Chevalier*, p. 45.; *Jones*, ii. 394. 447.; *Pallas*, ii. 288.; *Geog. Journ.*, i. 107., &c.) The water of the Black Sea appears to contain more salt than could have been expected, under existing circumstances. It has been observed, of the constant action of the St. Lawrence on the N. American lakes, that it has been continued long enough to make them sweet and clear, even had they originally been filled with ink! But an operation, not less powerful, has been at work fully as long upon these waters; and though the Sea of Azoph has become potable, except when a S.W. wind prevails, the Black Sea itself is said to be only about 1-7th part less salt than the Atlantic, and fully 1-10th salter than the Baltic. (*Chardin*, p. 155.; *Jones*, ii. 143., &c.) This, if correct, is, in all probability, attributable to the saline nature of the sea-bed. The N. coast is almost one continued plain of salt, and the numerous lakes, with which these steppes abound, are, by the action of the summer sun, covered with a thick white crust of the same mineral, perfectly crystallised, and having the appearance, and almost the consistency, of ice. (*Pallas*, ii. 466—477.; *Mrs. Guthrie's Tour through the Taurida*, pp. 55—59., &c.) It is very improbable that this peculiarity of soil should be continued to the very edge of the sea, and then suddenly cease; and on the other hand, if it be farther continued to any distance, it will necessarily countervail in a great degree the influence of the immense supply of fresh water. The fact is, however, that but very little is known, with any thing like certainty, of the chemical composition of the Black Sea. The Russian observations are limited to the N. shores; the few French and English travellers who have traversed its surface, have done so only partially and hurriedly: among trading navigators there has been no Jonas Hanway; and the statements of the Turks exhibit nothing but ignorance, prejudice, and misrepresentation. A scientific survey of this sea has yet to be performed, and Russia is the only power to which Europe can look for this service. Her government has already distinguished itself by similar investigations, and as she has so great an interest in the correct delineation and description of this sea, it is to be hoped that she may shortly undertake the task. Meanwhile, however, many old prejudices with respect to it are fast vanishing; and the Euxine is no longer regarded as a dark and desolate region of storms, danger, and shipwreck. That such an opinion should have ever prevailed, is not a little remarkable; but it did prevail in ancient, and in modern times till a comparatively late period. Tournefort was the first who attempted to dispel the prejudices and misrepresentations referred to; and who ventured to represent facts as he found them, and not as they had been disguised by the poets of antiquity, and by blind and ignorant Turkish navigators. *Quoiqu'en aient dit les anciens*, says this learned and excellent traveller, *la Mer Noire n'a rien de noir, pour ainsi dire, que le nom : les vents n'y soufflent pas avec plus de furie, et les orages n'y sont guères plus fréquens que sur les autres mers. Il faut pardonner ces exagérations aux poëtes anciens, et surtout au chagrin d'Ovide ; en effet le sable de la Mer Noire est de même couleur que celui de la Mer Blanche, et ses eaux en sont aussi claires ; en un mot, si les côtes de cette mer, qui passent pour si dangereuses, paroissent sombre de loin, ce sont les bois qui les couvrent, ou le grand éloignement qui les font paroître comme noirâtres. Le ciel y fut si beau et si sérène pendant tout notre voyage, que nous ne pûmes nous empêcher de donner une espèce de démenti à Valerius Flaccus, fameux poëte Latin, qui assure que le ciel de la Mer Noire est toujours embrouillé, et qu'on n'y voit jamais de temps bien formé.* (ii. 164.)

The prevailing wind in the Euxine is from the N.E., and as it blows over a great extent of flat and swampy country, it is laden with moisture; and being confined by the high land on the E., S., and S.W., heavy fogs are occasionally produced. It may even be conceded to Dr. Clarke, that "in winter these fogs, and the falling snow, cause sometimes a darkness so great, that mariners are unable to discern objects at the distance of a cable's length from their vessels." (*Travels*, i. 641.) But this inconvenience involves scarcely any hazard, for the depth of water is always sufficient to allow of lying to without danger of drifting upon sand or rock; and with the least break in the weather, landmarks of the very best kind come into view, which may be seen at 20, and often at 60 m. distance. (*Eton*, pp. 8, 9.)

From the confined extent of the water, a short and troublesome sea is caused by any thing like a gale; but it

is not dangerous; and storms, to which the Black Sea is not more subject than other seas, are rarely of long duration. (*Eton*, p. 6.) While they last, the close pent up water being greatly agitated, accidents, of course, sometimes occur; but it would, perhaps, be rather difficult to point out any sea of limited dimensions where, under such circumstances, they do *not* occur. The N.W. shore is low and sandy; a sandbank, 3 m. in extent, lies near the entrance of the Channel of Constantinople; and on the coast of Crimea two rocks lie close in shore.

Lastly, there is an opening, called *Yalan Bokur* (false mouth), a little to the N. of the Channel of Constantinople, and very considerably resembling it, though easily enough distinguished when the landmarks are visible. Ignorant half-bred pilots frequently conduct their ships into this mouth; and as it runs upon a low and dangerous shore, the consequences are mostly fatal. These are the only known *real* dangers of this sea. Can it be affirmed that any piece of water of like extent has so few? (*Eton*, p. 4–9.; *Jones*, ii. 387–397.) On the other hand, the Euxine is deep, and singularly free from rocks and shoals: there are but two islands in its whole area; the Isle of Serpents, off the mouth of the Danube, and Kerpe, or Carpah, on the shore of Asia Minor. The navigation is therefore of the openest kind, and even in the worst of storms there is no want of sea room. The largest ships may sail close to its high shores: the anchorage grounds are good, and hold well; and many of its ports are excellent. In fine, the Euxine may be described as a clear open sea, whose navigation is as easy as possible to skilful mariners, the bad character which it has so long undeservedly borne being wholly ascribable to the bad built of the vessels, their want of charts and compasses, and the utter incapacity of the sailors by whom, till recently, it has been navigated. From the 15th to the latter part of the 18th century, the Turks excluded every other nation from its waters. At length, the Russians fought their way to its shores, and in 1799 it was partially opened to British and other European traders. Conventions to the same effect were made with the Turkish government by Queen Elizabeth, James I., and Charles I., &c. (*Treaty of Adrianople, Sept.* 1675.), but they seem to have been without any effect; and it is only, therefore, since the latter date, or from the beginning of the present century, that the Black Sea has become known to, and been justly appreciated by, navigators.

The climate of the Black Sea and its neighbouring countries is subject to great extremes, but at an average is lower than would be supposed from its latitude. This would seem to be ascribable principally to its want of shelter on the N.; the winds from the polar regions reaching its coast, and blowing over its surface, unmitigated except by the temperature of the plain land over which they pass. Winds from the S. are less frequent than those from the N., and having to climb the snowy heights of the Taurus before they reach the coast, they arrive there materially chilled. Even on its S. shores, the N. wind sometimes prevents travelling even in the month of May. (*Tournefort*, iii. 37.) Its N. gulphs and bays are in certain seasons frozen hard enough to open a passage for troops; and it is recorded by Strabo, (lib. vii.) that the soldiers of Mithridates engaged those of the Tauric Chersonesus (Crimea) in the winter, on a part of the Bosphorus where, in the preceding summer, a naval action had been fought. In 1065 the width of the strait was measured on the ice (*Pallas*, ii. 300.): an equal degree of cold has been experienced in several winters within the present century; and though such extreme inclemency be not very common, navigation is always suspended with every return of winter in the Sea of Azoph, and most commonly along the whole N. shore of the Euxine. On the other hand, the summers are usually hot, the thermometer in the shade frequently standing at 98°, 100°, and even 102° Fahr. It often, however, varies in the same day from 22° to 27°, both in winter and summer, and in the former the barometer partakes of the irregularity, but is subject to fewer changes in the latter. Thunder-storms are rare, but tremendous when they do occur, being frequently accompanied by destructive hailstones and water-spouts. The climate is accounted healthy, except in the autumn, when bilious fevers are prevalent. The scourge of Mohammedan countries, the plague, is more or less common all round the coast, but this is a consequence of the filth of the inhabitants, and not of the climate. (*Pallas*, ii. 376—380.; *Mrs. Guthrie*, pp. 33. 55., &c.; *Tournefort*, iii. 16., &c.)

The Euxine teems with seals, porpoises, sturgeons, dolphins, mackerel, mullet, bream, and other fish, mostly of the same kind as those caught in the Caspian and Sea of Aral (*see* CASPIAN SEA): there are, however, few fisheries established along its shores, though, where they do exist, they are extremely productive. (*Pallas*, ii. 51. 132. 289. 461—463; *Olivier, Voyage dans l'Empire Othoman*, i. 135. &c.)

There are many conflicting opinions as to whether the Euxine be or be not of permanent magnitude. It was a commonly received opinion among the ancients, that it was formerly separated from the Mediterranean, and that the Thracian Bosphorus was burst through by a convulsion of nature, or by the deluge of Deucalion; and Aristotle even believes that this event did not long precede the time of Homer. (*Josephus, Antiq.* i. 3.; *Diod. Sic.* v. 3.; *Aristotle de Met* xiv.; *Pliny*, vi. 1. &c.) Without supposing any great degree of physical knowledge on the part of the Greeks, it may be supposed that the inhab. of the countries bordering on the Euxine would have a vivid recollection of such a catastrophe, had it occurred, and that, consequently, it would scarcely have been an invention or hypothesis of the writers. Add to this, that geological appearances strongly confirm the supposition; and the fact, though sneered at by some, will appear not a little probable. (*Pallas*, i. 80. 83.: *Tournefort*, ii. 346—390.; *Olivier*, i. 122.; *Dureau de la Malle, Géo. Phys. de la Mer Noire*, pp. 196—225.) It will be observed, that among the ancients only historians and naturalists have been cited, but it may be added, that the same revolution is dwelt upon by their poets and fabulists. (See in particular *Lucan*, vi. 5.) It was, in a word, the universal belief of all ranks and orders. But if this sea were ever thus confined, its surface must have been considerably higher than at present; and this also appears to be the fact, from the accumulation of salt-lakes and marshes in the plain country on its N. borders. It is evident, indeed, that a rise of a few hundred feet in its surface would be quite sufficient to flood the greater part of southern Russia, the whole of which, except the mountains of the Crimea, bear evident marks of having been laid bare at a comparatively recent period (*Pallas, passim*); and the whole appearance of its N. shores is that of a diminished bed. Polybius supposed the Euxine to be gradually decreasing; and he has offered reasons, in support of this opinion, formed on more solid premises than ancient writers often depend upon. (iv. 5.) In this, however, he appears to have been mistaken. The change in extent, if any ever did take place, seems to have occurred at once with the subsidence of the waters, by the opening of the Thracian Bosphorus. Since the age of Polybius no change seems to have taken place in the size of the sea; but that it has become clearer, is evident from two facts; first, that a bank, called by Polybius *Stethe* (Στηθη), formed at the mouths of the Danube, and more than 100 m. in length, has wholly disappeared; and that the Cyanean Isles, at the mouth of the Bosphorus, so celebrated in the voyage of the Argonauts, are now reduced to low and insignificant prolongations of the two opposite shores. (*Geo. Journ.* i. 105.; *Jones*, ii. 444.; *Olivier*, i. 122.) It is not, perhaps, likely that any further change should take place, except by some new convulsion. The surface is still a little, though probably but a little, higher than that of the Mediterranean, as is evident by the constant set of the current through the Channel of Constantinople,—a consequence of the narrowness of the latter, and of the rivers bringing down more water than is taken off by evaporation.

Notwithstanding the horror entertained by the Greeks, or rather the Greek poets, of this sea, its shores are famous in their true and fabulous history. Colchis, the Temple of the Sun, and scene of the Argonautic expedition, were on its E. coast; the Cimmerian land of everlasting darkness was originally fixed upon its N. shore; and in more historical times, the Lydian, Persian, and Byzantine powers, and the exploits of Mithridates, illustrated its S. and S.W. borders. At an early period, many Greek colonies were planted on its shores. Its commerce was also reckoned of first-rate importance. Athens drew from it her principal supplies of corn and naval stores; and it furnished the favourite slaves to the markets of Greece and Rome. Ovid died in exile somewhere on its borders, but whether on the Danube or Dniestr is disputed. From the time of Constantine till the 15th century it formed the centre of the Roman world, and during this period, a part, at least, of the Indian trade was carried on through it: the Venetians and Genoese were the conductors of this traffic. Soon after the fall of Constantinople in 1453, all but Turkish vessels were excluded from the Euxine; and it was not till after the treaty of Kainardji, in 1774, that the Russian eagle was displayed on its waters.

The name of this sea, *Euxine*, is only a modernised form of the original Greek word ἀξενος (inhospitable), bestowed upon it for the imaginary reasons previously alluded to. It appears, however, that subsequently, the Greeks imbibed a somewhat better opinion of it, and changed its designation to Εὐξενος (hospitable): it was sometimes also called simply Ποντος (the sea.) The Turkish name is Caca Denisi, and the Russian Czorno More, both being literally translated in the term Black Sea.

BLACKWALL, a hamlet of England, co. Middlesex, par. Stepney, at the confluence of the Lee with the Thames, 5 m. E. St. Paul's, being in fact a suburb of London. Here are the E. and W. India Docks, &c., for an account of which see LONDON.

BLAIN, a town of France, dép. Loire Inférieure, cap. cant., near the right bank of the Isac, 22 m. N.N.W.

Nantes. Pop. 4,553. Its castle, of which only a small part now remains, was formerly one of the strongest in Bretagne. It was partly demolished in 1629. Calvinism was early introduced into this town, a synod having been held here in 1565, at which there were reckoned above 1,200 Protestants. (*Hugo*, art. *Loire Inférieure*.)

BLAMONT, a town of France, dép. de la Meurthe, cap. cant. on the Vezouse. Pop. 2,638. It was burnt down in 1527 and 1636. It produces yarn for hosiery, and has considerable tanneries.

BLANC (LE), a town of France, dép. Indre, cap. arrond., on the Creuse, in a pleasant situation, 33 m. W.S.W. Chateauroux. Pop. (town *ex* cant.) 3,847. It is divided by the river into two parts, called the high and low towns: both are ill built, particularly the former, the streets of which, besides being narrow and crooked, are also precipitous. It is the seat of a tribunal of original jurisdiction. There now remain but few traces of its ancient fortifications, which, however, were once strong enough to resist several sieges. This is a very ancient place, and was often frequented by the Roman legions. The road from La Blanc to St. Savin is still called the *Levée de César*. (*Hugo*, art. *Indre*; *Dict Géographique*.)

BLANCO (CAPE), a celebrated cape on the W. coast of Africa; lat. 20° 46′ 26″ N., long. 17° 4′ 10″ W. This cape, which was discovered by the Portuguese in 1441, forms the extremity of a rocky ridge, called the Geb-el-reid, or White Mountain, projecting into the sea in a S. direction. Inside the cape is a spacious bay, which has on its S.E. side the bank and town of Arguin.

BLANDFORD FORUM, a par., bor., and town of England, co. Dorset, hund. Coomb's Ditch, Blandford (or N.) div., 98 m. S.W. London. Pop., 1821, 2,643; 1841, 3,349: houses 920. This neat little town is situated on a bend of the Stour, amidst one of the finest tracts of sheep pasture in the kingdom; a six-arched bridge crosses the stream, and there are two others to facilitate the communications of the town during occasional floods. The houses are uniform brick structures, arranged in regularly-formed, and well-paved and lighted streets. The church is a modern building in the Grecian style, with a tower and spire. There are also an Independent chapel, a free grammar-school, and a blue-coat school, each with small endowments; almshouses supporting 10 old people; a charity producing 120*l*. a year, for apprenticing poor boys; and another, now producing 300*l*. a year, originally left for the purpose of educating 4 poor children. There is a handsome town-hall, and a neat theatre; and on a fine down, near the town, annual races are held in Aug. The weekly market is held on Saturday, and 3 annual fairs on March 7., July 10., Nov. 8.: they are for horses, cattle, and cheese. A manufacture of shirt-buttons employs many women and children of the town and neighbourhood, but it is much less extensive than formerly; lace of a very fine description (some of it selling for 30*l*. a yard) used also to be made; but the chief business of the place originates in its market and fairs, and in its being the resort of the neighbouring gentry, and others at the races, &c., which makes it a thriving and increasing town. It was incorporated by charter of 3d of James I., which also granted the manor. Under the Municipal Reform Act there are 4 aldermen and 12 councillors, and the limits of the borough are restricted to the town, where 99 of every 100 of the pop. of the parish reside. The revenue of the corporation is derived from tolls of the market and fairs, lands, and quitrents, and averages about 225*l*. a year; they hold a court leet annually. A court of record was granted by the first charter, which has long been disused. Petty sessions for the Blandford div. are held in the town, by the co. magistrates; and monthly courts of the bishop and archdeacons of the diocese. It is also a polling town for the county, and the central town of a union of 33 parishes, under the Poor Law Act; it has 3 guardians; its rates amount to 1350*l*. Archbishop Wake was a native of the town; and it gives the title of marquis to the Marlborough family.

BLANKENBURG, a town of the duchy of Brunswick, cap. distr., and formerly of the principality of Blankenburg, on a rivulet of the same name, 37 m. S.S.E. Brunswick. Pop. 3,300. It is surrounded by walls, has some good buildings, including a gymnasium, a school of industry, &c. On a hill immediately adjoining the town is a large heavy-looking palace of the duke of Brunswick: it had a good collection of pictures, but the best of them have been removed. On the summit of the Regenstein, also at a short distance from the town, are the remains of a large castle, constructed by Henry the Fowler, in 919, consisting of chambers cut out of the rock. (*Murray's Handbook*, &c.)

BLANTYRE, a parish of Scotland, co. Lanark, in which manufactures have made great progress. The Blantyre Mills, in the village of Blantyre, on the Clyde, 3 m. W. Hamilton, and 8 m. S.E. Glasgow, were erected in 1785, for the spinning of water twist. In 1791, another mill was built for mule twist: both are moved by water power. The total number of workmen, in 1835, was 458; and the aggregate of spindles, 30,000. In 1813, a cotton weaving factory was established, which employs nearly 500 hands, the moving power being partly water, and partly steam. There are in the par. 128 hand-loom weavers. The dyeing of Adrianople or Turkey red on cotton yarn, has been carried on here for forty-five years. The total number of hands employed in these various works, exclusive of the hand-loom weavers, is about 1,000, of whom considerably more than a half are females. There is a school connected with the mills; average attendance in the day school, in 1835, 136; in the evening school, 56. There is also a library for the use of the workmen, a funeral society, and a society for religious purposes, all established by the workmen. (*New Statistical Account of Scotland*, No. vii. § *Blantyre*.)

BLAYE, a sea-port and fortified town of France, dép. Gironde, cap. arrond., on the right bank of the Gironde, 34 m. N.N.W. Bordeaux; lat. 45° 7′ N., long. 0° 40′ W. Pop. 3,266. It is divided into the high and low towns; the former, however, is merely the castle or citadel, built on a rock commanding the Gironde. The river is here about 2¼ m. wide; and for its defence Fort Pâté has been constructed on an island in its channel, about 1,000 yards from Blaye, and Fort Medoc on the opposite side of the river. All vessels inward bound are required to anchor in the port or road of Blaye, and deliver a manifest of their cargo, and many of the outward-bound ships call here to take on board provisions, and complete their cargoes. The town has also a considerable direct trade, exporting wine, brandy, corn, oil, soap, timber, apples, &c. Many of the pilots, so indispensable to ships navigating the Gironde, reside in Blaye. It has tribunals of original jurisdiction and of commerce, an agricultural society, a theatre, &c. In the centre of the town is a fine public fountain. Blaye is very ancient. In 1568 it was taken by the Protestants, and more recently by the Leaguers. The extensive marshes by which it was formerly surrounded having been drained by Henry IV., have become very fruitful of corn and other products. In 1832 the Duchess of Berri, when confined in the castle of Blaye, was brought to bed of a daughter. (*Hugo*, art. *Gironde*; *Purdy's Sailing Directions for the Bay of Biscay*; *Dict. Géographique*, &c.)

BLEICHERODE, a town of the Prussian States prov. Saxony, reg. Erfurth, between the Bode and the Wipper, 10 m. S.W. Nordhausen. Pop. 2,000. It has some oil-mills and fabrics of serges and other descriptions of woollen cloth.

BLENHEIM, or BLINDHEIM, a small village of Bavaria, circ. Upper Danube, on the Danube, near Hochstedt. This village is famous in modern history as being the scene of the great battle fought Aug. 13. 1704, between the English and Imperialists, under the Duke of Marlborough and Prince Eugene, and the French and Bavarians, under Marshals Tallard and Marsin and the Elector of Bavaria. Each army consisted of nearly 80,000 men. The English and their allies gained a complete and decisive victory. Their enemies left above 10,000 men killed and wounded on the field; a vast number more were drowned in the Danube, and above 13,000 were made prisoners; among the latter were Marshal Tallard (whose son was killed) and many other officers of distinction. All the artillery, baggage, &c. of the French and Bavarians fell into the hands of the conquerors. The loss of the latter, though severe, was not greater than might have been expected, having amounted to about 5,000 killed and 8,000 wounded.

BLENHEIM PARK, an extra-parochial district of England, co. and liberty of Oxford, 60 m. W.N.W. London. Area 2,700 acres, being the demesne attached to Blenheim House, an edifice erected in the reign of Anne, as a token of the national gratitude for the public services rendered by the first Duke of Marlborough: for which purpose 500,000*l*. was voted by parliament, and the queen added the honour of Woodstock (an ancient property of the crown) to the grant. It was called Blenheim from the great battle noticed above. The usual entrance to this splendid domain is from the Woodstock side, under a triumphal archway of the Corinthian order, erected by the first duchess. Fronting the palace is a fine sheet of water, partaking of the character both of a lake and river, and winding away through a deep vale; this is spanned by a magnificent bridge, and on an eminence beyond the bridge, in the midst of a fine lawn, is a fluted Corinthian pillar, 130 ft. high, surmounted by a statue of the duke in a Roman dress; on one side the pedestal is an inscription (written by Lord Bolingbroke) reciting his public services; on the others, the acts of parliament declaratory of his services, and abstracts of the entail of his estates and honours. The mansion occupies three sides of a parallelogram, the principal front being N., and the E. and W. sides forming wings for the domestic offices, stables, &c.; a terrace with

several flights of steps gives due effect to the elevations. The north, or principal front extends 348 ft. from wing to wing; it has five compartments, and is highly enriched, especially the central one, which has a Corinthian portico and fine pediment at the height of two floors; over which is an attic story. The south or garden front is of a plainer character; but its compartments correspond with the other, and a flight of steps leads to a portico, over the entablature of which is a colossal bust of Louis XIV., taken from the gateway of Tournay. The interior is magnificently finished, and contains a fine collection of sculptures, paintings, and tapestry. A well-known satirical couplet raised a prejudice against this noble pile, which prevented, for a lengthened period, a fair estimate being formed of its merits. The details have been severely criticised; and some of them may be open to censure. But whatever may be the defects of particular parts, they are lost in the *tout ensemble*. The general effect of the building is excellent; its parts seem to be admirably combined, and it has a most magnificent appearance; it is now, indeed, admitted, by general consent, to be a noble proof of the genius of its architect, Sir J. Vanburgh, as well as an "illustrious monument of Marlborough's glory, and of Britain's gratitude." (*Brewer's Oxfordsh.*; *Gent. Mag.* vol. lxxx.; *Neale's Views of Seats*, vol. iii.)

BLERE', a town of France, dép. Indre et Loire, cap. cant., on the Cher, 17 m. E.S.E. Tours. Pop. 2,978. The castle of Chenonceaux, once the property and residence of the celebrated Diana of Poitiers, is situated in the immediate vicinity of Bleré. Diana, having been dispossessed of the castle by her rival, Catherine de Medici, the latter surrounded it with a superb park. After many vicissitudes, it was acquired, in 1733, by M. Dupin, a gentleman distinguished by his wealth and learning, but more by the wit and beauty of his wife. Under its new masters Chenonceaux became the resort of some of the most illustrious personages of the 18th century, including, among others, Voltaire, Montesquieu, Buffon, Fontenelle, Bolingbroke, &c. Rousseau wrote several pieces for the theatre of Chenonceaux, and it was here that the *Devin de Village* first appeared. Happily, Chenonceaux escaped the revolutionary frenzy; and continues to be one of the most interesting objects in this part of France. (*Hugo, France Pittoresque*, ii. 101.)

BLETCHINGLY, a par. and town of England, co. Surrey, hund. Tanridge, 16 m S. of London. Pop., 1821, 1,187; 1831, 1,203; houses, 208; area, 5,250 acres. The town is situated near the end of the chalk range that traverses the co., and commands extensive views. The church is a fine specimen of the earlier Gothic style: there is an endowed school for 20 boys, 11 almshouses, and several small charitable donations. There are 2 annual fairs, held June 22., and Nov. 2.; the latter is for horses, pigs, and lean cattle: its ancient weekly market has been long discontinued. The inhab. are chiefly engaged in agriculture: the upper part of the par. (in which the town is situated) is a sandy and chalky soil, the lower part clay. Bletchingly returned 2 mem. to the H. of C. from the 23d of Edw. I. till the passing of the Reform Act, by which it was disfranchised: the right of election was in the holders of burgage tenures, amounting to 130. A castle, built soon after the Conquest, formerly stood on the brow of a hill at the W. end of the town. There are some vestiges in this parish of the residence of Earl Godwin, who retreated hither when his Kentish estates were inundated: the Croydon Railway passes through it, on the N. side.

BLOIS, a town of France, cap. dép. Loir et Cher, on the acclivity of a hill on the right bank of the Loire, 35 m. S.S.W. Orleans; lat. 47° 35′ 20″ N., long. 1° 20′16″ E. Pop. (*ex* cant.) 11,423. This is neither a large, a well-built, nor a handsome town; on the contrary, many of its houses are mean, and its streets narrow, crooked, and sometimes not accessible to carriages; but it is remarkable from the beauty of its situation, its antiquity, its monuments, and the historical events of which it has been the theatre. At one extremity of the town is the castle, and at the other the cathedral. The former is an immense pile, built at different epochs and in different styles of architecture. Louis XII. was born in this castle; and in it also Margaret of Anjou was married to the Duc d'Alençon, and Margaret of Valois to Henry IV. But it derives its principal interest from events of a very different character. Here, in December 1588, the Duc de Guise and his brother the Cardinal, were basely murdered by the order, and almost in the presence, of Henry III. This, also, was the scene of the imprisonment of Mary and of the death of Catherine de Medici. The last rays of glory fell on this castle in 1814, when Maria Louisa held her court in it after the capitulation of Paris. It is now occupied as a barrack. The cathedral is a handsome edifice; but the finest building in the town is the hotel of the prefecture, formerly the episcopal palace. The view from its gardens is extensive and fine. In the church of St. Vincent are fine monuments to Gaston, Duc d'Orleans, and a daughter of that prince. A suburb on the opposite side of the river is connected with the town by a handsome bridge of 11 arches, begun in 1717. The most ancient monument in the town is a superb aqueduct, ascribed to the Romans, cut in the solid rock. It is in excellent preservation; and conveys the waters of several springs, a distance of about half a mile, to a reservoir close to the town, whence they are distributed among public fountains dispersed in different parts of the city. Blois is the seat of a bishopric, a court of original jurisdiction, a departmental college, a diocesan seminary, and a secondary ecclesiastical school; a botanical garden, founded by Henry IV.; a public library, with 19,000 volumes; a royal society of agriculture; a departmental nursery, &c. It has, also, a port well frequented by the craft navigating the Loire, a theatre, an abattoire, and a *dépôt d'étalons*. It produces serges, hosiery, and gloves, cutlery and hardware, leather, &c., and has a considerable trade in wines, spirits, vinegar, fire-wood, and staves, liquorice, and other articles. Bernier, the celebrated eastern traveller, was a native of Blois. (*Hugo*, art. *Loir et Cher*; *Inglis's Switzerland, &c.*, p. 357., &c.)

BLYTHE (S.), or BLYTH NOOK, a sea-port town of England, co. Northumberland, on the Blyth, 12 m. N.E. by N. Newcastle-on-Tyne, and 8 m. S.E. by E. Morpeth. Pop. in 1801, 1,283; in 1831, 1,944. It is situate on the S. side of the river, where it discharges itself into the German Ocean, and consisted till lately of a few narrow ill-laid-out streets; but modern improvements are giving it a new aspect. Its church is a chapel of ease to the parish church of Earsdon: Methodists, Presbyterians, and other dissenters have places of worship. The coal trade is carried on to a considerable extent, and iron from the Bedlington works is largely exported. The harbour is excellent for ships of small burden, affording free entrance and safe anchorage in all seasons; and the coast for some miles is peculiarly adapted for bathing. There is here a dry dock, a custom-house dependent on that of Newcastle, a light-house, and a beacon-light.

BOAVISTA, the most easterly of the Cape de Verde islands, which see.

BOBBIO, a town of the Sardinian states, div. Genoa, cap. prov. same name, on the Trebbia, 34 m. N.E. Genoa. Pop. 4,000. It is surrounded by walls, and is the seat of a bishopric, and of a tribunal of original jurisdiction. It was ceded to Sardinia, in 1743, by Austria.

BOBROV, a town of Russia in Europe, gov. Voronege, on the Bitioug, 52 m. S.E. Voronege; lat. 50° 5′ N., long. 40° 10′ E. Pop. 5,000. It has two churches, and includes a large space laid out in gardens. It derives its name from the number of beavers (*bobry*) formerly found in its vicinity.

BOBRUISK, or BOBRISK, a town of Russia in Europe, gov. Minsk, on the Bobruia, where it falls into the Berezina, cap. district, 90 m. S.E. Minsk. It was fortified in 1810 and 1812, and was ineffectually attacked by the French during the last of those years. It has four churches and a gymnasium.

BOCHNIA, a town of Galicia, cap. circ., near the Raba, 25 m. E.S.E. Crawcow. Pop. 4,800. It has a gymnasium, and a board for the administration of mines and salt-works. For an account of the latter, which are very extensive, *see* WIELICZKA.

BOCHOLD, or BOCKHOLT, a town of the Prussian States, prov. Westphalia, reg. Munster, on the Ahé, 15 m. E.N.E. Cleves. Pop. 4,000. There are rich iron mines in its vicinity; and it has some trade in corn, spirits, &c., with manufactures of cotton and silk.

BOCHUM, a town of the Prussian States, prov. Westphalia, reg. Arnsberg, cap. circ., 25 m. N.E. Dusseldorf. Pop. 4,200. It has three churches and a college; and manufactures, coffee-mills, and jewellery.

BOCKING, a par. and village of England, co. Essex, hund. Hinckford: area of par., 3,800 acres. Pop. 3,128. The village, almost contiguous to Braintree, and 38 m. E. by N. London, consists principally of a single street, extending along the high road from London to the E. counties. There are several corn and fulling mills on the river Brain, and the increase (342) in the pop. during the 10 years previous to 1831, is ascribed to the increased manufacture of silk and crape. It has a free school, endowed by Dr. Gauden, bishop of Worcester, for the education of 30 boys; an almshouse, founded in the reign of Henry VI.; and some other charities. (*See* BRAINTREE.)

BODMIN, a bor. and town of England, co. Cornwall, hund. Trigg, 25 m. W by N. Plymouth. It is nearly in the centre of the county, is built on a gradual acclivity, between two hills, and consists chiefly of one main street nearly a mile in length: the houses are an intermixture of low irregular ancient structures, and neatly built modern ones. The church (rebuilt about A. D. 1472) is a spacious structure in the later Gothic style, situated in the vale at the E. end, whence the town gradually ascends. The Calvinists, Wesleyans, and Brianites, have each chapels. There is an endowed grammar-school, founded by Elizabeth, and a national girls' school. The

town-hall was originally the refectory of St. Austin's Priory; each of its ends are fitted as courts of justice, and the intermediate area used as a corn-market; over the whole are grand jury and public assembly-rooms. N. of the town is the county gaol, including a sheriff's ward and a bridewell: at the W. end is the co. lunatic asylum, built in 1820. It is well supplied with water, and partially paved and flagged, but not lighted. Pop., in 1821, 2,902; in 1831, 3,376: houses at the latter period, 596. These numbers refer, however, to the old boundaries of the bor., which included but a minor portion of the parish; whereas its present parl. boundaries comprise the entire parish, and also the adjoining parishes of Helland, Lanivet, and Lanhydrock, comprising in all an area of 16,300 acres, and a pop., in 1841, of 5,901. It has returned 2 mem. to the H. of C. since the 23d of Edw. I.; the right of election having been vested, previously to the Reform Act, in the corporation. In 1850 it had 337 registered electors. The market is held on Saturday; and it has several fairs. The chief manufacture is shoes, of which a considerable number are made, and sold at the different markets and fairs of the county. A railroad, commencing at Wade bridge (at the head of Padstow harbour), about 6 m. in a N.W. direction, terminates at the back of the town, by which coals and other articles are brought to it, as well as lime and sea sand, to the agricultural district through which it passes. It is governed by a mayor, 3 aldermen, and 12 councillors. It is a stannary town, and had, at an early period, the privilege of stamping tin. The summer assizes, 3 of the general quarter sessions, and the election courts for the E. division of Cornwall, are held here.

BŒOTIA, a famous region of ancient, and now of indep. Greece, prov. E. Hellas, and forming the N. part of the nomarchy of Attica and Bœotia, between lat. 38° 9′ and 38° 41′ N., long. 22° 53′ and 23° 49′ E.; shape triangular; having N.W. Phocis; N. the Opuntian Locris; N.E. the channels of Talanda and Egripo; and S. Attica and the Corinthian Gulph; length E. to W. about 42 m.; greatest breadth 27 m.

Its mountains, the most celebrated of which is Zagora, (an. *Helicon*), mostly surround or divide it into two principal basins — those of the Cephisus and Thebes. Its chief rivers are the Gayrios (*Cephisus*) and the Asopo (*Asopus*). It contains three lakes; those of Topolias (*Copais*), Sarzina (*Hylica*), and Paralimni; the first the largest in Greece. It is a high but well-watered region; and as many of the streams find their way, and the lakes a vent to the sea, only by means of subterraneous courses, marshes abound; and the atmosphere is damp, foggy, oppressive, and unhealthy in some places, as at Livadia, where intermittent fevers are prevalent. The fertility of Bœotia is however such, that it has always an abundant crop, though elsewhere famine should prevail. The land is well cultivated, especially with wheat, rice, madder, cotton, maize, hemp, and tobacco. Helicon is clothed in its lower parts with evergreens; above these there is a forest of pines, and its top is often capped with snow; kermes oak grows abundantly, and 6,000 okes (258,000 lbs.) of gall-nuts are collected yearly. The lake Topolias still produces the reeds anciently so celebrated for rustic flutes, and Bœotian pipers are still in high repute. Most of the cottages in the neighbourhood are built of these reeds. Flocks of bustards inhabit the banks of Topolias; and its large eels, dried and salted, form a considerable article of trade. Many spots in Bœotia present striking scenery. It forms two eparchies, those of Thebes (*Thiva*) and Livadia, which are its two principal towns.

BOGENDORF, a village of Prussia, prov. Silesia, reg. Liegnitz 18 m. W.S.W. Sagan. Pop. 1,400. It has in its vicinity mines of the precious metals, and of copper and lead.

BOGLIPOOR. *See* BHAUGULPORE.

BOGNOR, a marit. town and chapelry of England, co. Sussex, rape Chichester, hund. Aldwick, par. S. Bersted, 56 m. S.W. by S. London. Pop. (of the whole par.), in 1821, 1,851; 1831, 2,190. It is situated on the coast between Selsey Bill and Worthing, amidst rocks that extend in a curving direction 2 or 3 m. into the sea, and make it inaccessible except to the smaller class of coasting vessels: there is a good beach and every accommodation for bathing. Previously to 1780 it was a small fishing village, and this is still the occupation of its resident population, who send their produce to the London market. In the above year Sir R. Hotham commenced building a villa and some good lodging-houses, since which this watering-place has continued to enlarge, and forms a favourite resort for those who seek retirement, rather than gaiety, in occasional change of scene. It is sheltered on the N. by the South Down hills, a range extending from Portsdown to Dover. The Portsmouth and Arundel Canal passes within 3 m. There are Episcopal, Independent, and Wesleyan chapels; a school, in which 20 girls are clothed and educated; another (founded by the late Princess Charlotte) for 50 girls; a good hotel and lodging-houses, &c., for the accommodation of visitors. The regulation of the town is placed under commissioners (by an act of parliament), who meet monthly, and levy a duty of 2*s*. a chaldron on coals, to defray the expenses of repairing roads, &c. Weekly markets are held, in a spacious modern market-place, on Thursday and Saturday, and an annual fair on the 5th and 6th of July.

BOGODOUKHOF, a town of Russia in Europe, gov. Kharkof, cap. distr., on the Merlo, 60 m. N.E. Poltava; lat. 50° 2′ N., long. 35° 50′ E. Pop. 6,800. It is surrounded by a rampart and a ditch. The inhabitants are principally employed in tanning and dressing leather, and making it up into boots and shoes; they also carry on a considerable trade in cattle, hides, &c.

BOGORODITSK, a town of Russia in Europe, gov. Tula, cap. distr., at the confluence of the Lesnoi-Oupert and the Viarkova, 40 m. S.S.E. Tula. Pop. 5,000. It has a royal castle and four churches. The country round is productive of corn, hemp, flax, and honey, which form the principal objects of the trade of the town.

BOGOTA (formerly *Santa Fé de Bogota*), a city of Colombia, of which it is the cap. and the seat of the government, on an elevated plateau at the foot of Mount Chingasa, 8,615 ft. above the level of the sea; 225 m. E. the Pacific Ocean, 50 m. E. the river Magdalena, 65 m. S.E. Houda, and 134 m. N.E. Neyva; lat. 4° 37′ N., long. 74° 10′ W. Pop. from 30,000 to 40,000. Owing to its elevation, the city enjoys a fine and equable temperature; the climate, however, is exceedingly humid, though not unhealthy. The first appearance of the town from the N.W. is very imposing: being built on rising ground, it forms a sort of amphitheatre, and the white towers of the cathedral and the monasteries of Montserrat and Guadalupe are seen seated on lofty peaks behind it. Streets generally narrow, but regular, intersecting each other at right angles, and some having a stream of water constantly flowing down the middle: all of them are paved, and the principal ones have footpaths. The chief street, or *Calle Real*, has at its extremity the *plaça mayor*, or principal square, where the market is held; it is formed by the cathedral, the palace of the president, custom-house, &c. Bogota being subject to frequent earthquakes, the houses are low, with thick walls; elegance being commonly sacrificed to solidity. Nearly half the area of the city is occupied by religious structures; there are 26 churches, besides the cathedral, 9 monasteries, and 3 nunneries; and four-sixths of the houses in Bogota are said to belong to them. The cathedral, built in 1814, and distinguished by the simplicity of its interior, was destroyed by an earthquake in 1827. Most of the other churches are more remarkable for gorgeousness and gilding than for taste; gems are lavished in profusion upon the statues. The palace of the former viceroys of New Granada, now occupied by the president of the republic, can boast no architectural beauty. The "palace of the deputies" is a large house at the corner of a street, the under story of which is, or at least was a few years ago, "let out in shops for the sale of brandy!" The "palace of the senate" consists of one of the wings of the convent of the Dominicans. The mint is a large plain building. There are three sets of barracks, two *quartels*, and an artillery depôt, where all military equipments are made, and articles of European manufacture repaired; some of the convents have hospitals attached, but they are wretchedly conducted, and very dirty. It has a university and three colleges, the principal of which belongs to the Jesuits; a school of chemistry and mineralogy; a Lancastrian school on the most liberal principles; a national academy; a public library, &c. There is a theatre, a well-constructed building, and well attended; but the performances are bad. The private houses in Bogota are constructed of sun-dried brick, whitewashed, and tiled: latterly their style has been considerably improved. Beams are now concealed by a ceiling: glass has been introduced into, and barricades removed from, the windows; the street doors are better painted, and light balconies have begun to supersede enormous and heavy galleries. In general, the houses are built with a court in the centre, round which runs a gallery or a covered terrace. The furniture is simple; but European carpets and other manufactures are now in very general use. There are no chimneys, stoves only being used. In the principal streets, the ground floors are occupied by shops; these are, however, dirty and dark, and the only admission for daylight is by the door. Almost every inhabitant, not in the employ of government, in the church, or in the army, is a shopkeeper. "Seated upon his counter, smoking incessantly, and giving laconic answers to his customers, the Colombian merchant in many respects resembles those of Smyrna or Aleppo." Bogota cannot boast of ten merchants who can command 100,000 piastres, nor of five individuals living upon a revenue of that amount. The most common incomes are from 5,000 to 10,000 piastres. The city is very badly lighted; there are no common sewers; and the filth being cast into the streams that run through the streets, renders them infectious. Owing to the scantiness of the population, and the want of car-

riages, some of the streets are overgrown with grass. The market is well and cheaply supplied with provisions; but European manufactures are said to be extravagantly dear. There are no carts or vehicles of any description, traffic being carried on exclusively by mules. The environs of Bogota are agreeable, but little frequented; the favourite promenades being the *alameda*, or public walk, at one of the entrances to the town; and the two principal streets, along which gentlemen may often be seen riding at full gallop on wretched horses, bedizened with gold, and glittering in military uniforms, "some with round hats ornamented with plumes of feathers, others with cocked ones, and a still greater number wearing *shakos* and helmets." The costume of the females is still more peculiar. Rich and poor dress alike out of doors: the mantilla is worn; a piece of blue cloth envelopes the head, and covers all the features excepting the eyes, reaching to the waist; and the whole is crowned by a broad-brimmed beaver hat. The women of Bogota are generally acknowledged to be handsome; their complexions are fair and clear; their physiognomy is Spanish. They are however accused of being great *intriguantes*, and very severe strictures have been passed upon them by travellers. Visiting, evening parties, balls, masquerades, and religious processions, are their chief amusements; as bull-fights, cock-fights, the theatre, and gambling, are those of the men.

Bogota was founded by Gonzalo Ximenes de Quesada, who built 12 huts here in 1538; in 1548 it was created a city, and made the seat of a royal *audiencia;* and in 1561 advanced to the honours of a metropolitan see. It was the capital of New Granada, while a colony of Spain; a distinction which, since the war of liberation, it has changed for the greater one it at present enjoys, as the head city of a free state. (*Mod. Trav.* xxvii. 311—327.; *Balbi.* 3d edit., &c.)

BOGWANGOLA, an inl. town of Hindostan, prov. Bengal, 8 m. N.E. Moorshedabad; lat. 24° 21′ N., long. 88° 29′ E. It is built entirely of bamboo, mats, and thatch; but is a place of considerable trade, and from hence the cap. of the district is chiefly supplied with grain.

BOHAIN, a town of France, dép. Aisne, cap. canton, 16 m. N.N.E. St. Quentin. Pop. 3,393. It has a fabric of German clocks *à carillon*, and produces shawls, gauzes, &c.

BOHEMIA (Germ. *Böhmen*, Boh. *Czech*) (Kingdom of), an inland country, occupying the centre of Europe, and forming an important portion of the Austrian empire, between lat. 48° 34′ and 51° 3′ N., and long. 12° 5′ and 16° 46′ E., having N.E. Prussian Silesia, N. and N.W. Saxony, S.W. Bavaria, and S. and S.E. the archduchy of Austria and Moravia. Shape, an irregular rhomboid; greatest length, E. and W., 200 m.; greatest breadth, N. to S., 170 m. The area, pop., &c., according to the *Austrian National Encyclopædia*, are as follows:—

Districts or Circles.	Extent in sq. miles (Eng.)	Pop. 1831.	Chief Towns and Pop.
Bunzlau -	1,656	387,898	Jung-Bunzlau - 5,000; Reichenberg - 11,500
Leitmeritz	1,463	341,725	Leitmeritz - 4,290
Königgrätz	1,272	319,948	Königgrätz - 7,460
Chrudim -	1,270	294,526	Chrudim - - 5,630
Prachin -	1,921	256,589	Pisek - - - - 5,150
Bidschow -	946	245,640	Gitschin - - 3,780
Czaslau -	1,270	234,265	Czaslau - 3,320; Kuttenberg - 8,470
Elbogen -	1,187	233,713	Elbogen - - 2,010; Eger - - 9,470
Budweis -	1,677	203,875	Budweis - - 7,450
Pilsen - -	1,452	198,430	Pilsen - - 8,800
Tabor - -	1,217	197,[illegible]57	Tabor - - 4,050
Kaurzim -	1,109	185,295	Kaurzim - 1,860
Klattau -	973	171,701	Klattau - - 3,780
Beraun -	1,119	166,801	Beraun - - 2,170
Rakonitz -	844	157,326	Schlan - - 3,580
Saaz - -	909	129,970	Saaz - - 4,900
	20,285	3,725,079	
City of Prague		103,670	
Totals -	20,285	3,828,749	

But, in 1838, the pop. had increased to 4,128,661 (*antè*, p. 234.); and in 1837 the pop. of Prague, *ex* the garrison, the inhabitants of the citadel, and the strangers in the town, amounted to 107,358. (*See* Prague.)

Mountains, &c.—Bohemia is a basin, surrounded on every side by mountain-ranges, which in some parts rise to upwards of 5,000 ft. in height. From the Fichtelgebirge (pine-mountains), near the W. extremity, the chain called the Erzgebirge (ore mountains) runs N.E., forming the boundary between Bohemia and Saxony, as far as the exit of the Elbe from the first-mentioned country. The highest point of this range is the Schwarzwald, about 4,000 ft. above the sea; parallel to it is the Mittelgebirge (midland mountains), which runs as far as the l. bank of the Elbe. From the r. bank of the Elbe, E. and S.E., forming in part the frontier against Prussia, run a series of chains entitled successively the Lannitzer, Iser, Riesen (giant) and Sudetengebirge, the loftiest poin t of which, the *Snow-cap*, is from 5,200 to 5,400 ft. in height. The S.W. border is formed by the Böhmerwald, or Bohemian forest mountains, included in the Hercynian forest of the ancients, and a branch from the Fichtelgebirge: they are wild and precipitous, and contrast remarkably with the Moravian chain in the S.E., which is of gentle ascent, varying from 2,000 to 3,000 ft. in height, and separating the affluents of the Elbe from those of the Danube. Within these boundaries, Bohemia presents an undulating surface, with an inclination for the most part towards the N.: its hills are sometimes steep, and even precipitous; but rising generally no higher than about 500 or 600 ft. above the level of the sea.

Rivers.—Bohemia forms, in fact, an elevated plateau, sloping towards the N., and drained by the Elbe, which traverses two thirds of its breadth, and receives the numerous brooks and streams that descend from its lofty barriers. The sources of this great river are in the Riesengebirge mountains, whence it descends, in a S. direction, to Pardubitz, and thence W. as far as Melnik, where, after receiving the Moldau, it becomes navigable. In its course to the frontier of Saxony, it is joined besides by the Adler, at Königingrätz, the Iser, and the Eger; the Wattawa, Sasawa, Beraunka, and Luschnitz, fall into the Moldau before its junction with the Elbe. The Moldau is navigable from Budweis, and an iron railway between that town and Linz, on the Danube, completed in 1824, forms a connecting link of a grand water communication between the German Ocean and the Black Sea. This spirited undertaking was, until lately, the longest railroad in Europe; but it is only adapted to carriages drawn by horses, and having to pass over considerable heights, which occasion much difficulty and expense in transporting goods, the advantages it afforded were insufficient to divert the course of trade into this new channel, and it has proved an unprofitable speculation.

Minerals.—The mineral riches of Bohemia are of considerable importance and value. From the 13th to the 17th centuries, considerable quantities of gold and silver were obtained; the first is now, however, no longer met with, except occasionally in small quantities, in the beds of some of the streams; but above 20,000 marks of silver are still obtained annually from the lead mines. The latter produce about 60,000 cwts. a year of lead and litharge. Iron is found in most parts of the kingdom, but the product is but trifling, not exceeding from 15,000 to 20,000 tons a year. There are also tin mines (the only ones in the Austrian dominions), with mines of copper, zinc, cinnabar, arsenic, cobalt, &c. Coal is pretty abundant, particularly in the N. parts of the kingdom; and the produce which has increased very rapidly of late years, is now probably little under 90,000 or 100,000 tons a year. There are a great variety of mineral springs; those of Töplitz, Carlsbad, Sedlitz, &c., having a European reputation. About 800,000 bottles of water from these springs are said to be annually exported. All the salt used in Bohemia is imported. The working of the mines is superintended by two mining commissions, at Joachimsthal and Przibram. Under these are 23 inferior mining courts, and branches, the miners having their own codes of law and especial courts of justice; the whole is controlled by a department of the ministry of finance at Vienna.

Climate very healthy; but, from the elevation of the country, it is, on the whole, rather cold. In the mountainous regions, the snow, which often lies 12 ft. deep, does not disappear until April, the mildest climate is that of the valley of the Elbe. At Prague the mean temperature of the year is about 47° Fahr. The prevalent winds are westerly.

Soil, Agriculture, &c. — The soil of Bohemia consists principally of a clayey loam, but in parts sandy loams and sand predominate. In some of the mountainous circles there is a good deal of waste land; but, speaking generally, the valleys are very fertile. The finest land is in the circle of Saaz. Of the total area of the kingdom, amounting to 20,285 Eng. sq. m., or 12,982,000 Eng. acres, it is estimated that 11,050,673 acres are under culture or otherwise productive, being distributed as follows:— Arable lands, 5,532,509 acres; common pasture lands, 869,662 acres; woods, 3,393,215 acres; vineyards, 6,357 acres; meadows and gardens, 338.930 acres; the rest being barren mountains, water, roads, and other uncultivable lands. Here, as in all the rest of Germany, rye forms the principal crop, and next to it is oats, and then barley and wheat. The produce of each description of grain has been estimated at:— Rye, 2,129,508 qrs.; oats, 1,739,753 qrs.; barley, 877,508 qrs.; wheat, 394,156 qrs. (*Becker's Handel's Lexicon*, and *antè*, p. 239.): but we have no doubt that this estimate is below the mark; and, in fact, the estimate in the National Encyclopædia makes the product of rye 15,000,000 metzen, or about 3,250,000 qrs., and so with the other crops.

Potatoes are now very extensively cultivated, particu-

larly in the mountainous districts, where they form the greater part of the food of the people. Flax and hemp are principal objects of attention, and supply the material for the staple industry of the country. Hops, which are excellent, are raised in considerable quantities, about 12,000 cwt. being annually exported to Bavaria only. The culture of beet-root, with a view to the manufacture of sugar, has of late years increased very rapidly; so much so that, in 1838, no fewer than 87 fabrics of beet-root sugar were in operation. The export of fruit from the circle of Leitmeritz only has in some years amounted to 60,000 cwt. Some wine is made, but the quality is very inferior; and beer is the national beverage. The stock of horses, in 1831, was estimated at about 144,000; of horned cattle, at 974,000; and of sheep, at 1,350,000. Until recently, but little attention has been paid to stock husbandry; latterly, however, considerable efforts have been made to improve the breeds, and these have been very successful, particularly in the case of the sheep. The supply of cattle is inadequate for the consumption; and there is annually a large importation from Poland and Hungary.

On the whole, agriculture in Bohemia, though a good deal improved, is still in a very backward state. This, no doubt, is ascribable to a variety of causes; but principally, perhaps, to the depressed state of the peasantry, and the want of leases. Most of the land is parcelled out into immense estates; and these are cultivated, either by peasants employed by, and working on account of, the landlord, or by petty occupiers, paying a labour rent for their land. Mr. Gleig has given some curious details in reference to this subject in his Travels in Germany, Bohemia, &c. "Of large towns," says he, "there seems to be, in Bohemia, very few; but every vale and strath is crowded with human dwellings; village succeeding village, and hamlet treading on hamlet, with the most remarkable fecundity. On the other hand, you may strain your eyes in vain in search of those species of habitations which give to our English landscapes their peculiar charm. There is no such thing in all Bohemia — I question whether there be in all Germany — as a park; and as to detached farm-houses, they are totally unknown. The nobility inhabit what they term schlosses, that is to say, castles or palaces, which are invariably planted down either in the very heart of a town or large village, or at most a gun-shot removed from it. No sweeping meadows surround them with their tasteful swells, their umbrageous covers, and lordly avenues; no deer troop from glade to glade, or cluster in groups round the stem of some giant oak, their favourite haunt for ages. But up to the very hall-door, or at least to the foundations of the wall which girdles in the court-yard, perhaps twelve or twenty feet wide, the plough regularly passes. A garden, the graff generally possesses, and his taste in flowers is good; but it almost always happens that his very garden affords no privacy, and that his flowers are huddled together within some narrow space, perhaps in the very court-yard of which I have already spoken as alone dividing his mansion from the open and cultivated fields. With respect, again, to the condition of the cultivators, that is, in all respects, so different from the state of our agricultural gentlemen at home, that, even at the hazard of saying over again what has been stated a thousand times already, I must describe it at length. In the first place, then, there is no class of persons in Bohemia corresponding to our English farmer. Nobody hires land in order to make a profit out of it, at least nobody for such a purpose hires a large tract of land; but each individual cultivates his own estate, whether it be of wide or of narrow extent. Thus the graff, or prince, though he be the owner of an entire circle, is yet the only farmer within that circle. He does not let an acre of ground to a tenant; but having built what he conceives to be an adequate number of bouerin-houses, he plants in each of these a bouer-man, and pays him for tilling the ground. These bouerin-houses, again, are all clustered together into villages, so that the bouerman is never without an abundant society adapted to his tastes; and very happily, albeit very rudely, his days and nights appear to be spent.

"The land in Bohemia does not, however, belong exclusively to any order in the community. Many bouermen are owners of their farms, some of them to the extent of 100 acres and more; while almost every township has its territories, which, like the noble's estate, are cultivated for the benefit of the burgh. But in all cases it is the owner, and not the cultivator, to whom the proceeds of the harvest belong. These are, indeed, gathered in and housed for him by his representatives, who, in addition to some fixed money payments, for the most part enjoy the privilege of keeping a cow or two on the wastes belonging to the manor; but all the risk and trouble of converting his grain into money attaches to the proprietor of the soil." (ii. 19.)

But though by far the larger portion of the land be cultivated in the way described, by hired labour, still it is certain that a good deal is let in Bohemia, as in all similarly situated countries, not for money or a quantity of produce, but for a certain amount of labour to be performed on the estate of the lord, which amount is regulated by a law called the *Roboth-patent*. Mr. Reeve, in his instructive Sketches of Bohemia, has the following statement as to the relation subsisting between the lords and those occupying their estates, under this system: —

"The subjects, as they are termed, are all registered in the books of the estates; the lord collects the king's taxes, besides his own dues, and sends an annual supply of recruits to the imperial army. He has the power of expelling misdemeanants from his estate, and he exercises a certain control over his subjects; but the peasants are by no means attached to the soil; and they may always appeal to the courts of justice against their lord, with a proverbial certainty (such is the policy of the government) of gaining their cause. On the other hand, the lord represents the government to his peasants, and the peasants to the government; and whilst he is accountable to the justice of the country, he has it in his power to exercise a beneficent influence over the lower orders. He provides for their instruction; he introduces improvements, and encourages trade; he increases their commercial relations; he arbitrates in their disputes; and in proportion to his fulfilment or neglect of these functions, the estate is prosperous or poor. It often happens that the nobility and gentry have acquired a purely German character, in accordance with that of the Austrian government, but very much opposed to the national spirit and national wants of the Bohemian people. All the ancient seignorial rights which were not legalised and regulated by Joseph II., as the Roboth dues, &c., were abolished by that monarch. But the tradition of feudal attachment and of feudal obedience still exists amongst the people: thus, although the consent of the lord is not legally required to a marriage between his peasants, it is generally asked, and considered indispensable. The possessions of some of the Bohemian nobles are immense; Prince Schwartzenberg owns one eighth of the country; and the estates once held by the great Wallenstein were so vast as to have formed the appanage of six great families after his death and attainder." (*Metropolitan Mag., April*, 1837.)

Hence the condition of estates, and of the population upon them, depends more, perhaps, in this than in any other country, on the conduct of the lords. Wherever the latter are liberal and intelligent, the estate has an improved appearance, and the inhab. are contented, industrious, and thriving. Unluckily, however, the bulk of the landlords, like the occupiers of their estates, are strongly attached to routine practices, and to those feudal privileges which, while they oppress and degrade the peasantry, impoverish the lords.

Here, as in most other countries, industry flourishes most where it has to contend with the greatest difficulties. The rich level lands of Bohemia, instead of being the best, are the worst cultivated. The occupiers of the mountainous and poorer districts display, speaking generally, not only the greatest industry, but the greatest skill, and the most improved methods of cultivation.

The forests, as already seen, are very extensive: they are mostly situated in the W. parts of the kingdom, and especially in the district of Prachin. They are estimated to yield annually above 2,000,000 cubic fathoms of wood.

Manufactures. — With the exception, perhaps, of Moravia, Bohemia has long been the most celebrated of all the Austrian states for its manufactures. At this moment it produces the finest linens and linen yarn of any country in Europe. Spinning is the universal and favourite employment of the women; and no fewer than 500,000 females are said to prosecute it as a subsidiary business! Machines for spinning have, however, been introduced; but it remains to be seen whether they will be able to undersell the yarn produced by the hand. About 55,000 hands are supposed to be employed in linen weaving; and the total annual value of the produce of this branch of industry, including that of lace, may be estimated at about 1,200,000*l*. a year. This branch of industry is said, however, to be on the decline, in consequence of the growth of the cotton manufacture. According to the National Encyclopædia, 20,000 individuals are employed in hand-spinning, exclusive of those employed in the factories, which are numerous: 18,000 hands are said to be employed in the hosiery department of the trade. There are about 500 bleaching establishments in full work, and the manufacture of potash is very considerable. The woollen manufacture is very extensive: in spinning only, 55,000 hands are said to be engaged; and in weaving, from 15,000 to 16,000: the weaving of woollen stockings employs from 2,000 to 3,000 hands. The hat-makers, furriers, &c., are estimated at about 1,200; and the leather manufacturers at 4,000. There are about 100 paper-mills; and the imperial tobacco manufactory at Sedlitz supplies the whole country with that article, through the agency of above

7,000 retail shops. The manufacture of metals and minerals, and of beet-root sugar, has already been alluded to.

But of all the Bohemian manufactures none is nearly so well known in foreign countries as that of glass. Bohemian glass is not so pure as that of England or France; but the art of staining, painting, and gilding glass, is much better understood there than in this country, and articles of Bohemian manufacture are unequalled in point of lightness and richness of appearance. It is probable, however, were it not for the weight of the duties laid on glass in this country, and the troublesome regulations connected with their assessment, that we should soon become formidable rivals of the Bohemians, even in those departments in which they appear at present to have the greatest superiority.

Altogether, it is said that from 1-5th to 1-4th part of the inhab. of Bohemia are engaged in manufactures. But then it is material to observe that all the hand-spinners and weavers combine with their business that of cultivators of patches of land, and other employments. We believe, too, that the cotton trade of Bohemia, like that of the rest of Austria, is entirely the creation of prohibitions and oppressive duties on foreign stuffs and yarn; and that, were these repealed, or materially modified, the manufacture would be involved in the greatest difficulties.

Owing to the want of capital, many of the great landed proprietors are obliged to engage in manufactures. Thus, Prince Kinsky, and Counts Harrach and Bucquoy, are the greatest glass manufacturers; Prince Auersberg manufactures sulphur, vitriol, and colours; Count Urbna and Prince Windishgratz, tin plates; Count Thun, porcelain; Prince Lobkowitz, earthenware; Prince Wallenstein and others, beet-root sugar, &c. It is clear that manufactures carried on under such auspices must be more expensive and less improved than if they were carried on by individuals dependent upon them.

Races of People. — Of the 4,000,000 people in Bohemia, nearly 3,000,000 are Czeches, of Slavonic origin, and the rest Germans and Jews. The Germans, to the amount of 900,000, principally inhabit the capital and the circles of Elbogen, Saaz, Leitmeritz, Bidschow, and Königratz. In these circles German is the more prevalent language, though even in them Bohemian is the vernacular tongue of the lower classes, as it is that of the middle classes, and even of the higher ranks in other parts. The German pop. is more industrious, intelligent, and enterprising than the Slavonic. The Jews have been settled in Bohemia from a very remote epoch. Here, as in other countries, they are mostly engaged in mercantile and pecuniary transactions; and they are also extensively engaged in the business of distilling and brewing.

Religion. — Notwithstanding Bohemia may be truly said to be the cradle of the Reformation, and the determined and long-continued stand her inhabitants made in defence of the doctrines promulgated by Huss and his followers, she is now become one of the principal strongholds of Catholicism. The spirit of the ancient Bohemians has been entirely subdued; and they have become amongst the most bigotted and superstitious adherents of a faith imposed on them by the sword of the conqueror and the rack and gibbet of the inquisitor. Nowhere, perhaps, is the miserable trumpery of relics and saints' days held in such veneration. Religion here has not been employed to enlighten the understanding or improve the morals; but to darken the one, and to pervert and debase the other. The more intelligent part of the pop., disgusted with its ceremonies, have taken refuge in scepticism; but the great bulk of the people believe what they are told, and forsake the altars of Christ to prostrate themselves before those of St. John of Nepomuck! The church hierarchy consists of an archbishop (of Prague), 3 bishops, 7 deans of chapters, with numerous canons, 11 archdeacons, 133 deacons, 1,107 parish and 505 minor cures. Though the monastic institutions were much diminished by the vigorous and salutary reforms effected by Joseph II., there are still no fewer than 75 monasteries, and 7 convents, comprising about 1,020 monks and 150 nuns; these are, however, obliged to do the duty of parish clergy, or to employ themselves in education, or in the care of the hospitals.

Joseph II. granted full toleration to all sorts of religions. The Lutherans and Calvinists together amount to from 60,000 to 70,000. The Jews, amounting to nearly 70,000, are under the grand rabbi at Prague.

Education. — If the goodness of education were to be inferred from the number of educational establishments, Bohemia would have little reason to fear a comparison with most European countries. The institutions for its promotion consist of, a university at Prague; a polytechnic school; 26 gymnasiums; 3 philosophical seminaries; 3 theological seminaries; 1 military academy; 2 convents for female education; 1 Jewish college; 40 grammar schools; 2,500 Catholic, 36 Protestant, and 20 Jewish, schools: and there are also schools for music and drawing, an observatory, and numerous libraries and cabinets of natural history, arts, and sciences. The Academy of Prague, though not long established, enjoys considerable celebrity.

But there is great reason to fear that the enlightenment of the people is looked upon as a secondary and subordinate object by those who superintend education in Bohemia, — that is, by the clergy. Their primary object is to maintain the existing order of things; to educate the people in the belief that the Catholic is the only true faith; and that it is the duty of every good and well-disposed person to submit implicitly to the dictates of his spiritual and civil superiors! Such an education is better fitted to narrow and enslave, than to expand and emancipate the mind. Any thing like free inquiry, any examination into the reciprocal duties and obligations of princes and subjects, or any inquiry into the real sources of public wealth, would not be tolerated in the Bohemian academies. The pupils there are taught to believe that whatever is ordered is right! And adding to such a system of education the influence of a rigorous censorship of the press, the wonder is not that knowledge is at a low ebb in Bohemia, but that it is so far advanced as it really is.

"The march of intellect in Bohemia, though the schoolmaster be abroad, is in very slow time, and, what is worse, it is but little aided by the national pen or the national printing-press. As a proof of this, I may mention that there are only 10 printers and 10 booksellers in Prague; while for the political *quid nuncs*, there are merely published a couple of very small stupid newspapers in the German tongue, with other two, no less stupid, in the dialect of Bohemia. The literary periodicals, again, are confined to a small paper, called the *Bohemia*, in German, published thrice a week; and the *Abendunterhaltungen*, in Bohemian, printed twice a week. For the lovers of science, art, manufactures, and agriculture, a journal devoted to these matters is published twice a year; while the religious world remains quite satisfied with one quarterly journal. Such is the limited extent of the demand for political, literary, and religious information throughout Bohemia." — *Strang's Germany in* 1831, ii. 206.

During the reign of Joseph II. the use of the Bohemian language was forbidden, not only in the courts of justice, but also in the colleges and higher academies. But, instead of suppressing the language of the people, this seems to have occasioned a reaction in its favour; and during the present century Bohemian literature has been a good deal attended to, and made considerable progress.

Poor.—The number of hospitals and charitable institutions in the capital and principal towns is very considerable, and in the towns the poor are carefully provided for. No regular poor-rates are, however, collected; where the foundation funds and voluntary subscriptions do not suffice, the deficiency is made up by government. But the contributions of the latter are afforded very sparingly, and begging is, after all, the great resource of the Bohemian poor, as it must be of the poor of every country where a compulsory provision is not established. It is here, in fact, universal; and all travellers are disgusted with the numbers and importunity of the mendicants.

Manners, &c. — The Bohemians are passionately fond of music and dancing, and have attained to great proficiency in both. The national airs are nearly the same with those of the Slowaks of the N.W. part of Hungary, and are generally plaintive. The waltz is the favourite dance; and two of its most fashionable varieties, the *Redowak* and the *Galoppe*, have been borrowed from the Bohemian peasants. The men are generally robust and well proportioned; and the women are (in Germany) celebrated for their beauty. The dispositions of the people are more mercurial, and their manners more gay, frank, and open, than those of their Saxon neighbours. How much soever the objects of their veneration may be changed, they are still, as in the days of Huss and Jerome of Prague, zealous defenders of what they believe to be right and proper. There is a nearly total want of a middle class — an intermediate rank between the lords and their vassals. With the exception of Prague, there are no great towns, none of those *foci* whence intelligence and civilisation are diffused over a country. But, however ignorant and prejudiced, the character of the Bohemian peasant is most respectable. In point of morals, he is quite on a level with the peasantry of the other Germanic nations. Crimes of violence are of rare occurrence. The proportion of illegitimate to legitimate births is as 1 to 8; but in the capital it is as high as 1 to 2.

Government, &c.—The nobility of Bohemia are stated to be 2,260 in number, including 14 princes, 172 counts, 80 barons, and more than 100 hereditary knights as heads of families; the total revenues of the nobility were estimated 50 years ago at 180 millions of florins, 18,000,000*l*. At the meetings of the Estates, which form 4 divisions

viz. 1st, the prelates; 2d, the nobles (*Herrn*); 3d, the knights; and, 4th, the citizens of the principal towns, nothing but the distribution of the sums ordered by the emperor to be raised, is discussed. No law, however it may affect the religious, moral, or material welfare of the state, is ever submitted to them. A small minority once made a struggle for some ameliorations of the existing system, but without success. There is, indeed, a strong feeling against the absolutism of the emperor; but the nobility are afraid lest their peculiar privileges should be affected by any change, and no efficient reform need therefore be expected at their hands. The government of the country is directed by the different sections of the ministry at Vienna; the principal of which is the imperial united chancery, under which is the *Gubernium* at Prague. The court of appeals at Prague is under the ministry of justice at Vienna; the receiver of taxes is under the finance minister at Vienna. To these central authorities the various branches in every circle are subject; the courts of justice of the circle being at the same time courts of appeal from the manor courts of the nobles, who exercise judicial authority over their estates. The city and town magistrates have their own civil and criminal courts, from which appeal lies to the court of appeals at Prague. The military have a peculiar jurisdiction, and the nobles have, as in the other provinces, a special court, called the *Landrecht*. Independent of all authorities, judicial or administrative, the police forms a branch apart, being in the towns confided to especial commissaries, and in the country to the captain of the circle, in whom the three functions, judicial, administrative, and those of police, are united. The number of civil *employés* in the kingdom is stated in the *Encyclopædia* to be 8,461.

Towns.—Exclusive of Prague, Bohemia contains no town of any considerable importance, or of more than 10,000 inhabs. The towns are divided into royal and aristocratic boroughs, and the former, again, into privileged and non-privileged. The towns privileged to send deputies to the diet are Prague, Pilsen, Budweis, and Kuttenberg. Both classes of royal boroughs have their own magistrates, police, &c., and their internal government in their own hands. The boroughs of the nobility are usually under the control of their lords.

History.—After innumerable mutations, Bohemia, with Hungary and Transylvania, fell, in 1526, under the dominion of Ferdinand of Austria, brother of Charles V., who had married the sister and heiress of Louis, king of Bohemia and Hungary, killed at the battle of Mohacz. Bohemia was at this epoch in the enjoyment of a comparatively free constitution, and three fourths of the population were attached to the reformed faith. The attempts of the Austrian sovereigns to undermine the free institutions of the country, and to lay restraints on the exercise of the Protestant worship, provoked a desperate contest, which continued till 1620, when the Austrian troops totally defeated the Bohemians at the battle of Weissenberg, near Prague. The persecution which followed has seldom or never been equalled for atrocity. Many of the best and noblest Bohemian citizens lost their lives on the scaffold, and thousands upon thousands were driven into exile, and had their estates and properties confiscated. The free constitution of the kingdom was entirely annihilated; the Protestant religion all but extirpated; and such was the combined influence of massacre and exile, that in 1637 the pop. did not exceed 780,000! Subsequently the government gave every encouragement to the settlement of German colonists in the country: and in the reign of Maria Theresa and Joseph II. a new æra began; and the milder and more liberal system of government which they introduced has since been followed up.

BOIS-LE-DUC, a fortified town of Holland, cap. prov. N. Brabant, in a morass, at the confluence of the Dommel and Aa, 27 m. S. by E. Utrecht. Pop. 13,500. It is about 5 m. in circ., is defended by a citadel and two forts, and in case of need the environs may be laid under water. It is a well-built handsome town, and is intersected by several canals, over which there are a great many bridges. It is the seat of a vicar-general and tribunals of original jurisdiction and commerce, and has a fine town-hall, on the model of the Stadt-house at Amsterdam; 6 churches, of which the cathedral church, or that of St. John, built in the end of the 13th and the beginning of the 14th century, is one of the finest in Holland; a grammar-school, in which Erasmus was partly educated; an academy of painting, sculpture, and architecture; 2 hospitals, an orphan asylum, a house of correction, &c. Its manufactures, which are considerable, consist of linen and thread, needles and pins, cutlery, &c., with distilleries, glass-works, &c. It is well situated for, and has a considerable trade.

Bois-le-Duc was founded, in 1184, by Godfrey III., duke of Brabant. In 1629 it was taken by the Dutch, after a lengthened siege. It was held by the French from 1794 to 1814, when it surrendered to the Prussians, by whom it was again made over to its old masters.

BOJADOR (CAPE), a celebrated promontory of the W. coast of Africa, desert of Sahara; lat. 26° 7′ 10″ N., long. 14° 29′ 5″ W. This headland forms the W. extremity of a rocky ridge, called the Geb-el-khal, or Black Mountains. It was long the limit of navigation towards the S., and was first passed by the Portuguese in 1433.

BOJANO (an. *Bovianum*), a town of Naples, prov. Sannio, cap. canton. on the Biferno, in a deep gorge, at the foot of Mount Matese, 16 m. E.S.E. Isernia. Pop. 3,000. This town has suffered severely from earthquakes, the last calamity of this sort having occurred in 1805. It is the seat of a bishopric, and has, or had before the earthquake, a cathedral, with several churches and convents, and an hospital. During the early period of Roman history, Bovianum was a very important place. In the Social war it was one of the strongest holds of the confederates. It was taken by Sylla, and afterwards retaken by the Marsi. Under Cæsar it became a military colony. Strabo says that in his time it was ruinous and deserted. (*Cramer's Ancient Italy*, ii. 229.)

BOJANOWA, a town of the Prussian States, prov. and reg. Posen, 9 m. N.W. Rawiez. Pop. 3,000. It is divided into the Old and New towns; most part of the houses are of wood; it has a large town-house, and fabrics of coarse cloth.

BOKHARA or UZBEKISTAN, a country of Central Asia, comprising considerable portions of the anc *Sogdiana* or *Transoxiana*, and *Bactria*, forming the most powerful state of what is named by the moderns Indep. Tartary, or Turkestan. It lies between lat. 36° and 41° N., and long. 63° and 70° E.; having N. the desert and the khanat of Kokan; E. the mountainous regions of Hissar and Koondooz; S. Caubul; and W. the khanat of Khiva or Kharasm. Area, probably about 235,000 sq. m. Pop., according to Burnes, 1,000,000. It is divided into nine provinces, viz.:—

Provinces.	No. of tomuns.	Real Ld. Rev. in tillas.	Chief City or Town.
Bokhara - -	City & 7 t.	81,000	Bokhara, 150,000 Inh.
Karakool - -	1	15,000	Karakool.
Kermina - -	2	27,000	
Meeankal (or valley of the Kohik) -	7	43,000	Katta Kurgan.
Samarcand - -	5 t. and 5 other dist.	49,000	Samarcand 10,000 In.
Juzzak - -	1	8,000	Juzzak (Dizzikh).
Kurshee - -	5	32,000	Kurshee.
Sub-e-ab (or banks of the Oxus)	4	22,000	
Balkh - -	- -	*	Balkh 2,000 Inh.
		277,000 = 184,660*l*.	

Bokhara is mountainous only in the E., where its mountains are northern spurs from the Hindoo Koosh, and on its S. frontier, where they seem to belong to the Ghoor or Paropamisan range; if we except a few low-lying hills about Shuhr-Subz, Samarcand, and Bokhara. The height of the former range, in about lat. 39°, is supposed by Burnes to be at least 18,000 feet, since the mountains 150 m. E. of Kurshee were seen by him covered with snow in June. The plain region which comprises all the rest of Bokhara, is nothing but a sandy desert, with a few *oases*, stretching for a few miles on either side the banks of rivers; in which are planted the chief cities and towns; and which constitute the only cultivable lands, and are very densely peopled. The rivers are therefore of the highest importance: there are five, viz. the Jihon or Amoo (Oxus), Kohik or Zer-afchan, Kurshee or Karchi, Zourhab, and Balkh. The Oxus intersects the country S.E. to N.W., dividing it into two unequal portions, and varying in width from 300 to upwards of 800 yards. The course of the Zer-afchan (river of gold) is entirely within this country; it rises in the highlands E. of Samarcand, runs N. this city and Bokhara, and after a course of about 450 m., chiefly E. to W., falls into the lake Denghiz. The Kurshee rises in the same highlands as the Kohik, runs N.E. to S.W., by Shuhr-Subz and Kurshee, and is lost in the desert. The Zourhat runs from N. to S., and is similarly lost. The Balkh river rises S.W. the Hindoo Koosh, and runs N. to Balkh, where its waters are distributed all over the surrounding country by means of canals. The lake Denghiz, or "*the sea*," is 60 m. S.S.W. Bokhara, surrounded on all sides by sand hills; 25 m. long, and very deep: its water is salt, and it appears neither to increase nor decrease at any season of the year. There are other lakes, but of no importance.

Aspect.—The fertility of the country is said to have been anciently much greater than at present; the valley of Sogdiana has been spoken of as a paradise by both Greek and Arabian writers; but it is mostly destitute of large trees, and the banks of the Kurshee entirely so. The desert is varied only by sand hills, 15 or 20 feet high, raised by the wind; of a horse-shoe shape, the bow towards the N., and always resting on a base of hardened clay. Some

* The land rev. of Balkh, 20,000 tillas, goes to its own chief.

stunted herbage, low brushwood, and the camel-thorn, are the only signs of vegetation; and a few rats, lizards, beetles, and solitary birds, the only permanent inhabitants. S. of the Oxus, however, it is not quite so bare as elsewhere. Curtius has well described the present state of the region round Balkh, in his glowing description of anc. Bactriana. (See *Burnes*, ii. 211.) Many remains of former splendour, aqueducts, temples, &c., are to be met with in various spots, as between Khooloom and Mazar; the ruins of Bykund, 20 m. W.S.W., and of Khojouban, 25 m. N.W. Bokhara, &c.

Geology and Mineralogy.—N. of the Oxus, and from the base of the mountains to Bokhara, there is a succession of ranges of limestone, oolite, and gravel, alternating with vast and hardened plains of argillaceous clay or quartzose sand: the pebbles in Miankal are sharp and angular, and look very unlike having ever been subjected to the action of water. There is more gold in the sand of the Oxus than in any other river rising in the Hindoo Koosh; but other metals are not found in any quantity in this country; silver, iron, and copper, are all imported from Russia. Sal-ammoniac is native near Juzzah, and there is a bed 5 m. in circ. of dark-coloured, imperfectly crystallised salt, near Charjooee, 500 lbs. of which sell for 3*s*. in Bokhara city. The water in the wells of the desert is often found brackish and unfit to drink, especially S of the Oxus; between that river and Bokhara the water is good, and exudes through the sand.

Climate. — The climate of the elevated E. frontier is of course very different from that of the rest of the country. In the plains it is generally dry and salubrious; in the winter sometimes so cold that the Oxus is frozen over, and the snow lies for three months at Bokhara: in the desert in summer the heat exceeds 100° Fahr. The seasons are very regular; at the beginning of March the spring opens, the heat soon increases to an oppressive degree, being seldom refreshed by showers, and for four months the bed of the Kohik is dry at Bokhara, and the country suffers from drought. The summer lasts till October, when a fortnight or three weeks' rain sets in, succeeded by frosts, and these again by rains from the middle to the end of Feb., which are often very heavy, but evaporation is rapid. Violent tornadoes sometimes arise, blowing from the N.W.; but a steady wind from the N. blows across the desert in the hot season: the atmosphere is remarkably clear and cloudless at Bokhara, and meteors are frequently seen in considerable numbers at night. At Balkh the summer heat is very oppressive, and the climate unhealthy. Rheumatism is a frequent disease there; and ophthalmia and blindness are the scourges of the desert: fevers are rare, but leprosy is common.

Vegetable Products. — There is but little large timber: willow and poplar are the principal trees in the plains, and the latter is used for house-building: tamarisks and leguminous plants are the most frequent shrubs. A bastard indigo flourishes profusely on the banks of the Oxus, but neither the true plant nor the sugar-cane grow wild. Some *Boragineæ* and *Cruciferæ* are found universally; lilies, asphodels, and euphorbias less commonly. The *Galenia africana*, the favourite food of the camel, covers many parts of the desert: rhubarb grows in Kurshee; but the gigantic *Ferula persica* (which produces assafœtida) is the sole member of the umbelliferous family. Bokhara is celebrated for its fruits; it is believed to be the native country of the melon, which grows here to more perfection than any where else; and most of the fruits familiar to us grow there in great perfection.

Animals. — Wild animals are few: the lion is not now found, though Alexander killed one in Transoxiana. Diminutive tigers on the banks of the Oxus, wild hogs and asses, deer, antelopes, bears in the E., wolves, foxes, jackals, cats, martens, rats, and marmots, are the chief *Mammalia*; ostriches in the S.; eagles, hawks, owls, crows, storks, pigeons, plovers, and water-fowl, are common; but there are no singing birds; and all kinds of game are scarce. Tortoises and lizards are found in the desert; but there are neither alligators, nor many snakes. The fish in the Lake Karakool are good: those of the Oxus are the same as in other Asiatic rivers; a large dog-fish is caught there often of 600 lbs. weight. There are few insects; locusts sometimes infest the neighbourhood of Balkh; the scorpion is common, but not dangerous; a kind of cochineal insect lives on the bastard-indigo, but the dye it produces is very inferior, and the proper mode of treating it is unknown. The silkworm is abundant on the banks of the Oxus, where the mulberry is planted for it in great quantity; and the Turkmans in the summer months are nearly all occupied in the production of silk. The quality of the water, or some other cause in Bokhara city, produces the *rishta* or Guinea worm, and ¼ part of the population are said to be attacked annually with a painful disease, owing to the formation or growth of these worms beneath the skin. When observed, they are extracted by means of needles; an operation in which the Bokharese are very expert.

Races of Men. — Baron Meyendorff estimates the pop. and the different races of which it is made up, as follows:—

		Brought forward	2,460,000
Uzbeks - -	1,500,000	Kirghiz & Kara-kalpahs	6,000
Tadjiks - -	650,000	Jews - - -	4,000
Turkomans - -	200,000	Afghans - -	4,000
Arabs - -	50,000	Lenghir - - -	2,000
Persians - -	40,000	Bohemians - -	2,000
Kalmucks - -	20,000		
Carry over	2,460,000	Total - -	2,478,000

Burnes, however (1835), estimates the total pop. at no more than a million, half of whom he thinks are wandering tribes. The Uzbeks, the last race who conquered this country, say they originally came from the neighbourhood of Astrakhan, and are divided into a number of tribes, of which that of Mangout is the principal, and the khan always belongs to it. In their physical appearance they resemble a mixture of Tartar and Kalmuck, but those of the capital are scarcely to be recognised as belonging to either of these families, from their great intermixture with Persian blood. The Uzbeks are chiefly established in the principal towns, and in the valley of the Zer-afschan: they are all warriors, and the government offices are for the most part filled by them. Many are employed in trade, though they are avaricious, and much addicted to deceit. They are naturally proud, and have a great contempt for the other races, especially the Tadjiks; but are also said to be often well-disposed, and are simple, and easily subject to imposition.

Tadjiks. — The Tadjiks are regarded as the aborigines, and descendants of the ancient Sogdians. They are similar to European races in both features and complexion, the latter being much less brown than that of the Persians; their hair is black; they are active, laborious, and intelligent, but pusillanimous, and never take arms: they therefore differ in numerous particulars from the Uzbeks. They do not lead a wandering life, but are cultivators, artisans, and merchants; in the latter capacity, like the Uzbeks, they are greedy and avaricious. Most of them know how to read and write; and, excepting the clergy, they are the most civilised people of the country. Their physiognomy expresses mildness and tranquillity; but they are deceitful, and unfeeling towards their slaves.

Kalmucks. — A large portion of the Kalmucks are descendants of the hordes of Jenghiz-khan; the remainder are Torgout Kalmucks, who in 1770 abandoned the banks of the Wolga, to return to their original seat. The former are to be recognised only by their physical appearance; they have almost forgotten their original tongue, and have adopted the customs of the Uzbeks, amongst whom they live, in villages of their own.

Turkmans. — The Turkmans, or Toorkmuns, inhabit chiefly the region S. of the Oxus (which forms part of Turkestan, or Toorkmania); they belong to the great Tartar family, and differ from the Uzbeks in being exclusively a wandering tribe, having the face larger, and the figure more squat; in these particulars resembling the Kalmucks. They cultivate rice on the banks of the Amoo, but have many herds, and live much on their milk and flesh. Their horses are excellent, and have been celebrated since the time of Alexander. The Turkmans are by profession dealers in slaves; they have chiefs of their own, named begs, but all pay tribute to the khan of Bokhara.

Arabs. — The Arabs have been established here ever since the age of the caliphs. They are immediately recognised, by their swarthy complexion. Some are wandering, and others demi-nomadic tribes; a third section live in villages, some of which are near Bokhara; others are cultivators, and possess flocks in the steppes: it is chiefly the latter who furnish the lamb-skins, in such general demand.

Persians. — The Persians are mostly slaves, who have been captured by the Turkmans; and a proportion of 8 individuals in every village of 20 houses is perhaps a fair average throughout the country. — (*Burnes.*)

Kirghiz. — The Kirghiz are a small wandering horde, found especially N. the valley of the Zer-afschan. Some of the Afghans and Kirghiz are descendants of the hostages retained by Timour: there are some Chinese who have a similar origin. The Bohemians, or Zingeunes, here called Mazane, are of unknown extraction, and live in different companies in every part of the country; they tell fortunes, and have all the other occupations of gipsies.

Jews, &c. — The Jews live almost entirely in Bokhara city; where there are also 300 Hindoos, who are not allowed to build temples, have idols, walk in processions, bring their families beyond the Oxus, or purchase female slaves, and are prescribed a particular dress. They come chiefly from Sinde; are very sober and orderly, industrious and devoted to trade, in which they amass considerable wealth.

Agriculture is the principal source of the national

wealth: rice, wheat, barley, jowaree, sesamum, maize, moong, melons, and beans, are the chief objects of culture. The propensity to grow rice is strange, in a country so unfitted for it; but the fields of Shuhr-Subz yield rich crops, and irrigation for the purpose is pursued to a very great extent in the Kurshee valley, and at Balkh. Meyendorff observes that the rice of the Miankal (valley of the Kohik) is not good. S. of the Oxus the wheat fields, when sown, yield crops for three successive years. When the first harvest is finished, the cattle are turned in upon the stubble fields; and next season the stalks grow up and ear; and a third but scanty crop is reaped in the same way. At Karakool, in Bokhara Proper, the return is said to be sevenfold; at Balkh the wheat ripens in a month; the crops are very good, and the stalk as high as in England. Wheat is usually sown in autumn, and reaped in July; and the fields are afterwards ploughed for peas, which are gathered in the same year. Barley is sown early in March, and reaped before wheat: it comes in the place of oats, which are not used in Bokhara. Jowaree (*Holcus saccharatus*), which, with wheat and melons, occupies most of the surface, comes to maturity in nearly the same period as barley: it grows to five feet in height, and affords both grain for the poor, and, by its leaves, good forage for the cattle. It is commonly surrounded by *tanabs* of hemp and cotton, from the seeds of which oil is extracted: a considerable quantity of cotton is grown and exported, both raw and manufactured. Trefoil is cut seven or eight times a year; madder is grown, and tobacco; the best of which is from Kurshee. Beet-root, turnips, carrots, &c., abound; the potato has not yet been introduced. Kurshee is a "sheet" of gardens and orchards, but most of the stone fruit is inferior to that of Persia. There are many kinds of grapes, and the raisins prepared from those of Bokhara are unrivalled for size and flavour, and beautifully transparent. The vines are not pruned, as in Europe. The wines have little flavour, and will not keep long. The most celebrated fruit is the melon, which is of several kinds; one is oval, with a green or yellow skin, sometimes 4 ft. in circumference, and of a most delicious flavour. Winter melons are said to surpass all the others. Cucumbers also attain great size and excellence. The iris, rose, aster, sunflower, &c., are cultivated a great deal in the gardens, which are very large and numerous. The fields are parted into *tanabs*, each of which comprises a surface of 3,600 square yards; their limits are formed by ditches for irrigation. The want of water is the great hindrance to the progress of agriculture, as, wherever there are neither rivers nor canals, the ground is uncultivated. Property in land is of five kinds: 1st, The state property, which is the most considerable. 2dly, The *kharadj*, the right to which was formerly doubtful between the government and certain proprietors, and has been ceded to the latter, on payment of a light tax. 3dly, Fiefs, bestowed for military services. 4thly. Properties of individuals. And, 5thly, Legacies for religious purposes. The state territory, as well as other property, is let; government receiving as rent two fifths of its produce.

Cattle, &c.—Bokhara is rich in cattle; the sheep and goats claim the first notice, since the one yields the celebrated skins, and the other a wool, only inferior for shawls to that of Cashmere. These flocks graze on furze and dry grass, and their flesh is sweet and well-flavoured. All the sheep are of the variety with large tails, some of which yield as much as 15 lbs. tallow. The description of sheep which produces the jet black curly fleece, made into caps in Persia, and so much esteemed every where, is peculiar to Karakool, a small canton between Bokhara and the Oxus. The animal will thrive nowhere else, and has been transported to Persia and other countries without success: when removed it loses the peculiarity in its fleece, and becomes like other sheep. The annual export of skins amounts to about 200,000, the best of which are sent to Constantinople. The goats yield the shawl wool, and are about the common size, of a dark colour; and many belong to the wandering Kirghis tribes. The oxen are neither large nor strong, and beef is eaten only by the poor: mutton is the food for which there is the greatest market. The horses of Toorkmania are large and bony, and more remarkable for strength and bottom than symmetry or beauty. The Uzbek tribe, of Karabeer, possess the most matchless horses in the East: the breed was introduced by Tamerlane, or Timour, into the country round Samarcand and Shuhr-Subz. All the traffic of Bokhara, however, is carried on by means of camels: these have a sleek coat, as fine as that of a horse, and shed their hair in summer, from which a fine waterproof cloth, of close and heavy texture, is manufactured. The Bactrian camel, with two humps, and tufts of black hair on the neck and thighs, abounds S. of the Oxus, and can carry a burden of 6 cwt.; the dromedary is common in Bokhara; the asses are large, sturdy, and much used: there are no mules.

No considerable manufacture is found in Bokhara; none employing more than four or five workmen at a time. Cotton thread, silk stuffs of different colours, leather, excellent shagreen, good sabres, knives, and other steel articles, locks, hardware, gold and silver mountings for knives and sabres, rings, and other jewellery, articles of turnery, and fire-arms, are amongst the chief productions. Women are often employed in embroidery, and especially in divesting the cotton of its seeds, which occupies many hands. No farther use is made of hemp than to procure an intoxicating drug; sugar and confectionary are made from the manna found on the camel-thorn. The Jews and others excel in the art of dyeing, but leather is generally bad, and the cutlery, &c., inferior to that of Persia. The fine arts are still less advanced, owing to the influence of Islamism, which does not permit representations of animated objects: flowers are the principal subjects of paintings, and sculpture is confined to cutting tombstones. The modern edifices of Bokhara are destitute of merit, and the fine mosques built at Samarcand, under Timour, are looked upon as impossible to be equalled in the present day. The canals are large; which is indeed essential in a country where evaporation is so rapid; and all the villages are situated on the banks either of a river or canal, and consist generally of about a hundred houses built of earth, sometimes walled round, and intersected by public ways not so narrow as those of the towns: in their centre is commonly a public fountain, or small reservoir. There are very few towns; they are all built on rivers, and surrounded by cultivated fields: Bokhara, Samarcand, Kurshee, Karakool, and Balkh are the principal; the rest are but large villages.

Commerce.—Bokhara, though politically of such secondary importance, holds a pretty high position in the commercial world. Fruitful in the productions of the earth, where all around is desolation, it is a central mart, where the commodities of Europe, China, Persia, India, and Caubul, may be exchanged with advantage. Peter the Great of Russia wished to open a communication between the Caspian and the banks of the Oxus: he succeeded in opening roads from the S. of Asiatic Russia to the E. of the Aral Sea; and for 80 years they have been annually travelled by the caravans of Bokhara, which bring back the manufactures of Russia; while those of Britain reach the banks of the Zer-afshan by way of India.

Exports.—The exports are chiefly silk, cotton, wool, coarse chintzes, cotton-thread (which is in much request), lamb-skins, and others. The following articles were in 1819 amongst those imported at Orenburg from Bokhara:—Cotton, 16,813 pouds (599,670 lbs.); cotton-thread, 18,928 pouds (676,000 lbs.); white cotton, 20,410 pieces of 28 yds.; skins, 74,336.; silks, challies, torquoises, lapis lazuli, dried fruits, raisins, &c. &c. The returns are paid in Dutch crowns and ducats, Spanish piastres, and Russian silver roubles. The total exports to Russia are valued at nearly 320,000*l.* Silk and cotton are sent in large quantities to Caubul, and even into India; and wool as well, which fetches from 6½ to 8 tillas (4*l.* to 5*l.* 7*s.*) per 256 lbs. Engl. The lamb-skins of Karakool are paid for in ready money by foreign merchants.

Imports.—The imports from India are the same as those into Caubul; a half of the 2,000 camel-loads that reach the latter country yearly from India pass on into Turkestan. Muslins, Benares brocade (about 500 pieces), white cloth from the Punjab for turbans, sugar, and shawls, which pass through to Russia, are the chief imports. Till within the last twenty years the trade in European fabrics was with Russia only, through Orenburg and Froitsha; but it is now carried on more extensively through India and Caubul. There are four great roads from Russia; viz., 1st, from Astrakhan to Bokhara, across the Caspian, and through Orgunje (Khiva), 30 days; 2dly, Orenburg to Bokhara, between the Caspian and Aral, through Orgunje, 60 days; 3dly, Froitsha, across the desert of Kipchak, E. the Aral, 48 days; 4thly, Petropolok, through Tashkend to Bokhara, 90 days. The first is the best and safest, and is taken by the great yearly caravan, which leaves Bokhara in June; it is, however, necessary that amicable relations should subsist between Bokhara and Khiva. The less valuable merchandise goes to Froitsha, generally in August. The imports from Russia are white cloth, muslins, chintzes, and broad cloth, both of Russian and English manufacture, and the chintzes often Polish or German, imitation brocade, velvet, nankeen, gold thread, hardware, metals, cutlery, jewellery, leather, paper, Kirmiz dye, refined sugar, &c. Not less than three fourths of the articles from Russia and India are of British manufacture. British chintzes, which realise sometimes 50 per cent., and broad cloth (the finest selling for 30*s.* per yard) are, like most other British manufactures, valued by the females of both Caubul and Bokhara greatly above those of Russia; and though we may have to yield to Russia the trade in metals, which are so readily supplied from her frontier, we shall, no doubt, supersede her in the supply of piece-goods; the demand for those of Britain has

been for some time increasing, while that for those of Russia has been proportionally diminishing. Russian muslins are said to be better than the English (though of this we are very sceptical); but all other white goods are inferior, and none now find their way S. of the Oxus. The vizier of Bokhara told Burnes, that a more extended export of white cloths, muslins, and woollens from England would effectually supplant the Russians in those branches of commerce. The transport through Caubul costs little; and if Russia navigate the Wolga, Britain commands the two great thoroughfares of the Ganges and the Indus. By the trade with the Chinese territ. of Cashgar and Tarkund, Bokhara derives coarse porcelain, musk, bullion, tea, silks raw and manufactured, rhubarb, and Tibet wool; in all about 800 camel-loads, but chiefly conveyed by horses. Tea is drunk at all hours of the day in Bokhara, and especially among the Turkmans; and 950 horse-loads, about 200,000 lbs., were imported from China in 1832. The Persian trade is inconsiderable; Kirman shawls, sugar, and opium, are the chief imports; the latter is re-exported to China. The merchants of Caubul bring indigo and Cashmere shawls, most of which come through their hands. From Kokan are received white cottons, silks, more durable than those of Bokhara, and a raw silk of inferior quality. The commerce with Russia is said to employ 3,000 camels; that with all other countries as many more: but it is said that none of the merchants are possessed of 40,000*l*., from their frequent and severe losses by the pillage of the wandering tribes. The total capital vested in foreign commerce is believed to be from 500,000*l*. to 600,000*l*.

Money, Weights, &c. — The coins in use are the *tilla* (gold), worth 13*s*. 4*d*.; the *tonga* (silver) = 7·6*d*.; and the *pool* (copper) = ·276*d*. Weights: the *batman* = 131·104 kilog. (291 lbs.); *seer* (35¾ lbs.) The duties on European goods are very moderate, being only 2½ per cent.; a Christian must however pay 20, and a Hindoo 10 per cent. These injunctions are derived from the Koran; but as the Koran inculcates strict protection to the merchant, and as the people are strict observers of its precepts, in no Mohammedan country is there so much safety and freedom from exaction for the trader.

The Public Revenue is professedly spent in the support of mosques and moollahs, but the present khan is supposed to use a considerable portion to maintain his armed force. These revenues are derived chiefly from land, which in Turkestan is valued according to the water which fertilises it: the total amount is estimated by Meyendorff at about 400,000*l*. (by Burnes, at 369,350*l*.); but half the land is enjoyed by the church. Other taxes are those on merchandise, which in the late khan's reign were not levied until the goods were sold; taxes on the farmers' produce, on gardens, orchards, and melon beds; on dried fruits, manna, and skins; customs on goods entering the capital (according to Meyendorff, about 16,000*l*. a year, which ought to be applied to the use of the schools and clergy); a capitation-tax on all the inhabitants of the country not Mohammedans, and in time of war a tax on each householder. The land revenues are received by the *hakims*, or governors of districts, who pay the *employés* and troops cantoned in their prov. before forwarding the collections to the royal treasury: the administration of the finances is entirely in the hands of the khan himself and his vizier.

The Government is a combined monarchy and hierarchy: the khan is despotic; but does nothing without the advice and authority of the moollahs, or priests. This arises from no inability on his part to assert his power; but from the constitution of the monarchy, which is exclusively bottomed on the laws of the Koran, which are here more strictly enforced, perhaps, than in any other Mohammedan country. The order of succession to the throne formerly required only that the khan should be of the family of Jenghiz, whether by the male or female line; but that family is not now on the throne. He takes the title of *ameer ool moomuneen*, or "commander of the faithful," and looks upon himself as one of the heads of the Mohammedan religion, paying, however, a respect to the sultan of Constantinople, of whom he calls himself "the bow-bearer." Every thing that the khan eats or drinks is first tasted by the vizier and his attendants, and an hour elapses to judge of their effects (poisoning being common) before they are sent him. Hence we may fairly suppose, with Sir A. Burnes, that the ruler of the Uzbeks seldom enjoys a fresh-cooked dinner. The present khan, Nusseir Oollah, came to the throne in 1829, after a dispute which ended in his putting to death *five* of his brothers! He is about 40 years of age; and, notwithstanding his fratricide proceedings, is said to be just, liberal, and strict in religious observances, though bigoted. (*Burnes*.) The *koosh begee*, or vizier, has great influence, and his high office has seemed latterly to have become hereditary in his family: all the local governments are at present filled by his dependants or nominees. Every town or village is ruled by moollahs, the descendants of the first caliphs, and, excepting the khan the vizier, and priesthood, there is no other body having any weight in the country: there are no subordinate khans, nobles, or rajahs, as in Caubul or India; nothing, in short, bearing any semblance of a feudal aristocracy. The court displays no magnificence: the same system of government has existed in Bokhara from the earliest ages of Mohammedanism. The tomans, or districts, are governed by hakims, who are in direct communication with the khan; each is assisted by three functionaries, viz. a superintendent of police, a receiver of imposts, and a secretary. All the chief towns have a *cadi*, or judge; the smaller ones only a commissary of police: the *cadi* is assisted by a mufti, and in the capital by two: the police is strict and efficient, and the roads in the interior are free from robbers.

Justice is summary and severe; guided wholly by the Koran, and often capricious and contradictory; but nowhere in Asia is there so much protection afforded to all classes. The most trivial offences are punished with death; fines, imprisonment in dungeons, and blows, are also employed. Burnes relates that, though tobacco be publicly sold, without prohibition, to be seen smoking it subjects the party to severe punishment. Meyendorff says, that a Jew, who had sold brandy to a Cossack, was imprisoned by order of the police commissary; his family fined 50 *tillas* (about 33*l*.), and himself beaten with 60 strokes of a club. This punishment is very severe, for the blows are often given on the stomach, and 75 strokes are equivalent to capital punishment. Another mode of torture consists in shutting up a criminal in a room with stinging insects, which destroy him in a day or two.

The *armed Force* consists of about 20,000 horse and 4,000 foot; levied from the different provs.. but without discipline; independent of a militia of 50,000 horse, 10,000 of which are from Balkh and the countries S. the Oxus; and which are seldom called on to serve, and when embodied receive no pay. The regulars are paid in grain, each soldier receiving 8 maunds of 256 lbs. yearly; their chiefs have assignments of land. The regular force consists wholly of Uzbeks, who, though not good soldiers, are superior, as irregular cavalry. They are armed with curved sabres, long knives, and heavy spears 20 feet in length, with a short blade: some wear a short coat of mail, a helmet of iron, or a round shield of buffalo hide; the infantry carry matchlocks, but use them very indifferently. There are no native artillerymen; the artillery consists of 41 field pieces, which lie neglected in the citadel at Bokhara. Few troops are drawn from the S. of the Oxus; the Arabs are good soldiers, but the Turkmans cannot be coerced.

Religion. — The people are all Soonite Mahommedans; their religion has great influence over all their usages; and the intolerance of their sect causes incessant hatred towards their Shiite neighbours, the Persians. Intolerance and bigotry are amongst the most prevalent national vices, and no religion other than the national one may be publicly professed; though the Jews find means to avoid the injunction. Daily public prayer is enjoined, and in the capital nothing is allowed to be sold during the hour so employed; and the police officers expel with whips persons then exposing their merchandise in the markets. There are colleges at Bokhara, but theology alone is studied, and proselytism is greatly encouraged by the government. Astrology is honoured highly, for superstition is very prevalent; magic is firmly believed in, and its origin referred to India.

Public Education. — Bokhara itself for a long period was considered a learned as well as a holy place; Timour and Baber encouraged literature; which has, however, greatly declined since the Uzbek conquest. Notwithstanding a great number of colleges in the capital, and schools in the country, most of the pop. know neither how to read or write. The children of the Tadjiks acquire these branches, and some knowledge of figures, to serve them as merchants, since they are very rarely members of the chief clergy: the sons of the most opulent persons generally learn only to read, write, and get the Koran by heart. Still a respect for knowledge and its professors is generally prevalent: to found schools is an act of piety, as well as to feed poor scholars; and these often come uninvited and unknown to the *ménages* of the rich, and receive money. Geography, astronomy, history, and medicine are, as may be expected, in a very low state.

Habits, Usages, &c. — The diet of the people is very simple: after morning prayers, they take tea, mixed with milk, salt, and oily substances, of which mixture they are very fond. At 4 or 5 o'clock they dine, on rice, carrots, turnips, &c., with mutton, or other meat. The Uzbeks sometimes eat horseflesh, but it is expensive; cheese, milk, and fat, are much used; a sheep is killed, and the entire tail, however large or fat, is melted up with the meat, and cooked in a single boiler. Imme-

diately after dinner they take tea prepared, as in Europe; coffee is not used. They eat with their fingers, knives and forks being unknown. Drunkenness, if public, would be perhaps punished even with death.

Dress — of the men, is one or two long robes of cotton cloth; the under longer than the upper; and a white cotton turban; or, amongst the Uzbeks, a cap of red cloth, bordered with martens' skins: here, as well as at Constantinople, the form of the head-covering indicates the distinctions of rank. All wear large white trowsers, and close short drawers: the rich public functionaries are often habited in Cashmere shawls, and cloth of gold. The dress of the women differs little from that of the men; they wear the same pelisses, but the sleeves are tucked together, and tied behind; richly decorated boots; and have always a black veil over the face: the Turkman women are, however, not veiled. Both sexes often stain the nails red with henna, and the Persians use this herb to dye their beards; the women braid their hair, and blacken their eyelids and eyebrows with plumbago. The languages in use are the Persian and Turkman; the latter is spoken by the Uzbeks and wandering tribes S. of the Oxus, and is remarkable for its rudeness. The articles of luxury in use are very few; their dress and horses constitute nearly all the personal property of the people; their houses are ill built, almost destitute of furniture; they have neither plate, glass, nor clocks, and very seldom a watch. The rich have many slaves, who are brought from Orgunjé, and are mostly Persians, seldom Russians or Chinese.

History. — Alexander penetrated into both Bactriana and Transoxiana, which were after his death ruled by his successors. The Arabs conquered this country at the end of the 7th, or in the early part of the 8th, and Jenghiz Khan devastated it in the 13th century: it was the native country of the next great eastern conqueror, Timour, whose successors were dispossessed, by the Uzbeks, in the beginning of the 16th century. Nadir Shah, early in the 18th century, took Bokhara; but the government soon after fell again into the hands of the Uzbeks and of the descendants of Jenghiz: that family has, however, ceased to reign since 1800. The late khan devoted himself wholly to religion, and died in 1825, leaving a kingdom that had suffered insults and encroachments on every side, from his own want of attention to temporal concerns. The present sovereign, his son, is on amicable terms with the neighbouring states of Khiva and Caubul, and the empires of China and Turkey: with the Persians the Uzbeks hold no communication; and in Kokan the influence of Russia predominates. (*Burnes's Travels in Bokhara in* 1832—1834, 3 vols. 8vo. 1835; *Meyendorff, Voyage d'Orenbourg à Boukhara.* Paris, 1826.)

BOKHARA (*the treasury of sciences*), a celebrated city of Central Asia; cap. of the above *khanat*, and seat of the khan; on the left bank, and within 6 or 7 m. of the Zer-afchan, at the W. end of its valley; 115 m. W.S.W. Samarcand, and 250 m. N.W. Balkh; lat. 39° 48' N., long. 64° 26' E. Pop. (*Burnes*, 1835) 150,000, but this is probably beyond the mark. It is 8 m. in circ.; of a triangular shape, and surrounded by a wall of earth about 20 feet high, flanked by round towers and bastions, and pierced by 12 gates, with brick masonry. Bokhara is surrounded by a flat but rich country, and is quite embosomed in trees, giving it a beautiful appearance at a distance, which however vanishes on entering it. The streets are so narrow that a laden camel fills up even the largest, and in the smaller ones two persons have difficulty in passing each other: they are also extremely dirty, and always crowded with camels, horses, and asses. The houses are mostly small, and of one story; the common ones built of sun-dried bricks, on a frame-work of wood; others of a superior kind are painted and stuccoed, with Saracenic or pointed arches set off with lapis lazuli and gilding; the roofs of all are flat; and they have but a bare wall without windows facing the public ways: except in one building, there is no glass whatever. About 100 ponds and fountains, constructed of squared stone, furnish the population with water: the city is also intersected by canals shaded by mulberry-trees, which bring water from the Zer-afchan; the main canal from which is opened every fifteen days. There is scarcely a garden or burying-ground within the walls; "the traveller winds his way among lofty and arched bazars of brick, and sees each trade in its separate quarter of the city: here the chintz-sellers, there the shoemakers; one arcade filled with silks, another with cloth. Every where he meets with ponderous and massy buildings, colleges, mosques, and lofty minarets." The principal structure is the *Aerk*, or khan's palace, nearly in the centre of the city, built on a natural elevation between 250 and 300 feet high, surrounded by a brick wall 70 feet high, with a lofty entrance of brick decorated by a minaret on either side. This fortress contains the residence of the sovereign, his harem, and a mosque, all encircled by a garden, together with the residence of the vizier, and his public courts of audience; stables, barracks, &c.: the gates, both of the palace and of the outer city, are shut at twilight, and a double guard mounted. There are 360 mosques, and 366 schools and colleges in Bokhara, superintended by about 300 moollahs, who undertake the charge of both religion and education; Bokhara always enjoyed the titles of holy and learned. The mosques and colleges are generally situated opposite each other, and have a striking resemblance in their architecture: that of the former is the most varied; the principal mosque covers a space 300 feet square, and has a cupola rising to one third that height, and covered with blue enamelled tiles: most of these buildings are of brick, and the courts of some paved with stone. The handsomest structure in Bokhara is a college of King Abdoolla, built in 1650, which has a lofty arched entrance, some beautiful enamel, and a white marble pavement: the largest college here was built at an expense of 40,000 roubles in specie, defrayed by Catherine II. of Russia. Attached to the great mosque is a brick tower, or minaret, 210 feet high, built by Timour, in good proportions; the materials disposed in ingenious patterns, and the whole in good preservation. Criminals are thrown from this tower; but, excepting on these occasions, no one ascends it but the high-priest, to call the people to prayers; and he only on Fridays, since it overlooks most of the private gardens in the city, and the most scrupulous endeavours are made to seclude the women in Bokhara from the gaze of every stranger. W. of the palace is a small square, the Segistan, surrounded with massive buildings, colleges, shops, and stalls; a third part of the city consists of shops and hotels; and the jewellery and cutlery of Europe, the tea of China, the sugar of India, the spices of Manilla, the shawls of Cashmere, and every other article of use or ornament, may be purchased. Many of the merchants remain night and day in their shops, having no other habitation; the bazars are generally open every day, excepting those for slaves, gems, and other such luxuries, which are open but twice a week. There are 4,000 Jews in Bokhara, which is proportionally more than in any other eastern city, and they contend they are better treated here than elsewhere, though they are confined to a residence in three particular streets, are subject to high imposts, and not permitted to build a new synagogue. Sir A. Burnes gives a graphic description of the daily scene in Bokhara (*Travels*, ii. 237—239.):—"From morn to night the crowd which assembles raises the humming noise, and one is stunned at the moving mass of human beings. In the middle of the area, the fruits of the season are sold under the shade of a square piece of mat, supported by a single pole. One wonders at the never ending employment of the fruiterers, in dealing out their grapes, melons, apricots, apples, peaches, pears, and plums, to a continued succession of purchasers. It is with difficulty that a passage can be forced through the streets, and it is only done at the momentary risk of being ridden over by some one on a horse or donkey. The latter animals are exceedingly fine, and amble along at a quick pace with their riders and burdens. Carts of a light construction are also driving up and down, since the streets are not too narrow to admit of wheeled carriages. In every part of the bazar there are people making tea, which is done in large European urns, instead of teapots, and kept hot by a metal tube. The love of the Bokharese for tea is, I believe, without parallel; for they drink it at all times and places, and in half a dozen ways: with and without sugar; with and without milk; with grease; with salt, &c. The day is ushered in with guzzling and tea-drinking, and hundreds of boys and donkeys, laden with milk, hasten to the busy throng. The milk is sold in small bowls, over which the cream floats: a lad will bring 20 or 30 of these to market in shelves supported and suspended by a stick over his shoulder. Whatever number may be brought, speedily disappear among the tea-drinking population of this great city. Next to the venders of this hot beverage, one may purchase '*rahut i jan*,' or 'the delight of life,' grape jelly, or syrup mixed up with chopped ice. This abundance of ice is one of the greatest luxuries in Bokhara, and it may be had till the cold weather makes it unnecessary." It seems to be as available, and used as much by all classes, as in Sicily; no one in Bokhara ever thinks of drinking water unless iced. The learned, or would-be-learned, are seen poring over the tattered pages of Toorkee or Persian lore, at book-stalls, and at the doors of the colleges the students are often seen lounging after the labours of the day; "not, however, so gay, or so young, as the tyros of a European university, but many of them grave and demure old men, with more hypocrisy, but by no means less vice, than the youths in other quarters of the world." Each of these resident students has a fixed allowance, as well as the professors; the colleges are well endowed, and possess many of the surrounding lands, which have been purchased by pious individuals for that purpose, as well as

the whole of the bazars and baths. The baths, of which there are 18, can accommodate 270,000 people yearly, and bring an annual revenue of 1,800*l.*: some are very large. The colleges are shut for six months in the year, when the students work in the fields for a subsistence; their course of study generally lasts seven or eight years: they come from all the neighbouring countries except Persia. 'With the twilight, the busy scene in Bokhara closes, the king's drum beats, it is re-echoed by others in every part of the city, and at a certain hour no one is permitted to move out without a lantern. From these arrangements, the police of the city is excellent; and large bales of cloth are left on the stalls at night with perfect safety. All is silence until morning."

The origin of Bokhara is uncertain, but it is believed to have been at first but a collection of fishermen's huts, its site having abounded with small lakes. It is supposed to be at no great distance from the ancient *Trybactra*, but which Ptolemy places on the opposite side the Zerafchan, or river of Sogdiana; in A. D. 705 it was taken by the Arabs, and between 896 and 998 was very flourishing, and the seat of the Samanide dynasty. Jenghiz Khan burnt it in 1219, and it was not rebuilt till near the end of his life; it was threatened, but saved, by his grandson. Under Timour it flourished anew; but since the rule of the Uzbeks has rather declined, though it be still the most renowned city in Central Asia. Its priests affirm that while light *descends* to all other parts of the world, it *ascends* from the "holy" Bokhara! (*Burnes's Travels*, ii. 229—261.; *Meyendorff, Voyage*, pp. 164—188.)

BOLBEC, a town of France, dép. Seine Inférienre, cap. cant., at the foot and on the declivity of a hill washed by the Bolbec, 18 m. E.N.E. Havre. Pop. 9,802. This is a handsome thriving town. Having been almost entirely burnt down in 1765, it was rebuilt on a regular plan. Houses partly of brick and partly of hewn stone; streets wide and well laid out, the principal being ornamented with two fountains surmounted by statues in marble. In the environs are a number of country houses. It has a chamber of commerce, and a council of prud'-hommes; and was early, and is now, very extensively engaged in the spinning and manufacture of cotton. "Bolbec," says M. Dupin, "is advantageously situated for commerce, bringing raw cotton from Havre, and coal from Fecamp and Harfleur, while she sends her products to Rouen — the great mart for all sorts of cotton goods. The manufacturers of Bolbec unite a spirit of order and economy to activity and enterprise: their establishments are on a level with the progress of industry. The workmen are not all concentred in the town; many of them live in the adjoining country; they are in comfortable circumstances and happy." M. Dupin further states, that there were, in 1827, in the district of which Bolbec is the capital, 18,172 work-people employed in the spinning and weaving of cotton, producing goods of the annual value of above 25,000,000 fr., or 1,000,000*l.* sterling. (*Forces Productives et Commerciales de la France.*) Exclusive of cotton, it also produces various descriptions of woollen and linen goods, and has tanneries, dyeworks, &c. There is here no local tax or *octroi* on the goods imported into the town. (*Hugo*, art. *Seine Inférieure; Dict. Géographique, &c.*)

BOLGARY, or OUSPENSKOI, a village of Russia in Europe, gov. Kasan, near the Wolga, 16 m. S.W. Spask. In its vicinity are the ruins of the ancient city of Boulghar, the capital of the Bulgarians. It was visited by Peter the Great in his expedition against the Persians in 1722, and has since been visited and described by Erdmann and others.

BOLI, a city of Asiatic Turkey, in Natolia, cap. sanjiak, 85 m. N.W. Angora; lat. 40° 35′ N., long. 31° 19′ E. Pop. 6,000.? It is situated on an eminence, at the W. extremity of a rich and fertile plain, on or near the site of the ancient city, known to the Romans by the name of *Hadrianopolis*. The ruins of a castle stand on the summit of a small hill. It is a poor place, consisting of about 1,000 houses, principally inhabited by Turks, with a few Armenians, but no Greeks. It has 12 mosques, a square or market-place, a public bath; is the residence of a pacha of two tails, and, as it lies on the direct road from Erzeroum to Constantinople, is a considerable thoroughfare for caravans. There are mineral baths within about 4 m. of the town, to which the Turks resort in great numbers. (*Kinneir's Journey in Asia Minor, &c.*, p. 271.)

BOLIVIA, or UPPER PERU, a republican state of S. America, comprised between lat. 9° 30′ and 25° 40′ S., and long. 58° and 71° W., having N. and N.W. the states of North and South Peru, E. Brazil and Paraguay, S. La Plata and Chile, and W. the Pacific Ocean: extreme length, N. to S., above 1,100 m.; do. breadth, above 750 m.: the area has been estimated at 318,000 sq. m. Poppig estimated the pop. at 1,200,000, but others estimate it at little more than half that amount. The Weimar Almanac gives the following statement, which, however, we rather incline to think, makes the population greater than it should be: —

Departments.	Area in sq. m.	Pop.	Chief Towns.	Inhab.
1. La Paz - -	39,856	300,000	La Paz - -	40,000
2. Oruro - -	8,480	80,000	Oruro - -	5,000
3. Potosi - -	31,800	200,000	Potosi - -	35,000
4. Cochabamba -	55,120	250,000	Oropesa - -	25,000
5. Chuquisaca -	31,344	175,000	Chuquisaca -	18,000
6. Santa Cruz de la Sierra -	148,400	25,400	S. Lorenzo de la Frontera	10,000
Total - -	318,000	1,030,000	- - -	133,000

Chuquisaca is the capital city and seat of government.

Surface, Mountains, &c. — This large tract of country presents, in its various divisions, very different conditions of surface, elevation, and climate. On the W. it is traversed by lofty mountains, while on the E. it stretches out into immense plains. The Andes, which enter Bolivia at its S. extremity, give off, near lat. 24°, a lateral E. range of no great elevation, which forms the boundary for a considerable distance between Bolivia and La Plata. About lat. 20° the Andes divide into two great chains, which run parallel to each other to between lat. 14° and 15° S., where they again unite. The farthest W. of these chains is called the Cordillera of the Coast, or of the Andes; and the farthest E., the Cordillera Real: including the intermediate country, they occupy a breadth of more than 230 m. N. of lat. 18°, and S. of that parallel of upwards of 800 m.; and cover at least 100,000 sq. m. of surface, which, however, is partly in Peru. Many lateral ridges, sent off by the Cordillera Real, cover the deps. of Cochabamba and Chuquisaca, together with a part of those of Potosi and St. Cruz de la Sierra: the principal of these transverse ridges branches off from the Cordillera about lat. 17° 10′, and running N. past the city of Cochabamba, terminates within a few leagues of the town of St. Cruz de la Sierra. The summits of the W. Cordillera generally appear in the form either of a truncated cone, or of a dome, and are often volcanic: those of the E. Cordillera, as seen from the W., offer a succession of sharp ragged peaks and serrated ridges, and are not volcanic, but in many parts highly metalliferous. The declivity of the Bolivian Cordillera is rapid on either side, but particularly so on the E.: the principal elevations of both Cordilleras are about lat. 18° to 14° S., where that of the W. chain is 22,350 ft. (Sahama); of the E. 21,286 ft. above the level of the sea. Many of the passes across both chains are between 15,000 and 16,000 ft. in elevation, or near the limit, in this region of perpetual snow; while beneath the peaks of the Illimani there is a gorge, or valley, perhaps 18,000 ft. below the neighbouring summit, probably the greatest difference in elevation that has ever yet been observed between any two similarly contiguous points. (*See* ANDES.)

In the E. the country, which is, in many parts, very little above the level of the sea, is watered by the Beni, Mamore, Ubahy, Pilcomaho, and other considerable rivers; a few isolated ranges of hills are scattered over it, and in its S. part is the watershed between the sources of the Amazon and La Plata rivers, both of which receive considerable affluents from Bolivia; but neither this last-named tract, nor the isolated hills previously mentioned, appear to rise to any great height above the sea. The whole region is extremely fertile; but it is nearly in a state of nature, and covered with vast primeval forests. The desert of Atacama (*see* ATACAMA) occupies the country between the Andes and the Pacific: it extends for about 250 m. along the coast, having a variable breadth of from 30 to 60 m. It is never refreshed by rain, and is almost as sterile and worthless as the Sahara. The surface, which is undulating, and in parts hilly, is covered with loose sand; the only habitable parts being the narrow strips along the banks of the rivers.

There are numerous valleys in the Andes; the principal is the great valley of Desaguadero, between the two Cordilleras, extending from lat. 15° to 19° 30′ S., having an area (including the Lake of Titicaca in its N. part) of 18,500 sq. m.

Rivers, Lakes, &c. — The principal rivers are the Beni, Mamore, and the others which unite to form the Madeira, the largest affluent of the Amazon, and which run mostly in a N. direction; and the Pilcomayo, one of the chief branches of the Plata, which waters the S. part of the country, flowing mostly in an E. direction. Bolivia includes the E. and S. shores of the largest accumulation of fresh water on the S. American continent — the lake Titicaca, which occupies an area of 4,000 sq. m., at the height of 12,847 ft. above the ocean, an elevation superior to that of the highest summits of the Pyrenees. (*See* TITICACA.) It contains numerous small islands, from one of which, celebrated for some Peruvian ruins, it derives its name: the only outlet for its waters is the river Desaguadero, running from its S.W. extremity through the valley to the small lake of Aullagas; which latter, having no outlet, is kept at the same level by spontaneous evaporation. In the E., lakes are nume-

rous, and some of them, as those of Ubahy and Grande, 50 or 60 m. in length; but they have been little explored by Europeans.

Climate. — Rain, as already stated, never, or but very rarely, falls on the coast; in the plains to the E. of the Andes, the rainy season, which is identical with summer, lasts from Oct. to April, during which the rains are almost continuous, and the rivers inundate the country to a great extent. In the plains, the climate is excessively hot, and far from healthy; but in the valley of the Desaguadero, 13,000 ft. above the level of the sea, it is temperate, and snow falls in Nov. and April, at the begining and end of the summer season. The winter, from May to Nov., in the Desaguadero valley, is extremely dry, and although the nights are cold, the sky is serene and cloudless. Tremendous hail and thunder-storms are frequent on the mountains, and earthquakes on the coast. The reflection of the sun on the snow produces, in the higher regions in winter, a temporary blindness: few remarks as to comparative salubrity have met our eye; but the banks of the Beni have been particularised as remarkably healthy.

Minerals. — Gold is found in many places, especially on the E. declivity of the E. Cordillera, and in the sands of all the rivers which fall from that range into the Beni or its branches. Every one has heard of the riches of the silver-mines of Potosi; but it is supposed that they are nearly exhausted, and at all events, they are now comparatively neglected. (*See* Potosi.) Copper abounds at Corucuero, &c.: ores of lead and tin, salt, brimstone, nitre, and other volcanic products, are also found.

Vegetables.—The mighty forests which cover the banks of the E. rivers abound in the finest timber, fit for every purpose of ship-building, carpentry, &c. The cocoa of Apolobamba. Moxos, &c., is infinitely superior to that of Guyaquil (Ecuador): it is used by all classes, and is celebrated for its nutritious and restorative qualities. Tamarinds, the chirimoya, oranges, lemons, figs, sugar-cane, pine-apples, plantains, &c., flourish in profusion on the banks of the Beni.

Cascarilla, indigo, cotton, rice, coffee, grain, cinchona, copaiba, sarsaparilla, and other valuable drugs; gum-elastic, vanilla, dye-woods, tobacco, and canes of various kinds, are all produced in an extraordinary abundance E. of the Andes. Amongst other products, there is a species of cinnamon, called *canela de clavo*, said to differ only in the greater thickness of its bark, and darker colour, from the true cinnamon. The vegetation of the Desaguadero valley is peculiar: it has no trees; but the lower districts, if uncultivated, are covered with a very fine turf. There are here extensive plantations of quinoa (*Chenopodium quinoa*, Linn.) and of potatoes, which are found wild on the adjacent hills; but it does not ripen the drier European grains, nor are there any peculiar seasons for sowing or harvesting, both these operations being carried on consentaneously. In the narrow strips of land along the rivers that run through the desert of Atacama, maize is raised, with excellent fruits, cotton, sugar-canes, and the plant called *Arundo donax*.

Animals.—The tapir, jaguar, leopard, and six or seven sorts of monkeys, inhabit the banks of the Beni: guanacos, alpacos, a kind of hare, and a small animal of the family of *Rodentia*, whose burrowing often renders travelling on horseback unsafe, are found in the Desaguadero valley. Parrots, a bird of beautiful plumage, as well as a multitude of singing birds, including the thrush and whistler; several kinds of turkeys, &c.; several species of *Amphibia*, and an abundance of fine river fish, are met with in Bolivia: the E. plains are infested with myriads of annoying reptiles and insects. Vast herds of horned cattle feed on the banks of the rivers; horses, asses, and mules, are the other domestic animals: the climate of the plains is too hot for sheep.

People. — More than three fourths of the inhab. are said to be aboriginal Indians; who are divided into a great variety of tribes, presenting considerable differences in their physical and mental endowments, disposition, progress in civilisation, &c. Some, on the Beni, are wild and warlike, and go naked, even the women wearing nothing but a few leaves tied round the waist; another tribe, the Maropas, in the immediate vicinity of the former, although also a warlike and proud race, evince considerable ingenuity and aptness for many sorts of work: they manufacture beautiful cloths; are pretty good carpenters; and are said to show a marked taste for music and painting, in which they were initiated by the Jesuits. The Indians are excellent sailors on their own rivers, and very dexterous in the management of their canoes, which are often 50 or 60 ft. in length, and of considerable burden; in these they frequently make long inland voyages, subsisting wholly on the wild animals and vegetables they may happen to meet with. Some of the Mosetene tribes on the Beni display a remarkable acquaintance with the medicinal qualities of plants, which they administer in cases of sickness. These, as well as some other tribes, are peaceable, friendly to strangers, and free from superstition. Not a few Indians, especially in the Desaguadero valley, and on the coast, where the Quichua language is spoken, have been converted to the Catholic faith: such as have embraced Christianity, instead of going naked, or leading a roving life, wear a light dress of cotton, have fixed dwelling-places, and apply themselves to agricultural pursuits, though in these they are said to make but little progress The foreign settlers are mostly of Spanish descent in the mining districts, and the valleys of Cochabamba and Cachy Pilco: those of the pure African race are few; but those of mixed blood are numerous on the coast.

Manufactures chiefly consist of cottons, the best of which are made at Oropesa; woollens, of the hair of the llamas and alpacos, the best at La Paz; hats, of the wool of the vicuna, at St. Francisco de Atacama; glass at Oropesa; vessels of silver wire in the mining districts; fans, parasols, plumes, &c., of the feathers of the American ostrich, by the Indians.

Commerce. — The commerce of Bolivia is at present very inconsiderable. This does not arise so much from the low state of industry, or the apathy of the people, as from the difficulties they have to encounter in bringing their produce to market. They have not yet learned to avail themselves of the means afforded by the great rivers of S. America, for opening an intercourse with the ports on its E. shore. At present, nearly all the commodities brought from Bolivia to Europe come through the ports on the Pacific, to reach which they have to be conveyed first by toilsome passages against the currents of the rivers to the foot of the Cordillera, so fatal by its rigorous climate to the Indians of the plains; and then across the Andes, the passage of which has been considered by Condamine as equivalent to 1,000 leagues of transport by sea. The country W. of the Andes, besides being a desert, has no really good harbours, and is traversed by but one road, that from Oruro to Cobija (the only Bolivian port), and that is practicable only for mules and llamas. Cobija, though it has been made a free port, is, owing to these disadvantages, little frequented; the Bolivians preferring to obtain their small imports of foreign commodities through Arica and Tacna, notwithstanding they are there charged with a transit duty of 3 per cent., imposed by the government of Lower Peru, through whose territory they have to pass. The products of Chiquitos and Moxos are transported over the double range of the Andes to Lima, a distance of more than 200 leagues; or if sent to Europe by way of Buenos Ayres, the distance, not to speak of the difficulties of the road, cannot be calculated at less than 600 leagues. Nothing but bullion and gems can repay the enormous expenses of transport on beasts of burden over such immense distances; and, in fact, the exports of Bolivia are nearly altogether limited to the precious metals, and different kinds of woollens, and hats. The imports, which are very few, are chiefly iron and hardware, silk, and a few articles of finery.

But, notwithstanding this unfavourable state of things, the E. and most fertile portion of Bolivia is traversed by the Madeira, and other navigable affluents of the Amazon, on the one hand, and by the Pilcomayo, and other affluents of the Paraguay, on the other; so that, if the extraordinary facilities which these great rivers afford for penetrating into the interior of S. America, be ever made use of, the products of Bolivia will meet with a ready and advantageous outlet; and her all but boundless capacities of production, which, at present, can hardly be said to be in any degree availed of, will receive a stimulus, of the influence of which we can form no adequate idea.

Within the Brazilian dominions, not very far from the Bolivian frontier, a short break, of 3 m. only, separates a tributary of the Amazon from one of the Plata river: were these streams connected by a canal, there would be a continuous water communication, for the most part navigable, through the heart of S. America, from Buenos Ayres, in lat. 35° S., to the mouth of the Orinoco, in nearly 9° N.! In 1835 the Bolivian government were represented as endeavouring to promote internal traffic, by offering grants of land to persons settling, and considerable premiums for the establishment of steam navigation on the S. affluent of the Amazon; but we have not learned whether these have had any considerable success.

The public revenue in 1832 is said to have amounted to 1,700,719 dolls.; the public expenditure to 1,586,026 dolls.; and the total public debt in the same year to no more than 1,500,000 dolls.

The standing armed force is limited to 2,000 men; the country is divided into three bishoprics, but there is no established church. There is a university in the capital, and other public academies.

History, Constitution, &c. — This country, under the name of Upper Peru, formed, previously to the battle of Ayacucho in 1824, a part of the Spanish viceroyalty of Buenos Ayres. The republicans, under Gen. Sucre, having then defeated the royalists, the independence of the country was secured. Its present name was given to it in 1825, in honour of the liberator Bolivar, who, on being

requested, drew up a constitution, which was adopted in the year following. This constitution, which was exceedingly complicated, vested the executive power in a president for life, with the privilege of naming his successor; and the legislative functions in three bodies, a senate, tribunes, and censors. The code and constitution of Bolivar were soon after abandoned; but the legislative powers are still, nominally at least, vested in the three bodies above named; and the executive power is in the hands of a president. Generals Sucre, Velasco, and Blanco, successively filled this last office, which is at present held by Gen. Santa Cruz, elected in 1829. (*Pentland*, *Parish*, *Miller*, *Haënke*, *&c.* in *Geogr. Journal*, v. vi. &c.; *Mod. Trav.* xxviii.; *American Almanac*, 1839, &c.)

BOLKHOF, a town of Russia in Europe, gov. Orel, cap. distr., on the Nougra, 36 m. N. Orel. Pop. said to exceed 10,000. It is well built of wood, has numerous churches, with manufactures of hats, gloves, and stockings, and a considerable trade in hemp, linseed oil, tallow, and hides. (*Schnitzler*, *La Russie*, *&c.*, p. 352.)

BOLLENNE, a town of France, dép. Vaucluse, cap cant., 24 m. N. Avignon. Pop. 4,744. It stands on the declivity of a hill, and has filatures of silk and dye-works. Various remains of antiquity have been found in the vicinity.

BOLOGNA (an. *Bononia*), a city of N. Italy, the second in rank in the Papal States, cap. leg. same name, between the rivers Reno and Savena, on the verge of the valley of the Po, and at the foot of the hills forming the commencement of the Apennine chain; lat. 44° 30′ N., long. 11° 22′ E.; 22½ m. S.E. Modena, 25 m. S.W. Ferrara, and 399 ft. above the level of the Adriatic. It is nearly 1¾ m. in length (1,500 toises) by 1¼ m. in breadth (1,073 toises), and 4 m. in circ.; is walled, and divided into four quarters. Pop. 69,000. Except one square, it is indifferently built; streets crooked and narrow; houses mostly three stories high, in a palace style of architecture, chiefly of brick fronted with stucco, with deep projecting roofs, and generally surrounded with arcades. The *Piazza Maggiore*, or principal square, boasts of many fine buildings; amongst them are the *Palazzo Publico*, the residence of the cardinal legate, and seat of the courts of justice: in the centre of the square is a fountain, adorned with a statue of Neptune, reckoned one of the best modern statues in Italy, the work of Giovanni di Bologna. In the middle of the city stand the two leaning towers, inclining in different directions: that of Asinelli, 320 ft. high, inclines about 3½ ft.; Garisenda, 145 ft. in height, 8 ft. It is said that from the top of the former 103 cities may be seen. Bologna has 74 churches, 35 convents for monks, and 38 for nuns. The cathedral, built A. D. 432, has the meridian line by Cassini traced on its floor, and possesses the Annunciation (the last work of Lodovico Caracci), and other fine paintings. The church of Madonna di San Luca, 3 m. distant, has a covered walk to it the whole way from the city. The university, one of the oldest and most celebrated in Italy, owes its origin to the Emperor Theodosius, A. D. 425, and was restored by Charlemagne; it has a library of 150,000 vols., and was formerly attended by many thousand students; but it has declined in celebrity, and at present is not attended by above 1,000. There is another public library, the legacy of a clergyman, containing 83,000 vols. and 4,000 MSS.: there are also cabinets of mineralogy, natural history, and other physical objects; academies of sculpture, science, music, and the fine arts: the whole city abounds in pictures, statues, and other works of native artists. There is a public school for the poorer classes, where the rudiments of education, with Latin, arithmetic, singing, drawing, &c., are taught gratuitously; 9 hospitals; a *monte di pietà*; and many other benevolent institutions. The manufacture of crape, for which the city has been long famous, and which was at one time very extensive, has now declined, so as not to be worth more than 30,000 crowns a year. There are also manufactures of silk, glass, sulphuric acid, nitric ditto, kid gloves, wax candles, musical instruments, paper, cards, *mortadelle* sausages, celebrated all over Europe, &c. &c., exclusive of preparations of wine, oil, hemp, flax, and other natural produce, as stones, &c. Bologna is an archbishop's see, and has been so since the 4th century. The city and leg. are at present governed by a resident cardinal-legate; the court of appeal for the four provinces of Bologna, Ferrara, Ravenna, and Forli, sits here, and consists of six judges. The Bolognese are courteous and affable, independent, and remarkable for their love of liberty; industrious, quick, ingenious; ardent alike in their friendships and enmities; the women handsome. The middle classes are well informed; they are fond of the casinos, or reading-rooms, conversazioni, and theatres, of which there are three. The higher classes are wealthy; the lower bold, turbulent, and noisy. The prevailing dialect is not in use elsewhere; there is a tendency to pronounce words with masculine terminations, and in other respects it is the coarsest in Italy. The proportion of illegitimate births is as 1 to 7. No Italian city, Florence excepted, has produced so many celebrated men in science and the fine arts. Bologna always assumed the title of "learned," and had the motto *Bononia docet* on its money and public buildings, as well as the word *libertas*. It has given birth to 8 popes (including Benedict XIV.), nearly 200 cardinals, and to more than 1,000 literary and scientific men and artists; amongst them, the naturalists Galvani and Aldrovandi; the anatomists Mondino and Malpighi; the astronomer Marsigli; the mathematicians Manfredi and Canterzani; the brothers Zanotti, Ghedini, and Guercino; and the painters Francia, Guido, Albano, Barbieri, Domenichino, the three Caracci, Zambeccari, Aldini, &c. The air of Bologna is pure, but subject to sudden changes, which produce frequent inflammatory diseases. Its environs, both on the hills and in the plain, are studded with a number of country residences in a richly productive soil. For the natural productions of this region, *see* PAPAL STATES.

This city, originally built by the Etruscans, was anciently called *Felsina*; it was subsequently occupied by a Gallic tribe, the *Boii*, who designated it *Bononia*. It received a Roman colony A. U. C. 653. A Christian church was built here so early as the 3d century. Alaric besieged, but did not take it: it escaped Attila, and formed a portion of the exarchate of Ravenna. Pepin gave it to the Holy see, to which it belonged during the Carlovingian dynasty; after which it was governed by its own magistrates; it was next governed by feudal nobles; but these having abandoned their pretensions, and been admitted as private citizens, it became a republic, extending its rule over all Romagna as far as Rimini. In the 13th century it fell again under the Holy see, to which it was finally annexed in 1506. In 1796 it was taken by the French, but restored to the Popedom in 1815, to which it still belongs; although at different periods revolts have occurred, especially one in 1831, suppressed by Austrian interference. (*Rampoldi*, *Corografia dell' Italia*, p. 267.; *Schuts*, *Allgem. Erdkunde*, xxii. 436—440.; *Bowring's Report on Statist. of Pontif. States*, *&c.*)

BOLOTANA, a town of Sardinia, bishopric of Alghero, 16 m. W. Bosa, near the centre of the island. Pop. 2,274. It is situated on a hill, and the air is said to be good. The contiguous country is productive of corn and pasture. (*Smyth's Sardinia*, p. 330.)

BOLSENA, (an. *Vulsinium*) a town and lake (*Lacus Vulsiniensis*) of the States of the Church, deleg. Viterbo, 11 m. W.S.W. Orvieto. Pop. 2,000. The town stands near the N. shore of the lake, to which it gives its name. It is surrounded by a high wall, flanked with towers and a deep ditch; but is remarkable only for the ruins, in or near it, of the temple of the Etruscan goddess Nortia, a granite sarcophagus, ornamented with bas-reliefs, and other remains of antiquity. This was anciently a place of great wealth and luxury. Pliny says (*Hist. Nat.*, lib. xxxiv. § 7.) that when taken by the Romans, anno 266 B.C., it contained no fewer than 2,000 statues. Having been destroyed by the conquerors and rebuilt it was noted at a later period as the birth-place of Sejanus, the minister of Tiberius.

The lake of Bolsena continues, as of old, to be surrounded by finely-wooded hills—

Aut positis nemorosa inter juga Volsiniis.
Juv. Sat. iii. 191.

It is of an elliptical shape, about 12 m. long, by 8 m. in breadth; its depth is various, but near the banks it is generally shallow; it is well stocked with fish. It has two islands, which, in Pliny's days, were believed to be floating. Its superfluous waters are carried off by the river Marta, to which it gives birth. The country round this lake is now become exceedingly unhealthy; a circumstance which has most probably occasioned the decay of Bolsena, as well as the total ruin of several other cities, that once gave life and animation to its banks. (*Cramer's Ancient Italy*, i. 221.; *Conder's Italy*, iii. 84., and other authorities.)

BOLTON, or BOLTON-LE-MOORS, a flourishing bor. and manufacturing town of England, co. Lancaster, hund. Salford, par. Bolton, on the Croale, an affluent of the Irwell; 170 m. N.W. by N. London, 31 m. E.N.E. Liverpool, and 10 m. N.W. Manchester; lat. 53° 35′ N., long. 2° 23′ W. The progress of pop. has been as follows:—

	1801.	1811.	1821.	1831.	1841.
Bolton, Great -	12,549	17,070	22,037	28,299	33,610
Bolton, Little -	4,876	7,079	9,258	12,896	16,153
Tonge with Haulgh -	1,158	1,402	1,678	2,201	2,627
Total -	18,583	25,551	32,973	43,397	52,390
Bolton parish - -	29,826	39,701	50,197	63,034	73,935

The appearance of the town scarcely corresponds with its real opulence and importance, a considerable portion of the houses being crowded in narrow irregular lanes, which are but indifferently paved and sewered. Within the last 30 years, however, great improvements have been effected, and are still in progress; flagged footpaths have been formed in most of the streets, and the whole town

has been completely lighted with gas: various new squares have been formed; and a considerable number of handsome houses and villas have been erected, mostly near the S. entrance. It is well supplied with excellent water, from a reservoir covering an area of 15 acres, placed at such an elevation as admits of this indispensable fluid being conveyed into the upper rooms of every house in town. This important improvement was effected by a company, under an act obtained in 1824, at a cost of 40,000*l*. The church, on an eminence at the E. end of Great Bolton, is a plain ancient structure with a low tower, built of the dark red sandstone of the district. There are, besides this, 3 episcopal chapels of ease; 2 in Little, and 1 in Great Bolton: the last, an elegant Gothic edifice, built by the parliamentary commissioners in 1826, cost 13,400*l*., and has 923 free sittings. The Methodists, Baptists, Independents, Unitarians, Catholics, Friends, and Swedenborgians have all one or more places of worship. The free grammar-school, founded in 1641, has an annual revenue of about 485*l*.: Ainsworth and Lempriere, compilers of the well-known dictionaries which bear their names, were masters of this school. Here, also, are National and British and Foreign schools, Sunday schools, &c.: among other endowed charities are — Gosnel's, which consists of lands producing 80*l*. a year, 2-3ds of which is appropriated to a church lecturer, 1 6th to the grammar-school, the rest to the poor; Hulton's, lands and houses producing 277*l*. a year, for a church lecturer, apprenticing poor boys, and providing a classical teacher; and various smaller ones, amounting in all to 67*l*. a year, distributed amongst the poor. The above all belong to Great Bolton, the charities peculiar to Little Bolton being quite inconsiderable. But all parts of the town participate equally in the munificent donations left by Mr. Popplewell, who died in 1829, and his sisters, amounting to 27,700*l*. 3 per cent. consols, for the promotion of religion, learning, and charitable purposes.

Bolton has an exchange; a town-hall in Great, and another in Little Bolton; 2 cloth-halls, a theatre, assembly and concert-rooms; a dispensary, established in 1825, and 3 public libraries, all well built modern structures. Two weekly newspapers, the *Bolton Chronicle*, and *Bolton Free Press*, are published in the town.

The progress of Bolton has been greatly promoted by its improved communications. The Bolton Canal extends to Manchester (12 m.), and a branch from it to Bury; a railway from Bolton to Leigh (8 m.), and thence to Kenyon, where it joins the Liverpool and Manchester Railway, was opened in 1831. A railway along the canal banks, *via* Bury, to Manchester, has also been formed since 1833. A weekly market for general provisions is held on Monday, and is well supplied; there is also a market for store cattle, held every alternate Monday, between 5th Jan and 12th May; and 2 annual fairs, one on the 30th and 31st July, the other 13th and 14th Oct. The first day of each is for cattle; the last for hardware and toys.

The entire consequence of Bolton is derived from its manufactures, which were carried on at a very remote period. As early as 1337, some Flemish clothiers established themselves in the town; and in the reign of Hen. VIII. it was famous for its cottons, that is, for a peculiar description of *woollen* goods that went by that name. Cotton goods, however, began to be produced in Bolton, in considerable quantities, about the middle of last century. But the real prosperity of the town dates from 1770—1780, when the wonderful inventions of Arkwright, himself a native of Bolton, began to come into operation. From that epoch its progress has been rapid in the extreme; and it is now a principal seat of the cotton manufacture. The articles chiefly produced are — muslins, superfine printing calicoes, quiltings, and counterpanes, dimities, salteens, jeans, cotton shawls, &c. The principal manufacturers have warehouses in Manchester, where they generally attend on the Tuesdays, to effect the sale of their goods; but sales are also effected on other days, though not to the same extent. The cotton factories are numerous, and many of them are on a very large scale. There were employed in the town and its immediate vicinity, in 1841, 3,597 males and 3,879 females in the various branches of the cotton manufacture, ex. weaving. The latter, inc. hand and power looms, furnished, at the same time, employment to 2,216 males and 648 females. Here, also, are some considerable iron-foundries, where steam-engines, mills, and machines of various sorts are constructed. In 1849, 90 steam-engines, and about 14,000 work-people are said to have been employed in the factories and other public works in the town and its imm diate neighbourhood. A great many coal mines have been opened in different parts of the par.; and the prosperity of Bolton, like that of the rest of the district in which it is situated, may be said to have originated in, and to depend upon, its supply of coal.

There is a joint stock banking company at Bolton; a private banking company, and branches of some other banks. The savings bank had, on the 20th Nov. 1848, 94,636*l*. of deposits.

We have already noticed the fact, that Sir R. Arkwright, the inventor, or at all events the introducer, of the spinning frame, was a native of Bolton. He was the youngest of a numerous family, and was brought up to the humble occupation of a barber! With the exception, perhaps, of Watt, there is no individual to whom the manufactures of this country owe so much. Bolton, also, was the birth-place of Samuel Crompton, a most ingenious individual, the inventor of the mule-jenny, and one of the founders of the cotton manufacture.

The Reform Act conferred upon Bolton the privilege of returning 2 mem. to the H. of C. The limits of the parliamentary bor. and municipal bor. coincide, the pop. of both, in 1841, being 50,163. There were in the bor. in 1850, 1,497 holders of 10*l*. houses registered as electors.

It is governed by a mayor, aldermen, and councillors, assisted by a recorder: the mayor is chosen by the aldermen; these, by the councillors; and the councillors, by such of the burgesses as are qualified to vote for members of parliament. Burgh rev. in 1848, 7,221*l*. Previously to the municipal act, the government of the two towns was distinct; the police of each having been managed by portreeves and constables, annually elected at the respective courts leet, in Oct.; and the paving, cleansing, and lighting of each, by trustees incorporated under distinct local acts. Petty sessions for the bor. are held every Monday and Thursday. Bolton is the seat of a county court, before which 1800 plaints were entered in 1848. It, also, is the centre of a union under the Poor Law Amendment Act, which comprises 26 other townships and chapelries. The poor-rates levied in 1848, in Great Bolton, were 5,922*l*.; in Little Bolton, 1649*l*.

The parish within which this borough is comprised extends over 31,390 acres, and includes 19 other townships, chapelries, and hamlets; the entire population, in 1841, being 73,905. It is geologically situated in a large coal formation, and its surface is for the most part of a peaty nature. It contains numerous quarries, some of excellent flagstones, a few of roofing slate and veins of lead; but of these none are at present wrought. Three small streams (the Tonge, Croale, and Bradshaw) take their rise in the hills that overlook the town. It contains a few well-wooded and romantic valleys, but its general aspect is barren and cheerless, with scarcely a tree visible. About one fourth part is under the plough; of the rest no inconsiderable portion consists of unreclaimed mosses; and though the land increases in value near the town, such is not the case in its northern townships. Bolton is a place of considerable historical interest: its inhabitants from a remote period were distinguished for their archery, which is still continued as a sport, there being a target-ground near the E. entrance of the town, for the use of a society of archers, who shoot for prizes during the summer. The labouring classes have long been accustomed to settle their quarrels by single combat, or by what is called an "up and down" fight, which includes the right of *kicking* and *throttling!* Death has often followed from these brutal contests, which used to take place at all races, fairs, and such like occasions; but the practice is now, happily, on the wane, and will, it is to be hoped, be shortly known only as matter of history.

At the commencement of the last civil war, the inhabitants took the parliamentary side, and held out till 1644, when, after a desperate struggle and several repulses, the town was at length taken by the Earl of Derby, who held it till after the battle of Worcester. He was subsequently taken and beheaded here. (*Baine's Lancashire; Boundary Reports, and Municipal ditto, &c.*)

BOMBA, a village of Naples, prov. Abruzzo Citra, cap. cant., on the Monte Palliano, watered by the Sangro, 18 m. W.S.W. Vasto. Pop. 2,602. Its parish church is said to be one of the handsomest in the province. On the mountain on which Bomba is situated are the ruins of walls, gates, and towers, on the most gigantic scale. They are formed of enormous blocks of stone, united without cement, after the Etruscan fashion. Large caverns have also been excavated in the rock, and coins of the most renowned cities of Magna Græcia have been found among the ruins. Nothing authentic is known with respect to the history of these extraordinary ruins. (*Del Re Descrizione de l'Abruzzo*, ii. p. 421.)

BOMBAY (PRESIDENCY OF), the most westerly and smallest, notwithstanding its late important acquisition of Sinde, of the three presid. of British India; between lat. 14° 18′ and 28° 30′ N., and long. 67° and 76° 25′ E.; having W. the Indian Ocean, the district of Goa, the Guicowar's dom. and Beloochistan; N. Cutch, Gundava and the Punjab; E. the Nizam's dom.; and S. Mysore and the Madras presid.; area, 128,074 sq. m. Pop. 8,000,000. It nearly encloses the territ. of the rajah of Sattarah, and

the distr. of Baroda, Cambay, and others belonging to the Guicowar, and at its E. extremity, approaches within 50 m. the ceded Nerbudda distr. of the Bengal presid. It is divided, ex. Sinde, which will be noticed in another article, into the following collectorates: —

Collectorates.	Sq. M.	Pop.	Collectorates.	Sq. M.	Pop.
Bombay Island	18	230,000	S. Concan -	6,770	656,857
			N. Concan -	5,500	387,264
Poonah -	8,281	558,313	Surat, &c. -	1,449	451,431
Ahmednuggur	9,910	666,376	Baroach -	1,351	259,527
Candeish -	12,527	478,457	Ahmedabad	4,072	528,073
Dharwar -	9,122	838,757	Kaira -	1,827	481,735
S. Jaghiredars	2,978	778,183			
Sattarah, &c. -	6,169	736,284	Total -	68,074	6,910,277

Aspect, &c. — The N.W. parts of this presid. are more level than the S. and E.: Ahmedabad, Kaira, and Baroach are well watered, and some parts amongst the best cultivated and peopled lands in India; Surat is more undulating, its E. part hilly and jungly, and much of it waste; Candeish is interspersed with low barren hills; some spots are in good cultivation, but much is covered with jungle; Ahmednuggur abounds in rocks, hills, and waters; Poonah is irregular and mountainous, but with many fertile valleys; Darwar is an elevated table-land; and the Concan a long narrow tract stretching for 225 m. along the sea coast, having E. a chain of rocky hills, formerly crowned by a number of fortresses, and W. a low, straight shore, broken into numerous bays and harbours, till lately affording a resort to pirates, by whom it had long been infested.

The mountain ranges in the S. belong to the W. Ghauts; in Candeish, to the Sydaree (a continuation of the former) and Sautpoora ranges; and N. the Nerbudda, they are branches from the Vindhyan chain. The principal rivers are the Nerbudda, Taptee, Mhye, and Saubermuttee, falling into the Gulph of Cambay, in the N.; in the central parts the earlier branches of the Godavery and Beemah; and in the S. the Kistnah and Toombuddra.

Porphyritic trap, extending as far N. as Bulsaur, forms the inland hill ranges; sandstone, with many shells, and conglomerates containing fossils, are common in N. Concan and the N. parts of the presid. A primitive range of red sandstone formation, extending from Delhi, terminates at the head of the Gulph of Cambay. The great basaltic district of India, which commences at Nagpoor, occupies the whole coast from between Goa and Bombay to the head of the Cambay Gulph; which coast has been the theatre of volcanic phenomena, earthquakes, and tremendous whirlwinds, even within the last few centuries. Basalt and amygdaloid, yellowish porphyry, and green claystone, are found at Salsette and Elephanta, and near Rattanpoor an abundance of cornelian stones, imbedded in red gravel. A black soil, well suited to the culture of cotton, is widely diffused throughout the centre of this presidency.

Climate. — The mean temp. at Bombay, about the centre of the presid. is between 81° and 82° Fahr. But though Bombay be rather unhealthy, the Concan and Malabar coast generally is by no means so, except in the marshes below the Ghauts. The climate of the N. distr. is reckoned amongst the worst in India: the thermom. in the hot season rises sometimes to 116° Fahr.; and Europeans are affected with fever, ague, and other tropical complaints. Some amelioration must, however, have lately taken place, or greater care been adopted in guarding against it; since, between 1826 and 1832, the number of dead and invalided among the troops serving in the Bombay presid. had decreased from 357 to 126, while the average number of Europeans had been augmented from 3,000 to 3,700 nearly.

Vegetable Products. — Teak of very good quality grows on the Ghauts and lower hill-ranges, and in some parts poon is plentiful; the district of Surat abounds with the wild date and babool. Cocoa-palms cover an immense tract of sandy land, bordering the coast of the Concan; and various other trees of the same family are abundant. The N. part of this presidency is remarkable for the great variety of fruits it produces; the district of Ahmedabad, in particular, is noted for the size of its mango-trees, and their fruit. Rice, cotton, and the other chief articles of culture, will be mentioned presently.

Animals. — Wild elephants are met with in the Ghauts, that is, in the woody chain of mountains running along the W. side of Southern India; and tigers, panthers, leopards, and hyænas, are numerous in the jungles and wooded parts; buffaloes, wild boars, deer, antelopes, jackals, generally so, and in the N. the flying macanco is found. Birds in great variety inhabit this part of India.

People. — Besides Hindoos, Mohammedans, Parsees, Jews, and Europeans, many distinct tribes, some of whom are supposed to be aboriginal, inhabit this presidency. Bheels live E. of the Ghauts, from the hills near Poonah to the banks of the Nerbudda and Taptee; the Ramooses meet these S. of Poonah: W. of the Ghauts and around the Gulph of Cambay, Koolies, a very barbarous tribe, reside; Catties, Aheers, and Babreeas, are found in Kattywar; Dhooblas and Koombies in Gujrat, &c. All these are met with in the Bombay British army. The Jain sect is very numerous in the Gujrat districts; and nearly all the Parsees in India have settled within the limits of the Bombay presidency. A tribe, called Boras, reside in the district of Surat and its neighbourhood, who are Mohammedans as to religion; but in all other respects are similar to Jews.

Agriculture and Cattle. — Rice and cotton are the chief articles of culture; compared with these, the other great staples of Indian produce are grown only in insignificant quantities. An important item in the public revenue is the sum derived from the transit duties on opium; but none of this drug is grown within the limits of the presidency, the whole being brought from Malwah, where the soil is peculiarly adapted for its culture, and where the native princes are under engagements to dispose of the whole of the produce to the British authorities. Rice is largely grown in the central parts of the presidency; and in S. Concan it constitutes 4-5ths of the whole crops. The culture of cotton is extensive, and the produce is an important article of export. The cotton of this side of India is decidedly superior to that of the other; that grown in Baroach is particularly good. Sugar and indigo are cultivated in Candeish; where the first occupies a considerable extent of country, and where late reports speak of an intention on the part of government to erect sugar-mills. The indigo of Candeish has been said to be as fine as that of Bengal, but wanting in depth of colour. The mulberry-tree grows in some parts with immense rapidity, and great exertions are being made by various private individuals to introduce the culture of silk, and to render it important as an article of trade. Wool has lately been imported in considerable quantities from Bombay, and efforts are making by the government to improve the breed of sheep, by importing stocks into the presidency from Caubul, Sinde, and Cutch, and crossing them with Merino and Saxon breeds from the Cape of Good Hope. The cattle of Gujrat are of a remarkably large size, and in great request throughout India; at Surat there is a diminutive species of ox, 2 ft. only in height. S. of Surat the ox supersedes the horse for both draught and carriage: below the Ghauts the only other domestic animal is the buffalo. Poultry are not generally kept by the natives.

Public Revenue. — The whole of the Bombay territories, excepting Surat and Kaira dist., where the ryotwarry settlement is established, are assessed under the village land-revenue system. By this system an arrangement is entered into with the heads of the different villages, to which the various tracts of land belong in common. These heads are called *mocuddims* or *potails*, and either by descent, or sometimes by personal influence, have obtained a superiority in the village, and the management of its affairs. They do not, however, hold this power by any hereditary right, but are appointed or removed at the pleasure of the villagers. The village communities are little republics, providing for all their own wants among themselves, and independent, generally, of any relations with other villages: certain rights are possessed by the schoolmaster, accountant, washerman, barber, blacksmith, watchman, &c., in the produce of the soil; some portions are also set aside for certain recognised expenses of the village, and for defraying the expenses of hospitality toward strangers, &c. The land-tax here is higher than in Bengal; and the portion of the produce paid to gov. is besides uncertain, and dependent on the crops, which have often failed extensively in many districts. The assessment is fixed, after inquiring into the prosperity of the village — what it has hitherto paid — what it is capable of paying — the state of the village lands — and what assessments they ought to bear with reference to the produce. Should any of the brotherhood fail to pay his portion, it becomes an internal village arrangement, with which government has nothing to do; the rest come forward and pay it for him, and the *mocuddim* has no power from the government to enforce the assessment from the individual. In a great part of Poonah there are a number of acknowledged proprietors of usually small estates, called *meerassdars*, and generally cultivate their lands themselves, and pay their rent direct to government, unconnected with any village republic: in Surat and Kaira, although another is more general, the village settlement prevails pretty extensively. Col. Sykes (*Rep. Revenue*, iii. 164.) thinks that the *mouzawar* or village system realises more revenue to government than the ryotwarry system; that it occasions the officers little trouble; maintains a class of respectable persons (potails, &c.) in society; prevents peculation; and advances the comfort of the cultivators generally: but, on the other hand, Mr. Campbell (*Rev.* p. 201.) observes, that the potails often oppress

the ryots; shut them out from communication with the government; "in good seasons pocket all the profits, and in bad cast upon them (the cultivators), by extra assessments, or saddling them with the waste land, the greater burden of the losses."

Manufactures are not in a flourishing state; nor can they ever become so, until better means of transit for goods be constructed, to afford a vent for their products: the principal are woollens and cottons. In Poonah city silks, ornamented with gold and silver, are woven. A discriminating duty was formerly laid on Indian sugar imported into Great Britain, but that is now repealed, and its manufacture, as well as the manufactures of silk and indigo, is on the increase.

Trade. — This presid. is much less favourably situated than that of Bengal for commerce and internal communication. It has no large navigable river, like the Ganges, intersecting its richest provinces; the streams of the Deccan are too impetuous for navigation; and, notwithstanding the internal trade is thus wholly dependent on land carriage, the entire length of all the roads which have been constructed does not exceed 450 m. Most of the roads are impassable for carriages, and merchandise has therefore to be conveyed chiefly by *pack-bullocks*; indeed, the only good line of road is from Panwell to Ahmednuggur, a distance of 165 m.; and it is both unconnected with the S. of India, and at a distance unavailable for the produce of Candeish and Berar. Government has recently, however, ordered a survey for a road between Bombay and Agra.

For an account of the foreign trade of the presidency, *see* BOMBAY (City).

The revenue and expenditure of the Bengal presidency, during the year 1846-47, were as follows: —

Revenue.	Cos. Rup.	Charges.	Cos. Rup.
Land revenue	2,11,94,300	Total civil and political charges	41,10,927
Customs	30,71,373	Total judicial and police ditto	25,93,969
Mint duties	1,60,203	Total military and naval ditto	2,05,78,673
Post-office collections	2,60,178	Buildings, roads, & public works	1,84,000
Stamp duties	5,35,449	Allowances, &c. in accordance with treaties and allowances to village, officers, &c.	76,25,232
Sayer (duties on spirits &c.)	8,83,499	Charges of collecting revenue	46,70,744
Receipts from salt	19,30,219	Interest on debt	6,28,162
opium	61,08,418		
Marine and dock dues	2,04,281		
Judicial fees and fines	76,130		
Miscellaneous civil receipts	1,72,565		
Ditto Revenue ditto	84,611		
Subsidy from the Cutch government	1,86,950		
Interest on arrears of revenue, &c.	49,919	Total charges	4,06,91,707
		Total ordinary rev.	3,49,18,095
Total ordinary revenue	3,49,18,095	Deficit for 1846-47	57,73,612

The Government is vested in a governor independent of local control; but subordinate to the authority of the gov.-general of India, in matters of general and internal policy, and the disbursements of the public revenue. He is assisted by three counsellors, and the whole administration is conducted by a single board.

Military Force. — The Bombay native army, although the smallest, is the most ancient of the three presid.; sepoys having been disciplined toward the end of the 17th century. The sepoys are said to be brave, patient, capable of enduring fatigue, and bear the highest character for fidelity; still, however, it is very doubtful whether they would oppose any effectual resistance to an army of Europeans. The Bombay army has been always more ready than those of the other presid. to volunteer for distant expeditions. By recent returns the total armed force of this presid. is 30,190, of which number 6,252 are Europeans.

Marine Force. — The whole of the Indian marine is attached to this presid. It has been of late much diminished, with the diminution of piracy, and now (*Martin*, 1839) consists of only one frigate, four 18-gun ships, six 10-gun corvettes and brigs, two armed steamers, and some surveying vessels. These are manned by about 1,200 seamen, with 143 officers; and the whole costs annually 211,128*l.* Measures are now, however, taken for converting this force into an armed steam flotilla.

Church Establishment, &c. — Bombay is the see of a bishop, subordinate to the Bishop of Calcutta, who has under him 14 chaplains: the total ecclesiastical charges in 1837 were 19,038*l.* Roman Catholic Christians are more numerous in this than in either of the other presid., and their religious estab., which receives the aid of the gov., is subordinate to an apostolic vicar at Bombay, with authority direct from the pope. But the most numerous body of Christians within the Bombay gov. are Nestorians.

Education, &c. — Sir Lionel Smith, in his evidence before parliament, 1831, said, with regard to Bombay, "Education is in such extensive progress that I hardly think it could be more extended;" but this statement is evidently extravagant, and must be received with much modification. The Native Education Society, consisting of a nearly equal proportion of natives and Europeans, disbursed, in 1830-31, nearly 8,000*l.*; and have about 56 schools, educating 3,000 children: at Poonah there is a Hindoo college. The total number of public schools in this presid. is 1,705; scholars, 35,153: in Candeish the boys receiving instruction are, to the whole male pop. of that distr., as 1 in 18.

History. — In 1617 Bombay was created a regency, and made supreme over all the company's establishments in India, but in 1707 Calcutta was declared independent of it. In 1726 a chartered court for penal causes was established; and in 1775 Salsette, Bassein, and the revenues of Baroach, and other places, were acquired by treaty with a Mahratta chief. In 1780 Dobhoy and Ahmedabad were taken, but restored to the Mahrattas in 1782. In 1803 Baroach and Ahmednuggur districts were acquired, and the latter, with Poonah and Ahmedabad, were formally ceded in 1817. Concan, Marwar, Candeish, and the remainder of the ex-peishwa's dom., fell to the British in 1818. The seat of gov. was transferred from the city of Surat to that of Bombay in 1686. (*Hamilton's E. I. Gaz.* i.; *Rep. on E. I. Affairs before the Select Committees, &c.*, 1830 to 1832; *Bombay Calendar*, 1838; *Reports of the Chamber of Commerce, Bombay*, 1838.)

BOMBAY (*Buon Bahia*, Portuguese, *a good harbour*), a marit. city of Hindostan, prov. Aurungabad, cap. of the above presidency, and, after Calcutta and Canton, the greatest emporium of the East. It is built at the S.E. extremity of the small island of the same name, contiguous to the Concan coast, 650 m. N.W. Madras, 1,050 m. S.W. Calcutta, and 150 m. S. Surat; lat. 18° 56′ N., long. 72° 57′ E. Pop. upwards of 230,000. Bombay island belongs to a group, including Salsette, joined to it by a causeway, Caranja, Elephanta, Colabba, Butcher, Woody, and Cross islands, which, being disposed in a crescent manner, enclose its harbour. The island itself is of an oblong shape, 8 m. in length, N. to S., by about 2 or 3 m. wide; it is for the most part low, swampy, and barren, and was formerly very unhealthy; but in this respect it has been much improved, by means of drainage and embankments. The city consists of two portions; the old town, or fort, and the new town, or Dungaree. The fort stands on the S.E. extremity of the island, on a narrow neck of land immediately over the harbour; it is surrounded by extensive fortifications, which, towards the sea, are very strong; it contains some good buildings, but is, generally speaking, close and dirty, and little inhabited by Europeans; its streets are uneven and disagreeable, and the houses mostly built of wood, and mean in appearance. The Portuguese began to build the town within the walls in the same style that has ever since been followed: the verandahs of the houses are supported on wooden pillars, and shut up with Venetian blinds; the upper stories project beyond the lower, and the roofs are sloped and tiled.

Bombay bears no external resemblance to Calcutta or Madras, and its best streets scarcely equal their suburbs. There is no Asiatic magnificence; every thing has an air of dinginess, age, and economy, though the shops and warehouses are built on an extended scale. The government-house, a large but dismal-looking structure, somewhat like a German free-city *stadthaus*, is little used except for holding councils, and other public business; there is a castle, now occupied as an arsenal, and near it are the capacious docks constructed by, and belonging to, the E. I. Company, capable of accommodating ships of any size. These establishments, together with the barracks and the other buildings within the fort, have cost the company very large sums. The supreme judicial court, or *sudder adawlut*, the Protestant church, and the office of the gov. secretary, on the Green, an open irregular area, are amongst the chief edifices; there are many Portuguese and Armenian churches, both within and without the walls, some synagogues, and a vast number of mosques and temples. The new town of Bombay is larger than that within the fort, and in a low, wet, unwholesome situation, N. of the latter, and separated from it by the esplanade; it extends in one part from the harbour, on its E., quite across the neck of land to Back Bay: for seven or eight months of the year the inhab. suffer from inundation or its effects, few of the ground-floors of the houses being above high-water mark. The most remarkable structure in the new town is a pagoda, the largest in Bombay, dedicated to the worship of *Momba Devi*. Substantial buildings now extend to near 3 m. from the fort, outside of which most of the poorer classes live in huts of clay, roofed with mats of palmyra leaf. Ground in the city is very valuable, especially within the fortress. Most part of the island now belongs to Parsees, who form a wealthy and influencing part of the population, and are comparatively more numerous, perhaps, than in any other large town in India. They are the descendants of the

Ghebers, driven out of Persia by Shah Abbas; a comely, tall, athletic, active race; fairer than the other natives; mild in their manners; bold, enterprising, intelligent, persevering, successful in the pursuit of wealth, and contributing greatly to the prosperity of the place. "There is not a European house of trade in which one of them has not a share; and generally it is the Parsee that produces the larger part of the capital." In every department connected with ship-building and the docks, the Parsees have the chief interest; the whole N. quarter of the fort is occupied by them; their country houses are furnished with European decorations; and they make no scruple to eat, drink, and hold constant communication with Europeans. They have many temples for the adoration of Fire; and morning and evening all the males repair to the esplanade, and prostrate themselves in worship to the sun: the females do not join in these devotions, but of whatever rank, continue, as in patriarchal times, to fetch water from the wells. The Parsees are firmly attached to their original customs; amongst which is that of exposing their dead to be devoured by vultures, in buildings open at the top for the purpose; they are extremely dirty in their persons; but their women, although enjoying more liberty than any others in India, are certainly the chastest. The Parsees provide for their own poor, and not a single courtesan of their sect is to be found. Of the rest of the population, about two-thirds are Hindoos, one fifth part Mohammedans, and one thirteenth part Christians, besides about 2,300 Jews: the floating pop., besides the native and British seamen, consists of Arabs, Persians, Goa-Portuguese, Parsees, and the crews of vessels belonging to most other nations frequenting the port. The harbour of Bombay is one of the largest, safest, and most commodious in India; it is 8 m. in diam., and affords good anchorage and shelter for fleets of ships of the largest burden. It is also the only great inlet in India where the rise of the tides is sufficient to permit the construction of wet-docks on a large scale, the spring tides ordinarily rising 14, and occasionally 17 ft. Frigates and ships of the line may be built at Bombay in a very durable manner, and cost, it is said, 25 per cent. less than in England. This comparative cheapness is ascribed to the facility with which supplies of timber are obtained; but whether it be owing to a defect in the building, or to the weight of the timber, it is, we believe, generally admitted that Bombay-built ships are but indifferent sailers. It should also be observed, that if ships really cost more in England than in Bombay, the difference is wholly owing to our timber duties; were these repealed, it may be safely affirmed that British-built ships would be cheaper than those of any other country. Previously to 1819, a considerable fleet of small armed vessels was kept at Bombay, to check the piracy which had prevailed on the Malabar coast ever since the time of Alexander the Great; but at this epoch the nuisance was finally abated, by the capture of the strongholds of the pirates in the Arabian and Persian gulphs.

Bombay has a more extensive trade with China than either of the other presidencies: the rest of its commerce is chiefly with Great Britain, the Arabian and Persian gulphs, Calcutta, Cutch, Sinde, and the Malabar coast. The imports from China consist principally of raw silk, sugar, and sugar candy, silk piece-goods, treasure, &c. The principal articles of export to China are, raw cotton, opium, principally from Malwa, pearls, sharks' fins, fish maws, sandal-wood, &c. The exports to China being much larger than the imports, the returns for several years past have been made to a large extent by bills on London, drawn by American and other houses in China, and in bills on the Indian government, drawn by the agents of the E. I. Company in China. The trade with the United Kingdom has been regularly increasing since the abolition of the restrictive system. The chief articles of import thence are, cotton and woollen stuffs, cotton yarn, hardware, copper, iron, lead, glass, apparel, fur, stationery, wine, &c. The principal exports to Britain are, raw cotton, raw silk from China and Persia, ivory, pepper, and spices, piece-goods, coffee, and wool; the export of the last has increased with wonderful rapidity of late years; it comes chiefly from Cutch, Sinde, and Marwar. In 1837, 28 ships, mostly owned by native merchants, were employed in the China trade; there are besides many large ships engaged in the trade to England and elsewhere; and a numerous class of native craft, the largest of which make five or six trips during the eight fair months, from Oct. to May, to the chief ports N. of Bombay. They carry thither the produce of Europe, Bengal, and China, and return laden with cotton, ghee, oil, pulse, wheat, cotton cloths, timber, fire-wood, &c.: the capital employed in this trade, exclusive of cotton, has been estimated at about 1,500,000*l.* sterling. In 1843-4 there arrived at Bombay 377 ships (360 under British colours), of the aggregate burden of 168,882 tons: the value of the imports and exports in 1848 was as follows:—

Countries.	Imports.	Exports.
	Cos. Rup.	*Cos. Rup.*
Great Britain - - - -	1,28,97,576	95,13,703
France - - - - -	88,585	
Isles of France and Bourbon -	5,289	49,421
China - - - - -	73,84,319	2,95,91,692
Penang and Eastward - -	19,17,539	5,85,501
Ceylon - - - - -	1,17,470	1,98,687
Goa, Demaun, and Diu - -	2,83,285	3,66,111
Cutch, &c. - - - -	21,10,251	20,38,159
Persian Gulf - - - -	16,10,910	41,49,418
Arabian Gulf - - - -	13,47,283	21,81,917
Coast of Africa - - -	13,00,206	7,92,378
America - - - -	40,373	7,164
Kurrachee, &c. - - -	3,95,628	25,98,206
Sonmeanee - - - -	54,257	26,810
Suez - - - - -	1,26,063	1,01,582
Cape of Good Hope - - -	2,145	
Mauritius - - - -	4,013	573
Other places - - - -	4,718	2,482
Total -	2,96,89,970	5,22,07,466

Account of the Quantities of the Principal Articles of Indian produce, exported from Bombay during each of the three years ending with 1848.

	1846.	1847.	1818.
Opium, chests - -	— —	19,858½	17,919
Cotton wool, lbs. -	95,876,628	149,403,336	133,258,770
Sheep's wool, lbs. -	4,622,170	3,940,841	3,758,591
Coffee, lbs. - -	1,529,900	2,709,415	2,690,530
Indigo, lbs. - -	55,928	198,740	202,287
Pepper, cwts. - -	46,258	48,191	33,160¼
Ivory, cwts. - -	6,103½	5,387	5,697

Wages are higher here than in Bengal; palanquin bearers, for instance, receive 7 and 8 rupees each per month; but provisions are also much dearer. The markets are not equal to those of Calcutta, but superior to those of Madras: there are fewer Europeans at Bombay than at the other presids., neither are their salaries so high. The Bombay Native Education Society have their central schools here, which are well attended by native pupils. Two English newspapers are published here on alternate days, and 10 other periodicals. Several literary societies, and many charitable and religious institutions, have been established. Bombay is the seat of a Protestant bishop. Roman Catholics are numerous, and their religious establishments enjoy the support of the E. I. Comp.; one of the four vicars-apostolic of India, with direct authority from the pope, resides at Bombay, where the Catholic bishop has five different churches, all of which, except one at Colabba Island, are endowed. Sir R. Rice, in his evidence before the lords, in 1830, says that among a pop. of 150,000 in this city, there was but one execution in three years, which was that of an English serjeant; so that, if the police be not very bad, it may be fairly concluded that crimes of violence are very rare. The jurisdiction of the supreme court is confined to the island of Bombay and to Europeans in the rest of the presid.: the civil and criminal laws are those of England; but this court is not one of appeal from provincial courts, like the *sudder adawlut* at Calcutta. The garrison consists of about 4,000 troops, one fourth of whom are Europeans.

Bombay is, next to Madras, the oldest of our possessions in the East; it was founded soon after the cession of the isl. to the Portuguese, and was ceded to Charles II. as part of Queen Catherine's dowry, in 1661; but the Portuguese governor refused to deliver it up, and it was not until 1664 that it came into our hands. In 1668 the city and island were transferred, by royal letters patent, to the E. I. Comp. The seat of government was removed thither from Surat in 1686, and two years after Bombay was besieged by the Moguls. These were ordered to withdraw by Aurungzebe, which they did in the succeeding year; but plague, piracy, and rebellion continued for many years to devastate and disturb this colony. At present Bombay rules the whole N.W. coast of India, and its influence is felt along the shores of Persia and Arabia. (*Hamilton's E. I. Gaz.* i. 256—266.; *Reports on E. I. Affairs*, 1830—1832; *Bombay Calendar and Directory*, 1848.)

BONA (an. *Approdisium*), called by the natives *Annabah*, i. e. place of jujubes, a marit. city of N. Africa, reg. Algiers, prov. Constantina, on a tongue of land projecting into a spacious bay (Gulph of Bona), near the mouth of the Seibous, in a somewhat unhealthy country; lat. 36° 53′ 30″ N., long. 7° 48′ 20″ E. Pop. about 12,000. It is surrounded with walls (erected 1058) 30 ft. in height, and nearly 2 m. in circ., with 4 gates. The town and harbour are commanded by the citadel (*Kasba*), on a hill to the N. of the city, having thick walls and a circuit of about a quarter of a mile. This citadel was much injured in 1837 by an accidental explosion of gunpowder; but it has since been repaired, and made stronger than ever. Bona has been much improved since its occupation by the French. The streets are narrow and crooked, but there are several

good houses, a good market, with shops, reading-rooms, coffee-houses, and even a theatre. The road of Bona is far from being safe, the N.E. and E. winds throwing in a heavy sea. The Seibous was navigable when the Romans possessed Bona; and it might be rendered so again by clearing away a bar which has accumulated at its mouth, where there are but 3 or 4 ft.; whereas, within this, there are 13 ft. water. Bona is the seat of a French judicial court; has manufactures of *bernous* and other garments, tapestry, and saddles; exports corn, wool, ox-hides, and wax. It was formerly the centre of the French trade on this coast, and is at present the principal seat of the coral fishery. (*See* ALGIERS.) The Kasba was taken March 25. 1832, by a few French soldiers and sailors; the Turks left in it, being dissatisfied with their leaders, having opened the gates to them. Bona was afterwards pillaged and burnt by the Arabs, but the French, having received reinforcements, took possession of it, and captured 115 pieces of cannon. About a mile to the S. are the remains of Hippo Regius, once a residence of the Numidian kings, and afterwards the episcopal see of St. Augustine. It was situated between the rivers Boojermah and Seibous, being about 2 m. in circ. Its chief relics are some large cisterns and part of the Roman walls. A swampy tract extends between it and Bona, probably its ancient haven. Hippo was taken by the Goths, and finally destroyed by Othman, the third caliph. Its materials served to build the modern town. (*Rozet*, iii. 195—208.; *Shaw*, pp. 47, 48.; *Tableau de la Situation, &c.* p. 93.)

BONAVISTA, one of the Cape de Verde islands, which see.

BONDENO (an. *Padinum*), a town of the States of the Church, deleg. Ferrara, at the confluence of the Panaro and Po d'Argento. Pop. 2,500. It lies at the mouth of a defile which leads across the Apennines.

BONEFRO, a town of Naples, prov. Sannio, cap. cant., on the declivity of a mountain, 6 m. S.S.E. Larino. Pop. 3,000. It has a fine palace and a magnificent parish church, with four houses of refuge.

BONIFACCIO, a town and sea-port of the island of Corsica, cap. cant., on a small peninsula at the S. extremity of the island, on the strait which bears its name, 45 m. S.S.E. Ajaccio; lat. 41° 23′ 11″ N., long. 9° 9′ 16″ E. Pop. 3,031. It is well built and fortified, but not strongly. Its port, which lies between the peninsula on which the town is built and the main-land, stretches nearly 1 m. inwards, has deep water throughout, and is one of the best in the Mediterranean. Its entrance, however, is not more than from 80 to 90 yards broad, which renders it a little difficult of access. (*Hugo*, art. *Corse*; *Norris's Sailing Directions for the Mediterranean*, &c.)

BONIFATI, a town of Naples, prov. Calabria Citra, 4 m. S.E. Belvidere. Pop. 3,000. It has several churches, and a convent; and a great number of silk-worms are raised in its environs.

BONDOU, a country of W. Africa, which, like most others in the same part of the world, has not had its astronomical position precisely ascertained. On Rennell's map to Park's First Journey, it is placed between the lats. of 13½° and 14¾° N., and between long. 10° 10′ and 11° 20′ W. On the map to Park's Second Journey the long. remains unaltered, but the lat. is removed one degree more to the N., with the whole of the traveller's route, in order to make that route agree with the few observations which were taken. Though powerful among its barbarous neighbours, it is a small state, not exceeding in length, from E. to W., 78 m., nor in width, from N. to S., 70; it is, however, very compact in form, and its area is probably not less than 5,000 sq. m. Its pop. may amount to 1,500,000 or 2,000,000. It is bounded E. by Bambouk; S.E. and S. by Tenda and the Simbani Wilderness (wooded, not desert); S.W. by the same wilderness and Woolli; W. by Foota Toria; and on the N. by Kujaaga. (*Park's Maps and First Journey*, 44—57.) Bondou is tolerably elevated among the Senegambian system of mountains, and some parts of its surface rise into considerable peaks. The land slopes towards the N. and W., as is shown by the direction of the rivers, the Fo-le-me holding a N. course to the Senegal, and the Nerico a S.W. one to the Gambia. The subtributaries of these affluents are so numerous, that though neither of the first-class rivers (Senegal and Gambia) pass through Bondou, there are few districts better or more abundantly watered. As a natural consequence, vegetation is of a most vigorous kind; the hills are covered with thick woods, and in native fertility the soil is not surpassed by any in the world. The productions are the same with those of the neighbouring countries. (*See* BAMBARRA, BAMBOUK, &c.); but a winter or dry season harvest, though not quite peculiar to this country, is sufficiently remarkable to attract the attention of travellers. The corn, called by botanists *Holcus cornuus*, from the depending position of its ear, is sowed about November, is in full vigour by the end of December, and is reaped in the early part of January. It is exceedingly prolific, and appears to bear a strong resemblance to the Arabic dhourrah. In climate and division of seasons, Bondou agrees also with the surrounding countries (see *as above*), but it appears to possess the advantage of being more healthy, and (probably from its comparative density of population) it seems to be rather less infested by ferocious animals. Though close to the richest gold districts of Africa, it appears to be poor in metals; gold dust, *in small quantities*, and iron being part of the imports. (*Park*, 51. 58. &c.) The inhabitants differ essentially in complexion and manners from their immediate neighbours. They belong to the great Foulah family, next to the Mandingoes the most considerable of all the W. African nations. They have tawny or rather yellow skins, with small features, and soft silky hair. They hold the negroes to be their inferiors; and, when talking of different races, always class themselves among *white* people. They have, indeed, most of the distinctive marks of an Arab race; but, though many of them speak a little Arabic, their native tongue bears no resemblance to that language, nor have they any legends that trace their origin farther E. than Fooladoo (literally, "the country of the Foulahs"), near the sources of the Senegal. In industry, energy, and resources they are superior to their negro neighbours; they are tolerably good agriculturists, and are said to be well versed in grazing and dairy husbandry, though they make no cheese. Cattle is their chief wealth, and they possess also a handsome breed of horses. There are, indeed, but few African countries where so many of the necessaries, and even conveniences, of life are enjoyed, and that not by the rich only, but by the greater part of the population.

Centrally situated between the Senegal and Gambia, Bondou has become a high road for traffic; the slave dealers from the coast usually pass through it, and by their means a considerable commerce is carried on with the neighbouring and even distant countries. The native exports consist of corn, cotton cloths, some sweet-smelling gums, and probably sometimes cattle. The transit trade consists of slaves, salt, iron, Shea butter, and gold-dust. The government is monarchical, and the king is often at war with his Mandingoe neighbours, and generally to their loss. When Major Houghton was in the country, he had just stripped the king of Bambouk of a considerable part of his territory.

The Mohammedan religion is very generally professed, but not exclusively; the king himself is a kafir (infidel), and it does not appear that any intolerance is practised by either sect; but the uncharitable maxims of Islamism seem to have had some influence over the Bondou Foulahs, who are less hospitable than the poorer and more ignorant negroes.

Schools are established in the different towns, where children of all persuasions are taught to read and write. The character used is, of course, Arabic, and the instructors the Mohammedan priests; by this means Mohammedanism possesses a strong hold over the people, since the impressions made on the pupils' minds in these schools are seldom eradicated.

Customs and duties on travellers are extremely high. An ass load of goods pays a bar (two shillings) at all places; and at Fathconda (the royal residence) a musket and six bottles of gunpowder, or the value of them, are exacted as the common tribute; besides which, neither the king nor any of his chief officers are delicate in requesting presents, which requests, under the circumstances, are, in fact, demands which cannot be evaded. (*Park*, p. 44—62.; *Houghton's Afr. Assoc.* cap. xiii. 8. 11. &c.)

BONN, a very ancient handsome town of the Prussian States, cap. circ., prov. Rhine, on the left bank of that river, about 15 m. S. Cologne. Pop. 14,500. The principal celebrity of Bonn is derived from its university, founded in 1818, and intended to replace that of Cologne, suppressed by the French. Niebuhr, the historian of Rome, was one of its professors; and it has still to boast of some very distinguished names. In 1836 it had 686 students. The electors of Cologne formerly resided here; and their castle, a building of immense extent, is now the university. The library that belonged to the university of Cologne, comprising from 80,000 to 100,000 vols., has been removed thither. In the museum of Rhenish antiquities, in the university, is an ancient monument, inscribed *Deæ Victoriæ Sacrum*, supposed by some to be the identical *Ara Ubiorum* mentioned by Tacitus. (*Annal.* lib. i. § 39.) This, however, is doubtful. The cathedral, or metropolitan church, in the older Gothic style, with a high tower, has a statue of the Empress Helena, and is said to be built on the site of a church she had founded. There is also a good town-hall, theatre, &c. A fine avenue of chestnuts conducts to the *Château of Poppelsdorff*, appropriated to the use of the university, containing the museum of natural history, and having attached to it a spacious and well-kept botanical garden. The situation of Bonn is delightful. It is one of the most desirable towns on the Rhine as a place of residence. Beethoven, the musician, was born

here on the 17th December, 1770. (*Cellarii, Notit. Orbis Antiqui*, i. p. 330.; *Schreiber, &c.*)

BONNAT, a town of France, dép. Creuse, cap. cant., on a hill not far from the little Creuse. Pop. 2,738. It is distinguished by the old castle of Beauvais.

BONNET-LE-CHATEAU (ST.), a town of France, dép. Loire, cap. cant., 17 m. S. Montbrison. Pop. 2,156. This is a place of great antiquity; it is situated on a Roman road, constructed by Agrippa, and occupies a picturesque position on the summit of a hill, surmounted by a fortress, said to be of the age of the Romans. Part of the ancient walls and towers, by which the town was formerly surrounded, still exist. It has a handsome Gothic church. Locks of various sorts are made here, and some lace; and the place has a considerable trade in timber, forwarded to the building-yards at St. Rambert. (*Hugo*, art. *Loire*.)

BONNETABLE, a town of France, dép. Sarthe, cap. cant., on the Dive, 16 m. N.E. Mans. Pop. 5,746. It has a castle, constructed in the 15th century. The inhabitants are principally engaged in the cotton manufacture.

BONNEVAL, a town of France, dép. Eure et Loir, cap. cant., on the Loire, in a fertile valley, 19 m. S.S.W. Chartres. Pop. 2,560. Streets broad and well laid out. It was formerly fortified, and had an abbey. The church is surmounted by a very high steeple. It has a cotton mill, with manufactures of calicoes, carpets, coverlets, &c., and some considerable tanneries.

BONNORVA, a town of Sardinia, dioc. Sassari, 18 m. E.N.E. Bosa, in a healthy situation, on the declivity of a mountain. Pop. 4,000. It has two convents, one of them for Jesuits. A haras, or *dépôt d'étalons*, was established here in 1803. (*Smyth's Sardinia*, p. 330., and *Dict. Géog.*)

BOODROOM, or BODRUN, a sea-port town of Asiatic Turkey, in Natolia, coast of the Archipelago, opposite the island of Cos, 100 m. S. Smyrna; lat. 37° 1′ 21″ N., long. 27° 25′ 18″ E. Pop. 11,000.? It is beautifully and conveniently situated on a rising ground, at the bottom of a deep bay, commanding a view of the island of Cos, and the southern shore of the Ceraunic gulph, as far as Cape Krio. It has a small but well-sheltered harbour, with from two to three fathoms water, resorted to by Turkish cruisers, and having generally a ship of war on the stocks. In the bay outside the harbour there are from 10 to 20 fathoms. Houses of stone, and irregularly scattered along the shore of the bay, being interspersed with gardens, tombs, and cultivated fields. Streets narrow and dirty, and the bazars wretched. The castle or fortress, situated on a projecting rock on the E. side the harbour, was built by the Knights of Rhodes in 1402: it is still in tolerably good repair, and mounts 50 pieces of cannon. The serai, or palace of the moosellim or governor, and some small mosques, stand along the western margin of the harbour.

It is supposed that Boodroom occupies the site of the ancient *Halicarnassus*, the country of Herodotus, and of Dionysius the historian. Above the town are the remains of a theatre, 280 ft. in diameter, and which seems to have had 36 rows of marble seats. Old walls, exquisite sculptures, fragments of columns, and other relics, evincing its ancient splendour and importance, abound in the town and its vicinity. (*Beaufort's Karamania*, p. 95.; *Turner's Tour in the Levant.*)

BOONDEE (Bundi), a rajahship of Hindostan, prov. Rajpootana, distr. Haraotee, under protection of the British; area (*Sutherland*), 2,291 sq. m. It was formerly much more extensive, but Kotah and its territory have been separated from it: in 1817 more than half the revenues were usurped by Scindia and Holkar, and the peasantry, impoverished by endless exactions; but in 1818 the rajah received a considerable accession of dominion, and the town of Patun, from the hands of the British. Although small, this state is important, as it contains the principal passes from the S. into Upper Hindostan. The natives are of the Hara tribe, which has produced many celebrated men, and amongst others one of Aurungzebe's best generals.

Boondee, a town of Hindostan, prov. Rajpootana, cap. of the above rajahship, and residence of its sov., on the S. declivity of a long range of hills, 90 m. S.E. Ajmeer, 200 m. S.W. Agra; lat. 25° 28′ N., long. 75° 30′ E. It is divided into New and Old Boondee: the former is surrounded by a high stone wall, which extends up the acclivity to some fortifications which crown the hill; the houses are mostly of stone, and two stories high. The palace is half way up the hill, and is a very striking stone edifice, supported partly by a perpendicular rock 400 feet high, but principally by solid piers of masonry. This city is also rendered picturesque by its numerous temples, magnificent fountains, and spacious main street opening to the palace, at the lower extremity of which stands a great temple, dedicated to Krishna, with many groups in bas-relief, and other sculptures. Old Boondee is W. of the former, covers a considerable surface, and contains some fine fountains and pagodas, but is in a state of general decay. The passes N. of Boondee are strongly defended, and abound in natural beauties, in royal and religious edifices, and other works. (*Hamilton's E. I. Gaz.* i. 268, 269.; *Mod. Trav.* x. 82.)

BOORHANPOOR (*Barhanpura*), a town of the Deccan India, prov. Candeish, of which it was the ancient cap., in the dom. of Scindia; built in a plain, on the N.W. bank of the Tuptee, 135 m. S.S.E. Oojein, and 215 m. E. Surat; lat. 21° 19′ N., long. 76° 18′ E. This is one of the largest and best built cities in the Deccan, though, as a whole, devoid of architectural beauty. Most of the houses are of brick, many 3 stories high, with neat façades, framed in wood, as at Oojein, and universally roofed with tiles; but the fort and palace of its ancient sovereigns, and many Mohammedan mosques, chapels, and tombs, are heaps of ruins. Some of the streets are wide, regular, and paved with stone; and there is a square of considerable extent: the finest building is a mosque, called Jumma Musjud, a pile of grey-stone, with a handsome façade, and octagonal minarets, but destitute of a cupola, the usual appendage to Mohammedan structures. The Tuptee is a clear and beautiful stream, but here of no great breadth, and easily fordable in the dry season. Boorhanpoor is supplied with water by aqueducts, which bring it a distance of 4 m., and distribute it through every street below the pavement, whence it is drawn up by leathern buckets. 500 of the best houses, are occupied by Bokrahs, a Mohammedan sect, who are the great merchants in this part of Hindostan, wear the Arabian costume, and call themselves Arabs by descent. This city was conquered by the Mahrattas in 1760, since which it has progressively decayed. It was captured by the British in 1803, but afterwards restored to Scindia. The grapes grown in its vicinity are said to be the best in India. (*Hamilton*, i. 269, 270.)

BOORO, an isl. of the E. Archipelago, 4th divis (*Crawfurd*), between lat. 3° and 4° S., and long. 126° and 127° E., 50 m. W. Ceram; length, E. to W., 75 m., breadth 38 m. Rice, sago, a profusion of aromatic and other woods, tropical fruits, and the best cajeput oil, are found here; the interior is peopled by Horafooras who subsist on sago and the chase. Some of the other inhabitants are Mohammedans. Chinese junks and S. Sea whalers visit it, and the Dutch have a settlement on the island.

BOOROOGIRD, a town of Persia, prov. Irak-Kermanshaw, cap. governt. in a fine and fruitful valley, 190 m. N.W. Ispahan. Pop. 12,000 (*Kinneir*). It has a fine castle and several mosques. The town and dist. attached to it belong to the tribe of *Lack*, who do not wander far from the spots to which they are partial, but settle in villages, and employ themselves in the improvement of their estates.

BOOTAN, or BHOTAN, an indep. state of N. Hindostan, between lat. 26° 30′ and 28° 30′ N., and long. 88° 30′ and 94° E., having N. the Himalaya, which divides it from Tibet; E. and S. Assam and Bengal; and W. the river Teesta, which separates it from Sikkim: length, E. to W., about 350 m., by from 90 to 100 in width; but its limits would greatly exceed this estimate were it described as comprising all the country immediately adjoining the Himalaya, on both sides, from Cashmere to China, which is termed by the Hindoos *Bhote*, and its inhabitants *Bhotyas*. Assuming it to nclude the districts now referred to, its area has been estimated at about 64,500 sq. m., and its pop. at 1,500,000. The external appearance of Bootan is the very reverse of that of Tibet, which is a level table-land, whereas it is almost entirely mountainous or hilly.

Mountains. — Its N. portion, which is the S. declivity of the Himalaya, constitutes an almost impassable frontier, consisting of lofty mountains, either covered with snow, or black and destitute of all verdure excepting towards their base, where short and scanty herbage, a few bushes of holly, and occasionally a stunted pine, are all the signs of vegetation existing in this region.

About 10 m. from this boundary the aspect of the country changes, becoming, although still bold and lofty, more picturesque and smiling: the hills are cultivated to a considerable height, or covered with verdure often to their summits, having on their slopes luxuriant forests. The valleys are mere wedge-shaped intervals, or water-courses, between the hills, and their vegetation is similar to that of the temperate parts of Europe. The country continues of this character for about 50 m. from N. to S., gradually becoming less striking in its features as it approaches the *terriano*, which divides it from Bengal. This is a tract of marsh-land, 25 m. in width, and covered with jungle, being the only plain belonging to Bootan: its climate is most pestilential.

The principal river is the Tchinchien, which intersects the country N. to S., passing through the valley of Tassisudon, receiving the waters of the Patchien and Hatchien, and after a turbulent course of about 150 m., during which it forms several cataracts, and rushes over vast

masses of rock, falls into the Brahmaputra, a few miles below Rangamatty, where it is called the Gadawhar. There are several rivers of less consideration, supposed tributaries of the Brahmaputra; but the violence of their course prevents the simplest form of navigation being practicable.

The primary rocks in the mountains are chiefly granite and an imperfect quartz, having the appearance of marble, but employed in the manufacture of a species of porcelain; good limestone is abundant, but not used either for agricultural or other purposes. It is conjectured that the mountain ranges contain much mineral wealth, but they remain almost wholly unexplored. Iron and copper are the only metals hitherto discovered, and the former alone is applied to any purpose by the natives.

The climate exhibits every variety, according to elevation, and summer heats and winter cold are severally felt in places within sight of each other. In the mountainous regions it is not unhealthy, and resembles the climate of the S. of Europe, not being subjected either to the burning suns or periodical rains of Bengal. Snow prevails during a great part of the winter, except in some few districts; showers are frequent in summer, and in consequence of the exhalations arising from the numerous springs and cataracts, a certain humidity pervades the atmosphere, even at this season. Panukka, although but a few miles distant from Tassisudon, has a climate so much milder than the latter, that it has been chosen as the winter residence of the sovereign.

The mountain forests abound with beech, ash, maple, birch, yew, pine, fir, cypress, &c., but contain no oaks. Numerous fruits common to Europe flourish; as apples (though of an inferior quality), pears, apricots, peaches, walnuts, melons, mulberries, strawberries, raspberries (the two latter fruits growing wild), oranges, and pomegranates, which are excellent. In the colder districts, the cinnamon-tree, and a species of rhubarb, are found.

The marshes of the S. abound with elephants, rhinoceroses, tigers, buffaloes, and other formidable wild animals; but, excepting in these parts, they are not abundant. Captain Turner speaks only of a kind of monkey, which inhabits its vicinity, and the yaik, or grunting ox, which is found among the mountains of the N. boundary, but descends into the lower country for pasture during the winter months. The Tangun horse, a species peculiar to Bootan, about 13 hands high, well-formed, short-bodied, clean-limbed, deep in the chest, extremely active, and well-suited to mountainous countries, is an object of considerable traffic with Bengal. These have a tendency to become piebald; those of one colour amongst them, although rare, and less valued by the natives, are much more esteemed by the British merchants.

People. — The Booteas have been already noticed (see p. 192.) In physical formation they differ greatly from the Bengalese, being hardy, robust, strong, and occasionally, in the mountain districts, attaining a height of more than 6 ft. Their skins are smooth, and often not darker than those of the inhab. of the S. of Europe; faces broad, and cheek-bones high, from which point the face rapidly narrows downwards; the eye is small and black, with long pointed corners, looking as if extended in width by artificial means; they have scarcely any eye-lashes, beard, or whiskers. They are often greatly afflicted with goitre, especially those who live near rivers subject to inundation. Though not deficient in courage, they are peaceably inclined and inexpert in the arts of war: the bow and arrow (in the use of which they are skilful), sword, and falchion, are their chief weapons. No military discipline whatever is maintained, and ambush is more frequently resorted to than open conflict. They dress in woollen cloth; use animal food and spirits. Tea is the usual beverage, but so prepared as to suit few palates but their own. Their dwellings seldom exceed one story in height; the palace of the rajah, at Tassisudon, consists of several, and is magnificent, as compared with the other edifices. Much ingenuity is displayed in the construction of their bridges, which are composed either of timber or chains of iron: there is one of the latter kind across the Tchinchien, at Chuka, deserving of admiration; the founder of which is unknown. Their aqueducts are formed of the trunks of trees hollowed for the purpose. Both polygamy and polyandry are in practice; marriage is not ratified by any religious form, and it frequently happens that one female becomes the joint property of several members of a family; the dead are burnt, and their ashes plunged into a river, on which occasion certain ceremonies are performed by the Gylongs, a numerous sect of recluses, who apply themselves exclusively to administering the duties of religion. There are two annual festivals; one in the spring, called the *hooli*, consisting of different sports, in which those of all ranks, sex, and age, mix with unrestrained freedom; and an autumnal festival, called *mullaum*, embracing a multitude of Hindoo allegories.

Agriculture. — In the culture of the land the natives display industry and care. Rice, wheat, barley, and a species of triangular seed bearing an affinity to the polygonum of Linnæus, are the chief agricultural products. The valley of Tassisudon, and some of the lands skirting the river, yield two crops annually; the ground on the slopes of the hills is levelled by cutting it into shelves, to enable it to be irrigated by the mountain streams. The most laborious offices of husbandry fall to the lot of the females. Notwithstanding the climate affords great advantages for the production of culinary vegetables, the turnip is the only one cultivated with much success; cucumbers, shallots, melons, &c., are grown; but potatoes have failed, and are now totally neglected.

The trade with the surrounding countries is a monopoly in the hands of the government. Coarse woollen cloths, horses, wax, ivory, gold-dust, silver ingots, musk, the various fruits of Bootan, and Chinese manufactures, form the chief articles of export to Bengal; and the same articles, with the addition of rock salt, leather, tobacco, paper, rice, &c., to Tibet. An annual caravan is sent by the deb-rajah into the Bengal presid., which returns laden with indigo (composing half the cargo), English woollens, linen cloths, cottons, sandal-wood, spices, assafœtida, sheet-copper, tin, gunpowder, otter-skins, horns, hides, &c., the whole usually amounting in value to about 30,000 rupees. A small traffic with the E. division of the Rungpoor district is also maintained. A base silver coin, worth about 10*d.*, struck in Cooch Bahar, is current throughout Bootan, where there is no mint.

Manufactures. — The principal is paper, made from the bark of a tree, from which material a kind of silk and satin is also made. Paro is the only market in Bootan, and here are manufactured idols, swords, daggers, and the barbs of arrows; the latter are dipped in a poison procured from a tree unknown to Europeans, which, however, seldom proves mortal.

Religion. — Buddhism, of the Lama sect, is the prevalent religion; but a difference of opinion exists on certain points, one sect permitting the use of food considered impure by the Brahmins. No interruption whatever, of a diplomatic or other character, is allowed to interfere during the period of the celebration of sacred rites: there are many similarities in religious customs here with those of Tibet.

Government. — The sovereign power, though vested in the hands of the dharma-rajah, who is regarded as possessing divine attributes, is exercised only by the deb-rajah, who resides at Tassisudon. The several passes into the country are under the jurisdiction of officers called *subahs*, who usually inhabit the fortresses of their peculiar districts, except in winter, when they visit the lower country, to escape from the rigour of the season, and for the purpose of establishing their authority, which is uncertain in its extent.

The interior and S. parts of the country are divided into different domains, each controlled by a resident functionary, whose duty consists in the exaction of the gov. dues, and general administration of his distr. The most subordinate of the public officers are called *mookees*, which situation, however, affords an opportunity for considerable preferment. The revenues of the rajah are paid mostly in articles of produce and merchandise. Tassisudon, Wandipoor, Tamnukka, Ghassa, and Murichom, are the chief towns; but, with the exception of the first two, they are no better than small villages.

History. — Of this country, called by the ancient Brahmins Madra, no early record has been transmitted, nor was public attention much directed towards it until the deb-rajah's invasion of the neighbouring territory of Cooch Bahar, in 1772, which the British government opposed; but, through the intervention of the lama of Tibet, a peace was effected; the disputed district being awarded to the Bootanese.

It is extremely difficult, and in some parts impossible, to determine the exact boundary of the country; a regular system of encroachment on the surrounding states having been long practised by the Bootanese, who have at different periods appropriated to themselves considerable possessions belonging to Bengal and Assam. Great alarm was created in 1816 by a supposed threatened invasion of the Chinese, who had entered Nepaul; and the deb-rajah was excited by his fears to declare himself amicably towards the British, in the hope of gaining assistance, if required. A treaty was concluded in 1775, for carrying on the traffic of the E. I. Company with Tibet, through Bootan, by means of the native merchants, no other mode of communication being allowed. (*Hamilton's E. I. Gaz.* i. 270—276.; *Turner's Embassy to Tibet, passim.*)

BOOTON, an isl. of the E. Archipelago, 2d division; lying off the S.E. extremity of Celebes; length, N. to S., 85 m.; average breadth about 20 m.; between lat. 4° and 6° S., long. 123° E. It is high and woody, but well cultivated, yielding rice, maize, an abundance of tropical fruits, poultry, &c. The Dutch had formerly a settle-

ment here, and sent an officer annually to destroy all the clove trees on the island. (*Hamilton's E. I. Gaz.*)

BOPPART (an. *Baudobriga*), a town of the Prussian States, prov. Rhine, on the left bank of that river, 9 m. S. Coblentz. Pop. 3,800. This is a very ancient town, its walls appearing to be built on the foundations of a fort constructed by Drusus. In the middle ages it was an imperial city, and several councils have been held in it. The houses are mostly of wood and plaster, with projecting upper stories; and the streets are narrow, ill-paved, and filthy. The large convent of Marienburg, founded in 1123, and some similar establishments, have been converted into the more useful purpose of cotton factories. The parish church and the old church of the Carmelites are worth notice. (*Schreiber; Barrow's Tour, &c.*)

BORDEAUX, or BOURDEAUX (an. *Burdigala*), an important commercial city and sea-port of France; cap. dép. Gironde, in the centre of an extensive plain, on the left or W. bank of the Garonne, 55 m. S.E. from its embouchure, 102 m. N.N.E. Bayonne, and 307 m. S.W. Paris; lat. 44° 50′ 25″ N., long. 0° 33′ 35″ W. Pop. (*ex com.*) 100,000. The Garonne here describes a semicircle, along the outer side of which the city extends for about 2¼ m., with a breadth of about 1 m. in its greatest diameter. The city is divided into the old and new quarters: the former, or southern portion, which includes the ancient Roman town, contains only narrow, crooked, and dirty streets, with ill-built stone houses; while the latter, comprising the N. part of the city, has mostly risen up since 1743, when the Intendant M. de Tourny commenced his enlightened administration. It is extremely handsome, and deservedly celebrated. The Rue du Chapeau Rouge, which, with its continuations, divides the city into two nearly equal parts, is, in breadth, length, and appearance, not dissimilar to Portland Place, and has many elegant shops, and some noble edifices, as the Bourse, and Grand Théatre. The Allées and Cours de Tourny, the Cours du Jardin Public, the Cours d'Albret, and several other streets; and the *Places*, or squares, entitled Louis Philippe Ier, Royale, Dauphine, &c., may be particularised for their beauty or size. The Faubourg des Chartrions, which contains the Jardin Public, was spoken of as perhaps the finest suburb in Europe, till the extension of building made it part of the city. The approach to Bordeaux by water is very striking. The river, in its narrowest part, opposite the Place Royale, is 720 yards across, with a depth of 16 ft. at low, and nearly 5 fathoms at high water; the length of the port, from one end to the other of the city, is reckoned at upwards of a league; it is capable of accommodating 1,200 ships; and such as do not exceed 500 or 600 tons may enter it at all times of the tide. The Garonne is skirted along the city by a succession of superb quays, which descend, by a gentle inclination, to the water's edge, and, besides their utility, are amongst the principal ornaments of the town, being lined with handsome buildings, whose façades have an imposing effect. "On viewing," says Mr. Inglis, "this magnificent crescent from any opposite point from which the eye may embrace its whole extent, one cannot hesitate in ascribing to it a decided superiority over any *coup-d'œil* presented to us either in the French or the English metropolis." (*Switzerland, &c.* p. 315.) On the opposite side of the river there is only the small suburb of La Bastide. The communication between the city and its suburb is maintained by the famous bridge of Bordeaux, one of the noblest structures of the kind that is any where to be met with. It is 532¼ yards in length (or 120¼ yards longer than Waterloo Bridge), by 48 ft. broad; has 17 arches, the piers being of stone, and the upper parts partly of stone and partly of brick. It was commenced in 1810, and completed in 1821, at a cost of 260,000*l*. Owing to the depth and strength of the current, it was a most laborious undertaking. The road to Paris passes over this bridge. The public buildings most worthy of notice are the cathedral, the churches of St. Michel, St. Croix, St. Seurin, Paul, Bruno, and others; the Bourse (Exchange), Custom Ho., Grand Theatre, Hall of Justice, Palais Royal, Fort de Ha, synagogue, public-baths, &c. The cathedral is a fine, but unfinished, Gothic edifice, commenced, according to Hugo, in the 11th, and continued, by several different architects, in that and the succeeding centuries, from which circumstance, although beautiful in parts, it wants harmony and regularity. It is 413¼ ft. in length; the height of its nave is 85 ft.; that arm of the cross in which its grand entrance is placed is adorned with two spires, each nearly 160 ft. in height. At a short distance from it stands the ancient belfry, formerly nearly 320 ft. high; but having been much dilapidated during the Revolution, it is now reduced to little more than 100 ft. high, and serves as a shot tower. The church of St. Michel, built in the 12th century, is in a more perfect architectural style than the cathedral; but, like other churches in Bordeaux, it is dark and gloomy. It also has an isolated belfry, which was 320 ft. high until mutilated, and in part destroyed, by a tempest in 1768. On its summit is now a telegraph, forming part of the line between Paris and Bayonne; and beneath it is a cavern in which dead bodies have been preserved for a lengthened period. The church of St. Croix is the most ancient of all, having been built before the middle of the 7th century, and restored by Charlemagne. The churches of Notre Dame, St. Paul, and the College Royal, are of much later date. The synagogue is a handsome building, erected in the time of Napoleon. There are 2 Protestant churches, but they present nothing worthy of remark. The Bourse is a large edifice, with a splendid staircase, and a hall in its centre, 96¼ ft. in length, by 65¼ ft. broad, lighted by a large glazed dome, 78¼ ft. high, and adorned with a gallery supported by a double rank of arcades. In the upper part of the building are the Council Chamber, Tribunal of Commerce, and rooms used for other public purposes. The Custom House, built on the corresponding side of the Place Royale, is, externally, like the Bourse. The Grand Theatre, built in the reign of Louis XVI., at an expense of 170,000*l*., has, without exception, the handsomest exterior in France, and perhaps in Europe. It will accommodate 4,000 persons, and has a fine concert-room, a spacious hall, cafés, and other apartments. There are several other theatres, but none is particularly distinguished. The Palais, or Château Royal, built in 1778, and formerly the residence of the archbishop, is an extensive and fine structure, with a large quadrilateral court in its centre. Napoleon made it an imperial palace. The Palais de Justice, the seat of the royal court, and civil tribunal, has a marble statue of Montesquieu. The modern town-hall is of Gothic architecture; of the ancient one, built in the 13th century, nothing at present remains but an oval tower, surmounted by a dome, flanked by two turrets, called the *Tour de l'Horloge*.

Bordeaux was for a long period fortified; but the new streets planned by M. de Tourny for the most part occupy the sites of the former works: the Fort de Ha, constructed by Charles VII., is now converted into the prison: the Château Trompette, built by the same sovereign in 1453, was demolished in 1817; and its site, which now forms the Place Louis Philippe, laid out as a promenade, and planted with trees. There are some remains of antiquity in Bordeaux: the principal is what is called the "Palace of Gallienus," a vast amphitheatre of brick and stone, believed to have been erected about A.D. 260, but now much dilapidated. It stands in the N. half of the city, about ½ m. from the ancient Roman town. It appears to have been of an elliptic form, 144½ yds. long, by nearly 115 yds. wide, and capable of accommodating 15,000 spectators; it suffered greatly during the revolutionary phrenzy in 1792 (when the Palais d'Ombrière, or Castrum Umbrariæ, another Roman edifice, was also, for the most part, destroyed); but its two principal entrances, 28¾ ft. high, by 19 1-6th ft. wide, and a part of its circumference, are still nearly perfect. Most other relics of the Roman dominion have disappeared. The Temple of *Tutelle*, supposed to have been dedicated to the tutelary divinity of the place, and to have been erected early in the first century, was 88 ft. in length on each side, and contained 24 enormous columns, 17 of which were standing towards the end of the 17th century. It was much mutilated in 1649, and totally demolished under Louis XIV., in 1677, to make room for the glacis, constructed by Vauban, round the Château Trompette. No trace is found of the Temple of Diana and Fountain of Divona; and the stream *Divitia*, now La Devise, mentioned by Ausonius (*Claræ Urbes*, xiv. B.),

> Per mediumque urbis fontani fluminis alveum:
> Quem pater Oceanus refluo cum impleverit æstu,
> Adlabi totum spectabis classibus æquor —

instead of supporting fleets, is now arched over, and no vestiges are extant of its dock.

Bordeaux has many structures, &c. devoted to trade, arts, and manufactures. There are several building-docks, in which brigs, frigates, &c., and even ships of the line are constructed, though not so many of either as formerly. The *Abattoir Général* (slaughterhouse), commenced in 1827, is, like the Entrepôt for Colonial Produce near it, a large building well adapted for its purpose. There is a very extensive snuff manufactory near the Fort de Ha, employing from 400 to 500 hands, and containing a warehouse capable of holding 30,130 cwt. of tobacco. There are numerous brandy distilleries, sugar refineries, vinegar, glass-bottle, shot, and cordage factories, iron and steel forges, potteries, and tanneries, with manufactures of cottons, woollens, kid gloves, bonnets, corks, playing-cards, liqueurs, musical instruments, barrels, turpentine and other drugs, soda, alum, vitriol, mineral waters and other chemical preparations; and in the neighbourhood of Bordeaux some gunpowder fabrics.

The trade of the port is considerable in the produce of these manufactures, and in grain, cattle, and timber; but the chief articles of export are the famous red wines of the

Gironde and brandy. A large portion of the inhab. of the Quartier de Chartrons are wine merchants, and a great part also of that quarter is occupied with cellars, some of which are capable of containing 1,000 tuns of wine. The exports of wine from Bordeaux amount at present to from 50,000 to 60,000 tuns a year, and would doubtless be much greater were it not for the heavy duties imposed on most foreign articles. The trade of the port has also suffered severely from the depressed state of the French colonies, owing to the preference given to the growers of beet-root sugar. Besides wines and brandies, which are furnished to every country with which Bordeaux has any trade, the chief exports are liqueurs, walnuts, chestnuts, dried fruits, vinegar, tartar, skins, flour, cork, and various drugs to England. Spirit of wine, tartar, molasses, and colonial produce to the N. of Europe; fruits, verdigris, and a few manufactured articles to the U. States; to Spanish America and the W. India colonies of France, French manufactures, furniture, cattle, and flour; to the S. Seas, the E. Indies, and China, all sorts of manufactures, furniture, silver, &c. Bordeaux is the chief port of Southern France for colonial produce; it receives from America, India, and Africa, coffee, sugar, pepper, cigars, canella bark, indigo, quinquina, tea, rice, cocoa, skins, dye-woods, &c.; iron, lead, and other metals are imported, especially from England; fish, glue, and tallow from Russia; timber from the Baltic; metals, oil, liquorice, saffron, &c. from Spain; zinc and steel from Germany; cheese and stock-fish from Holland; linens from England, and the two last-named countries, &c. In 1836, 3535 vessels, including their repeated voyages, arrived at Bordeaux; of which 688 were from foreign ports, and 2,867 from French ports. Of the foreign vessels entering the port, 94 were English. There belonged to the city, on the 1st of January, 1837, 357 vessels, of the burden of 66,355 tons: of these 230 vessels, of the burden of 57,500 tons, were employed in foreign trade, and the others in coasting trade and river navigation. The trade with the interior, is greatly facilitated by the Canal du Midi (*See* FRANCE.) The custom duties at Bordeaux, in 1831, amounted to 550,478*l.*

Bordeaux possesses several charitable institutions. "The New Hospital, erected to replace that of St. André (built in 1390), is," says Mr. Inglis, "upon a scale of magnificence and comfort beyond what is to be found in any other town in Europe. I dedicated the second of my days at Bordeaux to a visit to this hospital, and was equally surprised at its extent, and delighted with the admirable arrangements that pervade every part of it. There is nothing that this hospital does not contain. It includes 710 beds for sick persons, and 18 chambers for the accommodation of persons who pay for the attentions they receive. It contains baths, bakehouses, courts, an apothecary's shop, water-reservoirs, gardens, and accommodation for medical men. There are also in the hospital 34 reservoirs for water, as a provision against fire, containing 1,410 hhds. I need scarcely add, that, in the cleanliness of every department, the hospital is perfect; and that in the smallest minutiæ, every thing is found that can contribute either to health or to comfort. The Bordelais are justly proud of this noble institution." (*Switzerland, &c.*, p. 318.) There are, also, hospitals for aliens, foundlings, the aged, insane, &c., *bureaux de charité*, a *dépôt de mendicité*, and other similar establishments. There are two buildings near the river, each 36 yards square, devoted to public baths; their exterior is crowned with an agreeable terrace, and the interior of both is fitted up with all the various kinds of baths, medicinal and otherwise. The vineyard of the former monastery of the Carthusians is now converted into a public cemetery: there are three others in Bordeaux, two belonging to the Protestants, and one to the Jews.

Bordeaux is the seat of an archbishopric, of a royal court and court of assize, and tribunals of primary jurisdiction and of commerce. It has numerous scientific and scholastic institutions. The Museum occupies a large extent of ground, and comprises the public library, cabinet of natural history and antiques, a picture gallery, schools of design and painting, observatory, &c. The public library contains 110,000 vols., amongst which are some rare works, and several valuable MSS.: the other departments are not very rich; the picture-gallery, however, boasts of some good paintings of the French, Italian, and Flemish schools. There is a botanic garden, at which a course of lectures, recognised by the University of France, is annually delivered; a university academy, royal academy of arts, sciences, and belles-lettres, a royal college, a faculty of theology, with schools of navigation and medicine, a normal school, a school for deaf and dumb, &c.; an Athenæum; Linnæan, philomathic, and medico-chirurgical societies, a royal society of medicine, a society of commercial emulation, &c. In the vicinity of the city is an experimental farm, and a race-course or hippodrome: the country round is chiefly appropriated to the culture of the vines; but, from its flatness, is devoid of much picturesque beauty. There is a joint-stock bank with a capital of 3,000,000 francs, and a *mont-de-piété*, in Bordeaux. Since 1825, this city has been lighted with gas. The inhabitants are generally opulent, and live in a style superior to that common in any other French city, Paris excepted. The jurisdiction of the royal court of Bordeaux extends over the déps. Gironde, Charente, and Dordogne; its archbishopric, which originated in the third century, has for suffragans the bishops of Agen, Angoulême, Poictiers, Perigueux, La Rochelle, and Luçon. Bordeaux sends 4 deputies to the chamber, 3 for the city, and 1 for the arrondissement.

History, &c.—The epoch of the foundation of Bordeaux is unknown. It was the capital of the *Bituriges Vivisci*, a Celtic nation of Gaul, and a celebrated commercial city in the time of Strabo. It was taken by the Romans in the reign of Augustus; and Hadrian made it the metropolis of the second Aquitaine. In the reign of Gallienus, Tetricus, the governor of this prov., one of the so-called thirty tyrants, assumed the purple here, and it is most probable (*Hugo*) that it was he who built the celebrated amphitheatre. In 417 the Visigoths, in 509 Clovis, and in 729 the Saracens, possessed themselves of it; under Charlemagne, it was governed by a count of its own; in the ninth century it was ruined by the Normans. It subsequently became the cap. of Guienne, and fell with the rest of that duchy under the kings of England, to whom it almost uninterruptedly belonged till the English were finally expelled from France in the reign of Henry VI. Generally speaking, this city has in later times been attached to the interests of the Bourbon family; but in 1830, on the publication of the *ordonnances* of Charles X., the standard of revolt was hoisted here before news arrived of the same occurrence in Paris. Bordeaux and its vicinity have, in all ages, produced celebrated men: amongst others, Montesquieu and Montaigne; the Latin poet Ausonius, in the fourth century; Chaptal de Buch, Edward the Black Prince, Jay, Deseze, &c.; Pope Clement V., and Richard II. of England, were also natives of this city. (*Hugo, France Pittoresque*, ii. 63—72.; *Guide du Voyageur, &c.*, 1837, p. 158—162.)

BORGIA, a town of Naples, prov. Calabria Ultra, cap cant., in a plain 6 m. W. Catanzaro. Pop. 3,000. Having been almost totally destroyed by an earthquake in 1783, it was rebuilt by Ferdinand IV. Its environs produce highly-esteemed wines, and large quantities of silk-worms.

BORGO, a sea-port town of Russia in Europe, princip. Finland, gov. Nyland, at the bottom of a bay of the Gulph of Finland, 35 m. E.N.E. Helsingfors; lat. 60° 22′ N., long. 25° 45′ E. It is the seat of a bishopric, and has a gymnasium. The harbour is indifferent, and it has but little trade. It was here that the emperor Alexander received the oath of fidelity tendered by the states of th principality.

BORGOMANERO, a town of the Sardinian states, prov. Novara, cap. arrond., on the Gogna, 18 m. N.N.W. Novara. Pop. 6,000. It is surrounded by walls, and is well built; has a fine square, several convents, an hospital, and a *mont-de-piété*.

BORGO-SAN-DONINO, a town of the duchy of Parma, cap. distr., on the Stirone, 22 m. S.E. Placentia. Pop. 4,000. It is surrounded by walls, has a ducal palace, a cathedral, 4 parish churches, a college, a seminary, a workhouse, and some fabrics of silk and linen. It owes its name to St. Donino, who was beheaded here in 304.

Borgo is prefixed to the name of various small towns in different parts of Italy.

BORISSOF, a town of Russia in Europe, gov. Minsk, on the left bank of the Bérézina, 45 m. N.E. Minsk. Pop. 1,000. Borissof would be unworthy of notice in a work of this sort, but for the celebrity it has acquired from the disastrous passage of the Bérézina, effected near it, by the remains of the French army under Napoleon, on its retreat from Moscow, in 1812.

BORISSOGLEBSK, a town of European Russia, gov. Jaroslavl, on the right bank of the Wolga, opposite to Romanof. Pop. 4,000. It is picturesquely situated on a hill declining towards the Wolga, and surrounded with dense forests. It is also the name of another small Russian town, gov. Tambof, on the left bank of the Vorona.

BORKHUM, a small isl. in the North Sea, belonging to Hanover, off the mouth of the Ems, about 9 m. from the nearest point of the mainland. It is included in the bailiwick of Pewsum, is about 13 m. in circ., and has about 500 inhab. It is so low that at high water it is divided by the sea into two pretty equal parts. The inhabitants are mostly seamen, several of them being employed as harpooners in the ships engaged in the northern whale-fishery. They also raise corn, fruits, and cattle. It is an established custom, that a third part of all articles saved from shipwreck goes to the individual on whose land the disaster took place. Borkhum is a par., with a church and a school. The spire of the church serves also as a lighthouse. The lantern, which is furnished with reflecting lamps, is 150 ft. above the level of the sea, and

is in lat. 53° 35′ 20″ N., long. 6° 40′ 26″ E. (*Dict. Géographique, &c.; Coulier, sur les Phares*, 2d edit. p. 61.)

BORMIO, a town of Austrian Italy, prov. Valteline, at the confluence of the Fredosso with the Adda, 30 m. N.E. Sondrio. Pop. 5,500. A large cattle fair is annually held here, from the 22d to the 25th of October; and in its vicinity, on the declivity of Mount Braglio, are celebrated mineral springs, much frequented by patients from the Valteline and the Grisons. This town was formerly much more considerable; but being sacked, burnt, and its inhab. put to the sword, in 1621, it has never recovered from the disaster. (*Rampoldi.*)

BORNEO (called by the natives *Tauna Klemantan*), the largest island in the world, Australia being reckoned a continent, occupying nearly the centre of the E. Archipelago; between lat. 4° 10′ S., and 7° N., and long. 109° and 119° 20′ E.; having N. and W. the China Sea; E. the Celebes Sea and Straits of Macassar; and S. the Sea of Java: form compact; length, N.E. to S.W., 750 m., breadth 350 m.; area, 260,000 sq. m. Pop. probably from 3 to 4 millions. The coasts are less indented by deep bays, or creeks, than those of most islands of the Archip.; notwithstanding which, it has several fine and spacious harbours. The shores consist usually of mud banks, with numbers of minute and rocky islets around them; the land for several miles towards the interior continuing marshy and alluvial, interspersed with gentle acclivities, covered with underwood. In the maps a chain of mountains, running N.E. to S.W., have been represented as passing through the centre of the island; but Mr. Earl, who visited the interior in 1834, saw no traces of these, nor does he believe in their existence. Excepting the volcanic chain of mountains passing through Java, and the S. parts of the archipelago, to the E., all the hill ranges of those islands run N.W. and S.E., and seem to be continuations of the great ranges which run in that direction through the ultra-Gangetic peninsula, and of which the rocky island Pulo Condor and the Natunas seem to be connecting links. They are all of the same geological character — granitic; and in Borneo probably terminate in a range which lines the S.E. shore for 90 m., called the Hundred Mountains. There are many isolated hills in Borneo, and a range stretching along the N.W. coast, of about 3,000 ft. in height. (See *Earl's Map, &c.*) There are numerous and extensive plains, especially in the N.; but the most important yet known to Europeans is that of Montradok, near the W. coast. There are said to be upwards of 100 rivers, many being navigable, and some of considerable size. The principal is the Banjarmassin, which has a S. course nearly throughout the whole island, and falls into the sea not far from the town of the same name on the S. coast. The Passir, Coti, and many others, are met with on the E. coast; on the W. the Sambas, Pontiana, Landak, Succadan, &c., are the principal; the first is 1 m. wide at its mouth, and much more a little farther inland. It has been ascended in small vessels by the Dutch for 80 m., and beyond that is said to be available for canoes to within two days' walk of Borneo Proper. The larger rivers, which come from the centre of the island, appear not to have their origin in any mountainous region, as they rise no higher during the rainy season: they seldom contain any sandbanks or rapids.

Nothing satisfactory has been communicated respecting the geology of Borneo, except the granitic character of its primary mountains; its soil, in the neighbourhood of the European settlements vies in richness with that of any other island of the Archip. In the N.E. it is said to be superior to all other parts. Borneo is rich in valuable minerals: it is the only island of the Archip. where diamonds are found; the chief of which are from Landak, in the Chinese territory: one, in the rough state weighing 367 carats, and worth, according to the common but absurd method of estimating such articles, 269,378*l.*, has been found there, and was, in 1815, the property of a petty chief. Diamonds are most numerous in the alluvial soils, in which gold is also found; and are of good water, though usually small. The plain of Montradok is said to have formerly yielded 88,362 oz. annually of pure metal (*Hamilton*); the soil in which it is found is stiff, and the veins lie from 8 to 15 ft. below the surface. It is met with chiefly in small particles, nearly as fine as sand, although sometimes in irregular pieces of the size of a sixpence. There are inexhaustible mines of ore of antimony of very superior quality at Serawak; 1,400 tons of which, at 16*s.* to 20*s.* per ton, are annually exported to Singapore: tin is plentiful in some parts, and a little iron is procured from the interior.

Climate. — The climate of the N. is similar to that of Ceylon, and not subject to the hot land winds that prevail on the coast of Coromandel: the W. coast has no rainy season in particular, but is refreshed by showers all the year round. Europeans have had but little intercourse with the eastern parts, and little respecting them is known.

Borneo is generally very fertile; but, except in Borneo Proper, the grain produced is not sufficient for home consumption. Timber is often very large; but not generally of the kinds suited for ship-building. No teak has been yet discovered: mangrove and rattans are plentiful on the banks of the rivers: iron-wood, ebony, camphor, dammer, and *tankamem* trees (from the latter of which wood-oil is obtained), cocoa-palm, betel, cinnamon, sago, &c., are amongst the principal trees. The camphor-tree grows to 15 or 16 ft. in circ., and proportionally high: it is cut down, split into pieces, and the produce (which is probably the best) found in the fissures: none of either the Borneo or Sumatra camphor is imported into England, which is supplied with that article from China only. Rice is excellent; but the Dutch are very jealous of its exportation, except through themselves Maize and the sugar-cane are cultivated, as well as the plantain and many other tropical fruits.

Animals. — The elephant, rhinoceros, and leopard, are confined to the N.E. corner of the isl.; the ox and wild hog are natives of the forests; and the jungles furnish an endless variety of the ape and monkey tribes; amongst which are the orang-outang, and a species of baboon, thought by Mr. Earl to be hitherto undescribed, 3 ft. in height, tailless, with short, glossy, brown hair, and an aquiline nose projecting 1½ in. from the face. The tapir, numbers of deer, and small bears, no larger than badgers, but with shaggy hair, inhabit Borneo.

Mr. Earl saw a small amphibious animal from 2 to 8 in. in length, with large pectoral extremities, leaping about in vast numbers on the mud of the W. coast, which very rapidly buried itself on the approach of an enemy: these are thought great delicacies, and caught in a singular manner by the Malays, who obtain a thin plank several ft. long by about 1 ft. broad, with spikes projecting from the end, and then, with the right knee resting on the plank, they push it rapidly forward, by means of the left foot, against the mud, and transfix the little animals before they have time to escape. The Sooloo Sea i. much frequented by English whalers for the spermaceti whale. The seas abound with turtle, and plenty of fish, oysters, and other *testacea*, *kolothuria*, &c.

People. — The interior and part of the N.W. coast are peopled by Dyaks, and, it is said, by a race with woolly hair, like the Papuan negroes; the W. coast by Malays, Chinese, and Dutch colonists; the N.W. by half-caste descendants of the Moors of W. Hindostan; the N. by Anamese (Cochin China); N.E. by Suluks; E. and S. coasts by Bugis, of Celebes. Besides these, three tribes live in small craft, in a wandering manner, about the shores; viz. the Lanuns, from Magindanoa; the Orang-Badju, and Orang-Tidong; source unknown.

Dyaks. — The Dyaks (Orang Benua), a savage race, believed to be the aborigines, are scattered all over the island in different small tribes. They are of a middle size, and, except when cramped up by being constantly in a canoe, are invariably straight-limbed and well-formed, muscular, though inferior to the Chinese in ability to carry burdens; feet short and broad; toes turned rather inwards; cheek-bones high; forehead broad and flat; eyes rather long, and the outer higher than the inner angle; faces prominent, with a pleasant expression, and more like that of the Anamese than other Asiatic nations; hair straight and black; no beard. The women are interesting, often good-looking, and sometimes even fair: many are married to Chinese, and make unexceptionable wives and mothers. Their manners are mild and prepossessing, but as they dread the Malays, from whom they have suffered formerly, they commonly avoid strangers; yet it is said that there is no Eastern people more apt to make progress in arts. (*Earl.*)

In the N.E., and near Banjarmassim, their condition is the most ameliorated. At the latter place, and on the S. coast, they are said to possess a written character, and they are there ashamed to avow certain of their usages; such as that of seeking for and preserving human heads, &c. Rice is their chief food, with pork, fish, deer, and other wild animals, which they shoot by means of arrows blown through a tube. This is their general weapon, but they sometimes use crooked bows and arrows, the latter of which are dipped in poison. They spend much time in ill-built, shallow canoes, about 10 ft. long, and made by hollowing out a single tree; but on shore inhabit thatched bamboo houses, elevated on posts, and entered by a ladder, which is always drawn up at night: these habitations are often collected in small villages, and defended by stockades. The men wear but little clothing; the women much more, and are bashful and modest: both sexes love finery, especially beads and feathers. Tatooing is in use among some of the tribes.

Upon the banks of the larger rivers many tribes often unite together, under the rule of one stronger than the rest; but in the forests they keep separate, and speak dialects so different as to be often unintelligible to each other. The more civilised have adopted Mohammedanism; others less civilised believe in a Supreme Being and

a future state, but suppose that, in the latter, the owner of a human head will have the former wearer of it as his slave! a belief which has naturally led to a widely-extended system of human sacrifice. No one can marry without the head of some one having been first obtained by himself or his friends; and at the funerals of persons of consequence, or treaties of peace between chiefs, slaves or prisoners are decapitated to obtain these trophies: the heads are dried and hung up in the houses; and piratical expeditions are often undertaken with no other object than to obtain them. Some Dyaks are occupied in washing gold, and dispose of the gold-dust to the Malays for red and blue cotton cloths, beads, brass wire, salt, and other necessaries of life, and tobacco, of which they are extravagantly fond. To avoid more intercourse than necessary with the Malays, they oblige them always to dispose of their merchandise at the nearest Dyak town. Next to human heads, which appear to them the most valuable of all articles, China jars are valued, and from some superstitious motives are so highly prized that they have been known to fetch 200*l.* or more. A circumstance, stated by Mr. Earl, which may be of use to individuals trading with Borneo, is, that if any one drink the smallest quantity of the blood of a Bornese in a cup of water, he, by doing so, binds him by ties closer than those of consanguinity. The Lanuns are a piratical people, who infest the N.W. coast for 300 m., and cruise in other parts of the Archipelago, plundering villages, and often carrying off their whole population into slavery. Sometimes the Dyaks join with them in these predatory expeditions, and bring away the iron and human heads, while the Lanuns appropriate the rest of the spoil. The Orang-Badju are a kind of sea gipsies, in person like the Malays; living at the mouths of most rivers on the E. border, in families of about a dozen or fifteen, in boats of from 8 to 10 tons each, covered, when in harbour, with a roof of matting. They are employed chiefly in fishing, taking tripang, and making salt from burnt sea-weed. They are generally Mohammedans, but by no means rigid in their tenets. The Orang-Tidong live to the N. of the latter, and cruise among the Philippines and Sooloo isles, where they dispose of sago, on which they chiefly subsist. They are a hardy race, and are said to be occasionally cannibals.

The Dutch have two small stations on the W. coast, Sambas and Pontiana, about 90 m. apart. The town of Sambas is meanly built, and contains no habitation of stone, or other substantial material: the houses of the government officers are low wooden, thatched buildings; the huts of the natives are chiefly raised on posts, ascended by ladders, but many are built on floats on the river, as in Siam. The Chinese *campong* is the only street; the fort is a mere embankment, surrounded by a stockade of poles, and mounted with a few nine-pounders; it contains the barracks, with a garrison of 40 men, half of whom are Europeans. Before the Dutch settled here, the place was a nest of pirates, destroyed by the British in 1812; the climate is not unhealthy, though the coast is covered with swamps and jungle. Sambas has the better river, but Pontiana is the better town. Between the two are the Chinese settlements of Montradok, Landak, &c. The gold mines near the former place are generally worked by companies of merchants clubbing together. Spades and mattocks are the only mining instruments in use: the ore is brought up in baskets, then washed (for the Chinese have no other method of treating it), and the gold-dust made into little packets, each weighing two Spanish dollars. About 3,800 oz. troy a year are sent to Singapore, which Mr. Earl thinks may be about 1-10th of the present produce of the island. The Chinese appear to be of a class like the lowest at Canton: previously to the Dutch settlement here in 1823, 3,000 of them arrived annually as settlers; but emigration has now ceased, owing to the treatment they have received from the Dutch. Mr. Earl reports that, in 1834, the Chinese expressed a great desire to trade with the British at Singapore, but the Dutch have interdicted all communication between them and foreign nations, except through the medium of Sambas and Pontiana; and, being in possession of the coast line, they are enabled to prevent it. The consequence is, that the Chinese refuse to hold communication with the Dutch, and the whole trade of the W. coast has been much diminished through their illiberality. The W. coast was ceded to the Dutch by the King of Bantam in 1780; but the cession, for some time afterwards, was resisted by the Sultan of Succadan. In 1823, the Dutch settled at Pontiana, and purchased the monopoly of some diamond mines from the Malay sultan. Finding these unprofitable, they endeavoured next to take forcible possession of the Chinese mines, but being repulsed, they blockaded the Chinese between their two settlements, obliging them to trade by their ports, and guarding the coast by several vessels. The Dutch revenues are chiefly derived from monopolies of salt and opium, the former of which is imported from Java, &c., in vessels chartered by government, and sold at seven times the import price, the interior being entirely dependent on the coast for its supply: other resources are from capitation taxes on the Chinese, and imposts on their entering or leaving the Dutch settlement. The pop. (1834) of the Chinese and Dutch territories was estimated by Mr. Earl as follows: —

Chinese - - - - - -	150,800
(90,000 in the Dutch settlement.)	
Malays - - - - - - -	50,000
Bugis - - - - - - -	10,000
Arabs - - - - - - -	400
Javanese and Amboynese soldiers - -	150
Dutch - - - - - - -	80
Dyaks - - - - - - -	250,000
Total	460,630

Exports. — The principal exports of the W. coast are gold, diamonds, antimony, camphor, bees' wax, deers' horns, *dammer*, ebony, wood oil, rattans, pepper, bezoar-stones, and iron, to Java, for the manufacture of *krises*. The iron of the interior is either exceedingly good, or the Dyaks are able to temper it astonishingly well, for their steel scimitars are capable of cutting through an iron nail or wire without difficulty. (*Earl.*)

Borneo Proper. — The state next in importance to the colonies is Borneo Proper, a Malay sovereignty in the N.W., probably the most ancient of all in the island, and from which the latter has derived its name: it is bounded N.E. by the Sooloo, and S.W. by the Dutch territory, and extends from 100 to 150 m. inland. The Malays here are distinguished for their haughtiness and indolence; and the sultan, who enjoys a high veneration, maintains more state and dignity than most Malay princes. The chief town has been much reduced by piracy and intestine commotion, which have driven away foreign settlers: it is on a river, and in appearance like other Malay towns, but not so large as either of the Dutch settlements: the inhab. are chiefly Mohammedans. The exports are camphor, sea-slug, tortoise-shell, birds' nests, clove-bark, pepper, gold-dust, sandal-wood, rattans, &c.; there is much fine timber on the banks of the rivers. There was formerly an extensive trade between Borneo Proper and China, as well as some commerce with the English in piece goods. Since the establishment of the Singapore colony, the British trade has recommenced; and if cultivated, Mr. Earl says, affords a fair prospect of a large consumption of our manufactures. The Malays are not destitute of some arts, among which is that of casting cannon: in this they are skilful, and arms and ammunition would be good articles for the British export trade.

Pappal, Malluda, Mangedara, Paitan, Tirun, &c., in the N. E., are mostly Suluk settlements. The country here abounds in forests of lofty trees, extensive plains covered with herds of large cattle, from breeds introduced by the Spaniards two centuries ago; many rivers, and much mineral wealth. Gold and diamonds are collected with little trouble; tin ore is sometimes picked up on the surface. Sago, rice, betel-nut, cocoa-nut oil, camphor, wax, a little pepper and cinnamon, pearls, rattans, clove-bark, and grain, in Malluda; birds' nests, lacka-wood, and tortoise-shell, in Mangedara; timber, lime, stone, eaglewood, and sea-slug, in Paitan; are the chief products. Tirun yields more birds' nests than any other region of the E.: its coast is generally a low swamp overgrown with mangroves; its rivers are numerous, large, and often navigable; its interior is covered with sago-trees, which form the chief subsistence of the people; and yields, besides, canes, rattans, wax, honey, bezoar, gold, and, it is said, saltpetre. Many Anamese have settled on the N.E. coast; emigration from Cochin China, in consequence of national disturbances, having prevailed lately to a great extent. Voyages hence, to and from Anam, may be made at any time of the year.

The chief state on the E. coast is that of Coti, or Coti-Lama, belonging to Bugis, from Celebes. Coti town stands 80 m. up the river of that name, the banks of which are inhabited by nearly 300,000 people. It is the chief place on this coast: its people are commercial, and many annually visit Singapore in their *prahus* or trading vessels. Passir stands on a large river a little S. of the former: it is a den of pirates. Banjarmassim, on the banks of the river of that name, is surrounded by a territory producing rattans of the best description in abundance, as well as gold, diamonds, and pepper. The pop. are mostly Bugis, who occupy nearly every river and creek on the E. and S. coasts. They have had some trade with Singapore, but which is discountenanced by the Dutch authorities; all the S. coast being claimed by the latter, who, in 1747, established a factory at Banjarmassim. On this coast there are said to exist the remains of temples, images, &c., relics of a more civilised people formerly inhabiting it, but no detailed history of these has been given. — (*Earl's Eastern Seas, &c.*, in 1832-3-4, pp. 252—342.; *Leyden's Sketch of Borneo; Crawfurd's Ind. Archipelago; Hamilton's E. I. Gaz.* i. 278—285.)

BORNHOLM, an isl. belonging to Denmark, in the

Baltic, about 24 m. E. by S. from the nearest point of Sweden, and 90 E. from Zealand. It is of a rhomboidal shape, being about 20 m. in length by 14 in breadth. Pop. in 1834, 24,645. Bornholm differs considerably from the other Danish islands: it rises high above the level of the sea. Its shores are formed for the most part of steep lofty rocks, surrounded by reefs, which render their approach not a little dangerous. It is well supplied with freestone, which is largely exported to Copenhagen and other places; and with limestone, blue marble, various species of clay, ochres, and coal. The clay is suitable for the making of coarse and fine pottery, and is used in the china factory at Copenhagen. Hitherto the coal has not been profitably wrought. Climate drier and more salubrious than that of Zealand. The centre of the island is occupied by an extensive heath; but elsewhere the soil is moderately fertile, producing all sorts of grain, but especially oats, with flax, hemp, &c. Cattle inferior to those of the other Danish islands, but the horses are strong and active. Timber is scarce; large trees being, however, frequently found in a state of perfect preservation imbedded in moss. There are a great many rivulets well stocked with fish, which are also very abundant round the coast. Exclusive of agriculture and fishing, brewing and distillation, tile and brick making, the manufacture of coarse and fine earthenware, &c. are carried on to a considerable extent. An ingenious native of the island having accidentally taken to pieces a wooden clock imported from abroad, took it for a model, and set about making another. His example was followed by others; and such was their success, that wooden clocks soon began, and still continue, to be a principal article of export! Linens, spun and prepared in the houses of the peasantry, are also exported. Coffee, sugar, tobacco, and spices are the principal articles of import. Roenne, the capital, and the residence of the governor, is situated at its S.W. angle. It is defended by batteries, has a considerable trade, and a number of vessels and boats engaged in the fishing; but its harbour is shallow, having only 6 or 7 ft. water. Nexæ, on the S.E. shore, is famous for its beer. A lighthouse, having the lantern elevated 272 ft. above the level of the sea, has been erected on Cape Hammersen, the most N. point in this island. The feudal system never obtained any considerable footing in Bornholm. Persons accused of political offences used to be banished thither. (*Catteau, Tableau de la Mer Baltique*, i. pp. 277—284.)

BORNOU, a kingdom of Central Africa, in from 10° to 15° N. lat., and from 12° to 18° E. long.; it is bounded on the N. by Kanem and the S. E. corner of the desert; on the E. by Begharmi; on the S. by Mandara; and on the W. by various small tribes extending to Houssa and the Fellata country. Bornou appears to have been formerly more extensive, both in lat. and long.; at present it may, perhaps, be about 400 m. in length, from E. to W., the same in extreme width, from N. to S., and its area is probably not less than 120,000 sq. m., of which however, certainly more than 20,000 are covered by the waters of Lake Tchad. (*Denham and Clapperton*, p. 314., &c.; *Lucas, Afric. Assoc.* i. 131., &c.—The surface of Bornou is an immense plain, the greater portion of which is subject to annual overflow, from which circumstance, joined to the great heat of the climate, the soil has every capability of abundant production; owing, however, partly to the want of industry in the people, and partly to the state of warfare in which the internal countries of Africa seem constantly to live, little advantage is taken of this favourable state of things, and the Bornouese are not much superior as agriculturists to other negroes. Clapperton (*Journey from Konka to Sokkatoo*, p.19.) found the natives of Houssa raising a second crop of wheat, by irrigation; but such instances, while they prove the natural fertility of the land, are extremely rare in Bornou. The principal rivers are the Shary and the Yeou; the former apparently rising in the mountains of Mandara, the latter in those of Houssa. The smaller streams are very numerous, but all are received into Lake Tchad, and unless that lake have an outlet on its E. shore, which, if not impossible, is very improbable, the whole water system of Bornou yields no supply whatever to the ocean. (*See* LAKE TCHAD.) Upon this point, however, it must be observed that something more than a suspicion is entertained of an *indirect* communication between the Sharg and the Niger. The Tchadda, which falls into the latter river between 7° and 8° of N. lat., and between 8° and 9° of E. long., is positively affirmed by the natives to be connected with the lake of the same name. Lander, in his last expedition, sailed up this stream to 150 m. from its mouth, and found its upward bed constantly bearing towards the Mandana mountains. (*Travels of R. and J. Lander*, p.769.) Major Denham also received information, on the Mandara frontier, of a river running W. through a country which his informant called Adomowa. (*Trav.* p.144.) In addition, likewise, to its identity of name with the distant lake, the Tchadda (river) has the second name of Shary given to it by the natives; and Capt. Allen, who ascended its stream in 1833, has given many reasons for supposing that it is connected also with the Yeou, the other great river of Bornou. (*Geog. Journ.* vol. viii.) From all these circumstances, the asserted communication appears to be highly probable, and indeed it is not easy, on any supposition, except that of its truth, to account for the prevalent belief on the banks of the Niger. The very considerable space of intervening country (600 m. direct distance) being considered, it is not very likely that the natives of that district should have even *heard* of the Tchad, unless its connection with their river had really existed*; but, at the same time, it is certain that the Bornouese waters and the affluent of the Niger flow in different directions (*Denham*, p. 236., &c.; *Lander*, p.769.), so that the possibility of a passage from the one system to the other implies the common origin of some of their branches to lie among lakes on elevated plains, from which the streams descend on different sides with a very gradual fall, and in considerable volume. Such a communication between independent basins was first established by Humboldt and Bonpland, with regard to the rivers of S. America. It will form an interesting feature in physical geography, should it be found existing also in interior Africa. (*See* NIGER.)

The climate of Bornou is one of very great but not uniform heat. In summer, that is, from March to June, the thermometer stands at 105° to 107° at noon, and even at night is rarely lower than 100°, except before sun-rise, when it sinks to 86° or 88°. The winter temperature is, however, lower than the lat. would warrant the expectation of; rarely higher than 74° or 75°: it frequently falls in a morning as low as 58° or 60°. The N.W. wind is cold, the S. and S.E. hot and suffocating; which, considering that the first blows over the Sahara, and the others over the high mountains of Kong, is a remarkable fact, which seems to require explanation. The seasons may be divided into *wet* and dry, but the first can scarcely be denominated *rainy*, in a tropical sense. About April or May, indeed, a short period, varying from 3 to 9 days, is marked by violent tempests, rain, thunder, lightning, and wind; but the remainder of this wet period, extending to October, by no means interferes with out-door labour, except in June, when there is another burst of falling weather, attended with a most oppressively sultry atmosphere. At this time it is that the lakes and rivers overflow their banks, flooding the land in their neighbourhood for many miles. The dry and cold season usually commences in October. (*Denham*, pp. 181—225. 314.; *Lucas*, p. 131.)

In a country devoid of mountains there are, of course, no minerals. Iron is procured from the neighbouring state of Mandara, in the hills of which it is very abundant, and gold dust is a principal article in Bornouese trade; but whether the last be brought down by the rivers, or procured from a distance, does not appear. (*Denham*, pp. 146. 317.; *Lucas*, p. 155.) Trees are extremely scarce throughout the country, except here and there upon the banks of rivers; though the neighbouring states, Kanem, Mandara, Houssa, &c., appear to be well wooded. The soil, which is chiefly alluvial, is highly productive, but its productions are by no means varied, consisting chiefly of millet, barley, beans, Indian corn, cotton, and indigo. The flooded lands on the shores of Lake Tchad are peculiarly well adapted for the growth of rice, but none is cultivated; and there is no tropical country *nor desert* so destitute of fruits and edible roots. (*Lucas*, p. 134; *Denham*, pp. 50. 102. 316. &c.; *Clapperton*, pp. 6. 15. &c.)

The wild animals of tropical Africa are all common in Bornou; and the ferocious kinds, lions, panthers, jackals, &c., which in the wet season approach the walls of the towns, are particularly dangerous. The buffalo, giraffe, elephant, hippopotamus, and crocodile, are animals of chace; the flesh of all of them is eaten, and that of the last three accounted a great delicacy. The civet cat is common, and the animal itself, as well as its secretion, is an important article of trade. Of domestic animals the number is immense: cattle and horses are of fine breeds, and plentiful; camels are rare, and sheep have a hairy instead of a woolly covering. Pelicans, spoonbills, cranes, snipes, ducks, geese, and, in short, almost every species of water fowl, are abundant in the extensive marshes: the ostrich traverses the plains, and partridges, grouse, guinea fowl, and other game, are also very numerous, as are the domestic fowls, which constitute the cheapest kind of animal food that can be purchased. Reptiles are numerous, consisting, besides crocodiles, of scorpions, centipedes, enormous toads, and many varieties of serpents, one of which, measuring 14 or 16 ft. in length, though said to be harmless, is probably of the boa or python species. In such a climate insect life is naturally abundant; bees are so numerous, that Lucas (p. 138.) affirms the wax is often thrown away, as an article of no value in the market; and Den-

* In an Arabic MS. geography of interior Africa, composed by Sultan Bello, of Houssa, Bornou is described as "a country which contains rivers," but no mention is made of the lake. (*Denham and Clapperton, Appendix*, xii. 159.)

ham remarks (p. 320.) that the honey is only partially collected. The curse of tropical countries, the locust, is a frequent visiter; and though a favourite article of food, is regarded with dread, since desolation always follows in its train. The rivers and lakes abound in fish, of many different species, most of them peculiar. (*Lucas*, p. 137.; *Denham*, 229. 284. 319. 321, &c.)

The inhabitants of Bornou consist of two classes,— the Shouas, descendants of Arab settlers from the N.; and Kanowry, as the native race is called, who are true negroes. The former, as in all similar conjunctions, are the dominant people; they have fine, open, aquiline countenances, large eyes, a light copper complexion, and bear a strong personal resemblance to the best specimens of English gypsies. They are divided into tribes, and still bear the names of some of the most powerful Bedouin hordes. Their language is Arabic, and to them is owing the introduction of the arts of writing and reading. They are shrewd, active, and courageous, but these are almost the only good traits in their character. Deceitful, arrogant, cunning, and dishonest, their superior attainments are used by them only as a means to rob and oppress their black neighbours. These last present, in their physical appearance, all the usual negro peculiarities—flat noses, large mouths, and inexpressive countenances. They are peaceable and orderly, but destitute of energy, cowardly, and appear to regard the Shouas as a superior race of beings. Nine different languages, or dialects (ten with the Arabic), are spoken in Bornou: Lucas says thirty, (p. 132.); but as he makes the limits of the country much larger than Denham, it is probable he included those spoken in some of the surrounding states.* No estimate can be made of the population of this kingdom; but as towns possessing 30,000 inhab. are met with, and markets are said to be sometimes attended by 80,000 or 100,000 persons, and the Shouah population alone can raise an army of 15,000 men, the number of inhabitants must be very considerable. (*Denham*, pp. 79, 80. 329., &c.) The religion of the court is, of course, Mohammedanism; but no disabilities appear to attend the profession of feticism, which is the faith of the bulk of the negroes. The government is absolute, and till lately was elective. The laws are arbitrary, and punishments summary, but usually administered with justice; and there is a kind of insolvent act, which relieves a man from his debts on proof of his poverty, leaving any future property he may acquire at the mercy of his creditor, without further process. In other respects the Bornouese resemble the negroes generally; their arts are few, and apparently introduced, in most cases, by the Arabs. But the Arabs also introduced the slave-trade, which was unknown before their arrival, and is said to be reluctantly submitted to. The Moors of Barbary, however, prefer slaves to any thing else; and as Bornou is dependent upon them for all the comforts, and many of the necessaries, of life, the slave-trade is carried on to a great extent. It is said that the natives are very anxious for a direct trade with England; but considering that their country is situated full 600 m. from the coast, and in a climate destructive to Europeans, we confess we are not of the number of those who entertain a sanguine expectation that any such trade will ever be carried on to any extent, or to any profit. (*Denham*, p. 321—335. *et pass.*; *Lucas*, p. 146—159. &c.) The name Bornou is Arabic. It is literally *Barr-Noa*, "the Land of Noah," the Arabs believing that the mountains in its neighbourhood received the ark after the deluge, and that the patriarch first established himself in its extensive plains. (*Lucas*, p. 131.) The negro name appears to be *Kanowra*. (*Denham*, p. 316.)

BORODINO, a village of Russia in Europe, gov. Moscow, on the Kologa, 10 m. W. Mojaïsk. This village will be for ever memorable from its being the scene of the most sanguinary conflict, perhaps, that has taken place in modern times. On the 7th Sept. 1812, the French army under Napoleon, in its advance upon Moscow, attacked at this point the entrenchments of the grand Russian army, 120,000 strong, under Kutousoff. The Russians made a desperate resistance, but in the end their position was carried. The slaughter was immense; the Russians having lost above 40,000 men killed and wounded, and the French nearly 30,000! Few prisoners were made on either side.

BOROFSK, a town of Russia in Europe, gov. Kalouga, cap. distr., on the Prorva, 55 m. S.W. Moscow; lat. 55° 10′ 30″ N., long. 36° 32′ 15″ E. Pop. 5,000. It is an old town, celebrated in Russian history for its defence by Prince Volkonski, in 1610, against the pretender Dimitri. It has 4 churches, a manufacture of sail-cloth, and its environs produce excellent onions and garlic. At a short distance is the convent Pæsnoutief-Borofski, founded in 1444, containing 5 churches and a considerable treasure. (*Schnitzler*, *La Russie*, *&c.* p. 139.)

BOROUGH-BRIDGE, a bor., market-town, and township of England, W.R. co. York, Claro wapentake, par. Aldborough, on the S. bank of the Ure, 17 m. S.E. York. Pop. 950. It has some good houses and inns, its consequence being principally derived from its situation on the great road from York to Edinburgh. It enjoyed the privilege of sending 2 mem. to the H. of C. from 1553 down to the passing of the Reform Act, by which it was disfranchised. It has several fairs; of these the most important is held in June, for the sale of hardware, and, though much fallen off, is still attended by dealers from Sheffield, Birmingham, &c. The others are principally cattle fairs. Many remains of British and Roman antiquities are found in this town and its immediate vicinity. Of these, the most celebrated are the obelisks, called the Arrows, about ¼ m. S. from the town. A beautiful tesselated pavement was discovered in 1831, a little to the W. of the town. At this town, on the 16th of March, 1322, the army of the rebel barons, under the Earl of Lancaster, was defeated by the troops of Edward II., in an attempt to cross the river; and their leader, being taken prisoner, was immediately beheaded.

BOROVITCHI, a town of Russia in Europe, gov. Novgorod, cap. distr., on the Msta, 100 m. E.S.E. Novgorod; lat. 58° 16′ N., long. 33° 50′ E. Pop 3,000. It has 4 churches, a convent, and a good deal of trade. In the neighbourhood are cataracts that interrupt the course of the river; but the obstacles to its navigation, thence arising, have been successfully obviated by works undertaken for that purpose.

BORROMEAN ISLANDS, a group of small islands in the Lago Maggiore, Continental Sardinia, which see.

BORROWSTONNESS, or **BO'NESS**, a burgh of barony, and sea-port of Scotland, co. Linlithgow, on the S. side of the Frith of Forth, 17 m. W. by N. Edinburgh. Pop. 2,809. It is one of the oldest Scottish sea-port towns, and its name often occurs in history. The harbour is safe and commodious; but the revenue which it yields is insufficient to keep it in repair, even though an impost of 2*d*. Scotch has been levied for the purpose for nearly a century (17 Geo. II.) on every Scotch pint of ale or beer brought into the town. Bo'ness carries on ship-building to a small extent, and has some little trade with the Baltic. It engages pretty extensively in the herring fishery, and has not unfrequently, of late years, sent one, two, or more vessels to the N. whale fishery. The town is the seat of the most extensive salt works on the Frith of Forth; and it exports about 30,000 bushels of salt a year. Here are two distilleries, an earthenware manufactory, and vitriol and soap works. Productive collieries abound in the immediate neighbourhood, and have been wrought for centuries. The mines extend nearly a mile below the bed of the frith, so as almost to meet those of Culross on the opposite side, which run in a S. direction to the distance of 2 m. Near Bo'ness is Kinneil House, a seat of the duke of Hamilton, and long the residence of Dugald Stewart.

BOSA, a sea-port town on the W. coast of Sardinia, div. Sassari, near the mouth of the Termo: immediately opposite to the latter is the islet of Bosa, lat. 40° 16′ 40″ N., long. 8° 25′ 31″ E., between which and the shore small vessels lie in tolerable security. Pop. 3,500. It is beautifully situated in a fine valley between two hills; is tolerably clean, and has several paved streets; but in summer it is ill supplied with water, and is then, also, very unhealthy. It is a bishop's see; has 9 churches, a convent of Capuchins and one of Carmelites, with a seminary for the study of philosophy and theology. On a hill immediately above the town are the remains of a castle or acropolis, where the principal families used formerly to reside. The natives are very active, carrying their produce all over the island; and most part also of the travelling pedlars belong to the town. (*Smyth's Sardinia*, p. 287.)

BOSCO-TRE-CASE, a village of Naples, prov. Naples, cap. cant., at the foot of Vesuvius, 12 m. E.S.E. Naples. Pop. 5,000. It is one of four villages situated at a little distance from each other, comprised under the general term *Bosco*; has several churches and convents, a royal manufactory of arms, a powder-mill, and an extensive fabric of *pâte d'Italie*.

BOSNA-SERAI, or **SERAJEVO** (an. *Tiberiopolis*), a city of Turkey in Europe, cap. prov. Bosnia, on the N. bank of the Migliazza, 246 m. S. Buda, and 575 m. N.W. Constantinople; lat. 43° 54′ N., long. 18° 26′ E. Pop. 60,000. ? It is well built, and has an agreeable appearance owing to the number of minarets, towers, and gardens which it encloses. It contains a *serai*, or palace, built

* Mr. Lucas's account of Bornou was derived from the reports of Sheriff Imhammed of Fezzan, confirmed by the governor of Mesurata, and remarkably corroborated by the independent statements of Ben Ali, a Morocco merchant, to the African Association, about 1789. These are therefore the Arab descriptions of Bornou; and it is gratifying to remark how closely they agree, *in general*, with those of Denham and Clapperton. It is singular, however, that none of them mention the great Lake Tchad, nor either of the great rivers which fall into it; though to the natives of a dry climate these would be supposed to form the most interesting features of the country. This is the more remarkable, since, from the notices of Begharmi, it is clear that the Arab merchants must have reached the E. shore of the lake, and consequently been acquainted with its extent both in lat. and long. (*Afric. Assoc.* pp. 73. 80. 142. 146. &c.)

by Mahomet II., to which the city owes its name; about 100 mosques, some of which are elegant structures; several Greek and Roman Catholic churches, with colleges, bazars, &c. Most of the houses are of wood; the Migliazza is here crossed by a massive stone bridge. The city was formerly encompassed with walls, but these are now decayed, and its only defence consists in a large citadel, built on a rocky height at its E. extremity, and mounting 80 cannon. The inhabitants are industrious, and employed in the manufacture of arms, iron, and copper articles, horse-hair bags, morocco, and other kinds of leather, and cotton and woollen stuffs. Near Bosna-Seraï are the principal iron mines in Bosnia. It is the chief mart in the prov., the centre of the commercial relations between Turkey and Dalmatia, Croatia and S. Germany, and has considerable trade with the cities of Saloniki and Yanina. The most wealthy families in Bosnia reside in this city; 2-3ds of the pop. are said to be Turks, but the Jews monopolise the chief part of the trade. (*Cannabich*, *Ritter*, *Malte-Brun*, &c.)

BOSNIA, or BOSNA, the most westerly pachalic or eyalet of Turkey in Europe, comprising Bosnia Proper, Turkish Croatia, and Herzegovina. It lies between lat. 42° 30′ and 45° 15′ N., and long. 15° 40′ and 21° 2′ E.; having N.W. and N. the Austrian prov. of Croatia and Slavonia; E. Servia, and S. and W. Albania and Austrian Dalmatia, the latter separating it from the Adriatic, to which, however, it approaches in certain parts very closely, if it do not actually come in contact with it. Area variously estimated at from 16,000 to 22,000 sq. m. Pop. from 800,000 to 1,000,000. It is almost entirely occupied by the Dinaric and Julian Alps, which, with their offsets, separate it into several well-marked divisions. Principal river the Save, forming the N. boundary of Bosnia, with its affluents the Unna, which in part separates Turkish from Austrian Croatia, Verbaz, Drin and Ibar forming its E. boundaries. The Bosna traverses Bosnia Proper, the Sanna, Croatia, and the Narenta, Herzegovina. It has numerous fertile valleys, but no lakes of importance, and only one plain of any size, that of Livno in Herzegovina. This country is supposed to be rich in minerals; but the Turks permit only the iron mines and a lead mine near Zvornik to be wrought. The former employ about 2,000 individuals. Gold and silver are said to exist in various places, and mines of the first of these metals were worked under the Romans: most of the large affluents of the Save bring down gold-dust; but its collection by the inhabitants is prohibited. Quicksilver is also found; and there are quarries of millstone, freestone, alabaster, and marble; coal mines, and numerous mineral springs, some of which furnish salt, though not in sufficient quantity for the supply of the country. The climate is generally cold, but not unhealthy; the winter snows lie on the ground for a long time, and the spring is short. In the S. violent winds prevail in winter, and the summer is extremely hot. The mountain chains, especially in the N., are covered with dense forests of pine, oak, beech, linden, chestnut, &c.; but the S. branches of the Dinaric Alps present a remarkable deficiency of vegetation. The best soil in the valleys is devoted to pasture; and Bosnia is generally better adapted for the feeding of cattle than for agriculture. The Bosniaks, however, seem to prefer the chase to more settled pastoral occupations; and as the woods abound with wild animals, as deer, wild boars, bears, wolves, foxes, &c., they have every facility for carrying it on. The inhab. consist of several races distributed perhaps nearly as follows:—

Nation.		Religion.	
Turks - -	246,000	Mohammedans -	450,000
Bosniaks - -	350,000	Greek Church -	230,000
Servians - -	120,000		
Morlachians -	75,000	Roman Catholics -	151,000
Croats - -	40,000		
Gipsies - -	16,000	Gipsies - -	16,000
Jews - - -	2,000	Jews - - -	2,000
Armenians -	1,000	Armenians - -	1,000
Total - -	850,000	Total - -	850,000

It is only in the valleys that any cultivation is carried on. Wheat, barley, maize, and legumes are grown in sufficient quantity for home consumption; and flax and tobacco near Zvornik and Novibazar. A great variety of fruit is met with. A liqueur is made from plums, and a sweet drink called *pekmes* from pears. The olive and vine are both cultivated; but the wines are strong and fiery, and in order to be relished should be drunk while young. Bosnia has a breed of strong horses, but it is much neglected, except by the Turks: there are large herds of fine cattle, and flocks of sheep, the wool of which is greatly esteemed in the markets of the Levant. Goats, hogs, and poultry are everywhere plentiful; and in Croatia many bees are kept, which yield good honey, but inferior wax. The manufactures of Bosnia are limited to iron articles of common use, leather, coarse woollen stuffs, saltpetre at Jaicza, cannon balls at Kamengrad; gunpowder, fire-arms, and other weapons. The principal exports are leather, hides, wool, goats' hair, honey, cattle, dried fish, timber, mineral waters, &c.; the chief imports, linens, woollens, silks, lace, glass, and metallic wares; paper, colonial produce, salt, oil, dried fruits, and silver coin from Dalmatia. The transit-trade in Levant produce is not inconsiderable; the chief seats of commerce are the towns of Bosna-Seraï, Novibazar, Zvornik, Bagna Louka, Mostar, and Gradiska. The roads are generally very bad, and impracticable for wheel-carriages. The total government revenue derived from this prov. is estimated at 700,000*l.* or 800,000*l.* a year, but not half this sum is said to reach the treasury of the sultan.

Bosnia is under the government of a pacha of three tails; it is divided into six sanjiaks or circles, and again into forty-eight subdivisions, each of which is subordinate to a military governor and a *cadi*, or judicial officer. Bosna-Seraï is the capital of the prov.; but Trawnik is the residence of the pacha. This officer is changed every three years; he has under his orders a military force of from 3,000 to 4,000 men. The Bosniaks are of Slavonic origin; though mostly Mohammedans, they yield but an unwilling obedience to the Porte, and differ from the Turks in many usages—having but one wife, and treating their women with consideration.

Bosnia was anciently included in Lower Pannonia. In the middle ages it first belonged to the Eastern empire, and afterwards became a separate kingdom, dependent upon Hungary. The Turks conquered it in 1480, after a war of 17 years; but it was not till 1522 that Solyman the Magnificent finally annexed it to the Turkish dominions. (*Cannabich, Lehrbuch der Geog.* pp. 745, 746.; *Von Zedlitz, Brief Survey of Bosnia, &c.*)

BOSPHORUS (more properly BOSPORUS) OF THRACE, or CHANNEL OF CONSTANTINOPLE, the strait which connects the Black Sea with the Sea of Marmara, and separates the E. corner of Thrace from Asia Minor. The length of this remarkable channel is about 17 m.; its width varying from ½ m. to 2 m.; its course slightly winding; its direction very little W. of S., and its embouchure in the Sea of Marmara is in 41° N. lat., 29° E. long.

A current sets constantly from the Black Sea through the Bosphorus, but, though generally very strong, it is subject to considerable modifications; a long-continued wind from the S.W. renders it sometimes almost imperceptible; while, on the other hand, a breeze from the N.E. so adds to its force, that it is almost impossible for a vessel, under such circumstances, to make head against it. The inequalities of coast cause several changes of direction in the set, as the water is thrown from side to side by the numerous bold promontories that project from both shores; but these do not affect the general course, except by making it more tortuous; that course tending constantly towards the S. and the Sea of Marmara. The depth of water is considerable; there is but one bank in the channel; consequently there is no danger in its navigation, nor any difficulty, except in an upward passage against its current; this is, however, sufficiently baffling to the unskilled Orientals. At its N. mouth, on the Black Sea, are two groups of islets, one on the European, the other on the Asiatic shore; these are the famous Cyanean Isles or Symplegades of the ancients, which it was once believed no vessel ever passed in safety, except by miracle. (*Apoll. Rhod.* ii. v. 435, &c.) They are now quite harmless, being, in fact, nothing but low continuations of the respective shores; they are in a continual state of decay, and might easily be overlooked, did not their ancient celebrity induce the modern navigator to search for them. In its freedom from all danger, its narrow channel, the strength and constant set of its current, and, in short, in most of its characteristics, the Bosphorus resembles a magnificent river more than an arm of the sea; and this resemblance is by no means impaired by the branch which it gives off at its S. end, and which, enclosing Constantinople on the N., forms what is justly called the Golden Horn, one of the finest harbours in the world. The country through which the Bosphorus flows is unrivalled for beauty; animals and vegetables of almost every variety abound, and the geology is peculiarly interesting, from the unequivocal evidences it exhibits of igneous action. The cliffs, which are stately and abrupt, consist of jasper, agate, cornaline, calcedoine, porphyry, trap, and calcareous spath, in very great but picturesque confusion. They are all more or less in a state of decomposition, and traces of metals are seen in the colouring of the various stones. Appearances seem to warrant the conclusion that this strait was opened by a convulsion of nature, and this belief was very generally entertained by the an-

cients. (*See* BLACK SEA.) At about half way between the two seas, or rather nearer to that of Marmara, at the narrowest part of the channel, stand two castles, one on each bank, named, from the Turkish provinces, Anadoli and Rumeli (Asia Minor and Thrace). They form almost the only defence to Constantinople on the N., and, if well manned, would be very difficult to pass. These appear to be almost the only *public* buildings, but private houses and gardens extend along nearly the whole length of the strait, especially on the European side. (*Chevalier, Voy. de la Prop.* pp. 43—49.; *Olivier, Voy. dans l'Empire Oth.* i. 120—124.; *Jones's Trav.* ii. 441—451.)

The name Bosporus (Βοσπορος), which has been improperly corrupted by modern orthography to Bosphorus (Βοσφορος), is indicative of the narrowness of this channel, and comes from Βος, an ox, and πορος, a ford. The passage across it of Europa, borne by Jupiter in the form of a bull, is a well-known Greek legend, and thence the ancients called those channels Bospori, which were narrow enough to allow of kine swimming across them. Two especially were so distinguished, namely, the strait now under consideration, and the Cimmerian Bosporus (Strait of Yenicalé), between the Euxine and the Palus Mœotis. Over the Thracian Bosporus, Darius Hystaspes threw a bridge of boats when he passed from Asia to his disastrous war with the Scythians; and the pillars of marble which he erected to commemorate that event are supposed, with great reason, to have stood upon the spots now occupied by the Turkish castles. (*Herodotus Melpom.* pp. 85—88.; *Strabo*, vii. 320.; *Ptolemy*, iii. 11.; *Pliny*, vi. 1. &c.)

BOSSINEY-WITH-TREVENA, a bor. of England, co. Cornwall, hund. Lespewth, par. Tintagel, 208 m. W. by S. London. Its area is 350 acres; its pop. is returned with that of the pa., which, in 1831, was 1,006: houses, 210. It is on a rugged exposed part of the N. coast of the county, and consists of two small villages ½ m. apart. There is a town-hall now occupied as a charity school: an annual fair is held the first Monday after 19th Oct. It claimed to be a bor. by prescription, and returned 2 mem. to the H. of C., under a charter of 7 Edw. VI., till disfranchised by the Reform Act: the elective right was in burgesses holding freehold property in the bor.; of whom there were 24. The area of the whole parish is 3,960 acres: annual value of property, in 1815, 3,674*l*. The remains of King Arthur's castle are on the table summit of a huge rock, protruding into the sea, and connected, by a narrow isthmus, with the rest of the parish.

BOSTAN (EL) (an. *Comana*), a town of Turkey in Asia, Natolia, pach. Marasch, at the N. foot of Mount Taurus, in a fine plain, on the Syhoun (an. *Sarus*), 80 m. N. from the bottom of the bay of Iskenderoon, and 115 m. S. by W. Sivas, lat. 38° N., long. 36° 26′ E. Pop. 8,000 or 9,000. Mr. Bruce (*Appendix to Kinneir's Travels*, p. 560.) says of El Bostan that "it has 40 dependent villages in the adjacent plain, surrounded with fine trees and cultivated fields and meadows. Few spots in Asia Minor offer a sight more agreeable. There is a great trade in wheat, sold to the Turkmans, who carry it even as far as Aleppo. When fearful of being attacked, the inhab. lay the environs of the town under water. It has four mosques, one of which is supposed to be very ancient."

In antiquity Comana was famous for the worship of Mâ, the Cappadocian Bellona. The population consisted, in a great degree, of soothsayers, priests, and slaves belonging to the high-priest, and employed in the service of the temple. The latter, in the time of Strabo, are said to have exceeded 6,000 of both sexes. It received a Roman colony in the reign of Antonius Pius, and, perhaps, also, in that of Caracalla. (*Cramer's Asia Minor*, ii. 139.)

BOSTON, a sea-port, m.-to., and bor. of England, co. Lincoln, on the Witham, 102 m. N. London, and 28 m. S. E. Lincoln; lat. 52° 59′ N., long. 0° 2 E. Pop., 1801, 5,926; 1831, 11,240; 1841, 12,942. The town is supposed by some, from antiquities found in its neighbourhood, to have been a Roman station, and to have taken its name from a monastery built by St. Botolph, A.D. 654, destroyed by the Danes in 870. That it became a place of considerable mercantile importance, after the Norman conquest, appears from the fact that, in 1204, its assessment towards a tax of a fifteenth, imposed on the ports, amounted to 780*l*., while that of London, the only port taxed higher than it, was but 836*l*. In 1281 it suffered by fire, and in 1286 by an inundation. Under an act of 27 Edw. III. it became a staple for wool, woolfells, leather, and lead. About the same time its mercantile prosperity was much increased by several Hanseatic merchants settling in it, who, however, emigrated about a century after, in consequence of a quarrel with the townsmen, which terminated in bloodshed. During the intermediate period its shipping was so considerable that it furnished 17 ships, and 360 men, towards an armament for the invasion of Brittany, and ranked the twelfth, as to number of vessels, among the 82 ports which were assessed; but it fell off rapidly after the departure of the Hanseatic merchants. The dissolution of the monasteries by Hen. VIII. injured the town, though compensation, in some degree, was made to it by a grant of 511 acres of the sequestered lands. It afterwards suffered by the plague, and by inundations, to which this flat country was particularly liable. During the civil wars, it was for some time the head-quarters of Cromwell's army.

The town, situate on the Witham, called by Leland the *Lindis*, about 5 m. from its mouth, and divided by it into two nearly equal parts, connected together by an iron bridge, of a single arch of 86½ ft. span, opened in 1837, consists of two long streets, one on each side the stream, from each of which others diverge. It is well built, contains many good dwelling-houses and shops, and extensive granaries and warehouses; the part within the borough is well paved and lighted under the provisions of a local act; but these advantages are not enjoyed by a small part, which has extended itself into the neighbouring parish of Skirbeck. It suffers much from the want of good water, that used being rain-water, collected in cisterns, or water raised from pits, or the river. The attempts made to procure spring-water have been unsuccessful, though borings have been carried to a depth of more than 600 ft. Its most remarkable building is the parish church of St. Botolph, erected in 1309. It is the largest church without aisles in the kingdom, being 382 ft. by 98 ft. within the walls. Its tower, 263 ft. high, built on the same plan as that of Antwerp, is capped with an octagonal transparent lantern, of very beautiful construction, and forms a remarkable landmark on this low coast, being visible at 40 m. distance. A chapel of ease was erected in 1822. The only traces of St. John's Church, taken down about two centuries ago, are found in its cemetery, still used as a place of burial. The other places of worship are those of the Unitarians, Wesleyan New Connexion, and Primitive Methodists, General and Particular Baptists, Independents, and Catholics. Each has a chapel, to most of which a Sunday-school is attached. A free grammar-school was founded in 1544; Laughton's, for the sons of poor freemen, in 1707; a blue-coat school in 1713, for 30 boys and 25 girls; and a national British and Infant school, together educating about 500 pupils of both sexes: there is also a dispensary and a very handsome Union house, this being a "union" under the new Poor Law. The other public places are — three subscription libraries, assembly-rooms in the market-house, a theatre, and a public promenade at Vauxhall Gardens. A weekly newspaper is also published. Since the passing of the Municipal Reform Act the town has been divided into 2 wards, and is governed by a mayor, 6 aldermen, and 18 councillors. It has returned 2 mem. to the H. of C. since the reign of Edward VI. Previously to the Reform Act the franchise was vested in the members of the corporation, and in the freemen who resided in and paid scot and lot in the bor. The parl. bor. includes the parishes of Boston and Skirbeck, and the hamlet and fen allotment of Skirbeck quarter, extending in all over 7,923 acres, and had, in 1841, a pop. of 14,618. Registered electors, 1849-50, 1,003. It is a polling-place for the co. There were several guilds, both religious and civil, all of which have fallen into desuetude; the hall of that of the Blessed Virgin Mary, which was one of the most important, is used by the corporation for their municipal meetings. Petty sessions are held on Friday. A court leet for the borough sits annually: its principal duty is to present nuisances. A court of record, which decides pleas in all actions, real, mixed, and personal, sits on Wednesdays and Saturdays. It is also the seat of a county court, before which 1227 plaints were entered in 1848. The police wear a uniform similar to the London police. The gaol, though sufficiently spacious, is ill-arranged for classification; all the female prisoners, except debtors, being confined in the same ward.

The parochial assessments increased from 4,127*l*., in 1825, to 18,416*l*. in 1847, the latter being assessed on property of the annual value of 195,700*l*. Its manufactures are mostly confined to sailcloth, canvass, and sacking; there are two iron and brass foundries, and three ship-yards, with patent slips, where vessels of 200 tons are built. Markets, well supplied with poultry and sea and river fish, are held on Wednesdays and Saturdays, in the new market-house, to which a corn-market is attached; fairs for cattle and sheep are on May 4. and 5.; for fat cattle on Aug. 11.; for horses about Nov. 18. and 3 days after; and for horned cattle only on Dec. 11. Immense numbers of the finest cattle and sheep are sold at these fairs, the town being in the centre of one of the richest grazing districts in the kingdom. The banking establishments are — the National and Provincial Bank of England; a branch of the Stamford, Spalding, and Boston Bank; with two private banking houses. The principal drainages in the vicinity are those of the Holland fens made by a cut of 12 m. from the town to Dogdyke, near Tattersall, by which 22,000 acres were reclaimed; and the Wildmore fens, 41,000 acres, drained in a similar manner. Owing to the neglect of keeping the river clear, the trade fell off so as to be almost extinct. In

1721 vessels of 250 tons could discharge at the town; in 1751 sloops of 6 ft. draught could not come up, except at springs. The drainages, already mentioned, revived attention to the state of the river, and under special acts of parliament, have improved it so far that vessels of 120 tons come up to town, whence the navigation is continued to Lincoln by small steamers and barges. A sluice was also erected to retain the water above the town; but, owing to the scanty supply in the upper part, it can seldom be opened for scouring and deepening the river, as was intended. The navigation to Lincoln is extended by the Fossdyke Canal to the Trent, at Torksey, and thence, either by still water or river navigation, to Gainsborough, Nottingham, and Derby, thus opening a vent for the export of the manufactures of the midland counties. The foreign trade is chiefly confined to the importation from the Baltic of timber, hemp, tar, pitch, and iron. The coasting trade is chiefly in the export of corn, wool, and other agricultural produce, the return cargoes consisting of coal and manufactured goods. There is a good custom-house, and a pilot establishment of a master and 12 pilots. Extensive powers are vested in the mayor and burgesses by two local acts for improving the port and harbour, under which they are empowered to collect tonnage, wharfage, and lastage, from vessels that enter; the receipts to be applied to its improvement. They are also empowered to make bye-laws, to which all vessels are to be subject. The expenditure, under these acts, for 21 years, commencing 1812-13, was 88,450*l.* The fund was involved in a considerable debt, now in process of liquidation, a considerable portion of which was contracted on account of the works, planned and carried on under the direction of the late Mr. Rennie, and his son, Sir John Rennie, chiefly consisting of a cut, commenced in 1828, about 1 m. long, and 3 m. from Boston. Its execution was extremely difficult, as it was carried through a shifting sand; but it has proved very beneficial both in deepening the harbour and draining the country. Another cut at the town, with a wall from the bridge to the quay, has since been executed on an effective plan, by the corporation. Part of the port dues are collected at Spalding and at Wainfleet, to each of which the jurisdiction of the corporation extends. There belonged to the port on the 31st December 1849, 177 sailing vessels of the burden of 8,377 tons, and two small steamers.—Gross Customs duties in 1846, 40,064*l.* (*Dugdale's Hist. of Embanking and Draining; Noble's Gazetteer of Lincoln; Thompson's History of Boston; Britton's Beauties of Eng.; Municipal Rep.; Boundary Rep.; Sessional Papers.*)

Boston, a marit. city of the United States, the principal place in New England, and the cap. of Massachusetts; on a small peninsula at the bottom of Massachusetts Bay, connected with the mainland by a narrow isthmus, called Boston Neck, 207 m. N.E. New York; lat. of lighthouse, 42° 19′ 41″ N., long. 70° 53′ 43″ W. Pop. in 1820, 43,298; in 1840, 93,383; and including the suburbs of Charleston on the N., and Dorchester on the S., with each of which Boston communicates by bridges, and that of E. Boston, on an island, with which an intercourse is kept up by steam-ferry boats, its pop. may now (1850) be estimated at above 135,000.

The bay, which is very extensive, is studded with numerous small islands, which protect the harbour from the winds, and afford convenient situations for forts commanding the approaches to the city by water. The harbour is excellent, being of great size, with water sufficient to admit the largest ships, and so completely landlocked, that the vessels in it are almost as secure as if they were in dock. At the outer entrance to the bay is a lighthouse 65 ft. high, with a revolving light. The bridges, some of which are of great length, connecting the city with its adjacent suburbs and the continent, are all of wood; but it is joined by a causeway of earth to Brooklyn, and the W. Avenue, as it is called, leading across the bay to Roxbury, is also of earth, but is partly only artificial, being fenced on each side by walls of stone. This avenue serves the double purpose of a bridge and a dam, and, with the addition of a cross dam of a similar construction, forms two large basins; one of which being filled with every flood, and the other emptied with every ebb tide, a perpetual current for the use of mills, &c. is established. The wharfs are very extensive: the Long Wharf is 1,650 ft. in length, by 200 ft. wide, and contains 76 large warehouses; the Central Wharf is 1,250 ft. long, by 150 ft. wide; and there are others nearly as extensive. The wharfs, as well as many other parts of the city, have been built on sites formed by raising ground originally covered by the tide. Most of the streets are narrow and crooked; but the houses, which are generally of brick, though many of them are of granite and sienite, are large and well-built. The principal public buildings are the state-house; co. court house; the Faneuil hall, in which public meetings and public assemblies are held; the Massachusetts General Hospital; and the market-house. The state-house, a brick building, fronts the common, a fine park of 75 acres, and the principal public square in the city, of which it occupies the most elevated part, 100 ft. above the bay. The market-house is a handsome granite edifice, two stories high, 540 ft. in length, and 50 ft. wide; the court-house is also of granite, 176 ft. long, 57 ft. high, and 54 ft. wide, adorned with massive Doric porticos. The general hospital is a handsome granite building, surrounded by open grounds of four acres in extent. Tremont-house, the front of which is built of grey sienite, in the Doric order, and several of the bank buildings, are rendered deserving of notice by their architecture. There are above 50 churches, two theatres, an odeon, &c.; an eye and ear infirmary; with houses of industry, reformation, and correction; a county gaol, &c. Boston, with the small town of Chelsea, constitutes the county of Suffolk, which is represented in the senate of the state by six senators. The city is divided into 12 wards; the municipal government is vested in a mayor, 8 aldermen, and a common council of 48 members, all of whom are chosen annually by the citizens. There is a police court of three justices, for the trial of minor offences, and the examination of criminal charges; as well as a municipal court, held by a single judge, with jurisdiction in all criminal causes not capital. The annual expenditure of the city amounts to about 300,000 dollars.

Boston is connected with the interior both by canals, railways, and river navigation; and she has a very extensive trade both with foreign countries and also with the S. states of the Union. She is wholly indebted to the latter, and principally to New York, Maryland, and Pennsylvania, for supplies of flour and wheat, and for large quantities of oats, rye, barley, and other grain; as well as for cotton, tobacco, rice, staves, coal, &c. Of these, the imports of flour amount, at an average, to about 600,000 barrels a year; all sorts of grain to about 2,500,000 bushels; cotton, 120,000 bales; staves, 3,000,000; coal, 200,000 tons, &c. Her returns are made partly in native raw produce, as beef, pork, lard, &c.; partly in the produce of her manufacturing industry, in which Massachusetts is decidedly superior to every other state in the Union; and partly in the produce of her fisheries and foreign trade. At an average, she sends annually to the S. states 50,000 barrels beef and pork; 180,000 barrels mackerel, herrings, and other fish; 20,000 cwt. dried and smoked fish; 3,500,000 pairs of boots and shoes; 600,000 bundles of paper; besides a very large amount of cotton and woollen manufactured goods, hardware, furniture, cordage, &c.; so as, in fact, to leave a large balance in her favour. Her exports to foreign states consist principally of the same articles she sends to the S. states; but she also re-exports a large amount of the foreign produce she had previously imported. Her imports from foreign countries consist principally of cotton, woollen, and silk goods; hardware; sugar, tea, coffee, wines and brandy, indigo and other dye stuffs, spices, &c. During the year ended 30th June 1848, the value of the foreign produce imported into the state of Massachusetts amounted to 28,647,707 dollars; whereas the value of the exports of native produce, during the same year, only amounted to 9,308,337 dollars, and of native and foreign together, to 13,419,699 dollars. This balance, to a greater or less extent, always exists against Boston in her trade with foreign countries; and is met by bills drawn on New York, Baltimore, and other S. ports which are uniformly and largely indebted to Boston.

There belonged to Boston, on the 30th June 1848, 285,410 tons shipping, being a larger amount than belonged to any other American port, excepting New York. Of this shipping above 25,000 tons are employed in the mackerel and cod-fishery.

Boston is the grand seat of the American ice trade. In 1841 there were no fewer than 16 companies engaged in the business of shipping ice in Boston, for the southern parts of the Union, the Havannah, &c. But the trade has since vastly increased, and Boston ice is now found in every part of the world, immense quantities being shipped for S. America, the E. and W. Indies, China, &c. At present (1850) the exports probably exceed 80,000 tons! It was formerly sold in New Orleans and the Havannah at 6 cents per lb., but it is now sold for 1 cent per ditto, and a similar reduction has taken place in its price in other emporiums. The ice, which is principally brought by railway from the Wenham and other lakes, about 18 miles from Boston, is remarkably pure and solid. It is sawn into square blocks, not less than 2 inches thick, and is packed in vessels fitted up for the purpose. We subjoin (see next page)

There are an immense number of banking and insurance companies in the city; and business is transacted with facility and despatch.

Boston has always been favourably distinguished, by her attention to education and literature. The North American Review and other valuable works are published here. Harvard University is established about 3 m. from the city, which contains its medical department. It has also a Latin and a high school; numerous public grammar and writing schools, in which arithmetic, geography, and

Statement of the Value of Imports into, and Exports from Boston, from 1838 to 1847, both inclusive.

Years.	Imports.	Exports.	
	Value.	For. Merch.	Dom. Products.
	Dollars.	Dollars.	Dollars.
1838 - - -	13,163,465	2,595,987	4,440,891
1839 - - -	18,409,185	3,495,720	4,507,816
1840 - - -	14,123,308	3,268,535	5,135,779
1841 - - -	18,908,212	3,499,580	5,89,2672
1842 - - -	16,027,450	2,475,233	4,750,851
1843 - - -	20,662,567	3,453,660	5,081,704
1844 - - -	22,141,788	2,351,495	5,843,231
1845 - - -	21,591,877	2,534,557	6,736,273
1846 - - -	21,284,809	1,761,022	6,481,802
1847 - - -	47,110,761	1,675,366	8,837,766

Arrivals at Boston in 1849.

	Ships.	Barks.	Brigs.	Schooners.	Totals.
Foreign - -	211	289	886	1,648	3,034
Coastwise -	195	501	1,088	4,283	6,067
Totals -	406	790	1,974	5,931	9,101

To which have to be added 89 sloops.

Of the arrivals, 10 ships, 41 barks, 472 brigs, 1418 schooners were British; 1 bark Russian; 1 bark Austrian; 1 bark Lubeck; 4 barks, 2 brigs, Hamburg; 2 barks, 1 brig, Bremen; 4 barks, 1 brig, 2 schooners, Prussian; 2 ships, 1 bark, 1 brig, 1 schooner, Danish; 8 brigs, Swedish; 3 barks, 1 brig, 2 schooners, Dutch; 2 barks, 1 brig, Norwegian; 1 ship, 3 brigs, French; 2 brigs, Spanish; 1 bark, 3 brigs, Sicilian; 1 bark Genoese; 1 schooner Venezuelan; and the remainder American.

history are taught; many primary schools, and an African school; all of which are under the direction of a school committee, consisting of the mayor, aldermen, and 12 other members, elected annually. It had, in 1840, 87 public and many private schools for children of both sexes, attended by about 16,640 pupils. It has also an Athenæum, with a library of 30,000 vols., a picture gallery, public hall for lectures, &c. The school for the instruction of the blind, founded in 1833, is said to be extremely well managed. The American Academy of Arts and Sciences, the Historical and Natural History societies, are amongst its learned associations: it has also a humane society, orphan asylums, and numerous other charitable establishments. A host of daily, tri-weekly, weekly, monthly, and other periodical journals, are published.

Boston was founded in 1630, and so named from the town in England previously described, whence many of its inhabitants had emigrated. Throughout the whole period of its history, its inhab. have displayed great energy in asserting popular rights, and took the lead in opposing the taxation of the American colonies in the reign of George III.; in consequence of which, the port of Boston was closed, by an act of parliament, in 1774. A British garrison was also stationed in the city, but being besieged by the American army in 1775-76, the British were at last obliged to evacuate it. Boston is the birthplace of Dr. Benj. Franklin, who was born here on the 6th of January, 1706. (*Murray's Encycl. of Geog.*, American ed., iii. 478, 479.; *Official Papers, published by Congress, &c.*)

BOSWORTH (MARKET), a par. and town of England, co. Leicester, hund. Sparkenhoe. Area of par. 7,220 acres. Pop. of par., 1821, 2,677; 1841, 2,539; of the town only, 1,135. This neat little town is on an eminence, in the centre of a fertile district, 95 m. N. W by N. London. It has a well endowed grammar-school, in which Dr. Johnson was once an usher; but its property, above 700*l.* a year, has been the subject of a long chancery suit. It has 2 fellowships and 4 scholarships in Emanuel Cambr. There are 2 cattle fairs held annually, May 8. and July 10. The Ashby Canal passes within a mile, and conveys coals, &c. The knitting of worsted stockings employs many persons in the town and neighbourhood. It is the central town of a poor law union of 28 parishes; has 2 guardians, and its average annual poor-rates are 765*l.*

The decisive battle between Richard III. and the Earl of Richmond, afterwards Henry VII., in which the former lost his crown and his life, and which terminated the long-continued struggle between the houses of York and Lancaster, takes its name from this town, in the vicinity of which it took place, on the 22d of August 1485. In the battle-field is a well, named from Richard III., with an inscription by the late Dr. Parr; and an elevation, called Crown Hill, where Lord Stanley is said to have placed Richard's crown on the Earl of Richmond's head. (*Nichol's Leicestersh.*; *Hutton's Boswell Field.*)

BOSZRA, a town of Syria, formerly the cap. of the Auranites; 50 m. S. Damascus, 80 m. N. E. Jerusalem; lat. 32° 40′ N., long. 36° 30′ E. Though now almost deserted, the ruins are extensive and magnificent: the principal of these, or at least the most sacred, in Mohammedan estimation, is the Deir-Bohaira (House of Bohaira), so called from being consecrated to a monk of that name, who is said to have proclaimed the sacred character of Mohammed, when the prophet, in his 13th year, visited Syria with his uncle. The great mosque, a very ancient temple, a triumphal arch, a castle of great strength, remnants of the city walls, and a reservoir 500 ft. long, 300 wide, and 20 deep, are among the remains of ancient grandeur; in addition to which the whole town and its environs are covered with pillars and other ruins of the finest workmanship. Boszra is very ancient: it is mentioned in the Sacred Writings as one of the cities which the half tribe of Manasseh, beyond Jordan, gave to the Levites (Josh. xxi. 27.). At this time, and for ages subsequently, it was celebrated for its vineyards, which are commemorated on the Greek medals of *Κολονια Βοστρης*, but of these no vestige now remains. After the establishment of Christianity, it was an archbishop's see, with 19 bishoprics under its jurisdiction. Its strong castle was built by the Saracens, between whom and the Latin kings of Jerusalem it several times changed masters, and under Baldwin IV., A.D. 1180, it was entirely ruined and depopulated. (*Abul-Feda*, *Vit. Mah.* c. 4.; *Tab. Syr.* pp. 51. 99.; *Adrichomius*, *Ter. Sanc.* 79, 80.; *Burckhardt*, *Trav. Syr.* pp. 224—236.).

BOTANY BAY. *See* AUSTRALIA and NEW SOUTH WALES.

BOTHNIA (GULPH OF), the N. arm of the Baltic, which see.

BOTHWELL, a par. and village of Scotland, county Lanark, on the N. side of the Clyde. The village lies on the road from Glasgow to Hamilton, 8 m. E. of the former, and 3 N.W. of the latter. About 1 m. farther on towards the S.E., the road to Hamilton is carried over the Clyde by Bothwell-bridge, the scene of one of the most memorable events in Scottish history. The covenanters, to the number of 4,000 or 5,000, having taken possession of the bridge, then much narrower than at present, were attacked, on the 22d of June, 1679, the bridge forced, and their army totally routed by the royal forces, under the Duke of Monmouth. (*Laing's Scotland*, iv. 104.) Near the village is the magnificent ruin of Bothwell Castle, once an important Scottish fortress. The par. is well wooded and well cultivated.

BOTZEN, or BOLZANO (an. *Pons Drusi*), a town of the Austrian states, Tyrol, cap. circ. in a pleasant, well-sheltered valley, at the confluence of the Eisach and Talfer, a little above where their united waters fall into the Adige, 30 m. N.N.E. Trent. Pop. 9,000. It is a thriving, well-built town, in the Italian style; has a castle, several convents, a college, and some manufactures of silk stockings, &c. A strong dyke of masonry, nearly 2 m. in length, and in parts 24 ft. thick, has been constructed to defend the town from the irruptions of a neighbouring mountain torrent. Being intersected by high roads leading to Switzerland, Austria, and Italy, Botzen has an extensive transit trade. It is also celebrated for its fairs, commencing the 18th March, 14th June, 9th September, and 30th November, continuing each 14 days, which are attended by a great concourse of French, Germans, and Italians. "Though still in Germany, the approach to Italy has become perceptible, in the falling off of cleanliness, the use of the Italian language, which now begins to be spoken, the southern vegetation, and the change of the climate." (*Murray*.) The country round produces excellent wine, and fruits in abundance. Botzen is supposed to occupy the site of the ancient Roman citadel, *Pons Drusi*.

BOUCHAIN, a fortified town of France, dép. du Nord, cap. cant., on the Scheldt, by which it is intersected, 12 m. S.E. Douai. Pop. 1,148. The fortifications are of very considerable strength, and the adjacent country may be laid under water. The Duke of Marlborough took it in 1711, after a memorable siege; but, being retaken by Marshal Villars in the following year, it was finally ceded to France at the treaty of Utrecht. It was one of the frontier fortresses occupied by the allies after the peace of 1815.

BOUCHES-DU-RHONE, a marit. dep. S. of France, situated, as its name implies, at the mouths of the Rhone. It is bounded E. by the dep. of the Var; N. and W. by the Durance, Rhone, and the W. arm of the latter, which separate it from the depts. of Vaucluse and Gard; and S. by the Mediterranean. Area, 512,991 hectares. Pop. 362,325. Soil and surface very various, but the former is generally inferior. The last offsets from the maritime Alps occupy the E. parts of the dep.; but they are not remarkable either for their height or appearance. The highest summit, that of St. Victoire, is 1,042 mètres (3,420 ft.) above the sea. The plain of Le Crau and the isle of Camargues, occupy a large portion of the surface. The first is of great extent, stretching from Arles to the lagoon of Berre. It has very little vegetable mould, and is formed principally of flints and other small stones; during winter it furnishes pasture to large flocks of sheep and goats; the former being driven in summer, when it is arid and waste, to the mountains. It is supposed by many that this plain was formerly a gulph of the sea, and various circumstances conspire to strengthen the sup-

position. The island of Camargues is the delta or alluvial land lying between the E. and W. arms of the Rhone, and is partly cultivated and in pasture, and partly occupied by marshes and lagoons. The latter, indeed, make one of the principal features of the dep. The principal are the lagoon of Vulcarris in the island of Camargues, and that of Berre or Martha, 12 m. N.W. Marseilles. They and the contiguous marshes occupy a great extent of land, and in summer are very unhealthy. Principal rivers, Rhone and Durance; the latter rushes along with great violence, frequently overflowing its banks, and causing great damage. There are also some smaller rivers, and the department is intersected by several canals. Climate generally hot and dry, and the country in summer has a barren, parched appearance. Agriculture bad, a consequence ascribable, partly to the minute division of property, and the attachment of the little proprietors to routine practices; but more, perhaps, to the unfavourable nature of the soil and climate. In the mountainous parts in the E. and N.E. there is a good deal of spade husbandry; in the S. and N.W., mules are employed in field labour, and horses in the W. and the island of Camargues. The produce of corn is insufficient for the consumption; but the produce of wine is estimated at about 820,000 hectolitres, leaving a large surplus for exportation. The produce of silk in 1835 was estimated at about 330,000 kilog. Olives are largely cultivated; and the gathering of kermes continues to be a good deal attended to. The dried fruits of the dep. are much esteemed. Horses and cattle are few in number, and not of good quality. The great wealth of the dep. consists in its sheep, of which it possesses about 800,000. From 400,000 to 500,000 of these sheep are annually driven, about the beginning of spring, to the mountains of the Drome, the Berre, and the high and low Alps, where they are depastured during the summer. When the period for setting out arrives, several proprietors join their flocks together, to the number sometimes of 25,000! Previously to the Revolution, the migratory flocks enjoyed privileges somewhat similar to those of the *Mesta* in Spain, but they were then abolished. The lagoons are resorted to in winter by myriads of aquatic fowl; which, when the frost sets in, are taken in vast numbers. Minerals, of little importance. There are brine springs, and salt is made in several places. This is more of a commercial than of a manufacturing dep. With the exception, indeed, of fabrics of soap and *soude factice*, hosiery, sugar refineries, some establishments for the manufacture of cutlery, coral-works, oil-mills, and silk filatures, with distilleries, tanneries, &c., manufactures are of little importance. The commerce of the dep. is, however, very extensive, Marseilles having been for several years past at the head of the commercial cities of France. (See MARSEILLES.) The herring and anchovy fisheries are extensively carried on. Principal towns, Marseilles, Arles, Aix, Tarrascon, Aubagne, &c. Public revenue in 1831, 39,262,854 fr., of which the customs produced 25,813,000 fr. The dep. sends 6 mem. to the Chamber of Deputies, is divided into 3 arronds., and has above 2,500 electors. (*French Official Tables; Hugo, France Pittoresque*, art. *Bouches-du-Rhone; Dict. Géographique, &c.*)

BOUIN, an island on the coast of France, between the depts. of Loire Inférieure and La Vendée, belonging to the latter, from which it is separated by a narrow channel. It is of a triangular shape, low and marshy. Area, 3 sq. leagues. Pop. 2,700. It produces corn and cattle, but especially salt, obtained in large quantities from the salt marshes that surround the village of Bouin, in the centre of the island. According to some historians, it was here, in 820, that the Normans made their first descent on the coast of France. (*Hugo*, art. *Vendée; Dict. Géographique.*)

BOULOGNE, or, as it is sometimes called, BOULOGNE-SUR-MER, a sea-port town of France, dép. Pas du Calais, cap. arrond., on the Liane, near where it falls into the English Channel, 20 m. S.S.W Calais; lat. 50° 43′ 31″ N., long. 1° 36′ 59″ E. Pop. 29,741. It is divided into the upper and lower towns. The former is pretty well built, but is irregularly laid out. It has two squares, ornamented with fountains, and contains the cathedral, the ancient episcopal palace, the Hôtel de Ville, and the courts of justice. It also contains the house where Le Sage, the immortal author of Gil Blas, lived and died. The fortifications, by which the upper town was formerly defended, have been mostly demolished, the old castle and the walls only remaining. The ramparts have been planted with trees, and afford a delightful promenade, commanding a view that extends to the coasts of England, which are distinctly visible. The lower, or new town, is situated at the bottom of the hill, and is intersected by the Liane: it is the most populous, most commercial, and best built. It is regularly laid out, and has several public buildings, among which may be specified the baths, the general hospital, founded in 1692, the barracks, a public library containing 22,000 volumes, a theatre, &c. A magnificent column, dedicated by the grand army collected here in 1805 to Napoleon, but not finished till 1821, stands on a hill nearly a mile from the town: it is crowned by a gallery surmounted by a dome, and is 164 ft. high. The harbour, which was formerly dry at low water, and nearly shut up by the bar at the river's mouth, has been vastly improved, though it still labours under a deficiency of water. It is formed of two large basins, connected by a quay. Ships may anchor at from $\frac{1}{2}$ to $\frac{3}{4}$ m. off the harbour, in from 6 to 9 fathoms. Boulogne is the seat of tribunals of primary jurisdiction and commerce, and has societies of agriculture, commerce, arts, and sciences; a museum of antiquities and natural history; a free school for navigation, &c.; with manufactures of coarse woollen stuffs, sailcloth, earthenware, and bottle-glass; and tanneries, rope-works, tile-works, &c. A good deal of trade is carried on from the town, and the herring, mackerel, and cod fisheries, all vigorously prosecuted. Notwithstanding the large quantities of fish that are constantly being sent to Paris, the supply in the town is always abundant and cheap.

Boulogne has been much resorted to since the peace by English visiters and families, and many of the latter have made it a permanent residence. A constant communication is kept up with London, Brighton, and Dover, by means of steam-packets; and the route from London to Paris by Boulogne is now frequently preferred to that by Calais. In consequence of this influx of English visiters and residents, the population of the town has nearly doubled since 1815, and it has now much of the appearance of an English town. Numerous boarding-schools have been opened, and balls, horse-races, &c., have been established for the instruction and amusement of the English. In 1837, 26,592 passengers entered, and 30,217 left, Boulogne.

Boulogne is a place of great antiquity. During the dominion of the Romans it bore successively the names of *Gesoriacum Navale*, and *Bononia*, whence its modern name is derived. During the middle ages, and in more modern times, it has undergone many vicissitudes, having been frequently besieged and taken. In the early part of this century it rose into great celebrity, from Napoleon having collected a large flotilla in its port, and made it the head quarters of the army avowedly intended to invade England. (*Hugo*, art. *Pas du Calais; Priv. Information.*)

BOULOGNE, a vil. of France, dép. Seine, between the Seine and the wood of Boulogne, 4 m. W. Paris. Pop. 6,016. The vil. is handsome: the adjoining wood is, in the fine season, the favourite promenade of the Parisian fashionables. The *Château de Madrid*, in this wood, built by Francis I., was demolished in the reign of Louis XVI.; and only a small part now remains of the *Château de la Muette*, some time occupied by Louis XV.

BOURBON (ISLE OF), an island belonging to France, in the Indian Ocean, between lat. 20° 50′, and 21° 24′ S., being 90 m. W.S.W. the island of Mauritius, and 440 m. E. Madagascar. Shape oval; greatest length, N.W. to S.E., 40 m.; greatest breadth, 27 m.: area near 900 sq. m. (231,550 hectares). Pop. (1836) 106,099. It is geologically formed by two systems of volcanic mountains, one at either extremity: the central point of the most northerly system, the *Piton des Neiges*, the highest summit in the island, is 3,150 metres, or 10,355 ft. above the level of the sea; the highest point of the southerly system is the *Piton de Fournaise*, an active volcano, 7,218 ft. in height. These two volcanic centres are connected by a chain of mountains running N. and S., which divides the island into two parts, that on the E. side being called the windward, and that on the W. the leeward division (*Parties du Vent* and *sous le Vent*), in consequence of the prevailing winds in Bourbon being from E. to S. There are no plains of any size: although the island is watered by many small rivers, none of which are navigable: there are several lakes, one occupying an extent of about 40 acres. The shores are not generally high; but the island has no safe roads, nor any harbour,—circumstances which have always been felt as serious drawbacks. The climate is healthy and agreeable, especially that of the E. part: the air is pure, and the sky clear, though this tranquillity be sometimes broken by violent hurricanes. From Dec. to May is the hot and rainy season, when the mean temperature is 80° Fahr.; during the remaining or temperate months, the mean is 76° Fahr. The soil is very fertile, particularly in the vicinity of the shores, where there are extensive alluvial deposits, which, like the soils in other parts of the island, consist largely of volcanic matters. The surface, in 1836, was supposed to be distributed as follows:—cultivated lands, 65,702 hectares; pasturage, 14,040 ditto; woods and forests, 55,921 ditto; waste lands, 95,887 ditto.—Total, 231,550 ditto.

The cultivated lands form a girdle round the island, and in some parts ascend the mountain slopes to considerably more than 3,000 ft. above the level of the ocean: in 1836, they were estimated to be divided as follows:—

Articles of Culture.	Hectares in Culture.	Product.
Sugar-cane -	14,530	Raw sugar 23,384,116 kilog. Molasses, &c. 1,658,840 Rum - 535,842 litres.
Coffee - -	4,179	Coffee - 928,200 kilog.
Cloves - -	2,980	Cloves - 193,500
Cacao - -	28	Cacao - 10,000
Tobacco - -	471	Tobacco - 82,000
Grain, &c. -	43,514	Grain (value) 2,656,947 fr.
Total -	65,702 hect.	

The sugar-cane is mostly of the Batavian variety; it was not very extensively cultivated before 1818; but is now largely grown, especially in the E. division of the island, where it has almost entirely superseded coffee. The coffee-plant was introduced from Mocha in 1717, and was subsequently much cultivated; but having been found to suffer severely from hurricanes and insects, its culture has been in great part discontinued: the best coffee is produced on the leeward side of the island. The cloves are chiefly sent to India, where they are exchanged for rice: the tobacco obtained is not enough for home consumption, and the wheat, rice, maize, and other grain raised in the island, does not exceed 4th part of the required supply. Potatoes, beans, and other leguminous plants, a great variety of fruits, &c., succeed remarkably well. The culture of cotton has been all but abandoned: manioc, introduced into the island by the celebrated M. de la Bourdonnais, forms the staple food of the blacks. In 1837, there were 32,240 hogs, 6,500 deer and goats, 5,350 horses; and mules, sheep, and oxen, nearly 5,000 each. Pasturage being deficient, oxen are imported from Madagascar; a great number of the cattle are fed for six months of the year upon the leaves of the sugar-cane. At the period at which Bourbon was first occupied by the French, the sides of the mountains were covered with forests, which reached even to the shores; the whole of the lower lands have been cleared, but the centre of the island is still covered with its primitive vegetation, which affords forty-one different species of woods serviceable for arts and manufactures. The coasts abound with fish and large turtles, and furnish also coral and ambergris. The fisheries occupy about 460 individuals, who take about 150,000 kilog. of fish annually, 2-5ths of which are consumed by themselves and their families, and the other 3-5ths sold in the island realising about 300,000 francs a year. The pop. in 1836 consisted of 36,803 free colonists, and 69,296 slaves, of whom 57,346 were employed in agricultural labour. The colonists are, in general, humane and kind to their slaves, who are mostly blacks, with only a few individuals of mixed blood. In 1829, about 3,000 Hindoo emigrants from Orissa came thither to settle; but the majority of them have returned to their native country. The island is divided into two arrondissements, six cantons, and thirteen communes; and contains two towns, those of St. Denis and St. Paul, and eight market-towns, heads of cantons, most of which are built on the coasts. The chief manufacturing establishments are brick and lime-kilns, tanneries, forges and founderies, tin-ware factories, a brewery, and manufactories of bags of palm-leaf (*sacs de vacoua*). The annual value of the products of these establishments is estimated at 41,170*l*. Most other European trades are pursued in the towns, the whole occupying about 200 masters, and 2,160 workmen. The following is a statement of the quantities and value of the principal articles of export in 1836: —

Exports.	Quantities.	Value.
Sugar, Raw - -	18,173,092 kilog.	12,721,164 fr.
Coffee - - -	990,013	1,386,018
Cloves - -	566,650	1,403,575
Dye Woods - -	105,303	21,061
Woods for Cabinet Work - -	112,811	39,498
Saltpetre - -	79,879	43,933

The chief imports are rice, wheat, oil, wines, cattle, timber, salt, glass, porcelain, &c., with cottons and other manufactured goods. The total value of the imports in 1836 was 13,769,541 fr. (550,780*l*.); and that of articles exported of the growth and produce of the island, 16,743,899 fr. (670,000*l*. nearly). The government is similar to that of the other French colonies, and is administered by a governor, and a council of 30 members, elected by the domiciliated French colonists paying a direct contribution of 200 fr. annually, of whom, in 1837, there were 1,145, composing 8 electoral colleges. There is a royal court, with 2 courts of assize, 2 tribunals of primary jurisdiction, and a justice of the peace in each canton. The military force, in 1837, consisted of 6,593 individuals, 378 of whom were officers. In the same year, the budget of the colony gave, as follows, the

Expenses in 1837 -	- 2,932,428 fr.	= 117,297*l*.
Receipts ditto -	- 2,149,563 fr.	= 85,982*l*.
Deficit -	782,865 fr.	= 31,315*l*.

Bourbon contains a college and numerous schools, 16 churches, 2 hospitals, 2 establishments for the relief of the poor, and 2 prisons. Four newspapers are published in it, and there is a public library at St. Denis. This island was discovered in 1545 by Mascarenhas, a Portuguese navigator, whose name it bore, till the French took possession of it in the next century. The English took it in 1810; but it was restored to France in 1815. The principal towns are St. Denis, St. Paul, St. Benoit, &c. St. Denis, the cap., is situated on a plateau on the N. coast of the island, at the mouth of the river of the same name; lat. 20° 51′ 30″ S., long. 55° 30′ E. It has about 900 houses, and 12,000 inhab. (*Hugo*, iii. 278.) It is mostly of wood, the *Hôtel du Gouvernement* being the only public building of any importance. It is the seat of a royal court, and of a court of primary jurisdiction, and has a college with about 160 pupils, an hospital, an arsenal, a celebrated botanical garden, &c. St. Paul, the second town in the island, on its W. coast, has 10,000 inhab., with a fine church, a tribunal of original jurisdiction, an hospital, &c. Neither St. Denis nor St. Paul have harbours, but only open and exposed roadsteads. (*Notices Statistiques sur les Colonies Françaises, &c.* p. 1—140.; *Etats du Population des Colonies Françaises, &c.* 1838.)

BOURBON-LANCY, a town of France, dép. Saone et Loire, cap. cant., on the declivity of a hill near the Loire, 27 m. W.N.W. Charolles. Pop. 2,814. It is commanded by an old castle on the summit of a steep rock. This town is celebrated for its mineral springs, of which there are 7 (some say 9), 6 cold and 1 hot. They are employed in nervous affections and rheumatisms. These springs were known to the Romans by the name of *Aquæ Nisinei*; and remains of the baths they had erected are said still to exist, while numerous Roman medals and an entire and beautiful statue have been dug up. The present baths were begun by Hen. III. and finished by Hen. IV. and Louis XIII. (*Hugo*, art. *Saone et Loire*.)

BOURBON-L'ARCHAMBAUD, a town of France, dép. Allier, cap. cant., 13 m. W. Moulins. Pop. 3,017. It is situated at the bottom of a valley, in a rich and finely variegated country. The towers are all that now remain of the Château de Bourbon, rebuilt in the 13th century. The Holy Chapel, erected in the 15th century, by Anne of France, and so much admired, was destroyed at the Revolution. The town is now celebrated only for its mineral springs and baths, said to be of great efficacy in cases of paralysis, rheumatism, gun-shot wounds, &c. They are frequented from May to September. There is good accommodation for visiters, and a hospital for the indigent.

This town had for a lengthened period lords of its own, who bore the title of barons. Aimar, who lived in 921, in the reign of Charles the Simple, is the first of these barons of whom there is any authentic account. Having been succeeded by his third son Archambaud, his name became that of all his successors in the seignory. Archambaud IX., the last of the name, having accompanied St. Louis to the East, died in Cyprus. Beatrix of Burgundy, his grand-daughter, married Robert of France Count of Clermont, one of the sons of St. Louis, bringing to him in dowry the lordships of Bourbon, Charolais, and St. Just, in Champagne. Their posterity, according to the custom of the house, took the surname of Bourbon; and now fills the thrones of France, Spain, Naples, and Lucca! (*Dict. Géographique*.)

BOURBONNE-LES-BAINS, a town of France, dép. Haute Marne, cap. cant., at the confluence of the Borne and the Apance, 21 m. E.N.E. Langres. Pop. 3,551. It is agreeably situated on the plateau and acclivity of a hill; and having been nearly burnt down in 1717, has been rebuilt on a regular plan, and has some fine promenades and fountains. It owes its entire celebrity to its hot baths, which occupy the site of a thermal establishment of the Romans. The modern buildings connected with the baths, including the Hôtel de Ville, a recent erection, most part of which is appropriated to the use of the company using the waters, are the finest of the kind in France. An hospital, founded here in 1732, for the use of the military attending the baths, has been much enlarged, particularly since 1815, and is now capable of accommodating 500 soldiers and 100 officers. The heat of the water varies from 40° to 52° Reaumur, or from about 120° to 156° Fahrenheit. They are principally employed in cases of paralysis and rheumatism, spasms, ill-reduced fractures, &c. (*Hugo*, art. *Haute Marne*.)

BOURBON-VENDE'E, a town of France, dép. Vendée, of which it is the capital, on the right bank of the Yon, nearly in the centre of the dep.; lat. 46° 41′ N., long. 1° 22′ W. Pop. 5,257. This town occupies the site of Roche-sur-Yon, a strong feudal castle, having

near it a miserable little town. The castle, after undergoing many vicissitudes, was dismantled by Louis XIII., and finally destroyed in 1793. After the establishment of the imperial government, and the pacification of Vendée, it became necessary to select a place for its capital, and Roche-sur-Yon was fixed upon. Napoleon gave the town, which had to be entirely created, his own name, which it bore till 1815. Large sums were expended in the construction of a prefecture and other public offices, an elegant parish church, &c. The most imposing, however, of the public buildings, is the barracks; a large and noble structure, occupying the hill on which the old castle formerly stood. Streets broad, and well laid out; but though the population has increased rapidly within the last half-dozen years, still many of the streets are merely laid out, and exist only by name. The old town, which is small and *assez triste*, occupies the ravine between the barracks and the new town. The town has a tribunal of primary jurisdiction, a departmental college, a society of agriculture, sciences, and arts, a public library with 5,000 volumes, an hospital, and a theatre "*fort laid et fort, petit.*" (*Hugo*, art. *Vendée, &c.*)

BOURBOURG, a town of France, dép. du Nord, cap. cant., on the canal of Colme, communicating with Dunkirk, 9 m. S.W. Dunkirk. Pop. 2,527. Its name is derived from the miry nature of the soil (bourbeux) on which it is built. It has fabrics of tobacco, potteries, and tile-works. Previously to the revolution there was here an abbacy for noble ladies, of which the unfortunate Marie Antoinette was patroness.

BOURG, or BOURG-EN-BRESSE, a town of France, dép. Ain, of which it is the cap., on the Reyssouse, 21 m. E.S.E. Mâcon; lat. 46° 12′ 31″ N., long. 5° 14′ 10″ E. Pop. (*ex* cant.) 8,818. Situation pleasant; streets narrow and crooked: formerly almost all the houses were built of wood, and many of them are so still, but within the last half-century the use of stone has become more general. It is traversed by the little rivulet Cone, and has several fine fountains. The ditches by which it was surrounded, were dried in 1771, and have been converted into gardens. Principal public buildings — the cathedral or high church, the halle-au-blé or grenette, theatre, Hôtel de Ville, prefecture, a monument in honour of Gen. Joubert, &c. It has a court of primary jurisdiction, a departmental college, a primary normal school, a public library with 18,000 volumes, a society of emulation and agriculture, a departmental museum, a botanical garden, and several gratuitous courses of instruction in different departments of science and art. Six high roads meet here; but being situated in an agricultural district, it is not distinguished either for trade or manufactures. The celebrated astronomer Lalande was a native of Bourg.

Adjoining Bourg is the church of Brou, a vast edifice, begun in 1511, and containing some fine tombs. There is attached to it a diocesan seminary, with 140 scholars.

Bourg is very ancient, being supposed by De Thou to occupy the site of the *Forum Segusianorum* of the Romans; but according to D'Anville, Feurs on the Loire is identical with the *Forum Seguisianorum*. After being long subject to the house of Savoy, Bourg was united to France in 1601. (*Hugo*, art. *Ain; Dict. Géographique, &c.*)

BOURG, a town of France, dép. Gironde, cap. cant., on the Dordogne, near its confluence with the Garonne, 15 m. N. Bordeaux. Pop. 2,466. It has a small port, where the corn, wine, and other products of the environs, are shipped.

BOURGANEUF, a town of France, dép. Creuse, cap. arrond., agreeably situated on the Thorion, 18 m. S.S.W. Gueret. Pop. 2,940. It has two porcelain-works, and a paper manufactory. This town was, for a considerable period, the residence of Zizim, or Djem, the younger brother of Bayazid II., emperor of the Turks, who was confined in it and other places in France, in consequence of a dishonourable treaty negotiated in 1482 between Bayazid and Pierre d' Aubusson, grand master of the Knights of St. John, lord of Bourganeuf, who had given Zizim a safe conduct. A large tower, in which the latter is said to have been confined, still exists. Having been liberated from his imprisonment in this place, the unfortunate prince was carried to Italy in 1487, where he is said to have been poisoned in 1495, by an agent of his brother and the infamous Pope Alexander VI. (*Malte-Brun; Biographie Universelle*, art. *Zizim.*)

BOURGAS, or BOURGHAS, a sea-port town of Turkey in Europe, Roumelia, on the Black Sea, at the bottom of the gulph of the same name, 70 m. N.E. Adrianople; lat. 42° 29′ 20″ N., long. 27° 28′ E. Pop. 6,000.? It is built on a promontory of a moderate height, and has a neat clean appearance. Its fortress is in ruins. It has a celebrated manufactory of pottery. "A fine clay is found in the neighbourhood, which is formed into pipe bowls, cups, and other utensils. These are unglazed, but highly polished, and ornamented with gilding. In this state they are exposed for sale in the shops of the bazar, which forms the principal street of the town; and as these shops are matted, and kept clean and neat, the whole has a rich and showy appearance. They pride themselves on this little manufacture, and sell it proportionally dear." (*Walsh's Journey*, p. 120., 4th ed.) The town has also some trade in corn, wine, butter, cheese, iron, and other productions of the contiguous country. The Gulph of Bourgas is open to the E.: the anchorage is to the S. of the town, and has a depth of from 12 to 5 fathoms.

BOURG-DE-PE'AGE, a town of France, dep. Drôme, cap. cant., on the Isère, 10 m. N.E. Valence. Pop. 3,602. The river separates it from Romans, of which it is properly a suburb. It is neat and well built; and has manufactures of hats and coarse silk, with dye-works, rope-works, tanneries, &c. (*See* ROMANS.)

BOURG-D'OYSANS, a town of France, dép. Isère, cap. cant., on the Rive, near where it falls into the Romanche, in a deep valley at the bottom of a steep hill, 18 m. S.E. Grenoble. Pop. 3,019. It principally consists of two long streets, with ill-built houses, many of which have their windows fitted up with oiled paper instead of glass. The valley in which the town is situated seems to be on all sides enclosed by mountains, and was for a while completely submerged and formed into a deep extensive lake! This inundation was occasioned by the course of the Romanche having been obstructed, in the 11th century, at the point where it escapes from the valley, by rubbish brought down from the adjoining mountains. This natural mound, having been gradually undermined, at length gave way, and the waters of the lake made their escape on the 15th Sept. 1219, sweeping all before them as far as Grenoble, which was laid under water. (*Hugo*, art. *Isère.*)

BOURGES (an. *Avaricum*), a city of France, dép. Cher, of which it is the cap., in an extensive plain at the confluence of the Auron and the Evre, 124 m. S. Paris; lat. 47° 4′ 58″ N., long. 2° 23′ 40″ E. Pop. (*ex* cant.) 19,646. It is agreeably situated on the declivity of a hill, and is surrounded by a thick wall flanked at regular distances with lofty towers in good preservation. (*Malte-Brun.*) Streets sufficiently broad*, but dirty; houses mean-looking, being low and having their gables to the streets. Large tracts, occupied by gardens, nurseries, promenades, &c., are enclosed within the walls, so that the streets have a deserted aspect, though less so at present than formerly, the population having increased rapidly during the last 10 years. Bourges contains some fine old public buildings. At the head of these is the cathedral, one of the noblest Gothic edifices in France, begun in 845, but not finished for some centuries afterwards. It is 348 ft. in length by 123 in breadth, and has several towers, the highest of which has an elevation of 221 ft. The palace of the archbishop is also a fine edifice; its garden, laid out by Lenotre, has an obelisk in honour of the Duc de Charost. The Hôtel de Ville, built by Jacques Coeur, famous alike for his skill and success as a merchant and financier, his immense wealth, and the injustice of which he was the victim, is a splendid Gothic mansion, that cost a vast sum. Besides the mayoralty, it furnishes accommodation for the courts of law. The prisons are built on the ruins of the ancient palace of the ducs de Berri; and the remains of the old tower that formerly commanded the town, and which was demolished in 1651, serve to enclose the courts of the prison. There are also the Hôtel de Prefecture, formerly the Hôtel de l'Intendance, barracks, a small but elegant theatre, a college, two large hospitals, a public library with 13,000 volumes &c. Bourges is the seat of an archbishopric, of tribunals of primary jurisdiction and commerce, of a royal college with about 240 pupils, a primary normal school, a diocesan seminary with above 100 pupils, and a secondary ecclesiastical school; it has also a society of agriculture, commerce, and arts; a course of geometry and mechanics applied to the arts, and a school of midwifery. It has manufactures of fine and coarse cloths, hosiery, &c., and its cutlery has been long in high estimation. There are in the town two mineral springs.

Bourges was formerly the seat of a celebrated university established by Louis XI. in 1463; but this having been suppressed at the Revolution, its place has been supplied by the royal college already alluded to. Louis XI. was born in this town; and it is also the birth-place of the celebrated preacher Bourdaloue, Jacques Coeur, and other distinguished persons. The house occupied by the famous jurist Cujas has been purchased by the city authorities for a barrack for *gens d'armes!*

To mark his respect for his native place, Louis XI. not only gave it a university, but also conferred on its mayors and magistrates the privilege of nobility. This, however, was any thing but an advantage, inasmuch as it served only to fill the town with poor gentlemen, and to discourage manufactures and commerce. The clergy were also exceedingly numerous. But most of the

* This is the statement of Hugo: Malte-Brun says they are narrow.

religious establishments were suppressed at the revolution, when the privileges and distinctions of the nobility and gentry were also abolished.

Bourges is one of the most ancient cities of France. It was taken by Cæsar, anno 52 B. C., and was for 475 years the capital of Aquitaine. It has suffered much at different periods from war, fire, and pestilence. Several councils have been held in it; and here, in 1483, the ecclesiastical constitution, denominated the Pragmatic Sanction, was accepted by the French clergy. (*Martiniere, Grand Dictionnaire Géographique; Malte-Brun; Hugo*, art. *Cher; Dict. Géographique, &c.*)

BOURGNEUF, a sea-port town of France. dép. Loire Inférieure, cap. cant., 23 m. S.W. Nantes. Pop. 2,689. The port dries at low water: and the bay, which is extensive, is gradually filling up with sand. To such an extent is this the case, that above 500 hectares of land are now under cultivation in the single commune of Bourgneuf that, 25 years ago, were under water; and the channel between the town and the opposite island of Bouin, formerly 2,700 yards across, is now narrowed to less than 100 yards! There were formerly in the vicinity very extensive salt marshes, the produce of which was largely exported; but these, though still very considerable, are now materially diminished. There are on the coast large beds of oysters. (*Hugo*, art. *Loire Inférieure.*)

BOURGOIN (an. *Bergusium*), a town of France, dép. Isère, cap. cant., on the Bourbre, in a fine situation, surrounded by beautiful hills, 9 m. W. La Tour-du-Pin. Pop. 4,325. It is neat and well built; has a tribunal of original jurisdiction, and manufactures of calicoes, bagging, &c., with paper-mills and flour-mills. It is is favourably situated for commerce, being traversed by the roads from Grenoble to Lyons, and from the latter to Chambéry.

BOURG-ST.-ANDEOL, a town of France, dép. Ardèche, in an agreeable situation on the Rhone, 9 m. S. Viviers. Pop. 4,290. It has several good buildings, and neat well-kept streets; a quay along the river, and a handsome suspension bridge over it, with some trade in corn, wine, and silk. It is named from St. Andeol, who suffered martyrdom in the Vivarais, in the beginning of the 3d century. Within a short distance of the town is a remarkable monument of antiquity, sculptured on the face of a rock, but now a good deal defaced. It has been very variously interpreted; some antiquaries having supposed it to be Diana in chase of a stag, and others that it represents a sacrifice in honour of the god Mithras. The latter is believed to be the correct explanation. (*Hugo*, art. *Isère; Millin, Voyage dans le Midi de la France.*)

BOURGUEIL, a town of France, dép. Indre-et-Loire, cap. cant., in a fine valley on the Doigt, 9 m. N.N.W. Chinon. Pop. 3,600. It has a communal college, and is surrounded by fruitful gardens, where anise, coriander, liquorice, and other plants, are cultivated to such an extent as to supply materials for a pretty extensive trade. Its vicinity also produces fine red wine. (*Hugo*, art. *Indre-et-Loire.*)

BOURLOS, or BOORLOS, a lake or lagoon of Egypt, between the Damietta and Rosetta branches of the Nile, parallel to the Mediterranean, from which it is every where separated by a narrow neck of land, except at one point where it communicates with the sea by a narrow channel, anciently the Sibbenitic mouth of the Nile. It is about 38 m. in length, and 17 m. in its greatest breadth. It is connected with the Nile by several canals; and is mostly shallow and marshy, being navigable only along its N. shore.

BOURNE, a par. and town of England, co. Lincoln, parts of Kesteven, wapentake Aveland, 91 m. N. London. Area, 8,190 acres. Pop. of par., 1821, 2,242; 1831, 2,589; of which the town had 2,355. It is situated in a level district adjacent to the fens, the town consisting chiefly of one long street of well-built modern houses; the church is the remaining portion of a much larger structure, in the Norman style, with 2 towers. There are Baptist and Wesleyan chapels; an endowed free school for 30 children; 2 almshouses, one supporting 6 old men, the other 6 women; and a town-hall, a handsome modern edifice, on the site of one built by Lord Burleigh in the reign of Elizabeth: it has a market-place under. The weekly market is on Saturday. Annual fairs are held April 7., May 7., and Oct. 29. A navigable canal extends from the town to Spalding and Boston, by which coal, timber, and other commodities, are supplied. The chief trade of the place is in leather and wool. There are several large tan-yards. The ann. value of real prop. in 1815 was 10,139*l*. It is the central town of a union of 37 parishes; its own average poor-rates are 1,843*l*., and it has 5 guardians. Petty sessions for the parts of Kesteven are also held in the town, and it is a polling place for that district and Holland. The name is derived from a small stream of remarkably pure water, which gushes from a source near Bourne. Roman coins and tesselated pavements have been found on the site; trenches and mounds of a Saxon castle are traceable: a priory of Augustine monks was founded in Wm. II.'s reign, whose revenue, at the general suppression, was 197*l*. 17*s*. 5*d*. Wm. Cecil, Lord Burleigh (Elizabeth's minister), was born in this town in 1520. Dr. Dodd, once celebrated as a popular preacher, but now principally remembered by his disgraceful death, was also a native of Bourne.

BOURTANG, a fortified town of the Netherlands, prov. Groningen, in the extensive morass of the same name, 31 m. E.S.E. Groningen. The morass, though it increases its strength, renders it unhealthy. It was taken by the Spaniards in 1593, and by the French in 1795.

BOUSSA, a city of Interior Africa, and cap. of a prov. of the same name, on an isl. of the Niger; lat. 10° 14′ N., long. 6° 11′ E. Pop., according to Clapperton, 10,000 or 12,000; but, according to Lander, 16,000 or 18,000. The country in the neighbourhood is bold and rocky, which renders Boussa a place of considerable strength, for its walls (which are tolerably well built, and kept in good repair) extend to, and are united with, the two extremities of a rocky precipice which skirts the W. branch of the enclosing river. The houses are, however, built in detached patches, and do not occupy more than a tenth part of the walled area, presenting the appearance of several small villages, rather than of one continuous town. The prov. of Boussa extends about 50 m. N. of the river, and is about the same length from N. to S., the city lying about 15 m. from its S. extremity. The soil is very fertile, especially that of the isl., producing corn, yams, cotton, rice, timber trees, and other African vegetation, in great abundance: it also abounds in the usual African animals; elephants, hippopotami, lions, tigers, &c. Boussa is considered, politically, as part of the great kingdom of Borgoo; but it appears as if the different states were perfectly independent of each other, though all speaking the same language; at all events, the communications of the sultan of Boussa with Clapperton and Lander seem to have had no reference to any controlling power. Of the Borgoo states, Boussa is, if not the largest, the most populous and most powerful. (*Clapperton's 2d Exped.* pp. 96—106.; *Lander's Records*, i. 141—143.)

Boussa possesses a melancholy interest for Englishmen, from its being the spot where the enterprising Mungo Park met his death. It is well known, that after his first successful expedition in the service of the African Association, that adventurous traveller was employed by government to complete his own partial discovery of the course of the Niger. This commission he did not live to effect; after traversing a far larger portion of Africa than had before been traversed by any European, his boat was attacked by a native army at this place, where the river is shut in by two high rocks, leaving barely passage room for the current, *as through a door*. (*Adami Fatouma's Journal*, p. 214.) Assailed from the top of these rocks, Park defended himself for a long while, throwing all his provisions overboard to lighten his boat; till, finding all hope of successful resistance at an end, he, with his remaining companions, leaped into the water, in a last attempt to escape by swimming, and was drowned, or, as is perhaps more probable, dashed to pieces by the missiles hurled down upon him. The boat subsequently drifted on a reef of sunken rocks, not half a stone's throw from Boussa; and a slave of Park, the only living remnant of his unfortunate expedition, was made prisoner. The cause of this murderous attack is represented by Isaacco and Adami Fatouma, Park's native friends, to have been owing to the knavery of a chief, who, secreting the presents entrusted to him by Park for the king, excited the indignation of the latter, by telling him "the white men had left nothing for him." The explanation given to Lander on the spot, twenty years later, however, was, that the natives took the adventurers for a party of Fellatahs, which nation had just then commenced that series of usurpations which they have since carried to an extreme height. Be this as it may, the destruction of the traveller was signalised by feastings and rejoicings; but before the revelries were ended, it so chanced that an infectious disorder broke out among the Boussians, sweeping off the sultan and a great number of his subjects, among whom, it is reported, the murderers of the party were included. The effect of this upon a superstitious people may be conceived; prayers and sacrifices were offered to the white man's god, and an expression grew into use among the surrounding nations, of which subsequent travellers have felt the full benefit, "*Do not hurt the white men, unless you would perish like the people of Boussa.*" The Boussians themselves share fully in this feeling; they are overwhelmed with shame at a recurrence to the subject, and plead their youth at the time, or their personal innocence, without attempting the slightest exculpation of their fathers. The death of Park involved the loss of his papers. This was to be the more regretted, as he had passed far beyond Timbuctoo, that native city of which such marvels had been re-

ported in ancient times, but of which no European had ever obtained a glimpse. The recovery of these papers was long attempted by every means that could be used; and Lander in his second expedition thought he had succeeded: an old man was found who possessed a book and papers taken from the river at the time of the murder, but, on inspection, the former proved to be an old nautical publication of the last century, and the latter a few memoranda of no consequence, such as rough observations on the height of water in the Gambia, a tailor's bill, an invitation to dinner, and the like. Great anxiety was displayed on this occasion by the sultan and his subjects to restore the journal; but, in all probability, it either sank with Park to the bottom of the Niger, or was dispersed upon its surface among the other ruins of the time: in either case, it was irretrievably lost. (*Isaaco and Adami Fatouma; Park's 2d Journal* *, pp. 173—219.; *Clapperton*, p. 100.; *Lander's Records*, i. 144—149.; *Travels*, pp. 594, 595.)

BOUSSAC, a town of France, dép. Creuse, cap. arrond., on a steep rock, near the confluence of the Veron, and the Little Creuse, 21 m. N.E. Gueret. Pop. 952. "Boussac," says M. Malte Brun, "contains fewer inhabitants than the capital of any other arrondissement in France. It stands on a rock, and is almost inaccessible to carriages; surrounded with walls flanked with bastions, commanded by an old embattled castle, from which the view extends along a defile formed by arid and wild mountains. The town is as gloomy a residence as can well be imagined." (Vol. viii. p. 329., *Eng. Trans.*)

BOUXWILLER, a town of France, dép. Bas Rhin, cap. cant., near the Moder, surrounded by mountains and forests, 20 m. N.W. Strasburg. Pop. 4,076. It is commanded by a fine old Gothic castle, and has manufactures of cotton, linen, arms, and braziers' ware, hats, &c., with breweries and bleachfields.

BOVA, an inland town of Naples, prov. Calabria Ultra, cap. cant., on a mountain, 17 m. E.S.E. Reggio. Pop. 3,500. This town suffered severely from an earthquake in 1783, but was rebuilt in better taste under the patronage of Ferdinand IV. It is the seat of a bishopric; has a cathedral, and several churches, a seminary, an hospital, and 2 *monts-de-piété*.

This, as well as several other towns in the Neapolitan states, is believed to have been founded, or at all events to have been occupied, by fugitives flying from Epirus and the Morea to escape the cruelty of the Turks. The foundation of Bova is ascribed to the great immigration which took place in 1477, when John Castriot, son of the famous George Castriot, or Scanderbeg, was expelled from his hereditary dominions by the Turkish conqueror, Mahomet II. At later periods similar immigrations took place from Corona, Maina, &c. The immigrants and their descendants have continued to be a distinct race, and have preserved the language and dress, though not the religion, of their forefathers. They occupy several towns and villages in different parts of the kingdom, their total number being at present supposed to amount to about 52,000. (*Swinburne's Two Sicilies*, i. 350. 4to. edit.; *Craven's Tour in Naples*, p. 314.; *Biographie Universelle*, art. *Scanderbeg*.)

BOVEY TRACEY, a par. and town of England, co. Devon, hund. Teignbridge, 166 m. S.W. by W. London. Area, 6,480 acres. Pop. of par., 1821, 1,685; 1831, 1,697. The town stands on the slope of a hill, at the base of which the Bovey flows, and is crossed by an ancient bridge of 3 arches. There is one main street, which branches off at the ancient market-place like a Y, one part continuing up the ascent, the other extending to the bridge. There are a few respectable modern houses, but the greater part are ancient, and meanly built. The church is a Gothic structure, with a good tower, at the E. end of the town; there are also Baptist and Wesleyan chapels, and an endowed free school for 24 children. Annual cattle fairs are held on Easter Mon., Holy Thurs., 1st Thurs. July, 1st Thurs. Nov. The market (granted in 1259) has been discontinued within the present century. There are 2 potteries, which employ many of the inhabitants; the remainder are engaged in agriculture; serge weaving and wool combing were once carried on to a considerable extent, and have become extinct only within a recent period. The ann. value of real prop. in 1815 was 6,714*l*. The average poor-rates amount to 882*l*. A portreeve and bailiff are annually appointed at a court leet held by the lord of the manor.

The Bovey heathfield, extending at the base of the town is a low moory tract, between 7 and 8 m. in circ., surrounded by hills which open to the S.E., in which direction the Teign flows after being joined by the Bovey. The granite hills on the outskirts of Dartmoor rise on the W. side, and the green sand range of Haldon on the E. The Bovey coal and clay formations traverse this plain in a S.E. direction, their outcrop being at the foot of the hill on which the town stands. There are 7 beds of lignite, in all forming continuous strata of about 70 ft. in thickness, and dipping at an angle of 23 ft. at the part where they are worked for the use of the pottery, which stands on the spot, and which is almost the only purpose to which the fuel is appropriated, the imperfect combustion and large proportion of ashes rendering it unavailable for general purposes, though occasionally used in the cottages of the neighbouring poor. The clay beds overlie the lignite: there are 5 in all, running parallel with each other, and alternating with beds of sand and gravel; the 4 western beds are potter's clay; the other pipe clay: shafts are sunk on and through them, at intervals, for 6 or 7 m. along their course, at such parts as are found sufficiently pure for the market; they vary in depth from 40 to 90 ft., the lignite being always arrived at in sinking through the 4 western beds, and a fine sand under the eastern one. From 30,000 to 40,000 tons of this clay are shipped annually at the port of Teignmouth for the Staffordshire potteries, the greater portion of which is excavated in the parish of Kingsteinton, and conveyed thither by the Stover Canal, formed through this inland basin, and locking into the Teign, about 3 m. above the place of shipment. This canal effectually drained the greater part of what had previously been an unhealthy morass, and fitted it for cultivation; a railway from the Haytor granite quarries traverses the heathfield, and terminates at the head of it: both were creations of the Templar family, whose mansion and property have since been transferred to the Duke of Somerset.

BOVINO (an. *Vibinum*), a town of Naples, prov. Capitanata, cap. distr., on the declivity of a mountain, watered by the Cervaro, 19 m. S.S.W. Foggia. Pop. 5,000. It is fortified, is the seat of a bishopric, and the residence of a judge of primary jurisdiction; it has a cathedral, 2 parish churches, and several convents. A battle took place near this town in 1734, between the Spaniards and the Imperialists, in which the former were defeated.

BOXTEL, a village of the kingdom of Holland, prov. Brabant, on the Dommel, 7 m. S. Bois-le-Duc. Here was fought, on the 14th Aug. 1794, an obstinate action between the French and the allied British and Dutch troops, under the command of the Duke of York. The latter were defeated with considerable loss, and obliged to retire behind the Maese.

BOYLE, an inl. town of Ireland, co. Roscommon, prov. Connaught, on the Boyle, 94 m. W.N.W. Dublin. Pop. (1821) 3,407; (1831) 3,433: pop. parish (1834) 11,810, of whom 1,042 were of the estab. church, 5 Prot. diss., and 10,763 Rom. Cath. The river divides it into two portions, which are connected by a fine modern bridge; and there are two other bridges near the town. The public buildings are the parish church, two Rom. Cath. chapels, and Baptist and Methodist meeting-houses; a new market-house, a lecture-room, and large barracks. It is a constabulary station; and has a dispensary, bridewell, savings' bank, and loan fund. The chief articles of trade, which is wholly carried on by land carriage, are grain, butter, and flax: some coarse woollens are manufactured. The butter-market is on Mondays, but the principal market-day is Saturday: fairs on March 6., April 3., May 9. and 30., July 9. and 25., Aug. 16., Oct. 1., and Nov. 25.

The corporation, under a charter granted by James I., in 1613, consists of the borough-master, 12 burgesses, and an indefinite number of freemen. It returned 2 mem. to the Irish H. of C. until the Union, when it was disfranchised. General sessions are held every nine months, and petty sessions on Mondays. A seneschal's court in the town has jurisdiction in several adjoining baronies, but none in the borough. Branches of the Belfast and Agricultural banks were opened here in 1835 and 1836. The post-office rev. in 1830 was 639*l*., and in 1836, 696*l*. The mail coach from Dublin to Sligo passes through thrice a week, and a mail car plies every day to French Park. (*Stat. Surv.; Railway Rep.*)

BOYNE, a river of Ireland, which has its source in the bog of Allen, near Carberry, in Kildare, 225 feet above the level of the sea. It flows N.E. by Trim, Navan, and Slane, to Tulloghallen, whence it follows an E. course to Drogheda, uniting with the sea about two miles lower down. The bar at its mouth has only 2 ft. water at low spring-ebbs, and from 9 to 10 feet at high water: hence only the smaller class of vessels can come up to Drogheda. It has been rendered navigable for barges as far as Navan.

The Boyne will be ever memorable in British history for the important victory gained on its banks, about 3 m. above Drogheda, on the 1st of July, 1690, by the forces under our great deliverer, William III., over those of James II. This victory, by securing the triumph of the liberal principles of government established at the Revolution, may be said to have been the great cause of the subsequent progress of the British empire in wealth, power, and population. In 1736, an obelisk, 150 feet in height, was erected in commemoration of

* That portion of Park's observations which is published was intrusted to Isaaco's care at Sansanding, before the departure of the traveller for Timbuctoo.

this great event, on the point facing the ford at Oldbridge, 2 m. W. Drogheda, where King William was wounded in the arm on the evening previous to the battle.

BRA, a town of the Sardinian States, prov. Alba, cap. mand., near the N. bank of the Sturu, 22 m. N. Mondovi. Pop. 7,000. It has 3 parish churches, an hospital, with fabrics of silk and linen, and a considerable trade in corn and cotton. It is reckoned particularly healthy.

BRABANT, N. and S., provinces of the low countries, the first making part of the kingdom of Holland, and the latter of that of Belgium, which see.

BRACCIANO, a town (an. *Sabate*) and lake (an. *Lacus Sabatinus*) of the Papal dominions, 25 m. N. Rome. Pop. 1,746. The town is situated on the W. side of the lake, is well built, has a flourishing paper manufactory, and an appearance of prosperity. It has a magnificent feudal castle belonging to the Torlonia family, now dukes of Bracciano.

The lake is nearly circular; its circumference, without following all the windings of the shore, being about 20 m. It is not generally deep, but is well stocked with fish. The Monte Rocca Romana, covered with wood, rises on the N.E. side of the lake, and it is in most parts bordered by hills. Besides Bracciano, it has on its margin Trivignano (an. *Trebonianum*), Anguillara (an. *Angulara*), Vicarello (an. *Vicus Aurelii*), San Stefano, near which are the ruins of several Roman villas, &c. It gives rise to the river Arone (an. *Aro*), which falls into the sea about 8 m. N. from the mouth of the Tiber. The scenery round the lake is of the most pleasing and sylvan kind. Without being positively unhealthy, the air of Bracciano is, in summer, what the natives call—"suspected." (*Gell's Rome and its Vicinity*, i. 222.)

BRACKLEY, a bor. and town of England, co. Northampton, hund. King's Sutton, 56 m. N.W. London. Area of par., 2,790 acres. Pop. of par., 1821, 1,851; 1841, 2,121. The town stands on a slope, on the N. bank of the Ouse, which is here crossed by a two-arched bridge. Houses, mostly rude buildings of unhewn stone. There are two churches of great antiquity; a national school; almshouses founded in 1663; and a good town-hall. A weekly market is held on Wednesday, and an annual fair on St. Andrew's day. Under a charter of 2 James II. it had a mayor, 7 aldermen, and 26 capital burgesses; and these, until the passing of the Reform Act, when it was disfranchised, had the exclusive privilege of returning 2 mem. to the H. of C. The charter authorised courts of record and of quarter sessions, but they have long been disused. The borough comprises 2 distinct parishes, only ecclesiastically united, Brackley St. James, and Brackley St. Peter; the poor rates of the former, in 1847, were 532*l.*; of the latter, 606*l.* It is the union town of 30 parishes. (*Bridge's Hist. Northamptonsh.*; *Baker's ibid.*)

BRADFORD, a par., market town, and parl. bor. of England, W. riding co. York, wapentake of Morley. The par. contains 33,710 acres, and had, in 1841, 105,257 inhab. The township of Bradford, comprising 1,680 acres, had, in 1801, a pop. of 6,393; in 1821, of 13,064; and in 1841, of no less than 34,560; and it has since continued to increase. But in addition to the township of Bradford, the townships of Manningham, Bowling, and Horton, including the Hamlets of Great and Little Horton, are included in the parl. bor., which has an area of 6,230 acres, and had in 1841, a pop of 66,508.

Bradford is situated on an affluent of the Aire, at the junction of three extensive valleys, 173 m. N. N. W. London, 31 m. W. by S. York, and 8½ m. W. Leeds. Though the streets in the older parts be in general narrow, those of a more recent date, which are by far the most extensive, are sufficiently broad, and they are all well paved and lighted. Houses wholly of stone, and well supplied with water. The town has an evidently thriving appearance, indicative of its really flourishing condition. The parish church of St. Peter is a structure in the pointed style of architecture, built in the reign of Henry VI.; the other churches are Christchurch; St. James's, built and endowed at the sole expense of John Wood, Esq.; and a new church, lately erected at the cost of —— Berthon, Esq. The Wesleyan and Primitive Methodists, Unitarians, Independents, Baptists, Roman Catholics, and Society of Friends, have all places of worship. A free grammar-school, founded in the reign of Edward VI., and chartered and, in part, endowed by Charles II., was rebuilt in 1830. It is open to all boys belonging to the parish, who may become candidates for exhibitions to Queen's College, Oxford. Within these few years a commercial school has been attached to it. Here, also, are national schools, with Lancastrian schools, a school of industry, and an infant school. The Baptists and Independents have each a college or academical institution within ½ m. of the town, for the preparation of candidates for their respective ministries; and the Methodists have a school for the sons of their preachers at Woodhouse Grove, 4 m. distant. A philosophical society has been established. The Exchange, a handsome building, in which assemblies are sometimes held, has attached to it a library and news-room. A mechanics' institute, founded in 1832, has a library, reading-rooms, lecture-rooms, &c. A dispensary is liberally supported; and there are numerous other charitable institutions. The poor-rates in Bradford union amounted, in 1847, to 30,493*l.*, assessed upon property valued at 321,659*l.* a year. It may be worth mentioning that the first temperance society in England was established here.

The town is governed by two constables, elected at a vestry meeting, one of whom retires annually. Burgh revenue in 1848, 4 980*l.* A court for the honour of Pontefract is holden on the first Wednesday of every month, for the recovery of debts under 15*l.*, in the new courthouse, a commodious and elegant building: a court of requests is also holden in its own court-house. Bradford is the seat of a county-court, before which 4,456 plaints were entered in 1848. The Reform Act made this a parl. bor., and conferred on it for the first time the privilege of returning 2 mem. to the H. of C. The boundaries of the parliamentary borough have been already specified. It had, in 1849-50, 2,117 registered electors. The returning officer is named by the co. sheriff. It is also a station for receiving votes at elections of members for the Riding.

The present importance and rapid growth of Bradford are wholly owing to the spirit and success with which the inhabs. have engaged in manufacturing industry. The production of worsted yarn and stuffs constitutes the staple business of the town. The spinning of the yarn employs a great number of hands, and when spun, it is now mostly woven in power-loom factories. There were in the town, in 1839, above 1,500 power-looms, producing, at an average, from 3 to 4 pieces each per week; each piece being 30 yards in length, and from 20 to 24 inches in width. Norwich was formerly the great seat of the worsted manufacture, which, indeed, is supposed to have derived its name from the par. of Worsted in Norfolk, into which it had been early introduced. But the superior facilities for the prosecution of the manufacture enjoyed by Bradford, chiefly in consequence of the unlimited command of coal, have given it, in this respect, a decided advantage over Norwich; and in fact, the greater part of the yarn wrought up in the latter is now made at Bradford. The stuffs, when finished at the loom, are partly bought by traders from Leeds, to be dyed there; this, however, is not nearly the case so much now as formerly, some very extensive dye-houses having been recently erected in and near the town. Sales are effected at the Cloth Hall, a building of two stories, each 144 by 36 ft. Thursday is the sale day, and during business hours the hall presents a most animated scene. But of late years, the hall has been used as a place of deposit and sale principally by the smaller class of manufacturers; and a *much* larger amount of goods is sold at the rooms and warehouses of the leading manufacturers.

There were in the par. of Bradford, and principally in the town, in 1839, 142 worsted mills, employing 10,896 hands; 9 woollen mills, employing 681 do.; and 2 cotton mills, employing 98 do.: making in all, 153 mills, and 11,675 hands. Of 120 engines belonging to these mills, 96 were wrought by steam, and 24 by water. The average rate of wages in the principal employments in the same year was,—men, from 15*s.* to 35*s.* a week; women, 8*s.* to 15*s.*; and children 2*s.* 6*d.* to 7*s.*

The entire par. of Bradford is very densely peopled, and along all the principal roads there is an almost uninterrupted succession of towns and villages. Besides the worsted and woollen trades, which are the principal employments, and others more recently introduced, the iron trade has existed from time immemorial, as is proved by the discovery of a number of Roman coins, in the midst of a mass of scoriæ, the refuse of an ancient bloomery in the neighbourhood of the town. The supply of ore is abundant; but the works, though considerable, are not so extensive as might, perhaps, have been anticipated. The command of unlimited supplies of coal has, as stated above, been one of the principal causes of the rapid progress of the manufactures of the town. This progress has, also, been greatly promoted by the facility of communication with the ports on the E. and W. coasts of the kingdom, afforded by the opening of the Liverpool and Leeds canal, a branch from which is carried into the town; and more recently they have received a fresh stimulus from the opening of railways, which connect Bradford with all parts of the country.

A festival numerously attended, and celebrated with much gaiety, is held at Bradford every seventh year, in honour of Bishop Blaise, said to be the inventor of woolcombing. Markets are held on Thursdays; fairs on

March 3, 4. July 17, 18, 19. and Dec. 9, 10, 11, the last is a great mart for pigs. The banks are the Bradford Banking Company, Bradford Commercial Banking Company, branches of the Leeds and W. Riding and of the Yorkshire district banks, a private banking house, and a savings' bank. The latter, established in 1818, had, on the 20th Nov. 1848, 86,343*l*. of deposits.

In modern times, Bradford has been chiefly remarkable for having (in 1812) been a principal seat of *Luddism*, or of those misguided individuals who supposed that their interests would be promoted by the destruction of that machinery to which, more than any thing else, Bradford, in common with other manufacturing towns, is indebted for its wonderful prosperity. The outrages committed by the Luddites were, however, finally suppressed, though not without some severe examples. It is to be hoped that the more general diffusion of sounder information on such subjects may prevent a recurrence of such *felo de se* enormities.

In 1825 the trade of Bradford was completely stopped, for nearly the whole year, by a most obstinate *strike* on the part of the workmen; but since then the business of the town has been prosecuted without interruption. (*Allen's Hist. of Yorkshire; Baines's Hist. and Direct. of Yorkshire; Parl. Reports; Priv. Inform.*)

Bradford (Great), a par. and town of England, co. Wilts, hund. Bradford, on the Avon, 93 m. W. by S. London. Pop., par., 1821, 10,231; 1841, 10,563: houses at the latter date, 2,202. The river divides the town into 2 parts (called the New, and Old towns), and is crossed by 2 bridges, one ancient, with 9 arches; the other modern, with 4. The old town consists chiefly of 3 streets, each above the other, on the slope and brow of a hill, rising abruptly from the N. bank; most of the streets are very narrow, but in this respect many improvements have been made within a recent period. The houses are all of stone, and many of them very respectable structures. The church is an ancient building at the foot of the hill. Six of the principal sects of dissenters have places of worship in the town: there is a charity school for 60 boys, founded in 1712; and 2 sets of almshouses, one for men, one for women. A weekly market is held on Saturday, and an annual fair on Trinity Monday. There is also a cattle fair at Bradford-leigh, a hamlet in the par., the day following that of St. Bartholomew. The chief manufactures of Bradford are fine broadcloths and kerseymeres, — for these it has been noted for a very long period: there are several manufactories in the town; and in 1838 it had 4 woollen mills, employing 418 hands. The stone quarries in Winsley tithing employ above 100 men. It enjoys an extensive water communication with the towns to the E. and W., by means of the Avon and Kennet Canal. A court of requests for debts under 5*l*. is held every third Tuesday: its jurisdiction comprises 3 adjoining hundreds, and it is held on the intermediate Tuesdays, at Trowbridge and Melksham. Bradford is a union town, under the Poor Law Act. Poor rate, in 1847, 8,721*l*., assessed upon property valued at 44,924*l*. a year. The area of the whole parish 11,740 acres, comprising, beside the town, 4 chapelries and 1 tithing. There is much picturesque scenery along the windings of the river and the dells of its wooded hills, and many fine old mansions. About one-third of the entire pop. reside in the town, which must have been of some consequence in the Saxon period, for St. Dunstan was elected bishop of Worcester at a synod held in it. Bradford sent members to one parliament in Edward I.'s reign, but never since; nor is there any record of its having ever been incorporated.

BRADING, a par. and marit. bor.-town of England, co. Southampton, div. Isle of Wight, liberty E. Medina, 73 m. S. W. London. Pop., in 1821, 2,023; 1841, 2,701: houses at the latter date, 520. It is situated at the head of Brading Haven, at the E. extremity of the island, and consists of one long street of irregular buildings. The church is said to have been built in 704, but it must have undergone extensive alterations and repairs: there are also two dissenting chapels, a national school for 60 children, and a small town-hall, under which is a market-place, but the market has ceased to be held: there are still annual fairs, May 1. September 21. There is a quay for the accommodation of small vessels, the place being approachable by such at high water; but the tract which forms the æstuary (about 900 acres) is uncovered at every tide. An attempt to embank it, and shut out the sea, was made by Sir H. Middleton (the projector of the New River), but unsuccessfully. The town was incorporated, and a market and fair granted in 11 Edw. I.; there was another in 6 Edw. VI., under which the town was governed by two bailiffs and two magistrates, the former elected annually; the latter were the bailiffs of the preceding year.

BRADNINCH, a par. and bor. of England, co. Devon, hund. Hayridge; 150 m. W. by S. London. Pop., 1821, 1,511; 1841, 1,714; houses, 338; area, 4,320 acres. It is pleasantly situated on an eminence, surrounded by higher hills, except on the S., and consists, for the most part, of a collection of neat thatched cottages. The church is an ancient structure; and there is a guildhall, with a gaol under, built subsequently to a fire that nearly destroyed the place a few years since. There are three paper-mills in the parish, which employ 80 or 90 hands; the rest are mostly engaged in agriculture. It once had a considerable woollen trade, but this has ceased, and its ancient weekly market has been discontinued. There are still two annual fairs held, May 6. and Oct. 2. It had a charter of incorporation, granted by Reginald, Earl of Cornwall, which was renewed and extended by James I. and James II.; under it were appointed a mayor, recorder, 12 masters, 24 inferior burgesses, &c.; and courts of quarter sessions and record were held, which have been abolished by the Municipal Reform Act. It returned 2 mem. to the H. of C. from the reign of Edw. II. to that of Hen. VII., when inability to pay their wages was pleaded, and admitted, on paying a fine of 5 marks.

BRAGA (an. *Augusta Bracara*) a city of Portugal, cap. prov. Entre Douro e Minho, and of the comarca of the same name, on a hill in the middle of a large and fertile plain, between the Cavado and the Dieste, 32 m. N.N.E. Oporto, lat. 41° 42′ N., long. 8° 20′ W. Pop. 14,500. It is defended by a citadel, and is surrounded by walls flanked with towns. The skirts are rather narrow, and the houses old: it is the seat of an archbishopric, and has a large cathedral, several parish churches and convents, an archiepiscopal palace, and seminaries, 78 fountains, some of which are highly ornamented. It has great numbers of silversmiths, harness-makers, and hatters, who supply with their wares all the fairs in the adjoining Portuguese districts, as well as most of those in Gallicia in Spain.

Braga is a very ancient city, its foundation being ascribed to the Carthaginians. Down to a recent period it had the ruins of a Roman amphitheatre and aqueduct, but these are now nearly obliterated, and it possesses few memorials of its ancient grandeur, except some coins, found in the vicinity, and some Roman millstones. About 1½ m. E. from the city, on a hill, is the renowned sanctuary *do Sentior Jesus do Monte*, annually resorted to by crowds of pilgrims. (*Miñano; Dict. Géographique*.)

BRAGANZA, a town of Portugal, prov. Tras-os-Montes, cap. comarca, in a fertile plain, on the Ferrenza, 35 m. N.W. Mirandella. Pop. 4,000. It is partially fortified, has a good citadel, is the seat of a bishopric, has two churches, a college, and some manufactures of silk and velvet. It was erected into a duchy in 1442; and in 1640, John II., 8th duke of Braganza, ascended the Portuguese throne under the title of John IV. His descendants continue to enjoy the crown of Portugal, and have also acquired that of Brazil.

BRAHILOW, BRAILOFF, or IBRAILA, a town of Turkey in Europe, in Wallachia, on the left bank of the Danube, 12m. S.S.W. Galacz, and about 105 m. by water from the Black Sea. Pop. 8,000? This may be said to be the sea-port of Wallachia, and in it all the foreign trade of the province centres. All vessels capable of entering the Danube may ascend to Brailoff; and its port, on one of the arms of the river, being defended by a small island from the drift ice carried down by the current in the spring, ships may winter here in perfect safety. Houses regularly built, principally from the ruins of the castle, which has been demolished; and the importance of the town having increased with the independence of the province, and the increasing commerce and navigation of the Danube, several handsome new streets and edifices have been recently erected. The warehouses are capable of containing above 300,000 chetwerts of corn. The great articles of export are the raw products of the country; including wheat, maize, and barley, with tallow, hides, beef, wool, timber, tobacco, yellow-berries, &c. These exports, especially those of corn, have lately increased in an unprecedented degree. In 1847 they amounted to no fewer than 1,310,485 qrs.; of which 390,818 qrs. were wheat, 619,115 Indian corn, and 300,552 barley. The exports in 1849 were 1,005,240 qrs. The quality as well as the quantity of the wheat shipped from this port, and from Galacz, has of late been greatly improved. It was formerly, for the most part, damp, with an earthy taste and smell, originating in its being usually kept in holes in the ground; but this practice is now very generally abandoned, and the grain is shipped in comparatively good order. Tallow, which is an important article, is divided into tallow and chervice: the latter, consisting of the fat of the carcase and marrow boiled together, is in much request at Constantinople; tallow is the fat of the intestines, feet, &c. The trade sometime since was principally managed by Greek houses; but merchants from England and other foreign countries have now established themselves here and at Galacz. (See *Hagemeister's Report on the Trade of the Black Sea*, Eng. Trans. p. 89. and *passim*; and the arts. Danube, Galacz, and Wallachia, in this work.)

BRAHMAPUTRA (*the son of Brahma*), vulg. BURRAMPOOTER, one of the largest rivers of Asia, forming the proper E. boundary of Hindostan; the peninsula beyond which should, therefore, rather be called "India beyond the Brahmaputra," than "beyond the Ganges," since the former separates two regions, for the most part unlike, not only in their topographical features, but also singularly so in the races of people who inhabit them, their religion, customs, &c. The Brahmaputra has three separate sources, viz. the Dihong, Dibong, and Lohit rivers, which unite in Upper Assam; the first has been traced by Capts. Bedford and Wilcox, and Lieut. Burlton, through the Himalaya chain to lat. 28° 15′ N., and long. 95° 10′ E., and is in all probability a continuation of the great Sau-po of Tibet. (See SAN-PO.) The Dihong, at the point to which Lieuts. Wilcox and Burlton penetrated, was 300 ft. wide, had considerable depth, and contained many rapids; one of which being found impassable, and the adjacent country wild and difficult in the extreme, prevented the future prosecution of the survey: the Dihong carries twice as much water as the Lohit into the Brahmaputra. The Dibong is the central and smallest of the three rivers; it rises N. the Himalaya, near lat. 28° 10′ N., and long. 97°, and passes through the mountains into Assam, near lat. 28° 15′, and long. 96°. The Lohit, called by the Assamese "holy stream," and considered by the Brahmins as more especially the origin of the Brahmaputra, is formed by the union of the Taluka and Tajuding, two streams rising in the high mountain region of Tibet, between lat. 28° and 29° N., and long. 97° and 98° E., which having joined, the river thence resulting takes a S.W. course, penetrating the Lang-tam chain of mountains (a continuation of the Himalaya), and passing through a remarkable basin of rocky hills, a place of pilgrimage often frequented by Brahmins, in which it is augmented by the waters of the Brahmakund, a holy pool fabled to owe its origin to an intrigue between Brahma and the wife of a santon. At its exit from this basin the river receives the name of Brahmaputra, and is 200 ft. broad: for the next 60 m. its course is mostly W.; 15 m. below Suddya, in lat. about 27° 50′ N., and long. 95° 30′ E., at a height of 1,150 (Paris) ft. above the level of the sea, the streams of the Dihong and Dibong join it. It now flows in a S.W. direction through the centre of Assam, with a very variable width, since its channel is continually subdividing to enclose a prodigious number of islands, the largest of which, that of Majuli, in central Assam, is nearly 70 m. long, and 10 m. in its greatest breadth. While in Assam the Brahmaputra is said to receive as many as 60 tributary rivers. It enters Bengal in the Rungpore distr., and soon after changes its direction, flowing at first S. and S.E., encircling the W. extremity of the Garrow mountains, and finally, S.S.W., to fall into the Bay of Bengal by a mouth 5 m. wide, in lat. 22° 50′ N., long. 90° 40′ E., in conjunction with the largest branch of the Ganges. The chief tributary streams it receives in Bengal are, the Soormah, Barak, and Goomty, on the left, and the Gadada, Neelcomer, Teesta, and Megna, on the right hand; the latter of which rivers, though not one tenth part its size, communicates its own name to the Brahmaputra after their junction. The affluents of the Brahmaputra bringing down vast quantities of mud, its waters are usually extremely thick and dirty, and its surface, during the floods, is covered with foam, intermixed with logs of wood, large masses of reeds, and carcasses of men and cattle. Its rise commonly begins in April; it attains its greatest elevation at the beginning of August, towards the end of which month its inundation subsides. Some rise, but no overflow, is experienced in September and October. In Bengal it is not fordable at any season, but it is by no means so readily navigated as the Ganges; the direction of the wind, which blows for so many months contrary to the course of the latter river, is commonly coincident with the direction of the Brahmaputra, and adverse to all progress upwards. Its banks are mostly covered with jungle or marsh-land, and in many places quite destitute of tracks; and its current is so strong, that 1 m. a day against the stream is, for a canoe, considered a tolerable advance. (*Ritter's Erdkunde von Asien*, vol. iii.; *Hamilton's E. I. Gaz.* i. 286—288.)

BRAINTREE, a par. and town of England, co. Essex, hund. Hinkford, 36 m. N.E. London. Area, 2,500 acres. Pop. of par. in 1821, 2,983; 1841, 3,670. The town is built on an eminence, and consists of several narrow irregular streets, in which a few good houses, of modern date, are dispersed, but the greater part are ancient mean buildings, many of them wood: the village of Bocking, in the parish of that name, is a continuation of this town on its N. side, and consists of one long street, in which are three dissenting chapels, and many well-built houses. Bocking parish includes 3,800 acres, and had, in 1841, a pop. of 3,487, mostly in the village. Braintree church is a spacious Gothic structure, with a tower and spire, on the elevated site of a still older encampment. There are four dissenting chapels; an endowed school for 10 boys (in which Ray, the naturalist, was educated); and several charities: the principal one produces 350*l.* a year, which is shared by the poor of this and two adjoining parishes. A weekly market is held on Wednesday; and two annual fairs, each lasting three days, which commence May 7. and October 2. The manufacture of silk and crape forms the chief employment of the inhabitants. These have latterly been a good deal extended, and have superseded the woollen manufacture, previously carried on. There are several manufactories on the course of the Blackwater, which flows N. of the town. Ann. val. of real prop. in 1815, 4,493*l.*: of Bocking, 6,957*l.* Braintree is the central town of a poor law union of 14 parishes: its own rates average 2,187*l.*: it has four guardians. Those of Bocking average 3,210*l.*: it has a like number of guardians. The former is also a polling town for the N. division of Essex. (*Wright's Hist. of Essex; Parl. Papers and Rep., &c.*)

BRAKEL, a town of the Prussian States, prov. Westphalia, reg. Minden, cap. circle, on the Brucht, near its confluence with the Nette, 32 m. N.N.W. Cassel. Pop. 3,000. It has a Catholic parish church, an hospital, a workhouse; and fabrics of linen, tobacco, and a glass-work.

BRAMBER, a par. and bor. of England, co. Sussex, hund. Steyning, on the Ader, which is navigable for small vessels, 45 m. S. by W. London. Pop., 1831, 97; houses, 27; area, 870 acres. It claims to be a bor. by prescription, and was of sufficient importance to give its name to the rape, in which it is situated. It sent 2 mem. to the H. of C. from the 23 Edw. I., with occasional omissions between that date and 7 Edw. IV.; and subsequently, without interruption, till it was disfranchised by the Reform Act; the right of election was in burgage tenure voters paying scot and lot, of which there were about 20.

BRAMPTON, a parish and market town of England, co. Cumberland, Eskdale Ward. Area of par., 16,970 acres. Pop. 3,345; pop of township of Brampton, 2,842. The town is situated 10 m. N.E. Carlisle, in a deep narrow valley. It has a town-hall, built by the Earl of Carlisle in 1817, in which courts are held for the barony of Gilsland. The par. church, now in ruins, is at the village of Irthington, about 1½ m. distant; but it has a parochial chapel, built in 1789, and repaired and enlarged in 1827: it has also 4 dissenting chapels, a grammar-school, a national school, erected by the Earl of Carlisle, an infant school, and 12 almshouses for 6 old men and as many women. At the E. end of the town is the moat, a conical mount, rising 360 ft. above the level of the streets The weaving of checks, ginghams, and other descriptions of cotton goods, on account of the Carlisle manufactures, is carried on to a considerable extent. Market-day, Wednesday.

BRANDENBURG, an important prov. of the Prussian states, consisting principally of the ancient mark or marquisate of Brandenburg, having N. Mecklenburg and Pomerania, E. the provs. of Prussia and Posen, S. Silesia and the kingdom of Saxony, and W. Prussian Saxony, Anhalt, and Hanover; between 51° 10′ and 53° 37′ N. lat., and 11° 13′ and 16° 12′ E. long. Area, 15,500 sq. m. Pop., 1846, 2,066,993, of whom 2,016,011 are Protestants, 33,905 Catholics, and 17,077 Jews, &c. It is divided into two regencies and 34 circles. Principal towns, Berlin, Potsdam, Frankfort, Brandenburg, &c. It consists principally of an immense sandy plain, watered by the Oder, Spree, Havel, Warta, Netz, and other rivers, and by numerous lakes. Soil generally poor: in many parts, indeed, it consists of vast tracts of barren sand, diversified with extensive heaths and moors; but in other parts, particularly along the rivers and lakes, there is a good deal of meadow, marsh, and other comparatively rich land. Forests very extensive. Estimating the whole extent of the prov. at 15,800,000 morgen, it is supposed to be distributed as follows:— water, 300,000 morgen; woods, 3,500,000 do.; arable lands, 6,700,000 do.; gardens, 65,000 do.; waste lands, 3,250,000 do , buildings, roads, &c., 550,000 do. Corn of all sorts is raised. Buckwheat, however, succeeds better than any other sort of grain on the sandy soils and next to it rye. Potatoes are now very extensively cultivated. The other principal products are wool, hemp and flax, tobacco, timber, hops, &c. Agriculture, though backward, has made great advances since 1815. The breeds of horses and sheep have been materially improved; particular attention is paid to the raising of wool, which has become a most important product. In 1837 the stock of black cattle amounted to 554,000 head; horses, 180,000; sheep, about 2,500,000; hogs, 175,000. The average rent per Prussian morgen of cultivated land of a medium degree of fertility may be about 2¼ rixdollars (7*s.* 6*d.* sterling). Agricultural labourers receive from 7*d.* to 9*d.* a day in summer, but in winter they are seldom employed by the day. With the exception of lime and gypsum, the minerals are of no importance. Manufactures were introduced by the refugees from France, subsequently to the revocation of the edict of Nantes, and

are pretty extensive. They are principally carried on at Berlin (which see, and PRUSSIA). Breweries, distilleries, glass-works, brick-kilns, tanneries, potash, charcoal, and lime manufactories, are very numerous, and employ a great many hands. The internal trade of the prov. is very considerable, and is much facilitated by the rivers and navigable canals by which they are united. The roads, also, have latterly been very greatly improved. (*See* PRUSSIA.) "Whether," says an intelligent traveller, "it be owing to the extreme niggardliness of the soil, which is for the most part sandy and unproductive, the Brandenburgers are in general extremely abstemious; bread, butter, and potatoes being the principal articles of consumption. The latter with the lower classes; and the former I have seen all ranks partake of half a dozen times a day. If you visit a friend, it is more than probable the lunch will be *butter-brod* (bread and butter): if you go to an inn and order refreshment, without specifying any thing particular, this will certainly be brought. Still, however popular, it divides its empire with potatoes, which a stranger taking notes might with every justice enter in his pocket-book as the national food. They are served up in an immense variety of forms." (*Germany and the Germans*, i. 97. Lond. 1836.)

BRANDENBURG, a town of Prussia, prov. same name, reg. Potsdam, cap. circ. W. Havelland, on the Havel, 35 m. W. S.W. Berlin, and 38 m. N.E. Magdeburg; lat. 52° 27′ N., long. 12° 32′ E. Pop. 13,000. The river divides it into three parts; the old town on the right, and the new on the left bank; while on an island between them is built the "Cathedral Town," which, from standing on piles, is also called "Venice." Streets of the old town narrow and crooked; but those of the new town are comparatively broad and straight; both are walled, and connected by a bridge. On the island is the cathedral, a structure of the 14th century, the castle, and an equestrian academy. It has 8 churches, 5 hospitals, a council-house with a public library, a gymnasium, a citizens' school (*Burgerschule*), a superior female school, with numerous elementary and charity schools; a workhouse, a theatre, and three public squares, in one of which stands the Rolandsaüle, a column hewn out of a single block of stone. The font and monuments in St. Catherine's church are worthy of notice, as are also the works of art in the cathedral. There are manufactures of woollens, fustians, linens, stockings, paper, &c.; with numerous breweries, distilleries, tanneries, and some boat-building; and it has a brisk trade both by land and water. It has been several times besieged — by Henry the Fowler, Albrecht the Bear, Gustavus Adolphus, &c. It was the birth-place of Julius von Voss. (*Von Zedlitz, Der Preussiche Staat*, 1836, i. 186, 187, &c.)

BRANDENBURG (NEW), a town of the grand duchy of Mecklenburg Strelitz, on a rivulet which falls into the lake Tollen, 17 m. N. by E. New Strelitz. Pop. 6,000. It is walled, and well built; has a castle, a grammar school, schools for the sons and daughters of towns-people, a workhouse, and some woollen and cotton fabrics; but the business of distillation is the most important carried on in the town.

BRANDON, a par. and town of England, co. Suffolk, hund. Lackford; 78 m. N.N.E. London. Pop., 1821, 1,770; 1841, 2,008; houses, 407; area, 5,570 acres. It is on the S. bank of the Little Ouse, or Brandon river, which forms the N. boundary of the county, and is here crossed by a neat stone bridge; about a mile below which is a ferry, where goods are deposited for conveyance by the river, to and from the Isle of Ely. Gun-flints are made in the town and sent to various parts of the kingdom: they are procured about a mile W. of it, from beds traversing a chalk stratum, and alternating with others of pipe-clay: many labourers are employed in quarrying these flints. There is also some traffic carried on in corn, malt, coals, timber, &c. In the neighbourhood are some extensive rabbit warrens, which, in part, supply the London markets. Fairs are still held, Feb. 14., June 11., Nov. 11.; but the market has been discontinued. There is an endowed free school. Brandon camp, a sq. earth-work in the vicinity, is supposed to be the *Bravinium* of the Romans. The Duke of Hamilton and Brandon derives his English title from this town.

BRANTOME, a town of France, dép. Dordogne, cap. cant., on the Drôme, near its confluence with the Colle, 12 m. N.W. Périgueux. Pop. 2,500. It is agreeably situated, and is a neat handsome town. The walls and ditches by which it was formerly surrounded have been demolished. It has some fabrics of woollen stuffs, hosiery, and cotton. Near the town is an abbey of the Benedictines, the foundation of which is ascribed by some to Charlemagne, and by others, to Louis-le-Débonnaire. This abbey was held *in commendam* by the historian Brantome, who retired thither after the battle of Jarnac, and composed in this retreat a part of his works. (*Hugo*, art. *Dordogne*.)

BRAUNZBERG, a town of Prussia, prov. E. Prussia, cap. circ. on the Passarge, about 3 m. above where it falls into the Frische Haff. Pop. 7,600. The river is navigable as far as the town by vessels of small burden, and it has some shipping, and exports corn and timber. It is the residence of the bishop of Ermeland, the seat of a royal court of justice, and has several churches, a monastery, a normal school, and 4 hospitals. But it derives its principal claim to notice from its seminary, the *Lyceum Hosianum*, for the education of Catholic clergymen. It is so called from its having been founded and endowed by the learned Stanislaus Hosius, bishop of Ermeland. It has six professors, and had, in 1837, 27 students.

BRAY, a township of England, co. Berks, hund. Bray. Pop. 1,000.? This place would be unworthy notice in a work of this sort, were it not that it has attained a proverbial notoriety. The parson who held the living, a vicarage, in the reigns of Henry VIII., Edward VI., Mary, and Elizabeth, appears to have been gifted with a most accommodating conscience. He commenced a Papist, then became Protestant, next Papist again, and then Protestant again! On being taxed with inconsistency, he defended himself by saying that he had always adhered to his principle, which was "to live and dye Vicar of Bray!" The well known song represents this worthy vicar as living in the reign of Charles II. and his successors; but the above is Fuller's account of the matter. (vol. i. 79. ed. 1811.)

BRAY, a marit. town of Ireland, cos. Wicklow and Dublin, prov. Leinster, on the Bray or Dargle, 12 m. S.E. by S. Dublin. Pop. in 1821, 2,029; in 1831, 3,656: pop. in 1834 of the parishes of Bray and Old Connaught, in which the town is situate, 5,176, of whom 1,184 are of the estab. church, 29 Prot. diss., and 3,963 Rom. Cath. The town, which takes its name from Bre, or Bree, a headland at the foot of which it stands, is divided into two portions by the river, which also separates the counties of Wicklow and Dublin. The part on the N., or Dublin side, is called Little Bray: the communication between the two divisions is kept up by an old bridge. It has a parish church, a large and elegant Rom. Cath. chapel, a Presbyterian meeting-house, and several schools, one of which, an infant school, is a spacious building: it has also a savings' bank, a loan fund, an hospital, and a dispensary. An old castle in Little Bray has been converted into a barrack. A constabulary and a coast-guard force are stationed here, and near the town is a martello tower. The town is neatly built, and is become a fashionable watering-place. It was formerly incorporated, and parliaments were held here, but its chartered privileges have fallen into desuetude. A manorial court is held monthly, and petty sessions on alternate Mondays. It manufactures small quantities of linen and coarse woollens; there is also a brewery and flour-mill. Markets are held on Tuesdays and Saturdays; fairs for freezes on Jan. 12., May 4., Aug. 5., and Nov. 12.; and for cattle on March 1., May 1., July 1., Aug. 15., Sep. 20., and Dec. 14. Post-office revenue in 1830, 543*l.*; in 1836, 585*l.* A mail coach, several stage coaches, omnibuses, and cars, pass daily through the town, or ply from it to neighbouring places, chiefly to Kingstown. The harbour is barred by a bed of shingle, which has to be cut through annually, in order to admit vessels of any size. The imports are coal, to the amount of 5,000 tons, and freestone and limestone of 7,000. A considerable fishery of cod, haddock, and herring, was formerly carried on, which has been completely annihilated. The salmon fishery has also declined. Trout, caught in the Bray river is abundant, and highly esteemed.

BRAZIL*, an empire of S. America, second only in extent to the giant empires of China and Russia, stretches along about two thirds of the E. coast of that continent, while its superficial area occupies nearly half its whole extent. It lies between 4° 17′ N. and 32° 35′ S. lat.; its most easterly point is Cape St. Augustin, in 34° 58′ W. long., but its W. frontier cannot be determined with any thing like accuracy, its boundary-line on that side being for the most part in countries hitherto unexplored by Europeans, and to which the Peruvian Bolivian, and Columbian governments have all different claims: probably, however, it may extend to about 65° W. long. The length, from N. to S., is between 2,600 and 2,700 m., and its breadth, from E. to W., between 2,000 and 2,300 m. Its extent of coast along the Atlantic Ocean exceeds 4,000 m.; its area has been estimated at from 2,300,000 to 2,700,000 sq. m. It is bounded, S. and E., by the Atlantic Ocean; N. by French, Dutch, and British Guiana, and the republic of Colombia; and W. by the states constituting the federal republics of Peru, Bolivia, and La Plata, in-

* It is commonly supposed that the wood yielding the red dye *Cæsalpinia Brazilletto*, derived its common name of Brazil-wood from its being principally imported from, and produced in, Brazil. This, however, is not the fact. It has been shown that woods yielding a red dye were called Brazil-woods long previously to the discovery of America; and that the early voyagers gave the name of Brazil to the part of that continent to which it is still applied, from their having ascertained that it abounded in such woods. (*Bancroft's Philosophy of Colours*, ii. 316—321.)

cluding Banda Oriental, or by the territories claimed by them.

A large proportion of Brazil consists of high land and mountains. Estimates have been given of the extent of country under tillage and that still in a wild state, as well as of that occupied by rivers, swamps, &c. &c.; but from the very limited knowledge which Europeans possess of by far the larger portion of Brazil, it is plain such estimates can be good for nothing, unless it be to throw ridicule and discredit on all statistical computations. It is, however, abundantly certain that the extent of cultivated land bears but a very small proportion indeed to that of the whole country; perhaps not more than 1½ or 2 per cent.!

The following statement of the area and population (ex-Indians) of the different provinces is, though but little to be depended upon, probably, about as accurate as it can well be made with the existing means of information.

Provinces.	Area in sq. m. (Eng.)	Pop. 1830.	Chief Towns.
Maritime Provinces:			
Pará - -	630,000	250,000	Pará.
Maranham - -	70,000	220,000	Maranham.
Piauhy - -	68,000	70,000	Oeiras.
Ceará - -	35,000	190,000	Ceará.
Rio Grande (do Norte)	30,000	70,000	Natal.
Parahyba - -	20,000	110,000	Parahyba.
Pernambuco -	50,000	500,000	Pernambuco.
Alagoas - -	16,000	220,000	Alagoas.
Sergipe - -	25,000	235,000	Sergipe.
Bahia - -	75,000	755,000	Bahia or Salvador.
Espirito Santo -	38,000	70,000	Espirito Santo.
Rio de Janeiro -	50,000	720,000	Rio de Janeiro
San Paulo - -	190,000	350,000	Santos.
Santa Catharina -	50,000	68,000	N. S. do Desterro.
San Pedro do Sul, or Rio Grande do Sul -	180,000	190,000	Rio Grande do S. Pedro.
Inland Provinces:			
Minas Geraes -	200,000	850,000	Villa Rica.
Matto Grosso -	455,000	172,000	Villa Bella.
Goyaz - -	310,000	140,000	Villa Boa.
Total -	2,492,000	5,180,000	

Perhaps no country is more favoured by nature, as regards the requisites for carrying on an extensive commerce, than Brazil. All its principal cities are on the coast: its harbours are among the finest in the world; and some of them are connected with the interior by large rivers, navigable for a great way inland.

The principal rivers are, — the Amazon, generally considered the largest river in the world, formed by the junction of the modern Marañon (Tunguragua) with the Ucayale, or ancient Marañon. It touches Brazil on the N. at its junction with the Madeira in about 59° W. long., and enters it at about the 57th do.; and then flowing through the prov. of Para and forming an immense æstuary, it discharges itself into the Atlantic Ocean under the equator in about 50° W. long. It receives in its course through Brazil from the S. some of its principal tributaries, including the Madeira, the largest of them all, which forms a portion of the W. boundary of the empire, with the Tapajos, and the Xingu: the affluents of the Amazon from the N. in its course through Brazil are comparatively unimportant. Of the other rivers the principal are the Tocantins or Para, an immense stream formed by the junction of the Araguay (the principal branch) and Tocantins properly so called: it has its sources in the S. parts of the provs. of Matto Grosso and Goyaz, and flowing N.N.W., falls into the Atlantic in about 1° S. lat. and 48° W. long. At the mouth of the Para, the phenomenon of the *bore*, to which the Indians have given the name of *pororoca*, manifests itself in a very striking manner. Three days previously to the new or full moon, when the tides are highest, an immense wave, upwards of 15 ft. in perpendicular height, rushes from shore to shore with a tremendous noise, and is succeeded immediately by a second and a third, and sometimes by a fourth. The tide, instead of occupying six hours to flow, attains its greatest height in a few minutes. The roaring of the pororoca is heard at a distance of nearly two leagues. (*Dénis, Brésil*, p. 293., Paris, 1837.) The Rio San Francisco, one of the largest of the Brazilian rivers, rises in the S. part of the prov. of Minas Geraes, near the sources of the Parana. It is the only river of importance between Bahia and Pernambuco; but its navigation is interrupted by the cascade of Paolo Affonso. The Rio Grande-do-Sul, in the prov. of San Pedro, is another large river, as is the Parana, or La Plata, separating Brazil from Paraguay and the states of La Plata, and forming also the boundary-line between the provs. of San Paul, Matto Grosso, and Goyaz: the Rio Pardo, the Ivahy, and the Ignazu, empty themselves into it.

In addition to the above, we may succinctly enumerate the Parahyba, separating the provs. of Maranham and Piauhy; the Itapicaru; the Rio Grande do Belmonte; the Rio Doce, and a host of others. Many of the rivers of Brazil, especially the Maranon, overflow their banks, and subject the country to extensive inundations. The navigation of some of the larger rivers is interrupted by falls and rapids, and the mouths of some of the smaller rivers are subject to winds and currents, which render their navigation difficult.

The lake, or rather lagoon, *Lagoa dos Patos*, in the prov. of Rio Grande do Sul, is the most extensive in Brazil. It stretches N. from Rio Grande, at its S. extremity, where it communicates with the sea, to Porto Alegre, a distance of above 145 m., being in parts about 40 m. in breadth. Though encumbered with shoals, it is navigable by vessels of considerable burden. It receives several large rivers, so that its waters in the N. parts, or those farthest from the sea, are but slightly brackish. There are a great many other lakes in different parts of the empire, but none of them are very extensive. They are most numerous in the prov. of Para.

The form of Brazil may be said almost to resemble that of a heart, of which the greatest diameter, from E. to W., in a straight line from Olinda to the territories claimed by Peru, may be about 30 degrees. The E. side of Brazil is traversed, from N. to S., at more or less distance from the coast, by a mountainous range, of which the average height is about 3,000 ft.: known by the name of Serra do Mar, its greatest height being 4,000 ft. This range serves to divide the coast-land from the high land, consisting of Campos †, the average height of which is about 2,500 ft. It gradually becomes lower in the direction of Paraguay, until it is lost in the low and mostly marshy plains inhabited by the Indian tribe of Guaycurus. Many geographers have fallen into the error of supposing that the prov. of Matto Grosso contains the highest mountains, and that they form a junction with the Cordilleras of Peru and Chili. But Eschwege, who resided in the country for 10 years, during which period he visited the greater part of it, confutes this supposition in his *Brasilien die neue Welt* (vol. i. p. 165. Braunsch. 1830). He observes that broad and extensive plains lie between, and that the sources of the Madeira, which flows in a northerly direction towards the Amazon, and of the Paraguay, taking a southerly course towards the La Plata, are both within a few miles of each other, and that their elevation is inconsiderable. The highest range of the Brazilian mountains is that which traverses the centre of the country, and its greatest altitude is about 6,000 ft. The mountains of Brazil may be subdivided into three different ranges: 1. the coast range, or Serra do Mar, above mentioned. This is by far the most picturesque of the Brazilian chains, and in some parts approaches within 16 or 18 m. of the sea, while in others it sweeps inwards to a distance of from 120 to 140 m. At a distance, and in the vicinity of the mountains, are found ancient forests (matto virgem), whose giant trees and countless plants and shrubs, of luxuriant growth, so thickly interwoven as almost to defy the attempts of man to force a passage, sufficiently attest the excellence of the soil on which they grow. On crossing the Serro do Mar, we meet with a barren table-land, called Campos Geraes, with few traces of cultivation. In the valleys, gold and diamonds are frequently discovered. The Serra do Mar chain commences in the Campos de Vacaria, sinks abruptly in the direction of the Rio Doce, and loses itself completely at Bahia. The celebrated Monte Pascoal, which was seen by the early navigators, forms a part of the Serra do Mar. It is known by various names in the districts through which it runs. On the E. side it is styled Serra dos Aymores, while in the neighbourhood of Rio it is styled Cerra dos Orgoës. It is worthy of remark, that the plants growing in the Campos are altogether distinct from those on the other side the Serra do Mar; and the zoologist may discover quite a new race of animals, as well as birds, in this region.

2. The central chain, called in some parts Serra do Mantequeira, and in others Serra do Espinhaco, is more extensive than the former, and comprises the highest points in Brazil; viz. the Itacolumi, near Villarica; the Serra do Carassa, near Caltas Altas; and the Itambé, near Villa do Principe. This range traverses the prov. of Minas Geraes, running, in its northerly course, through Bahia and Pernambuco, and in its southerly course, through San Paulo and Rio Grande. It is not only remarkable as comprising the highest points in the empire, but is highly interesting in a geognostical, botanical, and zoological point of view. In different parts, it bears the various local names of Serra do Lopo, Serra Sallado, Serra de San Geraldo, Serra dos Esmeraldas, &c. &c.

* Eschwege enumerates upwards of 40 tributaries to this single river. (*Brasilien die neue Welt*, ii. 136, 137.)

† The Brazilians give this name to all tracts of country, whether plain or hilly, that are destitute of wood. They distinguish such tracts as are diversified by occasional wood by the name of *campos serrdos*.

2. The Serra dos Vertentes, or the Water-separating Mountain, so called because it divides the E. tributaries of the rivers Amazon and La Plata from the river San Francisco. This chain is sometimes called the Brazilian Pyrenees. Its loftiest and most remarkable points are those of Serra do Canastra and Matto-Gorda, where, on one side, the Rio San Francisco, and on the other, the most important tributaries of the Rio Grande, take their rise; and the Pyrineos, in the province of Goyaz, where the tributaries of the Paraña are found.

Exclusive of its mountainous and hilly districts, and of its table-lands, the plains of Brazil are of vast extent; the prov. of Para, including a portion of the contiguous prov. of Matto Grosso, comprises, in fact, the whole of the lower and most level portion of the gigantic plain of the Amazon. During the inundations, large tracts of this plain are submerged. Its soil is soft, alluvial, and of the greatest fertility. It is mostly covered by immense primæval forests. There are also some very extensive plains in Maranham and other parts of the empire. That which includes the Lagoa dos Patos extends for above 220 m. along the shore.

Soil. — The soil of Brazil is of very various descriptions, and for the most part of exuberant fertility. Even in the mountainous districts in the interior of the provs., which are mostly covered with their native woods, the excellence of the soil is amply proved by the size and abundance of the trees. Neglected for centuries, a layer of the richest mould has been formed of their fallen leaves and decayed trunks, which mostly rests upon a rich and deep bed of clay, of a red or yellow colour, as it contains more or less oxide of iron.

Climate, &c. — The great extent of Brazil will, of course, account for a considerable variation of climate. Along the coast, the ordinary temperature is from 19° to 20° Reaumur, with some modifications, according to the localities. Thus, while the thermometer seldom rises above 20½° at Bahia, it sometimes stands as high as 26° and 27° at Rio Janeiro. Winter is severe in the S. provinces, and it even freezes at Rio Grande de San Pedro and San Catharina. The climate, in the vicinity of San Paulo, is usually accounted the most agreeable, and the temperature permits the growth of European fruits. The west wind, in the interior of Brazil, is unwholesome, as it passes over vast marshy forests. The sea coast, from Pará to Olinda, appears to possess a similar climate to Guiana. Notwithstanding the position of Brazil between the equator and the tropics, the air, owing to the height of the greater portion of the country, is in general temperate, rather than hot. Pernambuco and a few of the other provs. suffer occasionally from drought, to which, however, the coast lands are seldom subject.

The seasons may be properly reduced to two, the rainy and the dry, although some divide them into four; viz. the spring, commencing in Sept.; the summer, in Dec.; the autumn, in March; and the winter, in June. The rainy season usually sets in about Oct. or Nov., and is preceded in some parts by fogs, thick groups of clouds, and sudden gusts of wind, as well as by occasional showers, and the temperature is also extremely variable. This season generally lasts till March. The period of its commencement and termination varies according to latitude and natural position.

Prince Maximilian observes (*Reise nach Brasilien*, ii. 194.), that in the region of Campos Geraes, Feb., March, April, and May, are usually the rainy months; June, July, Aug., and Sept., are called the cold season; and that during Oct., Nov., Dec., and Jan., the greatest heat prevails.

M. Von Langsdorff, formerly Russian consul at Rio, makes the following remark upon the seasons in Brazil, in a letter to a friend, given in *Eschwege's Journal* (ii. 166.): — "Winter, in this country, resembles summer in the N. of Europe; summer appears one continuous spring; while spring and autumn are unconsciously lost in winter and summer." It may therefore be more truly said of Brazil than, perhaps, of any other country —

Stern winter smiles on this auspicious clime;
The fields are florid in eternal prime;
From the bleak pole no winds inclement blow,
Mould the round hail, or flake the fleecy snow;
But from the breezy deep the groves inhale
The fragrant murmurs of the *eastern* gale!

Products. — The most celebrated, though far from the most important, of the natural productions of Brazil, are diamonds. They have been found in Minas Geraes, Goyaz, and Matto Grosso; but it is supposed that other provs. are furnished with these highly prized gems. Those of Minas Geraes are generally the largest. The most celebrated mines are those of Serra do Frio*, which are also known by the name of the Arrayal Diamantino, or diamond district properly so called. This district is surrounded by almost inaccessible rocks, and was formerly guarded with so much vigilance that the governor of the prov. could not enter it without the special permission of the director of the mines.

* These mines were not actually discovered until the government of Dom. Lorenço d'Almeida, although diamonds were known to have been in the possession of the negroes, who met with them accidentally while employed in gold-washing, and other persons ignorant of their value, long before that period. They were first brought from Brazil to Lisbon in 1728, by Bernardo da Silva Lobo. He showed them to the Dutch resident consul, who recognised them as diamonds, and informed him of his important discovery.

The latter are wrought by accumulating the cascalhao, a kind of ferruginous earth (in which the diamonds are found mixed with flints), and washing it. The former operation is generally performed during the hot season, at a time when the beds of the rivers and torrents are dry, and the diamond-sand can be easily extracted. When the wet season arrives, the operation of washing commences. It is performed in the open air, and frequently under sheds, where the action of the sun is least likely to injure the negroes. At the bottom of the shed glides a small stream, which occupies one of its sides. Seats, raised, and without backs, are arranged along the shed, in such a manner that the subaltern officers (feitores) are enabled to watch the negroes at work. One officer superintends 8 negroes. Each negro works in a compartment of the shed, separated or walled off, as it were, from the others. The cascalhao to be examined is placed in troughs close to the stream, and the negroes are introduced entirely naked, excepting in times of extreme cold, when they are allowed a kind of waistcoat, but without either pockets or lining. They are furnished with an alavanca, a kind of handspike, by means of which they separate the earth from the flint, and then, taking the largest stones in their hands, they proceed to search for the diamonds. Notwithstanding the precaution of making the negroes work naked, robberies are of frequent occurrence. When a negro discovers a diamond, having first shown it to the officer, he deposits it in a large wooden vessel suspended in the middle of the shed. If any negro is fortunate enough to discover a diamond weighing 17 carats, he is purchased by the government, and receives his liberty. The discovery of a stone of less weight also confers liberty upon the finder, but with some restrictions. Various premiums are distributed, according to the value of the stone, even to a pinch of tobacco. (*Dénis, Brésil*, p. 345.) Notwithstanding every imaginable precaution, negroes find means to purloin diamonds, which they sell to smugglers (contrabandistas) at a very low price. The latter dispose of them chiefly at Tijuco and Villa do Principe. They obtain a higher price at the latter, because their risks are greater in transporting them hither. The negroes frequently contrive to impose upon the contrabandistas, by giving crystals the appearance of rough diamonds, so as effectually to deceive them. Formerly there were a great many negroes employed in the mines, but according to Freyreiss, the number employed at the time of his visit to Brazil (about 1823) did not exceed 2,000, and it is now less.

Diamonds differ greatly in size. There are some so small that 16 or 20 would scarcely make a carat. It is rare that, in the course of a year, more than two or three are found weighing from 17 to 20 carats; and two years may pass without discovering one of the weight of 30 carats. The largest diamond of which we have any account was found in the Rio Abacte in 1791: it weighs 138½ carats. The administration of the diamond mines is regulated by a law of the 2d Aug. 1771, entitled, "Regimento para a Real Extracçaõ dos Diamantes do Arrayyal, do Tijuco, do Serro do Frio," consisting of 54 articles. Down to the date of this law, the right of working the diamond mines was farmed out; but from that period, the government have taken it into their own hands, and they are all under the superintendence of a board, *Junta Real para a Administraçao dos Diamantes*.

Eschwege (*Brasilien die neue Welt*, i. 120.) gives the following table of the weight of the diamonds extracted from the first discovery. As little is known respecting the weight of those discovered during the first ten years (from 1730 to 1740), he commences with the latter year: —

	Carats.	Average per year.
From 1740 to 1772 - - -	1,666,569	52,080
—— 1772 — 1806 - - -	910,511¼	26,826
In the years 1811, 14, 15, and 16 -	74,147	18,537
During the 11 years of which there are no statistical accounts to which he could gain access (i. e. from 1806 to 1822, deducting the above), and during which the produce remarkably decreased, it cannot, at an average, be estimated at more than -	232,000	12,000

Eschwege estimates the total value of these, at the rate of 8,000 reis the carat, to be 23,869,534,000 reis, = 59,673,835 cruzadoes, = 39,782,556 Prussian dollars, or 3,475,537*l.*, so that, supposing this estimate to be tolerably correct,

it follows that the total value of the diamond-washings, during a period of above 80 years, was hardly equal to 18 months' export of sugar or coffee! The crown receives one fifth of the total value.

After Mexico and Peru, Brazil has furnished Europe with, perhaps, the greatest quantity of the precious metals. Gold is found throughout the district which extends from the neighbourhood of San Paulo and Villarica as far as the confines of the river Ytènes. The most celebrated mine is that of Congo Soco, in a beautiful valley, about 40 leagues from Villarica. It was begun to be wrought in 1740, the proprietor having in a short time amassed a splendid fortune. In consequence, however, of the want of care and activity on the part of his descendants, the mines ceased to be productive, and were disposed of, in 1825, to a company of Englishmen, known as the "Anglo-Brazilian Mining Company," for 70,000*l.* sterling. The operations of this company extend also to other places; but it has not been successful.

About Villarica gold is sometimes found in the form of powder and fine dust, in crystals, and sometimes, though rarely, in lumps. Spix and Martius (*Eng. Trans.* ii. 182.) mention an instance of a massy piece weighing 16 lbs. having been found.

The produce of the gold mines was most considerable in the first half of last century. Towards its close, from 70 to 80 arrobas were annually smelted in Villarica; while, previously to the arrival of the English company, the quantity had dwindled down to 40.

At present (1845) the produce of the entire gold and silver mines and washings in Brazil is not supposed to exceed from 1,500,000 to 1,600,000 doll. a year, being little more than adequate for the wants of the country.

The eagerness of all classes to engage in mining pursuits, formed, for a lengthened period, a powerful obstacle to the improvement of the country. But happily this rage is now greatly abated; and the energies of the population being directed to the safer and infinitely more productive occupations connected with the culture of the soil, mining has become an object of very inferior importance; and the value of the gold and diamonds that are now produced is quite inconsiderable, compared with that of various other articles. (See *post.*)

Iron-ore is found in great abundance in various parts of Brazil. At Ypanema, in the prov. of Rio Grande do Sul, the ore is particularly rich. But though known to exist, this mine was not wrought previously to 1810, when it was commenced, on account of government, by a party of Swedish miners. The works have since been considerably extended; and exclusive of the articles manufactured for government, orders have latterly been executed for private parties. But a work of this kind carried on at the expense of government is rarely successful; and many private iron-works have since been established in different parts of the empire that are of greater importance than those of Ypanema. It is probable, indeed, that government will at no distant period cease to burden itself with the expense of the latter. Notwithstanding the multiplication of iron foundries, the quantity of iron produced is still far below the wants of the country; and, along with hardware, it is largely imported.

It may be worth mentioning that the working of iron mines was, for unknown, but certainly bad reasons, long prohibited by government; but that prohibition no longer exists, having been repealed soon after the arrival of the court in Brazil. Malte-Brun has omitted to mention the latter fact; and the reader might infer from his account, that the prohibition had not been removed. As evincing the importance attached by the Brazilians to the opening of the mines, a gigantic pyramid has been erected upon the summit of the Garasoava, in commemoration of the event. In smelting and other operations, the Swedish method is practised.

Rock-salt has not hitherto been discovered in Brazil; but this deficiency is, in part at least, supplied by the numerous *salt-licks* and salt-springs that are found in different parts of the country. Salt steppes also are found, two of which are very extensive: one of these is situated partly in the prov. of Pernambuco, and partly in that of Bahia, on both sides the San Francisco, the other being near the W. boundary of the empire, in the prov. of Matto Grosso. The salt, which is found on the surface after the rains, is obtained by washing the earth and leaving the water to evaporate. Saltpetre and alum are, also, met with in various parts.

Among the other mineral productions of Brazil, may be mentioned platina and copper, found in the prov. of Minas Geraes. Precious stones abound, especially topazes, of which there are many varieties. In some parts, white and blue topazes are found, but they are usually yellow.

Vegetable Products. — Among these are sugar, coffee, cotton, cocoa, rice, tobacco, maize, wheat, mandioc, bananas, ipecacuanha, ginger, yams, oranges, figs, sarsaparilla, &c. &c. Of these, the most important, in a commercial point of view, are sugar and coffee, which are now, in fact, the staple products of the empire, and the culture of which has increased with almost unexampled rapidity. Sugar is principally raised in the prov. of Bahia, the soil of which is admirably suited to its growth; but it is also extensively produced in some of the other provs. The value of the sugar exported from the different ports of the empire is believed to be at present (1845) little short of 1,600,000*l.* The coffee of Brazil was formerly not liked in Europe, owing to defects in its treatment. The merit of having introduced a better system is due to Dr. Lecesne, a planter from St. Domingo, who, having established himself in the vicinity of Rio, instructed the cultivators in the most approved methods of treating the plant. The effects of this liberal conduct have been most striking. Coffee is still principally produced in the vicinity of Rio; and so rapidly has its cultivation been extended, that while its produce in 1818 only amounted to 74,215 bags, it amounted in 1836 to 704,385 bags, and in 1843 to nearly 1,200,000 do.! Estimating the average crop at 1,100,000 bags, worth at the port of shipment 3*l.* a bag, the total value of the coffee exported would be 3,300,000*l.*! And notwithstanding its extraordinary extension, such are the boundless capacities of the country that the culture of both sugar and coffee may be said still to be in its infancy, and to admit of an indefinite increase.

Cotton ranks, next to coffee and sugar, as one of the principal products of Brazil. It is mostly grown in the provs. of Pernambuco and Maranham, and, in respect of quality, is inferior only to sea-island cotton. Its cultivation has not, however, been increasing for several years past. The exports may amount, at an average, to about 170,000 bags of 160 lbs. each, worth about 5*l.* per bag, making in all the sum of 850,000*l.* Tobacco is principally grown in the islands in the bay of Rio Janeiro, in that of Angra dos Reys, &c., on the lowest coast-land; it is, however, inferior in quality to that of the U. States, and the cultivation has rather decreased. Rice is largely cultivated in some places, and is exported; but the principal dependence of the population is on the mandioc, manioc, or cassava (Jatropha *Manihot*), regarded by the Indians as a bequest from their prophet Suné, and which, on that account, has sometimes been supposed not to be indigenous. But, if connected at all with the plant, the function of the prophet was most probably confined to instructing the Indians in the mode of its use. And this, though a most essential service, was by no means an obvious one; for, in its natural state, the root of the plant, which is the only part that is made use of, is extremely dangerous, the juice being a deadly poison in which the Indians were accustomed to dip their arrows. When, however, the latter is expelled, the residuum, or farinaceous part is perfectly wholesome, and makes, indeed, a highly nutritious and excellent food. And long before the discovery of America the Indians were in the habit of expelling the juice, by first peeling and then beating the roots into a coarse powder and subjecting the latter to pressure and to the influence of heat in bags made of rushes. On the estates of the planters the roots are now ground in mills, pressed, and the perfect expulsion of the juice effected by heating the residuum in vessels placed over a brisk fire. Manioc is found on every table in Brazil, and supplies a great number of excellent dishes. Tapioca, so well known and extensively used in Europe, is a preparation of manioc, and is almost wholly brought from Brazil. The imports of this article into this country only have recently amounted, at an average, to about 1,550 cwts. a year. The culture of the manioc is said to be most unfavourable to the soil, exhausting it in the course of a few years. This, however, is of comparatively little consequence in a country where waste land is so abundant as in Brazil.

A species of sweet manioc (*Manihot Assim*) is also found in Brazil. It is boiled and eaten in the same manner as the potato; but it is not serviceable in the manufacture of flour.

Notwithstanding her fertility and extent, Brazil is indebted to foreign countries, and especially to the U. States, for large supplies of wheat flour. This has been said to be a consequence of the unsuitableness of the soil for the culture of wheat; but this does not really appear to be the case, that species of grain being found to succeed extremely well in the southern provs. and on the table-lands of the interior. The importation of flour is rather, we incline to think, a consequence of the indolence of the natives, and of the preference given to the culture of coffee. The prov. of Para is particularly fitted for the growth of rice, and might supply it in any quantity.

The culture of the tea-plant has been tried in Brazil, and the soil and climate have been found suitable to its growth; but its culture has not made, and could not rationally be expected to make, much progress, inasmuch as it can only be successfully carried on where labour is

abundant and cheap; whereas it is here both scarce and dear.

The forests of Brazil, which are of vast extent and luxuriance, furnish almost every variety of useful and ornamental wood; their products being adapted alike to ship-building, carpenters' work, cabinet work, dyeing, &c. The cocoa-tree is plentiful in the sandy soils along the coast. It is thicker and taller than in the E. Indies: cocoa is in general use among all ranks, and forms one of the chief articles of the internal trade, and also supplies considerable quantities for exportation. The carassato, or castor-tree, is an indigenous production, and is much cultivated for the sake of the oil extracted from its seed, in general use for lamps and other purposes. The jacarandu, or rose-wood, is peculiarly valuable for cabinet work, and is extensively exported. One of the most valuable woods, the *Cæsalpinia Braziletto*, or Brazil-wood (called *ibiripitanga* by the natives), producing a beautiful red dye, has been already referred to. It is found in the greatest abundance, and of the best quality, in the prov. of Pernambuco; but being a government monopoly, it has been cut down in so improvident a manner, that it is now seldom seen within several leagues of the coast. There are also cedars, logwood, mahogany, &c. The forests of Brazil, particularly those in the prov. of Para, along the Amazon, yield vast quantities of caoutchouc or India-rubber, the uses of which have been so very greatly extended during the last dozen years. At an average of the three years ending with 1842, the imports of this substance into this country from Para amounted to 3,790 cwts. a year. Nuts are also extensively exported.

Animals.— The Brazilian forests are full of rapacious animals: among which are the tiger-cat, the hyena, the saratu, an animal about the size of a fox, but far more ferocious, the jaguar, or tiger of S. America, the sloth, and the porcupine. The planters are much annoyed by ounces; wild hogs are common, and the singular animal called the anta, or tapir: the latter resembles the hog in shape, but is much larger; it is, in fact, the largest of the native quadrupeds, is timid and harmless, feeds like a horse, is amphibious, and capable of remaining for a long time at the bottom of lakes without coming up to respire. When killed, its flesh is generally eaten, and is said to differ but little from that of the ox.

The useful animals, as the horse, ox, and sheep, are all descended from the stocks brought from Europe by the early settlers. Their increase, especially that of cattle and horses, has been astonishingly great. Vast herds of wild cattle are met with in all the open parts of the country, particularly in the *llanos*, or plains of the S. provinces. Some idea of the numbers of these cattle may be formed from the fact stated by Mr. Luccock, that a single individual, Jose Antonio dos Anjos, slaughtered, in a single season, 54,000 head of cattle! Hides, tallow, jerked beef, horns, and bones, have long formed, and still continue to form, leading articles of export from Brazil. 429,000 hides were exported from Rio in 1846; and the total export from all the ports of the empire may be estimated at from 650,000 to 800,000 a year. It is only in particular situations that any use is made of the beef, which mostly becomes the prey of vultures, wild dogs, and other ravenous animals. Sheep being less able to defend themselves from attack, and being probably, too, not so well suited to the country, have not increased so rapidly as cattle and horses. Horses are of middling size, strong, active, and fleet. From 40,000 to 50,000 are said to be annually sent to the North. (*Modern Traveller*, xxix. 302.)

The emu, or American ostrich, is found in the Brazilian plains; and the forests swarm with innumerable varieties of birds, monkeys, &c. In the marshy countries the boa attains to an enormous size, and they are also infested with the corral-snake, and other venomous reptiles.

Manufactures.— These, unless we call the preparation of sugar a manufacture, can hardly be said to exist in Brazil, and are restricted to the production of the coarsest species of cotton cloths, the tanning of leather, and a few of those that are simplest and most necessary. In the interior, as in the provs. of Matto Grosso and Goyaz, the mechanical arts are in the most backward state imaginable. In proof of this we beg to subjoin the following curious extract from a report by the minister of the interior in 1844:—" It is scarcely possible to find persons who have any skill in the common mechanical trades; none whatever in comparison with the wants of the country. Eight French mechanics were recently on their way to Matto Grosso; as they passed through Goyaz, the provincial government induced three of them, a carpenter, a cabinet-maker, and a blacksmith, to establish themselves in the country; and this event was deemed so important, as to be officially noticed in the President's message to the next provincial assembly." (*Kidder's Brazil*, ii. 334.)

In the cities, however, a great number of trades are necessarily carried on. " The European stranger in Rio," says Dr. Von Spix, " is astonished at the number of gold and silversmiths and jewellers, who, like the other tradesmen, live together in one street, which calls to mind the magnificent *ruas de Ouro* and *de Prata* of Lisbon. The workmanship of these artisans is, indeed, inferior to that of the European, but it is not destitute of taste and solidity. Many trades which are very necessary in Europe are, at present, almost superfluous in the interior of this country, on account of the circumscribed wants of the inhab. In the capital, however, and the other towns on the coast, joiners, whitesmiths, and other artisans are numerous; but tanners, soap-boilers, and workers in steel are scarce. There is a great demand for mechanics, to build sugar and other mills, to construct machines for working the gold mines, &c.; and very high wages are paid them. Hitherto no glass, china, cloth, or hat manufactures have been established in the capital; and their erection would not be advisable in a country which can obtain the productions of European industry on the lowest terms, in exchange for the produce of its rich soil." (*Travels*, i. 198.) In 1844, the streets of Rio were lighted with oil lamps, gas not having been introduced. (*Kidder's Brazil*, i. 106.)

Commerce.— The extremely circumscribed extent of her manufactured products, on the one hand, and, on the other, the large amount of her coffee, sugar, cotton, and other tropical products, give Brazil a powerful motive to engage in, and the means of carrying on an extensive commerce. Her commercial policy has, also, been characterised by considerable liberality. The duties on imports and exports have been mostly moderate; and have been imposed more for the sake of revenue than of protection. Her imports comprise most sorts of manufactured goods suitable for her population and climate, particularly cottons, linens, woollens, and hardware, from England; flour, coarse cottons, beef, pork, &c., from the U. States; wine, silks, salt, brandy, olive oil, &c., from France and Portugal; linens, lace, pitch, &c., from Hamburgh, &c.

Great Britain enjoys the largest share of the trade of Brazil; and that share will, it is probable, be a good deal increased, when the duties on foreign and colonial sugars are equalised in 1854. We shortly stated in our last edition the mischievous consequences to our trade of the discriminating duty formerly imposed on slave-grown sugar, and showed that while it obstructed our intercourse with slave-holding states, it did not hinder them from importing slaves, or lessen the culture of sugar and other colonial staples by their instrumentality.

The real or declared value of the exports of all sorts of British produce to Brazil amounted, during the year 1848, to 2,067,299*l.* Of this sum cotton manufactures amounted to 1,057,990*l.*, woollen do. to 220,800*l.*, and linen do. to 183,247*l.* The other leading articles were brass and copper manufactures, hardware, and cutlery, iron and steel, soap and candles, apparel and slops, &c. The total value of the exports of domestic produce from the U. States to Brazil during the year ended the 30th of June 1848, was 3,092,736 dollars. Among the articles included in this amount, flour was one of the most important. Perhaps we may estimate the entire value of the exports from Brazil at about 8,500,000*l.* a year, and that of the imports at about as much.

One of the largest and most valuable of the articles imported into Brazil does not appear in the list of imports. According to a convention entered into by this country with the Brazilian government, the importation of slaves into Brazil should have entirely ceased in 1830. Far, however, from this being the case, the belief is, and it appears to be perfectly well founded, that their importation is carried on to nearly as great an extent at present (1850) as at any former period. Sir Fowell Buxton, in his work on the African Slave Trade, published in 1839, estimated the importation of slaves into Brazil at about 78,000 a year! And immense as this number may appear, it may be doubted whether it was considerably beyond the mark. It would appear, however, that their importation has decreased in the interval; but it is the general opinion that it may at present be safely estimated at from 45,000 to 55,000 a year!

Whatever may be the ultimate effect of this prodigious importation of Africans, there appears little hope of its speedy reduction. The boundless extent of fertile and unoccupied land in Brazil admirably suited for the growth of sugar, coffee, cotton, and other colonial staples; the growing demand for them, and the thinness of the existing population, which prevents the planters from extending their concerns so rapidly as their interest requires, constitute irresistible temptations to the importation of slaves; while the limited extent of the voyage, and the facilities which the all but interminable coasts and numerous bays of Brazil afford for their secure landing, enable them to be introduced with an ease and expedition unknown any where else.

The articles of export from Brazil have been already enumerated in our account of the productions of the country. The principal are coffee, sugar, and cotton; then follow hides, and other animal products, gold, dia-

monds, cabinet and dye woods, drugs, gums, nuts, &c. The export trade of Brazil used to be principally carried on with Hamburgh and the other Hanse towns, and the U. States. This, however, was a consequence of Brazil sugar and coffee being virtually excluded from our markets, which is now no longer the case. In 1848, 353,533 cwt. of Brazilian sugar and 1,056,186 lbs. coffee were entered for home consumption in the United Kingdom.

For some account of the money, weights, and measures of Brazil, see **PORTUGAL.**

We subjoin a statement of the quantities and values of the principal articles of native produce exported from Brazil. The returns for Rio de Janeiro and Bahia are for 1847; while the others, with the exception of the sugar from Pernambuco, are for 1845. But for all practical purposes they may be taken as representing the present (1850) amount and value of the exports.

Articles.			Quantity.	Average Price.	Amount.	
				£ s.	£	£
Rio de Janeiro.	Coffee	bags	1,650,000	2 0	3,300,000	
	Hides	number	300,000	0 10	150,000	
	Sugar	cases	4,000	10 0	40,000	
	Rosewood	tons	2,800	10 0	28,000	
	Rice	bags	8,500	0 18	7,650	
	Rum	pipes	4,000	6 0	24,000	
	Tobacco	rolls	21,000	0 20	21,000	
	Tapioca	barrels	1,330	about 3*d*. ℔ lb.	3,285	
	Horns	number	450,783	18*s*. ℔ 100	4,057	
	Gold and diamonds, in 1844		- -	about	450,000	4,027,992
				£ s.		
Bahia.	Coffee	bags	23,256	2 0	46,512	
	Cotton	—	11,103	3 0	34,209	
	Sugar	cases	72,620	12 0	871,440	
	Tobacco	arrobas	350,000	0 4	70,000	
	Hides	number	108,000	0 8	43,200	
	Rum	pipes	6,292	5 0	31,460	
	Rose and other fancy woods		- -	about	3,750	
	Diamonds (supposed value)		- -	about	500,000	1,600,571
Maccio.	Cotton	bags	20,000	3 0	60,000	
	Sugar	cases	5,000	12 0	60,000	
	Hides	number	15,000	0 8	6,000	126,000
Pernambuco.	Cotton	bags	25,000	4 0	100,000	
	Sugar *	tons	61,000	20 0	1,220,000	
	Hides	number	300,000	0 8	120,000	1,440,000
Paraiba.	Cotton	bags	20,000	4 0	80,000	
	Sugar *	tons	3,500	20 0	70,000	
	Hides	number	30,000	0 8	12,000	162,000
Ceará.	Cotton	bags	8,000	4 0	32,000	
	Hides	number	40,000	0 8	16,000	
	Fustic	tons	300	5 0	1,500	49,500
Maranham.	Cotton	bags	40,000	4 0	160,000	
	Hides	number	20,000	0 8	8,000	
	Rice, &c.		- -	- -	40,000	208,000
Pará.	Cocoa	bags	35,000	0 20	35,000	
	India rubber	tons	320	80 0	25,600	
	Cotton, isinglass, rice, drugs, &c.		- -	- -	100,000	160,600
Southern Provinces — Rio Grande do Sul.						
	Hides, dry	number	677,000	0 10	338,500	
	Ditto, salted	—	299,000	0 15	224,250	
	Jerked beef	arrobas	2,000,000	0 4	400,000	
	Tallow	—	200,000	0 7	70,000	
	Hair, wool, horns, &c.		- -	about	50,000	
					1,082,750	
	Deduct from the above about 200,000 dry hides, and for jerked beef and tallow exported to ports of Brazil		- -	- -	570,000	512,750
Santos.	Sugar, rice, coffee, &c. to Rio, but forming exports, about		- -	- -	- -	120,000
	Total value of exports		- -	- -		8,407,413

* A great portion of sugar is shipped in barrels and bags.

Population.—The population of Brazil, in 1830, was stated by Cannabich, upon the authority of documents existing in Brazil, to amount to 5,735,502. Malte-Brun estimated it, for the same year, at 5,340,000. Balbi computes the total at 5,300,000, subdivided as follows:—

Portuguese, or Filhos de Reino, Creoles, &c.	900,000
Mestizoes (free) and mulattoes	600,000
(slaves)	250,000
Free negroes	180,000
Negro slaves	2,926,500
Converted Indians	300,000
Independent Indians, European settlers, &c.	150,000

But we are satisfied that the highest of these estimates is very decidedly under the mark, and that the pop. of Brazil may at present (1850) be safely estimated at from 6,500,000 to 7,000,000. Exclusive of the immense importations of negroes from Africa, amounting, as previously seen, to about 50,000 a year for several years past, the white immigrants have, in some late years, amounted to from 8,000 to 9,000. But, supposing the entire immigration of whites and blacks to have averaged 60,000 a year since 1835, that would make, in the interval, an addition to the pop. of about 900,000; for, owing to the indulgent way in which slaves are treated in Brazil, the presumption seems to be that their natural increase, during the period in question, will have at least equalled the deaths. Even if we were not aware of this extraordinary immigration, the rapid increase of commerce and wealth would leave no doubt of there being a nearly corresponding increase of population.

But, supposing the population to amount to or to exceed 7 millions, it is really next to nothing when we compare it with the vast extent and natural richness of the country; and the truth is, that a deficiency of population is the prime defect in the social condition of Brazil. She should leave no means untried by which to attract immigrants from Europe; and should be ready to make them liberal grants of land, and to give them every other encouragement. But, strange to say, the reverse of all this takes place. Immigrants are not looked upon with any favour either by the government or the people; who thus voluntarily shut themselves out from what would be by far the most effectual, and is, perhaps, the only means for improving the national character and energies; and for enabling the gigantic resources of the empire to be developed.

In Brazil, unlike the Spanish and English colonies, there is hardly any political division of castes, and very few of those galling and degrading distinctions which have been made by all other nations in the management of their colonies. This was not intended by the mother country, but has arisen from the circumstances connected with the colonisation of this vast territory, which rendered intermarriage with the natives inevitable. It is true that, according to the old code, people of colour are not eligible to some of the chief offices of government, nor can they become members of the priesthood; but, from the mildness of the laws, the mixed classes have gained ground considerably, and the regulations against them are evaded, or rather have become obsolete. Marriages between white men and women of colour are by no means rare; and the circumstance is scarcely observed upon, unless the woman be decidedly of a dark colour, for even a considerable tinge will pass for white. The laws as to slaves are peculiarly humane. (*Modern Traveller*, xxix. 91., and the authorities there referred to.)

The diseases and the vices introduced by Europeans are said to produce a fearful mortality amongst the natives. At the time when the Jesuits, Anchieta and Nobrega, exerted themselves to introduce European ci-

vilisation, an epidemical small-pox suddenly carried off two thirds of the pop. (*Southey's Brazil*, i. 294.)

The Brazilerois, or native Brazilians, born of Portuguese parents in Brazil, inherit all the idleness and inactivity of their European ancestors. Weech remarks, "that the very narrow compass in which the necessities of the poorer classes are confined is almost incredible. A hut, constructed of thin poles of wood, plastered together, as it were, with earth, and covered with straw, is ample security against the sun and rain; a straw mat serves them as a bed, seat, and table; a dish and pot complete the house and cooking apparatus; a couple of cotton shirts, a pair of linen trowsers, a calico jacket, a pair of wooden shoes, and a coarse straw hat, complete a wardrobe that furnishes them handsomely for a year; and a kitchen-garden, a few fruit-trees, and a mandioc field, furnish them with a plentiful subsistence. Give them but a viola (a small guitar strung with metal strings), and some tobacco to make their much-loved paper cigars, and their dearest wishes are gratified. Smoking the latter, and strumming on the former, they can beguile entire half-days in a state of enviable forgetfulness, vegetating like the plants. A few fowls, sent to the city from time to time, furnish the necessary supplies; and thus are thousands of families, whose annual income does not exceed 20 milrees" (54 florins,—4*l*. 10*s*.).

The wealthy inhabitants of the country differ only from those of the city in their greater ignorance. Wealth alone possesses value in their eyes; knowledge and character appear to them almost superfluous. The stranger, therefore, who cannot boast of wealth, is, in their estimation, a very insignificant person.

Dénis gives the following quotation from an unpublished voyage in Brazil, by M. de Tollenare, in which he distinguishes between the vanity of the Parisian and the Brazilian:—"The vanity of a Frenchman," says he, "peeps out in his conversation, by his pretensions to wit; if he be rich, he wishes every body to believe that he owes his wealth to his talents, although it is more frequently due to chance. His luxury will be the expression, more or less happy, of good taste. He refines upon the conveniences of life; follows the most absurd fluctuations of fashion; pretends to an admiration of the fine arts, while he admits within the circle of his friends only those who manage flattery with address.

"The Brazilian, infected with the sin of vanity, is self-satisfied, and does not care to conceal it; whatever may be the source of his wealth, he never considers the means by which he obtained it as any reproach; he never tries to disguise them; let him be but rich, and he is insensible to shame; when he is poor, he is perpetually exhibiting '*maladresse*.' His luxury is rude and solid; his admiration rests upon substantial ornaments and massive jewels. Both men and women bestow much attention on their toilet, when they appear in public; 'Madame' repairs to mass, attended by a numerous retinue of slaves, richly attired; and on her return, she perhaps squats upon a mat, to eat, with her fingers, dry fish and mandioc!"

The planters of Brazil are very similar to those of other countries. The possession of an engenho (sugar plantation and manufactory) establishes, among the cultivators, a sort of nobility. A *senhor d'engenho* is always spoken of with respect; and to attain this rank is the object of every one. When the senhor is in the company of his inferiors, or even of his equals, he is reserved, holds his head high, and speaks in that loud and commanding tone, that betokens the man accustomed to be obeyed.

The mulattoes (commonly called Pardos, signifying of a brown colour, for the term mulatto is regarded as a reproach in Brazil) are the offspring of Europeans and negroes. They show considerable ingenuity and perseverance in the mechanical arts, and are said to display a taste for painting.

There can be no doubt of the effectual influence of the mulatto in the political affairs of the country: a physical organisation essentially energetic, and which fits him to bear up against the heat of the climate, his activity and his intelligence, point him out as a person likely to make a conspicuous figure in a revolution, if not to organise a movement.

The Creoles are those born in Brazil of African parents; the Mamlucos are the offspring of whites and Indians; the Curibocos, of negroes and Indians; and the Cubros of mulattoes and negroes. The African negroes form, as has been seen, a very large proportion of the population. Their condition, though not equal to that of the slaves in Buenos Ayres and the adjacent countries, is upon a far better footing than in many other colonies. It varies, however, in the different provinces, and is best in those situated in the interior. In the provinces formerly inhabited by the less warlike races among the Indians, who formed early alliances with Europeans, the introduction of negroes has been less necessary. Such, for example, is the case with Rio Grande do Sul, San Paulo, and the countries traversed by the Amazon. The negro population is most numerous in the provinces devoted to the raising of sugar and coffee, as Bahia and Rio Janeiro; and in these probably they have the greatest facilities for obtaining their liberty. The negroes brought to Brazil belong generally to Angola, Anguiz, Benguela, Cabinda, Mozambique, and Congo. Since the recent attempts to repress the trade, Koromantines, or negroes from the Gold Coast, who are thought to possess a greater degree of intelligence, are not so frequently met with. There are three modes by which the negroes of Brazil obtain their liberty: it may be granted them by their master while living, or he may bequeath it to them by his will, or they may obtain it by ransom.

The Brazilians divide the Indian races into "Indios mansos," civilised or converted Indians speaking the Portuguese language, and Tapuios or Gentios, or wild hordes.

The general opinion has been that the whole American race, from the polar regions to the Straits of Magellan, offered no distinctive traits, and that it was almost impossible to subdivide it. But a closer inspection has shown that there is as great a difference amongst them as among any of the other great varieties of the human race.

With few exceptions, the natives of Brazil appear to belong to the great family of the Guaranis, the differences in the tribes resulting from the different situations in which they have been placed; and originating partly in physical and partly in moral and accidental circumstances.

Speaking generally, the natives of Brazil are of a bright-yellow copper colour; short, robust, and well made; hair black, lank, coarse, and deficient on the chin; face round; cheek-bones not particularly prominent; skin soft and shining; nose short, nostrils narrow; mouth middle sized; lips thin; eyes small, oblique, and elevated towards the exterior angle. They are in an extremely low state of civilisation; their industry being confined, in addition to the arts of hunting and fishing, and the gathering of wild fruits, to the culture of manioc and bananas. In some tribes clothes are wholly or all but wholly unknown; in others the women wear a scanty covering round their middle; and in others both sexes are partially clothed. The practice of painting the skin is universal; and some of them were, and, indeed, still are, in the habit of inserting wooden rings by way of ornament in the under lip. Almost all the tribes were anthropophagists, devouring the captives they had taken in war; but this horrid custom, if it did not entirely cease at the epoch of the conquest, has since nearly fallen into disuse; and M. D'Orbigny denies that the Guaranis ever ate their children and parents, as has been affirmed by some travellers. (*L'Homme Americain*, ii. p. 304.) They are in general grave and serious; but they are notwithstanding fond of feasts and pastimes; and, like the other Indians, are fond, to excess, of spirituous liquors. In some tribes they admit of a plurality of wives; and the men, engaged in chace or in war, or sunk in apathy and idleness, devolve on the women the principal care of the domestic concerns. It is doubtful whether some of the more barbarous tribes have any idea of a Supreme Being; but they mostly all believe in the existence of malignant demons, whom they are anxious to conciliate. Among the tribe called Tupinambas, the chief was at the same time elective and hereditary; that is, a preference was generally given to the son as his father's successor, though the custom does not appear to have been immutable. Montaigne, on meeting an Indian chief at Havre, inquired, through an interpreter, what was his right among his tribe; upon which the latter replied, "It is that of marching foremost to battle;" and this might be said to express succinctly the extent of power assigned to him by his people. The Tupinambas chiefly inhabit the coast from the river Camama to the San Francisco. The Corvados, formerly very numerous, are now reduced to a number comparatively insignificant. They dwell chiefly on the banks of the Rio Xipotó, in Minas Geraes. They have one trait that distinguishes them from most other Indian tribes, *i.e.* they bury their dead. The Corvados, it appears, have lost much of their primitive ferocity, and with it also much of their former courage and intelligence.

The Cafusos, a mixture of Indians and negroes, are a very singular race. What gives them a peculiarly striking appearance, is the excessively long hair of the head, which, especially at the end, is half curled, and rises almost perpendicularly from the forehead to the height of a foot or a foot and a half; thus forming a prodigious and very ugly kind of peruke. (*Spix and Martius*, i. 324.)

The Puris, at the commencement of the present century, were very troublesome enemies to the Brazilians. A great many fazendos have been from time

to time destroyed by them. The Rio Doce, the S. banks of the Parahyba, San Fidelis, and the country watered by the Rio Pomba, in Minas, are the chief points exposed to their incursions. This race is more implacable than any of the Indian races of Brazil.

The Botocudos, descended from the Aymores, occupy at present the territory lying between the Rio Doce and the Rio Pardo. They inhabit the recesses of the forests; are little addicted to agriculture; and are exceedingly fierce. The name given to them by the Portuguese is derived from patoque or botoque (literally the bung of a cask), from the circular ornament they wear in their ears and lips.

The estimates that have been formed of the number of Indians in Brazil differ in the most extraordinary manner. Thus, they were estimated by Humboldt to amount, in 1819, to 259,400 (*Voyage aux Régions Equinoxales, &c.*, ix. 179.; xi. 164.); whereas they have since been computed by Veloso de Oliveira at 800,000, and by the Viscount de Santarem at 1,500,000! (*D'Orbigny, L'Homme Americain*, ii. 291.) Though probably too low, we have little doubt that Humboldt's estimate is much nearer the mark than either of the others.

Literature, &c. — It was not till 1808 that a printing press was introduced into Brazil, at Rio, by John VI., on his arrival from Portugal. A newspaper was immediately established, and it is a curious fact, that only 40 years ago there should not have been a single journal in a country where more than 40 periodical publications are now regularly issued.

The first work of importance published in Brazil did not, however, appear until 1817. It was the *Corografia Brasilica, ou Relaçao historico geografico do Reino do Brazil*, by Manoel Ayres de Cazal, printed at Rio, in 2 vols. 4to. The work of Henderson, "A History of the Brazils," 4to. Lond. 1821, is almost wholly translated from the above. The few works written by Brazilians prior to the commencement of printing in Brazil were printed at Lisbon.

Minas Geraes has produced a poet in the person of Gonzaga, whose songs are extremely popular. His poems, chiefly lyrical, under the title of "Marilia de Dirceo," por T. A. G., were published at Bahia, in three parts, and have gone through numerous editions.

Notwithstanding Pedro I. founded two universities, literature appears to make little progress. The journals would seem to engross all the literary talent of the country, though none of them can be said to be conducted with ability, or to have attained an extensive circulation. The Mercantile Gazette, at the head of the periodical press, numbers about 2,000 subscribers. An imitation of the "Penny Magazine" has been attempted at Rio, but the projectors having fixed the annual subscription at 50 francs per annum, its success has not been very great. The three journals which have the largest number of subscribers are the "Aurora," the "Official Courier," and the above-mentioned "Commercial Gazette of Rio de Janeiro." A "Journal of the Parliamentary Debates" was attempted, but did not pay the cost of printing. In the year 1836, 35 journals were published in Brazil, of which 5 were of a literary and scientific tendency; 4 of the latter being printed in Rio itself. None of the journals devote much space to criticism, and they are all very inferior, with the exception, perhaps, of the "Quarterly Journal," published at Rio by the Brazilian Historical and Geographical Institute, founded in 1838.

The Royal Library at Rio consists principally of works carried away from the Royal Library at Lisbon by John VI. It is, under suitable regulations, open to all classes; but, notwithstanding several recent additions, it is deficient in modern works.

It is but seldom that any work is a source of profit to its publisher, with the exception of a journal; it is the custom here for the writer to pay for the insertion of his articles in the journals, instead of receiving any remuneration for them.

It is a difficult matter to find compositors in Brazil, and when found, they will only hire themselves for the lightest possible works. They are generally young mulattoes. Printers usually employ their slaves.

There are some good French booksellers at Rio, and French is, in fact, the learned and fashionable language of the city, and generally also of the country. A knowledge of it is required on the part of all entrants into the higher class of public institutions, and it is very generally read. Unluckily, however, the worst rather than the best class of French works would seem to be in the greatest demand. (*Kidder*, i. 115.)

Education. — The greatest want of Brazil at the present moment, next to that of population, seems to be that of good elementary instruction. Hitherto most schools established in the country have been under the control of ecclesiastics, alike bigoted and uninstructed. The increase of such schools would be an evil rather than a good. Luckily, however, the influence of the clergy is every day becoming less powerful; and several respectable academies have been opened in most of the large towns by parties not under their guidance. But, speaking generally, there are as yet no means in Brazil by which even the children of the middle classes can acquire any thing like a really good and useful education. Everywhere, indeed, except in the great towns, the population is too thin and too much dispersed to admit of schools being established. According to a very recent statement it appears that in the prov. of Goyaz, more than twice as extensive as the U. Kingdom, there were only 18 primary schools, or 16 for boys and 2 for girls. (*Kidder*, ii. 329.) The truth is, that till population becomes denser, education must necessarily be extremely deficient. At present the civilisation of Brazil is confined within a narrow strip along the coast. All beyond this is involved in the grossest barbarism.

Income and Expenditure. — At an average of the years 1832-33, 1833-34, and 1834-35, the income and expenditure of Brazil were as follows: —

	Income.	Expenditure.
1832-33	- 12,332,395 dollars	12,602,975 dollars
1833-34	- 12,978,029	12,016,691
1834-35	- 14,819,551	12,908,250

The budget for the year ending the 30th of June, 1839, was fixed as follows: —

Ministry of the interior	- -	1,527,072 dollars
Do.	justice - - -	809,945
Do.	foreign affairs -	163,440
Do.	marine - - -	2,131,030
Do.	war - - -	3,113,224
Do.	finance - - -	5,877,985
	Total - - -	13,622,696

The revenue for the same year was estimated by the minister at 13,663,289 dollars. It principally arose out of the customs duty of 15 (now 20) per cent. on imports, and 2 per cent. on goods exported, including transhipments, &c.; from tenths and duties on the sale of lands and houses; the mining duties, and the revenue of the diamond district; 15 per cent. on the export of hides from the Rio Grande; and a variety of other items. In 1835-36, the customs duty of 15 per cent. on imports produced, exclusive of the provinces of Rio Grande and Para, 6,231,480 dollars. The total debt of Brazil may be estimated at 14,000,000*l*.

Government and Administration of Justice. — Prior to 1808, Brazil was merely a Portuguese colony, but on the arrival of John VI., it was raised to a kingdom. In Aug. 1822, Brazil was forcibly separated from the mother country, and erected into an empire, and Don Pedro declared emperor. In 1824, the present constitution was drawn up, and on the 20th March, in the same year, was accepted by the emperor, who, conjointly with the two chambers, took the oath of allegiance to it. The spirit of the constitution is monarchical, and its principal heads are as follows: —

"The empire of Brazil is free and independent. Its government is monarchical, hereditary, constitutional, and representative. The reigning dynasty is that of Don Pedro. The Roman Catholic is the established religion; all other religions are tolerated, but their places of worship can receive no ecclesiastical marks of distinction. The political powers recognised by the Brazilian constitution are four in number: — the legislative or two chambers, the moderating or the emperor, the executive, and the judiciary. The emperor and the general assembly represent the Brazilian nation; all their power flows from the nation. In the general assembly resides the legislative power, subject to the sanction of the emperor. The general assembly is composed of two chambers, the chamber of deputies and the senate. The senators are elected for life, and chosen by the provinces. The chamber of deputies is elective and temporary. To the chamber of deputies alone belongs the right, — 1st, of imposing taxes, and regulating all matters of finance; 2dly, entire power as to the state of the army and navy; 3dly, of choosing a new dynasty in case of the failure of issue of the regnant. The proceedings of each chamber are public, excepting where the exigency of the state demands their being secret. No senator or deputy can be arrested during the continuance of his mandamus. It is not lawful to be at the same time member of both chambers. The power of judging the individual offences of members of the royal family, ministers, councillors of state, senators, and deputies, belongs solely and absolutely to the senate. The executive power resides with the emperor, which he exercises by means of responsible ministers. The emperor calls together the general assembly, declares war, and concludes peace; but whenever the safety of the state allows, he has recourse to the advice of the general assembly. The ministers are

responsible, and are impeachable on the ground of treason; embezzlement of the public money, or property; of corruption, or extortion, or abuse of power, or violation of the freedom, safety, and property of the citizen. Any elector is eligible for a deputy, provided he derive from his property, trade, or employment, a specified nett revenue.

The number of senators is 54, and of deputies 548. Each senator and deputy receives a certain amount of salary. Parliaments are quartennial, and each meeting lasts 4 months. The executive power is delegated to 6 ministers, under whose control are placed all matters connected with the interior, foreign affairs, justice, marine, war, and finance.

Brazil is divided into 18 provinces for the purposes of district government, and their affairs are administered by as many presidents, who are styled "presidentes de provincias."

The diplomatic body is composed of two envoys-extraordinary, one resident at the court of France, the other at that of England; there is also a resident in Austria, and a chargé d'affaires in Portugal, Spain, Belgium, the Hanseatic republics, Prussia, Rome, Naples, Florence, &c. In America there are three; viz. in the U. States, at Buenos Ayres, and at Monte Video. The secretaries and attachés amount to 18

The Brazilian aristocracy, in 1844, was composed as follows: — 20 marquisses, 7 counts, 29 viscounts, and 32 barons. Titles of nobility are not hereditary.

Brazil was recognised as an independent empire by Portugal, 7th Sept. 1825, and subsequently by the other cabinets of Europe. Don Pedro II., the present emperor, was born 2d Dec., 1825.

As regards legislation, a vast deal remains to be done in Brazil. Where a statute-book is wanting, the administration of justice must be fluctuating and uncertain. The criminal code is a curious memorial of the turbulent times of 1830, when it was compiled, state offences being treated in it with the greatest indulgence. In consequence, government found it imperatively necessary, on the increase of crime in the provinces, and the progress of disaffection in the disturbed districts of Para, Rio Grande do Sul, and San Pedro, to have recourse to far stronger punishments than were warranted by the letter of the law.

As the prosecution of criminals is left to the parties who have been injured, it not unfrequently happens that crime goes altogether unpunished, parties being unwilling to undergo the expense and trouble of prosecution. The consequence of this system of administration of the law is, that private revenge very often supplies the place of public justice. Mathison (p. 138.) mentions an authenticated instance of an individual who had committed no less than four assassinations in one year, from motives of private revenge, and in every instance he escaped without being called to any account.

Religion. — The established religion of Brazil is the Roman Catholic; but all other religions are tolerated, and there is not now, whatever there may have been formerly, much intolerance among the Brazilian Catholics, except among the lowest and least instructed classes. Indeed the others are generally distinguished by a want of zeal in religious matters; and are more occupied with the outward ceremonies of religion than with its spirit or practical influence. There is, of course, great differences among the clergy. Some of them possess the virtues and acquirements that are suitable to their station; but such is not generally the case; the majority being ignorant, bigoted, and not unfrequently immoral. A reform of the priesthood would do more than anything else to improve the national character and morals.

Ecclesiastical affairs are under the direction of an archbishop, at Bahia, (originally a bishopric, being the first founded in Brazil, in 1522, and raised to the archiepiscopal rank in 1667;) 6 bishops; viz., at Rio, Pernambuco, Maranhao, Para, Mariana, and San Paulo; and 2 "prelacias," with episcopal powers; viz., Goyaz, and Cuyaba. The church of Brazil has been for some time engaged in a dispute with Rome as to the appointment of the bishops, the pope claiming the sovereign right of nomination, which the church rejects.

Monasteries and nunneries are, or rather were, numerous in many parts of Brazil. The saints' days are said to be celebrated in a manner as splendid as at Rome. A recent writer (Dénis, p. 132.) observes that neither the carnival at Venice, nor the declining masquerades of Paris, can convey an exact idea of the tumult and extreme absurdities which prevail during the days of the "*intrudo*," or carnival, not only at Rio, but throughout the cities of Brazil. Luckily, however, measures have been taken for lessening the number of monasteries and nunneries. The revenues of many of them have reverted to the crown, and their buildings have been applied to other and more useful purposes.

Army and Navy. — The land forces amount to from 60,000 to 65,000 men; of whom 25,000 are regular troops. The latter have received considerable additions of late years. Previously they did not exceed 8,000.

The remainder of the military force consists of regular and local militia: the former may be despatched on foreign service, while he latter does not leave the place of their abode.

The local militia, in which every man from 16 to 60, who is not already enrolled in the regular militia or the troops of the line, may be called upon to serve, constitutes an important defence, and is chiefly employed in maintaining internal order One great use may be said to be that of keeping up a certain military order among the people. Its chief officers are the "capitao mors," or colonels.

The navy numbers 1 ship of the line, 2 frigates, 5 corvettes, 7 schooners, 6 steamers, &c.; but they are all in a very inefficient state.

Discovery and Historical Sketch. — It is generally believed that the first discovery of Brazil was made on the 26th of January, 1500, by the Spaniards, under Vincente Yanez Pinçon, a native of Palos, and one of the companions of Columbus. He is said to have touched at Cape St. Augustin, and to have subsequently coasted along the shore as far as the river Amazon, and thence to the mouth of the Orinoco. His discovery does not appear to have been attended by any important results, for he made no settlement, but merely claimed the country for Spain.

In the same year, Pedro Alvarez Cabral was appointed admiral of a large fleet sent out by Emanuel, king of Portugal, to follow up the successful voyage of Vasco de Gama in the east. Adverse winds drove the expedition so far W. that, on the 25th of April, Cabral fell in with the coast of Brazil, which he supposed at first to be an island; and on Good Friday the fleet cast anchor in a commodious harbour, to which he gave the name of Porto Seguro. Having taken possession of the country for the crown of Portugal, by erecting a cross, and giving it the name of Tierra de Santa Cruz, Cabral proceeded on his voyage, taking care, however, in the first place, to send information of his discovery to his sovereign. Soon after this intelligence reached Portugal, Emanuel despatched a small squadron to explore the country, under the command of the famous Amerigo Vespucci, who had been invited from Seville for that purpose, in 1502, and who made a second voyage in a subsequent year. In 1504, he again returned to Europe, bringing with him a cargo of Brazil wood, &c.

It was not until 1508 that a third voyage of discovery was undertaken to Brazil, as the advantages which had accrued on the former voyages did not appear to have answered the expectations of the projectors. Amerigo Vespucci was then despatched by the king of Spain, to whose service he had returned, to take possession of the country. But this produced a remonstrance from Portugal; and a dispute having arisen amongst some of the leaders of the expedition, it returned to Spain without effecting any thing of importance. In 1515, another expedition was fitted out from Spain, the command of which was assigned to Juan Diaz de Solis, with the ostensible purpose of finding a passage to the great Pacific Ocean. To this navigator is supposed to belong the honour of having discovered the harbour of Rio Janeiro, on the 1st of Jan., 1516, though the priority, in this respect, has been disputed by the Portuguese admiral, Martin Affonso de Souza. On the return of the expedition to Spain, the Portuguese government claimed the cargoes, and again remonstrated on this interference on the part of Spain.

In the reign of Joan III., the coast was divided into captaincies, many of which extended 50 leagues. It is needless to follow step by step the rising fortunes of the Brazilian territory. Various towns sprung up along the shore, which were subject to the vicissitudes that then usually awaited newly founded colonies. They were successively taken and plundered by the French, Dutch, English, &c., who, if not expelled, usually contented themselves with a short possession, and abandoned them, after frequently committing the most barbarous atrocities. Notwithstanding these calamities, the colony continued to increase in prosperity and importance under the superintendence of the Portuguese government. But it experienced a severe check on the annexation of Portugal to the crown of Spain in 1588, during the reign of Philip II. As the mines that had been discovered, down to that period, yielded less wealth than those of the Spanish possessions in S. America, Brazil did not receive much favour from that monarch. The Dutch took advantage of this indifference on the part of Spain; and it was not indeed until they had made considerable inroads, that an expedition was fitted out, in 1640, to expel them from the territory. About this period, the house of Braganza was restored to the throne of Portugal. After a long and desperate struggle, the

Dutch were compelled to evacuate Brazil in 1654. Henceforward it continued in the possession of Portugal, but the latter country being in a very abject impoverished state, instead of rendering assistance to its colony, was compelled to rest its principal hopes of being able to maintain an independent existence on the wealth and resources of Brazil, which it subjected to all the galling and vexatious restraints of the old colonial system.

In 1808 a new æra began in Brazil. The French having invaded Portugal in the course of the previous year, the prince regent, John VI., and his court, accompanied by a large body of emigrants, set sail for Brazil, where they arrived on the 25th of Jan., 1808. Brazil immediately ceased to be treated as a colony. In the course of the same year, her ports were thrown open to all friendly and neutral nations; and by a decree dated the 15th of Nov., 1814, all nations were allowed to trade freely with them.

The revolution in Portugal in 1820 was very speedily followed by a revolutionary movement of the same description in Pernambuco; and to restore tranquillity, and anticipate the further progress of revolution, the government, in 1821, proclaimed the adoption of the Portuguese constitution. Soon after this, the king having left Brazil for Portugal, a struggle commenced between the Portuguese, who wished to recover their former ascendancy over Brazil, and the Brazilians, who were resolved to preserve their newly acquired liberties, which ended in the complete separation of all connection, other than that subsisting between independent states, between the two countries. The government of Brazil having been entrusted to the crown prince, Don Pedro, he refused to admit the troops sent out by Portugal to support her authority, or to obey the instructions of the king his father. In the following year, 1822, Brazil was declared to be a free and independent state, and Don Pedro assumed the title of emperor. After several stormy debates, the project of a constitution (see *antè*), submitted by the emperor, was accepted; but the disputes between the emperor and the chamber of deputies having continued, the former abdicated the throne in favour of his son, a minor, in 1831, and, singular as it may seem, the rights of the latter have hitherto been preserved; and some attempts at insurrection by the republican party have been suppressed without much difficulty, and internal tranquillity has been pretty well maintained.

Considering the lengthened period during which Brazil has been colonised; its vast extent and fertility; the variety of its productions, and its favourable situation for commerce, its progress in the accumulation of population and wealth has been extremely slow. This apparent anomaly may, however, be easily explained. The slow progress of Brazil, like that of the contiguous *ci-devant* Spanish colonies, is entirely owing to the vicious principles on which it was governed by the mother country; to the rigid exclusion of foreigners from the country; the oppressive restrictions laid on the trade and industry of the colonists; and more than all the rest, to the ignorance of the Portuguese, and their inferiority, in respect of science and art, to most other nations of Europe. Portugal could bequeath nothing to her colonies but pride, superstition, and intolerance. But since the downfal of the old colonial system, consequent on the emigration of the court to Brazil, the foundations of a new and better order of things have been laid. *Novus sæclorum nascitur ordo.* The settlement of foreigners in Brazil, and the unfettered intercourse she now carries on with all the most civilised countries of the world, have already had the best effects. And though it will require a lengthened period to counteract the joint influence of ignorance, slavery, and a debasing superstition, Brazil is rising, not merely in the scale of wealth and population, but also in that of civilisation.

BRAZZA, an island of the Adriatic Sea, near the coast of Dalmatia, dependent on the circle of Spalatro. It is about 24 m. long, by from 5 to 7 broad, and contains 20 villages, with 15,000 inhabitants. It is very mountainous and rocky: in the most elevated parts there are large tracts quite stony, and hardly fit to bear the wildest plants. Great labour and expense are necessary to bring the ground to a fit state for tillage; yet the inhabitants go on progressively increasing their cultivated land, and consequently their vintage, and diminishing their woods and cattle. Its wine is accounted the best in Dalmatia; the other vegetable productions are oil, figs, almonds, and saffron. The corn crop is extremely scanty, scarcely affording subsistence to the inhabitants for three months in the year; hence they are obliged to import to a large extent from the mainland. The stony nature of the soil, and the scarcity of fresh water, subject the island to frequent droughts. Brazza was famous in ancient times for its kids, which still continue in their former perfection. The pastures here give to the flesh not only of kids, but of lambs, a particular delicacy of taste; the milk too of this island is far superior to that of the neighbouring countries, so that its cheese is in great repute in Dalmatia, and wherever it is known. Bees and silk are cultivated with some success; and the berries of the lentisk furnish the peasants with oil during a scarcity of olives. This island belonged formerly to the republic of Venice, and was ceded to Austria at the peace of Campo Formio.

BRECHIN, a royal burgh of Scotland, co. Forfar, on a sloping bank on the left side of the S. Esk, 7¾ m. W. from its junction with the sea at Montrose. Pop. of the town, 3,951; of the town and par., 7,560. The main street, which runs nearly N. and S., is about a mile in length. Some portions of the town are very steep, particularly about the Cross. It was formerly walled, and was also a bishop's see: the bishopric was founded by David I. about the middle of the 12th century; and the portion of the cathedral which now forms the parish church still remains. It was originally a stately Gothic structure, but its architectural beauty and symmetry have been defaced by the bad taste displayed in modern repairs. It is surmounted by a square steeple 120 ft. high. In addition to the parish church, which is collegiate, there are in the town no fewer than four Presbyterian dissenting chapels, and one Episcopal chapel; there is also a new place of worship, recently built, in connection with the established church. There are various schools in Brechin, all of them conducted on the best principles. In the churchyard, near the cathedral, is one of those round towers, of which there is only another in Scotland, at Abernethy, and which, it is supposed, were built by the Picts, but for what purpose is unknown. It is 108 ft. high, is surmounted by a conical roof of grey slate, and has no staircase, either without or within. In another part of the town is an ancient hospital, called the *Maison Dieu*, now used as a stable; but certain funds which belonged to it afford weekly allowances to poor inhab. being the widows or children of burgesses. The Red Friars seem to have had a monastery here, but all traces of it have disappeared. (*Keith's Scot. Bishops*, edit. 1824, p. 397.) But, interesting and venerable as Brechin is for its antiquities and its historical and ecclesiastical name, it is no less important now, though in a very different department, — that of manufactures. Its staple manufacture is linen, partly bleached, (hence the number of bleaching grounds in the immediate vicinity,) and Osnaburghs, sackcloth, coffee and cotton bagging, &c. "The particular branches of manufacture," to quote from the *New Statistical Account* (No. i. § *Brechin*), "are heckling, spinning, weaving, and bleaching. There may be employed in heckling about 30 men and women; in spinning, 200; in weaving, from 1,000 to 1,500; in bleaching, from 40 to 50. Besides the above branches of manufacture, two distilleries for spirits, three nurseries, and three lime-works, have been for some time in full operation in the immediate neighbourhood of the town." Brechin unites with Montrose, Forfar, Bervie, and Arbroath in sending a mem. to the H. of C. Registered electors, in 1849-50, 172. Of the eminent men which this place has produced, the late Dr. John Gillies, author of a valuable History of Greece, a translation of the Politics of Aristotle, and royal historiographer for Scotland, deserves special mention.

Brechin Castle, which has been for many centuries the residence of the Maules of Panmure, stands on a precipice overlooking the Esk, and is separated from the town by a deep ravine. This castle was formerly a fortress. In 1303, it withstood a siege of 20 days by the English under Edward I.; and surrendered only when Sir Thomas Maule, its brave commander, was killed.

BRECON, or BRECKNOCK, an inland co. of S. Wales, having N. the cos. of Cardigan and Radnor; W. Cardigan and Caermarthen: S. Glamorgan and Monmouth; and E. the latter and Hereford. It is about 35 m. in length, by about 30 m. in breadth, and contains 482,560 acres. It is pervaded by two principal mountain chains, which, with their offsets, occupy a large portion of the surface. The highest summits are the beacons of Brecknock, Capellante, and Cradle mountain; respectively 2,862, 2,394, and 2,545 ft. above the level of the sea. There are, however, a number of beautiful and fertile valleys. The Wye skirts the co. for a considerable distance on the N.W., and it is traversed by the Usk, Taaf, and other lesser streams. Climate rather severe and humid. Though a good deal improved, agriculture is still in a very backward state; and no proper rotation of crops is observed. Oats and barley are the principal objects of attention, but a good deal of wheat is also raised. Turnips are more extensively cultivated than formerly, and the stock of cattle and sheep is also improved. Farms mostly small, and generally occupied by tenants at will. Average rent of land in 1843, 5*s*. 9*d*. an acre. Manufactures unimportant, consisting principally of woollen cloth, the produce of domestic industry. There are iron-works on the S. confines of the co., adjacent to those of Merthyr Tydvil, Hirwain, and Rumney, which employed in 1831 470 men. Principal towns

Brecon, Crickhowell, and Builth. The Welsh language, though still spoken in different parts of the co., is falling rapidly into disuse. Brecon is divided into 6 hund. and 66 par. In 1841 it had 11,105 inhab. houses, and 55,603 inhab. It returns 2 mem. to the H. of C., 1 for the co. and 1 for the bor. of Brecon. Registered electors for co., 1849-50, 2,866. Expenditure for the relief of the poor in 1847, 20,065*l.*

Brecon or Brecknock, a bor. and town of S. Wales, cap. of the above co., at the confluence of the Honddû and Tarrel with the Usk; 144 m. W. by N. London. Pop., 1821, 4,193; 1851, 6,070: houses at the latter date, 1,236. It is an ancient, irregularly built town, on a very beautiful and picturesque site: there are three principal streets, which diverge from the high street, and contain many well-built houses: the meanest buildings are towards the approaches, on either side; which, however, on the line of the chief thoroughfare, have been much widened and improved within a recent period: it is paved, and lighted with gas. There are four churches — St. John's, originally attached to the priory; St. Mary's, a chapel of ease (both Gothic, and nearly rebuilt in Henry VIII.'s reign); St. David's, built soon after the Conquest, and one of the oldest in the country; and Christ Church, a collegiate church, established by Henry VIII.: it is extra-parochial, and has a grammar-school attached to it. There is an endowed free school for 50 boys, and three or four small charities (the principal of which amounts to 36*l.* a year, for apprenticing poor children), and a borough and county hall, rebuilt in 1770, a good spacious building, in the high street, with the market place under it. There is a promenade along the Usk, under the old town walls, which commands a noble range of mountain scenery; and a more retired one through the priory woods. The Brecknock and Abergavenny Canal (35 m. long) commences at this town, and joins the Monmouthshire Canal (18 m. long), which last joins the Usk near Newport. Regular passage and trading boats ply on the canal. Weekly markets are held on Friday for cattle; Saturday and Wednesday for general provisions; and 5 annual fairs, for stock and agricultural produce (each preceded by a leather fair), 1st Wednesday in March, 4th May, 5th July, 9th September, and 16th November: those of May and November are also statute fairs, for hiring servants. There are no manufactures; and its trade chiefly consists in the supply of articles of general consumption to the neighbourhood, which comprises the greater part of the co. The limits of the parl. borough comprise the par. of St. David's, St. John's, St. Mary's; the Castle, and Christ Church precincts, and the ward of Trecastle, which is 10 m. off, and only connected with it for election purposes. Its present municipal limits are restricted to about one third of the former, and comprise only the town and some small portions immediately contiguous. It has 4 aldermen and 12 councillors. Previously to the Municipal Reform Act, courts of petty and quarter sessions of the borough were held, but the business was of trifling extent: there was also a court of record, for the recovery of debts, held weekly, on Mondays and Thursdays, and much resorted to. This and the petty sessions are still held. The assizes and quarter sessions for the co. are held in Brecon. Brecon has returned 1 mem. to the H. of C. since the reign of Mary. Previously to the Reform Act the privilege vested in 11 burgesses. There are 356 qualifying tenements of 10*l.* and upwards; registered electors in 1849-50, 345. Brecon is the chief polling town of the co. The castle of Brecon was built in 1094, from which period the town also dates its origin; many Norman families then settled in the co., whose descendants still remain. It was surrounded by strong walls: these and the castle were destroyed in the last civil war, by the inhabitants, to prevent a siege, or being saddled with the maintenance of a garrison.

BREDA, a fortified town of the kingdom of Holland, prov. Brabant, cap. arrond. and cant., on the Merk, 24 m. W.S.W. Bois-le-Duc, and 30 m. N.N.E. Antwerp. Pop. 13,500. It is one of the strongest places in the kingdom, being regularly fortified and defended by a citadel rebuilt by William III. king of England; its position, in the middle of a marsh that may be laid under water, contributes materially to its strength. It is well built, with broad and well-paved streets; has 4 squares, a fine quay, several canals, an arsenal, town-hall, 2 Protestant and 4 Catholic churches, an orphan hospital, &c. The principal Protestant church has a spire 362 ft. in height. The ramparts are planted with trees, and afford fine promenades. It is the seat of tribunals of primary jurisdiction and of commerce; and has some manufactures of woollen goods, linen, hats, &c., with breweries and tanneries.

Breda was taken from the Spaniards by Prince Maurice, in 1590, by means of a stratagem suggested by the master of a boat who sometimes supplied the garrison with fuel. With singular address, he contrived to introduce 70 chosen soldiers into the town, under a cargo of turf; who, having attacked the garrison in the night, and secured the gates, their comrades came to their assistance, and gained possession of the town. It was retaken by the Spaniards, under the Marquis of Spinola, in 1625; but was finally ceded to Holland by the treaty of Westphalia, in 1648. (*Dict. Géographique, &c.; Watson's Phillip II.*, iii. 158.)

BRE'DE (La), a village of France, dép. Gironde, cap. cant., near Bordeaux. Pop. 1,531.

This village would be unworthy notice in a work of this sort, were it not that in its environs is the *Château de la Bréde*, where the illustrious author of the *Esprit des Lois* was born, and where he composed the greater part of his immortal works. It is a large gloomy-looking building, in the middle of extensive plains and meadows, and is surrounded by a deep ditch filled with water, over which is a drawbridge. In the chamber used by Montesquieu, the furniture has been carefully preserved as in his time: it consists of a plain bed, a few easy chairs of a Gothic shape, and some family pictures; the room is wainscotted, and from the window there is a fine view over the surrounding country. Montesquieu was much attached to this retreat. "Je puis dire," says he, "que la Bréde est un des lieux aussi agréables qu'il y ait en France; au château près, la nature s'y trouve en robe de chambre, et pour ainsi dire au lever du lit." (*Hugo*, art. *Gironde*.)

BREMEN, one of the three free German Hanseatic cities, on the Weser, by which it is intersected, 60 m. S. W. Hamburg, and about 37 m. direct from Bremerhaven, at the mouth of the Weser: lat. 53° 4′ 45″ N., long. 8° 48′ 3″ E. Pop., in 1849, 53,478. The larger portion of the city, called the *Altstadt*, or old town, lies on the right, and the *Neustadt*, or new town, on the left bank of the river. The streets in the latter are comparatively straight and broad, but those in the former are mostly narrow and crooked, and the houses being high, they have a gloomy appearance. An island in the river is included within the city; the communication between its two great divisions being kept up by a bridge, which crosses this island. The ramparts by which the town was formerly surrounded, have been levelled, planted, and converted into fine gardens and promenades. It has 9 churches, of which the cathedral, built in 1160, is the principal: the church of St. Ausgarius has a spire 325 ft. in height. The new town-hall, formerly the archiepiscopal palace, is a building of the same elaborate character as the town halls in Bruges, and other cities of the Netherlands. There is also an old town-hall, built in 1405, beneath which are the famous wine cellars, containing vats filled with hock, said to be considerably more than 100 years old. It has, also, an exchange, with concert and ball-rooms; a museum, built in 1801, containing a public library, lecture, and reading-rooms, &c.; a theatre; a building called the *Schutting*, or place of meeting of the elder merchants (*Conventiculum Seniorum*); a weighing-house; a *pædagogium* (for scientific instruction), gymnasium, high school, school of commerce and navigation, school of design, &c.; 2 orphan asylums, and numerous other charitable institutions. Both sides the river are lined with handsome and convenient quays.

The manufactures of Bremen are pretty considerable. The principal are those for the preparation of snuff and cigars, which employ a great many hands. There are also many distilleries; numerous factories for weaving, and establishments for bleaching linen; with factories for the spinning of cotton; sugar refineries; tanneries, sail and canvass factories; soap and candle do.; cordage do.; oil works, &c. A considerable trade is also carried on in the building and fitting out of vessels.

The situation of Bremen renders her the principal emporium of Hanover, Brunswick, Hesse, and other countries traversed by the Weser. In consequence, she has an extensive and increasing trade. Vessels of large size stop at Bremerhaven, on the E. side of the river, where a new and excellent harbour has been formed on a piece of ground ceded, in 1827, by Hanover to Bremen. Vessels drawing from 13 to 14 ft. water ascend the river as far as Vegesack, 13 m. below Bremen; and vessels not drawing more than 7 ft. water come up to the city. The great articles of import are tobacco, coffee, sugar, and other colonial products; whale-oil, cotton, and cotton yarn, vegetable oil, cheese, butter, wine, tea, rice, iron, spices, dye-woods, &c.

Of the articles of export linens occupy by far the most prominent place; and next to them are snuff and cigars, with hams and bacon, oak bark, rags, bones, chicory, oil-cake, refined sugar, quills, soap, lead, vitriol, &c. We subjoin a list of the principal articles imported into Bremen in 1851 and 1852, specifying the quantity or (where that is not given) the value of each article. (See Table, top of following page.)

Emigration. — Bremen has become the most considerable port on the Continent for the shipment of emigrants to the United States, and other parts in America. In proof of this we subjoin an Account (for which see next page).

The total value of the imports into Bremen in 1851, by sea and land, amounted to 37,546,116 rix-doll., equal

Account of the Quantities of the principal Articles imported into Bremen in 1851 and 1852.

Imports.		1851.	1852.
Coffee	lbs.	13,512,559	12,300,942
Corn, barley	lasts	1,256	1,687
oats	—	2,445	2,637
rye	—	10,900	10,650
wheat	—	3,565	4,610
Cotton	lbs.	9,811,162	8,561,729
Dye wood, fustic	—	2,232,000	1,767,000
logwood	—	8,009,000	6,444,000
redwood	—	906,000	1,652,000
Herrings	barrels	5,031	4,294
Hides	—	89,411	110,231
Oil, cocoa nut	lbs.	150,000	200,000
linseed	—	753,000	840,000
olive	—	217,000	30,000
palm	—	134,000	180,000
rape	—	1,115,000	1,035,000
Rice	—	13,097,999	22,533,201
Sugar, raw	—	18,397,903	16,587,068
refined	—	514,249	340,901
Tar	barrels	5,843	4,298
Tea	pack.	4,315	9,142
Tobacco, West Indian and South American	lbs.	15,404,428	17,865,232
North American	—	16,760,436	40,197,927
stems	casks	7,581	7,501
cigars	numb.	6,625,000	10,569 000
Whalebone, Greenland	lbs.	1,700	5,600
South Sea and North Western	—	226,900	87,500
Wood, cedar	logs	8,201	10,284
lignum vitæ	lbs.	160,000	109,000
mahogany	logs	3,154	5,498
Total value of Imports - 37,546,116 r. doll.=£6,095,149.			

Account of the principal Exports from Bremen in 1851.

Articles.		Total.	Value in Rix Dollars.
Ashes, pearl and pot	lbs.	1,624,466	128,322
Butter	—	897,432	144,125
Coffee	—	13,700,516	1,8 2,832
Corn, rye	lasts	7,714	652,284
wheat	—	1,831	204,261
Cotton	lbs.	8,634,528	1,370,283
Flour, wheat	—	2,364,215	85,267
rye	—	865,369	20,615
Glass (mirror and window)	boxes	4,911	449,371
Glassware	—	- -	119,586
Hams	lbs.	847,644	95,377
Hides, dried	—	1,480,185	264,571
salted	—	665,545	60,232
Indigo	—	179,389	266,785
Iron bars	—	6,120,045	176,978
Manufactures, cotton	packs	16,531	2,531,342
woollen	—	5,955	2,322,013
general	—	7,561	1,271,491
Rice	lbs.	9,862,090	464,443
Tobacco leaf	—	35,297,944	5,347,337
manufactured	—	282,076	33,342
stems	—	9,231,226	372,593
cigars	nos.	327,624,000	2,376,742
Wine		- -	574,996
Total value of exports, - - rix doll. 32,868,947			
Equal at the average rate of exchange of 616 rix dollars per 100*l*. to - £5,335,868 0*s*. 4*d*.			

Account of the Numbers and Destination of the Emigrants that sailed from Bremen in 1851 and 1852.

Destination.	1851.		1852.	
	Ships.	Persons.	Ships.	Persons.
New York	10 steamers.	737	11 steamers.	781
Ditto	125 sail. vess.	19,005	178 sail. vess.	28,855
Baltimore	29 —	5,494	52 —	10,077
New Orleans	32 —	8,360	49 —	13,116
Philadelphia	10 —	716	11 —	1,028
Galveston	12 —	1,511	16 —	2,271
Callao	5 —	1,161		
Quebec	- -	- -	12 —	1,440
Elsewhere	13 —	509	9 —	983
Total	236	37,493	338	58,551

at the average rate of exchange (616 rix-doll. per 100*l*.) to 6,095,148*l*. 14*s*. The value of the exports by sea and land during the same year, was estimated at 32,868,947 rix-d. or 5,335,868*l*. In 1851 there belonged to Bremen 231 sea-going ships, some of them of large size, of the aggregate burden of 50,200 lasts=75,300 tons; and in addition to these a considerable number of Hanoverian and Oldenburg ships are employed in the trade of the port. The Bremen merchants carry on an extensive direct trade with the U. States, Cuba, Brazil, &c.

Bremen is possessed of a tract of territory lying round the city, on both sides the Weser, containing in all about 74 sq. m. with a pop., exclusive of that of the city, of 25,569; making the total pop. of the state, 79,047. The land, which is low and marshy, intersected by canals, and very fertile, is mostly appropriated to pasture. The inhab. of the city and country are all Protestants, with the exception of about 1,500 R. Catholics and a few Jews. The executive government is vested in a senate consisting of 4 burgomasters, 2 syndics, and 24 councillors; but the principal legislative authority is in the hands of the assembly of burgesses (*Wittheit*), composed of all resident citizens that pay a certain amount of taxes, without regard to their religion. The senate choose senators for life, from a list of candidates proposed by the burgesses. In 1852, the ordinary and extraordinary revenue of the republic amounted to 989,706 rix-dollars, and the ordinary and extraordinary expenditure to 978,277 rix-dollars, leaving a surplus of 11,429 rix-dollars. There is an export duty of $\frac{1}{6}$ per cent. *ad valorem*, on all goods shipped from, and an import duty of $\frac{3}{8}$ per cent. on all goods imported into, Bremen. The port and shipping charges are very moderate. Bremen contributes 485 men to the army of the Germanic confederation.

Bremen is said to have been founded in 788. She was long one of the leading towns of the Hanseatic league. In 1640, she was summoned to the diet, and allowed a seat and vote on the Rhenish bench, in the college of imperial cities. In 1648, at the treaty of Westphalia, the archbishopric to which Bremen had given name was secularised in favour of Sweden, who held it till 1712, when it was taken possession of by Denmark, by whom it was ceded to Hanover in 1731. Bremen acquired from the electors of Hanover a full recognition of its independence and other prerogatives, which had sometimes been disputed by the Swedes. In 1806, it was taken by the French; and from 1810 to 1813, it was the cap. of the department of the Mouths of the Weser. In 1815 it was restored by the congress of Vienna to its old franchises. (*Priv. information.*)

BRENTFORD, a town of England, co. Middlesex, hund. Ossulton and Elthorne, at the junction of the Brent with the Thames, 8 m. W. by S. London. Pop., 1851, 8,870: houses at same date, 1,750. It consists of one long indifferently-built street, on the great W. road from the metropolis: a modern stone bridge connects it with the S. bank of the Thames, and another (built in 1824, on the site of one very ancient) spans the Brent, which divides the town into Old and New Brentford; the former in the parish of Ealing, the latter a distinct parish. The church at Old Brentford is dependent on that of Ealing; that of New Brentford is a chapel of ease to Hanwell: both are modern structures. There are 4 dissenting chapels, 3 endowed free schools, and 2 national schools. A weekly market is held on Tuesdays, and annual fairs 17th May and 12th September. There are flour-mills, a distillery, and an iron-foundry, in the town; the malting business is also carried on to some extent. These employ many of the inhabitants; the market gardens of Ealing employ others; and the traffic arising from its thoroughfare is considerable, and occupies another portion. The Grand Junction Canal joins the Brent a little below Hanwell, and its communication is continued by it to the Thames, on which there are several wharfs, between the town and Kew Gardens. Brentford is usually considered the co. town, but it has no public hall, nor separate jurisdiction. There is a court of requests for debts under 40*s*. held during the summer half year in the town; during the other at Uxbridge: its jurisdiction extends over the hundreds of Elthorne and Spelthorne. It is the chief polling town, where the co. members are nominated.

BRESCIA (an. *Brixia*), a city of Austrian Italy, cap. prov. same name, on the Garza, and near the left bank of the Mella, at the foot of the Alps, on the margin of the great plain of Lombardy, 51 m. E. Milan, and 30 m. N.N.E. Cremona; lat. 45° 32′ 18″ N., long. 10° 13′ 34″ E. Pop. 35,000. It is surrounded by walls and ramparts, and has a castle on a hill on an eminence within the walls: the streets are broad and straight, and its numerous squares, public buildings, palaces and fountains, give it an air of grandeur and magnificence. It is the seat of a bishopric; and has a fine modern cathedral of white marble, begun in 1604, and finished only in 1825; an elegant modern episcopal palace, and many churches and convents, some of which are said to be ornamented with pictures by the masters of the Venetian school. The Palace of Justice (*Palazzo Publico*), built on the site of an ancient temple, is curious, as exhibiting that incongruous mixture of Gothic and Grecian architecture to be found in so many of the edifices of northern Italy: it has also a fine museum of antiquities, a large theatre, a *monte-de-pieta*, a public library, lyceum, gymnasium, an athenæum, or academy of science and belles-lettres, with numerous hospitals and eleemosynary establishments, and no fewer than 72 public fountains. It is distinguished by its industry and trade. Near it are large iron works, and the arms and cutlery of Brescia have been long reckoned the best in Italy: it has also fabrics of silk, flax, paper, &c. with numerous oil-mills, tanneries, &c. A fair commences annually on the 6th of August; and a large building is constructed outside for the accommodation of those frequenting the fair. Brescia has produced many eminent men, among whom may be specified Tartaglia, Mazzuchelli, Agoni, &c.

This city is very ancient. It is supposed to have been

the cap. of the *Cenomani*, and it subsequently became a Roman colony and *municipium*. It was sacked by Attila. Being declared by Otho I. a free city, it was governed for nearly 300 years by its own consuls; but being distracted by the contests of the Guelphs and Ghibellines, it placed itself, in 1426, under the Venetian government. It was taken by the French during the League of Cambray, and having revolted, was retaken by them by storm in 1512, when it was given up to military execution. On this occasion, the Chevalier Bayard, the knight *sans peur et sans reproche*, was severely wounded. It has also been repeatedly laid waste by the plague and smallpox; and was in part destroyed, in 1769, by the explosion of a powder magazine. During the ascendancy of Napoleon, it was the cap. of the dep. of Mella.

The chief interest of the town is derived from its antiquities. During excavations, begun in 1820 and continued till 1826, there was discovered a beautiful temple of white marble, adorned with columns of the Corinthian order: and under the pavement was found a bronze statue of Victory, between 5 and 6 ft. high, represented as a very fine specimen of art. (*Rampoldi; Conder's Italy*, ii. 60., &c.)

BRESLAU, the second city of the Prussian dominions, cap. prov. Silesia, and of a regency and circ. of same name, at the confluence of the small river Ohlau with the Oder: lat. 51° 6′ 30″ N. long. 17° 2′ 18″ E. Pop. (1846) 112,194, of whom about 70,000 were Protestants, 35,000 Catholics, and the remainder Jews, &c. It comprises the old and new towns, with various suburbs, some of them built on islands of the Oder, and united to the body of the town by numerous bridges. Streets in the old town mostly narrow; but those in the newer parts are broad, and the houses good; while the number and magnificence of the squares and public buildings give it an air of splendour. Among the latter may be specified the cathedral, founded in 1148; the church of St. Elizabeth, with a spire 364 ft. (*Murray*) in height; and several other churches; the *ci-devant* convent of the Augustines; the palace, now the government-house, built by Frederick the Great; the archiepiscopal palace, town-house, mint, Catholic gymnasium, theatre, Exchange Buildings, university, barracks, &c. A colossal statue in cast-iron of Marshal Blucher, by Rauch, was erected opposite to the Exchange Buildings in 1827, to commemorate the decisive and important victory gained by the Marshal and the Prussian landwehr under his command over the French under Macdonald, on the Katsbach, in 1813. The university was founded in 1702, and had in 1834, 920, and in 1837, 721, students, — a decline, we may remark, not peculiar to this, but which extends to all the other Prussian universities. Breslau is the seat of government for the prov., has a court of appeal for the latter and for the regency, a supreme council of mines, and other administrative establishments. Besides the university, it has a school of industry, of deaf and dumb, of surgery, one Catholic, and three Protestant, gymnasiums, a seminary for the instruction of schoolmasters, a school of architecture, a school of arts, and an immense number of inferior schools, a society for the promotion of public utility, &c. The library of the university contains above 130,000 volumes, and there are several smaller collections all open to the public. There are a great number of richly endowed hospitals and other charitable institutions, among which may be specified one for faithful servants. It has numerous breweries and distilleries (of the latter nearly 100), with manufactures of linen, cotton, wool and silk, alum, soap, plate, jewellery, &c.; and is the centre of a very extensive commerce, being in some measure the *entrepôt* of the prov. Exclusive of its own products, the greater part of the linens, cottons, cloth, &c. manufactured in Silesia, are disposed of at its *fairs*. Metals from the mines, and timber from the forests in the upper part of the province, are also brought here in large quantities, with flax and hemp, madder, and oxen from the Ukraine and Moldavia. Exclusive of its other fairs, two great fairs for the sale of wool are held annually in June and October. The first of these is the greatest fair of its kind in Germany, the quantity sold being usually about 6,000,000 lbs. During its continuance, the town, owing to the number of persons in the Oriental costume, has a good deal of the appearance of an eastern city. The Bank of Berlin has a branch here. The conveyance of goods to and from Hamburgh by water occupies from 30 to 34 days.

The fortifications with which Breslau was formerly surrounded were demolished by the French. The ramparts have since been levelled, planted, and laid out in public walks; the bastions have been converted into terraces; and the ditch into an ornamental sheet of water, to the great embellishment of the city.

Breslau is the most bustling animated town in the Prussian dominions. The inhabitants are evidently wealthy; and the increasing number of new buildings, ornamented villas, and pleasure grounds in the vicinity, attest its growing prosperity. It is said to be a desirable place to live in. It is salubrious; provisions abundant and cheap; education excellent, and to be had for almost nothing; the people intelligent, frank, and sociable; the literary institutions numerous and easily accessible; and the country round beautiful. The *condittoris* (see BERLIN) are very splendid. Dram-drinking is very prevalent, spirits constituting the principal beverage of the lower classes.

BRESSAY, one of the Shetland islands, which see.

BRESSUIRE, a town of France, dép. Deux Sèvres, cap. arrond., on a hill, at the foot of which is the Dolo; 19 m. N.W. Partenay. Pop. 1,894. It is the seat of a tribunal of primary jurisdiction, and of an agricultural society. It was formerly a fortified town, defended by a castle, destroyed in 1793, when the town was burnt to the ground, with the exception of the church and of a single house. (*Hugo*, art. *Deux Sèvres*.)

BREST, a strongly fortified marit. town of France, dép. Finisterre, cap. arrond. of the same name, occupying the foot and declivity of a steep hill, on the N. side of a spacious bay, near the extremity of the penins. of Brittany; 30 m. N.W. Quimper, 132 m. W. N.W. Rennes, and 314 m. W. S.W. Paris; lat. 48° 23′ 14″ N., long. 4° 28′ 45″ W.; pop. 29,773. Inclusive of its suburb Recouvrance, from which it is separated by the river Penfeld, it is about 3 m. in circuit, and of a triangular shape. Brest proper (situated on the E. as Recouvrance is on the W. side of the river) is naturally divided into the upper and lower town: in the first, which is the most ancient portion, though containing a considerable number of good modern edifices, the streets are irregular, crooked, and narrow, and the houses so unevenly placed, that the gardens of some are on a level with the 5th stories of adjacent ones. In some places the declivity is so rapid, that the road to the lower town is formed by flights of steps. In the lower town many of the streets near the port are well laid out, clean, and healthy; elsewhere they are quite the reverse. Recouvrance, although improved latterly, offers but an unfavourable contrast to Brest. The ramparts which surround the town are planted with trees, and form a pleasant promenade, with fine views toward the harbour. The port, or inner harbour, formed by the mouth of the Penfeld, is lined by good quays adorned with large and handsome stone buildings. It is landlocked, capable of accommodating 50 frigates and other vessels, and is protected by formidable batteries, and by an ancient castle on a rock at its entrance. A large portion of Brest is occupied by marine establishments. It has a noble arsenal established by Louis XIV., excellent docks for building and repairing ships, large rope walks, and various magazines for the stores necessary to the fitting out of a navy, with marine barracks and an hospital. In the upper part of the town is the *Bagne*, a building for the reception of convicts sentenced to the gallies; and the largest edifice of its kind in France. It is 277 yards in length; its centre and extremities are occupied by the various officers having charge of the convicts; the intermediate spaces are separated into 4 divisions, each capable of lodging 500 men. It combines security with salubrity. But despite the severe discipline enforced in this prison, it is said to be *plutôt une école de démoralisation qu'un lieu de punition et d'expiation*. (See the interesting account given by Hugo of this prison, ii. 30.) Among other public buildings are the parish church of St. Louis, with a handsome altar, the town hall, and the theatre. There are several public fountains, one of which is ornamented with a fine statue. Brest is the seat of a tribunal of original jurisdiction, and the residence of a sub-prefect, a maritime prefect, and other functionaries. It contains 2 public libraries, a cabinet of natural history, botanic garden, and observatory, schools of naval artillery, navigation, medicine, surgery, and pharmacy, societies of agriculture and emulation, a tribunal of commerce, and an exchange.

The outer harbour or road of Brest, is, without any question, one of the finest in the world. It is of great extent, being capable of accommodating the largest navies, and has deep water throughout. The channel, *Le Goulet*, by which it communicates with the ocean, is only 1805 yds. across, defended on either side by very strong batteries; and it is further strengthened by having a rock in its centre, which obliges ships to pass close under the guns of the batteries. Several small rivers discharge themselves into the outer harbour, by one of which, the Châteaulin, there is an inland communication with Nantes. Brest has some tanneries and manufactures of glazed hats; and a fleet of fishing boats for pilchards, cod, and mackerel. Its commerce is comparatively trifling, and mostly confined to supplying provisions to the marine: there is, however, some trade in grain, fish, salt, &c.; and a fair for cattle, leather cloths, &c., is held monthly.

This town is affirmed by some authorities to be the *Brivates Portus* of the Romans; but of this there is considerable doubt. It was of little consequence till it was fortified by a duke of Brittany in the 11th century. It was assigned to the English, in 1372, by John IV. duke of Brittany, and was held by them till

1397. In 1489 it was taken by the French; and was soon after permanently united to the monarchy by the marriage of Charles VIII. with Anne of Brittany. Cardinal Richelieu, being sensible of its great natural advantages for a naval station, began, in 1631, the construction of the fortifications and magazines, which were completed by Vauban, in 1680. In 1694, an English and Dutch force that had attacked Brest, was defeated with great loss. The space included within the fortification was considerably enlarged in 1772. (*Hugo*, art. *Finisterre; Guide du Voyageur, &c.*, 207, 208.)

BRETEUIL, a town of France, dép. Eure, cap. cant., on the Iton, 16 m. S.W. Evreux. Pop. 1,980. The country round abounds in iron mines, the working of which, and the smelting, &c., of the ore, afford abundant employment for the inhabitants.

Breteuil, a town of France, dép. Oise, cap. cant., at the source of the Annoy, 16 m. N.E. of Beauvais. Pop. 2,414. It is ill-built, ill-paved, and dirty. There are manufactures of woollen stuffs, paper, and shoes, for the use of the troops and hospitals of Paris. It is very ancient, and was once fortified and had a castle; but few vestiges of the latter or of the fortifications now exist. Its ancient abbey still remains. There are some fine nurseries in the environs. (*Hugo*, art. *Oise; Dict. Géographique.*)

BRETIGNY, a hamlet of France, dep. Eure et Loir, 6 m. S.E. Chartres. It is remarkable for a treaty of peace, concluded between France and England in 1360, which restored John, king of France, to his freedom, lost at the battle of Poitiers, in 1356, when he was made prisoner by the English.

BRETTEN, or BRETHEIM, a town of the grand duchy of Baden, cap. bailiwick, 12 m. E. Carlsruhe. It is remarkable as being the birth-place of the learned and amiable reformer Melancthon. The house where he was born, in 1497, is still to be seen in the market-place, with a statue and an inscription erected to his memory in 1705. This town suffered much during the wars of 1632 and 1689.

BRIANCON, a strongly fortified town of France, dép. Hautes Alpes, cap. arrond., on the Durance, 50 m. E.S.E. Grenoble. Pop. 3,455. This is the highest town in France, being nearly 4,300 ft. above the level of the sea. From its commanding a practicable defile, leading from Piedmont into France, it has always been looked upon as one of the keys of the kingdom on the side of Italy. In consequence no expense has been spared on its fortifications, which are now deemed all but impregnable. They consist principally of strong forts built on the contiguous heights, and which command all the approaches to the town.* The two principal forts, *Trois-Têtes* and *Randouillet*, communicate with each other and with the town by a bridge of a single arch 130 ft. (40 metres) in span, thrown over a deep ravine. With the exception of a single street, the town is ill-built, gloomy, and dirty. It has a tribunal of primary jurisdiction, and a departmental college; with fabrics of cotton goods, hosiery, steel and cutlery, pencils, &c. (*Hugo*, art. *Hautes Alpes.*)

BRIANSK, a town of Russia, in Europe, gov. Orel, cap. distr., on the Desna, 55 m. W. Orel; lat. 53° 16′ N., long. 34° 24′ E. Pop. 5,000. It has numerous churches, a foundry of cannons, tanneries, &c.; and there is in the vicinity a manufactory of arms. The neighbouring forests supply fine timber.

BRIARE, a town of France, dép. Loiret, cap. cant., on the Loire, at the point where it is joined by the canal of Briare, 25 m. S. Montargis. Pop. 2,977. The canal, to which the town is indebted for its importance, is the oldest work of the kind in France, having been begun in the reign of Henry IV., though it was not finished till 1740. It establishes, by means of its junction with the canal of Loing at Montargis, a communication between the Loire and the Seine; and consequently conveys the various products of the prov. watered by the former to Paris. (*Hugo*, art. *Loiret.*)

BRICQUEBEC, a town of France, dép. La Manche, cap. cant., 8 m. W.S.W. Valognes. Pop. 4,414. It has in its environs a copper mine.

BRIDGENORTH, a bor. and town of England, co. Salop, hund. Stottesden, on the Severn, 115 m. N.W. London. Pop. of old bor. in 1821, 4,345; in 1841, 6,198; but the parl. bor., the limits of which were extended by the Boundary Act, had, in 1841, a pop. of 7,000. It is divided by the river into the upper and lower towns; the former is built up the acclivities and on the summit of a rock, rising abruptly from the W. bank of the stream to the height of 180 ft. Ranges of detached houses, many of which are handsome modern structures, are built each over the other, so that the roofs of one range are lower than the foundations of the next above it, from the base to the summit of the precipice; with these are intermixed other dwellings, excavated in the rock itself; rude caverns, gardens, and trees. Crowning the summit, at the S. end, is the square ruined tower of the ancient castle, leaning considerably from the perpendicular; and the church of St. Mary Mag., a handsome structure, with a lofty tower and cupola, built in 1792. At the N. end is the ancient church, St. Leonard, built in 1448. Half way between the two churches is a flat square reservoir, raised on lofty brick columns, and looking at a distance like a handsome portico: to this tank, water is forced by machinery from the river, to supply the upper town. There are several good streets leading from the high street to the churches; and parallel over these are others of a like character. A carriage road winds round the rock, and several flights of almost perpendicular pebbled steps, secured in iron framing, lead up through the rock into the interior of the town. The whole has a singularly picturesque effect, and from the pallisaded wall round the castle hill, extensive and diversified views are commanded over a fertile and romantic district. A handsome stone bridge of six arches connects the lower with the upper town. Its streets have an intermixture of ancient and modern houses. St. Leonard's church is endowed with 600*l.* private benefaction, and 1,100*l.* public grant. St. Mary's, formerly the castle chapel, and exempted by king John from all ecclesiastical jurisdiction, is endowed with 200*l.* private, and 1,500*l.* public grant: both are curacies in private patronage. The Baptists and Independents have each a chapel. There is a free grammar-school, founded in 1503, which educates 10 scholars, and has three exhib. to Christ Church, Oxford; a blue-coat school, in a building over one of the ancient gateways, where 30 boys are clothed, educated, and apprenticed; and a national school, supported by subscription, for 200 boys and 150 girls. The hospital of St. Leonard supports 10 aged widows; and endowed almshouses, with 158*l.* a year, maintain 12 burgesses' widows. The town-hall, in the middle of the principal street, is a spacious old building of timber frame-work and plaster, raised on brick pillars and arches: the corporation meetings and courts are held in it, and the market in the covered area underneath. There is a gaol, built by the corporation in 1823. A neat theatre, built about the same period; and a public library, with a good collection in general literature. The weekly market is held on Saturday; and there are 7 annual fairs. There is a carpet manufactory, and another for tobacco pipes, in the town. Its iron trade has declined, but nails are still made to some extent; and vessels are also built for the navigation of the Severn. The greater part of its labouring pop. are employed upon the river. It has a spacious line of quay N. of the bridge, and offers every facility for the transit of goods, so that large quantities of corn, malt, beans, &c., are sent thither from various parts of the country, and it has become a thriving inland port: its retail trade is also very considerable.

Previously to the Municipal Reform Act the government was nominally vested in 2 bailiffs, 24 aldermen, and the whole of the burgesses, whose number (including the former) was 634; but in reality it was a self-electing body of 14. Petty sessions for the bor. are held every alternate Monday, and general sessions once a year; but no felonies are tried. A court of record is held on the same days as the petty sessions, which takes cognisance of actions to any amount; but not more than three a year are entered. The revenue of the corporation, derived from lands and tenements, averages about 1300*l.* a year. The tolls of markets and fairs, formerly levied by them, were given up in 1825. They hold the Severn water-works in trust for the benefit of the town, and levy a rate on the inhab. to support them: they are also trustees of an estate, producing 100*l.* a year, for the benefit of the two church ministers.

Bridgenorth has returned 2 mem. to the H. of C. from the 23d of Edward I. Previously to the Reform Act the elective franchise was vested in the corporation and freemen, of whom there were 634. Parl. constituency, in 1849-50, 740.

Bruges was the ancient name of the borough, from a Saxon bridge over the Severn, which was destroyed to prevent the incursions of the Danes. A new bridge was subsequently erected, 1¼ m. N. of the old site; and hence the present name originated. The Earl of Shrewsbury built the walls, in which were six gates, in the reign of Will. II.; the castle was built in that of Hen. II., and it has since undergone many sieges. Dr. Percy, bishop of Dromore, was born here in 1728.

BRIDGEPORT, a town and sea-port of the U. States, Connecticut, on Long Island Sound, at the mouth of the Pequanock, 17½ m. S.W. Newhaven. Pop. 2,800. It has a bank and some trade.

BRIDGETOWN, the cap. of Barbados, which see.

Bridgetown, a town and sea-port of the U. States, N. Jersey, on the Cohanzy, 20 m. above its entrance into the Delaware, and 56 m. S. Philadelphia. It has a court-house, jail, bank, academies, &c.; and had, on the 30th September, 1837, 12,455 tons shipping.

BRIDGWATER, a bor., par., and sea-port of England, co. Somerset, hund. N. Petherton, on the Parret, about 7 m. in a direct line, and 12 m. by water, S.

* According to the *Dict. Géographique*, the town is quite open, not being surrounded with either walls or ditches; whereas, according to Hugo, it has a "*triple enceinte de murs*."

from its embouchure in Bridgewater Bay, in the Bristol Channel, 28 m. S.S.W. Bristol; lat 51° 7′ N., long. 2° 59′ W. Pop. (of new bor.), in 1841, 9,688; houses, 1,441. The town is situated in a fertile well-wooded plain of considerable extent, having E. the Mendip, and W. the Quantock hills; it is built on both sides the stream, but chiefly on the W., the 2 parts being connected by a handsome iron bridge of 1 arch. That on the W. bank has a remarkably neat appearance, the houses (mostly of brick) being well and uniformly built, and the streets spacious, clean, and well paved; the other (Eastover) is inferior in these respects, but has also of late years been much improved: the whole is lighted by gas, and well supplied with water from many fine springs. The church is an ancient Gothic structure, with an embattled tower and lofty spire; there are chapels for Baptists, Friends, Independents, Wesleyans, and Unitarians; a free grammar-school (founded by Elizabeth in 1561), and 2 other endowed schools (founded, one in 1723, the other 1781), each of which educates about 30 children; almshouses, with an endowment of about 18*l.* a year; and an infirmary, established 1813, and supported by subscription. The judge's mansion is a handsome modern edifice, in which the courts of justice are held; the market-house is also a good recent building, with a dome and Ionic portico. There is a spacious quay, accessible to vessels of 200 tons; but the entrance to the harbour is difficult, and should not be attempted without a pilot. The tide in the river frequently rises to a great height, rushing forward with a perpendicular front and with extraordinary velocity. (*Norie's Direct. for the Bristol Channel.*) There are 3 weekly markets: Tuesday, for vegetables; Thursday, corn and cattle; Saturday, general provisions. Fairs are annually held on the first Monday in Lent, July 24., Oct. 2. (the principal one), and Dec. 27.; they are for linen and woollen goods, cattle, and general merchandise. The imports from foreign parts consist chiefly of wines, hemp, tallow, and timber: customs duties in 1845, 6,979*l.* 4*s.* 5*d.*; in 1846, 5,487*l.* 15*s.* 6*d.* The imports, coastwise, consist of groceries, general merchandise, and coals; the exports, of agricultural produce. The Taunton and Bridgewater Canal connects the 2 places. Considerable quantities of Welsh coal are conveyed by it inland, and the agricultural produce of the fertile district round Taunton, brought for shipment to Bristol and other ports. On the 1st of Jan. 1850, there belonged to the port 127 vessels, of the burden of 10,231 tons. A great quantity of bricks are made in the vicinity, both common and of a peculiar kind, and large size, resembling Bath-stone. The town is on the line of the Bristol and Exeter Railway; it is divided into 2 wards (the N. and S.), and governed by a mayor, 6 aldermen, and 18 councillors. Courts of pleas and of petty sessions are held every Monday, and of general sessions quarterly, for the bor. It is the seat of a county court, before which 752 plaints were entered in 1848. The general quarter sessions for the co., in summer, and the co. assizes, once in 2 years, are also held in the town: at such times its gaol is usually crowded, otherwise it has few prisoners. It has sent 2 mem. to the H. of C. since the 23 Edw. I.; the right of election, previously to the Reform Act, being in the inhabitants paying scot and lot, and having resided in the town for a certain period; the number was about 400: number of registered electors, in 1849-50, 508. There were, in 1847, 513 10*l.* householders in the bor., and 161 scot and lot voters. The revenues of the corporation are derived from market and fair dues, tithes, and rents, and average about 2000*l.* a year. The living is a vicarage, united with the rectory of Chilton Trinity, and in the gift of the crown. Bridgewater is a polling place for the E. division of Somerset, and the central town of a union under the Poor Law Amendment Act. The poor-rates levied in the bor. in 1847 amounted to 4,033*l.*

The town derives its name from Walter de Douay, to whom it was granted by William I., and is spelt "Burg" and "Brugge" Walter, in the old records. In the great civil war it sided with the king, and being well fortified and provisioned, was the depository of much valuable property, sent thither for security; all of which, together with 1,000 prisoners, fell into the hands of Fairfax, after an obstinate resistance. The ill-fated Duke of Monmouth was proclaimed king at Bridgewater, previously to his defeat and capture at the Battle of Sedgemoor. The famous Admiral Blake, one of the greatest of the naval heroes of England, was a native of this town, having been born here in 1599.

BRIDLINGTON, a market to. of England, E. riding co. York, 176 m. N. London, 37 m. E.N.E York, 24 m. N. by E. Hull, and 5 m. W. Flamborough Head. Pop., in 1841, including Bridlington Quay, 5,162. The town, which is about a mile from the sea-coast, consists of one long street, with some smaller streets narrow and irregularly built. A priory, erected in the early part of the reign of Henry I., at the E. end of the town, is, though much decayed, a venerable and magnificent specimen of the old English church architecture. It was endowed with very large estates: its last prior being convicted of high treason, was executed in 1537. A part of it, used as the parish church, accommodates above 1,900 persons. The other places of worship are those of the Wesleyan and Primitive Methodists, Baptists, Independents, Presbyterians and Quakers. The schools are, a free grammar-school, founded in 1637; two large national schools, an infants' school, and a school of industry, founded in 1781, to instruct poor children in carding, knitting, and wool spinning. A detached building, which formed part of the priory, is used for a town-hall and prison. Besides a brisk retail trade, an extensive corn trade is carried on. The business is transacted in the Exchange, a neat commodious building. Hats are also manufactured here, and in the neighbourhood are several wind and water mills, and a steam-mill for grinding bones. The malt trade, which was formerly very extensive, is much fallen off. Markets are held on Saturdays, and a cattle market every fortnight; fairs on the Monday before Whitsunday, and Oct. 21. Bridlington is a station for receiving votes at elections for the E. riding. The banks are, a branch of the York Union, and a private banking house. Bridlington Quay is a neat village, about a mile from Bridlington. Its principal street, which is very broad, leads directly to the harbour, where there is excellent anchorage: it is defended by two batteries. Here are hot and cold baths, and a chalybeate spring, whose medicinal properties are highly esteemed. An ebbing and flowing spring, discovered in 1811, supplies the inhabitants with abundance of excellent water. The port is a member of that of Hull, and has a neat custom-house on the quay. It is much frequented in summer by visiters for sea bathing. (*Allen's Hist. of Yorkshire; Thompson's Bridlington, &c.*)

BRIDPORT, a bor. and sea-port of England co. Dorset, hund. Bridport, 127 m. W.S.W. London, in a fertile vale encircled by hills, between the Brit and Asher, which are crossed by several bridges, and unite a short distance below the town. It consists chiefly of three main streets, well lighted and paved, with many handsome modern houses on either side. The church is a cruciform structure of the later Gothic, with an embattled and pinnacled tower in the centre. The Friends, Independents, Wesleyans, and Unitarians, have each chapels. The town-hall (where the council meet, and the borough sessions are held) is a handsome modern edifice in the centre of the place; there is also an endowed free school, founded 1708, and an almshouse, founded 1696. Pop., in 1821, 3,742; in 1841, 4,787: houses at the latter period, 929: this, however, refers merely to the *old* bor., which was only co-extensive with the parish, an area of 250 acres; but the limits of the new parl. bor. as fixed by the boundary act, were extended so as to comprise portions of 6 parishes, and it had, in 1841, 7,166 inhab. Its pier harbour (about one m. S. of the town, between Lyme and Portland) is safe and commodious, though rather shallow. An act, passed in 1722 (for restoring its piers, and forming a sluice) was carried into effect in 1742, the corporation being trustee. In 1822 another act passed, by which other persons were joined with them in the trust, and the harbour was then materially improved and enlarged, at an expense of nearly 20,000*l.*, and is now suitable for vessels of 200 tons; since which the increase of its trade has been progressive. In 1832 it was made independent of Lyme, within whose jurisdiction it had previously been, and established as a bonding port: between 20 and 30 vessels, averaging about 100 tons, belong to it; and several fine coasting smacks are built here. The manufactures are — twine, lines, and fishing-nets, for the home and colonial fisheries, and sail-cloth and shoe-thread: these employ several hundred persons. The exports consist chiefly of those manufactures, and of butter and cheese, the produce of the neighbourhood. The imports comprise hemp, flax, and deals, from the Baltic; tallow, skins, coal, culm, slate, wines, spirits, and groceries, coastwise. There are 2 weekly markets (Wednesday and Saturday), and 3 fairs (April 6., Holy Thursday, and Oct. 10.), chiefly for horses, cattle, and cheese. The bor. is divided into 2 wards, and governed by a mayor, 6 aldermen, and 18 councillors: the revenue of the corporation (derived from market dues and rents) averages about 250*l.* a year. It has sent 2 mem. to the House of Commons since 23 Edw. I. Previously to the Reform Act the right of election was vested in the householders paying scot and lot, the number of voters being nearly 300. In 1849-50 it had 630 registered electors. Bridport was a borough during the Saxon period: at the time of the Domesday survey it had 100 houses, a mint, and an ecclesiastical establishment. Its staple manufacture is of remote origin; Camden notices a special law of Henry the Eighth's reign, by which the navy was to be exclusively supplied with cordage made at Bridport; and Gibson, in a note on the passage, speaks of the failure of an attempt in his day to form a harbour (*Gibs. Ed. Brit.* 170.) It confers the title of viscount on the Hood family; the living is a rectory in private patronage.

BRIE-COMTE-ROBERT, a town of France, dép. Seine et Marne, cap. cant., near the Yères, 10 m. N.N.W. Melun. Pop. 2,725. It was built by Robert of France, count of Dreux, to whom his brother Louis VII. gave the lordship of Brie. Its old feudal castle has been demolished. The parish church, founded in the 13th century, is remarkable for the height of its tower. The Hôtel Dieu is nearly of the same age as the church. (*Hugo*, art. *Seine et Marne*.)

BRIEG, a fortified town of the Prussian states, prov. Silesia, cap. circ., on the Oder, about half way between Breslau and Oppeln. Pop. 11,500. It is situated on an elevated bank of the river, over which it has a wooden bridge, and is well built and thriving. Principal public buildings, a gymnasium, formerly a university, to which is attached a good library, a lunatic asylum, with several churches and hospitals. It has extensive manufactures of linens, woollens, cottons, hats, &c., and carries on a considerable trade.

BRIEL or BRIELLE, a fortified sea-port town of the Netherlands, prov. S. Holland, cap. arrond., on the N. shore of the island of Voorn, near the mouth of the Maese, 13 m. W. Rotterdam; lat. 51° 54′ 11″ N., long. 4° 9′ 51″ E. Pop. 4,200. It is a handsome well-built town; is strongly fortified; has a good harbour, a tribunal of primary jurisdiction, and sends a deputy to the states of the province.

The Briel is remarkable in Dutch history for being the place where the first foundation of the republic may be said to have been laid. The exiles from the Netherlands, who had taken refuge in England from the persecutions of the Duke of Alva, were ordered by Queen Elizabeth, in consequence of the urgent representations of Alva, to leave this kingdom. Being thus driven to despair, they assembled a small fleet at Dover, under the command of William de Lumey, Count de la Marck, and resolved, if possible, to get possession of some place of strength in their native country. Their original intention was to make an attempt on Enchuysen; but the wind being unfavourable, they cast anchor before Briel, of which they took possession on the 1st of April, 1572. Thus was struck the first blow in that apparently most unequal and long-continued struggle between Holland and Spain, that ended in the independence of the former; a struggle which, whether we consider the sacrifices and perseverance of the weaker party, or the beneficial consequences of their success, is, perhaps, the most extraordinary and important of which history has preserved any account. (For an account of the capture of Briel, see *Watson's Philip II.*, i. p. 427. 8vo. ed.)

Briel was the birth-place of the heroic Admiral Van Tromp, who fell in an engagement with the English, under Blake, off the Texel, on the 8th of Aug., 1653.

BRIENNE-LE-CHATEAU, a town of France, dép. Aube, cap. cant., on the great road from Paris to Chaumont, 15 m. N.W. Bar-sur-Aube. Pop. 2,002. The town has a fine castle, erected a short while previously to the Revolution, by the minister Lomenie de Brienne. It stands on an artificial plateau, and commands an extensive view. But the place derives almost its entire celebrity from its connection with the imperishable name of Napoleon. The great captain received the first rudiments of his warlike education in a military academy that formerly existed in this town, but which was suppressed in 1790; and here, in 1814, in an engagement with the Russians and Prussians, he was in imminent danger. (*Hugo*, art. *Aube*, &c.)

BRIEUC (ST.), a sea-port town of France, dép. Côtes-du-Nord, of which it is the capital, on the Gouet, near its embouchure in the Bay of St. Brieuc, 38 m. W.S.W. St. Malo; lat. 48° 31′ 2″ N., long. 2° 43′ 55″ E. Pop. 11,382. Its port, at the mouth of the river at the village of Ligoué, has a handsome quay, and a commodious harbour, accessible to vessels of 350 tons. The town is pretty well built. The cathedral, a Gothic edifice, was begun in 1220, and finished in 1234; there are, also, a hôtel de ville, an hospital on a large scale, a work-house, a theatre, &c. The bridge over the river is a handsome stone structure of three arches. There are some good squares and fine promenades. St. Brieuc is the seat of a bishopric, and of tribunals of primary jurisdiction and commerce; and it has a departmental college, a diocesan seminary with 160 pupils, a school of arts, and a public library with 24,000 volumes. There are in the town fabrics of linen, serge, flannel, paper, &c., with tanneries and breweries. The inhabitants used to employ a considerable number of ships in the whale and cod fisheries, particularly the latter. In 1828, for example, they had engaged in the cod-fishery 47 ships, of the burden of 8,090 tons, manned by 2,610 seamen, who brought home 4,669,200 kilog. of cod, &c., worth 1,845,405 fr. But it would seem, from the statements of Hugo, that in the interval between 1828 and 1833, this important business had very rapidly declined, and we have not learned whether it has since recovered. The coast fishery is still carried on to a considerable extent. Horse-races were established here in 1807, and are kept up with great spirit. (*Hugo*, art. *Cotes-du-Nord*.)

BRIGHTON, formerly BRIGHTHELMSTONE, a fashionable marit. town and parl. bor. of England, co. Sussex, rape Lewes, hund. *Wellsbourne*, vulg. *Whalesbone*, 47 m. S. London. This modern *Baiæ* is situated on the coast of the British Channel, between Beachey Head and Selsey Bill, lat. 50° 49′ 32″ N. long. 8′ 18″ W. Pop. in 1821, 24,429; 1831, 41,994; 1841, 46,661; and at present (1850) it is estimated at 63,000. It is of an irregular shape, being built along the shore, and on the slopes of a gentle valley, the centre of which, the *Steyne*, a long, narrow slip of land, lying N. and S., divides the town into the E. and W. portions. The only buildings in this valley are the Pavilion, and St. Peter's Church; but it has a statue of George IV. by Chantrey, and a handsome fountain constructed in 1846. The town E. the Steyne, has been wholly built within the last 70 or 80 years. Along the cliffs, which in this part rise high above the sea, has been formed a very noble marine promenade. A wall of immense thickness (at the foundation 30 ft. wide), and from 60 to 70 ft. high formed of concrete, protects a fine pavement, and a road upwards of 100 feet in width. From the extreme E. entrance of the town, this magnificent promenade and drive is skirted to the Steyne by large mansions, and lodging-houses of the first description. Among others are th se of Kemp Town, and its squares, a splendid range, forming 3 sides of a quadrangle, and having a row of houses, of similar architectural character, diverging from either extremity: the spacious area in front is laid out in walks, &c., and has an arched passage communicating with the beach, the crescent, and various spacious streets, opening from the line of cliff to the northward. West of the Steyne is the old town, consisting principally of old and irregular buildings. Many of these have, however, been pulled down, and on the sites of some of them, a new market was constructed in 1829, and a town hall in 1831; but the latter, though large, and making a good appearance externally, is not well adapted for public mee ings. In every direction round the old town (excepting of course the sea), new streets and squares have been erected; particularly along the line of coast, called the King's Road to Hove, where, facing the sea, are some fine ranges of mansions, including Bedford Square, Regency Square, Brunswick Terrace and Square. Adelaide Terrace, &c. The cliffs, along this part of the coast, rise only a few feet above the highest part of the beach: in their front is a fine promenade, and, below this, a level space of green sward reaching down to within a short distance of the water On the Lewes road are Hanover Crescent, Richmond Terrace, the Grand Parade, and Park Crescent, recently erected on the site of the Royal Gardens and Cricket Ground. On the London road are York and St. George's Places, and many structures in the cottage style. The palace called the Pavilion, was begun by George IV. when Prince of Wales, in 1784, and finally completed in 1827; it is in the oriental style, being copied from the Kremlin at Moscow; its stone front extends 200 ft.; it has a circular building in the centre, surmounted by a pillared dome. The Chapel Royal is on the W., and behind is a circular range of stables in the Arabian style, lighted by a glass dome. The palace is shut out from the view of the sea by the Albion Hotel and other buildings; and little can be said in favour of the taste displayed

in its erection. This building and the ground attached to it, comprising about seven acres, have lately been purchased by the town, at a cost of 53,000*l.* It is proposed to convert it into reading and assembly rooms, &c. The old church of great antiquity, a mean fabric, partly in the ornamented and partly in the later Gothic style, has a low, massive, square tower, which, as it stands on a hill 150 ft. above the sea, serves as a landmark for vessels. St. Peter's church, an elegant Gothic structure, completed in 1827, at the public expense, has upwards of 1,100 free sittings. Besides these, and the Royal Chapel, there are various places of worship connected with the established church, and with the Independents, Baptists, Scotch Seceders, Friends, and Wesleyan and Whitfield Methodists. It has also a Jewish synagogue and a R. Catholic chapel; the latter, an elegant building in Upper St. James' Street, contains a fine specimen of sculpture from the chisel of Mr. Carew. There are numerous free schools, partly supported by subscriptions and partly endowed, with orphan, national, infant, and ragged schools. A college in the Elizabethan style has recently been erected near the E. extremity of the town, for the education of the sons of noblemen and gentlemen, in strict conformity with the principles and doctrines of the Church of England. The County Hospital, in the neighbourhood of the college, is a large and well supported establishment. There are baths of all kinds, constructed with every regard to comfort and convenience, as well as numerous bathing machines.

The German Spa, in a valley facing the sea, at the foot of the Row Hill, was established in 1826, for the preparation of artificial mineral waters, in imitation of the natural springs at Carlsbad, Ems, Marienbad, Pyrmont, &c.

All classes of visitors find suitable accommodation here, in furnished lodgings, inns, and hotels; of all which there is every variety, from those of the most superb and expensive character, to the plainest and most economical. The theatre is small and ill contrived; but the public assembly rooms, at the Old Ship Hotel, are handsomely fitted up. On the Downs is a well kept course, where races are held the first week of August. There are many fine promenades; amongst them, a very favourite one is the suspension chain pier, constructed in 1821, at an expense of 30,000*l.*: the pier head is 60 ft. by 20, and has seats and awnings, with galleries and flights of steps, to facilitate landing and embarkation at different states of the tide; the pier itself is 1,200 ft. in length by 14 ft. in width; and an esplanade of the same length, 40 ft. wide, connects it with the Steyne. Principal market-day Saturday, but there is a daily supply. Fairs on Holy Thursday, and the 4th September. Brighton has no harbour, and no maritime trade; but about 150 boats are employed in fishing. Mackerel, herrings, turbot, soles, skate, &c., are caught in considerable quantities, and in part supply the London markets. The intercourse with the metropolis, formerly effected by fast coaches, is now carried on with the greatest facility by means of a railway. The steamers, which used a few years ago to leave Brighton for Dieppe, have been discontinued.

The Reform Act conferred on Brighton the privilege of returning 2 members to the H. of C. The parl. bor., inc. the parishes of Brighton and Hove, extends over 1,980 acres. Constit. in 1849-50, 3,067. The parochial affairs are managed by directors and guardians, and the affairs of the town, lighting, &c., by commissioners. The principal magistrate, the High Constable, is assisted by 12 head-boroughs. The rateable property assessed to the poor rate amounted, in 1841, to 269,446*l.*, and in 1850 to 332,800*l.* Sum raised for the poor in 1847, 19,852*l.* Magistrates of the county hold sittings in the Town Hall every day at 11. It is, also, the seat of a county court, before which 2,024 plaints were entered in 1848.

Brighton has *two* banking establishments, and a Savings Bank, the deposits in which amounted, on the 20th November, 1848, to 108,208*l.* The town supports three newspapers.

For some centuries Brighton was a mere fishing village, and was frequently attacked and plundered by the French; to prevent which, Hen. VIII. erected some fortifications, which were strengthened and extended by Eliz. But it has suffered more from the action of the sea undermining the cliffs, than from anything else. "In the reign of Elizabeth the town of Brighton was situated on that tract where the chain-pier now extends into the sea. In 1665, 22 tenements had been destroyed under the cliff. At that period there still remained under the cliff 113 tenements, the whole of which were overwhelmed in 1703 and 1705. No traces of the ancient town are now perceptible." (*Lyell's Geology*, i. 413., ed. 1835.) The great sea-wall, noticed above, was constructed to prevent the encroachment of the sea on the eastern cliffs, on which it was making the most serious inroads.

Brighton began to come into repute in the reign of George II. as a watering and sea-bathing place, principally through the writings of Dr. Richard Russell, an eminent physician of that day. In 1760 the chalybeate spring was observed, which tended to increase its growing popularity. No doubt, however, it was principally indebted for its rapid rise, and for the high rank it has long continued to hold among watering and fashionable places, to the zealous and continued patronage of Geo. IV. when Prince of Wales, and when regent and sovereign. It has nearly quadrupled its population in the course of the present century; and the advantages it enjoys in its situation, and in its being the nearest port on the S. coast to London, will probably insure its prosperity, though it should cease to be an object of royal favour. (*Private Information.*)

BRIGNOLLES, a town of France, dép. Var, cap. arrond., on the Carami, 22 m. N. N. E. Toulon. Pop. 5,652. It is neat and well built, and is finely situated in a fertile basin, surrounded with high wooded hills. Its principal ornament is its magnificent public fountain, in the square Carami. It has a tribunal of primary jurisdiction, a primary normal school, a secondary ecclesiastical school, a public library, a society of agriculture, &c., with filatures of silk, fabrics of wine, candles, and tanneries. A considerable trade is carried on in olive-oil, wine, liqueurs, brandy, and excellent prunes, known by the name of *brignolles*. (*Hugo*, art. *Var*; *Dict. Geog.*)

BRILLON, a town of the Prussian States, prov. Westphalia, reg. Arnsberg, cap. circ. 24 m. S.E. Soest. Pop. 3,031. It has two churches, a college, an hospital, and fabrics of linen and brass. In the environs are mines of silver, lead, and calamine.

BRINDISI (an. *Brundusium*), a sea-port and city of Naples, prov. Terra d'Otranto, cap. distr., at the bottom of a bay between capes Cavallo and Gollo; lat. 40° 37′ 50″ N., long. 17° 58′ 32″ E. Pop. 8,500. (*Rampoldi.*) In antiquity this was one of the most important cities of Italy, and was the port whence the intercourse between Italy and Greece, and the East, was usually carried on. It owed this distinction as much to the excellence of its harbour as to its situation: but in modern times it is sadly changed for the worst. It is still of great extent within the walls; but the inhabited houses do not occupy above half the inclosure. The streets are crooked and rough, and the houses poor and in disrepair. With the exception of the citadel, a large heavy-looking cathedral, and a few remains of antiquity, there is nothing in it that deserves attention. This melancholy change has been produced by the nearly total loss of the inner harbour. This, which encompasses the city on two of its sides, and is deep and capacious, was united to the outer harbour, or bay, by a narrow entrance, like that leading to Portsmouth harbour or the Havannah. Unfortunately, however, this entrance having been nearly shut up, the inner harbour was in consequence rendered inaccessible to all but the smallest vessels, and in summer became fetid and unhealthy. Julius Cæsar, who attempted to block up Pompey's fleet that had rendezvoused in the inner harbour, by running mounds into its outlets, may be said to have commenced the ruin of Brindisi, which was completed in the 15th century by a prince of Taranto, who sunk vessels filled with earth and stones in the passage left open by Cæsar! The destruction that was thus brought on the town and its offsets roused at length the attention of the Neapolitan gov., by whom a vigorous effort was made in 1776 to obviate the cause of the mischief, by cutting a new channel between the two harbours. But owing, as it would seem, to some defect in the plan, the project has only partially succeeded; the new channel soon filled up, and the entrance to the inner harbour became nearly as much encumbered as before. The canal is now, however, kept open by dredging and otherwise to the depth of 10 or 12 palmi, so that vessels of this draught of water may enter the inner port. The outer harbour, or bay, is deep and capacious, and has good anchoring ground. It is partially protected by an island, on which a fort is built; but it is exposed to the easterly gales, which throw in a heavy sea. (*Swinburne's Two Sicilies*, i. 384., 4to. ed.; *Craven's Naples*, p. 148.; *Rivera, Considerazioni su i mezzi da Restituire il Regno delle due Sicilie*, i. 242., &c.)

BRIOUDE, a town of France, dép. Haute Loire, cap. arrond., in a vast plain near the Allier, 30 m. N. W.

Puy. Pop. 5,247. It is old, ill-built, and dirty. Its most remarkable edifices are the college, situated on a hill, and commanding a fine view, and the church of St. Julian, a venerable Gothic fabric, founded in the 9th century. Besides the college, it is the seat of a court of primary jurisdiction, and has a small public library, and a society of agriculture. Brioude was the birthplace of the Marquis de Lafayette, who acted so conspicuous a part in the American and French revolutions. At Old Brioude, about 3 m. S. S. E. of Brioude, is a bridge over the Allier, built in 1845, consisting of a single arch 182 ft. in span. (*Hugo*, art. *Haute Loire; Dict. Géographique*.)

BRISACH (NEW), a fortified town of France, dép. Haut. Rhin, cap. cant., near the left bank of the Rhine, opposite to Old Brisach, 9 m. S. E. Colmar. It was built in 1690 by Louis XIV., and fortified by Vauban. It is a regular octagon, and is regarded as one of the finest works constructed by that celebrated engineers The streets all terminate in a *place* in the centre, and the houses are all of the same height. It is of no importance except as a fortification. Hugo says he passed through it in 1828, and that two of its gates were then shut up; that most of its houses were deserted, and that the grass grew in the streets. (*Hugo*, art. *Haut Rhin*.)

BRISTOL, a large city, co., parl. bor., and sea-port of England, at the confluence of the Avon and Frome, 8 m. S. E. of the embouchure of the former, in the Bristol Channel. and 108 m. nearly W. London. Lat. 51° 27′ 6″ N., long. 2° 35′ 28″ W. Pop. of city and suburbs, (inc. Clifton and the parish of Bedminster, the latter on the S. side of the Avon, co. Somerset,) in 1821, 95,758; in 1841, 140,158: but certain portions of the suburbs are excluded from the limits of the existing parl. bor., the pop. of which, in 1841, was 123,188, and is now (1850) estimated at about 137,000. The city extends over 6 or 7 distinct hills and their intermediate valleys, amidst a picturesque and fertile district. In the older portion, along the river side, forming the nucleus of the modern city, the houses were originally of wood and plaster, with upper stories projecting over narrow streets; but these are now greatly diminished. In the more modern and elevated portions of the town, the streets and squares are spacious, and the houses are mostly well built and substantial. Those of Kingsdown, St. Michael's, and Clifton hills, on the N. and W., rise, with their terraces and gardens each above the other, like an amphitheatre. Redcliffe, on the S., has narrow streets and densely crowded houses, resembling those of the older part of the city; but the process of widening them has been already commenced by the Improvement Committee under a local act of parliament. Bedminster is mostly occupied by small modern tenements for the working classes, and tan-yards. The whole city is well paved and sewered, and is lighted with coal gas, supplied by 2 public companies. Water is conducted by pipes to several public conduits and public pumps, and also by waterworks, established under an incorporated company, which fetches its supplies from springs rising in the Dundry and Mendip Hills. The cathedral in College Green, of the age of Stephen, and anciently part of St. Augustine's abbey, is a venerable edifice. It was originally in the form of a cross, and displays the different styles of English church architecture; length 175 feet, breadth of transept 128, and of nave and aisles 73 do., height of tower, 140 do. The nave was destroyed during the civil war in the reign of Charles I. The Chapter House, in the Norman style, has been renovated within these few years; and Mr. Rickman says that its vestibule is remarkable for its simplicity and the beauty of its composition. Among the other churches, belonging to the establishment, the principal are St. Mary's Redcliffe, crowning the summit of that hill: St. Stephen's, with its richly decorated tower; the beautiful pinnacles of which, being in a dilapidated state, were removed some years since; and it is a subject of general regret that they have not been restored: All-Saints, which has a statue of Colston, by Rysbrack: the Mayor's Chapel, formerly called Gaunt's Church, &c. The dissenters of various denominations form a very numerous and important part of the community, and have a proportional number of places of worship. There are about a dozen endowed charity schools. The free grammar-school, founded in 1532, has several exhibitions, and two fellowships, each of 30*l.* a year, in St. John's, Oxford. The endowments of Queen Elizabeth's Hospital, founded by John Carr in 1586, produce about 5,000*l.* a year. They are employed to educate, clothe, maintain, and afterwards apprentice about 200 boys, who are lodged in a noble building lately erected in the Elizabethan style on the N. W. side of Brandon Hill. Alderman Whitson's Red Maids' school, founded in 1621, has an income of about 4000*l.* a year; it maintains, clothes, and educates 120 young girls, daughters of freemen, from 8 to 18 years of age, who are then placed in suitable situations; and, if they conduct themselves with propriety, they have a small portion when they marry. This school has also been rebuilt in the Elizabethan style, and, with the preceding schools, is under the management of the Charity Trustees. There are also the Redcliffe free grammar-school, founded in the 13th of Eliz.; Colston's, in 1708, for the maintenance, clothing, and education of 100 boys, &c. &c. Besides these, there are many other schools, supported either wholly or partially by benefactions and public subscriptions, in which upwards of 3,000 children are educated, and upwards of 10,000 receive instruction in the Sunday schools of the various sects. There are 21 almshouses, (ex. the Friends' Workhouse,) which receive in all 110 old men and 236 old women. The other charitable institutions comprise the Infirmary, established in 1735, capable of accommodating 200 patients; it has an annual average of 1,600 *in* and 5,000 *out* patients, who are supported partly by its own funded property, and partly by subscriptions and donations: the General Hospital, a smaller establishment than the former, and partly on a self-supporting principle: the Dispensary, which gives medical relief to the poor at their own dwellings: asylums for the blind, the deaf and dumb, and for orphan girls: a female penitentiary, and between 40 and 50 other charitable societies, which distribute in various ways very considerable sums. But notwithstanding the number and amount of these charities, the sum raised by a rate for the relief of the poor within the city amounted, in 1849-50, to above 30,000*l.* assessed upon property estimated at the annual value of 220,884*l.*

The principal public buildings are, — the Guildhall, a splendid modern structure in the florid Gothic style, on the site of the old building: the Council House, built in 1827, at a cost of about 14,000*l.*: the Gaol, a large well-arranged structure, built in 1820; the Bridewell, rebuilt after the riots in 1831: the Exchange, an extensive building of the Corinthian order, was erected by the corporation in 1760, but not being adopted by the merchants as a place of meeting, the interior is occupied as a corn-market, and its back forms part of the spacious quadrangle in which the principal market is held. The Commercial Rooms, built in 1811, and used as an exchange, have a handsome dome, an Ionic portico, a large hall, reading-room, and various apartments for the despatch of business.

The branch of the bank of England, a handsome modern building, in the Grecian style, adjoins the Guildhall. The Bristol Literary and Philosophical Institution, a handsome edifice, opened in 1823, has a reading-room, library, theatre, and museum: in the latter are good collections both in natural history and the fine arts; courses of lectures are given, philosophical papers read, and it has occasional exhibitions of paintings. The Mechanics' Institute, built in 1832, has a lecture and a reading-room. The Bristol Library, established in 1772, has an extensive collection (about 35,000 vols.) in general literature. There are also law and medical libraries; a medical school, established in 1834, in which complete courses of lectures are given, the certificates of its professors being recognised at Apothecaries' Hall; an endowed "Academy for the advancement of the Fine Arts;" and an academy for the education of young men for the Baptist ministry, to which an extensive library and museum are attached.* There is a handsome edifice of the Corinthian order in Princes Street, in the great room of which concerts, balls, &c., are sometimes given. The Victoria assembly rooms have a magnificent saloon 117 ft. in length by 55 do. in width, and 48 do. in height, where religious meetings are also held. The theatre was said by Garrick to be one of the best of its size in Europe. At Clifton are baths and pump-rooms; and connected with the hot wells is a handsome edifice of the Tuscan order.

The Bristol channel is celebrated for its high tides. They rise at Kingroad, at the mouth of the Avon, from 48 to 49 ft. at springs, and 23 ft. at neaps, while their rise at the entrance to the floating harbour at Rownham, varies from 30 to 33 ft. In consequence of this extraordinary rise, the largest ships come up to the city. The tide sets with great rapidity in the river, especially between the precipitous rocks of Clifton and Leigh, which seem to be rent asunder to admit its passage; and to obviate the risk of damage to shipping from this rapid flow of the tide, and from grounding at low water, a spacious floating harbour, equivalent to a wet dock, has been constructed. This important work, begun in 1804 and completed in 1809, was effected by changing the bed of the river. But the original entrance to the harbour being too small to admit steam ships of the largest size, a new entrance of the requisite dimensions was made to it in 1849. The harbour extends about 3 miles from the entrance lock at Rownham, to the dam at Temple Meads, occupying the old bed of the Avon, and the bed of that branch of the Frome that lies between St. Augustine's and St. Stephen's quays, and cost, in all, a very large sum. Its present quay frontage amounts to 2,000 yards, admitting of any further extension that an increased trade may require. There are two basins for the temporary accommodation of vessels entering or leaving; one at Rownham for large ships, the other below the iron bridge at Bedminster, for vessels under 500 tons. There are also several capacious graving-docks, and ship-building is carried on to some extent; the Great Western and Great Britain steam-ships, with the Severn, the Avon, and others of inferior dimensions having been built in the port.

Three bridges connect the opposite sides of the floating harbour and rivers, viz. Bristol Bridge, of 3 stone arches, built in 1768, connecting the central part of the city with Redcliffe; and 2 iron bridges, each with a single span of 100 ft.; one on the Bath and Wells, the other on the Exeter line of road; and a swivel iron bridge (to admit the passage of ships), connecting St. Augustine's and Clifton with the rest of the city. A small stone bridge spans the Frome at the point where it ceases to be navigable; and a suspension bridge is commenced, which is intended to connect Clifton with the co. of Somerset. The latter will be, when finished, one of the most picturesque and striking works of its kind in the kingdom, and probably in the world; the roadway, which will be 850 ft. in length and 220 ft. above high-water mark, has precipitous rocks at both ends, on each of which a tower is already erected; but the work is, for the present, suspended. The Avon, above Bristol Bridge, is navigable for barges to Bath, whence the water communication is continued to London by the Avon and Kennet canal and the Thames. Three railways, viz. the Bristol and Gloucester (36 m.), Great Western (118 m.), and the Bristol and Exeter (76 m.), have termini in the city, which, consequently, has a rapid means of communication with the metropolis and all parts of the country. The Exchange market, and that of St. James, are open daily for general provisions; the chief supply being on Wednesdays and Saturdays; corn and leather markets are held Tuesdays and Thursdays. The cattle-market is held on Thursdays, in a walled area of 4 acres, outside the city, at Temple Meads, at the junction of the Great Western and Exeter railways. At the great market on the Thursday preceding Christmas, the show is usually very fine. Two annual fairs, commencing 1st March and 1st Sept., that were formerly resorted to by clothiers, hosiers, cutlers, &c., from all parts of England, having fallen into desuetude, were abolished in 1837; but fairs for cattle, horses, leather, &c., are still held on the above days.

Bristol was, for a lengthened period, second only to London as a commercial emporium; but, though its comparative importance has, in this respect, greatly declined, it continues to be the seat of some important manufactures and of an extensive and increasing trade. The principal manufactures are those of refined sugar; brass and copper wares, for the production of which Bristol was formerly famous, and in which she still maintains her reputation; soap, glass bottles, crown and flint glass, chain cables, anchors, steam-engines and other machinery, tobacco, earthenware, floor cloth, brass wire, pins, patent shot, sheet lead, zinc, saltpetre, tin pipes, hats, drugs, colours, dyes, starch, bricks, British spirits, malt liquors; with extensive soda works; and in 1837, a cotton mill was opened here, which, at present (1850), employs about 1,700 hands. Many of the iron founderies are on a large scale, and are increasing both in their number and the extent of their exports. In 1848, there were made at the various soap manufactories 10,761,892 lbs. hard soap, and 368,980 lbs. soft do. The establishments for glass, sugar, brass, floor-cloth, and earthenware, are also on an extensive scale. The post-office revenue in 1848 was 22,060*l.* There is a savings' bank, established in 1813, and *six* other banking establishments, including the branch of the bank of England. The deposits in the savings bank, on the 20th of Nov. 1849, amounted to 340,006*l.* 17*s.* 7*d.*

Bristol early possessed, and continues to enjoy, a large share of the trade with the West Indies; and among her foreign imports the most important are those of sugar, molasses, rum, tea, and cocoa; the next most important are those of tobacco, timber, wine, brandy, tallow, fruits, wool, hemp, dye stuffs, oils, saltpetre, hides, &c. The exports consist principally of the produce of the

* The Bristol College, established in 1830, no longer exists.

various manufactures of the city, with salt, iron, coals, and culm, in part the produce of the neighbourhood; and cotton, linen, and woollen goods. In 1849, the declared value of the exports to foreign parts amounted to 221,964*l.*; and 477 British ships, of 107,548 tons burden, and 169 foreign do. of 22,424 tons burden, entered inwards. The customs duties during the same year were 1,042,319*l.* Bristol carries on an extensive and growing trade with Ireland, from which she imports corn, butter, bacon, potatoes, cattle, horses, sheep, pigs, salmon, &c.: sending in return tea, raw and refined sugar, wrought iron, tin plates, copper, glass, woollen, and leather. In 1849, there arrived from Ireland 438 vessels, of 95,158 tons. The imports, coastwise, consist mostly of iron, tin, coal, salt, agricultural produce, and foreign produce, brought from other ports under bond. The exports are chiefly foreign and colonial produce (especially groceries, spirits, and wines), and the various manufactures of the city. There belonged to the port, in 1850, 286 sailing vessels, of 37,212 tons, and 27 steamers, of 3,528 tons. A communication by steam for the conveyance of goods and passengers to Ireland was established in 1826, and has led to a great increase of the trade with that part of the empire. Bristol also had the honour of being the first port in the empire to establish a regular communication by steam with the U. States. The first voyage by the Great Western steamship was performed in 1838.

The parl. and municip. limits of Bristol coincide, and had, as already stated, a pop. in 1841, of 123,188; and at present, 1850, probably of 137,000. It is divided into 12 wards, and is governed by a mayor, 16 ald., and 48 councillors. Previously to the Municipal Reform Act; the government was vested in a mayor, 12 ald., and 30 common councillors the recorder being senior alderman: they were a self-elected body, and filled up their vacancies from the freemen, of whom there were 3,109 registered. The governing charter was granted in the 8th of Anne; the earliest in the 9th of Hen. II. A court of sessions, or gaol delivery, (except for capital cases, now tried at Gloucester,) is held quarterly by the recorder. The tolzey, or sheriff's courts, for all kinds of actions in cases under 40*s.* A county court is held at Bristol for part of the county of Gloucester, before which 9,167 plaints were entered in 1848; Bristol has, also, a district court of bankruptcy, and a court of assize for *nisi prius* cases, held the week after the Somerset assizes, by the senior judge on the western circuit.

Six weekly papers are published in the city.

The county jurisdiction by water, extends over the Avon, from 4 m. above the city; and sea-ward, to the steep and flat Holmes, and to the high water-mark, on the English side of the Severn, from Aust's Passage to Clevedon. The corporation are conservators of the port and harbour; and have the power of licensing pilots, on whom is conferred the exclusive privilege of piloting all vessels passing up or down to the E. of Lundy Island, except Irish and coasting traders: the ports of Bristol, Newport, Cardiff, Swansea, Ilfracombe, and Bridgewater are comprised within this jurisdiction. A board of commissioners, elected by the rate-payers, has the exclusive power of paving, lighting, and cleansing the town; they levy an annual assessment on the inhab. for these purposes varying from 11,000*l.* to 12,000*l.* The corporation revenues, derived from towns and market dues and rents of houses and lands in the city and neighbourhood amounted in 1847, to 48,483*l.* 6*s.* 7*d.* The Dock Company was incorporated by an act of 43 Geo. III.; but in 1848, the docks were transferred from them to the incorporation, and the rates have been since greatly reduced. A Chamber of Commerce, instituted in 1823, no longer exits. The management of the poor, within the old limits of the city, was vested in a corporate body by an act 7 & 8 W. 3. c. 32., and subsequent acts have been passed regulating their number and powers. The guardians consist of the mayor and 12 members elected annually by the town council out of their own body, the senior churchwardens of the different parishes, the senior overseer of the castle precincts, and 48 other inhabitants. The amount expended for the relief and maintenance of the poor of the united parishes for the year ending Lady-day, 1850, was 29,572*l.* 3*s.*

Bristol has sent 2 mem. to the H. of C. since 1283: previously to the Reform Act, the right of election was in the freeholders and freemen only. Registered electors, in 1849-50, 12,157, of whom above 6,000 were 10*l.* householders. Bristol was made the seat of a bishopric in 1541. It is now, in conformity to the act 6 & 7 W. 4. c. 77., united with Gloucester, in a see comprising the city of Bristol, the deaneries of Cricklade and Malmsbury, in Wilts, and the previous diocese of Gloucester: Bristol being constituted a deanery, which, alternately with that of Gloucester, is to elect the future bishops.

The Bristol hot well, under the Clifton rocks, is much resorted to by invalids, its waters being considered efficacious in consumptive cases. The temp. of this saline spring, when fresh from the pump, is 74° Fahr., and it then evolves free carbonic acid. It issues from the cliff, between the high and low-water-mark. The hot-well house is finely situated beside the Avon; a carriage road winds from it, behind the rocks, to Clifton Down; a shorter footpath at the back also leads to that suburb, which is the fashionable part of Bristol; the scenery, by either line, is singularly interesting. The acclivities are occupied by handsome edifices in squares, terraces, crescents, &c., forming fine promenades; the most magnificent of these ranges is York Crescent, Victoria Square, Caledonia Place, &c. Near the water is a good hotel, whence the Irish steam-packets start regularly; and on the cliff a splendid one, where concerts and assemblies are held during the season. Another spring higher up the cliff, but probably from the same source, has within a recent period had baths and a pump-room attached to it. The geological features of the place may be thus briefly described: — If the entire area be divided N. and S. into three unequal portions, that on the E. will fall within the limits of a coal formation, which extends N. and S. of the city, but chiefly to the N., about 30 m.: its beds are thin, as compared with those of other coal-fields. The central or largest portion is chiefly occupied by the new red sand, in which saurian remains occur; the western part is chiefly mountain lime. Some of the summits in the N. and W. parts of the city are 250 ft. above the bed of the Avon. In the rocks of Clifton, and the opposite ones of St. Vincent, quartz crystals of great purity occur, known as Bristol diamonds. There are remains of three Roman encampments at Clifton, Rownham, and Abbots-Leigh.

The decline in the comparative importance of Bristol, as a trading emporium, has been chiefly manifested by contrasting its progress with that of Liverpool. The average customs duties of Bristol for the seven years ending with 1757 amounted to 155,189*l.*; those of Liverpool, for the same period, to 51,136*l.* In 1784, the customs of Bristol were 334,909*l.*, a great increase; but those of Liverpool had advanced, in the same year, to 648,684*l.* The excess of local taxation, the town and harbour dues having been much heavier than those of any other of the larger ports, has been usually assigned as the principal cause of the slower progress of Bristol. But that grievance, after having been mitigated by various reductions effected since 1835, has at length been wholly obviated; and the charges on shipping in the Avon are now remarkable for their moderation. This important reform took place in 1848, under the local act 11 & 12 Vict. c. 43 (30 June, 1848), which transferred the property of the docks from the former dock company to the citizens, and vested their management in the common council of the city. In consequence of this change, and of the reduction of the rates by which it has been followed, ships that formerly paid 2*s.* and 3*s.* per ton of dock dues now pay 1*s.* per do.; while those that paid 1*s.* now pay 6*d.*; and those that paid 8*d.* and 6*d.* now pay 4*d.* And it is of importance to observe that all former charges on ships and goods outwards have been wholly abolished; so that, as regards exports, Bristol is an absolutely free port.

But notwithstanding the greater weight of local taxa-

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tion must have operated seriously to the injury of Bristol, too much stress has been laid upon it in accounting for the slower growth of the trade of the port. The real cause of the rapid rise of Liverpool, Glasgow, and other sea-port towns, is to be found, not in the lowness of their port charges, or in any peculiar advantages they individually enjoy; but in their having become the ports of the great manufacturing districts. The extraordinary growth of Liverpool is a consequence of the still more extraordinary growth of the cotton manufacture. Her rise has been dependant upon, and consequent to, the rise of Manchester, Bolton, Blackburn, &c.

The citizens of Bristol are clebrated for their hospitality; and the society in it is a good deal more English than in Liverpool.

According to Camden (*Gibson's ed. of the Brit.* i. 74.), Bristol first rose into notice towards the close of the Saxon dynasty. It is noticed by William of Malmsbury as a place of great trade, frequented by ships from all parts of Europe. It had then, as now, an extensive intercourse with Ireland; and our readers will, perhaps, be surprised to hear that slaves were a principal article of export to that country. (*Henry's Great Britain*, vi. 268.) Its castle was built, or, at all events, enlarged and strengthened, by the Earl of Gloucester, brother to the Empress Matilda. During the wars of the Roses the town was comparatively undisturbed and flourishing; but in the civil war of the 17th century it suffered severely. At the commencement of hostilities it was garrisoned by the parliamentary forces; subsequently it was stormed by the king's forces, and surrendered to Prince Rupert: the following year (during which it suffered under the united evils of pestilence and war) it was again stormed, and retaken by Cromwell, who subsequently demolished its castle. In 1247 a great improvement in its port was completed, by cutting a new channel for the river, and forming a double line of quay between Bristol and Redcliffe: a bridge, on the site of the present, was built at the same period. Thence to the 16th century, its factories supplied a large portion of the kingdom with woollen goods, soap, and glass: in the reign of Edw. III. it was made a staple of wool; and it then traded extensively with Ireland, France, and Russia. In the *Itinerary* of Botoner are details of its trade and shipping in the 15th century, which prove its extended commerce and great enterprise at that period. Near the close of the 15th century Hen. VII. granted charters to John Cabot and his two sons, which resulted shortly after in the discovery of Newfoundland, and a large part of the American continent. In October, 1831, a most disgraceful riot occurred here; which, owing to a want of decision on the part of the civil and military authorities, was allowed to attain to a most alarming height. The mansion-house, the episcopal palace, and several private houses, were burnt down; and a large amount of property destroyed.

Among the distinguished individuals that Bristol has produced are — William of Worcester, the topographer; Wm. Cannynge, the most eminent merchant and ship-owner of his day; Sebastian Cabot, the discoverer of Newfoundland, born at Bristol, of Venetian parents; Edw. Colston, a merchant famous for his benevolence and the extent of his charities; Sir Wm. Draper, distinguished by his controversy with Junius; Chatterton, the poet, whose uncle was sexton of Redcliffe church, where the Rowley MSS. were alleged to have been discovered; Southey, the poet and *litterateur*; Sir Thomas Lawrence, the eminent painter; and Bayley, the sculptor. (*Seyer's Hist. of Bristol; Municip. Commissioners' Report in* 1835; *Eighth Report of the Charity Commissioners, &c.*; and *Private Information.*)

BRITISH EMPIRE (THE), one of the most civilised, powerful, and important states that have ever existed, consists of the islands of Great Britain and Ireland, with the smaller islands contiguous to them, and their dependencies in various parts of the world. Great Britain, the largest, and by far the richest and most populous of the British Islands, includes what were formerly the independent kingdoms of England and Scotland; the former occupying its S., most extensive and fertile, and the latter its N. and most barren portion. These two kingdoms, having been united, form with that of Ireland what is called the *United Kingdom of Great Britain and Ireland*, which constitutes not only the nucleus and centre, but the main body and seat of the wealth and power of the empire.

The islands of Great Britain and Ireland are situated in the N. Atlantic Ocean, off the W. shores of continental Europe, opposite to the N. parts of France, the Low Countries, Denmark, and the S. parts of Sweden and Norway, between 50° and 59° N. lat., and 2° E. and 11° W. long. Great Britain, which, from its superior magnitude and importance, gives name to the United Kingdom and the empire, is not only the largest of the European islands, but one of the largest in the world. It lies to the E. of Ireland, and approaches at its S.E. extremity at Dover to within 21 m. of the opposite coast of France. But as the coast of Great Britain stretches N.N.W. from Dover to Duncansby Head, the extreme N.E. point of the island, while the opposite shore of the Continent recedes in a N.E. direction, the intervening space, called the North Sea or German Ocean, is of very considerable dimensions. To the S. of the British Islands we have the English Channel, and W. and N. the broad expanse of the Atlantic.

Great Britain is very irregularly shaped, being deeply indented by numerous gulphs and arms of the sea, but on the whole it approaches to the figure of a wedge, being narrowest at its N. and broadest at its S. extremity. The longest line not intersected by any considerable arm of the sea that can be drawn in Great Britain, extends from Rye in Sussex (lat. 50° 57′ 1″ N., long. 0° 44′ E., to Cape Wrath in Sutherland (lat. 58° 38′ N., long. 40° 58′ W.), a distance of about 580 m.; and its greatest breadth from the Land's End (lat. 50° 4′ 8″ N., long. 5° 41′ 31″ W.) to a point near Lowestoffe, on the coast of Norfolk (lat. 52° 28′ 30″ N., long. 1° 46′ E.), is about 367 m. But, owing to the indentations already referred to, its breadth in some places is much less, being between the friths of Forth and Clyde under 40, and between the Moray Frith and the Minch under 30, m. from shore to shore. Its area is estimated at 89,035 sq. m., of which England and Wales contain 58,320, and Scotland (inclusive of its dependent islands) 30,715 sq. m. The area of the Scottish islands is roughly estimated at about 4,000 sq. m.

Ireland lies to the W. of Great Britain, between the parallels of 51° 25′ and 55° 23′ N. lat., and of 6° and 11° W. long. Its figure is rhomboidal; and though it has many noble bays and harbours, it is less indented by gulphs and arms of the sea, and is decidedly more compact than Great Britain. It is every where surrounded by the Atlantic, except on its E. shores, which are separated from Great Britain by St. George's Channel, the Irish Sea, and the North Channel. From St. David's Head in Wales to Carnsore Point, the distance across is about 47 m.; from Port Patrick in the Rhynns of Galloway to Donaghadee, the distance is 22 m., but from the Mull of Cantire to Tor Point in Ireland, the distance is only 13½ m. The longest line that can be drawn in Ireland, in about the same meridian, extends from the Old Head of Kinsale in Cork to the Bloody Farland Point in Donegal, a distance of about 237 m.: the longest line that can be drawn crosswise in Ireland, in nearly the same parallel of lat., extends from Emlagh Rash, on the coast of Mayo, to Quintin Point, at the mouth of Lough Strangford, on the coast of Down, being about 182 m.; but in other places the breadth is a good deal less. So conveniently is Ireland situated in respect of water communication, that there is no part more than 50 or 55 m. distant from the sea, or from one of its arms. The area of Ireland is estimated at 32,512 sq. m.

As separate articles will be appropriated to the description of England, Scotland, and Ire-

land, and their dependencies, it is only intended in this article to take a rapid view of those particulars that have reference to the empire as a whole, and which could not, with propriety, be placed under the description of any one of its separate heads.

Natural advantages of the United Kingdom. — Perhaps no country ever existed more favourably situated, or placed under more advantageous physical circumstances, than the United Kingdom. It is sufficiently extensive to be the centre of a mighty empire; and to support, independent of any extrinsic resources, a very large population, and, consequently, possesses that native and inherent power that is necessary to secure the first of political blessings — national independence. Its insular situation is also of immense advantage; it gives us a well-defended frontier, on which there can be no encroachment, and about which there can be no dispute; and while it renders us comparatively secure from hostile attacks, it affords unequalled facilities for commerce; every part of our frontier being, as it were, a terminus to the "great highway of nations." The surface of the country is agreeably diversified with hill and dale, mountains and plains; and while the soil is not so very fertile as to yield crops with little labour, and so to encourage sloth on the part of the cultivator, it is in general sufficiently productive, and yields abundant returns to the laborious and skilful husbandman. It has been well observed of Great Britain, and the same thing is equally true of Ireland, that "it is not fertile enough to make men indolent, nor barren to such a degree as to deny grateful, if not ample, returns to the industrious cultivator. In a word, it enjoys the fortunate medium between fertility and barrenness, or (to speak more properly) between easy and difficult culture; inclining rather *to the side of difficulty*, and affording opportunity sufficient for industry and improvements; which is just the circumstance a person would wish for who truly understands the good of his country. Rich soils infuse ease and indolence into the inhabitants; but soils that require laborious cultivation stimulate industry and invention, and impress on the population a hardy enterprising character." (*Harte's Essays*, p. 188.)

All the most valuable species of the *Cerealia*, as wheat, oats, and barley, succeed quite as well in the British Islands as in any other country. Potatoes, too, and a vast variety of useful vegetables and fruits, are raised in the greatest abundance. Owing to the peculiar aptitude of the soil and climate, no country can compare with the United Kingdom in the luxuriance of its verdure, and the richness of its pastures. And in consequence principally of this circumstance, but partly, also, of the care bestowed on the selection of the most improved stock, our horses, cattle, sheep, and other useful animals, are all equal, if not superior, to the finest breeds to be found in any other part of the world.

The British Islands have also been singularly fortunate in respect of climate. If we desiderate the clear skies of Italy and the south of France, we also want the long-continued droughts and exhausting heats to which they are subject. Though exposed to sudden changes, we are exempted from all violent extremes of heat and cold. The general impression seems to be that the climate of Great Britain has been considerably modified since 1750; and that our winters have become milder, and our summers less dry and warm than formerly. In most seasons, indeed, the winter can hardly be said to commence till after Christmas; and in some years there is little if any frost. The great defects in our climate are the prevalence of cold blighting E. winds in April and May; and not unfrequently, of rainy weather in August and September. It is but rarely that our crops suffer from excess of drought; but they occasionally suffer from backward summers, and autumnal rains. On the whole, however, the climate of the British islands is, notwithstanding its defects, one of the best, if not the very best, in Europe. It requires, indeed, the most anxious and watchful attention on the part of the husbandman; but, instead of being a drawback, that is an advantage. There is also much truth in the remark of Charles II., as quoted by Sir William Temple: — "He thought that was the best climate where he could be abroad in the air with pleasure, or at least without trouble and inconvenience, the most days of the year, and the most hours of the day; and this he thought he could be in England more than in any other country of Europe."

Among the other physical circumstances that have promoted, in no ordinary degree, the power and prosperity of the empire, may be specified the number and excellence of our harbours, affording asylums for the ships, and depôts for the goods of the most distant countries; and the number of our rivers, their depth, and the facilities they afford to internal communication. The last-mentioned circumstance is peculiarly worthy of remark: Great Britain and Ireland being islands, with no part very remote from the sea, it might be supposed that their rivers would be of comparatively small magnitude, and of but little use in navigation. But the fact is distinctly and completely the reverse. The Thames, Trent, and Severn, in England, and the Shannon, in Ireland, are all navigable to a very great distance. The first, notwithstanding its limited length and volume of water, ranks, as a navigable channel, among the first rivers of Europe; its embouchure is unencumbered by any bar, and it is navigated from the sea to London Bridge, a distance of 45 m., by the very largest ships, and to a much greater distance by barges. The Severn, Trent, and Shannon have been rendered navigable for barges and steam-boats for the greater part of their course; the latter, which flows through the interior of Ireland, almost to its very source! The means afforded by the rivers for facilitating internal communication, have been vastly extended by the construction of canals; and, with the single exception of Holland, the United Kingdom has a greater extent of artificial navigation than any other country.

The mineral riches of Great Britain are not merely equal to those of any other country, but superior. We cannot, it is true, boast of mines of gold and silver, but we possess what are really more important and valuable. Iron, the most useful of all the metals, is found in the greatest abundance, and of an exceedingly good quality, in most parts of the empire. Our tin mines are the most productive of any in Europe; and we have also very productive mines of copper, lead, manganese, &c. Our salt springs and beds of fossil salt are alone sufficient for the supply of the whole world. But coal is by far the most important and valuable of our mineral treasures. It is hardly, indeed, possible to overrate the advantages Great Britain derives from her vast, and, to all practical purposes, inexhaustible beds of coal. In this climate, fuel ranks among the principal necessaries of life; and it is to our coal mines that we owe abundant

and cheap supplies of so indispensable an article. Had they not existed, wood must have been used as fuel; and it is quite impossible that any attention to the growth of timber could have furnished a supply equal to the wants of the present population of Great Britain, even though a large proportion of the cultivated land had been appropriated to the raising of trees. But, however great and signal, this is not the only advantage we derive from our coal mines: they are the principal source and foundation of our manufacturing and commercial prosperity. Since the invention of the steam-engine, coal has become of the highest importance as a moving power; and no nation, however favourably situated in other respects, not plentifully supplied with this mineral, need hope to rival those that are, in most branches of manufacturing industry. To what is the astonishing increase of Glasgow, Manchester, Birmingham, Leeds, Sheffield, &c., and the comparatively stationary or declining state of Canterbury, Winchester, Salisbury, and other towns in the south of England, to be ascribed? It cannot be pretended, with any show of reason, that the inhabitants of the former are naturally more ingenious, enterprising, or industrious than those of the latter. The abundance and cheapness of coal in the north, and its scarcity, and consequent high price, in the south, is the real cause of this striking discrepancy. The citizens of Manchester, Glasgow, &c. are able, at a comparatively small expense, to put the most powerful and complicated machinery in motion, and to produce results quite beyond the reach of those who have not the same command over coal, or, as it has been happily defined, hoarded labour. Our coal mines have been sometimes called the Black Indies; and it is certain that they have conferred on us a thousand times more real advantage than we derive from the conquest of the Mogul empire, or than we should have reaped from the dominion of Mexico and Peru. They supply our manufacturers and artisans with a power of unbounded energy and easy of control, and enable them to overcome difficulties insurmountable by those to whom nature has been less liberal of her choicest gifts.

Estimate of the Mineral Produce of Great Britain, at an Average of Years and Prices.

	Quantity.	Value.
Silver	68,166 lbs. troy	205,000
Copper	13,000 tons	1,200,000
Tin	5,500 —	550,000
Lead	56,000 —	1,000,000
Iron (1854)	2,450,000 —	12,250,000
Coal	44,500,000 —	22,000,000
Salt, alum, and other minor produce more than		1,500,000
Total value probably exceeds		£38,705,000

Races of People. — At the earliest period to which history ascends, the British islands were occupied by Celts or Gael, who, it is probable, had passed over into Britain from the contiguous coasts of France, and from Britain into Ireland. To the Celtic population of Britain succeeded the Gothic. At a period long preceding the Christian æra, the Goths or Scythians, advancing from the east, had occupied a large portion of the N. and N.W. parts of Europe. The Low Countries and the N. provinces of France were in the age of Cæsar peopled by Goths, who had acquired the distinctive appellation of *Belgæ;* and it appears from Cæsar, that long previously to his invasion of Britain, colonies of Belgians had passed over into it, and then occupied its maritime and most fertile portions. (*De Bello Gallico*, lib. v. § 12.) The Romans, though they subdued Great Britain, did not settle in great numbers in it; and the Belgæ, by whom it had been colonised at the epoch of their invasion, may be regarded as the principal progenitors of the English nation; for, though the various Gothic tribes who passed over into Britain after the departure of the Romans were sufficiently powerful to subdue it, and one of them (the *Angles*) succeeded in giving its name to the greater portion of Britain, they were far too few in number to have occupied it fully, or given it a new language, had their own differed materially from that previously in use. (*Pinkerton's Geog.*, art. *England*, and his *Dissert. on the Goths, passim.*) But the ancient and the more recent Saxon and Belgian colonists being essentially the same people, readily amalgamated. The invaders having expelled the original or Celtic inhabitants from the lower and more fruitful parts of the country, the latter were compelled to resort to the fastnesses of Wales, the Highlands of Scotland, and the remote parts of Devon and Cornwall. The facilities which these countries afforded for resisting and eluding an invading force, prevented them being overrun by the Goths. They were never even fully subdued by the Roman legions; and at this moment we find them a distinct race, speaking the language of their remote ancestors.

The temporary conquest of England by the Danes, and its subsequent subjugation by the Normans, however important in other respects, made no sensible change in the stock of the inhabitants. The Normans, though long settled in France, where they had acquired the use of the French language, originally emigrated from Norway; and belonged, as well as the Danes, to the Gothic family. Except, therefore, in so far as we may suppose the Celtic and Belgic inhabitants to have been blended together, the Gothic blood would seem to have been preserved pretty pure in all the country S. of the Tay, and E. of the Severn and the Exe.

The Romans did not invade Ireland; and the Goths do not appear to have passed over into it, at least in any considerable numbers. Hence its population, in so far as it is not alloyed by emigrants from England, since the invasion under Henry II. and their descendants, may be regarded as of Celtic origin. In fact, the Irish language, a dialect of the Gaelic, is at this moment spoken to the almost total exclusion of English, in various pretty extensive districts of Ireland; and we should be disposed to consider nearly two-thirds of the people of that island, as being lineally descended from the ancient occupants of the country.

Population.—The progress of population in Great Britain and Ireland was long very slow. Latterly, however, it has increased with extraordinary rapidity. This, in the former, has been a consequence of the wonderful increase of manufactures and commerce since 1763, and in the latter, of the splitting of farms, and the endless division and subdivision of the land. The progress of population in the different portions of the U. K., down to the beginning of this century, according to the best attainable information, will be seen in Table at top of next page.

The population of England and Scotland was, for the first time, determined by actual census in 1801; since which a census has been taken every 10 years. In Ireland, an incomplete census was taken in 1813; but it was not till 1821 that the population of that part of the empire was exactly ascertained. For the results of the censuses hitherto taken, see Table in the following pages.

I. Progress of Population in the different Portions of the United Kingdom.

England and Wales.		Scotland.		Ireland.		United Kingdom.	
Years.	Population.	Years.	Population.	Years.	Population.	Years.	Population.
1696	5,500,000	1707	1,050,000	1672	1,100,000	1700	7,650,000
1710	5,066,337			1712	2,099,094		
1730	5,687,993						
1750	6,039,684	1755	1,265,380	1754	2,372,634	1750	9,670,000
1760	6,479,730			1777	2,690,556		
1780	7,814,827			1785	2,845,932		
1801	9,187,176	1801	1,599,058	1805	5,395,456	1800	15,800,000
1851	17,927,600	1851	2,888,742	1851	6,661,830	1851	27,478,181

II. Summary Account of the Population of Great Britain and Ireland, including the Army and Navy, at the Periods at which Censuses have been taken, with the Ratio of Increase in the intervening Decennial Periods.

	1801.	Inc. per Cent.	1811.	Inc. per Cent.	1821.	Inc. per Cent.	1831.	Inc. per Cent.	1841.	Inc. or Dec. per Cent.	1851.
England	8,331,434	14½	9,538,827	17½	11,261,437	16	13,091,005	14·5	14,995,138	12·8	16,921,888
Wales	541,546	13	611,788	17	717,438	12	806,182	13·0	911,603	10·3	1,005,721
Scotland	1,599,068	14	1,805,688	16	2,093,476	13	2,365,114	10·7	2,620,184	10·2	2,888,742
Army, Navy, &c.	470,598	- -	640,500	- -	319,300	- -	277,017	- -	193,469	- -	210,474
Islands in the British Seas	- -	- -	- -	- -	89,508	15·8	103,710	19·6	124,040	15·3	143,126
Total	10,942,646	15·1	12,596,803	14·2	14,481,139	14·9	16,643,028	13·2	18,844,434	12·3	21,169,951
Ireland	- -	- -	- -	- -	6,801,827	14½	7,767,401	5·2	8,175,124	Dec. 18½	6,661,830
Total Population of the U. Kingdom	- -	- -	- -	- -	21,202,066	15·1	24,419,429	10·6	27,019,558	Inc. 3·9	27,831,781

III. Account of the Total Area (inc. and exc. Water) in Sq. Miles and Acres, of the Inhabited Houses, and of the Total Population per Sq. Mile (inc. and exc. Water) in the different Divisions of the U. Kingdom, in 1851.

	Square Miles, including Water.	Statute Acres, including Water.	Square Miles, exclusive of Water.	Statute Acres, exclusive of Water.	Inhabited Houses.	Total Population.	Population per square Mile, inc. Water.	Population per square Mile, exc. Water.
England	50,922	32,590,429	50,922	32,590,429	3,076,620	16,921,888	332·5	332·5
Wales	7,398	4,734,485	7,398	4,734,485	201,409	1,005,721	135·9	135·9
Scotland	30,714	19,657,315	30,469	19,500,348	370,308	2,888,742	94·0	94·0
							Average of G. Britain.	
Total	89,034	56,982,230	88,789	56,825,262	3,648,337	20,816,351	233·8	234·4
Ireland:								
Leinster	7,619	4,876,211	7,530	4,824,587	257,965	1,672,174	219·4	222·0
Munster	9,476	6,064,579	9,240	5,913,198	266,974	1,857,244	195·9	201·0
Ulster	8,555	5,475,438	8,219	5,260,482	367,167	2,120,106	247·0	257·9
Connaught	6,962	4,392,043	6,530	4,179,179	169,299	1,012,008	147·4	154·9
							Average of Ireland.	
	32,512	20,808,271	31,527	20,177,446	1,061,405	6,661,830	204·8	211·3
							Average of U. K	
Total of United Kingdom	122,546	77,790,501	120,316	77,002,708	4,709,742	27,478,181	224·2	228·3
Channel Islands and Isle of Man	394	252,000	394	252,000	21,845	143,126	343·2	363·2

IV. Account of the Number of Persons, distinguishing between Males and Females, belonging to the different Divisions of the United Kingdom in 1841; showing, also, the Number of Houses in each, with the Number of Persons chiefly occupied in Agriculture, Trade, Manufactures, &c.

	Persons.			Houses.			Occupations.		
	Males.	Females.	Total of Persons.	Inhabited.	Uninhabited.	Building.	Persons chiefly employed in Agriculture.	Persons chiefly employed in Trade, Commerce, and Manufacture.	All other Persons not comprised in the two preceding Classes.
England	7,327,517	7,672,637	15,000,154	2,755,710	163,077	25,704	1,157,816	2,529,073	11,313,265
Wales	447,707	463,896	911,603	188,229	10,157	1,764	103,632	90,133	717,838
Scotland	1,241,862	1,378,322	2,620,184	502,852	24,026	2,646	229,337	473,581	1,917,266
Isles in the British Seas	57,556	66,484	124,040	19,190	869	220	8,493	17,589	97,958
Army, Navy, and Merchant Seamen, afloat, &c.	187,484	969	188,453	- -	- -	- -	- -	- -	188,453
	9,262,126	9,582,308	18,844,434	3,465,981	198,129	30,334	1,499,278	3,110,376	14,234,780
Ireland:							Families.	Families.	Families.
Leinster	963,747	1,009,984	1,973,731	306,459	12,320	1,272	214,046	92,692	55,396
Munster	1,186,190	1,209,971	2,396,161	364,637	12,005	1,023	292,983	78,989	43,182
Ulster	1,161,797	1,224,576	2,386,373	414,551	21,590	626	267,799	141,801	30,205
Connaught	707,842	711,017	1,418,859	243,192	6,293	392	199,360	38,534	17,800
Total of Ireland	4,019,576	4,155,548	8,175,124	1,328,839	52,208	3,313	974,188	352,016	146,583
Total of U. K.	13,281,702	13,737,856	27,019,558	4,794,820	250,337	33,647			

V. Abstract Account of the Numbers, Ages, and Sexes of the Persons in different Occupations in Great Britain. Returned in the Census of 1841.

	Males.		Females.			Males.		Females.		
	20 Years of Age and upwards.	Under 20 Years of Age.	20 Years of Age and upwards.	Under 20 Years of Age.	Total.	20 Years of Age and upwards.	Under 20 Years of Age.	20 Years of Age and upwards.	Under 20 Years of Age.	Total.
	Commerce, Trade, and Manufacture.					Agriculture.				
England and Wales -	1,750,128	318,434	391,261	159,383	2,619,206	1,041,980	161,697	48,450	9,321	1,261,448
Scotland - - -	277,507	69,058	89,189	37,827	473,581	166,009	40,823	17,380	5,125	229,337
Isles in the British Seas -	11 774	2,448	2,567	800	17,589	7,275	681	499	38	8,493
Total -	2,039,409	389,940	483,017	198,010	3,110,376	1,215,264	203,201	66,329	14,484	1,499,278
	Domestic Servants.					Labourers.				
England and Wales -	150,005	83,524	476,081	289,438	999,048	482,683	85,182	98,828	7,229	673,922
Scotland - - -	13,652	8,115	82,305	54,578	158,650	65,865	9,801	8,163	744	84,573
Isles in the British Seas -	727	385	4,348	2,075	7,535	1,995	152	1,151	75	3,373
Total -	164,384	92,024	562,734	346,091	1,165,233	550,543	95,135	108,142	8,048	761,868
	Persons engaged in the Government Civil Service.					Educated Persons following miscellaneous Pursuits.				
England and Wales -	13,340	219	515	14	14,088	81,372	10,637	30,060	1,809	123,878
Scotland - - -	2,621	51	105	- -	2,777	12,988	2,687	2,236	188	18,099
Isles in the British Seas -	88	- -	5	1	94	480	54	292	33	859
Total -	16,049	270	625	15	16,959	94,810	13,378	32,588	2,030	142,836
	Persons returned as Independent.					Parochial, Town, and Church Officers, including Police and Law Officers, &c.				
England and Wales -	118,688	5,092	308,061	14,132	445,973	19,955	321	1,836	13	22,125
Scotland - - -	11,167	499	44,859	1,766	58,291	2,927	36	118	4	3,085
Isles in the British Seas -	2,263	98	4,596	219	7,176	60	- -	5	- -	65
Total -	132,118	5,689	357,516	16,117	511,440	22,942	357	1,959	17	25,275

	Military.			Naval.			Almspeople, Pensioners, Paupers, Lunatics, and Prisoners.				
	Males.			Males.							
	20 Yrs. of Age and upwards.	Under 20 Yrs. of Age.	Total.	20 Yrs. of Age and upwards.	Under 20 Yrs. of Age.	Total.					
England and Wales -	30,460	6,303	36,733	87,843	7,350	95,193	64,924	28,051	60,019	23,212	176,206
Scotland - - -	3,921	710	4,631	21,808	2,551	24,359	7,963	1,073	11,700	954	21,690
Isles in the British Seas -	690	150	840	2,048	231	2,279	652	131	319	71	1,173
Army abroad and in Ireland - - -	89,215	15	89,230								
Navy and Merchant Seamen afloat, &c. - -	- -	- -	- -	79,619	17,180	96,799	610	347	- -	- -	957
Total -	124,286	7,178	131,464	191,318	27,312	218,630	74,149	29,602	72,038	24,237	200,026

	Professional Persons.				Residue of Population not included in either of previous classes.				
	Clerical.	Legal.	Medical.	Total.					
	Males.	Males.	Both Sexes.						
England and Wales -	20,450	14,155	18,436	53,041	239,013	2,935,752	3,059,350	3,156,751	9,390,866
Scotland - - -	2,956	3,185	3 568	9,709	35,469	475,501	509,804	510,628	1,531,402
Isles in the British Seas -	137	114	183	434	1,838	22,911	24,509	24,872	74,130
Navy and Merchant Seamen afloat, &c. - -	- -	- -	- -	- -	206	292	703	266	1,467
Total	23,543	17,454	22,187	63,184	276,526	3,434,456	3,594,366	3,692,517	10,997,865

TOTAL OF POPULATION.

	Males.		Females.		Total.
	20 Years of Age and upwards.	Under 20 Years of Age.	20 Years of Age and upwards.	Under 20 Years of Age.	
England and Wales - - - - - -	4,130,763	3,644,461	4,475,231	3,661,302	15,911,757
Scotland - - - - - - -	630,328	611,534	766,508	611,814	2,620,184
Isles in the British Seas - - - -	30,304	27,252	38,300	28,184	124,040
Army abroad and in Ireland - - - -	89,215	15	-	- -	89,230
Navy and Merchant Seamen afloat, &c. - -	80,435	17,819	703	266	99,223
Total -	4,961,045	4,301,081	5,280,742	4,301,566	18,844,434

Too much stress should not, however, be laid on these returns. They make the number of those engaged in agriculture appear to be less and of those engaged in trade and manufacture greater than the truth. The smiths, for example, with the numerous carpenters, bricklayers, saddlers, harness-makers, and others employed in the shoeing of husbandry horses, and in the construction of agricultural buildings, implements, &c., are as obviously agricultural labourers as ploughmen or mowers; and contribute to produce corn, quite as efficaciously, and but little, if at all, less directly. Such persons, however, instead of being included among the agriculturists, are reckoned in the class of artificers or manufacturers, to which, indeed, they technically belong; and it is necessary to keep circumstances of this sort steadily in view in fairly appreciating the numbers really dependent on different businesses.

Industry.—To attempt any exposition of the causes that have rendered Great Britain so pre-eminently distinguished by her industry and progress in the arts, would lead us into discussions foreign to the object of this work, and which, though that were not the case, our limits would hinder our attempting. It is sufficient to observe that they are of different kinds; and that we are

not indebted for our superior wealth and civilisation to one or a few, but to a number of concurring causes: to the various favourable physical and moral circumstances under which we are placed. We have already glanced at the influence of the first; but that of the second class of circumstances has not been less powerful. The security of property and freedom of industry we have long enjoyed, in a greater degree than any other European nation, have powerfully promoted and stimulated industry, by impressing every man with the conviction that he would be allowed to enjoy, accumulate, and dispose at pleasure, the fruits of his industry and skill: our free institutions, opening, as they have done, the highest stations to individuals of talent and ability, how humble soever their origin, have diffused through all classes a desire to excel, and a determination to rise superior to every difficulty. It is characteristic of Englishmen—

> Certare ingenio, contendere nobilitate,
> Noctes atque dies, niti præstante labore,
> Ad summas emergere opes, rerumque potiri.

Even the magnitude of our national burdens, which, to a superficial observer, might appear to be a heavy drawback on our exertions, has really been a means of adding to their efficiency. Had they been oppressive, their operation would no doubt have been very different: but it was seen that they might be met by increased exertions, and these have been made: they have, in fact, operated on the public like an increase of the necessary expenses of his family on a private individual; and occasioned efforts of industry, economy, and invention, that have more than countervailed their influence, and which we should have in vain attempted to produce by any less powerful means.

Pretty full accounts will be found in the articles in this work appropriated to England, Scotland, and Ireland, of the agriculture, manufactures, and commerce of each. Here we shall only endeavour to lay before the reader a few general results; and these, we regret to say, are of less importance than might have been anticipated. Owing to the extreme difficulty of obtaining accurate returns in regard to the extent or value of any considerable branch of industry, and the limited attention that has been paid to such subjects, but little information has been collected on which it would be altogether safe to rely. The following estimates are therefore submitted, not as being free from error, or wholly to be depended upon, but as having been compiled with considerable care, and being, we believe, better entitled to credit than most others that have been put forward.

Agriculture. — ***Extent of cultivated and uncultivated land.***—The numbers in the subjoined Table of the extent of the cultivated (including meadows and arable pasture grounds) and uncultivated land in the different divisions of the U. Kingdom, have been derived as follows; viz. those for England and Wales, from a statement furnished by Mr. Couling, land surveyor and civil engineer to the Emigration Committee of 1827; those for Scotland, from the General Report of Scotland (III. Append. p. 5.); and those for Ireland, from the statement furnished by Mr. Griffith to the Lords' Committee on Tithes.

	Cultivated.	Uncultivated.	Total.
	Acres.	*Acres.*	*Acres.*
England - -	25,632,000	6,615,680	32,247,680
Wales - - -	3,117,000	1,635,000	4,752,000
Scotland - -	5,043,450	13,900,550	18,944,000*
Ireland - - -	14,603,473	5,340,736	19,944,209*
British Islands (Jersey, Guernsey, and Man, &c.) - -	383,690	735,469	1,119,159
Totals -	[illegible]8,779,613	28,227,435	77,007,048

* The totals for Ireland and Scotland are exclusive of lakes.

These returns, however, even at the time when they were framed, had no pretensions to accuracy, and could be considered merely as rough approximations. And considering the time that has since elapsed, and the rapid spread of agricultural improvement, there can be no manner of doubt that the proportion of cultivated land has since been materially augmented. In Scotland, only, this extension has been supposed to amount to about a million of acres; and we incline to think that, large as it may seem, this estimate is little, if at all, beyond the mark; while the immense number of acts passed of late years for the inclosure and division of wastes and commons in England and Wales, shows that there, also, the extent of the cultivated land must have been widely extended.

The following table (see next page) has been compiled from a great variety of data, and has received the corrections of some eminent practical authorities.

At the close of the war in 1815, the produce of wheat in England and Wales did not amount to 3 quarters, or 24 bushels, an acre. But such and so great has been the progress of improvement in the interval, that its produce at present certainly amounts to, or rather perhaps exceeds, 3½ quarters, or 28 bushels, an acre. This, supposing there are 3,600,000 acres under wheat in England, makes an addition of 14,400,000 bushels to the produce, exclusive of the farther quantity of other grain furnished by the greater breadth of land under tillage. And it is material to observe that the progress of improvement has been even more rapid in other parts of the U. Kingdom than in England; the produce of *all* descriptions of crops, and the land in cultivation, having been every where increased in a degree that could not previously have been anticipated. According to Dr. Colquhoun, the consumption of corn in the U Kingdom, in 1814, amounted, ex. seed, to 35,000,000 quarters. And the annual average consumption (ex. seed) may at present (1854) be estimated at about 54 million quarters, of which about 47 millions are of domestic growth.

The pasture and wood land of England and Wales (the former included under the term cultivated land) may be estimated at about 16,500,000 acres, its produce being worth about 3*l.* 5*s.* an acre a year, or in all, 53,625,000*l.* But to this may be added about 2,500,000*l.* for the annual value of the waste lands, or of the mountain pastures, heaths, marshes, &c. not included in the pastures, making the total value of the produce of the various descriptions of wood and grazing grounds about 56,125,000*l.* a year. This produce may be distributed as follows:—

	£
Cattle 1,200,000 at 11*l.* each - -	13,200,000
Calves 200,000 at 3*l.* each - -	600,000
Sheep and lambs 6,800,000, at 1*l.* 10*s.* each	10,200,000
Wool (exclusive of slaughtered sheep) 338,000 packs, at 12*l.* each - -	4,056,000
Hogs and pigs 555,000, at 1*l.* 16*s.* each -	1,000,000
Horses 200,000, full grown, annually produced, at 15*l* each - - -	3,000,000
Poultry, eggs, rabbits, deer, &c. -	1,314,000
Meadow and grass, for work and pleasure horses - - - -	11,500,000
Dairy produce, or milk, butter, and cheese	10,000,000
Wood - - -	1,250,000
	£56,120,000

The total annual value of the agricultural produce of England and Wales, may therefore be estimated at

	£
Crops and gardens - -	75,350,000
Pasture land, wood, and wastes -	56,120,000
	£131,470,000

Estimate of the Extent of Land in the United Kingdom under the principal Descriptions of Crops; the average Rate of Produce per Acre; the total Produce; the Amount of Seed; the Produce under Deduction of Seed; and the total Value of such Produce.

	Crops.	Acres in Crop.		Produce per Acre.	Total Produce.		Seed (1-7th of Produce).	Produce under Deduction of Seed.		Price per Quarter.	Total Value.	
				Quarters.	Quarters.		Quarters.	Quarters.			£ s. d.	£ s. d.
England.	Wheat - - -	3,600,000		3¾	13,500,000		1,928,571	11,571,429		45s.	26,035,715 5 0	
	Barley - - -	1,200,000		4½	5,400,000		771,428	4,628,572		27s.	6,248,572 4 0	
	Oats and rye - -	2,400,000		5	12,000,000		1,714,285	10,285,715		20s.	10,285,715 0 0	
	Beans and peas - -	500,000		3¾	1,875,000	32,775,000	267,857	1,607,143	28,092,859	28s.	2,250,000 4 0	
	Potatoes, turnips, and rape -	2,500,000 }		7*l.* per acre.	- -		-	- -		- -	26,000,000 0 0	
	Clover - - -	1,300,000 }										
	Fallow - - -	1,000,000										
	Hops - - -	50,000		15*l.* per acre.	- - -		- -	- -		- -	780,000 0 0	
	Gardens - - -	250,000	12,800,000	15*l.* per acre.	- -		- -	- -		- -	3,750,000 0 0	75,350,002 15 0
				Quarters.			(Seed 1-6th.)					
Scotland.	Wheat - - -	350,000		3¼	1,137,500		189,583	947,917		45s.	2,038,021 11 0	
	Barley - - -	450,000		4	1,800,000		300,000	1,500,000		26s.	1,950,000 0 0	
	Oats - - -	1,200,000		5	6,000,000		1,000,000	5,000,000		20s.	5,000,000 0 0	
	Beans and peas - -	50,000		3	150,000	9,087,500	25,000	125,000	7,572,917	28s.	175,000 0 0	
	Fallow - - -	100,000										
	Potatoes - - -	200,000 }										
	Turnips - - -	450,000 }		7*l.* per acre.	- -		-	- -		- -	7,700,000 0 0	
	Clover - - -	450,000 }										
	Flax - - -	5,000		15*l.* per acre.	- -		- -	- -		- -	75,000 0 0	
	Gardens - - -	35,000	3,290,000	15*l.* per acre.	- -		- -	- -		- -	525,000 0 0	17,463,021 11 0
				Quarters.			(Seed 1-6th)					
Ireland.	Wheat - - -	500,000		3	1,500,000		250,000	1,250,000		40s.	2,500,000 0 0	
	Barley - - -	320,000		3½	1,120,000		186,666	933,333		24s.	1,119,999 12 0	
	Oats - - -	2,200,000		5	11,000,000	13,620,000	1,833,333	9,166,667	11,350,000	20s.	9,166,667 0 0	
	Potatoes - - -	1,400,000		8*l.* per acre.	- -		- -	- -		- -	11,200,000 0 0	
	Fallow - - -	300,000										
	Flax - - -	140,000		15*l.* per acre.	- -		- -	- -		- -	2,100,000 0 0	
	Gardens - - -	15,000	4,875,000	12*l.* per acre.	- -		- -	-		- -	180,000 0 0	26,266,666 12 0
	Totals -		20,965,000	- -		55,482,500	- -		47,015,776			119,079,690 16 0

Taking the extent of pasture land and wood land in Scotland, exclusive of heaths, wastes, &c., at 2,500,000 acres, and estimating its produce to be worth, at an average, 3*l.* per acre, its total value will be 7,500,000*l.*; but to this has to be added the value of about 13,000,000 acres of mountain pastures, heaths, and waste land, the value of which has been estimated, apparently with great moderation, at about 1,200,000*l.* Hence the total value of the land produce in Scotland will be—

	£
Value of crops and gardens - -	17,463,022
of pasture and wood land -	7,500,000
of uncultivated land and wastes -	1,200,000
	£26,163,022

The estimates given above (p. 455.) of the extent of land under crop in Ireland, and the magnitude and value of the crops, are less to be depended on than those having reference to England and Scotland. But assuming them not to be very wide of the mark, there will remain nearly 9 millions of acres of pasture land, producing, at an average, about 2*l.* 10*s.* an acre a year, to which may be added about 1,300,000*l.* a year for the value of mountainous tracts, bogs, and marshes: so that, on the above hypothesis, the entire annual value of the land produce of Ireland will be —

	£
Value of crops and gardens - -	26,266,667
of pasture lands - -	22,500,000
of uncultivated land, &c. -	1,300,000
	£50,066,667

Hence, the aggregate annual value of the agricultural produce of the United Kingdom would be—

	£
England - - -	131,470,000
Scotland - - -	26,163,022
Ireland - - -	50,066,667
	£207,699,689

Forests. — We subjoin

A Statement showing the Extent of the different Royal Forests, and of the Number of Acres in each enclosed and appropriated to the Growth of Timber for the Navy.

Forests.	Acres in each Forest.	Acres enclosed for Timber.	Forests.	Acres in each Forest.	Acres enclosed for Timber.
New Forest - - -	66,942	6,000	Salcey Forest - -	1,847	1,121
Dean Forest - - -	23,015	11,000	Whichwood Forest - -	3,709	1,841
Alice Holt Forest - -	1,892	1,892	Waltham Forest - -	3,278	
Woolmer Forest - -	5,945	1,700	Windsor Forest - -	4,402	4,402
Bere Forest - - -	1,417	1,417	Delamere Forest - -	3,847	3,847
Whittlewood Forest - -	5,424	5,895	Parkhurst Forest - -	900	900
			Acres - -	122,622	38,015

N.B. The above is exclusive of a considerable extent of land in other parts of the kingdom belonging to the Crown that either is or may be enclosed as forest.

Rent. — The first authentic information in regard to the rent of land in Great Britain was obtained under the Property Tax Act. It appears from the returns made by the property tax commissioners, that the total rental of England and Wales amounted, in 1810, to 29,503,070*l.*, and that of Scotland to 4,851,404*l.* Owing to the rapid rise of prices, in the years immediately subsequent to 1810, the gross rental of England and Wales had increased, in 1815, to 34,330,462*l.*, and that of Scotland to 5,075,242*l.* Since then we have no authentic information to guide us. An account has, it is true, been published of the value of the lands, houses, and other fixed property, assessed to the existing property and income tax in 1851-52. But this tax does not affect those holding lands and houses whose gross incomes are under 100*l.* a year; and in consequence a considerable number of the smaller class of proprietors were not assessed; though, as there is no account of the precise number or value of the properties thus excepted from the assessment, there are no means of arriving at the exact amount of the total gross annual value of the land and other fixed property. We, however, subjoin the following summary of the returns in the paper now referred to.

Account showing the total Annual Value of the Real Property assessed to the Property Tax in Great Britain, in 1851-52, distinguishing between England and Scotland, and between the Assessments on Lands and those on Houses, Tithes, Manors, &c.

	England.	Scotland.	Great Britain.
	£	£	£
Lands - - - - - -	41,118,329	5,487,586	46,605,915
Houses - - - - - -	40,046,762	3,783,572	43,830,334
Tithes - - - - - -	371,928	- -	371,928
Manors - - - - - -	160,963	885	161,843
Fines - - - - - -	313,502	309	313,811
Quarries - - - - -	243,028	47,681	290,709
Mines - - - - - -	2,110,285	261,704	2,371,989
Iron works - - - - -	629,299	177,408	806,707
Fisheries - - - - -	17,261	36,442	53,703
Canals - - - - - -	922,627	93,304	1,015,931
Railways - - - - -	6,442,032	648,899	7,090,931
Other property not comprised in the foregoing - - - - -	2,503,835	423,012	2,926,877
Totals - - - - -	94,879,851	10,960,832	105,840,683

The property tax has only been recently extended to Ireland, so that our information with respect to the rental of that important part of the empire is less authentic. But Mr. Griffiths, the engineer, whose means of acquiring accurate information on the subject cannot well be surpassed, submitted to a committee of the House of Lords a carefully compiled estimate of the rental of each county of Ireland (*see* IRELAND) in 1832, from which it results, that the gross rental of that kingdom then amounted to 12,715,478*l.*; and this estimate is further confirmed by the returns obtained under the act of 1846, for effecting a valuation for the assessment of the poor's rate. It appears from this valuation, which is believed to be under the mark, that the present (1853) gross annual value of the land of Ireland amounts to about 11,422,188*l.*

The profits of the farmers have been very variously estimated; but, on the whole, we believe they may be safely taken at about half the rent. But supposing this hypothesis to be a just one, their aggregate amount would not be represented by half the gross rental of Britain or Ireland,

inasmuch as that includes the rental of the lands occupied by proprietors, or the rent which it is supposed they would bring, provided they were let.

Prospects of Agriculture.— Imports of Corn. — Down to the peace of Paris, in 1763, England was in the habit in ordinary years of exporting large quantities of corn. But notwithstanding the astonishing improvements made in agriculture, and the consequent increase of our produce since that epoch, we are now, owing to the still more rapid growth of our population, in the habit of importing supplies of all sorts of grain. The imports depend of course, in a great degree, on the produce of our harvests; being comparatively large in bad, and comparatively small in favourable seasons. It is seen, from the subjoined tables, that at an average of the 7 years ending with 1852, the entries of foreign wheat and flour for consumption amounted to 4,231,185 qrs. a year; those of barley, to 870,786 do.; and those of oats and oatmeal, to 1,162,546 do.; and the probability would seem to be that these imports will be maintained or increased for, at least, some years to come.

Down to a late period (1849) various restraints were laid on the trade in corn; the tendency of which was to fetter importation, and artificially to elevate the home prices. But the influence of these restrictions had been gradually declining for a considerable period before their repeal (1846-49); and was latterly a good deal exaggerated in the public estimation. It is difficult, or rather, perhaps, impossible to form at this moment (1854) any very correct appreciation of the future influence of the repeal of the corn laws over agriculture and the condition of the agriculturists. But we do not believe that there are any good grounds for thinking that it will inflict on them any material or lasting injury. The arable soil of the U. Kingdom is superior to that of most other countries; our farmers, also, are superior in skill, and have a greater command of capital and other resources; and they are immediately contiguous to and are intimately acquainted with the markets from which their principal foreign competitors are 3,000 m. distant. Under such circumstances it would be foolish to feel much anxiety in regard to the ultimate result of the new system. Though prices fell full 30*s.* a quarter between 1815 and 1846, there was an unparalleled increase of improvement, and a great rise of rents in the interval. And supposing prices to fall in future 10*s.* or 12*s.* a quarter, below the level of 1846, may not a similar result be expected? In the next page are some illustrative tables of the corn trade of the U. Kingdom since 1835.

The imports in 1846, 1847, and 1848, were increased beyond all former precedent by the failure of the potato crops in Ireland in 1845, 1846, and 1847. The stimulus thus given extended to 1849, the imports of which were farther increased by the total repeal of the corn laws in February that year. There is, however, little probability, unless in the event of a scarcity occurring, that the imports will speedily exceed the level of 1849. The truth is that they were then overdone, and entailed a heavy loss on the importers.

Manufactures. — The manufactures of Great Britain are far more extensive and important than any that have ever belonged to any other nation. We may, indeed, be said to be purveyors of most descriptions of manufactured articles for all the world; and there are but few nations, how remote or barbarous soever, that are not indebted for some considerable portion of their comforts, and sometimes even of their necessaries, to the skill and ingenuity of British artisans. A very large proportion of the people of our own country are engaged in, and directly depend upon, manufactures for their support; and they supply the materials of that commerce for which this empire is so peculiarly distinguished; and which extends to, civilises, and enriches almost every country of the globe.

We regret our inability to lay before the reader any accurate accounts of the value of the gross annual produce of any of the great departments of manufacturing industry. The following estimates must, therefore, be regarded as mere approximations; though we are disposed to think that in most cases they come pretty near the mark: —

	£
Cotton - - -	35,000,000
Woollen - - -	26,000,000
Iron and hardware - -	22,000,000
Watches, Jewellery, &c. -	3,000,000
Leather - - -	13,600,000
Linen - - -	8,000,000
Silk - - -	10,000,000
Glass and earthenware -	4,250,000
Paper - - -	2,500,000
Hats - - -	2,000,000

The value of the above articles amounts to a gross sum of 126,250,000*l.* But exclusive of these, there are other departments of manufacturing industry of great value and importance; such, for example, as the manufacture of spirits and beer, cabinet-makers' goods, &c. In point of fact, however, but a small part of the value of spirits and beer is derived from the labour expended upon their preparation, or upon their extraction from the malt used in their manufacture; and there are no means by which to form any estimate, how rude soever, of the value of cabinet-makers' work. Some information will subsequently be given in regard to ship-building.

But these statements, how imperfect soever, are more than sufficient to evince the vast extent and importance of our manufactures. It would be desirable, on many accounts, to be able to separate the sums mentioned above as constituting the gross annual value of our principal manufactures into their constituent parts, that is, to show how much of the total value of any branch of manufacture is made up of raw produce, or of the value of some other branch of manufacture embodied in it, and how much consists of the wages of labour and superintendence, and how much of the profits and wear and tear of capital. But to do this is, in many cases, next to impossible; and in all cases, the greatest care and circumspection are required to avoid falling into the most serious errors. It is necessary also to observe, that considerable care is always required in drawing conclusions from the gross value of any manufacture, in regard to the addition really made by it to the aggregate wealth of the country. Thus, assuming the gross annual value of the woollen manufacture to be about 26,000,000*l.* a year, we should fall into the greatest imaginable error, if we supposed, as is commonly done, that it made an annual addition of that amount to the gross produce of the country. Of this sum of 26,000,000*l.*, nearly a half, or about 12,875,000*l.*, may consist of the value of the wool; and the value of the British wool, which is by far the largest portion of the whole, being already included in the estimate of the annual produce of agriculture, would be reckoned twice over were it also included in the estimate of the produce of the woollen manufacture. The same caution must be used in almost every case; and unless it be carefully at-

Account showing the Quantities of the different Varieties of Foreign and Colonial Grain entered for Consumption in the U. Kingdom in each of the 18 years ending with 1852, with the Total Quantities so retained, and the Annual Entries at an Average of the above Period, and of the 7 years ending with 1852; with a similar Account for Indian Corn and Meal for the 10 and 7 Years ending with 1852.—(Compiled from various *Parl. Papers.*)

Years.	Wheat and Wheat Flour.	Barley and Barley Meal.	Oats and Oatmeal.	Rye and Rye Meal.	Peas and Pea Meal.	Beans and Bean Meal.	Aggregate of the preceding Sorts of Grain and Meal retained for Consumption.	Indian Corn and Meal.
	Qrs.	*Qrs.*	*Qrs.*	*Qrs.*	*Qrs.*	*Qrs.*	*Qrs.*	*Qrs.*
1835 - - -	28,554	136,853	176,142	3	25,184	69,824	436,560	
1836 - - -	30,107	110,021	97,197	18	80,928	87,796	406,067	
1837 - - -	244,272	47,475	334,024	19,576	87,615	109,076	842,038	
1838 - - -	1,848,475	8,192	11,072	2,517	11,618	54,240	1,936,114	
1839 - - -	2,711,723	594,301	862,789	152,182	170,270	123,597	4,615,262	
1840 - - -	2,401,436	619,801	517,052	1,857	159,457	129,517	3,829,120	
1841 - - -	2,647,808	222,837	27,918	518	132,857	267,697	3,299,635	
1842 - - -	2,989,645	49,969	295,437	28,516	80,150	43,279	3,487,296	
1843 - - -	990,523	223,513	45,254	2,724	45,383	45,702	1,353,129	10,225
1844 - - -	988,515	1,020,766	258,235	28,779	106,375	225,680	2,628,350	38,711
1845 - - -	315,615	299,430	587,434	23	81,735	197,919	1,492,156	42,295
1846 - - -	2,962,928	404,644	779,442	1,710	181,801	209,874	4,540,399	757,609
1847 - - -	4,612,111	782,686	1,788,121	253,435	193,235	476,279	8,105,867	4,022,919
1848 - - -	2,193,755	888,925	872,553	55,481	164,771	448,704	4,624,189	1,637,419
1849 - - -	5,592,594	1,544,888	1,375,583	259,936	283,092	482,612	9,538,705	2,255,961
1850 - - -	4,845,854	1,023,907	1,153,279	93,431	179,738	444,612	7,740,821	1,276,958
1851 - - -	5,275,677	826,390	1,193,566	23,002	98,602	318,506	7,735,823	1,808,748
1852 - - -	4,133,376	624,062	982,278	9,576	105,517	372,975	6,229,784	1,471,097
Totals - -	44,814,968	9,428,690	11,354,376	933,284	2,188,628	4,107,889	72,841,315	13,321,942
Average annual consumption for the 18 years ended 1852 -	2,489,720	523,816	630,798	51,849	121,590	228,216	4,046,739	1,332,194
Average annual consumption for the 7 years ended 1852 -	4,231,185	870,786	1,162,546	99,510	172,393	393,366	6,930,798	1,890,101

An Account of the Quantities of the different Varieties of Corn and Grain, Flour and Meal, imported into the U. Kingdom in 1852, specifying the Countries whence the same was brought, and the Quantities brought from each, in Imperial Quarters.

Countries from which imported.	Wheat and Wheat Flour.	Barley and Barley Meal.	Oats and Oatmeal.	Rye and Rye Meal.	Peas and Pea Meal.	Beans and Bean Meal.	Indian Corn and Meal.	Buck-wheat and Buck-wheat Meal.	All sorts.
Russia, northern ports - -	27,112	5,997	304,448	6,085	305	- -	- -	1	343,948
ports within the Black Sea -	706,622	14,070	1,290	829	50	1,200	253,816	- -	957,877
Sweden - - - - -	516	758	56,233	- -	93	- -	- -	- -	57,600
Denmark - - - - -	218,831	254,870	247,104	301	43,231	5,856	- -	- -	770,196
Prussia - - - - -	452,292	54,207	24,693	- -	19,827	3,683	- -	- -	554,702
Mecklenburg - - - -	120,544	15,580	2,239	- -	7,344	- -	- -	- -	145,707
Hanover - - - - -	9,158	833	133,131	- -	19	6,203	- -	- -	149,314
Oldenburg and Kniphausen -	442	- -	39,865	- -	- -	4,377	- -	- -	44,684
Hanseatic Towns - - -	49,487	37,083	41,386	66	18,079	21,754	- -	2	167,857
Holland - - - - -	124,963	1,001	79,176	35	1,691	14,681	- -	12	221,559
Belgium - - - - -	25,961	10,190	1	- -	2	9,532	- -	22	45,708
Channel Islands - - -	1,640	99	- -	- -	- -	- -	- -	4	1,743
France - - - - -	459,418	100,292	56,458	357	259	28,213	92,116	8,048	745,161
Portugal - - - - -	1	-	- -	- -	- -	- -	9,646	- -	9,647
the Azores - - - -	- -	2	- -	- -	- -	- -	6,144	- -	6,146
Spain - - - - -	6,321	8,441	- -	- -	3	1	1,186	- -	15,952
Italy, and the Italian Islands, viz.									
Sardinian territories - -	57	- -	- -	- -	- -	- -	674	- -	731
Tuscany - - -	11,696	2,306	- -	- -	- -	- -	1,351	- -	15,353
Papal territories - -	22,732	- -	- -	- -	- -	- -	- -	- -	22,732
Naples and Sicily - -	26,635	- -	1,928	- -	- -	12,693	- -	- -	41,256
Austrian territories - -	3,983	- -	- -	- -	- -	3,914	106,005	- -	113,902
Malta and Gozo - - -	17,106	41,389	- -	- -	- -	1,616	3,408	- -	63,519
Ionian Islands - - -	1,431	- -	- -	- -	- -	- -	9,512	- -	10,943
Wallachia and Moldavia - -	86,140	55	- -	968	- -	- -	626,714	- -	713,877
Egypt - - - - -	391,668	54,248	- -	17	34	257,188	71,590	- -	777,745
Syria - - - - -	12,375	3,664	- -	- -	- -	- -	338	- -	16,377
Turkish dominions, not particularly designated - -	40,341	16,103	- -	1,261	- -	- -	138,314	- -	196,019
Algeria - - - - -	- -	3,746	- -	- -	- -	- -	- -	- -	3,746
British North America - -	110,033	90	1,454	- -	14,658	- -	3	2	126,210
Foreign West Indies - -	1,974	- -	- -	- -	- -	- -	1,414	- -	3,388
United States of America -	1,231,894	8	133	72	783	1	167,663	4	1,400,558
Brazil - - - - -	1	- -	- -	- -	- -	- -	1,074	- -	1,075
All other parts - - -	225	569	- -	- -	20	- -	522	- -	1,336
Total quantities imported -	4,164,602	625,602	989,578	9,991	106,398	370,912	1,471,190	8,095	7,746,668

tended to, none but the most misleading inferences need be looked for.

The progress made by Great Britain in manufactures, since the middle of last century, has been quite unprecedented. At that period the quantity of iron produced in England and Wales is not supposed to have exceeded 18,000 tons a year; but the application of pit-coal to the production of iron having soon after become pretty general, the manufacture began gradually to increase, the produce in 1788 being estimated at 68,000 tons, in 1796 at 125,000 tons, and in 1806 at 250,000 tons. Since this last mentioned period, the progress of the iron trade has been such that, at this moment (1854), there are certainly not less than from 1,750,000 to 1,850,000 tons of iron annually produced in England and Wales, and about 680,000 tons in Scotland. The business has now become of the very highest importance. Iron is employed with the greatest advantage in many ways for which it was formerly supposed not to be at all suitable: so much indeed is this the case that iron steam-boats have been constructed for crossing the Atlantic! And it is to the cheapness and abundance of our supply of iron, as much as to any thing else, that the superiority of our machinery, and consequently of most branches of our manufactures, is to be ascribed.

But the progress of the British cotton ma-

nufacture, since 1760, is undoubtedly the most extraordinary phenomenon in the history of industry. In 1764 the consumption of cotton wool did not amount to 4 million lbs., whereas it now (1853) exceeds the prodigious amount of 760 million lbs.! It is difficult to give any very satisfactory explanation of this astonishing progress. Much, no doubt, must be ascribed to the influence of the general causes already specified, but much also has been owing to what may be called accidental circumstances. The cotton manufacture may, in fact, be said to be wholly the result of the inventions and discoveries of Hargreaves, Arkwright, Watt, Crompton, and a few others. And the fact of Hargreaves, Arkwright, and Watt being Englishmen gave us that priority and early superiority in the manufacture, which our favourable situation in other respects has since enabled us to maintain. It is seldom an easy matter for new rivals to come into successful competition with those who have already attained to considerable proficiency in any art or manufacture; and they rarely succeed, unless they have some very material advantage on their side. But in this instance, besides having the start of foreigners, the natural and moral circumstances under which our manufacturers have been placed have given them advantages not enjoyed in any thing like the same degree by the manufacturers of any other country. Were any change or revolution effected in machinery that should admit of coal being advantageously dispensed with, it is difficult to say what effect it might have in the long run on our manufactures. We believe, however, that our advantageous situation, the magnitude of our capital, the industry of our workmen, and the determination of all classes to advance themselves in the world, would, under any circumstances, insure our continued prosperity as a manufacturing people. While, however, coal continues to be as indispensable in industrious undertakings as at present, and while we preserve our free institutions without the alloy of popular licentiousness and agitation, there is but little ground for supposing that our manufacturing prosperity will be impaired. On the contrary, it is reasonable to expect, seeing the increasing wealth of our foreign customers, the greater competition at home and abroad, and the greater attention paid to scientific investigations, that it will go on increasing, and that the discoveries and progress to be made in the next age will surpass those made in the present, wonderful as they have been.

Commerce. — Neither the commerce of Tyre or Carthage in antiquity, nor that of Italy in the middle ages, nor of Holland in the 17th century, could compare, for the variety and value of the products which it distributes, and the all but unlimited range which it embraces, to the existing commerce of England. Our products are found in every country, and our flag floats over every sea.

Quæ regio terræ nostri non plena laboris?

And as all commerce is bottomed on a principle of reciprocity, and is sure to stimulate the industry and to add to the wealth of all who engage in it, we may safely affirm, that while the people of Britain are pursuing only their own interests, they are contributing in the most effectual manner to diffuse the blessings of civilisation, and a taste for luxury and refinement. It is impossible, indeed, to overrate the beneficial influence of that commerce of which this country is the centre and mainspring. No one aware of its vast extent can have the smallest doubt that it is by far the most important means of civilisation and improvement ever brought into active operation. And we may unhesitatingly conclude, that instead of having approached, or, as some suppose, passed, its zenith, it will continue to increase with the increasing wealth, and consequently growing wants, of the various nations it is now rousing to activity and enterprise; and that it will derive new vigour, and have its foundations widened and consolidated, by every circumstance calculated to promote the industry and to add to the riches of those with whom we deal.

When we look a little narrowly into the matter, we find that at bottom society resolves itself into a series of exchanges; that every individual is in some sort a merchant; and that the principal business of life consists in the exchange of one sort of service or article for another. Hence in all countries the mercantile transactions carried on at home, or in the *home trade*, infinitely exceed in number and value those carried on with foreigners, or in the *foreign trade*. The latter, however, is not on that account the less important or valuable. But for the intercourse we carry on with foreigners we should be wholly destitute of many most desirable products — such, for example, as tea, coffee, wine, the precious metals, &c., as well as of the raw material of many of our most important manufactures, including those of cotton and silk. Generally, too, manufactures are improved and perfected according to the scale on which they are carried on; so that an extensive commerce is at once a consequence and a cause of manufacturing pre-eminence. The cotton mills of Lancashire and Lanarkshire could not have been constructed had the demand for their produce been confined to the empire only: they have not been built to supply the limited consumption of Great Britain and Ireland, but the unlimited consumption of the world!

It is plainly impossible, from the nature of the thing, to form any estimate of the extent of the home trade carried on in any great country, or of the exchanges effected amongst its citizens. Formerly, accurate accounts were kept of the cross-channel trade between Great Britain and Ireland; but, with the exception of corn, no official account is now kept of the products conveyed from the one to the other. Luckily, however, this is not the case with the trade with foreign countries. Duties being laid on most articles imported from abroad, it is necessary for fiscal purposes that their amount should be ascertained with as much accuracy as possible; and it is believed that the declarations of the real value of the exports made by the exporters do not differ materially from the truth.

The trade carried on with colonies, or the colonial trade, though conducted under different regulations and duties, is substantially the same with the foreign trade; and may be, and indeed generally is, considered as a branch of the latter.

We subjoin a few statements respecting the principal articles imported from and exported to the countries with which we have the greatest intercourse.

Russia — Imports from: — Tallow, corn, flax and hemp, flax and linseed, timber, bristles, ashes, hides, iron, and wax. Exports to: — Cotton twist, woollen fabrics, salt, coal, hardware, colonial products, &c.

Sweden and Norway — Imports from: — Timber, iron, and bark. Exports to: — Cottons and cotton yarn, woollens, earthenware, hardware, coffee, indigo, tobacco, sugar, &c.

Denmark — Imports from: — Corn and rape-seed, butter, bristles, wool, hides and bark. Exports to: — Coal, salt, iron and steel, earthenware, machinery, coffee, indigo, &c.

Prussia — Imports from: — Corn, oak and fir timber, bark, bristles, wool, spelter, flax, &c. Exports to: —

Refined sugar, salt, cottons, hardware, earthenware, &c. Our trade with Prussia is principally carried on through Hamburgh.

Germany — Imports from : — Wool, corn, wines, butter, linens, hides, clover, rape-seed, smaltz, spelter, zaffre, furs, wooden clocks, &c. Exports to : — Cotton stuffs and yarn, woollens, refined sugar, hardware, earthenware, iron and steel, coal, salt, indigo, coffee, rum, tobacco, cotton wool, spices, &c. A good deal of the imports from and exports to Holland and Belgium are on German account.

Netherlands — Imports from : — Butter, cheese, corn, madder, geneva, flax and tow, hides, linens, seeds, toys, &c. Exports to : — Cotton stuffs and yarn, woollens, hardware, earthenware, salt, coal, and colonial produce.

France — Imports from : — Brandy, wine, silk (raw and manufactured), gloves, madder, eggs, skins, and fruit. Exports to : — Wool, linens and linen yarn, brass and copper manufactures, machinery, coal, horses, &c. Large quantities of Nottingham lace are smuggled into France, and brandy into England.

Portugal and Spain — Imports from : — Port and sherry wines, barilla, wool, raisins, dried fruits, lemons, oranges, olive oil, quicksilver, &c. Exports to : — Cotton stuffs, woollens, linens, hardware and cutlery, iron and steel, soap, candles, leather, and cinnamon.

Italy — Imports from : — Thrown silk, olive oil, straw for plaiting, straw plait and hats, currants, lemons, oranges, wine, barilla, shumac, bark, cheese, lamb-skins, hemp, &c. Exports to : — Cotton stuffs and yarn, refined sugar, woollen manufactures, hardware and cutlery, iron and steel, coffee, indigo, tobacco, pimento, &c.

Turkey, Greece, &c. — Imports from : — Silk, opium, madder, figs, raisins, valonea, oil, cotton, currants, senna, &c. Exports to : — Cotton manufactures and twist, linens, hardware, iron and steel, cordage, woollens, earthenware, indigo, and coffee.

Egypt and Africa — Imports from : — Cotton wool, flax, linseed, senna and other drugs. Exports to : — Cotton manufactures, iron and steel, arms and ammunition, and machinery.

Foreign West Indies — Imports from : — Sugar, coffee, cotton, cigars, &c. Exports to : — Cotton manufactures, earthenware, linen manufactures, hardware, iron and steel, woollens, glass, machinery, &c.

United States — Imports from : — Cotton, tobacco, wheat flour, wheat, rice, maize, skins and furs, hides, staves, &c. Exports to : — Cotton, linen, and woollen manufactures, hardware, cutlery, earthenware, salt, brass and copper, apparel, books, &c.

South American States — Imports from : — Cotton wool, sugar, coffee, bullion and precious stones, cocoa, hides, fruits, bark, dye-woods, furs, &c. Exports to : — Cotton, linen, and woollen manufactures, earthenware, hardware, soap, candles, &c.

African British Colonies — Imports from — Cape and Constantia wines, hides, ivory, skins, aloes, palm-oil, teak, timber, wax, dye-woods, sugar from the Mauritius, &c. Exports to : — Cotton, woollen, and linen manufactures, apparel, earthenware, hardware, iron and steel, soap, candles, stationery, fire-arms, salt, machinery, &c.

Asia and Australia — Imports from : — Tea, wool, indigo, cotton, sugar, silk, coffee, pepper, saltpetre, piece-goods, rice, lac-dye, cinnamon, mace, cloves, cocoa-nut-oil, whale-oil, ivory, tin, and the precious metals. Exports to : — Cotton stuffs and yarn, woollens, linens, earthenware, copper, hardware, iron and steel, leather, glass, machinery, &c.

American British Colonies — Imports from : — Timber, furs, fish, corn, ashes, skins, turpentine, &c. Exports to : — Woollens, cottons, linens, hardware, iron and steel, soap, candles, earthenware, apparel, glass, cordage, coal, butter, cheese, &c.

British West Indies — Imports from : — Sugar, coffee, rum, cotton, pimento, molasses, mahogany, logwood, fustic, cocoa, cochineal, ginger, hides, &c. Exports to : — Cotton stuffs, linens, woollens, apparel, soap, candles, hardware, iron and steel, fish, earthenware, cordage, beef and pork, arms and ammunition, &c.

The subjoined Tables give a pretty complete view of the commerce of the U. Kingdom. Those who wish for more ample information may refer to the Commercial Dictionary.

The means of internal communication in Great Britain are probably superior to those enjoyed by any other country. Our high roads, which, during the first half of last century, were execrable, have been signally improved since the close of the American war; and since the general introduction of the practice of *macadamising*, they may be confidently pronounced to be the very best in Europe. With the exception of Holland and Belgium, no country is better supplied with canals; and by these

1. Account of the Official and Declared Value of the Exports of British and Irish Produce and Manufactures, and of the Official Value of the Exports of Foreign and Colonial Merchandise from the U. Kingdom, with the Official Value of Imports into the same, in the following Years.

Years.	Exports from U. K.			Imports into U. K.
	British and Irish Produce and Manufactures.		Foreign and Colonial Merchandise.	
	Official Value. £	Declared Val. £	Official Value. £	Official Value. £
†1801	24,501,608	39,730,659	- -	- -
1802	25,195,893	45,102,330	- -	- -
1803	20,012,596	36,127,787	8,032,643	25,104,541
1804	22,132,367	37,135,746	8,938,741	26,454,281
1805	22,907,371	37,234,396	7,613,120	27,331,020
1806	25,266,546	39,746,581	7,717,555	25,554,478
1807	22,963,772	36,394,443	7,624,312	25,326,845
1808	24,179,854	36,306,385	5,776,775	25,660,953
1809	32,916,858	46,049,777	12,750,358	30,170,292
1810	33,299,408	47,000,926	9,357,435	37,613,294
1811	21,723,532	30,850,618	6 117,720	25,240,904
1812	28,447,912	39,334,526	9,533,065	24,923,922
1813	*	*	*	*
1814	32,200,580	43,447,373	19,157,818	32,620,771
1815	41,712,002	49,653,245	15,708,435	31,822,053
1816	34,774,521	40,328,940	13,441,665	26,374,921
1817	39,233,467	40,349,235	10,269,271	29,910,502
1818	41,960,555	45,180,150	10,835,800	35,845,340
1819	32,983,689	34,252,251	9,879,236	29,681,640
1820	37,820,293	35,569,077	10,525,026	31,515,222
1821	40,194,681	35,823,127	10,602,090	29,769,122
1822	44,242,532	36,966,023	9,227,567	30,531,141
1823	43,826,607	35,357,041	8,603,905	35,798,433
1824	48,730,467	38,422,104	10,204,785	37,168,279
1825	47,150,690	38,870,945	9,169,492	44,208,803
1826	40,965,736	31,536,723	10,076,287	37,813,890
1827	52,221,934	37,181,335	9,830,821	44,908,173
1828	52,788,089	36,812,757	9,946,546	45,167,443
1829	56,217,962	35,842,623	10,620,165	43,995,286
1830	61,152,354	38,271,597	8,548,394	46,300,473
1831	60,686,364	37,164,372	10,745,126	49,727,828
1832	65,025,278	36,450,594	11,044,870	44,610,546
1833	69,987,357	39,667,318	9,833,753	45,914,426
1834	73,835,231	41,649,191	11,562,037	49,364,733
1835	78,360,059	47,372,270	12,797,724	49,029,334
1836	85,220,144	53,293,979	12,391,712	57,296,045
1837	72,544,071	42,069,245	13,255,497	54,762,285
1838	92,453,967	50,061,737	12,711,512	64,258,013
1839	97,394,666	53,233,580	12,795,990	62,048,121
1840	102,706,850	51,406,430	13,774,165	67,492,710
1841	102,179,514	51,634,623	14,723,373	64,444,268
1842	100,255,380	47,381,023	13,586,422	65,253,286
1843	117,876,659	52,279,709	13,956,288	70,214,912
1844	131,558,477	58,584,292	14,398,177	75,419,374
1845	134,598,584	60,111,082	16,279,318	85,297,508
1846	132,312,894	57,786,876	16,296,162	75,934,022
1847	126,131,029	58,842,377	20,040,979	90,921,866
1848	132,619,151	52,849,445	18,376,886	93,517,134
1849	164,539,504	63,596,025	25,561,890	105,874,607
1850	175,416,709	71,359,184	21,893,167	100,460,133
1851	190,658,314	74,188,722	23,732,703	110,679,125
1852	196,216,610	78,049,367	23,329,089	109,345,109

means, and the aid afforded by our numerous navigable rivers, the conveyance of the bulkiest articles has been rendered both easy and cheap. It is now, however, obvious that railroads are destined to supersede the former methods of conveyance, in so far at least as the transit of passengers and of the lighter and more valuable species of goods is concerned; and the wonderful speed with which lengthened trains of carriages are impelled by locomotive engines along these roads, is among the most valuable and astonishing results of modern science and discovery. By facilitating travelling

* Records destroyed by fire.

† The great increase in the *official*, and the comparatively stationary amount of the *real* value of the exports, has occasioned a great deal of erroneous discussion. The rates by which the official values of the exports are estimated were fixed in 1696, so that they have long ceased to be any test of their actual value, and are of use only as showing the fluctuations in the *quantities* exported. To supply this deficiency a plan was set on foot by Mr. Pitt, for keeping an account of the real value of the exports from the declarations of the exporters. Now, it has been contended, that, while the great increase in the official value of the exports since 1815 shows that the quantity of the articles exported has been proportionally augmented, their nearly stationary real value shows that we are selling this larger quantity for about the same price — a result which is said to be most injurious. But the circumstance of a manufacturer or a merchant selling a large or small quantity of produce at the same price affords no criterion of the advantageousness of the sale; for if, through improvements in the arts or otherwise, a particular article may now be produced for half the cost of its production 10 or 20 years ago, it is obvious that double the quantity may be afforded at the same price without injury to the producers. And this has been most strikingly the case with the great articles of cotton, hardware, &c. The fall in the price of the former enables us to export and sell with a profit, (for unless such were the case, does any one suppose the exportation would continue?) at the same price, more than double the cotton stuffs and twist that we exported in 1815! Surely, however, this is, if any thing can be, a decisive proof of manufacturing improvement and commercial prosperity.

II. Account of the real or declared Value of the various Articles of the Manufacture and Produce of the United Kingdom, exported to Foreign Countries, during each of the Six Years ending with 1852; specifying the Countries to which they were exported, and the Value of those annually shipped for each; and showing also the Average Amount of Exports during the said Six Years to each Country, and to each of the Five Great Divisions of the Globe; and the Average Proportion exported to each, supposing the whole Exports to be 1000.

Countries.	1847.	1848.	1849.	1850.	1851.	1852.	Average Annual Amount of Exports 1847-52.	Average Annual Proportion exported to each Country, supposing the whole Exports to be 1000.
EUROPE.	£	£	£	£	£	£	£	£
Russia	1,844,543	1,925,226	1,566,175	1,454,771	1,289,704	1,099,917	1,530,056	22·998
Sweden	179,367	162,819	186,027	151,030	189,519	184,734	175,383	2·636
Norway	169,149	150,117	182,336	211,917	257,814	254,276	204,268	3·070
Denmark	253,701	296,466	353,599	454,304	445,500	452,436	376,001	5·656
Prussia	553,968	404,144	428,748	424,180	503,531	581,881	482,793	7·256
Germany	6,286,217	4,859,775	5,619,961	7,033,116	7,190,766	7,308,722	6,388,092	96·018
Holland	3,017,423	2,823,258	3,199,937	3,512,632	3,542,673	4,109,976	3,422,650	51·445
Belgium	1,059,156	823,968	1,457,584	1,136,237	984,501	1,076,499	1,089,708	16·379
France	2,551,283	1,024,521	1,951,269	2,401,956	2,023,463	2,731,286	2,115,296	31·794
Portugal Proper	889,916	1,175,748	979,597	1,029,201	1,048,356	1,101,213	1,037,839	15·599
Azores	42,980	55,360	58,106	47,607	59,635	63,479	54,578	·823
Madeira	33,853	40,822	35,009	41,578	41,941	41,825	39,171	·588
Spain and the Balearic Islands	770,729	616,878	623,136	864,997	1,015,493	1,253,957	857,532	12·890
Canary Islands	30,680	45,822	58,378	61,754	49,827	39,611	47,684	·716
Gibraltar	466,815	750,257	533,481	388,141	481,286	510,889	521,817	7·844
Italy and the Italian Islands	2,348,707	2,706,882	3,494,849	3,400,691	3,921,025	3,392,286	3,210,740	48·259
Malta	195,836	379,467	357,744	314,386	301,443	256,867	305,957	4·599
Ionian Islands	143,426	178,831	165,805	135,912	223,096	138,642	164,285	2·469
Turkey, Greece, & Greek Islands	2,810,902	3,143,013	2,881,093	3,012,653	2,441,951	2,501,973	2,798,597	42·065
Isles of Guernsey, Jersey, Alderney, and Man	512,191	599,583	634,125	506,415	613,724	564,453	576,748	8·669
Total	24,191,172	22,162,957	25,126,262	26,613,781	26,630,048	27,667,955	25,399,195	381·769
ASIA.								
Syria and Palestine	415,292	258,186	338,366	303,254	359,871	511,096	364,344	5·478
Arabia and Persia	12,417	19,656	17,132	13,711	17,184	20,686	16,798	·255
East India Company's Territories and Ceylon	5,470,105	5,077,247	6,803,274	8,024,411	7,807,039	7,352,9[illegible]7	6,755,831	101·516
China	1,503,969	1,445,959	1,537,109	1,574,145	2,161,268	2,503,599	1,787,675	26·862
Sumatra and Java	358,177	337,585	383,112	507,199	759,698	619,185	494,209	7·429
Philippine Isles	101,186	143,897	80,997	193,269	202,900	115,620	140,195	2·108
Total	7,861,446	7,282,530	9,159,990	10,616,289	11,307,960	11,123,093	9,559,052	143·679
AFRICA.								
Egypt	538,308	509,876	638,411	648,801	968,729	955,701	709,971	10·667
Tripoli, Barbary, and Morocco	30,809	31,130	80,880	51,996	55,249	120,209	61,712	·928
Western Coast of Africa	518,120	571,022	620,371	641,975	658,934	536,358	591,180	8·886
Cape of Good Hope	688,208	645,718	520,896	796,600	752,393	1,064,283	744,683	11·191
Eastern Coast of Africa	13,751	. .	5,489	. .	224	5,542	4,168	·064
African Ports on the Red Sea	505	590	1,290	1,728	788	1,138	1,007	·016
Cape de Verd Islands	4,145	3,321	1,771	3,242	11,094	9,561	5,523	·084
St. Helena and Ascension	31,378	31,724	23,312	30,063	30,555	31,760	29,799	·448
Mauritius	223,563	169,308	234,022	368,726	232,955	229,693	243,045	3·653
Total	2,049,087	1,962,696	2,126,145	2,543,131	2,710,921	2,954,245	2,391,088	35·940
AMERICA.								
British North American Colonies	3,233,014	1,990,592	2,280,386	3,235,051	3,813,707	3,065,364	2,936,352	44·136
British West Indies	2,273,524	1,546,829	2,027,390	2,213,581	2,443,665	2,031,358	2,087,725	31·381
Hayti	192,089	88,067	109,306	274,918	239,146	251,409	192,489	2·893
Cuba and other Foreign West Indies	1,317,687	910,518	1,443,002	1,522,896	1,852,340	1,637,178	1,447,270	21·753
United States of America	10,974,161	9,564,909	11,971,028	14,891,961	14,362,976	16,567,737	13,055,162	196·233
Mexico	100,688	915,937	779,059	451,820	577,902	366,020	536,904	8·070
Guatemala	86,983	75,116	117,933	251,073	319,814	260,699	185,275	2·785
Columbia	327,885	310,076	519,799	665,193	723,689	779,029	554,278	8·332
Brazil	2,568,804	2,067,302	2,444,715	2,544,837	3,518,684	3,461,391	2,768,123	41·607
States of La Plata and Uruguay	490,504	605,953	1,399,575	909,280	676,407	1,452,966	922,448	13·865
Chili	866,325	967,303	1,089,914	1,156,266	1,201,937	1,167,494	1,071,873	16·156
Peru	623,189	853,129	878,251	845,639	1,208,253	1,024,007	905,412	13·610
Falkland Islands	2,088	717	6,173	1,145	2,841	7,792	3,459	·052
Foreign Settlements on the North West Coast of America	8,193	3,452	7,119	10,628	281	125	4,966	·074
Total	23,065,134	19,929,930	25,073,650	28,974,288	30,931,642	32,075,572	26,675,036	400·917
AUSTRALIA.								
New South Wales, Van Diemen's Land, Swan River, and New Zealand	1,644,170	1,463,931	2,080,364	2,602,253	2,807,356	4,222,205	2,470,046	37·126
South Sea Islands	25,368	47,401	29,314	18,143	60,795	33,784	35,801	·539
Total	1,669,538	1,511,332	2,109,678	2,620,396	2,868,151	4,255,989	2,505,847	37·665
RECAPITULATION.								
Europe	24,191,172	22,162,957	25,126,262	26,613,781	26,630,048	27,667,955	25,399,195	381·769
Asia	7,861,446	7,282,530	9,159,990	10,616,289	11,307,960	11,123,093	9,559,052	143·679
Africa	2,049,087	1,962,696	2,126,145	2,543,131	2,710,921	2,954,245	2,391,088	35·940
America	23,065,134	19,929,930	25,073,650	28,974,288	30,931,642	32,075,572	26,675,036	400·917
Australia	1,669,538	1,511,332	2,109,678	2,690,396	2,868,151	4,255,989	2,505,847	37·665
Grand Total	58,842,377	52,849,415	63,596,025	71,367,885	74,448,722	78,076,854	66,530,218	1000·000

III. Account of the Quantities of the Principal Articles of Foreign and Colonial Merchandise imported into and retained for Consumption in the U. Kingdom, with the Gross Amount of the Customs Duties received thereon in 1848 and 1849.

Articles.		Quantities imported. 1848.	Quantities imported. 1849.	Quantities (of Articles chargeable with Duty) entered for Home Consumption. 1848.	Quantities (of Articles chargeable with Duty) entered for Home Consumption. 1849.	Gross Amount of Duty received. 1848.	Gross Amount of Duty received. 1849.
Animals, living, viz.: —						£	£
Oxen and Bulls	No.	24,590	21,751				
Cows	—	22,506	17,921				
Calves	—	15,642	13,645				
Sheep	—	128,406	126,247				
Lambs	—	2,177	3,018				
Swine and Hogs	—	2,119	2,653				
Bacon	cwt.	211,315	384,325				
Barilla and Alkali	tons	2,349	1,403				
Bark for tanners' or dyers' use	cwt.	355,348	365,755				
Beef, salted, not corned	—	114,357	144,638	- -	- -	11	
Beef, fresh, or slightly salted	—	7,623	5,279				
Butter	—	294,427	282,501	288,145	279,462	140,701	138,406
Caoutchouc	—	4,208	5,328				
Cheese	—	441,635	379,648	431,101	390,978	107,375	97,686
Cocoa	lb.	6,442,986	7,769,234	2,936,641	3,233,372	13,816	16,644
Coffee: —							
Of British Possessions	—	35,970,507	40,334,630	30,147,771	29,769,730	527,606	520,974
Foreign	—	21,082,943	22,985,876	6,959,508	4,661,344	182,686	122,236
Total of coffee		57,053,450	63,320,506	37,107,279	34,431,074	710,292	643,210
Corn: —							
Wheat	qrs.	2,580,959	3,872,134	1,865,294*	4,509,626	418,780	226,785
Barley	—	1,054,274	1,389,793	899,960	1,554,860	94,834	79,888
Oats	—	967,056	1,282,219	882,559	1,368,673	95,616	69,165
Rye	—	62,635	241,870	48,721	256,308	4,931	13,083
Pease	—	216,014	236,438	167,083	285,487	15,925	14,540
Beans	—	487,929	458,650	452,460	483,430	38,905	24,676
Indian corn, or maize	—	1,575,521	2,247,424	1,582,755	2,249,571	68,578	112,452
Buckwheat	—	197	308	205	308	11	15
Beer or bigg	—	906	843	- -	1,749	- -	87
Wheatmeal or flour	cwt.	1,754,449	3,371,301	1,227,754	3,937,219	48,812	73,962
Barley meal	—	65	224	64	224	3	4
Oatmeal	—	6,595	40,516	6,165	40,055	145	758
Rye meal	—	35,984	18,826	30,534	24,031	1,012	455
Indian corn meal	—	232,819	102,173	233,880	102,181	2,589	1,916
Dyes and dyeing stuffs, viz.: —							
Cochineal	cwt.	18,380	18,254				
Indigo	—	59,127	81,449				
Logwood	tons	23,192	23,996				
Madder	cwt.	81,261	95,914				
Madder root	—	139,463	161,986				
Shumac	tons	9,617	12,590				
Eggs	No.	88,012,585	97,903,151	88,106,455	97,884,557	32,127	35,694
Flax and tow, or codilla of hemp and flax	cwt.	1,463,661	1,806,786				
Fruits, viz.: —							
Currants	—	402,267	447,206	380,500	433,450	299,612	341,349
Figs	—	22,751	39,516	25,067	31,165	19,741	24,544
Lemons and oranges	chests or boxes	391,033	361,166	364,609	296,366	75,755	64,871
	No. (loose)	65,541	45,290	55,911	45,201		
	at value	£3,199	£3,109	£9,192	£10,859		
Raisins	cwt.	239,669	209,452	228,691	193,811	180,033	152,142
Guano	tons	71,414	82,817	- -	- -	4	
Hams	cwt.	7,717	12,282	6,975	9,460	2,341	3,284
Hemp, undressed	—	845,771	1,061,273				
Hides, untanned, viz.: —							
dry	—	132,395	143,490	- -	- -	1	
wet	—	414,886	535,295				
tanned, tawed, curried or dressed (except Russia hides)	lb.	1,248,647	1,809,755				
Gloves	pairs	3,039,550	3,658,464	2,693,196	2,874,695	41,325	44,059
Mahogany	tons	31,668	29,012	- -	- -	1	
Metals, viz.: —							
Copper ore and regulus	—	14,167	- -	8,406			
weight of metal	—	- -	- -	2,005	- -	8,134	
entered under act 11 & 12 Vict. c. 127., and previous resolutions	—	35,886	47,499	42,997	47,085	2,150	2,356
unwrought and part wrought	cwt.	31,737	44,114	6,614	41,073	43	256
Iron, in bars, unwrought	tons	23,869	29,396				
Steel, unwrought	—	348	1,013				
Lead, pig and sheet	—	3,789	7,332	2,210	5,581	278	699
Spelter	—	13,525	15,794				
Tin, in blocks, ingots, bars or slabs	cwt.	5,975	35,545	4,698	16,715	1,438	4,622
Oil, viz.: —							
Train, blubber, and Spermaceti	tuns	21,966	19,968	Spermaceti of foreign fishing free from 1st Jan. 1849	- -	1,840	
Palm	cwt.	510,218	493,331				
Cocoa nut	—	85,453	64,451				
Olive	tons	10,086	16,945				
Opium	lb.	200,019	105,504	61,178	44,009	3,212	2,311
Pork, salted	cwt.	254,070	347,352	-	- -	6	1
Quicksilver	lb.	1,562,663	2,229,458				
Rice	cwt.	996,372	975,316	Fr. 1 Mar. 249,037	537,326	6,912	15,027
in the husk	qrs.	34,627	32,428	Fr. 1 Mar. 19,055	3,576	952	1,529
Saltpetre and cubic nitre	cwt.	515,076	566,379				
Seeds, viz.: —							
Clover	—	99,813	130,375	124,592	166,012	31,185	41,429
Flaxseed and linseed	qrs.	799,650	626,459				
Rape	—	79,970	29,480				
Silk, viz.: —							
Raw	lb.	4,471,735	4,991,472	- -	- -	2	
Waste, knubs, and husks	cwt.	9,340	12,757				
Thrown	lb.	1,070,989	614,689				

* The consumption of the several species of Corn, exhibited above, for the year 1848, includes not only the "Quantities charged with Duty," but also those quantities entered previously to the 1st March 1848, which were exempted from Duty under the temporary Act 11 Vict. c. 64.

Articles.	Quantities imported. 1848.	Quantities imported. 1849.	Quantities (of Articles chargeable with Duty) entered for Home Consumption. 1848.	Quantities (of Articles chargeable with Duty) entered for Home Consumption. 1849.	Gross Amount of Duty received. 1848.	Gross Amount of Duty received. 1849.
					£	£
Silk manufactures of Europe, viz.:—						
Silk or satin, broad stuffs - lb.	357,601	382,847	239,966	183,603	59,993	45,898
ribbons - —	255,512	315,768	196,964	201,010	87,922	88,263
Gauze or crape, broad stuffs —	9,946	6,618	5,570	5,828	2,507	2,624
ribbons —	53,546	45,387	51,813	47,154	36,270	33,010
Gauze mixed with silk, &c. —	39	21	5	8	2	4
Ribbons - - —	2,567	3,512	2,518	3,598	1,511	2,160
Velvet, viz.:—						
Broad stuffs - - —	31,720	31,972	27,319	23,090	12,296	10,392
Ribbons of velvet - —	47,365	51,853	46,908	48,772	23,456	24,388
Silk manufactures of India, viz.:—						
Bandannoes and other silk handkerchiefs - - pieces	308,586	517,501	152,889	133,948	4,684	4,567
Spices, viz.:—						
Cassia Lignea - - lb.	510,247	472,693	76,152	83,500	1,000	1,079
Cinnamon - - —	347,368	758,812	32,732	62,658	477	953
Cloves - - - —	117,433	274,712	126,705	134,881	3,326	3,512
Mace - - - —	47,572	44,326	19,717	20,666	2,588	2,713
Nutmegs - - —	336,420	211,202	167,220	181,255	18,309	18,120
Pepper - - - —	8,125,545	4,796,079	3,188,448	3,257,746	83,698	85,518
Pimento - - cwt.	20,773	24,994	4,230	3,419	1,110	900
Spirits, viz.:—						
Rum - - galls. (proof)	6,858,981	5,308,447	2,987,492	3,044,758	1,154,499	1,142,855
Brandy - - galls. ditto	2,429,089	4,480,306	1,609,557	2,187,500	1,307,117	1,640,282
Geneva - - galls. ditto	365,727	461,390	23,765	27,209	17,827	20,396
Sugar, unrefined, viz.:—						
Of the B. poss. in America, equal to white clayed - cwt.	2,179	5,971	2,368	6,395	1,864	4,611
not eq. to white clayed —	2,793,132	2,838,836	2,768,780	3,063,878	1,861,068	1,902,002
Of Mauritius, eq. to white clayed - - —	216	742	179	830	140	610
not eq. to wh. clayed - —	886,068	892,782	812,629	995,739	551,924	624,951
Of B. possessions in the E. Indies, eq. to wh. clayed —	54,273	71,056	39,684	85,521	31,292	62,131
not eq. to wh. clayed - —	1,278,474	1,396,188	1,312,715	1,271,027	886,176	792,699
Foreign, eq. to wh. clayed - —	- -	- -	4,384	3,221	4,800	3,222
not. eq. to wh. clayed - —	- -	- -	1,211,785	470,590	1,172,241	444,869
not eq. to brown clayed (entered since 11 July 1848) - - —	1,855,689	1,720,276	9,683	25,953	8,957	20,833
without distinction of quality - - —	- -	- -	14	- -	35	
Total of sugar unrefined -	6,869,931	6,925,851	6,162,221	5,922,154	4,518,517	3,855,928
Sugar, refined, and candy:—						
Of B. possessions - - —	31,114	56,625	20,933	60,090	18,785	48,526
Foreign - - - —	195,614	240,597	25,359	15,302	33,152	19,802
Molasses - - - —	517,534	1,062,661	637,050	812,330	183,811	214,695
Tallow - - - —	1,498,359	1,468,719	1,411,972	1,415,989	99,577	94,748
Tar - - - lasts	12,609	15,206				
Tea - - - lb.	47,774,755	53,460,751	48,735,696	50,024,688	5,330,537	5,471,641
Timber and wood, viz.:—						
Battens, batten ends, boards, deals, deal ends and plank, foreign, entered by tale - C.	110	25	87	55	613	351
Deals, battens, boards or other timber or wood sawn or split:—						
Of British possessions - loads	496,5	471,149	486,600	483,369	51,094	50,740
Foreign - - - —	368,077	339,971	364,822	335,920	372,838	335,469
Staves - - - —	51,306	79,882	- -	- -	50	30
Timber or wood, not being articles sawn or split, or otherwise dressed, except hewn, and not otherwise charged with duty:—						
Of British possessions - loads	596,291	583,097	599,152	586,782	31,465	30,809
Foreign - - - —	332,150	238,497	355,874	261,444	276,385	196,124
Tobacco:—						
Unmanufactured - - lb.	34,090,360	41,546,848	27,098,314	27,480,621	4,267,579	4,328,217
Manufactured and snuff - —	1,512,714	1,905,306	206,820	205,066	97,655	96,814
Turpentine, common - cwt.	401,787	412,011				
Watches - - - value	£70,324	£8[illegible],380	£67,478	£80,887	7,086	8,490
Whale fins - - cwt.	7,765	8,906				
Wine, viz:—						
Cape - - - galls.	318,051	289,008	268,163	241,890	38,741	34,956
French - - - —	680,255	466,042	378,453	355,504	109,143	102,282
Other sorts - - - —	6,538,224	7,201,004	5,723,169	5,890,295	1,651,463	1,697,833
Total of wine - -	7,536,530	7,956,054	6,369,785	6,487,689	1,799,347	1,835,071
Wool, cotton - - cwt.	6,366,251	6,745,259	- -	- -	14	
Sheep and lambs:—						
from B. possessions out of Europe - - lb.	39,546,340	45,268,052				
from other parts - —	29,797,137	29,832,831	- -	- -	- -	1
Total - -	69,343,477	75,100,883	- -	- -	- -	1
Alpaca and the Llama tribe —	1,521,370	1,655,300				
Woollen manufactures:—						
Manufactures not made up value	£684,320	£625,540				
Articles or manufactures of wool wholly or in part made up - - —	£94,497	£112,250	£81,641	£97,668	8,155	9,753
Other articles - -	- -	- -	- -	- -	311,166	311,288

to a degree that could not, a few years ago, have been conceived possible; rendering all the great markets of the empire easily accessible to the products of the remotest districts; obliterating local prejudices and customs; reducing the country to a homogeneous mass; and producing every where a spirit of emulation and competition, our improved means of communication are exercising an influence of the most powerful kind, and which cannot be too highly appreciated.

Still, however, it has been doubted whether these extraordinary improvements in the arts, and the vast extension of commerce, have conferred any real and important advantage on the bulk of the people. That they have added prodigiously to the field of employment is certain; but it has been contended that the increase of

population, and consequently of the demand for labour, has been equal, or nearly so, to the increase of employment; that the condition of the people has not been materially improved; and that their command over the necessaries, conveniences, and enjoyments of life has not been augmented in any thing like the degree in which their numbers have increased. There is really, however, little or no truth in these representations. The condition of the great bulk of the people of Britain, and especially of the labouring classes, has been signally improved since the peace of Paris in 1763. The greatest ameliorations have been effected in the interval in the diet, dress, and lodging of all classes. Towards the middle of last century, about half the people of England were consumers of barley, rye, and oat bread; whereas, at present, not a tenth part of the population use any bread unless made of wheat. The consumption of butchers' meat, as compared with the population, has also doubled, or more, in the interval (*Statistics of the British Empire*, ii. cap. 5.); and the extraordinary increase in the consumption of tea, sugar, coffee, and such like articles, is too well known to require being pointed out. The improvements that have been made in clothing and lodging are, if possible, still more remarkable. Linen shirts, that were formerly luxuries, used only by the richest classes, are now worn by every body; and the old, coarse, comfortless home-made cloths have been wholly superseded by the better and cheaper products of the factories. The cheapness, to specify one article, and extraordinary abundance of cotton fabrics, have given the poorest females the means of greater comfort, neatness, and display in dress, than were enjoyed by the highest classes in the first half of last century. And any one who compares the old farm-houses and cottages, or the houses in the old narrow streets and lanes in any one of our great towns, with the farm-houses, cottages, and town lodgings for the poor, built within the last fifty, and still more the last thirty years, will at once be sensible of a vast improvement. Essential as glass windows may now appear, in the 16th century they were luxuries, all but unknown in the castles of the principal nobility of England; and in Scotland, in the early part of last century, glass was seldom seen in the windows of the first class of country houses, and never in cottages. (*Statistics of British Empire*, i. 714.) The latter were then, also, almost universally destitute even of chimneys! But the general use of these, and of glass, is not the only circumstance in which modern houses excel those built previously to the American war. The former are in all respects superior. They are constructed on a larger scale; the apartments are more spacious and lofty; they are better ventilated; and are supplied with water to an extent of which our ancestors had no idea. It is, in fact, to the better construction of houses, the greater width of streets, and, above all, to the more abundant supply of water, and the effective system of under-ground drainage, in modern-built streets and towns, that their freedom from epidemic diseases, and the wonderful improvement in the health of the inhabs., are mainly to be ascribed.

Signal as the spread of improvement has been every where throughout Great Britain since 1750, it has been greatest in Scotland. This, no doubt, has been principally owing to the fact of Scotland being previously in a comparatively backward state. But its progress since the epoch referred to, or rather since the close of the American war, has been all but unprecedented; and, if at all, has only been surpassed by the progress made by Kentucky, and one or two more of the American states.

If any thing more than has been already stated were required, to establish the astonishing improvement in the condition of the people of Great Britain during the last 60 or 70 years, it would be evinced by the decrease that has taken place in the rate of mortality since 1760 and 1770. The extreme limit of human life assigned by the Psalmist has not, indeed, been extended; but a much larger proportion of those born arrive at or approach to that limit than formerly. The probable life of a male annuitant 5 years of age (a picked life), at the commencement of last century, has been found to be 39·03 years; whereas it appears that the probable life of a male of 5 years of age, taken at an average of the mass of the population, from 1813 to 1830, was not less than 49·80, or nearly 11 years greater than the former! This extraordinary improvement must, no doubt, be ascribed to a variety of causes: partly to the drainage of bogs and marshes, by which agues and marsh-fevers have been entirely banished from many districts; partly to improvements in the diet, dress, lodgings, and other accommodations of the mass of the people; partly to the greater prevalence of cleanliness; and partly, and since 1800 chiefly, perhaps, to discoveries in medical science and the extirpation of the small-pox. But, however explained, this, and the facts mentioned above, show conclusively that the beneficial influence of the extraordinary improvements in arts and sciences made during the last 60 or 70 years has not been countervailed by other causes, and that it has not been confined to the upper and middle classes. On the contrary, these improvements have been especially beneficial to the labourers. The latter are at this moment better fed, better clothed, and better lodged, than at any period of the 18th century; and, in point of fact, daily enjoy, and reckon as indispensable, a great number of articles of convenience and luxury that formerly could rarely be obtained even by the richest lords.

It must, however, be admitted, great as has been the advance of all classes since 1750, that the labouring class has not latterly advanced in the same degree as the others; and it may, perhaps, be doubted whether its condition has been perceptibly ameliorated during the last 15 or 20 years. When, indeed, we consider the continued extension of manufactures, the rapid progress of agriculture, and the vast increase of public works, within the period now referred to, it would seem that it should have been marked by a continued rise in the rate of wages, and a proportional improvement in the condition of the labouring class. But it is generally admitted, either that no improvement has taken place, or that it is much less sensible than might, under the circumstances, have been expected. Probably, however, it is less difficult than has been supposed to discover why such has been the case.

The astonishing increase in the demand for manufacturing labour, consequent to the inventions of Hargreaves and Arkwright, was not confined to adults, but extended to young persons, and even children, of both sexes. In consequence, a family became in the manufacturing districts an advantage rather than a burden; and population has been increased in them, partly by the powerful stimulus thus given to marriage, and partly by immigration from other parts of Britain and from Ireland, with more than its rapidity in prosperous colonies. And this increase appears, for some years past, to have fully equalled the increasing demand for labour, and has consequently kept wages from rising. The immigration from Ireland, which has

principally taken place since steam navigation afforded an easy means of conveyance to the poorest classes, has had a powerful influence in bringing about this result, directly by adding to the number of work-people, and indirectly by accustoming the English and Scotch labourers to a lower standard of comfort, and to a dependence on the potato. It is not, therefore, to be wondered at that the condition of the labouring classes should have been nearly stationary, previously to the late stimulus given to emigration by the discovery of the gold fields of California and Australia. The depressing influences with which they had to struggle were not of a kind that could be easily countervailed.

We incline, also, to think that the changes that have been made of late years in the laws relating to the poor, and especially in those relating to settlements, have tended, by stimulating population, to detract from the progress of improvement. The mischievous influence of the old law of settlement, in obstructing the transit of labour from place to place, has been much exaggerated; while sufficient stress has not been laid on the difficulties it threw in the way of the building of cottages, and the progress of population in contributing to raise the rate of wages, and to improve the condition of the labourers. Much of what is unsatisfactory in the present state of the agricultural poor will, we apprehend, be found to be justly ascribable to the injudicious modification of the laws now referred to.

No doubt, also, various disadvantages, some of which appear to be not a little formidable, attach to the continued extension and improvement of manufactures. But their consideration would lead us into inquiries no way suitable for a work of this description.

In Ireland improvement has been much less rapid than in either England or Scotland; and it may, indeed, be doubted whether in some parts of it, especially in the W. and S., the condition of the peasantry has not deteriorated during the last half century. At all events it is even now, and has long been, in a very depressed and degraded state. And without anticipating the few remarks on this subject we shall have to lay before the reader in the article IRELAND, we shall at present content ourselves with merely observing that this unfavourable state of things appears to be principally owing to the facility given to the subdivision of the land, to the all but universal dependence which the peasantry have for many years placed on the potato for supplies of food, and to the want, down to a very late period, of any compulsory provision for the support of the poor. The first of these circumstances enabled the poorest persons to get possession of hovels and patches of land; the second enabled them to raise on these patches, in ordinary years, supplies of the cheapest and most precarious variety of food, for themselves and their families; and the third left the peasantry without any resource on which to fall back when the potato happened to fail; and thus, by relieving the landlords from all obligation to provide for the occupiers of the land, tempted them, by the flattering prospect of immediate advantage and of impunity from future results, to consent to or to connive at the continued subdivision of their estates without reflecting upon the consequences that such conduct would inevitably entail in the end on the occupiers and on themselves. No doubt, also, some considerable portion of the distresses of the Irish peasantry may be ascribed to former misgovernment, and still more to the recklessness and improvidence inherent in the national character.

We are glad, however, to have to state that measures have been adopted in the view of obviating some of these causes of degradation. An act passed in 1825 that imposed considerable restraints on the ruinous practice of subletting and subdividing land; and the introduction of a poor rate has, at length, compelled the landlords to take an interest in the condition of the occupants of their estates; and has made them exert themselves, not merely to check subdivision in future, but to retrace their steps by ejecting cottiers, and consolidating, where that is practicable, the smaller occupancies. In some cases, perhaps, the reaction may have been too sudden and extensive. But, though loudly declaimed against and liable to abuse, this is the line of conduct that is most likely to prove in the end of advantage to the country. We believe, indeed, that we might go farther, and say that no other can be of any material service. No real improvement need be expected in Ireland till the hordes of paupers, that are hutted upon and incumber the soil, have been removed elsewhere.

The failures of the potato crop in Ireland, in 1846 and 1847, entailed very serious privations on all classes of the population. But, how appalling soever in the meantime, these privations were necessarily of a temporary character, and were in great measure relieved by the bounty of the people of England. And believing as we do, that the general dependence of a population on the potato is an evil of the first magnitude, we certainly are not of the number of those who regret the check given by these failures to the potato culture. On the contrary, we incline to think that their influence should have been extended; and that it would be sound policy to restrain the culture of a plant which places those dependent on it in the most perilous situation, and reduces wages to the lowest amount required to support mere animal existence. The accounts of the great extent of land under the potato in Ireland in the course of the present season (1854), and of the apparently unabated confidence placed by the peasantry on this hazardous and debasing resource, are, perhaps, the most unfavourable that have been received from that country for many years back.

Among the present circumstances favourable to the improvement of Ireland, the most important by far is the great emigration that has taken place from it of late years; and which may be carried to a much greater extent before it can be otherwise than advantageous. Happily, also, the mendicant agitation by which Ireland was so long distracted and disgraced, has been put down, or rather has died out. The clamour for a repeal of the union was too palpable and worthless a delusion to be again revived.

Shipping. — The mercantile marine of Great Britain first began to attain to considerable importance in the reign of Elizabeth; and it has continued progressively to increase with the increasing colonies and commerce of the country. The subjoined Tables give a view of its present magnitude, and of the navigation of the empire: —

Account of the Number and Tonnage of Vessels, with the Number of their Crews, belonging to the British Empire, on the 31st of December of each of the Three Years, 1851, 1852, and 1853.

	1851.			1852.			1853.		
	Vessels.	*Tons.*	*Men.*	*Vessels.*	*Tons.*	*Men.*	*Vessels.*	*Tons.*	*Men.*
England - -	19,404	2,803,052	145,222	19,600	2,907,999	147,252	20,078	3,150,653	152,184
Scotland - -	3,587	536,266	29,587	3,450	535,008	29,512	3,451	559,141	29,563
Ireland - -	2,203	262,411	14,155	2,178	251,997	13,902	2,219	259,364	14,083
Isles of Guernsey, Jersey, and Man - -	849	60,615	5,798	858	61,274	5,978	860	61,046	5,701
British Plantations -	8,201	669,741	46,166	8,316	665,114	46,868	8,701	734,218	52,365
Total -	34,244	4,332,085	240,928	34,402	4,424,392	243,512	35,309	4,764,422	253,896

Account of the Total Tonnage of British and Foreign Vessels, distinguishing the two, entered and cleared with Cargoes and in Ballast, at Ports in the United Kingdom, in each of the 14 Years ending with 1853.

Years.	Entered.			Cleared.			Total.		
	British.	Foreign.	Total.	British.	Foreign.	Total.	British.	Foreign.	Total.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1840	3,197,501	1.460.294	4,657,795	3,292,984	1.488,888	4,781.872	6,490,485	2,949,182	9,439,667
1841	3,361,211	1,291,165	4,652 376	3,429,279	1,336,892	4,766.171	6,790,490	2,628,057	9.418,547
1842	3,294.725	1,205,303	4,500,028	3,375,270	1,252.176	4,627.446	6,669.995	2,457.479	9,127,474
1843	3,545,346	1,301,950	4.847.296	3,635,833	1,341,433	4.977,266	7,181,179	2.643.383	9 824.562
1844	3,647,463	1,402.138	5,049,601	3,852,822	1.444,316	5,297.168	7,500.285	2,846,484	10,346 769
1845	4.310,639	1,735,079	6,045,718	4,235,451	1,706,136	6,031,587	8.546,090	3,531,215	12,077.305
1846	4.294,733	1,806,282	6,101,015	4.393,415	1.921,156	6,314,571	8,688.148	3,727.438	12 415,586
1847	4,942,094	2,253.939	7,196,033	4,770,370	2,312,793	7,083,163	9.712,464	4,566,732	14,279.196
1848	4,565,533	1,960,412	6,525,945	4,724,027	2,056,634	6.780,681	9.289,560	4,017,066	13,306,626
1849	4,884,210	2,035,690	6,919,900	4.785,428	2,299.060	7,084,488	9,669,638	4,334,750	14,004,388
1850	4,700,199	2.400,277	7,100.476	4,742,345	2,662,243	7.404,588	9,442,544	5,062,520	14,505,064
1851	4,938 386	2 933,708	7.872,094	4,882,490	3,225.614	8,108,104	9,820,876	6,159,322	15,980,198
1852	4,934,863	2.952,584	7,887,447	5,051,106	3,191,596	8,242,702	9,985,969	6,144,180	16,130,149
1853	5,055,343	3,887,763	8,943,106	5,212,980	4,234,124	9,447,104	10,268 323	8,121.887	18,390,210

Account of the Number of Vessels, with the Amount of their Tonnage, that were built and registered in the Ports of the British Empire, in 1851, 1852, and 1853.

	1851.		1852.		1853.	
	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.
England - -	521	109,811	556	123.082	611	150,150
Scotland - -	138	38,858	131	41,959	163	50,526
Ireland - -	13	968	25	2,[illegible]50	24	2,693
Isles of Guernsey, Jersey, and Man -	30	2,926	30	2,593	32	4,067
British Plantations -	680	141,116	677	138,880	597	115,513
Total - -	1,382	293,679	1,419	309,504	1,427	352,551

Ship-building. — The cost, including the outfit, of the ships built in the U. Kingdom in 1852, may, we believe, be taken, at a rough average, at from 12*l.* to 14*l.* per ton, or 13*l.* at a medium, making their total value 1,983,319*l.* London, Sunderland, Newcastle, Liverpool, Hull, Yarmouth, &c. are the principal building ports. The business has increased with extraordinary rapidity at Sunderland; so much so that while only 60 ships, of the burden of 7,560 tons, were built in that port in 1820, no fewer than 146 ships, of the burden of 51,823 tons, were built in it in 1851. Ships built in London, Liverpool, Bristol, and other western ports, are, however, in higher estimation than those built in the Tyne and the Wear, at least for those branches of trade where the best ships are required.

Within the last dozen years the building of iron steam ships has been immensely extended on the Tyne and the Clyde, especially the latter, which has become the grand seat of this branch of industry. According to a statement published by Dr. Strang, the well-informed chamberlain of the city of Glasgow, it appears that during the 7 years ending with 1852, no fewer than 247 steam-vessels had been built on the Clyde, of which 14 only had wooden hulls, the others being of iron. The burden of the wooden steamers amounted to 18,331 tons, and that of the iron steamers to 129,273 tons. Dr. Strang estimates that 10,820 persons are constantly employed on the Clyde in the construction and repair of steam-vessels and their machinery. Sailing vessels are now, also, very frequently constructed of iron.

Money. — The metallic money of the United Kingdom consists partly of gold, and partly of silver and copper, coins. The standard of our gold coin is 11 parts fine to 1 part alloy: a pound troy of this standard gold is coined into 46 sovereigns and $\frac{89}{120}$ths of a sovereign, or into 46*l.* 14*s.* 6*d.*; so that the sovereign contains 113·001 grains fine, and 123·274 grains standard, gold.

The standard of our silver coin is 11 oz. 2 dwt. fine to 18 dwt. alloy. Since 1816, a pound of this standard silver has been coined into 66 shillings, so that each shilling contains 80·727 grains pure silver, and 87·27 grains standard. Silver coins form a mere subsidiary currency, and are legal tender to the extent only of 40*s.*

Copper coins are much over-valued in our currency, and are legal tender to the extent only of 1*s.*

But by far the greater part of the considerable transactions in the United Kingdom having reference to money, are settled by the intervention of paper; that is, by the agency of the notes of the different banking companies, or of bills. In England and Ireland, no bank note can be issued for less than 5*l.*, but in Scotland they may be issued so low as 1*l.*; they are all made payable to bearer on demand, either in coin or in notes of the Bank of England. The latter, with the banks of Scotland and Ireland, are the principal banking establishments. Bills vary in every possible way, in regard to amount, time, and place of payment.

Constitution. — For full details in regard to this important head, the reader is referred to the articles England, Scotland, and Ireland. It is here sufficient to observe, that the British constitution appears to have been at its outset substantially the same with the constitution originally established in most of the other European states formed out of the ruins of the Roman empire.* But it is the peculiar boast and happiness of England that she alone has had the good sense or good fortune to preserve that distribution of power among the different orders of the community which at one time prevailed among the French, Spaniards, &c. Our govern-

* "Si l'on veut lire," says Montesquieu, "l'admirable ouvrage de Tacite sur les mœurs des Germains, on verra que c'est d'eux que les Anglois ont tiré l'idée de leur gouvernement politique. Ce beau système a été trouvé dans les bois." (*Esprit des Loix*, liv. xi. cap. 6.)

ment is of the species called mixed, being partly monarchical, partly aristocratical, and partly democratical. The executive authority is vested in the sovereign, or rather in the ministers chosen by him, while the legislative authority is shared by the sovereign and by the houses of Lords and Commons. The former of these houses consists of dignified clergymen, and of nobles whose dignity is hereditary, and who are generally possessed of large fortunes.

In 1853 it consisted, inc. minors, of —

Peers of the blood royal	3
Archbishops (1 Irish Representative)	3
Dukes	20
Marquises	21
Earls	112
Viscounts	24
Barons	195
Scotch representative peers	16
Irish ditto	28
English bishops	24
Irish representative ditto	3
Total	449

The House of Commons — the predominating power in the state — consists of 656 representatives chosen by electors in the different counties and represented towns; and though the sovereign be not, his ministers are, responsible to it and to the H. of Lords for all acts done by them in their public capacity. According to the theory of the constitution, the H. of C. is chosen by and represents the wishes, feelings, and prejudices of the British people. But if by people be meant the full-grown male pop. of the U. Kingdom, this statement is altogether erroneous. By far the greater portion of the population has not, and never had, any thing directly, and but little indirectly, to do with the choice of the members of the H. of C. Down to the passing of the Reform Act in 1832, the members for counties in England were chosen by persons having a freehold, or a life interest in freehold property, worth 40*s.* a year; and in towns the right of election was usually in the corporation, or in the corporation and freemen. That hostility to the old system that paved the way for the Reform Act was not occasioned so much by the faulty mode in which representatives were chosen in towns entitled to send them to the H. of C., as by the decayed condition of many of these towns. The parl. boroughs had all been specified previously to the Revolution; and no provision was made in the constitution for admitting representatives for such new boroughs as might afterwards attain to importance, or for the disfranchisement of such of the parl. boroughs as might happen to fall into insignificance. Hence it came to pass that many commercial and manufacturing towns, such as Manchester, Birmingham, Paisley, &c., which had attained to vast wealth and importance after the parl. boroughs were selected, were excluded from all share in the representation, while, on the other hand, many boroughs that had become quite unimportant continued to enjoy this valuable privilege. A distinction of this sort could not be long endured; and but for the engrossing excitement occasioned by the late French war, it would, most likely, have been obviated some twenty years sooner. The Reform Act, by disfranchising a good many decayed and trifling boroughs, and enfranchising the greater ones, and giving the right of voting at the election of members to the holders of 10*l.* houses, has rendered the H. of C. a good deal more democratical than formerly, and has, consequently, made it correspond better with the theory of the constitution. This tendency, has, perhaps, also been strengthened by the charges that were at the same time made in the county representation, though that is more doubtful.

Statistical View of the Representation of the United Kingdom.

Places represented.	Number of Members	Registered Electors, 1851.	Pop. excl. of Army and Navy, 1851.
England.			
40 Counties	143	473,296	9,777,210
Isle of Wight	1		
184 Cities and Burghs	319	402,411	7,115,490
2 Universities	4	7,517	
Wales.			
12 Counties	15	36,458	718,720
2 Burghs	2	1,331	69,150
55 Burghs included in 12 districts	12	10,121	217,937
Scotland.			
33 Counties	30	50,833	1,779,305
7 Cities and Towns	9	83,009	748,620
69 Burghs included in 14 districts	14	47,941	388,288
Ireland.			
32 Counties	64	126,215	5,727,966
33 Cities and Burghs	39	30,001	828,571
1 University	2		
470	654	1,219,169	27,401,857

It remains to be seen whether the changes that have been made in the system of representation will turn out in the end to be beneficial. It is obvious that such a modification in our institutions as should admit the great towns that had grown up since the parl. boroughs were selected to a direct participation in the privileges of the constitution, was alike just and indispensable. It was an insult to common sense to pretend that Gatton and Old Sarum should be represented, and that Manchester and Birmingham should not; and the wonder is, that so revolting an anomaly should have been so long maintained. The only question now is, has the franchise been placed in proper hands? Time only can resolve this; but there are, perhaps, some grounds for apprehension. It appears to us that, in a country like Great Britain, with so great a public debt, and where so much depends on the security of property in opinion, as well as in fact, the power to send representatives to the H. of C. should not have been voluntarily conceded, except to those who, from their position in society, might be presumed to have a substantial interest in the support of the existing order of things. But the occupier of a 10*l.* house or of a 50*l.* farm may be, and in fact not unfrequently is, little better than a beggar. And we are not of the number of those who contend that a person with only 5*s.*, or without any thing, will feel himself as much interested in good government, and in the maintenance of that security so essential to all great undertakings, as the owner of an estate or of a cotton-mill. That such a person has a real interest in the well-being and tranquillity of the empire, is most true: but it is absurd to suppose that he will be so likely to be influenced by a wish for its promotion, or that he will be so little disposed to lend a willing ear to the seductive harangues of demagogues, or to withhold his sanction, in periods of distress or excitement, from dangerous projects, as a person with some considerable amount of property.

That there are difficulties in the way of the establishment of a *bonâ fide* property qualification is true, but they are far from insuperable; and provided the qualification were of a reasonable amount, it appears to be the most likely means of securing the election of representatives to whom the affairs of the country might be safely entrusted, and of providing for a really responsible, and, at the same time, safe and judicious system of government.

We believe, however, that the objectionable

class of electors alluded to above forms in most, if not in all, instances a minority; and that the good sense and obvious interest of the bulk of the people will be sufficient to hinder any rash or dangerous tampering with our institutions. It were well, however, that steps were taken to give the Reform Act fair play, by putting a stop, if that be practicable, to the manufacture of fictitious votes. In many instances this practice has been carried to a very great height, and threatens, unless put an end to, to subvert every sound principle of representation.

It is a curious fact, that, with few exceptions, the members for great towns and other extensive constituencies are not generally those who are entitled to, or enjoy, the greatest influence in the H. of C. and in the country. And it is not, perhaps, very difficult to explain why such is the case. Large constituencies are comparatively little under those local influences that exert so great a sway over those that are more limited in regard to number. The great majority of the voters have little or no personal knowledge of the persons who solicit their suffrages; so that candidates who have acquired notoriety, by agitation or otherwise, who are lavish of promises and professions, and declare their readiness to support popular projects and theories, how deficient soever in character and attainments, are usually preferred to abler and more trustworthy competitors.

Perhaps the greatest advantage resulting from the free constitution of the H. of C. has been indirect rather than direct. We owe to it what no other European nation has enjoyed — a really free press. According as the people increased in wealth and intelligence, and members for populous places found it necessary to conciliate public opinion, it became of importance to them to have their speeches printed and circulated over the country. Hence, though the reporting of debates be a breach of privilege, it has long been practised, with the consent of all parties. Members, in fact, speak less to the House than to the reporters, and, through them, to the country; and the censures and comments in which they are accustomed to indulge become a warrant and an apology for similar censures on the part of journalists. It would have been subversive of every principle of justice to punish the latter for what had been proclaimed with impunity by the former. Hence it is that we are really indebted for the freedom of the press, that is, for the palladium and only real safeguard of our rights and liberties — not so much to the votes, as to the debates carried on in the H. of C. Freedom of debate produced freedom of printing; and, consequently, gave us the only effectual security for good government, and the only real check upon abuse. It would require a lengthened essay, or rather a large volume, to point out all the advantages we derive from the freedom of the press; but it is not too much to say, that we are mainly indebted to it for the high place we hold among the nations of the earth; and should we ever be deprived of it, our other institutions would, one by one, be subverted, or be rendered of comparatively little importance, and the sun of Britain's glory would set — and for ever.

Next to the security afforded by the freedom of the press, *trial by jury* has been the grand bulwark of the liberties of the people of England. This institution is of very remote origin, and, like representative assemblies, was at one time introduced into several European countries. It is expressly laid down by the great charter, that "*nullus liber homo capiatur, vel imprisonetur, aut exulet, aut aliquo alio modo destruetur, nisi per legale judicium parium suorum, vel per legem terræ.*" "The founders of the English laws," says Blackstone, "have with excellent forecast contrived that no man should be called to answer to the king for any capital crime, unless upon the preparatory accusation of 12 or more of his fellow subjects (the *grand jury*); and that the truth of every accusation, whether preferred in the shape of indictment, information, or appeal, should be afterwards confirmed by the unanimous suffrages of 12 of his equals and neighbours (the *petty jury*), indifferently chosen, and superior to suspicion. So that the liberties of England cannot but subsist so long as this *palladium* remains sacred and inviolate, not only from all open attacks, which none will be so hardy as to make, but also from all secret machinations, which may sap and undermine it, by introducing new and arbitrary methods of trial, by justices of the peace, commissioners of the revenue, and courts of conscience." (Book iv. cap. 27.)

With the exception of England, trial by jury, in most other countries, was not long in being either suppressed or perverted; that is, juries were either entirely dispensed with, and the power to try prisoners entrusted to judges appointed by the different governments, or the institution was kept up in name only, its object and spirit being totally changed. Instead of jurymen being "indifferently chosen, and free from suspicion," which is of the very essence of jury trial, they were not unfrequently selected by the crown, or its creatures! When so perverted, this institution, from being an efficient protection against unjust and unfounded accusations, becomes a most convenient and dangerous instrument in the hands of an unprincipled government. Hence, it is always impossible to form any fair estimate of the judicial systems of any two or more countries, or of the protection afforded by each to life and property, from merely learning that trial by jury is established in them. Every thing depends on its organisation. If juries be fairly and impartially chosen from the mass of the people, they are the best bulwarks that can probably be devised for the protection of innocence; but if otherwise — if they may be named, or their election influenced, by judges or government officers, they throw a constitutional veil over the acts of the oppressor, and are, in all respects, most inimical to the public interests.

In England, the selection of jurymen having been always, or at least very generally, made on fair principles, jury trial has been deservedly in the highest degree popular. In most countries, the fact of government bringing a charge against an individual, and his condemnation, have been nearly identical; but it has been quite otherwise with us. Here the charge had to be referred to 12 individuals fairly selected from among the freeholders of the neighbourhood; and unless they were *unanimously of opinion that the charge was well founded*, the accusation fell to the ground, and no farther legal proceedings bottomed upon it could be instituted against the accused.

The signal benefits derived from jury trial in criminal cases, and in charges of treason and sedition; and the fact that, were it given up in one class of cases, it might gradually fall into disuse in others, seem to be the principal causes of its being continued as a means of trying all descriptions of civil suits. The fair presumption, however, would seem to be, that a large

class of civil cases might be as well or better decided by a judge or judges appointed for that purpose; and one would be disposed to think that trial by jury might now be advantageously confined to that description of civil cases where the facts are disputed, for the investigation of which it is peculiarly well fitted.

The vital importance of an indifferent selection of jurymen is obvious; but if any doubt should remain in the mind of any one with respect to it, that will be removed by comparing its influence in England with its influence in Scotland: in the former, it has been the best defence of the liberty of the subject; whereas, in the latter, it was the readiest means government could employ to oppress and get rid of any obnoxious individual! This anomalous result was entirely owing to the fact that in England juries were fairly selected; while in Scotland they were nominated by the sheriffs and judges! Luckily, however, this gross abuse has, of late years, been obviated; and Scotland, as well as England, is now in the *bonâ fide* enjoyment of a system of trial by impartial juries.

Religion.— The most perfect toleration is given to the professors of different religious creeds in the U. Kingdom. But, from the Revolution down to 1829, Catholics were excluded from parliament, and were incapable of holding most offices of trust and emolument. These unjust and degrading disabilities were, however, removed at the epoch referred to; and Catholics may now be elected members of the legislature, and are eligible to almost all offices. The repeal of the test and corporation acts, in 1828, removed sundry disabilities under which dissenters previously laboured.

The established church of England has retained the episcopal form of church government with its subordination of ranks; and is a very richly-endowed institution. Its tenets, which are partly Lutheran and partly Calvinistic, are embodied in the famous 39 Articles. The Kirk, or established church of Scotland, which is Presbyterian in form and Calvinistic in principle, is moderately well endowed. The greatest equality subsists among its members; and, on the whole, it may be said to be an essentially popular body.

The church of England enjoys the confidence and support of the great bulk of the people of England, and such also was the case with the church of Scotland previously to the disruption, in 1843, occasioned by the disputes relating to patronage, which led to the formation of the Free church. But it has always been quite otherwise with the established church of Ireland. The latter is identical with the Church of England. Inasmuch, however, as the doctrines of the Reformation never made any considerable progress in Ireland, and as the great bulk of its inhabitants have always been Roman Catholics, the established church has been that of a small minority only, and has never possessed the esteem of the people. On the contrary, they have always regarded it as a usurpation, as being originally forced upon them by the arms, and upheld by the power of England, and as being hostile alike to their religion and their secular interests. Much of the disturbance and disaffection that always prevail in Ireland may be ascribed to this unhappy constitution of the established church. The furnishing of religious instruction to the bulk of the people, to those who are too poor to be able easily to furnish it for themselves, has always been held to be a principal object of an established church. And it is in truth little better than a contradiction and an absurdity, to make the church of a small and opulent minority the national church, and to appropriate to its exclusive use funds that might amply provide for the religious instruction of the whole people. It is not to be supposed that the majority should tamely acquiesce in such a state of things; they cannot but regard it as an insult to their religion, and as an outrage upon their sense of justice. Common sense would suggest, either that the Catholic should be made the established religion of Ireland, or, if not, that the Catholic clergy should participate, in proportion to the number of their adherents, in the endowments now exclusively enjoyed by the clergymen of the church of England.

Revenue and Expenditure. — That portion of the national revenue that is withdrawn from the public by means of taxes, and appropriated to the use of government, amounts at present (1854) to about 57,000,000*l.* sterling, and far exceeds in magnitude the public revenue of any other country. But it must not thence be inferred that taxation is here comparatively heavy. Its pressure is not to be estimated by the actual amount of the sum taken from the people and lodged in the coffers of the treasury; but by the mode in which taxes are imposed, and the ability of the people to bear them. In some countries taxes are imposed on certain classes only; and even where this gross inequality does not exist, they are often imposed on erroneous principles, and in a way that makes their assessment and collection peculiarly difficult and injurious. But in the U. Kingdom taxation presses equally, or very nearly so, on all classes; and, without pretending to say that our system of taxation is perfect, or that it might not be materially improved, it appears, speaking generally, to be founded on sound principles, and is practically as little injurious as it could well be rendered. And if we compare the magnitude of our taxes with that of the national revenue whence they are derived, it will probably be found that the complaints of the peculiarly heavy pressure of taxes in this country are, in great measure, without foundation. It is not to the influence of taxation, but to the expensive style of living, which prevails amongst us, and which luckily (for it is the grand incentive to industry and invention) pervades all classes, that the difficulty many individuals have in preserving their places in society is to be ascribed. Instead of supposing that the influence of taxation in Great Britain has been hostile to the increase of public opulence and private comfort, we incline to think it has had a precisely opposite effect. To the desire of rising in the world, the increasing pressure of taxation during the late war superadded the fear of being thrown down to a lower station; and the two together produced results that we should in vain have looked for from the unassisted agency of either. Oppressive taxes would have had an opposite effect; and instead of producing new displays of industry and economy, would have produced only despair and national impoverishment. But it was seen that the increase of taxation might be met by increased exertion and economy; and this increased exertion has, in fact, led to the production of a far greater amount of wealth than was required to meet the increased demands of the revenue collectors.

About two thirds of the public revenue are derived from duties of customs and excise; and the rest from the property and income tax, the duties on stamps, the assessed taxes, and the post-office. With few exceptions, the duties

seem to be judiciously selected; and though it be true that some of them, as those on tea, tobacco, &c., would be more productive were they materially reduced, the defect is not in the selection of the articles on which to impose duties, but in the too great height to which they have been carried; a defect that admits of being easily obviated.

Account of the Public Revenue of the United Kingdom in 1850, 1851, and 1852.

Income.	Public Income in the Years					
	1850.		1851.		1852.	
Customs and Excise.	£	£	£	£	£	£
Spirits, foreign	1,430,298	- -	1,427,332	- -	1,477,904	
Spirits, rum	1,099,950	- -	1,097,920	- -	1,103.584	
Spirits, British	5,909,381	- -	6,030,324	- -	6,226.736	
Malt	5,391,321	- -	5,035,569	- -	5,323,935	
Hops	319,258	- -	426,241	- -	231,653	
Wine	1,821,123	- -	1,776.247	- -	1,795,013	
Sugar and molasses	4,114,134	- -	4,159,040	- -	4,054,714	
Tea	5,596,961	- -	5,900.624	- -	5,984,172	
Coffee	565,660	- -	444,670	- -	437,229	
Tobacco and snuff	4,410,323	- -	4,466,469	- -	4,542,572	
		30,658,409		30,764,436		31,177,512
Butter	158,081	- -	166,780	- -	143,341	
Cheese	84,497	- -	83,242	- -	70,000	
Currants and raisins	490,682	- -	521,765	- -	465,120	
Corn	467,881	- -	504,921	- -	404,385	
Silks	218,718	- -	213.710	- -	222,936	
Paper	858,598	- -	934,567	- -	947,905	
Soap	1,066,472	- -	1,043.027	- -	1,127,259	
Candles and tallow	77.261	- -	67,840	- -	77,633	
Coals, sea-borne	975					
Glass	10,705	- -	10,975	- -	10,116	
Timber	665,910	- -	521,872	- -	515,817	
Excise licences	1,130,175	- -	1,160,570	- -	1,183,321	
Post-horse duties	150,010	- -	145,432	- -	150,061	
Hackney carriages	79,208	- -	88,033	- -	84,556	
Stage carriages	195,580	- -	217,052	- -	218,142	
Railways	251,215	- -	287,332	- -	280,144	
Miscellaneous of Customs and Excise	716,047	- -	865,941	- -	850,608	
		6,622,015		6,833,059		6,751,344
Total Customs and Excise	- -	37,280,424	- -	37,597,495	- -	37,928,856
Stamps.						
Deeds and other instruments	1,553,346	- -	1,191,491	- -	1,378,646	
Probates and legacies	2,248,206	- -	2,286,258	- -	2,418,517	
Insurance, Marine	162,769	- -	172,673	- -	192,243	
Insurance, Fire	1,104,852	- -	1,134,539	- -	1,162,913	
Bills of exchange, bankers' notes	576,684	- -	566,894	- -	570,087	
Newspapers and Advertisements	362,224	- -	396,514	- -	594,152	
Receipts	169,570	- -	174,744	- -	180,491	
Other stamp duties	529,110	- -	605,936	- -	454,250	
		6,706,761		6,529,049		6,921,299
Assessed and Land Taxes.						
Land Taxes	1,159,387	- -	1,142,906	- -	1,151,613	
Windows	1,708,025	- -	944,857	- -	152,971	
Houses	- -	- -	16,458	- -	726.715	
Servants	204,947	- -	209,055	- -	209,613	
Horses	292,944	- -	297,092	- -	373,246	
Carriages	402,622	- -	407,969	- -	407,222	
Dogs	150,075	- -	155,864	- -	157,923	
Additional 10 per cent.	302,490	- -	299,271	- -	137.763	
Other assessed taxes	315,220	- -	316,513	- -	242,561	
		4,535,710		3,789,984		3,559,627
Property and income tax	- -	5,510,860	- -	5,440,350	- -	5,652,770
Post-office	- -	2,261,262	- -	2,422,168	- -	2,442,327
Crown lands	- -	365,809	- -	352,957	- -	358,265
Other ordinary revenue and other resources	- -	770,970	- -	702,708	- -	892,427
Total income	- -	57,431,796	- -	56,834,711	- -	57,755,571

The following is an account of the nett amount (including the expenses of collection) contributed by each of the three great divisions of the U. Kingdom to the principal branches of the public revenue in 1849:—

	England.			Scotland.			Ireland.			U. Kingdom.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
Customs	18,142,711	15	5¼	1,949,030	2	11	2,177,121	13	8	22,268,863	12	0¼
Excise	10,969,508	11	6¼	2,629,731	1	0	1,403,858	16	4	15,003,098	8	10¼
Stamps	5,976,314	3	1½	518,037	19	7¾	518,914	12	4½	7,013,266	15	1½
Taxes	4,226,028	2	1¼	296,882	5	5¼	-	-		4,522,910	7	7¾
Property-tax	5,109,895	4	3	454,938	3	0	-	-		5,564,833	7	3
Post-office	1,815,864	5	10¾	168,134	15	9½	181,350	16	1	2,165,349	17	9½
	46,240,322	2	5¼	6,016,754	7	9¾	4,281,245	18	5¼	56,538,322	8	8¼

The expense per cent. of collecting the gross public revenue in 1849, was —

	Great Britain.	Ireland.	U. Kingdom.
	Per cent.	Per cent.	Per cent.
Customs - -	£5 6s. 6½d.	£10 2 0¾d.	£5 15s. 9¼d.
Excise - -	5 2 6¼	11 3 10	5 13 6¼
Stamps - -	1 18 8	3 4 10¾	2 0 7¼
Taxes - -	8 5 3¼		8 6 3¼
Post-office -	67 0 8¼	81 10 5	69 1 6¼

Defence. — *Army.* — The formation of a standing army being long regarded by our ancestors with extreme jealousy and aversion, its establishment in England is of comparatively modern origin, not dating farther back than the reign of Charles II. It is annually provided for by a vote of the H. of C.; so that it is always in the power of the latter at any time to reduce, or, if it see cause, totally to disband, the army. But the old jealousies of which it was the object no longer exist; and there can be no doubt that the establishment of a properly trained regular military force is not only indispensable to guarantee the national independence from hostile attack, but that it is also by far the best force that can be employed to maintain internal tranquillity and order. It would be worse than useless to waste the reader's time by dwelling on the merits and services of the British army. It has been employed in every quarter of the world, and has every where exhibited all those qualities that go to form a perfect military force — the most unflinching courage, combined with the greatest patience and fortitude under privations and hardships, and the constant observance of the strictest discipline.

The British army is recruited by means of voluntary enlistment only; and it is to be hoped that all attempts to introduce the conscription into this country may meet with no better success in future than that which has hitherto attended them. If soldiers could not be procured by other means, we should admit that necessity formed a valid excuse for the introduction of a conscription. But no such necessity has ever existed. No country that chooses to pay fair wages to its troops, and which treats them as men employed in the service of their country should be treated, will ever want for a supply of voluntary recruits. If we ever be forced to resort to the oppressive and odious resource of conscription, the necessity will have arisen from the adoption of some spurious system of economy, or from something wrong in the treatment of the troops, or both.

The annual Mutiny Act, and the Articles of War issued by the crown, and subjoined to the Mutiny Act, constitute the code of martial law in force in the British army.

We subjoin an account taken from official documents of the regular troops (exclusive of the ordnance) at home, in the colonies, and in foreign countries, in 1792, 1815, and 1853.

	1792.	1815.	1853.
At home and in the Colonies.			
Household cavalry - - -	779	1,504	1,308
Foot guards - - -	3,766	9,612	5,260
Cavalry of the line - - -	3,409	16,477	7,583
Infantry of the line - -	36,598	138,701	78,581
Garrison battalion - - -	- -	1,823	
Veteran battalions - - -	- -	2,922	
West India regiments - -	- -	8,798	3,417
Colonial corps - - -	- -	7,147	5,574
Fencibles - - - -	- -	3,268	
Foreign corps - - -	- -	21,314	
Augmentation in progress -	- -	9,148	
	46,552	220,714	101,723
India.			
Cavalry of the line - -	512	5,555	3,165
Infantry of the line - -	10,188	24,045	27,144
Totals - -	57,252	250,314	132,032

The numbers and descriptions of the land forces embodied for the year 1853-54, were as follows: —

	Horses.	Officers.	Non-commissioned Officers, Trumpeters, and Drummers.	Rank and File.	Total.
Life guards and horse guards - -	822	96	159	1,053	1,308
Cavalry of the line -	8,142	710	900	9,138	10,748
Foot guards - -	- -	218	432	4,610	5,260
Infantry of the line -	- -	4,416	7,109	94,200	105,725
West India regiments	- -	181	236	3,000	3,417
Colonial corps -	900	251	409	4,914	5,574
Total army, exc. Ordnance - -	9,864	5,872	9,215	116,945	132,032
			Non-commissioned Officers and Men,		
Ordnance - -	- -	913	16,655		17,598
Making the total force	- -	6,813	-	-	149,630

The charge for the above forces, exclusive of the ordnance, was 4,565,076*l.*, of which 939,293*l.* was to be defrayed by the East India Company. The charge for the ordnance during the same year was 2,882,352*l.*; making the total expense of the *effective* military force in 1853-54, 7,447,428*l.* But to this has to be added the charge for *non-effective* services, that is, for half-pay and pensions to officers and men, which amounted, for the army and ordnance together, during the same year, to 2,186,179*l.*, making the total cost of the army, including the sum to be repaid by the East India Company, 9,633,607*l.*

The pay and other emoluments of the officers and men depend partly on the length of their service and partly on the department of the service to which they belong. In the household troops, the pay of privates varies from 1*s.* 9½*d.* to 2*s.* 0½*d.* a day; in the cavalry of the line it is 1*s.* 4*d.*; in the foot guards, 1*s.* 2*d.*; and in the infantry of the line, 1*s.* 1*d.* Soldiers, however, are not entitled to receive the whole of this sum in money: when at home and in barracks, they are supplied with certain rations, for which 6*d.* a day, and not more, is to be deducted from their pay. The greater part of their clothes and accoutrements are furnished at the public expense; but certain deductions are made from their pay on that account. Pensions are granted for casualties in action, &c., and to soldiers discharged after certain periods of service. (The regulations relating to pay, half-pay, pensions, &c., may be seen in the *Army List.*)

Exclusive of the regular troops, there is also the militia, yeomanry, and police. The first has not been embodied since 1815. The yeomanry is a species of volunteer cavalry that formerly was much more considerable than at present. It is a description of force of which the utility is very doubtful; and it appears to us that wherever a military force has to be employed, the preferable plan is to employ regular troops. Under the new organisation, the police has become a valuable species of force, and is extensively employed in Ireland, and in London, and in several towns in England.

Navy. — The naval service has always been exceedingly popular in this country; and the navy has long been reckoned the pride and best bulwark of the empire. The H. of Lords, in an address to Queen Anne, in 1707, laid it down as "a most undoubted maxim, that the honour, security, and wealth of this kingdom does depend upon the protection and encouragement of trade, and the improving and right encouraging its naval strength . . . . therefore we do in the most earnest manner beseech your majesty that the sea affairs may be always your first and most peculiar care." And there cannot be a doubt that, in this

instance, the lords gave expression to what were then, and have ever since continued to be, the sentiments of the great majority of the British nation.

The battle off Cape La Hogue, in 1692, gave the British navy an ascendancy over that of France, the only other great naval power, it has ever since preserved. During the last war with France, our navy was prodigiously augmented; and the victories of the 1st of June, 1794, of St. Vincent, Camperdown, the Nile, Copenhagen, and Trafalgar, left us the undisputed masters of the ocean.

The ships in commission and in ordinary in 1792, 1815, and 1848, were —

		1st Rate.	2d.	3d.	4th.	5th.	6th.	Small Vessels, &c.
Ships in commission	1792	- -	2	10	5	14	12	8
	1815	1	2	22	5	50	25	113
	1848	5	11	1	7	10	15	203
Ships in ordinary	1792	7	19	102	16	79	30	179
	1815	12	15	175	13	100	80	167
	1848	7	17	30	15	33	13	93

The number of seamen and marines, and the sums voted at different periods for the service of the navy, have been —

Years.	Seamen.	Marines.	Total Men.	Sums.
1792	- -	- -	16,000	£ 1,985,482
1815	- -	For 3 Mon.	70,000	17,032,700
	- -	10 do.	90,000	
1825	20,000	9,000	29,000	5,983,126
1830	26,000	9,000	35,000	5,595,855
1835 *	17,500	9,000	26,500	4,215,721
1848	29,500	13,500	43,000	7,068,730

The navy is governed by the lord high admiral for the time being, or by a body of commissioners called the Board of Admiralty, of which the power is, in fact, vested in the First Lord. This board has the superintendence of all naval matters; all appointments, &c. of commissioned officers, and warrant officers with some exceptions; promotion, honours, pensions; and the general control of every thing relating to the discipline of the fleet.

Those who enter the service with a view to obtain commissions, begin as volunteers, and then serve as midshipmen; after 6 years in the latter character, and attaining the age of 19, they *pass* an examination for the rank of lieutenant — the lowest commissioned officer. But the attainment of a commission, and subsequent promotion, are entirely at the disposal of the Admiralty. Certain advantages are enjoyed by those who have completed their education as students at the naval college of Portsmouth. The discipline of the navy is maintained by articles embodied in acts of parliament. Sailors enter the navy by voluntary enlistment; but in cases of emergency they may be obtained by impressment. Of the antiquity and legality of this practice no doubt can be entertained; but very grave doubts have been entertained in regard to its necessity and expediency.

King's ships are now classified according to a system of rating adopted in 1816. There are six classes of what are termed rated ships; all three-deckers ranking as first rates; and the following five rates comprising ships whose complements of men are above 700, under 700, 600, 400, and 250 men respectively. Ships of war carrying less than 74 guns are usually styled frigates; less than 20, sloops of war, &c.

For an account of the pay, half-pay, pensions, &c., of the different descriptions of officers and men in the sea-service, the reader is referred to the *Navy List*.

The navy estimates for 1830-31, 1835-36, and 1853-54, have been as follows (see top of next column): —

Heads.	1830-31.	1835-36.	1853-54.
Effective Service.	£	£	£
Wages to seamen, &c.	980,200	933,054	1,736,236
Victuals for ditto	709,031	422,216	615,426
Admiralty office	- -	108,844	137,245
Navy pay-office	80,017	22,183	
Registry office			
Scientific branch	845	24,590	34,939
Her Majesty's Establishments at home	198,498	118,547	131,230
Ditto ditto abroad	66,494	22,661	22,764
Wages ditto at home	458,720	350,612	685,648
Ditto ditto abroad, included in establishments	- -	25,765	36,566
Naval stores	680,000	426,958	1,023,011
New works, &c.	99,000	62,440	256,918
Pilotage, salvage, &c.	75,000		
Medicines, &c.	64,026	23,000	26,000
Hired packets	27,870		
Miscellaneous services	112,899	49,450	57,427
Total effective service	3,652,603	2,590,320	4,765,440
Non-effective Service.			
Half-pay	854,000	819,103	687,575
Military Pensions, &c.	567,564	534,695	483,134
Civil ditto	173,684	220,152	148,394
Total naval service	5,247,851	4,164,760	6,082,513

Public Debt. — Exclusive of the large sums raised by taxes, the British government has borrowed immense sums. Of the total expenditure of the United Kingdom, during the year 1852, amounting to 55,229,367*l*., no less than 27,934,583*l*. went to defray the interest and expense of managing the national debt! Many conflicting opinions have been entertained in regard to the policy of the borrowing or funding system, and in regard to the preference to be given to different methods of borrowing; the statement of which would be inconsistent alike with our objects and limits. It is sufficient for our purpose to remark that the public debt has grown up, almost entirely, since the Revolution, and principally during the American and late French wars, especially the latter. Individuals lending money to the public, or, as it is said, contracting for a loan, receive a certain specified amount of government stock, or *funded property*, bearing a specified rate of interest, or, as it is called, *dividend*, payable quarterly at the Bank of England. A lender to the public is not entitled to demand repayment of the principal sum lent; all that he has a right to claim is the regular payment of the interest or dividend on that sum: but he is at liberty to dispose of his right to this dividend, or, in other words, to sell or transfer his stock to any one else. Such transfers or sales are usually effected at the Stock Exchange, in the city of London, and their negotiation affords employment to a considerable number of brokers. The price of stocks is liable to much variation, being necessarily affected by all those circumstances that affect the peace and prosperity of the empire; the abundance or scarcity of money; the rate of profit, &c. Contrary to what is usually believed, a large proportion of the public debt is held by individuals in the lower and middle walks of life. A large proportion is also held by bankers and other individuals, whose business requires that they should be able readily to command their capital.

It is needless to occupy the reader's time by details respecting the various schemes that have been proposed for paying off the national debt, by means of sinking funds and such like devices. Notwithstanding the high patronage under which some of these schemes have been brought forward, and the encouragement they have met with, the reader may be assured that they are universally bottomed on delusion or quackery, or both. "The increase of revenue, or the diminution of expense, are the only means by which the sinking revenue can be enlarged and its operations rendered more efficient; and all schemes for discharging the national debt, by sinking funds operating at compound interest, or in any other manner, unless in so far as they are founded on this principle, are completely illusory." (*Hamilton on the National Debt.*)

* 1,000 first-class boys were first voted in 1834, and subsequently increased to 2,000 in the following year.

Account of the Public Expenditure of the United Kingdom, in the Years 1850, 1851, and 1852.

Expenditure.	1850.		1851.		1852.	
	£	£	£	£	£	£
Revenue—Charges of Collection:						
Civil Department { Customs	666,525	- -	677,703	- -	649,761	
Civil Department { Excise	615,144	- -	622,976	- -	616,288	
		1,311,969		1,300,679		1,266,019
Preventive service, land guard, revenue police, cruizers, &c.	- -	521,980	- -	529,249	- -	523,175
		1,833,949	- -	1,829,925		1,789,224
Stamps	- -	134,659	- -	130,575	- -	132,740
Assessed Taxes	- -	303,622	- -	290,000	- -	290,963
Other ordinary revenues	- -	58,766	- -	58,365	- -	34,262
Superannuation and other allowances	- -	402,369	- -	399,561	- -	391,544
Total revenue	- -	2,733,345	- -	2,708,426	- -	2,638,733
Public Debt.						
Interest on permanent debt	23,878,803	- -	23,758,291	- -	23,637,996	
Terminable annuities	3,737,325	- -	3,784,664	- -	3,822,855	
Management	71,756	- -	71,458	- -	70,030	
	27,687,884		27,614,413		27,530,881	
Interest on exchequer bills	403,706	- -	402,714	- -	403,652	
Total debt		28,091,590		28,017,127		27,931,533
Civil Government.						
Civil list — Privy purse; Salaries of the household and tradesmen's bills	371,800	- -	371,800	- -	371,800	
The allowances to the several branches of the Royal Family, and to the King of the Belgians	173,273	- -	171,000	- -	152,353	
The Lord Lieutenant of Ireland's establishment	26,424	- -	26,425	- -	26,633	
The salaries and expenses of the Houses of Parliaments (including printing)	170,646	- -	154,987	- -	100,710	
Civil departments, including superannuation allowances	627,157	- -	667,244	- -	695,836	
Other annuities, pensions, and superannuation allowances on the consolidated fund, and on the gross revenue	231,714	- -	227,633	- -	223,246	
Pensions, Civil List	11,481	- -	12,730	- -	13,589	
Total civil government		1,612,495		1,631,819		1,581,167
Justice.						
Courts of justice	677,793	- -	716,469	- -	645,243	
Police and criminal prosecutions	879,818	- -	840,037	- -	891,542	
Correction	841,574	- -	779,450	- -	567,411	
Total justice		2,399,185		2,335,956		2,104,196
Diplomatic.						
Foreign minister's salaries and pensions	159,285	- -	152,798	- -	151,635	
Consuls' salaries and superannuation allowances	139,798	- -	147,370	- -	152,116	
Disbursements, outfit	30,509	- -	28,450	- -	28,335	
Total diplomatic		329,592		328,618		332,406
Forces.						
Army { Effective Charge	4,146,609	- -	4,355,497	- -	4,957,320	
Army { Non-effective Charge	2,255,247	- -	2,130,001	- -	2,060,844	
Total army	6,401,883	- -	6,485,498	- -	7,018,164	
Navy { Effective Charge	5,071,608	- -	4,512,614	- -	5,303,136	
Navy { Non-effective Charge	1,366 275	- -	1,337,302	- -	1,322,807	
Total navy	6,437,883	- -	5,849,916	- -	6,625,943	
Ordnance { Effective Charge	2,387,616	- -	2,073,239	- -	2,325,707	
Ordnance { Non-effective Charge	165,562	- -	165,203	- -	166,091	
Total ordnance	2,553,178	- -	2,238,442	- -	2,491,798	
Total forces		15,392,944		14,573,856		16,135,905
Kaffir war	-	- -	- -	300,000	- -	870,000
Bounties, &c. for promoting fisheries	-	16,149	- -	15,000	- -	12,000
Public works	-	601,364	- -	560,537	- -	731,399
Payments out of the revenue of crown lands, for improvements and various public services	-	126,985	- -	87,075	- -	77,533
Post office: charges of collection and other payments	-	1,417,058	- -	1,293,855	- -	1,341,399
Quarantine and warehousing establishments	-	127,337	- -	125,062	- -	125,[illegible]
Miscellaneous, not classed under the foregoing heads	-	2,060,490	- -	2,025,661	- -	1,84[illegible]
		54,938,534		54,002,995		56,229,367
Surplus of income over expenditure	-	2,493,262	- -	2,831,716	- -	2,526,204
Total expenditure	-	57,431,796	- -	56,831,711	- -	57,785,571
Memorandum.						
The amount of terminable annuities on 5th January was	-	3,808,862	- -	3,816,272	- -	3,891,856
In corresponding perpetuities, as estimated by Mr. Finlaison	-	1,199,815	- -	1,333,403	- -	1,095,126
Difference	-	2,609,047	- -	2,482,869	- -	2,796,430

Account of the Principal and Annual Charge of the Public Debt at different Periods since the Revolution.

	Principal Funded and Unfunded.	Interest and Management.		Principal Funded and Unfunded.	Interest and Management.
	£	£		£	£
Debt at the Revolution, in 1689	664,263	39,855	Debt at the commencement of the American war, in 1775	128,583,635	4,471,571
Excess of debt contracted during the reign of William III. above debt paid off	15,730,439	1,271,087	Debt contracted during the American war	121,267,993	4,980,201
Debt at the accession of Queen Anne, in 1702	16,394,702	1,310,942	Debt at the conclusion of the American war, in 1784	249,851,628	9,451,772
Debt contracted during Queen Anne's reign	37,750,661	2,040,416	Paid during peace, from 1784 to 1793	10,501,380	243,277
Debt at the accession of George I. in 1714	54,145,363	3,351,358	Debt at the commencement of the French war, in 1793	239,350,148	9,208,495
Debt paid off during the reign of George I. above debt contracted	2,053,125	1,133,807	Debt contracted during French war	601,500,343	22,829,679
Debt at the accession of George II. 1727	52,092,238	2,217,551	Total funded and unfunded debt on the 1st of February, 1817, when the English and Irish exchequers were consolidated	840,850,491	32,038,291
Debt contracted from the accession of George II. till the peace of Paris in 1763, three years after the accession of George III.	86,773,192	2,631,500	Debt cancelled from the 1st of Feb. 1817, to the 5th of January, 1854	69,927,490	4,578,745
Debt in 1763	138,865,430	4,852,051	Debt and charge thereon, 5th of Jan., 1854	770,923,001	27,459,546
Paid during peace, from 1763 to 1775	10,281,795	380,480			

An Account of the Public Revenue and Expenditure from 1822 to 1849, both inclusive; distinguishing between Ordinary and Extraordinary Revenue; and between the great Heads of Expenditure.

Years.	Income.			Expenditure.			
	Ordinary Revenue, Deducting Drawbacks, &c.	Extraordinary Revenue.	Total Revenue.	Charges of Collection, &c.	Annual Charge of Public Debt.	All other Expenditure.	Total Expenditure.
1822	59,340,451	483,270	59,823,724	5,688,091	31,343,551	18,047,674	55,079,316
1823	57,250,969	1,247,188	58,498,157	5,742,593	29,978,454	18,476,364	54,197,410
1824	57,615,479	2,214,212	59,829,691	5,413,461	30,166,421	20,361,637	55,941,519
1825	57,662,821	282,284	57,945,105	5,597,431	29,197,187	20,101,331	54,895,949
1826	55,012,870	615,923	55,628,793	5,387,384	29,228,967	21,658,361	56,274,712
1827	54,850,063	660,082	55,510,145	5,268,486	29,417,543	21,650,790	56,336,819
1828	56,951,669	439,566	57,391,235	5,286,592	29,309,052	19,548,597	54,144,241
1829	55,576,556	358,407	55,934,963	5,148,280	29,155,611	19,919,521	54,223,412
1830	54,765,669	166.621	54,932,290	4,875,674	29,118,859	18,024,084	52,018,617
1831	50,881,814	130,794	51,012,608	4,588,167	28,341,416	18,781,882	51,711,465
1832	51,368,128	154,959	51,523,087	4,534,332	28,323,752	18,050,244	50,908,328
1833	50,578,671	100,726	50,679,397	4,408,071	28,522,507	16,235,735	49,166,314
1834	50,746,678	84,593	50,831,271	4,321,415	28,504,096	16,397,606	49,223,116
1835	50,258,286	150,293	50,408,579	4,364,916	28,514,610	15,908,112	48,787,638
1836	52,837,924	111,473	52,949,397	4,246,743	29,213,599	17,328,963	50,819,305
1837	50,387,349	276,004	50,663,353	4,188,159	29,489,571	17,641,383	51,319.113
1838	51,146,805	228,715	51,375,520	4,042,061	29,260,238	18,418,449	51,720,748
1839	51,771,507	155,988	51,927,495	4,082,596	29,454,062	19,903,629	53,440,287
1840	51,634,081	216,002	51,850,083	4,282,517	29,381,718	19,779,818	53,444,053
1841	52,197.111	166,838	52,363,949	4,279,589	29,450,145	20,735,584	54,465,318
1842	50,979,595	264,740	51,244,335	4,278,704	29,428,120	21,517,049	55,223,873
1843	55,432,804	1,512,839	56,945,043	4,362,226	29,269,160	21,870,353	55,501,739
1844	57,773,090	686,661	58,459,751	4,455,997	30,495,459	20,152,189	55,103,645
1845	56,349,468	1,341,236	57,690,704	4,630,350	28,253,872	20,988,840	53,873,062
1846	57,589,397	839,936	58,429,333	4,639,195	28,077,987	22,865,843	55,583,025
1847	56,068,267	205,463	56,273,730	4,727,465	28,141,531	26,361,417	59,230,413
1848	57,227,938	966,379	58,194,317	4,805,600	28,563,517	25,621,619	58,990,736
1849	56,937,804	640,981	57,578,785	4,627,036	28,323,961	22,529,662	55,480,659

Literature.— Some remarks respecting the language and literature of England, will be found under the head ENGLAND. Here it is sufficient to observe that the basis of the English language is essentially Saxon, intermixed, however, with a great number of words derived from the Latin, and other languages of Latin origin. It is needless to say that the English have attained to the highest distinction in every department of literature. But in modern times, the distinguishing feature of our literature, is undoubtedly the periodical, and especially the daily, press. To such perfection has the method of conducting the daily journals been carried, that debates that occur in either house of parliament, are accurately and very fully reported in the morning papers of the ensuing, or it may be, of the same day. These, indeed, are not unfrequently published within two or three hours of the termination of the debate; and being carried to the country by the railway coaches, and other speedy conveyances, the report of a debate ending in the H. of Lords or Commons at 4 o'clock in the morning, may be perused at Birmingham or Bristol, above 100 miles off, by 12 o'clock of the same day! The other departments of the daily journals; such as communications from foreign parts; criticisms in various branches of science and literature; and the comments of the editors on the events of the day, are, for the most part, written with great ability; and though strongly tinctured with party prejudices, and but little to be depended on when party interests are concerned, they discover a grasp of mind, and an extent and accuracy of information, that are really astonishing, considering the haste with which they have to be composed, and the little time given for correction. Generally speaking, the periodical press of Great Britain is decidedly superior to that of every other country, and displays much practical good sense, and, with some few exceptions, the most praiseworthy respect for the decencies of private life, and for the great principles that form the foundations of society.

The Colonies and Foreign Dependencies belonging to the U. Kingdom, and forming part of the British empire, are of great extent and importance. They consist principally of our dominions in N. America and the West Indies, the Cape of Good Hope, Australia, and India. The reader will find in the table at the end of this article, statements of the population, trade, &c., of the greater number of these colonial possessions, and detailed accounts of each will be found under its peculiar head in this work. The common opinion is, that the U. Kingdom is indebted for a large portion of its wealth and power to the possession of these distant territories; but it may be doubted whether there be much real ground for this opinion. It is true that England, in common with all Europe, has derived infinite advantage from the discovery and settlement of America, and from the intercourse with India by the Cape of Good Hope. But the question is, have we derived greater advantages from retaining the countries we settled in a state of dependence, after they were able to govern themselves, than we should have done by making them free? We are inclined to think that those who dispassionately inquire into the matter will find that this is a question which must be answered in the negative. Our colonies in America and the West Indies have never furnished one farthing towards defraying any part of the general expenditure of the U. Kingdom; they are, indeed, exempted, by express statute, from any such charge; at the same time that the fleets and armies required for their protection in war, and their security in peace, are all supplied by the British nation, and cost them nothing. Exclusive of the outlet they afford to emigrants, the only advantage, in a national point of view, derivable from them must, therefore, if it exist at all, be found in the trade or intercourse we carry on with them. But it has been shown, over and over again, that the trade with colonies differs in no important respect from that with foreign countries; that, unless it be naturally advantageous for both parties, it cannot be for the interest of the mother

country to engage in it; and that if it be naturally advantageous, it will be carried on to the same or a greater extent, were the colony an independent state. The great and growing intercourse we have continued to keep up with the U. States since they achieved their independence, is a practical proof of the truth of what has now been stated. Our trade with Canada is, on the other hand, a proof of the mischief occasioned by forcing an intercourse where there is no natural aptitude for one. That colony, of the value of which the most extravagant notions have been entertained, has not, we believe, a single commodity to export which we might not obtain better and cheaper elsewhere. It is true it supplies us with large quantities of timber, but why? Because, while timber from the N. of Europe is charged, on importation into this country, with a duty of 15*s.* a load, timber from Canada is charged with a duty of only 1*s.* This regulation, besides forcing the use of an inferior article, imposes a burden on the people of Britain of about 300,000*l.* a year. Surely, therefore, it were for our advantage that it were repealed; and if so, there would be an end of nine tenths of our trade with Canada. While, however, the forcing a trade with colonies is no advantage, but the reverse, the effort to keep them in a state of unwilling dependence, after they are desirous to be independent, entails a very heavy expense on the mother country. Our ascendancy in Canada, at this moment, is wholly dependent on the presence of a large military force, occasioning, one way and another, a direct outlay of little less than 1,500,000*l.* a year; and all this enormous direct and indirect expense is incurred without any equivalent advantage, and with a full conviction in the mind of every man of sense in the empire that, at no very distant period, Canada will be independent, or an integral portion of the United States.

It is said that the West Indian colonies are advantageous, because they supply us with sugar, which yields a large amount of revenue! But in this respect they are merely on a level with China and Virginia, which supply us with tea and tobacco, which also yield a large amount of revenue. It is the people of Britain, and not the West Indian islands, that pay the sugar duties. And as sugar could be imported from Brazil and Cuba quite as cheap as it can be imported from the British West Indies, or rather, we believe, decidedly cheaper, it is difficult to perceive how the emancipation of the latter could occasion any very material public loss.

Nothing, therefore, can be a greater error than to suppose that we are indebted for any very considerable portion of our national greatness to the extent of our colonial dominion. In all those cases in which we carry on a really beneficial trade with a colony, the chances are ten to one that we should carry it on to an equal extent were it independent; while the number of our colonies, their distance from the U. Kingdom, the ease with which some of them may be attacked during war, and the difficulty and expense of defending them, must be very serious considerations. On the whole, perhaps, it will be found, if rightly examined, that extensive colonial possessions are a source of weakness rather than of strength. We derive our superior wealth and civilisation from totally different sources—from the physical and moral advantages enjoyed by the U. Kingdom; and while we possess these, we need not fear that any serious injury will result from circumscribing the extent of our colonial dominion.

Our Indian empire is a foreign dependency, not a colony; it does not enjoy that exemption from taxation, for the benefit of the U. Kingdom, enjoyed by our colonial possessions; and it has occasionally remitted considerable sums as tribute to England. But the magnitude of these sums has been much exaggerated; and it has been doubted by various well-informed parties whether, at an average of years, we have received any thing considerable from India.

Malta, Gibraltar, and such like strongholds, are valuable, because they afford convenient and secure asylums for our ships of war and merchantmen, serving also as depôts for our produce, and arsenals, whence we may send out cruisers and expeditions to annoy our enemies in war. They are, as it were, a species of foreign bulwarks, and are of importance and value, as means of defence and aggression.

Probably the greatest advantage derived from our extensive colonial dominions is to be found in the vast field they afford for the profitable employment of our surplus population, and for the exercise of talents for which there is comparatively little demand at home. The U. States also present great attractions to emigrants from this country, resulting in part from the common origin of their people, the identity of their language, the general mildness of their climate, and their comparative proximity; and in part from the greater facility with which tracts of unoccupied land may be acquired in them. The policy of the existing regulations in regard to the disposal of unoccupied lands in most of our colonies appears, indeed, to be of the most questionable description. At present, however, we shall content ourselves with observing that whether the plan of fixing a *minimum* price on unoccupied land be or be not expedient, the price fixed in the greater number of our colonies is by far too high, being in truth four or five times as much as it should be. We subjoin

An Account of the total Number of Emigrants that have left the U. Kingdom during each of the Twenty-five Years ending with 1849, specifying also the Destination of the Emigrants.

Years.	North American Colonies.	United States.	Australian Colonies and New Zealand.	All other Places.	Total.
	Emig.	*Emig.*	*Emig.*	*Emig.*	*Emig.*
1825	8,741	5,551	485	114	14,891
1826	12,818	7,063	903	116	20,900
1827	12,648	14,526	715	114	28,003
1828	12,084	12,817	1,056	135	26,092
1829	13,307	15,678	2,016	197	31,198
1830	30,574	24,887	1,242	204	56,907
1831	58,067	23,418	1,561	114	83,160
1832	66,339	32,872	3,733	196	103,140
1833	28,808	29,109	4,093	517	62,527
1834	40,060	33,074	2,800	288	76,222
1835	15,573	26,720	1,860	325	44,478
1836	34,226	37,774	3,124	293	75,417
1837	29,884	36,770	5,054	326	72,034
1838	4,577	14,332	14,021	292	33,222
1839	12,658	33,536	15,786	227	62,207
1840	32,293	40,642	15,850	1,958	90,746
1841	38,164	45,017	32,625	2,786	118,592
1842	54,123	63,852	8,534	1,835	128,344
1843	23,518	28,335	3,478	1,881	57,212
1844	22,924	43,660	2,229	1,873	70,686
1845	31,803	58,538	830	2,330	93,501
1846	43,439	82,239	2,347	1,826	129,851
1847	109,680	142,154	4,949	1,487	258,270
1848	31,065	188,233	23,904	4,887	248,089
1849	41,367	219,450	32,191	6,490	299,498
Total	808,740	1,260,247	185,386	30,811	2,285,184

For accounts respecting the population, revenue, &c., of India, the reader is referred to the articles HINDOSTAN and BENGAL (Presidency of), BOMBAY, &c.

[See Table next page.]

Return, enumerating the various Colonies, of any Importance, belonging to the United Kingdom, the Dates of their Acquisition, their Government, Population, Trade, and Navigation.

Colonies.	Date of Capture, Cession, or Settlement.	Whether having Legislative Assemblies, or governed by Orders in Council.	Population, 1853, or last Census.	Imports into the U. Kingdom, 1845. (Official Value.)	Declared value of British and Irish Produce and Manufactures exported from the U. Kingdom, 1851.	Number and Tonnage of Vessels, 1845. Entered Inwards into the U. Kingdom. Ships.	Entered Inwards into the U. Kingdom. Tons.	Cleared Outwards from the U. Kingdom. Ships.	Cleared Outwards from the U. Kingdom. Tons.
				£	£	*Ships.*	*Tons.*	*Ships.*	*Tons.*
North America.									
Canada East	Capitulation, 18th Sept. 1759	Governor, Council, and Assembly	900,000 ?						
Canada West	Ditto, 8th Sept. 1760, and cession by treaty, 1763	Ditto Ditto Ditto	952,004	1,450,500	2,451,534	1,580	629,824	1,371	559,299
New Brunswick		Ditto Ditto Ditto	193,300	372,807	442,198	1,026	381,913	732	279,639
Nova Scotia	Fisheries and settlements, established soon after their discovery in 1479	Ditto Ditto Ditto	276,117		445,309				
Cape Breton		Ditto Ditto Ditto		87,151	57,109	236	56,295	190	46,736
Prince Edward's Island		Ditto Ditto Ditto	62,634						
Newfoundland		Ditto Ditto Ditto	96,506	278,171	334,730	173	21,189	210	29,306
		Total	2,481,061	2,188,719	3,730,880	3,015	1,089,221	2,503	914,980
West Indies.									
Antigua	Settlement, 1632	Governor, Council, and Assembly	37,757	373,308	99,703	62	15,106	59	13,930
Barbadoes	Ditto, 1605	Ditto Ditto Ditto	135,939	611,603	419,479	83	21,251	83	22,340
Dominica	Ceded by France, 1763	Ditto Ditto Ditto	22,200	94,742	33,595	12	3,027	10	2,838
Grenada	Ditto, 1763	Ditto Ditto Ditto	32,671	120,952	45,163	16	4,189	60	16,027
Jamaica	Capitulation, 1655	Ditto Ditto Ditto	377,433	1,691,651	700,290	179	56,463	214	66,355
Montserrat	Settlement, 1632	Ditto Ditto Ditto	7,053	17,163	173	2	672	1	391
Nevis	Ditto, 1628	Ditto Ditto Ditto	9,601	46,764	2,208	11	1,798	5	801
St. Christopher	Ditto, 1623	Ditto Ditto Ditto	23,177	188,052	58,664	24	6,361	33	8,122
Anguilla	Ditto, 1666	Ditto Ditto Ditto	2,934						
St. Lucia	Capitulation, 22d June, 1803	Governor and Council, and Orders of the Queen in Council	24,516	120,097	22,974	16	3,479	18	4,036
St. Vincent	Ceded by France, 1763	Governor, Council, and Assembly	30,128	256,404	73,201	29	8,011	24	6,736
Tobago	Ditto, 1763	Ditto Ditto Ditto	14,378	108,013	16,820	17	4,516	16	4,150
Tortola	Settlement, 1666	Ditto Ditto Ditto	6,689	10,162	-	1	221	2	432
Trinidad	Capitulation, 18th Feb. 1797	Governor and Council, and orders of the Queen in Council	68,600	689,491	275,185	96	22,392	110	25,644
Bahamas	Settlement, 1629	Governor, Council, and Assembly	27,519	68,745	32,088	39	5,529	20	2,565
Bermudas	Ditto, 1609	Ditto Ditto Ditto	11,092	29,871	32,435	2	218	28	10,233
British Guiana	Capitulation, 18th Sept. 1803	Governor and Council, and Orders of the Queen in Council	127,695	1,227,043	389,054	174	44,460	212	59,350
Honduras	Treaty, 1670	Superintendent and Magistrates	11,066	774,242	232,633	77	22,845	59	19,323
		Total	970,448	6,428,283	2,433,665	839	220,538	954	263,273
Gibraltar	Capitulation, 4th Aug. 1704	Governor and Council, and Orders of the Queen in Council	12,182	56,615	481,286	82	18,921	203	36,258
Malta and Gozo	Ditto, 5th Sept. 1800	Ditto Ditto Ditto	115,864	163,063	501,143	71	11,550	190	37,062
Cape of Good Hope and Natal	Capitulation, 10th Jan. 1806	Ditto Ditto Ditto	293,279	779,547	752,393	175	47,460	116	27,136
Sierra Leone	Settlement, 1787	Governor and Council, and Acts of Parliament	44,472	79,146	94,546	52	12,297	60	15,387
Gambia	Ditto, 1618	Ditto Ditto Ditto	5,671		47,197				
Gold Coast	African Forts, 1618	Ditto Ditto Ditto	385,000	64,521	107,653	44	6,961	34	5,407
Ceylon	Capitulation, 17th Sept. 1795	Governor and Council, and Orders of the Queen in Council	1,627,849	1,326,899	175,414	51	11,718	57	22,511
Mauritius	Ditto, 3rd Dec. 1810	Ditto Ditto Ditto	192,523	1,003,039	232,955	97	27,199	71	21,418
New South Wales	Settlement, 1787	Governor and Council, and Assembly	208,000	723,639	1,201,261				
Victoria	Ditto, 1851	Ditto Ditto Ditto	230,000		604,403				
Van Diemen's Land	Ditto, 1803	Ditto Ditto Ditto	70,000	169,241	420,922				
Western Australia	Ditto, 1829	Ditto Ditto Ditto	7,000	61	34,726	99	36,158	146	58,557
South Australia	Ditto, 1834	Ditto Ditto Ditto	68,000	50,798	375,035				
New Zealand	Ditto, 1839	Ditto Ditto Ditto	22,400	21,055	171,009	4	1,184	6	1,875
Ascension	-	Ditto Ditto Ditto	550	-	2,841			1	189
St. Helena	Ceded by Holland, 1673	Ditto Ditto Ditto	5,490	22,567	23,248	9	2,101	14	2,724
Hong Kong	Treaty, 1842	Governor and Council, and Orders of the Queen in Council	32,983	-	632,399				
Heligoland	Capitulation, 5th Sept. 1807	Ditto Ditto Ditto	2,215	-	238				
		Total	3,323,478	4,460,005	5,658,969	664	174,849	898	228,504
		Totals North American	2,481,061	2,188,719	3,730,880	3,015	1,089,221	2,503	914,980
		Totals West Indian	970,448	6,428,283	2,433,665	859	220,538	954	263,273
		Totals Other Colonies	3,323,478	4,460,005	5,658,969	664	174,849	898	228,504
		General Totals	6,774,987	13,077,007	11,823,514	4,518	1,484,608	4,355	1,406,757

Population, Public Burdens, &c., of Great Britain (ex. Ireland) in 1775, 1793, 1801, 1815, and 1848.

	1775.	1793.	1801.	1815	1848.
Population of Great Britain - - - -	8,800,000	10,000,000	10,943,000	13,540,000	21,000,000
Interest of Debt - - - -	4,470,000	9,624,000	18,500,000	30,300,000	28,189,000*
Total Public Revenue raised by Taxation in Gt. Brit.	10,038,000	17,956,000	35,500,000	71,000,000	53,500,000
Loans - - - - - -	Nil.	3,925,000	18,500,000	40,799,000†	Nil.
Amount of Loans and Taxes taken together -	10,038,000	21,881,000	54,000,000	111,799,000	53,500,000
Amount of Taxes paid by each individual - -	22*s.* 9*d.*	35*s.* 10*d.*	64*s.* 10*d.*	104*s.* 10*d.*	50*s.* 11*d.*
Amount of Taxes and Loans paid by each individual	22*s.* 9*d.*	43*s.* 11*d.*	98*s.* 8*d.*	165*s.* 1*d.*	50*s.* 11*d.*
Rent of Land - - - - - -	17,200,000	22,000,000	26,000,000	39,350,000	45,600,000
Shipping (of United Kingdom) - -	697,304‡	1,564,520	1,855,879	2,681,276	4,052,160
Imports of Cotton in lbs. - - - -	5,000,000	19,040,000	56,004,000	100,000,000	686,400,000
Produce of Iron in Great Britain in tons - -	50,000	120,000	180,000	400,000	1,850,000
Produce of Wheat per acre in bushels - -	20	24	24½	28	30
Price of Wheat per quarter - - - -	49*s.* 10*d.*	49*s.* 3*d.*	119*s.* 6*d.*	65*s.* 7*d.*	50*s.* 6*d*
Declared Value of Exports - - -	§	- -	39,731,000	49,653,000	58,739,000‖
Efficiency of same Amount of Labour - -	1	1	$1\frac{1}{10}$	$1\frac{5}{10}$	2

* The return for this year includes interest of Irish Debt.
† Average of 1814, 1815, and 1816.
‡ Shipping of Great Britain only. But the shipping of Ireland and of our colonies, exclusive of the U. States, then in a state of revolt, was quite trifling.
§ The account of the declared value of Exports was not taken till 1798.
‖ This is the return for 1847, the Exports in 1848 being artificially reduced in consequence of the extraordinary Continental convulsions of that year. They amounted in 1849, to 63,319,937*l.*

History.— A sketch will be given in the article England of the principal events in the history of that most important part of the empire. The leading epochs in the history of the latter are:—

I. The invasion and establishment of the English power in Ireland during the reign of Henry II.

II. The union of the crowns of England and Scotland in 1604, on the accession of James, king of Scotland, to the throne of England, vacant by the death of Elizabeth.

III. The great civil war in the reign of Charles I., followed by the execution of that monarch in 1649; the establishment of the Commonwealth; and the restoration of Charles II. in 1660.

IV. The Revolution, justly styled "glorious," of 1688, which expelled the family of Stuart from the throne; defined and firmly established the principles of the constitution; and introduced a liberal, tolerant, and really responsible system of government, under our great deliverer, William III., Prince of Orange.

V. The establishment of the legislative union of England and Scotland, 1707.

VI. The accession of the House of Hanover, 1714.

VII. The American war, 1776—1784.

VIII. The war with revolutionary France, 1793—1815.

IX. The legislative union of Ireland with England and Scotland, 1799.

X. The passing of the Reform Act, 1832.

BRITTANY, or BRETAGNE, one of the most considerable of the ancient provinces of France, occupying the peninsula of that name on the Atlantic. It is now distributed among the depts. of Loire Inférieure, Ille-et-Vilaine, Finisterre, Morbihan, and Côtes-du-Nord.

BRIVE, a town of France, dép. Corrèze, cap. arrond., in a beautiful and fertile plain, on the Corrèze, 15 m. S.W. Tulle. Pop. (ex cant.) 6,062. It is well built, the houses being all of hewn stone, and covered with slates. It has also a considerable trade in wine, chestnuts, and cattle, and is the centre of the trade in truffles and *volailes truffées.* The famous Cardinal Dubois was a native of Brive. (*Hugo*, art. Corrèze.)

BRIXHAM, a sea-port and par. of England, co. Devon, hund. Haytor, 166 m. W.S.W. London, just within Berry Head, which forms the W. point of Torbay. Area of par. 5,210 acres. Pop. of par. in 1841, 5,684. The town is built in a narrow ravine opening towards the sea, and on the cliffs impending over it on either side, and is divided into the upper and lower towns. In the latter the buildings are much crowded, in narrow irregular streets and alleys; but the upper town contains many good houses, as does also the immediate neighbourhood, which is remarkably picturesque. The church in the upper town is an ancient structure, with some interesting monuments: in the lower town is a chapel of ease, which has 300 free sittings: the living is a vicarage (with the perpetual curacies of Churston and Kingswear annexed), in the gift of the crown. It has also a Baptist and a Wesleyan chapel, and a national school, incorporated with an endowed one founded 1634, which educates about 400 boys and girls. There is a pier harbour at the end of the lower town, consisting of an inner and outer basin, which communicate with each other, and are safe and commodious. The spring tide rises about 24 ft. at the pier-head. The principal trade of the place is connected with the Torbay fishery, in which about 120 vessels, of 20 to 45 tons, and 70 smaller boats, are engaged; there are also upwards of 120 vessels of 60 to 120 tons, belonging to the place, chiefly engaged in the coasting trade of the Channel. There are extensive marble quarries in the neighbourhood. By far the most remarkable historical event connected with this place, or with Torbay, is the landing of our great deliverer William III. at its pier, on the 5th of November, 1688.

BROADSTAIRS, a small sea-port and watering-place of England, co. Kent, E. coast, Isle of Thanet, half way between the N. Foreland and Ramsgate, 66 m. E. by S. London. There are several good lodging-houses, warm baths, two public libraries, good hotel, assembly-room, &c., and an episcopal chapel, built in 1828. There is a wooden pier (formed in the reign of Henry VIII.), which is accessible for small vessels.

BRODY, a town of the Austrian States, N.E. part of Galicia, circ. Zloczow, near the confines of Russia, 52 m. E. by N. Lemberg; lat. 50° 7′ N., long. 25° 18′ E. Pop. 25,000, of whom 18,000 are Jews. It is situated in a marshy plain; and the houses being mostly of wood, and the streets unpaved and filthy, it is well entitled to the name it bears, *brody* meaning a dirty place. But, notwithstanding its unpromising appearance, it enjoys a very considerable trade. In 1779 it acquired the privilege of a free commercial town; that is, a town into which commodities may be imported, and from which they may be exported free of duty. This franchise has rendered it an important emporium; and its fairs are attended by dealers from the Ukraine and Odessa, Moldavia, Wallachia, &c., as well as the contiguous Austrian and Russian provinces. The principal articles brought from the S. are cattle, especially horses, with hides, tallow, wax, &c., which are exchanged for colonial produce, manufactured goods, hardware, particularly scythes, furs, jewellery, &c. It is a constant practice in the transit trade between Odessa and Brody, to offer as security for the duty on the articles so conveyed, a certain number of serfs, or Russian slaves, taken at a valuation of 100 silver roubles (16*l.*) a head. This security is preferred to a guarantee on land, from its being more convertible. There is a regular exchange with Odessa. The greater part of this important trade is in the hands of Jewish merchants settled at Brody, of whom 40 are said to be opulent, while about 200 more possess smaller capitals. It is the seat of a mercantile tribunal; has a Catholic and three Greek churches; one large and two or three smaller synagogues; a convent and hospital of the Sisters of Charity; grammar and commercial schools, with peculiar schools for Christians and Jews; a theatre, in which, during the fairs, plays are alternately represented in the German and Polish languages; a Jewish hospital, &c. The town is on the estate of Count Potocki, who has a large castle within its precincts. (*Austrian Encyc.; Hagemeister on the Trade of the Black Sea, passim;* and *Private Com.*)

BROEK, a village of Holland, 6 m. N.E. Amsterdam. Pop. 800. It is celebrated for the wealth of

its inhab., but more for the extreme cleanliness of its houses and streets, the attention to which has been carried to an absurd and ridiculous excess. There is a good description of this village in Chambers's *Tour to the Rhine*.

BROMBERG, a town of the Prussian States, prov. Posen, cap. circ. same name, on the Braa, 6 m. from its confluence with the Vistula. Pop. 9,500. The canal joining the Vistula with the Netz, an affluent of the Oder, runs between this town and Nakel on the Netz. It has a court of appeal for the circ., a gymnasium, and other literary establishments, several distilleries and breweries, chicory and tobacco works, and a considerable and increasing trade.

BROMLEY, a par. and town of England, co. Kent, lathe Sutton-at-Hone, hund. Bromley and Beckenham, 10 m. S.E. London. Pop. (1821) 3,147; (1841) 4,325: houses at the latter date, 793; area 4,630 acres. The town is on the N. bank of the Ravensbourne, and chiefly consists of one street of neat respectable houses, extending for some distance along the line of road from the metropolis to Tunbridge: it is lighted and partially paved. The church is a spacious structure, with an embattled tower; the Independents and Wesleyans have each a chapel; a national school for both sexes is supported by subscr.; there is an almshouse for old people, rent free; a charitable estab., called Bromley College, founded in 1666, and enlarged and endowed by many subsequent benefactors, supports 40 clergymen's widows, who each receives 38*l*. a year, with coals and candles: the edifice encloses two quadrangular areas, and has a chapel, the minister of which receives 150*l* a year: the charity is under the direction of 14 trustees. There is a weekly market on Thursday, a monthly one, for cattle, every third Thursday, and ann. fairs Feb. 14, Aug. 4. chiefly for live stock. Ann. val. of prop. in 1843, 22,700*l*. It is the central town of a poor law union of 16 pars.; its own rates average 1,200*l*. The inhab. are chiefly engaged in agriculture. From the 8th century the manor has vested, with little interruption, in the bishops of Rochester. The present palace was rebuilt on an ancient site in 1777; it is a plain brick building, on an eminence ½ m. from the town; an ancient spring in its gardens has medicinal properties similar to those of Tunbridge: after being neglected two or three centuries, it was reopened in 1756, and continues to be much resorted to; its weekly market was granted to the town in 1477.

BROMSGROVE, a par. and town of England, co. Worcester, hund. Half-shire, 100 m. N.W. London. Pop. (1821) 7,519; (1841) 9,671: houses at latter date, 1,974. The town is situated on the W. bank of the Salwarp, in a fertile and well wooded vale, and chiefly consists of one spacious street about a mile in length, paved and lighted. Its church, on a gentle rise, has a tower and spire, together 189 ft. in height, and considered the finest in the co. There are 3 dissenting chapels; a free grammar-school, founded by Edward VI. (in which 12 boys are clothed and educated, with 7 scholarships, and 6 fellowships in Worcester College, Oxford); and a town-hall, with a market-place under it. The weekly market is on Tuesday; two annual fairs are held, June 24th and Oct. 1st Nail-making is the chief business of the place; there is also a large button manufactory. In the adjoining parish of Stoke Prior there are large salt and alkali-works, in which some of the inhab. of Bromsgrove are employed: the linen manufacture was formerly carried on, but is now extinct. The line of the Birmingham and Gloucester railway passes near the town. Annual value of real prop. in 1843 36,480*l*. It is the central town of a poor law union of 9 parishes; its own rates average 3,000*l*.: it has 5 guardians. A court of requests for debts under 40*s*. is held in the town every third Wednesday. Bromsgrove Lickey, a lofty range, in which the Salwarp, Rea, and some other streams, have their source, lies on the N. of the town.

BROMYARD, a par. and town of England, co. Hereford, hund. Broxash, 110 m. N.W. London. Pop., in 1821, 2,767; 1841, 2,927; houses, 606; area, 9,310 acres. The town, situated near the Frome, in an orchard district, consists of several irregular streets, which are paved and lighted; many of its houses are of wood. There is a spacious church, in the Norman style; an Independent chapel; a free grammar-school, founded by Elizabeth; a national school, for 120 children; and almshouses for 7 old women. The weekly market is Monday; corn, cheese, and butter are the chief articles. Petty sessions for the hund. are held in the town. The par. comprises three townships and one chapelry.

BRONTE, or BRONTI, a town of Sicily, Val di Catania, cap. cant., near the Giaretta, at the W. base of Mount Ætna, 22 m. N.N.W. Catania. Pop. 8,871, having declined 282 between 1798 and 1831, when the last census was taken. It has several churches and convents; is healthy; has manufactures of woollens and paper; and the adjacent territory produces corn, wine, silk, pestachio nuts, almonds, &c. Lord Nelson was created Duke of Bronte in 1799, with an income of 6,000 oncie a year.

BROOKLYN, a suburb of New York, on Long Island; *see* NEW YORK.

BROSELEY, a market town and par. of England, co. Salop, hund. Wenlock, 127 m. N.W. London, on the Severn, by which it is separated from Madeley. Area of par. 1,550 acres. Pop. (1841) 4,829. The town consists principally of one long street, with smaller ones branching off to the different collieries and other works. It has a parish church, and chapels for different denominations of dissenters; and there is a chapel of ease at Jackfield, within the parish. It is within the jurisdiction of the bor. of Wenlock. Courts leet for the manor are held in the town-hall in April and October, at the latter of which four constables are appointed; and a court of requests, for the recovery of small debts, is held generally every alternate Wednesday. There are here extensive coal and iron mines, with large iron-foundries; and it is celebrated for its extensive manufacture of tobacco-pipes and garden-pots. A burning spring or well was discovered here in 1711, which disappeared on the sinking of a coal mine in 1755. Owing to the depression of the iron trade, the town declined considerably previously to the census of 1831, there having been a falling off in the the population, since 1811, of nearly an eighth part; the pop. at that period being 4,580; but in 1841 it had nearly recovered its old level.

BROUAGE, a fortified town and sea-port of France, dép. Charente Inférieure, on the strait dividing the island of Oleron from the mainland, 8 m. S.S.W. Rochfort; lat. 45° 52′ 13″ N., long. 1° 3′ 45″ W. Its port admits only of vessels of small burden; but it is strong by nature as well as art, and is of importance from its defending the approaches to Rochfort, and the left of the Charente. Around the town are extensive salt marshes, from which salt is obtained in great quantities, and of an excellent quality. To facilitate its shipment, the marshes are traversed by a canal running from the Charente above Rochfort to a little below Brouage. (*Dict. Géog. &c.*)

BRUGES, a city of Belgium, cap. W. Flanders, and of an arrond. and 5 cantons, in a vast level plain of sandy soil at the junction of the canals from Ghent, Ostend, and L'Ecluse; 7 m. from the N. Sea, 12 m. E. Ostend, 24 m. W. N. W. Ghent, and 60 m. N. W. Brussels; lat. 51° 13′ N., long. 3° 13′ E. It is the seat of an episcopal see under the archbishop of Mechlin; the seat of a court of assize, of a high court of justice, and of a court of commerce. Pop. in 1830, 42,198; in 1838, 44,374; and in 1846, 49,308. The city has a circ. of nearly 4½ m., and is entered by 6 gates. It has 6 large squares, in which are held weekly markets and annual fairs, and above 200 streets and lanes; some are wide and handsome, and all are generally clean. Many large and noble ancient mansions, and spacious public edifices, present their pointed gables to the streets, and afford interesting specimens of the ornamental Gothic architecture of the middle ages: they induce the contemplative spectator to revert to the grandeur and opulence of Bruges in the days of chivalry, when its gorgeous halls and courts were scenes of regal pomp and pageantry, and impress him with a feeling of sadness in contrasting its ancient prosperity with its present comparative desolation. Bruges, in common with all the towns of W. Flanders, is destitute of spring-water, so that the inhabitants are obliged, as were their ancestors in the time of Pliny, to have recourse to supplies from the clouds. For this purpose, every house is provided with a cistern for collecting rain from its roof; and that which gathers in the ditches of the ramparts is conveyed by means of hydraulic machinery to public fountains and tanks, whence it is distributed in pipes throughout the city. There are 54 bridges across the numerous canals, by which the streets are intersected, of which 12 are of wood, and rotatory, and 42 of stone or brick: hence the Flemish name of the place, — Brügge, that is, *bridges*; in French, Bruges. The Ostend canal presents an expanse of surface that resembles a stately river, and is sufficiently wide and deep to admit the passage of ships of 500 tons from the sea. The canal to Ghent is also navigable for large and heavy vessels. Its *trekschuit*, or passage-boat, is a huge floating hotel, affording every accommodation; but delicate passengers are liable to much annoyance from the state of the nearly stagnant water, which often is nearly black with putridity, and covered with dead fish, owing, it is said, to the extensive steeping of flax in the river Lys, which joins the canal at Ghent. The level character of the country is shown by the fact, that between Bruges and Ghent, a distance of nearly 35 m., this great canal has not a single lock. The central basin or dock of Bruges is capable of containing above 100 vessels always afloat; and the convenient quays, stores, and spacious warehouses by which it is surrounded, afford great facilities for the despatch of business. The city is advantageously situated for both maritime and inland commerce; and though its commercial transactions are now infinitely inferior to those of which it justly boasted in the 15th century, they are perseveringly carried on with most of the principal ports of France, Spain, Holland,

Italy, England, Sweden, Denmark, Norway, and Russia. "Besides the facilities for internal commerce afforded by excellent roads to the other principal towns of the kingdom, Bruges possesses an important advantage in being traversed by the great national line of railway from Ostend to Ghent, Mechlin, &c."

The leading manufactures of Bruges consist of lace, linens, woollen and cotton goods, and of salt and sugar refining. Breweries are numerous; and several establishments are in operation for the manufacture of soap, pottery, leather, tobacco, and especially for bleaching, distilling, and dyeing. The blue dyes of the stuffs of Bruges are believed to derive their peculiar excellence from the quality of the canal water in which they are scoured. The lace manufacture is the most important. It employs 7,400 persons, or more than one-sixth of the whole population. Children are taught to make lace in at least 200 schools established for this purpose. The exports comprise corn, cattle, and other agricultural produce of the soil, and the products of the various manufactories. The imports consist of wool, cotton, metals, dye-woods, drugs, wines, and miscellaneous foreign productions.

Among the most remarkable public edifices are the cathedral of Notre Dame (Onser Vrouw), the tower of which is so lofty, that when the atmosphere is particularly clear, it is visible from the mouth of the Thames. The interior contains an exquisitely carved pulpit; a marble statue of the Virgin and Child, attributed to Michael Angelo, and for which Horace Walpole offered 30,000 florins; and two costly old monuments of Charles the Bold, Duke of Burgundy, and his daughter, the wife of the Emperor Maximilian, in richly gilded bronze and silver. The old Gothic hospital of St. John, and the elegant cathedral of St. Saviour, have several celebrated pictures by Hans Hemling, Van Dyke, and others. In the great hall of the Hôtel de Ville is the public library, containing many curious illuminated MSS., a missal of the 14th century, and the scheme of a lottery drawn at Bruges in 1445. These, and other Gothic buildings in the city, belong generally to the 14th century, and are ornamented with windows of rich coloured glass, sculptured monuments, and paintings by the old Flemish masters. In the great square is a lofty Gothic tower or belfry, the most beautiful in Europe, and its chimes or *carillons* are esteemed the most complete and harmonious in the Netherlands, where only superior qualities are approved in this species of musical instrument, or rather machine. In this tower there are 48 bells, some weighing 6 tons: they are played upon every quarter of an hour commonly by means of an immense copper cylinder communicating with the clock, and weighing about 9 tons. Its surface is pierced by 30,500 square holes, so that an infinite variety of airs may be set upon it, by merely shifting the iron pegs that lift the hammers. On particular days a paid professor of music performs the finest pieces by striking with great effort upon huge keys with well-guarded fists, and upon pedals with his feet. Watchmen are constantly posted at the top of this tower to make alarm signals of fire, by ringing a loud bell, and exhibiting in the day, a flag, and in the night, a lantern, towards the point whither the engines are required to hasten, which is further indicated by a speaking-trumpet. The city fire establishment consists of 9 engines and 140 men. The ancient abbey of the Dunes is a vast and solid building, in which is held the episcopal academy. The Jerusalem church is a fac-simile of the Holy Tomb. There is a Béguinage, or convent of Béguin nuns, and also a convent of English Augustin nuns, possessing a richly ornamented church. The city is divided into 7 Catholic parishes, and contains 1 Protestant church. Several other public edifices are worthy of notice, as well as ancient private mansions interestingly associated with important historical events and personages. The council chamber of the Palais de Justice contains an immense chimney-piece of wood beautifully carved, in 1529, with figures of Charles V. and his family as large as life. There is a small theatre, a botanic garden, a museum of natural history, several literary and scientific societies, a well-attended athenæum or collegiate school for the higher degrees of education, receiving annually from government 6,350 fr.; a good surgical school, attended commonly by 50 students; and a very flourishing academy of painting and sculpture, in which, besides the student's course, gratuitous instruction is given to others in architecture, design, and drawing. Its gallery of paintings comprises several by the celebrated Van Eyck.

Few cities are better provided with endowed charities and asylums for the destitute and afflicted, and with schools for instructing the children of the poor. The average number of persons in a state of indigence within the city is estimated at 5,000. The poor-house is a central establishment for the two Flanders, and will contain 550 paupers: the number of inmates is generally about 500. The prison is kept remarkably clean, and the walls of its cells are rendered dry and secure by a casing of thick boards of oak. There is a *mont-de-piété*, or benevolent institution for lending money upon pledges. In 1832 the number of pledges deposited was 106,371, and the amount lent upon them was 780,891 fr. The city authorities exercise a vigilant superintendence in matters affecting the public health, and gold medals are awarded to those medical gentlemen who have manifested a benevolent zeal in gratuitous vaccination. The number of children who were vaccinated in 1832 was 10,988, and of 183 who took the small pox, 12 died. The temperature of the atmosphere about Bruges is subject to sudden and extreme transitions; and oppressive heat of the mid-day sun in summer is often succeeded by very chilling evening damps. Health and longevity appear, however, to be kept up to the average points, and those who possess the means of choosing their place of residence often prefer this locality; so that the spacious mansions of the opulent burghers of former times are now tenanted by many of the highest families of Flanders, and by retired independent merchants, to whom this old city would seem to have peculiar attractions. The adjacent rural districts to the W. display the most exuberant specimens of the Flemish farmeries; and orchards, which abound in every part of W. Flanders, are especially numerous in the vicinity of Bruges, producing excellent cherries, apples, pears, walnuts, plums, and, less commonly, apricots and peaches.

The history of Bruges commences at a very early date. It was a prosperous seat of manufacturing and commercial industry long before Ghent and Antwerp rose to the same distinction. In the 7th century it was rapidly acquiring importance, and under Charlemagne, at the end of the 8th century, its weavers were highly distinguished. During the government of the rich and powerful counts of Flanders, who resided at Bruges from the 9th to the 15th centuries, its woollen manufactures grew and flourished to an amazing extent, so that Philip le Bon, in 1430, to commemorate its great prosperity, instituted the chivalric order of the Golden Fleece. At the Flemish court of this ostentatious Duke of Burgundy, whose hypocrisy, and not his exemption from pride and cruelty, procured him the cognomen of Good, a sumptuous splendour of pageantry was displayed, which no European monarch could imitate, and an absolute power was exercised, which none dared dispute. The records of luxurious banquets and apparel at this period are almost incredible. Not only the dresses of men and women, but the housings of their horses, were of velvet, satin, and gold, profusely spangled with brilliant jewels, — an extravagance which Charles V., in the following century, was obliged to suppress by enacting sumptuary laws. The wealth and splendid attire of the citizens of Bruges had long been subjects of wonder; for when the queen of Philip le Bel, of France, visited this city in 1300, she is said to have exclaimed with astonishment, "I here see hundreds who have more the appearance of queens than myself." The public and private buildings of the city were worthy to display such courtly magnificence; so that Southey, judging from the existing architectural remains of that ancient grandeur, says, in his "Pilgrimage to Waterloo,"—

> "When I may read of tilts in days of old,
> Of tournays graced by chieftains of renown,
> Fair dames, grave citizens, and warriors bold —
> If fancy would pourtray some stately town
> Which of such pomp fit theatre might be,
> Fair Bruges! I shall then remember thee."

This noble city, throughout the 14th and 15th centuries, was the central emporium of the whole commercial world, and had resident consuls and ministers from every kingdom in Europe. In the Hanseatic League, or confederacy of the great European ports for the promotion of commerce, Bruges was the leading city, and the grand depôt of naval stores. Her quays were crowded with foreign ships and merchants, and her piles of magnificent warehouses were filled with the wool of England, the linen of Flanders, and the silk of Persia. Her weavers were celebrated for making the most beautiful description of tapestry more than a century before the Gobelins manufacture was commenced under the direction of their descendants. The wealth of the citizens of course was enormous: a single merchant gave security for the ransom of Jean sans Peur, the last Count of Flanders, to the amount of 400,000 crowns of gold. The annual exports merely of stuffs manufactured from English and Spanish wool amounted to 8,000,000 florins, and the florin was then quadruple its present value. This amazing prosperity continued undiminished during the dominion of the dukes of Burgundy; but under the Austrian dynasty, at the close of the 15th century, the rebellious conduct of its inhabitants, in forcibly imprisoning the Archduke Maximilian, induced his father, the Emperor of Germany, to visit the city with such destructive vengeance that henceforth its greatness died away, its trade was transferred to Antwerp, and the religious persecution and brutal ferocity of the Spanish under Philip II. and the Duke of Alva completed the process of its ruin, at the end of the 16th century, by compelling its artizans to escape for their lives

to England, where they found a hearty welcome from Queen Elizabeth, and became the means of establishing the woollen manufactures, for which this country has since become so distinguished. The subsequent history of Bruges, under the dominion of the Spanish, French, and Austrians, is comparatively of little interest.

In glancing over the records of the old cities of Flanders, we find a reckless passion for freedom developing itself in a long succession of obstinate and sanguinary conflicts between the people and their rulers, and often between different towns and parties. By turns we find the victorious citizens, enjoying a short interval of intemperate and insolent triumph, abusing the blessings procured by the death of thousands of their compatriots, and then find them ruinously defeated, and suffering long periods of abject slavery and financial exhaustion under the despotism of their haughty and ambitious conquerors.

Bruges, during its golden age of commercial ascendancy in the middle ages, was the native place of numerous eminent scholastic and philosophic authors, classical commentators, mathematicians, jurisconsults, theologians, physicians, and painters. A list of these persons is given in the first of the following works, on the authority of which the statements of the present article principally depend. (*Vander Maelen's Dict. Géog. de la Flandre Occidentale; Guide Books by Coglan, Boyce, &c.; Murray's Hand-Book; Délices du Pays Bas; Grattan's Hist. of the Netherlands, &c.*) A plan of the city of Bruges, on a large scale, has been published by the Geograph. Estab. of Brussels.

BRUGGEN, a town of the Prussian States, prov. Rhine, reg. Dusseldorf, on the Schwalmen, 10 m. S.W. Kempen. Pop. 750. It has a fine Catholic, and a Calvinist church, with linen fabrics, bleach-fields, oil-mills, and a tannery.

BRUGUIÈRE, a town of France, dép. Tarn, cap. cant., on the Thoré, 4 m. S. Castres. Pop. 4,000. It manufactures flannels, coverlets, and other descriptions of woollen goods.

BRUHL, a town of the Prussian States, prov. Rhine, reg. Cologne, 4 m. W. the Rhine, and 9 m. S. Cologne. Pop. 1,700. It is surrounded by walls, is well built, and has a seminary for the instruction of schoolmasters; but it derives its principal consequence from the magnificent castle in its vicinity, commenced in 1725 by the elector Clement Augustus, of Bavaria, and finished by Maximilian Frederick. It is splendidly fitted up, and has extensive pleasure-grounds and gardens. (*Schreiber.*)

BRUMATH, a town of France, dép. Bas-Rhin, cap. cant., on the Zorn, 12 m. N N.W. Strasburg. Pop. 4,131. It is supposed to occupy the site of the ancient *Brucomagus*; and the medals, marbles, urns, &c., which have been found here prove, at least, that it had been inhabited by the Romans. Some hard fighting took place in its vicinage, in 1793, between the French and Austrians. (*Dict. Géog.*)

BRUNN, a town of the Austrian States, cap. Moravia, at the confluence of the Schwarza and Zwittawa, 70 m. N.N.E. Vienna, lat. 49° 11′ 28″ N., long. 16° 36′ 35″ E. Pop. 40,000, exc. garrison of 3,000 or 4,000. It is built on the declivity of a hill, having the cathedral on its summit and the suburbs at its foot; is encircled by walls, bastions, and trenches, and was formerly defended by the citadel of Spielberg, on the hill of that name to the W. of the town; but the defences of the latter having been destroyed by the French, it is now used as a state prison and house of correction; Silvio Pellico was shut up in it for above 8 years. Though narrow and crooked, the streets are well paved, lighted, and provided with foot pavements. Among the public buildings are, — the cathedral, remarkable for the height of its nave; St. Jacob's church, built in 1315, with a tower 276 ft. in height, a bell weighing 115 centners, and some monuments; the episcopal palace; the *Landhaus*, formerly a rich Augustine convent, now the residence of the governor, and the place of meeting of the states of the prov.; the town-house, a Gothic structure, built in 1511; the barracks, an enormous pile, formerly the Jesuits' college, having 7 courts, a fine church, and a riding-school; the theatre, with its assembly-rooms; the Maria school for young ladies, &c. Many of the nobility belonging to the prov. have here fine palaces, which give an air of grandeur to the town. The quarter called the Franzensberg is very picturesque; in the gardens a marble monument was erected in 1818, in honour of the late emperor Francis I. The Ausgarten, a park laid out as a garden, was opened to the public by Joseph II. Brunn is the seat of a bishopric and of the government of Moravia and Austrian Silesia, of a Protestant consistory, a court of appeal, high criminal and military courts, the *landrecht*, or nobles' court for the prov., and is the place of meeting of the provincial estates, and the residence of their standing committee. It has a philosophical institute, a gymnasium, a principal normal school; schools for young ladies, tradesmen, and mechanics; a theological seminary, and numerous parish and infant schools, an imperial society for the encouragement of agriculture and of the natural history and geography of Moravia, to which is attached a valuable museum, a botanical garden, and a public library. It has general, orphan, and lying-in hospitals; a lunatic asylum; with numerous institutions for the relief of the poor. The manufactures of Brunn are of very considerable value and importance. Those of woollen goods are the most extensive in the empire; and the town has thence been called the Austrian Leeds. Latterly, however, the cloth trade has been represented as not in a very prosperous state. The cotton manufacture has been introduced, and has made considerable progress; and silk, glass, soap, tobacco, and machinery, are extensively produced. Its trade is very extensive; and it will be still farther promoted by the branch which is to be carried to it from the railway now being made from Vienna to Galicia. (*Osterreischen Encyc.; Murray's Handbook, &c.*)

BRUNSWICK (Ger. *Braunschweig*), **THE DUCHY OF**, in Germany, consists of five detached portions of territory on the rivers Weser, Seine, Ocker, and Aller, between lat. 51° 38′ and 52° 59′ N., and long. 9° 10′ and 11° 22′ E. It occupies part of the vast plain which stretches from the foot of the Harz mountains, and their continuation (the Solling) to the German Ocean and the Baltic, with a portion of the rise of those chains on the N. side. The largest portion contains the districts of Wolfenbuttel and Schöningen, in which the cities of Brunswick and Wolfenbuttel, and the towns of Konigsbutter and Helmstadt, are situated. The district of Wolfenbuttel is traversed by the Ocker, which rises in the Harz mountains, and is not navigable. The Aller traverses the district of Schöningen, but is not navigable in that part of its course; nor is the Seine navigable, which traverses the district of that name. The Weser, which forms the boundary of the duchy towards Prussian Westphalia for a considerable distance, affords an excellent water communication with the sea and the harbour of Bremen on the one side, and with the states of Hesse and Thuringia, in the heart of Germany, on the other, by means of the Werra and the Fulda, which unite near Minden, and thence take the name of Weser. This river, which forms the main outlet for the waters falling from the N. and W. sides of the Harz, and the Thuringian forest ultimately receives all the smaller streams which previously unite with the Aller, excepting the Bode, which falls into the Saale, a tributary of the Elbe, and which traverses the third and most southern detached portion of territory, the district of Blankenburg. Of the Harz mountains, which, with the Thuringian forest, separate the tributaries of the Elbe from those of the Weser; a considerable portion, valuable for minerals and forests of vast extent, belongs to Brunswick. The summit of the Brocken, and the rude and almost impassable Central Harz, in which granite, mica slate, and primitive formations predominate, belong to Hanover, while the E. and W. falls of the range, in which the transition and secondary formations prevail, form part of the Duchy of Brunswick. A portion of this mountain chain belongs jointly to the two governments, and is distinguished by the denomination of *Communion Harz*. The highest summits within the Duchy are the Wormberg, 2,880 ft., and the Ackermanshöhe, 2,706 ft. in height. The next considerable mountain, or, rather, forest range, is the Solling, which lies between the rivers Seine and Weser, and is covered with extensive and valuable woods of oak and beech. The summits of this chain are of no great elevation. Iron is found, and sandstone, known under the name of Sollinger stones, is quarried in them. The Elm, a slight range of heights between the Ocker and the Aller, is covered with woods of oak and beech, and contains veins of iron and beds of coal, with occasional mineral springs.

Two small detached portions of territory, viz., the circuit of Thedinghausen on the Weser, to the N.W. of Hameln, and that of Badenburg, are enclosed by the Hanoverian territory, and form part, the former of the Weser district, the latter of the Seine district. Finally, the detached circuit of Kalvorde, inclosed within the Prussian province of Saxony, belongs to the district of Schöningen. According to the latest official returns, the population, in 1846, amounted to 268,943 inhabitants. The Weimar Almanack gives the following survey for 1833: —

Districts.	Area in sq. m.	Pop.	Towns.	Villages.	Houses.
1. Wolfenbüttel -	460	109,000	3	182	12,200
2. Schöningen -	290	40,000	5	73	4,300
3. Harz - -	301	41,500	7	78	4.650
4. Weser - -	280	37,500	6	70	4,050
5. Blankenburg -	170	20,000	6	64	2,500
Total -	1,501	248,000	27	467	27,700

The three cities contained in 1846 —

Brunswick - - 42,000 inhabitants.
Wolfenbuttel - - 9,003 do.
Helmstadt - - 5,300 do.

The various religious denominations are thus classified: Lutheran, 242,700, in 238 parishes, with 398 churches and chapels, directed by 29 superintendents, and 7 general superintendents; the Calvinists have but one parish, and the Catholics three parishes. The most perfect toleration and equality of civil and religious rights are shared by all the Christian persuasions. The Jews, 1500 in number, have four synagogues. The number of Hernhuters (a kind of Quakers) is stated at 100.

A census of the pop. in 1814 gave 207,000 as the number of the inhab., which consequently increased down to 1832 in the proportion of about 1 per cent. per ann.; and, supposing the same rate of increase to have continued down to the present time (1839), the pop. will now be nearly 263,000. We have stated that the hilly parts of the duchy are covered with forests of fir, oak, and beech. According to Dr. Volger, about 390,000 acres are arable and meadow land, 294,000 acres forests, and 228,000 uncultivated moors, water, &c. The plain at the N. fall of the Harz is mostly of a limestone soil, alternating with beds of loam, and is fertile; the districts along the Weser and Seine are also fertile; but the predominant feature is sand in those parts. Towards the N. part of the duchy, these fruitful plains merge into the arid and unproductive sandy heaths of Dolgen and Lüneberg. The average produce of corn, of all descriptions, is estimated, by Veilguth at about 575,000 qrs.; oil from linseed, rape, and poppies at 1200 tons, flax 4500 tons, besides tobacco, madder, and hops, in each of which articles, the produce considerably exceeds the consumption. Cattle breeding is carried on successfully in the river districts; and improved breeds of cattle and sheep are found on all the larger estates. Hogs are very extensively reared; but the sausages and hams of Brunswick enjoy so much reputation, that a large importation of hogs takes place from the neighbouring states, the produce of which is sent to all parts of the Continent. Horses are not reared in sufficient numbers to supply the wants of the duchy, and are annually brought from Holstein and Mecklenburg.

The extensive forests, which had suffered, from many years of neglect and wasteful management, have of late been improved under scientific direction, and are divided into 4 inspectorships (*Fortmeisterein*), and 61 forester's districts. Timber, of valuable quality, is annually floated down the Ocker, Seine, Innerste, and Weser, especially from the Harz and the Solling forests, and forms a considerable object of export trade. The game in these forests is not very abundant, consisting of red deer, roebucks, hares, and rabbits, with occasional wild boars. A species of throstle (*Krammtsvogel*) caught by thousands in the winter season, is esteemed a great delicacy. Fish not very abundant, nor of rare sorts. The mineral riches of the Harz mountains, although no longer so prolific as reported in former times, afford employment to a number of industrious individuals, and are managed partly in conjunction with Hanover, and partly by Brunswick alone. The Rammels berg, near Goslar, of which 3-7ths is the share of Brunswick, and 4-7ths that of Hanover, produced, in two recent years, the following quantities: —

Gold.		Antimony.	Lead.	Zinc.	Copper.	Sulphur.	Vitriol.	Alum.
mks.	*loth.*							
10	13	603,790	606,100	13,750	428,780	187,000	693,330	60,060
11	6	615,340	616,922	13,608	492,923	173,910	734,333	47,076

Iron is the chief produce of the mines worked separately by Brunswick in the three districts of the Harz, Weser, and Blankenberg. They are all worked on government account, and as well as the salt mines, stone cutting mills, four glass houses, and the porcelain manufactory at Fürstenberg, are under the direction of a mining board at Brunswick. The salt works are very considerable; they are established at Salzdahlum and Salzliebenhall, in the district of Wolfenbuttel, and at Schöningen. That at Salzdahlum has been worked since the 13th century. The brine spring at Julinshall is worked jointly with Hanover. In the Brunnenholz, near Helmstadt there is a coal-mine with two shafts, and another near Walkenried, where alabaster and agates are found. Mineral springs occur in several parts; those near Helmstadt and Seesen are frequented by invalids. Asphaltum and other bituminous substances are found in many parts of the Harz mountains, especially at the Rammels berg and Iberg.

Besides the iron-works, linen weaving is the chief article of manufacture. According to Becker, it is mostly woven in the towns of Schöningen, Konigsbutter, Schoppenstadt, Langelsheim, and in several towns of the Harz and Weser districts. Large bleaching-grounds are found at Heckenbeck. Camlets are the only descriptions of woollens woven within the duchy; a spinning-mill for woollen yarn has been established at Bevern; and spinning is a great source of industry amongst the inhabitants of Lutter and Barenberge, and at Lesse. Dyeing is carried on at Schoppenstadt, Kalvörde, and Vorsfelde. Brewing is extensively carried on in all the principal towns, but the beer is bad, and does not prevent the universal use of brandy amongst the lower classes. The Mumme, a heavy draught extracted from malt, is now principally used by persons in delicate health, and is exported for that purpose to all parts of Germany. Oil and sawing mills are found on nearly all the principal streams, and the preparation of the root of chicory as a substitute for coffee, which attained to a great extent during the exclusion of colonial produce under the continental system, is still favoured by high duties on such produce within the limits of the customs' league. Becker estimates the quantity annually prepared at 6,750 tons. The price of labour is usually 6 gg. (about 9*d.*) per diem, in the country, and something more in towns. Trade, especially the transit trade, is a great source of emolument both to the town and duchy of Brunswick, and is principally transacted at its ancient fair, which still keeps up all its importance, and bids fair to succeed to Leipzig as soon as the railway which is now constructing from the Harz shall be continued to some navigable point of the Aller or the Elbe. Brunswick is engaged by treaty in a customs' league with Oldenburg and Hanover (*See* GERMANY), which opens to her the communication with the German Ocean by means of the Elbe and Weser, while the credit and ancient trading connections of the Brunswick mercantile houses fill up a blank which would otherwise be very sensible in that league. The government wisely directs its attention to the encouragement of the different industrial resources, and has preferred establishing a liberally-endowed and well-conducted system of education to the imposition of protecting duties, by which one class of the people is aided at the cost of the others. The foundation of the "Real Institute," which unites with practical instruction in agriculture and the management of forests the scientific information on which the higher branches of these occupations, as well as mining, and the mechanical and chemical arts, ought to be founded, marks an epoch, even in Germany, where so much care is shown for intellectual improvement. Nor are the higher branches of knowledge by any means neglected. The Lyceum, formerly the Caroline College; 2 normal schools for teachers; and 6 gymnasia, afford ample means of cultivating them. The university formerly existing at Helmstadt, the revenues and library of which were transferred during the Westphalian régime to Göttingen, has not been re-established, but Göttingen is regarded as the university of the duchy. There are 63 burghers' schools, and 369 elementary schools, giving one to nearly every village. The revenues of 9 secularised convents and religious foundations are applied to support a number of unmarried young women and other persons on the presentations of the patrons. The charitable foundations are 52 in number.

The inhabitants of the duchy are mostly descendants of the ancient "Brokmanner," a branch of the Sassen or Saxons, and the Low-German language is universal among the villagers, except on the Harz, whose mining population was drawn from Upper Germany, and speaks High-German. The names of some villages, as Wenden, &c., are perhaps the sole remains of the ancient Wendish or Slavonian inhabitants of the north-eastern parts of the duchy. The higher classes of the towns speak High-German, which, as all over Germany, is the language of public business and of the schools. Personal courage and open-heartedness are the leading characteristics of the Brunswickers, and, until the feeling was on a recent occasion wantonly trifled with and abused, they were distinguished by an unshaken attachment to the reigning house. They are allowed to be the best situated, in point of comfort and village economy, of all the Germans, and the aspect of the whole country is indicative of good order and prosperity. The discontent of the oppressed inhabitants who, being long accustomed to the mild rule of wise princes, found the tyrannical innovations of the late Duke Charles insupportable, led in 1830 to the expulsion of that prince, and the transfer of the sovereignty to his second brother William, who has since been recognised as reigning duke by the great powers of Europe. One of the first acts of this prince's sovereignty was in conjunction with the "Landstande," or estates to remodel the constitution which had been given in 1820 under the direction of Count Munster during the minority of the former duke. Instead of two chambers the representation of the people is now confided, agreeably to the old German fashion, to one house of Assembly, but which is composed of elected members; 10 deputies being taken from amongst the owners of the 78 knight's estates within the duchy, 12 from the principal towns, 10 from the villages and peasantry of the open country, whether holding freehold or copyhold property, and 16 chosen from all classes indiscriminately by electors named by each class. With the exception of two members of the higher clergy, which must be chosen, no distinction of rank or property influences or limits the choice of this last portion of the assembly. The

members chosen for the towns and for the country must, however, belong to that class of each which pays the highest amount of taxes, and which is fixed to include one-tenth of the houses in town, and one-fourth of the landed holdings. The Chamber meets every three years, and renews one-half of the members of each class by a new election. The budget is voted for three years, and the Chamber has the right of controlling the expenses of the state, under acknowledgment of the obligation to provide for the dignity and power of the government. This new constitution, which was proclaimed 12th Oct., 1832, provides for many rights of the subject, which are not acknowledged in other German states, amongst others, — that every person who is arrested be brought up for examination within 24 hours, and then delivered over to his proper judge; where the course of justice is impeded by government influence, recourse lies to the Chambers; the right of emigration and removal to any other country unimpeded is acknowledged. Two of the counsellors (judges) of the court of the duchy, are to be chosen by the Chamber; all privileges of various classes of the community are abolished, and perfect equality before the law is established. In the first sittings of the new chamber the manorial dues and services of all emphyteutic fiefs were declared redeemable; the dues in money and kind at 25 years' purchase, the service dues at 18 times their estimated value. The municipal institutions were modified at the same period, and the freedom of the cities rendered easy of acquisition. The magistracy is composed partly of salaried and partly of honorary officers, dependent on the sanction of a council of freemen chosen by the citizens at large, and who vote the sums requisite for the service of the city. The official published statement of the revenue and expenditure for the period 1837 to 1839 gives the following results: —

Revenue.		Expenditure.	
	Doll.		*Doll.*
Land tax -	987,000	Department of justice - -	470,571
Personal tax -	831,559	Do. finance	211,819
Indirect taxes -	976,707	Do. war -	865,775
Stamps -	114,000	Do. police -	134,116
Fees of courts -	84,600	Pensions -	277,136
Post-office and tolls	192,339	Extraordinary building expenses	494,760
Lottery - -	31,147	Interest of public debt - -	346,920
Domains and other branches -	590,312	Salaries in various departments and sinking fund -	395,136
Total -	3,287,664	Total -	3,287,664

This estimate contains only the surplus revenue of the domains left after defraying the civil list of the Duke, which amounts to 237,c00 dollars annually. The Duke further derives a revenue of 170,000 florins from the duchy of Oels, in Silesia, and a mediatised principality under the sovereignty of Prussia, which is an appanage of the second branch of the House of Brunswick. Finally, the estates of the convents and religious foundations secularised at the period of the reformation, and then destined to support the clergy and institutions of education, form a separarate fund, which does not enter into the budget, yielding the sum of 340,605 dollars annually. A resolution of the chamber fixed the lowest amount of salary of a parish minister at 400 dollars, and that of a village schoolmaster at 80 dollars per annum, the amount required to make up these sums being chargeable on the budget. The public debt is stated not to exceed 2,300,000 florins, and is being rapidly reduced. On the whole, this little state is one of the best managed in Europe in every department of administration. Respecting the principles upon which taxes are imposed, we have collected the following particulars. For the land-tax, the ground is rated according to four classes, and a separate assessment is laid on each. The personal tax is a capitation assessment in all persons who are of age, and is divided into 10 classes, whose contribution varies from about 3*s*. 2*d*. to about 3*l*. 16*s*. per annum. The indirect taxes are levied in conjunction with Hanover and Altenburg, according to a moderate tariff, which affords encouragement to native industry, without aiming at forcing precocious manufactures. A tax is levied upon houses, and some tolls on provisions carried into towns for sale; but these are local assessments for municipal purposes.

The present Duke of Brunswick is the lineal descendant of Henry the Lion, the last of the house of Welf, who held the united duchies of Bavaria and Saxony. In their rivalry with the Suabian house of Hohenstaufen in the 12th century, the party of the powerful Welfs was stronger in Italy than in Germany, and the jealousy entertained of their power in the former country caused all the princes of the empire to unite with the Emperor Frederick Barbarossa in humbling them. Henry the Lion having refused to aid that emperor in his wars with the free Italian cities and the pope, was deprived, by a decree of the diet in 1180, of both duchies, and only left the possession of his allodial domains of Brunswick and Lüneburg, which were subsequently split into numerous branches, but merged finally in the still reigning lines of Lüneburg (or Hanover) and Brunswick, which is the elder branch. As such, the crown of England would have devolved to this line, which claims descent from the daughter of Henry II. on the extinction of the House of Stuart, had not the Duke of Luneburg, afterwards George I., by marrying the daughter of Elizabeth, Countess Palatine, the daughter of James I. of England, procured a prior claim to the younger line. Treaties of mutual inheritance exist between the houses of Hanover and Brunswick, and the succession only passes to the female side when legitimate male heirs fail. The intimate family connection which in the last century subsisted between the House of Brunswick and the reigning families of Great Britain and Prussia, engaged the princes of Brunswick in political alliances with these two powers, in opposition to France, and occasionally to Austria. The Prussian army, at the outset of the disastrous campaign of 1806, was commanded by the Duke Charles William Ferdinand of Brunswick, who fell in the battle of Jena. Although he had declared his duchy neutral, and no Brunswick troops were with the Prussian army, yet his lands were immediately seized by the conqueror, and incorporated with the kingdom of Westphalia. His youngest son, Frederick William, after the death of his eldest, and the abdication of his second brother, the sole remaining heir, served for some time in the Prussian, and afterwards in the Austrian army. In 1809, this adventurous prince raised a small corps, and attempted, in co-operation with the grand Austrian army, to excite a diversion in the north of Germany; but finding his cause ruined by the victory of the French at Wagram, he crossed the whole of Germany, at the head of a small body, not exceeding 2,000 men, and marched from the Bohemian frontier to the sea coast near Bremen. Eluding and alternately fighting the various French corps which crossed his passage with equal good fortune and bravery, he succeeded in embarking for England, where his troops joined the British army, with permission to retain the black uniform which their bravery had rendered celebrated, and served until 1814 in the peninsula. Having regained his dominions, under the stipulations of the treaty of Vienna, Frederick William fell at the head of his troops while maintaining the position of Quatre Bras, two days before the battle of Waterloo. In the Germanic Confederation, Brunswick ranks as the thirteenth voice, conjointly with Nassau, and has two voices in the Plenum. The contingent to the Confederate army is 2,096 men, consisting of 1,625 infantry, 299 cavalry, and 172 artillery and pioneers.

BRUNSWICK, a city of Germany, cap. of the above duchy, on the Ocker; lat. 56° 18′ N., long. 10° 32′ E. Pop. 42,000. Bruno, who appears about the year 842 as Duke of Ostfalen, is said to have first built walls round the little town of Brunswick, to protect it from the incursions of the Normans. Henry the Lion, Duke of Saxony and Bavaria, and the grand champion of Christianity and Germanic civilisation, against the Slavonic nations on the Elbe and the Baltic Sea towards the close of the 12th century, made Brunswick his place of residence, and extended and adorned the city. He finished the cathedral church of St. Blaize, an interesting monument of the Byzantine Gothic style, endowed it with lands and relics brought from Constantinople and the Holy Land, and erected a bronze figure of a lion said to have been cast in the Greek capital, upon a pedestal in front of his palace, on the site of which a barrack now stands. From this period Brunswick became one of the most important cities in N. Germany; and the wealth of its dukes, who were owners of the extensive mines and salt works in the Harz mountains and in the vicinity, was principally expended in the cities of Lüneburg and Brunswick, the seats of the chief lines of the Welf family. In the 13th century Brunswick, which, owing to these resources, had advanced in commercial prosperity, became a member of the Hanseatic league, and flourished as one of the leading cities of Lower Germany. On the decline of the league, the increased power of the territorial princes exposed the city to the vicissitudes which their political speculations drew upon the country; and Brunswick suffered in common with other N. cities upon the advance of the Imperial armies under Tilly and Wallenstein, in the 30 years' war. The division of the reigning house into many branches was also, at that period, disadvantageous to Brunswick, which saw the rival cities of Wolfenbuttel, Celle, Hanover, Göttingen, &c. spring up and prosper as so many diminutive capitals, each the seat of a petty court. The city was further almost drained of its small remains of wealth during the French occupation; but through the industry of its inhabitants, and the celebrity of its fair, held in February and August, and frequently visited by 20,000 strangers, it keeps up its importance as a commercial city. An iron railway has been commenced

from Brunswick to the foot of the Harz mountains, of which a portion as far as Wolfenbuttel (about 9 miles), was opened in 1839, having cost 300,000 dollars. Should this undertaking be continued through Hanover to the Elbe, or the Weser, Brunswick will bid fair to succeed to Leipzig and Frankfort, as the staple mart of English manufactures and colonial wares for the N., and perhaps E. parts of Europe. The fortifications of the city have been levelled since the peace, and converted into agreeable plantations, with walks and drives; and the city, although bearing rather an antiquated appearance, has some good streets, and abounds in interesting remains of the middle ages. The cathedral, and church of St. Giles, which has lately been repaired and fitted up as a repository for works of art, the bronze lion before mentioned, and the town-house with a curious gallery, adorned with the statues of many of the dukes in niches, and the bronze fountain in its vicinity, are justly deserving of notice. The principal streets are the Bohlweg, in which the new palace, a tasteful Greek structure, is built to replace the old residence, burnt by the mob in 1830, the Fallersleben and Wenden streets. The church of St. Andrews, with its steeples, one of which is 318 feet in height; and that of St. Catherine, with paintings by Diebrich, and stained glass windows from designs by Cranach and Durer, as well as the church of St. Martin, in the pointed Gothic style, are interesting to lovers of the fine arts. Nor is the museum less worthy of attention, in which, amongst a number of inferior paintings, are some of high value of the Flemish and Dutch schools, by Rembrandt, Jan Steens, Vandyke, and Rubens, together with a portrait of Raffaelle, said to be by his own hand; and others by Guido, Giorgione, &c. An Ecce Homo, by Albert Durer, a crucifix, by Benvenuto Cellini, with a collection of antique statues, coins, &c., are worthy of inspection. The celebrated Onyx vase, purchased by one of the dukes of Brunswick, who secured it as his share of booty when Mantua was sacked, in the course of the thirty years' war, together with several other objects of value, were carried off, and are still retained by Duke Charles. The Caroline college, now divided into a lyceum or classical college, with a gymnasium or grammar school, and a "real schule" or mechanics' and commercial institute, with a branch for agriculturists and foresters, a college for teachers, several elementary schools, a general and a lying-in hospital, with schools of surgery, orphan and deaf and dumb asylums, are the public institutions for education. It has also manufactures of linen and woollen stuffs, hardware, &c.; and numerous charitable institutions.

Brunswick, a town of the U. States of America, Maine, on the Androscoggin, 26 m. S.W. Augusta, and 30 m. N.E. Portland; lat. 43° 53′ N.; long. 69° 55′ W. Pop. 3,547. It is a place of considerable trade. On the opposite side of the river is Topsham, with which town it is connected by two bridges. The falls of the river afford a convenient supply of water power, which is used to some extent, to give motion to corn-mills, and woollen and cotton factories. Bowdoin College, founded in 1794, stands on an elevated plateau near the town. It possesses a philosophical and chemical apparatus, laboratory, cabinet of minerals, gallery of paintings, and a library containing above 8,000 vols. A medical school connected with the college was established in 1820. In 1838, the college had 124 and the school 90 pupils.

Brunswick (New). A city of New Jersey, in the United States of America, partly in Middlesex and partly in Somerset cos., on the S.W. side of Raritan river, 22 m. N.E. Trenton. Pop. (1830) 7,831. The town lies rather low; but is considered healthy, and has a good deal of trade. It has a court-house, jail, market-house, two banks, a theological seminary, and several places of worship. Rutgers College, founded in 1770, under the name of Queen's College, is a handsome stone building three stories high, with libraries containing upwards of 6,000 vols. Students 93 (*American Alm.*, 1839.). The Raritan is navigable as far as New Brunswick for sloops of 80 tons burden.

Brunswick (New). A territory belonging to England in N. America. *See* New Brunswick.

BRUSSELS (Lat. *Bruxellæ*, Flem. *Brussel*, Fr. *Bruxelles*), capital of the k. of Belgium, and of the prov. of Brabant, about 50 m. E. by S. from the sea, lat. 50° 50′ N., long. 4° 22′ E.; on the Senne, a small river, which, rising near Soignies, in Hainault, and flowing N., falls into the Scheldt, through the Rupel, about 2 m. N.W. of Mechlin. The scenery of the adjacent country is beautifully diversified by sloping heights, and green valleys refreshed by the waters of the Senne. A large portion of the city being built on the acclivity of a hill, it presents, when viewed from the W., a picturesque amphitheatre of houses; and the great inequality of the elevation of its site has often induced a comparison with Naples and Genoa. The figure described by the outline of the surrounding wall resembles that of a pear, the smallest part pointing S.S.W. The greatest extent of the city, from N.N.E. to S.S.W., is about 3 m.; and the extreme width, from N.W. to S.E., about 2¼ m. Brussels, a century ago, was completely surrounded by strongly fortified ramparts, with salient angles, and ditches or moats, supplied from the river Senne. These fortifications are now almost wholly removed, and their site is formed into spacious boulevards, planted with rows of stately linden trees, that encircle two thirds of the city, on the N., the E., and the S. The city wall is overlooked by the boulevards, which command extensive views of the country, and afford an agreeable promenade, extending about 5 m. from the Porte au Rivage on the N., to the Porte de Hal on the S. There are nine of these *portes* or mural gates, several of which are fine old architectural arches of great strength. They communicate with, and bear the names of, the high roads that traverse the kingdom and centre in the capital.

The Senne enters the city on the N.W. side by two branches, and forms, within the walls, four islands, of which the principal are named St. Gery and Bon Secours. This rivulet is only about 30 ft. in width, and from 4 to 6 ft. in depth, and is not navigable in any part of its course. Brussels, however, possesses the advantage of water communication with Charleroy on the S., and with Mechlin, Antwerp, and the ocean, on the N., by means of two capacious and well appointed canals. The width of the Antwerp canal is 45 ft. It was opened in 1551, and cost nearly 2,000,000 of florins (166,000*l.*). Five locks overcome a descent of 50 ft., in a course of 17 m., between Brussels and the town of Boom, where the canal joins the Rupel, a large affluent of the Scheldt. The head of this canal, in the N.W. quarter of the city, is furnished with several commodious basins and quays, whence passengers and goods are conveyed in large and handsome barges to the junction of the Rupel. The Charleroy canal cost 4,350,205 florins, and was first opened in 1830. It is carried along the W. boundary of the city in the ancient ditches of the fortifications to the Porte au Rivage, where it communicates with the canal to Antwerp. Fifty-five locks obviate a fall of 432 ft., in its course of 45 m. to Brussels. It passes through a tunnel of 1,175 yards, and is crossed by 55 aqueducts and 36 bridges. The soil of the elevated ground, occupied by the S. and E. portions of the city, is sand, interspersed with fossils, marine substances, calcareous stones, and layers of ferruginous earth; and that of the lower N. and W. section consists of a sandy marsh, mixed with marine substances, and covered with a deep bed of peat or turf. The highest part, on the S. extremity, between the portes of Hal and Namur, is about 220 ft. above the level of the sea. The upper town contains the royal court and government offices, the park, the finest squares, streets, and hotels, and the mansions of the higher classes. The central and lower town comprises chiefly the trading and operative portion of the population, and has generally a more crowded and mean appearance, though it still abounds in fine old ornamented buildings, once occupied by the ancient nobles of Brabant. The *Rivage*, at the N. extremity, is inhabited by rich merchants, and presents a constant scene of commercial activity. The total number of houses is about 15,000, of which 700 are inns or hotels; and there are nearly 300 streets, many of which are wide and regular, besides lanes and blind alleys almost innumerable. All are generally paved with large flint stones, and are lighted by about 1,300 lamps, both of gas and oil. The city is abundantly supplied with spring-water, by means of pipes and powerful hydraulic engines, from three subterranean caves at Etterbeeck, a beautiful village in the southern vicinity. There are besides ten springs within the walls, 30 fountains, and about 90 pumps. Several fountains are ornamented by elegant obelisks and groups of exquisite bronze and marble sculptures. The most remarkable are *Les Fontaines des Fleuves*, in the court of the Hôtel de Ville, formed of river gods in white marble, and dolphins in bronze; the *Fontaine de Minerve*, in the Place du Grand Sablon, consisting of a beautiful group of figures in white marble, erected in 1741, by the Earl of Aylesbury, in attestation of his respect for the inhabitants, after residing among them 40 years; and the *Mannikin Pis*, near the Hôtel de Ville, in the centre of the city. This is an exquisite bronze figure, about 2 ft. in height, of an urchin boy who discharges a stream of water in a natural manner. Great value and historical interest are attached to this antique little figure by the old citizens of Brussels, who regard it with peculiar solicitude as a kind of municipal palladium. The ancient part of Brussels is ornamented by many fine specimens of the florid style of Gothic architecture of the 16th century; and the modern part exhibits numerous excellent buildings, erected about 50 years ago; but the newly-built dwelling-houses have commonly the uncouth form and fashion of granaries or manufactories, and are often constructed with very inferior bricks, and with timbers too slender for the lofty tiled roofs. Their uniformity of appearance too is destroyed by the custom of

painting the fronts with strongly contrasted colours — yellow, green, white, &c. — which often produce a glaring effect, more suitable for isolated inns or fancy cottages than the streets of a metropolitan city. In the Rue de la Madeleine and Rue Montagne de la Cour, are many elegant shops, and these are accounted the liveliest and most frequented streets in Brussels, though in appearance and business they are certainly dull, compared with Paris or London; indeed dulness in general forms a common subject of querimonious remark among the French and English residents in the capital of Belgium. Four uniformly built streets surround the large palace garden called the Park, namely, the Rue Royale, which will admit of comparison with some of the finest streets of the European capitals; the Rue Ducale, in which are the palace of the Prince of Orange and the grand concert room; the Rue Bellevue, containing the king's palace; and the Rue Brabant, in the centre of which is the palace of congress, or houses of parliament. The Grande Place, or great market-place, in the centre of the city, is a noble and very interesting square, containing the gorgeous old Gothic Hôtel de Ville, the Maison du Roi, and many other rich specimens of the ancient ornamental architecture. Here, in 1568, counts Egmont and Horne were beheaded by the Spanish viceroy the Duke of Alva, whose persecutions brought ruin and death into almost every house in Brussels. The Place Royale, near the king's palace, is perhaps the finest square in Brussels. The houses around it are remarkably handsome and regular. The Place du Grand Sablon is the largest square, and is used as a market-place. The Place de la Monnaie is also extensive, and approached by several spacious streets: it contains the theatre, the mint, the exchange, and some of the finest cafés in the city. The Place de St. Michel, better known since the Revolution as the Place des Martyrs, is planted with rows of linden trees, and surrounded by uniform and elegant buildings ornamented with Doric columns. This square was chosen for the sepulture of those who fell in opposing the royal forces during the revolutionary struggle in September 1830. There are 14 other squares of less distinction, but which at once serve the purposes of health and ornament. The park is an open oblong space of about 14 acres, on the high eastern side of the city. Its surface is covered with smooth verdant turf, and is formally laid out in broad straight walks and winding paths, which are overshadowed and sheltered by lofty beech and chesnut trees and plantations of acacias. There are several fountains, and many excellent marble statues, busts, vases; and groups of persons and personifications from classical mythology and history are distributed about the grounds. The walks command a great variety of interesting scenery, including the old Gothic edifices of the lower town and the surrounding country, which is very picturesque. In the N.E. corner of the park is "Vauxhall," comprising a small pretty theatre for vaudevilles, and a ball-room. Along the banks of the Antwerp Canal, issuing from the N. point of the city, is the beautiful promenade called the *Allée Verte*, that is, the Green Alley. It is formed of a broad carriage-road, and on each side a footway, divided by four rows of umbrageous elms, extending about a mile and a half. Here the royal family, and multitudes of all classes, are seen every fine evening enjoying the freshness of the country air, and the pleasing views of numerous villas and rural scenery. In fact, the environs of Brussels are in general so interesting, that they form the subject of a large portion of every full description of the city. Besides the excursion, *of course*, to the battle-field of Waterloo, and its surrounding localities, still intensely exciting to the curious, about 35 villages in the more immediate vicinity of Brussels are enumerated in the guide-books as well worth the attention of philosophic and inquisitive strangers. Among their objects of interest are — the splendid royal palaces of Laecken and Tervueren, and the great workhouse and penitentiary establishments of Vilvorde and La Cambre. The most remarkable public buildings in Brussels require some notice. The royal palace, at the S. extremity of the park, presents a façade of 120 yards in length, with a central portico and arcades. The style of architecture is plain, and the general aspect of the structure not at all remarkable. The interior too offers little worthy of inspection beyond the usual suites of royal saloons and apartments, which are very superbly furnished, and covered with rich velvet, satin, and gilt. The paintings are neither numerous nor very valuable, with the exception of Vandyke's *Chapeau de Velours*. The Palais du Congrès, at the N. end of the park, is a magnificent building, ornamented with fluted Doric columns and appropriate sculptures. Marble stairs on each side of a spacious hall ascend to the two chambers of parliament, which are elegantly fitted up for the reception of the members. The public are admitted into both chambers during the debates, females as well as males; and for this accommodation, the Chamber of Deputies contains a capacious gallery. On the E. side of the park is a palace which, before the revolution of 1830, was occupied by the hereditary Prince of Orange. It was built in 1820. The exterior is nobly simple, presenting a façade of 230 ft. in length, with a lofty central dome and cupola. The interior is not surpassed by any European palace in sumptuous furniture and elegant decorations. The paintings are not numerous, but of the highest order, comprising some of the most choice productions of the Flemish and Italian schools. The Hôtel de Ville, in the Grande Place, or great central market-place, is one of the largest and most remarkable of those civic palaces, in the florid Gothic style, that are to be seen in perfection only in the Netherlands. It was erected in 1400. The architecture is Lombardo-Gothic, with a great profusion of quaint sculptures, pointed turrets, and other fanciful and intricate ornaments. In the front are 40 windows, and in the lofty sloping roof 80 more. At a point remarkably distant from the centre of the front, an elaborately ornamented pyramidal tower, open throughout to the summit, rises to the height of 364 ft., and commands a fine view of the surrounding country, including the battle-field of Waterloo. It is surmounted by a colossal copper-gilt statue, 17 ft. high, of St. Michael crushing a dragon, which turns about to serve for a weather-cock. The interior of the building is entered by a spacious flight of steps, and the lofty halls and saloons exhibit many curious old paintings, gilded carvings, and specimens of fine tapestry. Opposite the town-hall is a venerable Gothic edifice, built about A.D. 1000, called the Brood Huys (bread house) or Maison de Roi. The Palais de Justice is a large building containing the courts of law: its front displays a noble portico, imitated from that of Agrippa's Temple at Rome. The Palais du Conseil d'Etat, the Hôtel des Monnaies, and several other state offices, are structures more or less elegant: also the theatre, which was opened in 1819, and cost 56,000*l*. Its interior displays very commodious arrangements and tasteful decorations. The stage in front is of greater width than that of the Grand Opera at Paris. The price of admission to the boxes is 4*s*. 4*d*., and to the pit 1*s*. 4*d*. A smaller theatre in the park has been already noticed, and there is also a private one for amateurs. Near the Place Royale is the large and handsome old Palace or Const, founded in 1300, and rebuilt in 1746. When this was the residence of the Spanish and Austrian governors of the Netherlands, it was one of the richest palaces in Europe. It now contains the public library, lecture-rooms, museums, and galleries of paintings and sculptures. The Palace of Industry is a large adjoining building for the exhibition of the manufactures of the kingdom, mechanical models, and new inventions.

Brussels contains several grand and venerable cathedral churches, erected in the middle ages. Four only of 16 are considered primary, and belong each to one of the 4 arrondissements into which the city is divided: the others, although little inferior in appearance, are secondary in rank. The cathedral of St. Gudule, the largest and finest in Brussels, was founded in 1010; and here the first chapter of the chivalric order of the Golden Fleece was held by Philip le Bon, in 1435. There is an aspect of imposing grandeur in its spacious front, surmounted by 2 large square towers, from the top of which Antwerp is distinctly visible at a distance of 27 miles, and one contains a bell that weighs 14,500 lbs. Against the pillars which divide the lateral aisles from the nave, and support the lofty roof, are placed finely-sculptured statues of the 12 apostles, 10 ft. in height, at an elevation of 25 ft. from the floor. The pulpit is formed of wonderfully carved groups of figures the size of life, representing the expulsion of Adam and Eve from paradise. The glass of the principal window displays a magnificent representation of the last judgment, by the celebrated Flemish painter, Francis Flors, and several other antique painted windows of this noble cathedral are exceedingly brilliant and beautiful. Its altars and sumptuous mausoleums of sculptured marble, and numerous fine paintings, are objects worthy of especial notice. The organ, too, is remarkable for the depth and power of its intonations and perfect unison; but that which most attracts the curious spectator is one of the side chapels — a large and splendidly ornamented oratory — called *St. Sacrament des Miracles*, from its being the sanctuary in which are preserved 3 miraculous consecrated wafers, said to have been stolen by Jews in the 14th century and miraculously recovered. These wafers are still annually paraded with great pomp through the principal streets!

The cathedral of *Notre Dame de la Chapelle* is a beautiful Gothic structure, founded in 1134, and but little inferior in dimensions to that of St. Gudule. Its paintings and sepulchral monuments are even more numerous. At the summit of its lofty spire is stationed a watchman, who sounds a trumpet every quarter of an hour during the night, in proof of his wakeful vigilance; and on seeing a fire, he blows a shrill and incessant blast, to hasten the attendance of the engines. The interior ornaments of this fine cathedral consist of numerous paintings, statues, and monumental sculptures, by eminent artists; and a very curious carved pulpit, representing Elijah fed by an

angel under a canopy of palms. The church of *Notre Dame des Victoires* is a profusely ornamented Gothic structure of the 13th century, displaying the most exact symmetry in its plan and proportions. It is ornamented by marble statues and sculptured tombs; its windows are brilliantly painted; and the tones of its organ are exceedingly grand and harmonious. *Notre Dame de bon Secours*, built in the 17th century, is the best attended church in Brussels. Its handsome front façade is surmounted by a lofty dome, and the ornaments of the interior are exhibited to great advantage by the frequent performance of high mass with peculiar sacerdotal pageantry. St. Catherine and St. Nicholas are very irregular and uncouth Gothic edifices of the 12th century, adorned with numerous fine old paintings. The churches of Caudenburg, St. Augustine, and Notre Dame de Finisterre, are handsome specimens of the Grecian style, and were erected in the 17th century. A convent of Béguin nuns, called *Le Grand Béguinage*, built in 1657, at an expense of 332,000 florins, has a beautiful church, which contains many fine paintings. There were here formerly a thousand nuns: at present the number is greatly reduced. There are two other nunneries, the convent of Berlaimont, and that of *Les Sœurs Noires* — the Black Sisters. The Church of England service is performed in several Protestant chapels, for the accommodation of the numerous English residents; and the Jews, of whom there are 10,000 in the whole kingdom, have their general consistory in Brussels, and a handsome synagogue; but the great mass of the population are zealously attached to the rites and doctrines of the church of Rome, while their Lutheran king, Leopold, attends the Protestant service in his private chapel. Previous to the suppression of religious houses in Belgium by the French republican government, at the close of the last century, Brussels contained 31 monasteries, 2 convents of Béguins, 2 of English nuns, and 18 oratories; and during the middle ages, the extent and magnificence of the monastic establishments in this locality were truly amazing.

The two principal medical hospitals of St. Peter and St. John are admirably regulated. There is also a well-managed lying-in hospital, and a military hospital attached to the barracks. Nothing can exceed the care and cleanliness observed in every part of the hospital of St. Peter; indeed to this remarkable attention is attributed the fact that, in the calamitous year of cholera, not one case of that dreadful malady occurred in the wards of this establishment, among a miscellaneous assemblage of 600 patients. The hospital of St. John contains between 200 and 300 beds, and includes a community of the Sisters of Charity. The earnest piety and genuine benevolence which induce these and other exemplary females of the Catholic religious orders to go about doing good, by visiting the sick poor, especially in the hospitals, often excite the admiration of strangers who justly appreciate virtue and goodness, and convey a tacit reproach to the pious Protestant ladies of England. There is an excellent society for gratuitous vaccination, which is efficiently supported, and is very beneficial to the poor.

The civil and military prison of Brussels is an appropriate modern building, having 9 or 10 open courts. It is situated very healthily in the high S.W. quarter of the city, and is under excellent management. The part for civil offences will contain 500 prisoners. There are 3 public cemeteries outside the boulevards, adjacent to the gates of the Hal, Louvain, and Flanders. The English residents in Brussels have also 2 burial-grounds on the roads to Uccle and Louvain. Several commodious bathing establishments are formed upon the river Senne, both within and beyond the city walls, and one for medical steam-baths. In the *Place Royale*, near the king's palace, are the public hotels *de Belle Vue*, *de Flandres*, and *de l'Europe*, which, in the extent and excellence of their accommodations, are not much surpassed by any on the Continent. There are also several large and elegant cafés which might admit of comparison with some of the finest in Paris. The markets of Brussels amount to more than 20, and are all well and abundantly supplied. The principal corn-market, in the lower N.W. quarter, forms one of the finest squares in the city. It is surrounded by handsome houses, and planted with double rows of lofty trees. Adjoining the fish-market, which is one of the best in the kingdom, is the market for poultry, in which are exhibited baskets full of the hinder legs, or *gigots*, of large frogs, neatly twisted and skewered up ready for dressing. Their appearance is bright and plump, and by no means so disagreeable as to increase the unfavourable prejudice of an English palate. Brussels is amply supplied with culinary vegetables from market-gardens. Butchers' meat is good, and about 6*d.* a pound. Game is rather plentiful, and poultry abundant. Fresh-water fish are cheap, sea-fish rather dear. Bread is excellent in quality, and two thirds cheaper than in London. Groceries in general are 10 per cent. lower, and tea 50 per cent. lower, than in England. Ale and beer of a good description are the common beverage. Wines are moderate in price, spirits particularly cheap. Excellent coal is obtained, by the Charleroy Canal, at one third the cost in London; and wood for fuel is cheaply procured from the forest of Soignies. The following tabular abstract of the records for 1838, which are made in imposing municipal taxes upon the provisions brought into the city, will serve to show the amount of different articles consumed in 1838.

Oxen	11,001 in number	Brandy and liqueurs	63,250 gallons
Calves	14,303 —	Gin	1,539,560 —
Sheep and lambs	29,199 —	Beer	7,168,106 —
Pigs	3,636 —	Vinegar	38,138 —
Hams	7,104 —	Oats	278,311 bushels
Meat cut up	2,134,350 lbs.	Hay	8,993 tons
Fresh sea-fish	22,777*l.* value	Straw	9,032 —
Cod	998 tons	Firewood	71,000 cub. métre
Stockfish	192 —	Charcoal	137,546 bushels
Red herrings	3,389 baskets	Coal	79,360 tons
Pickled herrings	225 tons	Timber	19,612 —
Butter	21,190 cwts.	Lime	240,191 bushels
Wines	164,824 gallons	Bricks	41,058,150 in number
		Stones	5,983 tons

The pop. of Brussels, in 1824, was 84,004; in 1830–31, 98,279; in 1837, 104,265; and in 1846, 123,874; but these numbers are exclusive of the pop. of the suburbs, amounting to about 30,000.

From the city registers, which are very carefully compiled, we find that the average number of the inhabitants of Brussels, in each of the 14 years, from 1824 to Jan. 1. 1838, was 93,092; the average annual births, 4,037; deaths, 3,700; marriages, 910; and divorces 3.

The climate of Brussels is temperate, moist, and extremely variable. The inhabitants of the upper town enjoy a warmer and dryer atmosphere, and a greater exemption from diseases, than those of the lower town, from which the epidemics that occur most commonly arise. In general the city is healthy, and rarely visited by malignant or pestilential fevers. The air is genial and mild, and the sky often serenely blue. Refreshing breezes blow from the sea, but fogs not unfrequently descend in the morning and evening. The temperature of Brussels, compared with that of Paris, is colder in winter, and less warm in summer; compared with London, it is also colder in winter, but warmer in summer. The dry nature of the soil in the higher part reflects the sun's rays in summer, so as to render the heat extremely oppressive. In general, the weather is more damp and variable than in Paris, and less so than in London.

Among numerous benevolent institutions, are several extensive and munificently supported almshouses, or asylums for the aged, infirm, and destitute, who have never resorted to public begging. The buildings of these establishments are extremely neat and commodious, and the management is such as to produce the most exemplary order and propriety. Each has from 150 to 200 inmates, and the annual expense of one (near the cathedral of St. Gudule) is defrayed by voluntary contributions, amounting to 25,000 francs, collected from the public houses of the city; to the proprietors of which 5 fr. are awarded for every 300 fr. contributed by their customers. There is a foundling hospital, which had, in 1833, 1,920 inmates, supported at an expense of 150,000 fr. a year, of which 27,300 fr. are furnished by the government. The Orphan Asylum contains about 150, who are taught industrial arts, and provided for until the age of 20. In 1833, there were 10 almshouses, or asylums for the indigent, which supported 3,870 persons, at an expense of 771,684 fr., and according to the official reports of the superintendents of the poor, the total number of paupers in Brussels, to whom relief was administered in the same year, was 31,426, belonging to about 500 families. The Board of Beneficence, in relieving 31,426 individuals, expended 158,970 fr., which, with the 771,684 fr. supplied by the asylums, make 930,654 fr., or 38,778*l.*, devoted to the poor in one year, besides a great extent of private charity. A great and important institution, called the Société Philantropique, has for its object the prevention and extirpation of mendicity: it is supported by subscriptions. In 1833, the number of pledges received by the Mont de Piété, was 240,940, and the sum lent thereon was 1,806,543 fr.; the number of pledges redeemed was 179,933, and the amount refunded was 1,234,698 fr. In March, 1838, the Central Savings' Bank, established in the capital for the whole kingdom, possessed a fund of deposits consisting of 39,971,634 fr., or 1,615,485*l.* Very ample provision is made for the instruction of the children of the poor. There are also evening schools for adult mechanics and labourers, and an excellent establishment for instructing the deaf and dumb. In 1832, the schools for poor children, including a numerous one for infants, contained 5,276 scholars, the expense of whose instruction, during that year, was 25,596 fr. A model school receives from the government 1,270 fr. per ann. for its head master,

and for each of two under masters 424 fr. Subsidies to the amount of about 1,200 fr. are also awarded to three other schools, one of which is Jewish, and held at the synagogue. The primary schools connected with the model school were attended in 1833 by 1,780 children. At the same period the total number of scholars at the different schools in Brussels was 8,470. A large school on the Lancastrian system is established in a spacious building erected for the purpose, and supported by a society of benevolent persons; and Sunday schools are numerously attended. For the instruction of youth of both sexes in all departments of scholastic knowledge, and every elegant accomplishment, there are many excellent academical institutions, public and private. The modern collegiate establishment, called the Free University of Brussels, offers every desirable facility for prosecuting a complete course of study in science, language, and literature. Besides a magnificent library, it possesses a chemical laboratory; museums of natural history, mineralogy, geology, comparative anatomy; an anatomical theatre, and chambers for clinical practice. In 1838, the number of students was 210, of whom 30 were devoted to the physical sciences, 89 to law, 52 to medicine, and 39 to polite literature. The Royal Athenæum is a highly useful and prosperous institution, established on liberal and rational principles, and kept in full operation by 15 professors and masters. The attention formerly devoted to the ancient languages, so as to engross exclusively the whole period of youth, is properly divided between ancient literature and the more important modern experimental sciences and industrial arts. In the former department there are usually from 150 to 200 pupils, and in the latter from 250 to 300. The hall for lecturing will hold 1,200 persons. There is a fine veterinary and agricultural college, with 150 students, a military school, and a school for instructing boys scientifically in the principles of commerce, and the operations of the mechanical arts. Several societies and establishments for the promotion of science and literature have a high and well merited reputation. The Royal Academy of Brussels was founded in 1769. The Geographical Establishment, in the Faubourg de Flandres, was founded in 1830, by M. Vander Maelen, an affluent and patriotic gentleman. On the boulevards, at the E. angle of the city wall, is the Observatory, a neat and appropriate edifice, with two towers commanding an extensive horizon. Its site is 190 ft. above the level of the North Sea. This establishment is furnished with an apparatus of very superior philosophical instruments, and serves not only for the prosecution of astronomical and meteorological observations, but for the promotion of all the kindred mathematical and experimental sciences, especially that of horology. Near the Observatory, on the outer side of the city wall, is the Botanic Garden, which is generally allowed to be one of the finest in Europe. An institute of fine arts awards prizes to distinguished students of painting, engraving, sculpture, and architecture, and affords them the means of professionally visiting Rome, and the other celebrated schools and repositories of art. Prizes are also distributed by an academy of painting, sculpture, and architecture, which is numerously attended by students, whose productions form an annual exhibition. There is also a society of friends of the fine arts. A royal conservatory of music is attended by 400 pupils, many of whom become eminent performers; and infirm and aged musicians are assisted by an institution called the Society of Apollo.

For the promotion of mercantile and mechanical knowledge, there is a commercial society, and one for the encouragement of arts and industry. Two medical societies comprise very numerous bodies of learned physicians, and other distinguished men of science. In the old court, or Palace of the Fine Arts, is a museum of natural history, that surpasses in extent and value every other in the kingdom. The departments of zoology, ornithology, entomology, and mineralogy, are especially replete with rare and admirable specimens, including animals from the Dutch East Indian colonies, Russian minerals, and all the volcanic products of Mount Vesuvius. Another portion of the edifice contains the great public library, of nearly 140,000 vols., and 15,000 historical MSS. and minerals. The latter were collected at a very early period, by the dukes of Burgundy, and are of extreme value; many being richly adorned with miniature paintings of exquisite beauty, by the early Flemish artists, and the greater part are splendidly bound in crimson morocco. Above 2,000 vols. of the books were printed in the 15th century. The third division of the palace is occupied by a collection of about 500 paintings, by the great Flemish masters from Van Eyck to Rubens, and his numerous pupils. The library, museums, and gallery, are constantly open to the public. This spacious building serves also for public lectures, which are delivered gratuitously every day, by the most eminent professors, on geology, botany, chemistry, architecture, doctrine of chances, philosophy of history, history of the sciences, history of Belgium, general literature, hygiène, individual and public, and industrial mechanics. Besides the great literary treasures in the old palace, there is a national library possessing 60,000 vols., and 1,100 MSS.; and several of the public institutions have large and choice collections of scientific and literary works. Brussels indeed affords peculiar advantages to those who require the use of modern publications for study or amusement; not only from its convenient central position between Germany, France, and England, the three great foci of European literature; but that, owing to a very active, yet, perhaps, not strictly equitable, spirit of enterprise among the publishers of the Belgic capital, all the best new French works, in every department of science and literature, are reprinted in Brussels, with equal accuracy and neatness, nearly as soon as they appear in Paris, and commonly at one-third of the original cost. Paris and the Parisians are the models which the people of Brussels are ambitious to imitate. They advert accordingly with much complacency to those points of resemblance which their city exhibits—its circumambient boulevards forming a fashionable promenade beneath umbrageous trees; its palace garden in imitation of those of the Tuilleries; its cafés, that emulate the splendid saloons of the Palais Royal; its grand theatre for the operatic drama, and smaller one for vaudevilles. These, and other copies of the characteristics of the French capital, with a general adoption of the French language, and, among the wealthier classes, an anxious observance of French manners and fashions, have obtained for Brussels the appellation of "Paris in miniature." The common language of the working classes in the lower and commercial parts of the city is Flemish, and a smaller portion speak the Walloon, a language derived from the Gallic tribes antecedent to the Franks. It may, in general, be observed, that the inhab. of Brussels are possessed of a spirit of enlightened enterprise, and exhibit a zealous disposition to adopt all rational improvements in social institutions, in the physical sciences, and industrial arts; while, in ecclesiastical matters, they retain, with peculiar veneration, many notions and ceremonious customs that belong to remote ages of ignorant superstition. Public charities are supported with great liberality. Modern literature and the fine arts, especially music and painting, are cultivated with ardent emulation. The drama is powerfully patronised, and the performances at the principal theatre are got up in a sumptuous and masterly style. A classification of the inhab., published in 1833, when the whole amounted to 93,574, shows the number of wholesale merchants to be 350; dealers in wine and brandy, 120; brewers of beer, 55; keepers of estaminets, or houses for drinking and smoking, 200; distillers of spirits, 40; bakers, 125; butchers, 25. At the same time there were 113 doctors of medicine, 81 surgeons, and 46 apothecaries.

The manufactures of Brussels consist principally of its celebrated lace and tulle, and of carpets, fine linen, hosiery, printed cottons, hats, paper, soap, candles, chemical productions, painted porcelain, leather, fabrics of horse-hair, and caoutchouc, articles of iron, brass, gold, silver, bronze, and cut glass; clocks, lamps, mathematical, optical, and surgical instruments. The establishments are numerous and of the highest description for brewing beer, refining sugar and salt, cabinet-making, carriage-building, lithography, type-founding, and printing and binding books. In the year 1833 there were 45 printing-offices, all in active operation. In addition to the commerce arising from its manufactures, and the consumption by the inhabitants, Brussels possesses an important transit trade, by means of its two canals, consisting of all kinds of grain, coals, timber, iron, stones, lime, bricks, and various other products of the soil, and of foreign countries. The number of canal boats which entered Brussels during the 3 months, April to June, in 1833, was 1,560, of 80,727 tons. Cheap and expeditious conveyance to Antwerp is supplied by the railroad, the carriages of which proceed from Brussels every alternate hour. The establishments connected with commercial operations are—the Commission Supérieure d'Industrie et de Commerce, Tribunal de Commerce, Chambre de Commerce, Société Générale pour favoriser l'Industrie, Société du Commerce de Bruxelles, six insurance companies, the Entrepôt, Royal Exchange, Custom House, and very commodious public rooms called the Brussels Lloyd's, where merchants meet for the transaction of business and perusal of the daily papers. There are two large annual fairs for the sale of all kinds of merchandise; one of 12 days, commencing May 22.; the other of 14 days, beginning the 18th Oct.

The municipal authority of Brussels is vested in a burgomaster and four sheriffs. They constitute the city regency, whose sanction must be obtained to all measures affecting the rights and interests of the citizens. The supreme court of law, and other national tribunals seated in the capital, are noticed in the article on Belgium, where further particulars are given respecting some of the institutions here mentioned.

Brussels is believed to have been founded in 600, and to have been walled in 1044. A code of municipal laws was formed in 1229, involving the principle of trial by jury. About 1300, sixty trades were incorporated in nine classes, to represent the citizens in all questions of taxation. Liberal notions of government continued to prevail, and the population and extent of the city were much increased. In the general persecution of the Jews during 1370-71, hundreds of that race were put to death in Brussels, and the amount of their confiscated property in the province of Brabant was nearly 13,000,000 florins. Under the Dukes of Burgundy, at the commencement of the 15th century, Brussels became a distinguished seat of learning and the arts, and was the residence of a magnificent court, which greatly promoted the progress of science, literature, commerce, and manufactures, especially the weaving of linens and woollens, and beautiful tapestry. In 1489, during the dominion of the House of Austria, the city was desolated by a dreadful plague, which destroyed 30,000 inhab., and produced a famine, whose effects lasted 4 years. Brussels was highly prosperous under the Emperor Charles V., who often dwelt in its palace, and made it the scene of his final abdication in 1555. The intolerant and oppressive proceedings of Philip II. kindled that rebellion in the Low Countries which ended in the establishment of the independence of the United Province. In 1568, the martyrs of freedom, Counts Egmont and Horne, were beheaded in the Grand Place. Alva's violent exaction of exorbitant taxes at length excited a general revolt of the citizens, and after many changes and party contentions, and the loss, in 1578, of 27,000 inhab. by the plague, the Spanish governors, in 1598, gave up the place to the Austrian dynasty, under which the arts and sciences again revived and prospered.

Brussels, in 1695, was unsuccessfully besieged and bombarded by the French, under Marshal Villeroy, when 14 churches and convents were destroyed, with 4,000 houses. In 1706 the keys of the city were delivered to the Duke of Marlborough, and in 1746 it was again attacked by the French under Marshal Saxe, to whom it capitulated after a siege of three weeks. In 1794, after the storm of the French revolution had burst upon it, and Belgium was annexed to France, it became the chief town of the department of the Dyle. In 1803 Napoleon entered the city with great pomp, at the head of 10,000 troops, with a body guard of the citizens in splendid uniform. Twelve years afterwards, on his return from Elba, Brussels was the head-quarters of the British army, and sent forth the troops who, on the plains of Waterloo, put an end to the ambitious career of that extraordinary individual. From that period Brussels, conjointly with the Hague, was the capital of the kingdom of the Netherlands until the Belgic revolution of Sept. 1830, which made it the capital of Belgium. (*Documents obligingly communicated by M. Vander Maelen of Brussels; Annuaires of Brussels; Romberg's Brussels and its Environs; Guide to Brussels and Belgium*, Paris; *Grattan's Hist. of the Netherlands; Délices des Pays Bas; Traveller's Guide through Belgium*, Hague; *Addison's Handbook for Residents in Belgium, Brussels, &c.*)

BRUTON, a town of England, co. Somerset, hund. and par. Bruton, on the Brue, 24 m. S. by E. Bristol. Pop. 1,885. It is well built, consisting principally of three streets, having a common centre, with a good market-house, where the sessions for the E. division of the co. are sometimes held. Here is a well-endowed hospital, founded by a native of the town, for the support of poor men and women, and for the support and education of a certain number of children. In 1838 this town had 4 silk-mills, employing in all 355 hands. Market, Saturday; fairs for cattle 29th of April and 19th of Sept.

BUCHOREST or BUKOREST, a city of Wallachia, of which it is the cap., being the residence of the hospodar, and of a Greek archbishop, on the Damboritza, over which there is here a bridge; 37 m. (direct dist.) from its confluence with the Danube, and 280 m. W. N. W. Constantinople; lat. 44° 26′ 45″ N.; long. 46° 47′ E. Pop. variously estimated at from 80,000 to 100,000. It is situated in a vast swampy plain, is divided into above 60 quarters, and though of comparatively recent origin, it is not built according to any regular plan, and presents a curious display of barbarism and civilisation in its mud cabins, brick houses covered with shingles, and spacious hotels; and in the vulgar finery of the boyars, or nobles, and the rags and filth of the other classes. It also presents a curious mixture of European and Oriental habits and costume; half the inhab. wearing hats and coats, and half calpacs and pelisses. Some of the streets are paved; but they are mostly boarded over, or rather covered with trunks of trees, or other large logs laid transversely, instead of a pavement; and, from the flatness of the ground, and the slovenliness of the inhab., all the filth of the streets collects under this rude floor. The streets are thence called *ponti*, or bridges, and, according to Dr. Walsh, they "are really bridges floating on rivers of filth. In winter this is continually splashing up through the interstices, and in summer it rises in clouds of black dust; and at all seasons is attended with a foul unwholesome odour, generating putrid fevers and the plague." The palace of the hospodar, or prince, an immense old pile, and the metropolitan church, are in the largest square in the centre of the town. Near to them is the fire tower, 60 feet in height, whence a full view of the city is obtained. It has a vast number of churches, each with from 3 to 6 spires, or towers! It has also about 20 monasteries and convents, and 30 khans, or Oriental inns, with several hospitals, one of which, for the military, managed by German physicians, is said to be very well conducted: another hospital, founded in 1835, by a bequest left by Prince Brankovano, is also stated to be worthy of notice. There is a wooden theatre, where French plays and Italian operas are sometimes performed. The other principal buildings are a large bazar, and the residences of the consuls, or ambassadors of the different European powers. Since the final emancipation of the prov. in 1834 from the rapacious and brutal despotism of the Turks, improvements of all kinds have begun to be set on foot, and the most praiseworthy efforts have been made to supply all classes, especially in the capital, with the means of education. In this view the college of St. Sauvain has been organised, which furnishes instruction to 500 pupils. The French language has been adopted as the basis of instruction, and the institution is under the direction of a gentleman who resided long in Paris. In addition to this, four other schools have been opened in the city, where instruction is afforded gratuitously to all who choose to accept it. There is also a lyceum for the Greeks; and a public library, a society of belles lettres, and an agricultural society, have been established.

Formerly the boyars used to ride on horseback; but about 40 years ago they adopted the practice of riding in carriages, and now would hardly cross to the opposite side of the street without using one of them. When Dr. Clarke was here, the number of carriages was estimated at 4,000, and, at present, it is probably not materially different. But Buchorest is principally distinguished by profligacy of manners. Gambling-houses are most abundant; and prostitutes are more numerous in it than in any other European city of nearly the same size: a tax upon them has, in fact, been suggested as the most prolific source of revenue, but in this respect, as in most others, some improvement has taken place.

The trade of the town is very considerable. The exports consist of wool, butter, wheat, hides, yellow berries, tallow, honey, wax, &c., sent by the Danube, or by Varna, to Odessa, Constantinople, &c.: they also export immense herds of horned cattle, hogs, &c to Germany, whence they import almost every thing they have, from the cheapest necessaries up to the most expensive luxuries. There are considerable numbers of German artizans, particularly of watchmakers and jewellers, in the town.

But it should be mentioned that these statements apply rather to what Buchorest was than to what it is; for it was visited in 1847 by a tremendous fire, which destroyed several churches and khans, and a great many private houses. Probably, however, it has been rebuilt on an improved plan.

The old cap. of Wallachia was Tergovist; but in 1698 the seat of government was transferred to the present city, then only a miserable village, belonging to a boyar, called Buchor, from whom it has taken its name. (*See* WALLACHIA; and *Walsh's Journey from Constantinople to England*, cap. 11.; *Macmichael's Journey from Moscow to Constantinople*, pp. 107—120.; *Clarke's Travels*, viii. 264. &c.; *Revue de Deux Mondes for May*, 1839, &c.)

BUCKFASTLEIGH, a par. and town of England, co. Devon, hund. Stanborough, 172 m. S.W. by W. London. Pop., in 1821, 2,240; 1841, 2,576; houses, 550; area, 6,720 acres. It consists of one main street, on the line of the great western road from London to Plymouth; and of another, branching from it on the W. side down the incline, and called the Lower Town. Generally speaking, the houses are meanly built: it is paved, but not lighted. The church is on an eminence overlooking the Dart, on the N. of the town in the meadows beneath which there are some remains of an ancient Cistertian abbey. The inhabitants are chiefly employed in wool-combing and weaving serges, for which there are three or four manufactories in the town. There is also a copper mine in the parish, that is, or was recently, in work; and limestone is quarried and burnt in considerable quantities, for manure to the surrounding district. There are fairs held, for the sale of live stock, the third Thursday in June, and second Thursday in Sept. The weekly market has been long discontinued. The annual value of property in 1815 was 5,802*l*. There are the remains of an ancient encampment in the parish.

BUCKINGHAM, an inl. co. of England, having N. Northamptonshire, E. the cos. of Bedford, Hertford, and Middlesex, S. Berks, and W. Oxford. Shape very irregular; area 472,320 acres, of which about 440,000 are supposed to be arable, meadow, and pasture. The vale of Aylesbury, one of the richest tracts in the empire, occupies the middle of the co., and has, on either side, ranges of hills. It is about equally divided between tillage and pasture. The grass lands are partly used for the dairy, and partly for fatting. Agriculture but indifferent; there is a great waste of horse power, and a proper rotation is not always observed. Sheep are an important stock, and the average weight of their fleece is supposed to have been increased, during the present century, from 3 to 5 lbs.; many hogs are also kept; and large quantities of ducks are raised at Aylesbury and other places. There are some large estates. Farms of a medium size average about 180 acres. Leases pretty common; but they are not granted for a sufficiently long term, and are defective in not laying any restrictions on the tenant as to cropping. Average rent of land in 1843, 25*s*. 3½*d*. an acre. Cottages generally good, and most of them have gardens. The manufacture of pillow lace has greatly declined; but a good deal of straw plat is made in the parts of the county next to Bedford. Minerals of no importance. The Thames bounds the co. on the S., and the Ouse partly intersects it, and partly bounds it on the N. It contains 8 hunds., and 202 parishes, and had, in 1841, 31,087 inhab. houses, and 155,983 inhabs., of whom 76,482 were males, and 79,501 females; it returns 11 mems. to the H. of C., viz. 3 for the co., and 2 each for the boroughs of Aylesbury, Marlow, Buckingham, and Wycombe. Sum expended on the relief of the poor in 1846-47, 82,339*l*. Annual value of real property in 1815, 662,872*l*.; do. in 1842-43, 827,890*l*.

Buckingham, a par., parl. bor., and town of Eng., co. Buckingham, hund. of same name, on the Ouse, 50 m. N.W. London. Area of par., 5,330 acres. Pop. of par., 1821, 3,465; 1841, 4,054: houses at the latter date, 802. Except on the N. side, the town is surrounded by the Ouse, over which there are three stone bridges. It consists chiefly of one long street, which is paved and lighted; houses of brick, and neatly built. The church, with a good tower and spire, was built in 1780, principally at the expense of the Temple family. It has a free grammar and green-coat school for 26 boys, and a national school for 300 boys and girls; two ancient hospitals, supporting 6 green-coat and 10 blue-coat pensioners; and a few minor charitable benefactions. The weekly market is on Saturday, and there are 10 annual fairs for cattle and sheep. A branch of the Grand Junction Canal extends to the town, by which coals, &c. are supplied. No particular manufacture is carried on: in the neighbourhood are paper and corn-mills, and a few lime quarries. Under the Municipal Reform Act there are 4 aldermen and 12 councillors, and the limits of the bor., which were previously co-extensive with the par., are restricted to that portion of it on which the town stands, and which comprises about three-fourths of the pop. The town was incorporated by a charter in 1st of Mary, for services rendered by its inhab. in the Duke of Northumberland's rebellion: the corporation was a self-elected body, consisting of a bailiff and 12 chief burgesses, who, till the passing of the Reform Act, returned 2 mem. to the H. of C. The last-mentioned act not merely gave the suffrage to the 10*l*. householders of the bor., but included with them the 10*l*. householders of the par., and those of several of the adjoining parishes. Registered electors, in 1850, 376. There is a court of gen. sessions for the bor. held twice a year. It is the seat of the summer assize for the co. The gaol was built in 1758, by Lord Cobham, through whose influence the act for holding one of the assizes here was procured; both having previously been held at Aylesbury. The revenue of the corporation amounted in 1848 to 760*l*. Under the Poor Law Amendment Act it is the central town of a union of 30 parishes. Buckingham is a polling town for the co. Till within a recent period, the manufacture of lace by hand furnished employment to many of the women and children. The ducal title of the Temple family is derived from the town. (*Lyson's Mag. Brit.* i.; *Camden's Brit.*; *Parl. Pap. and Ret.*)

BUDA (*Slav.* BUDIN; *Germ.* OFEN),* a royal free city of Hungary, of which, in conjunction with Pesth, it is the cap. and seat of government, on the right bank of the Danube, immediately opposite to Pesth, 116 m. W. Debretzin, and 135 m. E.S.E. Vienna; lat. 47° 29′ 44″ N., long. 19° 2′ 30″ E. Pop. about 41,000. The pop. of Pesth may be estimated at 65,000; so that, if we regard them as one city, its pop., exclusive of the military, will be about 106,000. Buda is built on and round the last hill of a range which decreases in height as it approaches the Danube, and is divided into 6 quarters. The upper town, or citadel, occupies the centre and highest part of the city, the Schlossberg; it is enclosed by bastioned walls, but is no longer of any importance as a fortress. Although the smallest division, it contains most of the finest buildings. The royal castle, or palace, begun in 1749, is a quadrangular structure of great extent, containing 203 apartments, some of which, as the throne-room, audience-hall, and drawing-rooms, are extremely magnificent. In this building are kept the regalia of the kingdom, to which the Hungarians attach an extraordinary degree of importance. A large garden surrounds the palace; and Dr. Clarke says that the view from one of its balconies, elevated on a rock above the Danube, is one of the most striking he had ever seen. The church of the Virgin's Ascension, and the garrison church, both Gothic edifices, the state's palace, high judicial chamber, town-hall, residence of the commandant, arsenal, post-office, and many other military and civil public buildings, are situated in this quarter. To the N., and at the base of the rock on which the citadel stands, is the lower, or "Water town," which in some parts vies with the former division in elegance. It contains the church of St. Anne, and several others. The *Landstrasse*, a well built quarter; the new town, a cheerful suburb toward the E., reaching to the bank of the Danube; the Raizenstadt, or *Taban*, to the S., the most populous quarter of all; and the "Christina town," to the S.W., extending into the rich and beautiful Christina valley, are the other divisions of Buda. The chief remaining buildings deserving notice are the churches of the Capuchins, the Elizabethan nuns of St. Florian, the Greek church, the synagogue, several monasteries and convents, the palace of the primate in the Landstrasse, with the palaces of Counts Sandor, Teleki, Erdödy, Zichy, Pechy, Batthyany, &c. A well appointed observatory, attached to the University of Pesth, stands on the Blocksberg, an adjacent hill, to the S., 300 feet above the level of the river. Copious hot springs, strongly impregnated with sulphur, issue from the sides of the hills on which Buda is partly built, and especially from the Blocksberg. The successive occupiers of the place, Romans, Turks, and Christians, have taken advantage of these springs, and have converted them into commodious baths. Of those constructed by the Romans, only broken fragments now remain; but the Turkish baths are in a perfect state of preservation, and the largest, appropriated to the use of the town, is a fine specimen of Saracenic architecture. The finest of the modern baths, that of the "Emperor," in the vicinity of the Landstrasse, is surrounded by gardens and pleasure-grounds. There is here also a good theatre, with other places of public amusement, including numerous fine promenades. Amongst the many establishments devoted to science and education in Buda, are an archi-gymnasium (high college), a high school in each of the different quarters of the city, a school of design, Illyrian female schools, a public library, cabinets of mineralogy, conchology, &c. Many of the nobility, the Franciscan friars, and other bodies, possess good libraries, to which liberal access is permitted: in the royal palace there is a gallery of paintings. There are various charitable institutions, including four hospitals.

We stated in the former edition of this work that the bridge of boats, about ¾ m. in length, across the Danube, between Buda and Pesth, was about to be superseded by the construction of a suspension bridge, and we are glad to have to state that this anticipation has proved to be correct. The bridge in question, commenced in 1840, from the designs and under the direction of Mr Clark, an Englishman, was opened in 1848 at a cost of about 650,000*l*. It is probably entitled to the first place among suspension bridges. It has a clear waterway of 1,250 feet, the centre span or opening being 670 feet. The height of the suspension towers from the foundation is 200 feet, being founded in 50 feet of water. The sectional area of the suspending chains is 520 square inches of wrought iron, and their total weight 1,300 tons. This is the first permanent bridge which has been erected over the Danube, below Vienna, since the time of Trajan. Its solidity was exposed to a severe trial very soon after its completion; for it was crossed on the 5th of January, 1849, and the immediately following days, by large divisions of the Hungarian and Imperial troops engaged in the late unfortunate contest in that country.

The summit of the Blocksberg commands a fine view of the surrounding country, and especially of the river and the opposite city. "On this side is Buda, full of architectural anomalies, yet, from that very circumstance, an object of peculiar interest: on the other, Pesth, laid out in all the regularity of street, and square, and mall, and public garden. There is not a greater contrast between the old and new towns of Edinburgh than between Buda, the ancient capital of the Magyars, and Pesth, a city of yesterday's growth. The one wanders from terrace to terrace, in dark and dingy masses, or stretches in a long line wherever, between the river and the basis of the hill, a space of level ground can receive it: the other, a series of streets which cross each other at right angles, shines in all the splendour of a plan

* Literally, *oven*, from its natural sudatories, or hot baths.

rigidly adhered to, and materials the best calculated to preserve an appearance of uniformity, even in separate edifices." (*Gleig.*) Add to this striking contrast the vastness of the river, the passing of barges, ships, and steam-packets, in the very centre, as it were, of Europe, and the scene and the associations connected with it must be admitted to be of no common kind.

Buda is the usual residence of the viceroy, or palatinate, and the general commandant of the kingdom, the seat of the vice-regal council, and the highest administrative authorities. It has much less of a bustling and commercial character than Pesth. There are a few manufactures of linens, woollens, silks, velvet, leather, gunpowder, earthenware, &c., and a cannon-foundry; but its principal trade is in its fine wines, of which about 230,000 eimers are produced annually from the vineyards around the heights in its neighbourhood.

Buda is believed by some writers to be either the *Curta* of Ptolemy, or the *Aquincum* of the Itinerary of Antoninus. It was held by the Romans till nearly the end of the 4th century. Attila made it occasionally his residence. Arpad, the Magyar chief, made it his head quarters in 900; and it then became the cradle of the Hungarian monarchy. It was enlarged and improved by succeeding Hungarian monarchs, and made a free city by Bela IV., in 1245. It was taken by the Turks, under Solyman the Magnificent, in 1526; but was re-captured by Ferdinand I., king of Bohemia, brother of the emperor Charles V., in the following year. It was again taken by Solyman in 1529, and was held by the Turks till 1686, when it was taken by the Imperialists, after a desperate resistance. Joseph II. removed the seat of the Hungarian government thither in 1783. In 1810, the Taban quarter, and a part of the Water town, were destroyed by fire. (*Oesterr, Nat. Encyclop.; Murray's Handbook for S. Europe; Gleig's Bohemia, &c.; Clarke's Travels*, viii. 336. 8vo. ed.)

BUDUKHSHAN, a prov. of Central Asia, now a dependency of the khan of Koondooz, between lat. 36° and 38° N., and long. 70° 30′ and 72° 30′ E.; having N. and N.E. a chain of mountains, inhabited by tribes claiming a Macedonian origin; S.E. and S. the Bolor-Tagh mountains, and the high country of the Caufirs; and W. the other territories of Koondooz. It consists of the valley of the Koocha, a tributary of the Oxus, which rises at its S.E. corner, and soon becomes a considerable river, unfordable even at Budukhshan (Fyzabad). The scenery of this country, and its natural productions, have been spoken of in high terms by all who have visited it; it contains ruby mines, and cliffs of lapis lazuli. Near the Oxus the former are still worked by the khan of Koondooz, and the latter article, much of which was formerly sent into China, is obtained by lighting a fire under the cliffs, and, when hot, dashing cold water upon them, which causes them to fracture. The ruby mines were well known to the emperors of Delhi, and at a much earlier period: they are at a place called Gharan, on the verge of the Oxus; are dug in low hills; and the gems imbedded in limestone like round pieces of pebble or flints. The inhabitants of Budukhshan are Tadjiks; very social and hospitable; speaking the Persian language, and retaining the manners and customs prevalent N. the Hindoo Koosh before the Tartar invasion. Neither Uzbeks nor Toorkees had settled in the country before the chief of Koondooz overran it, about 16 years ago, by whom its own chief was dethroned; since which its peasantry have been driven out, and a rabble of lawless soldiery quartered in their stead. The capital is also called Budukhshan, or Fyzabad, and is near the E. bank of the Koocha, in lat. 36° 28′ N., long. 71° 23′ E. It is said to have been peopled from Balkh, and most of the inhabitants are of the Shiah sect. This country suffered much from a terrific earthquake in January, 1832, which appeared to exhibit its chief violence in this valley, and destroyed many roads and villages and a great part of the population. (*Burnes's Trav. into Bokhara*, iii. 174—178.; *Elphinstone's Caubul*, ii. 387, 388.)

BUDWEIS, a town of Bohemia, cap. circle of the same name, on the r. bank of the Moldau, 75 m. S. Prague. Pop. 7,400. Is well and regularly built, and partially fortified. Contains a cathedral, 7 churches, a court of jurisdiction for the circle, gymnasium, philosophical academy, and diocesan seminary. Has manufactories of woollen cloth, muslin, damask, saltpetre, and musical instruments; and considerable trade in horses and corn. (*Oesterreichische, Nat. Encycl.*)

BUENOS AYRES (*Good Air*), a marit. city of S. America, cap. of the repub. of La Plata, on the S.W. shore of the æstuary of the great river La Plata, 125 m. W. by N. Montevideo, and 90 m. N.W. Point Piedras; lat. 34° 36′ 29″ S., long. 58° 23′ 34″ W. Pop., according to Sir W. Parish, perhaps 100,000; from 15,000 to 20,000 of whom are foreigners, chiefly English and French. The city is built upon a bank, from 15 to 20 ft. above the level of the river. Including its suburbs, it extends N. and S. for upwards of 2 m., with a breadth in its centre of about 1¼ m. It is built on a uniform plan; the streets, which are all straight, intersect each other at right angles at every 150 yards, dividing it into a number of squares, each having an area of about 4 Eng. acres. The principal streets, which were formerly all but impassable in wet weather, while in the dry season they were obscured with clouds of dust, are now tolerably well paved, and provided with footpaths on either side. The houses and other buildings have also been greatly improved within the last few years, and their interior rendered much more comfortable; upper stories are now generally added to them; chimneys, that were formerly all but unknown, are common; they are supplied with English grates, and with coals carried out from Liverpool as ballast. Most sorts of European furniture have found their way into the residences of the upper classes. Almost every house in the principal streets has a garden both before and behind it; and many have latticed balconies in which odoriferous shrubs are reared. Though on the edge of one of the greatest rivers in the world, water in Buenos Ayres is both scarce and dear. The wells, though numerous, afford nothing but hard, brackish water, unfit for culinary purposes. There are no public cisterns; rain-water is, indeed, carefully collected in a few private tanks; but the mass of the people have to pay high for their daily supply, which instead of being raised from the river by machinery, and conveyed in conduits to public pumps, is carried about in butts mounted on bullock-carts. The quarter of the city inhabited by Mestizos and negroes is wretched and filthy in appearance, and strongly contrasts with the opulence and taste displayed in the other parts. The *Plaza*, or great square, contains the cathedral, and the town-hall, a handsome stone edifice, built by the Jesuits; and a whole side of it is occupied by the *Recova*, a range of piazzas, 150 yards long, and above 20 in width, enclosing a double range of shops. In the centre of the square is a small obelisk, erected to commemorate the declaration of independence. The town-hall is chiefly used as a prison, but meetings of the municipality are sometimes held in the upper rooms; and from the balcony the citizens are harangued on public occasions. The cathedral, a large handsome edifice, with a cupola and porticos, has its interior profusely decorated with carving and gilding, and its dome painted in compartments, representing the Acts of the Apostles. The church of the Franciscans, and that of the convent of Mercy, are next in rank, and have steeples and cupolas nearly in the same style as the cathedral. In the former there is a painting of the Last Supper, well executed by a native Indian artist. There are many other Catholic churches, several convents and nunneries, a Protestant church, Presbyterian chapel, &c., a founding hospital, orphan asylum, and other benevolent institutions. These edifices are all built of fine white stone, found in the plain not far from the city. The fort, which contains the residence of the supreme director and the government offices, is a square brick and stone building, near the river. The university, one of the most celebrated in S. America, occupies a very extensive building, which has been recently fitted up at a great expense: a suite of six rooms in this building contains the state library, a good collection of about 25,000 vols.

The æstuary of the Plata is very broad, but is also in most parts shallow, encumbered with sand-banks, and infested with sudden gusts of wind called *pamperos*. Its navigation is consequently attended with a good deal of difficulty, and ships bound for Buenos Ayres generally take pilots on board. There is no harbour, and vessels drawing 16 or 17 ft. water anchor in the outer roads, called the *Amarradero*, 7 or 8 m. from the shore, loading and unloading by means of lighters. This, too, is an operation by no means free from danger, boats being sometimes swamped in crossing the bar between the outer and inner roads. From the want of a pier, and the shallowness of the water on the beach, even the boats are not able to come close to the shore, but are met at a little distance from it by a rude sort of ox-carts, into which they deposit their goods, at no little risk, and sometimes much loss. These unfavourable circumstances, which might, however, be materially improved by a little exertion and outlay on the part of the government, operate as a heavy draw-back on the trade of the city, and tend proportionally to augment that of Montevideo, which is more easily accessible. But notwithstanding the competition of the latter, and the great increase of its trade of late years, Buenos Ayres is still the principal outlet for the produce of the vast countries traversed by the La Plata, and especially for the provinces situated on its right bank.

Within the last few years the trade in wool, in consequence of the great improvement effected in the breed of sheep, has become of considerable and rapidly increasing importance. In 1827 the export of this article to Great Britain amounted to only 19,444 lbs.; whereas in 1837 it amounted to 2,207,951 lbs.; and, in 1845, the exports to all parts amounted to 17,547,600 lbs! We sub-

join an account of the quantities of the principal articles of produce exported from the port of Buenos Ayres during the year ended the 30th of June, 1849: —

Beef, jerked	quintals	497,662	Skins, calf	dozens	1,230
— preserved	tins	1,290	— deer	bales	32
Bones		3,125,500	— —	dozens	4
—	tons	983	— goat	bales	96
Feathers	bales	49	— —	dozens	160
—	arrobas	15	— —	bundles	51
Hair	bales	3,101	— nutria	dozens	43
—	seroons	957	— sheep	bales	3,059
—	arrobas	18	— —	dozens	123
Hide cuttings	bales	4,363	— slunk calf	bales	144
Hides, ox and cow, salted		861,336	— —	dozens	417
— — dry		2,028,297	Tallow	pipes	24,919
— horse, dry		37,675	—	boxes	35,216
— — salted		103,236	—	seroons	3,506
Horns, ox and cow		1,966,791	Wool	bales	29,998
Skins, calf	bales	665	—	seroons	3,179
			—	arrobas	150

The total value of the imports amount to about 7,000,000 or 8,000,000 dollars, of which those furnished by Great Britain amounted to near a half. The imports hence chiefly consist of cotton (by far the most important article), linen, woollen and silk manufactures, hardware, cutlery, earthenware of all sorts, glass, leather, hats, &c. France supplies Buenos Ayres with jewellery, perfumery, and other articles of luxury; the imports from the U. States consist chiefly of coarse unbleached cloths, spirits, soap, sperm candles, dried and salted provisions, tobacco, furniture, and deals. The Mediterranean trade is principally in Sicilian and Spanish produce, particularly cheap wines, brandies, olive oil, maccaroni, dried fruits, and paper. Spanish goods are in little demand, though some serges, velvets, sewing silk, and snuff, are imported. The annual importation of Spanish and Sicilian wines is from 10,000 to 12,000 pipes, besides about 2,000 pipes of brandy. The *yerba maté*, or Paraguay tea, formerly an export article of some consequence, has now been nearly superseded, even in Buenos Ayres, by tea: the other Chinese imports are silks, crapes, nankeens, porcelain, and numerous minor articles. The trade with Chili and Peru is insignificant. The markets of this city are well supplied with butchers' meat and fish. Poultry is dear, a couple of fowls selling for as much as an ox. Vegetables and fruit generally are also dear; milk in quality and price is much the same as in London, and all the butter used is imported.

The inhab. of Buenos Ayres are said to be observant, intelligent, and desirous to improve. Education receives a considerable share of attention. Several years since, besides the university, a superior academy, and a military college, there were 8 public schools, for whose support the corporation contributes about 7,000 dollars annually, and 5 other schools, exclusively for the benefit of the poor, under the charge of different monasteries, and supplied with books and stationery at the public expense. It is rare to meet with a boy 10 or 12 years of age in the city who cannot read and write. There are several printing presses; and various weekly journals advocating liberal principles are published.

Buenos Ayres was founded by Don Pedro de Mendoza, in 1534, but, in consequence of the opposition of the Indians to the settlement, it was obliged to be abandoned at two subsequent periods, and was not permanently colonised till 1580, after some sharp actions with the natives. In 1620 the city was erected into a bishopric, and in 1700 contained 16,000 inhabitants. In 1776 it became the seat of the vice-royalty of La Plata; and in 1778, when the trade of the river was thrown open by Spain, its trade and consequence began rapidly to augment. In June 1806 it was taken by the British, but retaken by the Spanish in the same year. In 1810 the revolutionary movements began that ended in the emancipation of Buenos Ayres and the states of La Plata from Old Spain. The declaration of independence appeared on the 9th of July, 1816. (*Sir W. Parish's Buenos Ayres, &c.; Mod. Trav.* xxx. *Parl. Reports, &c.*)

Buenos Ayres (Republic of). *See* Plata (La), (Republic of).

BUFFALO, a city of the U. S. of America, New York cap., co. Erie, at the W. extremity of Lake Erie, where it contracts into Niagara river, 293 m. N.W. New York, and 22 m. S. Niagara falls. Pop. 1835, 15,611; 1848, 42,000. It stands partly on a low marshy tract, intersected by Buffalo creek, which forms its harbour, and partly on an elevated terrace, leading to a still higher plateau. The principal streets descend from the high ground over the terrace towards the creek and harbour, and are crossed by the others generally at right angles. According to Capt. Marryat (*Diary in America*, 1839), "Buffalo is one of the wonders of America. It is hardly to be credited that such a beautiful city should have risen up in the wilderness in so short a period. In the year 1814 it was burnt down, being then only a village; only one house was left standing, and now it is a city with 25,000 inhab. It is remarkably well built; all the houses in the principal streets are lofty and substantial, and are either of brick or granite The main street is wider, and the stores handsomer than the majority of those in New York. It has very fine churches (now 18 or 20), a handsome theatre, town-hall, and market; and 3 or 4 hotels, one of which is superior to most others in America; and to these we must add a fine stone pier, with a lighthouse, and a harbour full of shipping, and magnificent steam boats. It is almost incomprehensible that all this should have been accomplished since the year 1814. And what has occasioned this springing up of a city, in so short a time as to remind you of Aladdin's magic palace? The opening of the Erie canal, from Lake Erie to the Hudson river and New York, passing through the centre of the most populous and fertile states." The city also contains a literary and scientific academy; a lyceum, having a library and chemical apparatus; and numerous public and private schools. Several other public institutions are in course of being established: among which are an hydraulic association, Sailors' and Boatmen's Friend Society, and the university of W. New York. In 1835, 99 buildings were erected at the cost of one citizen.

Buffalo creek, formed by the confluence of several small streams, is navigable for about 8 m. A bar at its mouth has been dispersed, so as to admit vessels drawing 8 ft. water into the harbour; and a pier, 1,500 ft. in length, with a lighthouse upon it, has been carried out into the lake, to facilitate their ingress and egress. Still, however, the harbour is not accessible at all seasons, on account of the accumulation of ice brought down by the W. winds, and a ship-canal has been cut from it to the lake W. of the town, which has done a good deal to obviate this inconvenience. From its position on the best channel of intercourse between the W. regions and the Atlantic, as well as its being the only port of entry for the Niagara district, Buffalo is a place of great and increasing trade. In the city and its environs, a great variety of manufactures are carried on, including steam-engine foundries, woollen and felt factories, grist and saw mills, breweries, and other works. The value of the manufactures produced in 1835 amounted to 2,073,500 dollars, and it must now (1850) have increased to more than treble that sum The aggregate burden of the vessels belonging to the port, in the year ending the 30th September, 1838, was 9,615 tons, whereas it had increased during the year ending the 30th of June, 1848, to 42,624 tons! The city had, in 1835, 3 banks; and 6 newspapers were published, 3 of which appeared daily, and these numbers have since, no doubt, greatly increased But the shipments of wheat and flour at Buffalo show better than anything else the astonishing increase of its trade: these amounted, in 1835, to 15,935 tons; in 1840, to 95,573 do.; and in 1847, to no fewer than 380,053 do.! In 1848, the value of the imports and exports of Buffalo were estimated at 48,989,116 doll., or 9,797,823*l*.

Buffalo was an inconsiderable place previously to 1812, in which year it was made a military station. Its destruction in 1814 was effected by a party of British and Indians; but in 1817, it again contained more than 100 houses, many of which were large and elegant. In 1832 it was incorporated as the "City of Buffalo," divided into five wards, and the government vested in a mayor and common council chosen annually by the citizens. (*N. York Gazetteer*; and *Official Accounts*.)

BUFFON, a small vil. of France, dép. Côte d'Or, on the Armançon, 12 m. N. Semur. This village belonged to the illustrious author of the *Histoire Naturelle*, Georges Louis Le-Clerc, created, by Louis XV., Count de Buffon, by which name he has since been distinguished.

BUG (an. *Hypanis* or *Bogus*), a river of European Russia. It rises near Blosysko, in the S. W. corner of Volhynia, and pursues a S. E. course past Bratzlaff, Olviopol, Vosnesensk, and Nicolaeff, 25 m. below which it falls into the æstuary of the Dniepr. It is navigable from Vosnesensk. The entrance to the Bug is without the bar of the Dniepr; happily, too, it has no bar of its own, and has deep water as far as Nicolaeff.

BUGIA or **BOUJEIAH**, a sea-port town of Africa, reg. Algiers, on the declivity of a mountain, at the mouth of the Aduse, 122 m. E. Algiers. The port, which is large, is formed by a projecting neck of land, great part of which was anciently faced with stone. There is good anchorage off the town in 8 or 10 fathoms, but N. E. winds throw in a heavy sea. Previously to the French occupation, the town was protected by half ruinous walls, and by a castle on the summit of a hill, which also commanded the roadstead. The inhabs. manufacture ploughshares, mattocks, &c. of the iron obtained from the neighbouring mountains, and great quantities of oil and wax are brought down to this place by the Kabyles, for shipment. The town is built of, and stands upon, the ruins of a more considerable ancient city. It was bombarded by Sir Edward Spraggs, in 1671. (*Shaw's Barbary*, p. 43 4to. ed.)

BUGNE (LE), a town of France, dép. Dordogne, cap. cant., a little above the confluence of the Vézère with the Dordogne, 16 m. W.N.W. Sarlat. Pop. 2,437. It is advantageously situated, well built, and carries on dif-

ferent branches of the woollen manufacture. It is also the entrepôt of the wines and other products of the surrounding cantons, which are shipped thence to Bordeaux, and has a considerable trade in cattle, hogs, &c.

BUIS (LE), a town of France, dép. Drôme, cap. cant., on the Ouvèze, 10 m. S.E. Nions. Pop. 2,147. It is ill built, but has some fine promenades and a handsome square, surrounded by a double row of trees. It has some trade in wool, cloth, hats, and jewellery.

BUJALANA, a town of Spain, Andalusia, prov. Cordova, being 22 m. E. from the city of that name, and 7 m. from the Guadalquivir. Pop. 14,500. It is well built, with broad streets, has two convents for either sex, two hospitals, a college, and a foundling hospital. It has some woollen fabrics, and a large fair which commences on the 26th of August. Though its modern name be of Arabic origin, it is believed that this town occupies the site of the *Calpurnia* of the Romans; and it has various inscriptions, and other antiquities of Roman origin. (*Miñano*.)

BUKHUR, an island and fort in the Indus, 165 m. N. Hydrabad. The fort, which is constructed of brick, is about 400 yards from the left, and 350 from the right bank of the Indus. But it has no strength in its works, and is formidable only from its position. (*Burnes*, i. 256. 12mo. ed.)

BUKOWINE, a ci-devant prov. of the Austrian empire, now included in Gallicia, which see.

BULGARIA (an. *Mœsia Inferior*), a large prov. of Turkey in Europe, included in the beglerbeglik of Roumelia; lying between lat. 42° 8′ and 44° 10′ N., and long. 22° 14′ and 29° 36′ E.; having N. Wallachia and Bessarabia, W. Servia, S. Roumelia, and E. the Black Sea. Length, N.E. to S.W., about 350 m.; breadth varying from 40 to 100 m. Area, loosely estimated, from 30,000 to 34,000 sq. m. Pop. 1,800,000? The country is for the most part mountainous, and eminently so in the S., where the principal chain of the Balkhan mnts. forms its boundary: the Danube constitutes its N. limit; but excepting that river, Bulgaria possesses none of any magnitude, although sufficiently watered by small streams. Its climate is temperate, and its soil fertile and well adapted for the culture of corn, vines, the mulberry, and other fruit trees, and tobacco. There are but few marshes; the pasturages are extensive and rich, and feed numerous herds of cattle: the higher lands are often covered with forests of pine, oak, beech, &c. The Bulgarians are descended from a Slavonic horde, formerly inhabiting the banks of the Wolga, who crossed the Danube and established themselves in this country in the 7th century, and have since gradually spread themselves over a large part of the region S. of the Balkhan. The present race have laid aside the military character of their ancestors; they are a pastoral people, living in small hamlets of about 40 or 50 houses each, and occupying themselves chiefly in agriculture and cattle-breeding, with some manufactures, as those of coarse woollen cloth, rifle-barrels, morocco leather, and attar of roses. Large gardens are devoted to the culture of roses; and we are indebted to the Bulgarians for the finest and most elegant of perfumes. Dr. Walsh says that the people are kind, hospitable, and benevolent; forming a striking contrast to the "rude and brutal" Turks found amongst them. The women, who mix freely with the men, are handsome, industrious, and dress neatly: all wear trinkets; and the girls have their heads uncovered, and their hair braided and ornamented with different coins, as amongst the Albanians. The male peasantry dress in brown sheep-skin caps, jackets of undyed brown wool, which their wives spin and weave, white cloth trowsers, and sandals of raw leather, and carry no weapons of offence. They live in houses of wickerwork plastered, the interior being clean and comfortable. Their language is a dialect of the Servian. Ever since the 9th century their religion has been that of the Greek church; but they have few places of worship, and in those they have the service is performed in Greek, a tongue which they do not understand. Schools and books are equally rare with churches, and except the shop-keeper and priest of a village, scarcely any one can read or write; yet notwithstanding this gross ignorance, crimes are singularly scarce, and travellers in their country are not secure only, but experience the kindest treatment. *Sponte sua, sine lege, fidem rectumque colebant.* Bulgaria is divided into four sandjaks, viz. those of Silistria, Rustchuk, Widin, and Sophia; its chief towns are Sophia the capital, Shumla, Silistria, Rustchuk, Nikopoli, Widin, and Varna. (*Malte Brun; Walsh's Journey from Constantinople*, &c. pp. 164 to 170.)

BUNDLECUND, a large division of Hindostan, prov. Allahabad, between lat. 24° 3′ and 26° 26′ N., and long. 77° 48′ and 81° 33′ E.; having N. the Jumna; S. Berar and Malwah; E. Bogilcund; and W. Scindia's dom.: area 23,817 sq. m. Pop. (*Hamilton*, 1828) 2,400,000. The country is mountainous, and imperfectly cultivated; the mountains belong to the Vindhyan chain, and run in parallel ranges through the distr., each successively buttressing a table-land; the country is naturally very strong, every hill being a natural fortress, and often crowned by an artificial one; but the highest summit is no more than 2,000 ft. above the level of the sea. The Cane, Desan, and Betwah, are the chief rivers, but none of them is of much importance; there are several large artificial reservoirs or lakes, formed by masonry, erected across the currents of various streams for the purposes of irrigation. The soil is of every variety, from the rich black loam to the sterile conkar; the valleys and lowlands are generally of the former, and, when properly watered, yield abundant crops: the summits of the hills, although mostly rocky, are covered with small coppice-wood: the face of the country often presents detached pieces of jungle, but there are no forests, and a few scattered and stunted teak-trees form the only large timber. Bundlecund is celebrated for its diamond mines in the table-land of Pannah, where they are said to be found wherever the soil is gravelly. This soil is from 2 to 8 cubits deep, mostly very red, but elsewhere of a dark brown; it contains many small pebbles, with which the diamonds are found intermixed, but never adhering to any other stone or pebble. The workmen lift up the gravelly earth; throw it into a shallow pit filled with water; and, after washing out the earth, examine the pebbles on a board. Much time is fruitlessly lost, but a very few diamonds found in the course of the year repay the workman, since he receives ¼ the value of those above the size of a filbert, ½ the value of those as large as a pea, &c. Very few are now found worth more than 100*l*., and their profits are comparatively insignificant. The mines are the exclusive property of the rajah of Pannah; they are supposed to be identical with the Panassa of Ptolemy.

Bundlecund is now either substantially British territory, or possessed by chiefs tributary to the British, who, since 1803, have retained the internal administration of their dom., on an acknowledgment of allegiance, and the right of interference on our part. The British distr. (1832) contained 2,119,000 kucha begas in cultivation, yielding a revenue of about 300,000*l*. a year. Hindoo usages have been less affected here by foreign rule than in most other parts of India; the people generally are industrious, and obedient to the constituted authorities, though their chiefs are restless and turbulent. Their language is a dialect of the Sanscrit. They are usually possessed of but little personal property; there is little trade or capital stirring, and these circumstances, together with the bare and open character of the country, are probably the causes of *dacoity* or gang-robbery being so unusual. Atrocious crimes are rare; footpad robbery and *cozzanky*, or robbery on horseback, are the only serious offences, and these are most common on the skirts of Scindia's prov., whence small parties of Pindarries occasionally enter on ravaging excursions: burglary and theft are not common. The zemindars consider it highly disreputable to connive at such outrages, and frequently expel from their villages or estates persons of suspected character. The punchayet, or arbitration system, in the settlement of disputes, has been always very much resorted to here.

At the fall of the Delhi empire, the Mahrattas, under Ali Bahauder, possessed themselves of part of this prov., but were unable to establish their authority in the villages and hill fortresses. Bundlecund was occupied by the British troops in 1804, and erected into a magistracy under the Benares court of circuit. In 1817 that portion of it now belonging to the Bengal presid. was finally ceded by the Peishwa, to whom Ali Bahauder had been nominally subordinate. (*Hamilton's Hindostan*, i. 317—334.; *Martin's Statist. of the Colonies*, pp. 275—368.; *Reports on E. I. Affairs, and Appendixes*.)

BULSAUR, a sea-port town of Hindostan, presid. Bombay, on the Gulph of Cambay, 45 m. S.W. Surat; lat. 20° 36′ N., long. 73° 5′ E. Its trade is considerable, chiefly in grain, jaghery, and timber; its manufactures are mostly coarse ginghams and other cloths. Rice and sugar-cane are cultivated in its vicinity.

BUNGAY, a town of England, N. border, co. Suffolk, hund. Waveney, on the Wangford, 92 m. N.E. London: it consists of 2 par., having together an area of 2,090 acres, and a pop. of 3,734. Having been almost wholly destroyed by fire in 1688, it is comparatively new, well laid out, and well built. The market-place, said to be the best in the co., has two fine crosses; and the town has also a neat theatre, and assembly rooms; a free grammar-school, with two exhib. to Emanuel College, Cambridge, and several other schools; the remains of a Benedictine nunnery; some manufactures of hemp; and a considerable trade in malt, corn, coal, flour, lime, &c. Here is also the celebrated printing establishment of the Messrs. Child, which has produced many reprints, in a cheap form, of some of the principal English classics. The trade of the town is promoted by the Waveney, being navigable thence to Yarmouth. Market, Thursday; fairs, 14th May, and 25th Sep.

BUNKER'S HILL, a steep hill 110 ft. in height, Mas-

sachusetts, U. States, in the centre of the peninsula on which the town of Charlestown is built, and about 1 m. N. Boston. Here on the 17th June, 1775, was fought one of the earliest and most remarkable battles of the American revolutionary war. The provincial troops having established themselves on a portion of this height, during the night, a British force advanced to dislodge them; but though the latter ultimately effected their purpose, the resistance made by the Americans was such, that the British lost 1054 men killed and wounded, while the American loss was only 450, killed and wounded. In 1825 the erection of a granite obelisk, intended to be 220 ft. high, was commenced on the hill, in memory of the action; but in 1836 it was only one third finished.

BUNPOOR, a town or village of Beloochistan, cap. prov. Kohistan; 14 m. N. the Bushkurd mnts.; lat. 27° 47′ N., long. 60° 20′ E. It is small, and ill built; at one time it had been surrounded by a mud wall, but the whole is now gone to decay. The citadel of the chief, strong enough to resist any attacks from the Persians, is built on the summit of an extraordinary mound of earth, said by tradition to have been artificially raised by an immense army of Ghebers, who at a remote period passed this way. Pottinger says, "that if really artificial, it must have been raised with vast labour, as the earth could not have been procured nearer than the mnts." The neighbourhood of Bunpoor is desolate and impoverished, destitute of agriculture, and even of date-trees. The inhab. are the Rukhshanee Belooches, the leading tribe amongst the Nharooés; the language spoken at Bunpoor is Persian and Beloocheekee mixed. The revenues of the chief are usually farmed out, and in lieu of them he received (1810) 26,000 rupees, 140 camels, 140 matchlocks, 140 sheep or goats, 140 measures, of 160 lbs. each, of wheat, and the same of dates. (*Pottinger's Beloochistan, &c.* p. 176.)

BURDWAN (*Varthaman*, productive), a distr. of Hindostan, presid. and prov. Bengal; between lat. 22° and 24° N., and long. 87° 20′ and 88° 25′; having N. Beerbhoom, E. Nuddea, S. Hooghly, and W. the Jungle Mehals distr.; area 2,000 sq. m. Pop. (1822) 1,487,300. It is one of the most productive territories of India, and being environed by jungles N. and S., "appears like a garden surrounded by a wilderness." The uncultivated are but 1-8th part of the extent of the cultivated lands: the chief articles of produce are indigo, sugar, cotton, tobacco, and mulberry-trees. A principal part of the wealth of Burdwan consists in its coal mines: the coal-field appears to be very extensive; the coal is of good quality, and preferred to any other at Calcutta. Several mines, about 130 m. from that city, are worked by an English company, which employed, in 1831, from 2,000 to 3,000 natives in mining, and 300 or 400 boats in conveying the coal to Calcutta, the mines being on the banks of a river connected with the Hooghly. It is not sold at the pit's mouth, but delivered at about 20*s.* a chaldron in Calcutta; Singapore, Penang, Madras, and Ceylon, are also supplied hence: the wages of the miners are from 5*s.* to 8*s.* per month. Fine iron-ore is found in the neighbourhood of the coal, and a great deal of stone. Commerce has been greatly facilitated by the opening of roads to Hooghly, Culna, and Cutwa; the zemindars are opulent, and many of them reside in the capital of the presid.; the land-revenue in 1829-30 was 284,750*l.* There are few villages in which there is not a school for the rudiments of education, and there are some private endowments for the purpose; but no regular schools of Hindoo or Mohammedan law exist here: the proportion of Mohammedans to Hindoos is about 1 to 5. Burdwan became subject to the British, with the rest of Bengal, in 1760: the titular rajah enjoys, at present, but little consideration; and his zemindary is now greatly diminished from its original size. (*Hamilton's Hindostan*, i. 153—155.; *Evid. of Mr. Bracken, on Coal, &c., Reports*, 1831.)

BURDWAN, a town of Hindostan, prov. Bengal, cap. of above distr., and seat of a zillah court; 60 m. N.N.W. Calcutta; lat. 23° 15′ N., long. 87° 57′ E. Pop. about 54,000, 2-7ths of whom are Mohammedans. The Burdwan rajah has here a large palace, an English summer-house, and spacious gardens, &c.

BURFORD, a par. and town of England, co. Oxford, hund. Bampton; 63 m. W.N.W. London. Pop., 1821, 1,686; 1831, 1,866; houses, 385; area, 2,170 acres. It is pleasantly situated by the small river Windrush, but is very indifferently built. The church is partly in the Norman, partly in the later Gothic style, and has a very fine spire, surmounting a tower. The Baptists, Friends, and Wesleyans, have chapels. There are almshouses for 16 poor widows; a free school, with an endowment producing 84*l.* a year, held in the town-hall, where, till 1636, the co. assizes were held. There is a weekly market on Saturday and fairs held the last Saturday in April, and July 5th, for live stock and cheese. Saddlery was once a considerable branch of manufacture: there was also a large traffic in wool and corn; both have greatly declined; and the property of the town has been still further depreciated by the alteration in the line of road from Oxford to Cheltenham, which previously passed through and now avoids it. Edgehill, where Fairfax beat the royalists, is in the neighbourhood. The celebrated Wilmot, Earl of Rochester, was educated in its school. It gives the title of earl to the Duke of St. Albans.

BURG, a town of the Prussian states, prov. Saxony, reg. Magdeburg, on the Ille, 13 m. N.E. Magdeburg. Pop. 13,500. It is walled, has 3 gates, 4 reformed churches, a grammar school, an hospital, a workhouse, &c. It is also the seat of a provincial council, a board of revenue, a district court of justice, &c. A very extensive woollen manufacture is carried on, and it has some dyeing establishments and snuff factories.

BURGOS, a city of Spain, cap. prov. same name, on the Arlançon, and on the high road from Madrid to Bayonne, at the foot of a mountain. 134 m. N. Madrid, 59 m. S.W. Vittoria; lat. 42° 21′ N., long. 3° 38′ W. Pop. 12,000. It is of an irregular shape; streets clean, and handsome, particularly that leading to the cathedral, but it has a deserted impoverished appearance. It has a modern square, surrounded with a portico, supported by large columns, with houses upon a uniform plan, but small and mean. It is only, in fact, worth mentioning from its bronze statue of Charles III., almost the only one of the sort in Spain; though, according to Bourgoing, it is ill designed and executed. The cathedral, a well preserved chef-d'œuvre of Gothic elegance, is about 300 ft. in length, by above 250 in width. Its exterior is inferior to none in Spain; but the interior, though remarkable for the beauty of its workmanship, is inferior to the cathedrals of Toledo and Seville. Having been the cradle of the two most renowned captains of Spain, Ferdinand Gonzales, and the Cid Campeador, Burgos contains a triumphal arch in memory of the former, and a monument to the latter. There are three fine stone bridges over the Arlançon, in the space of half a league. Two of them communicate with the suburb of the city, on the opposite bank, called Vega, and the third, with the royal hospital, remarkable for its cleanliness and salubrity. There are some fine meadows on the banks of the river, and there also is the famous convent of Las Huelgas, whose abbess possessed almost royal privileges. Close to the city is the monastery of Miraflores, where John II. and his queen have magnificent tombs, and where also there are, or were, some paintings remarkable for their colouring. There are three military roads from Burgos, one to Oviedo and Gijon, another to Agreda, and a third to Santaña. The approaches to, and promenades of, the town are well ornamented with trees; but though it be one of the coldest parts of Spain, fuel is scarce and dear. Miñano mentions an hospital for deserted children, and four other hospitals, exclusive of that already specified. Formerly the greater part of the wool exported from Spain used to pass through Burgos, and it still has some manufactures of leather, woollens, and hats, and two *lavaderas*, or washing pools for wool.

La Borde contends, notwithstanding what has been affirmed to the contrary, that Burgos did not exist in the time of the Romans, from its not being mentioned by Ptolemy nor any other ancient geographer; its want of any ancient monuments, and its being insulated and out of the line of the ancient military road. He maintains that its foundation cannot be carried farther back than the reign of Alphonso I., and that it was Alphonso III. who ordered the castle to be built. It was formerly the residence of the counts of Castile, and many of the Castilian kings, and was then celebrated for its wealth and prosperity, and for its woollen manufactures and fairs. But it has since greatly declined: it suffered much during the late contest with France, and still more in the present civil war. (*Miñano; Bourgoing, Tableau de l'Espagne*, 37; *De la Borde*, ii.; *Inglis*, i. 40.)

BURGUNDY, one of the old French provinces, now distributed among the depts. of Côte-d'Or, Saone et Loire, Yonne, Nièvre, Aube, Haute Marne, and Ain.

BURHAMPORE. *See* BOORHAMPOOR.

BURLINGTON, a town of the U. S. of America, Vermont cap., co. Chittenden, on a bay of the same name, a short distance S. of the entrance of the Onion river into Lake Champlain, 36 m. W.N.W. Montpellier, and 100 m. S. Montreal. Lat. 44° 28′ N.; long. 73° 15′ W. Pop. 3,525. It is the chief commercial town of the State, and has a considerable trade with N. York. It contains a court-house, jail, bank, academy, and various places of public worship. The University of Vermont, established in 1791, is situated on an elevated spot E. of the town, and 1 m. from the lake. It was partly destroyed by fire in 1824; but has been rebuilt, and consists of three brick edifices, containing a chapel, 46 rooms for the students, a philosophical apparatus, and a library of above 6,000 vols. Its funds are chiefly derived from landed endowments. Students in 1838, 105.

BURNHAM, a par. and village of England, co. Bucks,

hund. Burnham; 30 m. E. London. Pop., 1821, 1,918; 1831, 2,137; houses, 393; area, 4,110 acres. The village is a short distance from the Thames: its church is an ancient structure; and there is a national school. Fairs are held Feb. 23, May 1, and Oct. 2. Its ancient market has been long discontinued. The ann. val. of prop. in 1815 was 10,361*l.* Its poor-rates average 1,167*l.* It is a place of great antiquity. The moated site of a palace of the kings of Mercia is still traceable. A nunnery, founded 1165, existed till the general suppression.

BURNLEY, a market town of England, Lancashire, hund. Blackburn, par. Whalley, on the Burn, 180 m. N.W. by N. London, 30 m. S.E. by S. Lancaster, and 21 m. N. Manchester. Pop., in 1821, 6,378; 1831, 7,551; 1841, 10,699. Its name is derived from the river Burn or Brun, on which it is situated, which unites with the Calder immediately below the town. It stands in the middle of a narrow valley, and has been greatly improved and enlarged within the last 20 years. It is mostly built of freestone, and is well paved, lighted, and abundantly supplied with water. St. Peter's parochial chapel, built shortly after the Conquest, has been replaced by a more recent structure, built at different periods. It has in it the burial-place of the Towneley family, where, among other monuments, one has been erected to the memory of Charles Towneley, Esq., whose fine collection of marbles is now in the British Museum. The Independents, Baptists, Wesleyan and Primitive Methodists, and Rom. Catholics have places of worship. A grammar-school was founded in 1578, to which the sons of tradesmen and others in the lower walks of life are admitted on paying a fee of 2*l.* 2*s.* a year, the fee paid by the sons of the higher classes being 3*l.* 3*s.* There are several other schools, and sundry charitable endowments and institutions. Numerous county magistrates reside in the neighbourhood; 2 or more of whom usually attend the petty sessions which are held here every Monday. The town is a station for receiving votes at the election of members for the N. division of the co. The woollen manufacture, which was once carried on extensively, and which still exists here, has been nearly superseded by that of cotton, which is carried on upon a great scale in the town and neighbourhood. There were in the town and on its bounding streams, in 1835, 17 cotton mills, mostly wrought by steam, and employing 2,040 work-people; and since then the trade and pop. of the town have greatly increased; the latter is now (1850) estimated at above 12,000. The articles produced are principally common printed calicoes. There are also extensive bleaching and printing works, with iron and brass foundries, machine manufactories, breweries, tanneries, rope-walks, &c. The town is mainly indebted for its rapid growth and progress in manufactures to the abundance and cheapness of the coal found in its immediate vicinity, or rather directly below it; for here, as at Whitehaven and some other places, parts of the town have sunk, from the roof of the coal mines not being properly supported. It is also well supplied with freestone, slate, &c. It has an easy communication with the surrounding districts by means of the Liverpool and Leeds canal, by which it is nearly encircled. Markets are held on Monday for corn, and on Saturday for general purposes: fairs on March 6, Easter eve, May 9 and 13, July 10, and Oct. 11; also for cattle on alternate Mondays, for woollens on the second Thursday in July, and for horses on the third Thursday in Oct. A branch of the Commercial Bank of England, and the banking-house of Birbecks, Alcock and Co., are established here. (*Baines's Lancashire, &c.*)

BURNTISLAND, a royal burgh and sea-port town of Scotland, co. Fife, on the N. shore of the Frith of Forth, 5¼ m. N. Granton. Pop. (1841) 1,859. It is a dull, but a clean and well-built town, having a main street running nearly at right angles with the harbour, and some subordinate streets. It has a town-house, a parish church, a Presbyterian dissenting chapel, and a good school-house. Its harbour, though the best on the N. side of the Forth, nearly dries at low water; but this serious defect has been to a considerable extent obviated by the extension of the piers into deep water, so that railway passengers and others arrive and depart at any time of the tide. A considerable number of boats were formerly employed in the herring-fishery; but this branch of industry has greatly declined. It used to be exclusively carried on in the Frith of Forth during the winter season. That department is now, however, wholly abandoned; and the few boats sent out by the Burntisland curers are employed, in summer only, at Fraserburgh, or Wick. Burntisland has been of late a good deal resorted to in summer by sea bathers. It has long formed one of the principal stations for the landing and embarkation of passengers crossing the Frith of Forth. And its importance in this respect has been vastly increased since the opening of the Edinburgh and Northern railway, which unites the town with Perth, Dundee, Dunfermline, &c. The passage across the Frith to Granton Pier is performed in about ½ hour. In the vicinity of the town is a large distillery. Burntisland unites with Kinghorn, Dysart, and Kirkaldy, in sending a mem. to the H. of C., and had, in 1849-50, 56 registered electors. (*New Statist. Account of Scotland*, art. *Burntisland, &c.*)

In 1601, the General Assembly met at Burntisland, when James V. renewed his vows as a covenanter. It is a curious fact that the existing quays were built by Cromwell.

BURSA, BRUSA, or PRUSA (an. *Prusa ad Olympum*), a famous city of Turkey in Asia, Natolia, cap. Sanjiack, 62 m. S. Constantinople, lat. 40° 9′ 30″ N., long. 29° 4′ 45″ E. Pop. estimated at 40,000 by Kinneir, and at 100,000 by Fontanier; but probably about 60,000. It is beautifully situated, at the extremity of a fertile, well-watered and well-wooded plain, on the lower acclivities of Mount Olympus. Including the suburbs, which are more extensive than the city properly so called, it extends 2 m. from E. to W. and ½ m. from N. to S. (*Turner.*) It is not well built; the houses being principally of wood, on the model of those of Constantinople: it is very subject to fires; and the streets are, for the most part, narrow. Tournefort says, that the latter are *bien pavé et propre, surtout dans le quartier du bazaar;* whereas, according to Mr. Turner, who visited the town in 1815, "*all* the streets are badly paved, and most of them narrow and dirty." No doubt, however, this is one of the cleanest of the cities of Turkey; for a great number of streams that have their source in the upper parts of the mountain flow down several of the streets, and supply almost every house with a fountain. The castle, on a perpendicular rock near the centre of the town, most probably occupies the site of the acropolis of the ancient Prusa. Within its walls is a mosque, formerly a Greek church, in which are the tombs of Sultan Orchan, his wife, and children. The chief ornaments of the city are its mosques, which are exceedingly numerous. The most magnificent are those of the sultans Achmet and Osman, and the Oolah, or great mosque, in the centre of the city. The warm baths of Brusa are famous all over the East: the principal is that of Kaplutcha Hamman, about 1½ m. N.W. from the city. The heat of the water, which is slightly impregnated with sulphur, does not exceed 100° Fah. The water is received into a fine building, where there is every accommodation for bathers of both sexes. The *bezestein*, a large building with shops and warehouses, and the bazars, which are extensive, are well supplied with merchandise, particularly with raw silk and silk stuffs. Great quantities of silk are produced in the adjacent plains; and very excellent silk and silk and cotton stuffs are manufactured in the city, and furnish, with raw silk, carpets, and velvets, the principal articles of export. The khans and colleges, or medresses, of Brusa are numerous; and may vie with those of any other city of the Ottoman dominions. On the whole, considering the fertility of the surrounding country, the beauty of the situation, and its comparative cleanness, it is one of the most agreeable of Turkish cities. Here, indeed, it is, and at Damascus (if any where), that the destroying frenzy of the race of Othman seems to have been arrested in its career; and its menaces successfully defied by the productive powers of indulgent nature." (*Browne.*)

Prusa was founded by Prusias, the protector of Hannibal, and was long the cap. of Bithynia. We hear little of it after it came into the possession of the Romans, though it was always famous for its baths, and admired for the beauty of its situation. It was one of the most considerable cities of the Greek empire. It was taken by Orchan, son of Othman, the founder of the Othman dynasty, in 1356, and became the seat of the Turkish power and the ordinary residence of the sultans till Amurath removed the seat of government to Adrianople. (*Tournefort*, letter 21.; *Kinneir's Asia Minor, &c.*, p. 245.; *Walpole's Trav. in various Countries*, ii. 169, &c.; *Turner's Levant*, iii. 163, &c.)

BURSLEM, a market town and par. of England, co. Stafford, N. division of Pirehill hund. 2¼ m. N.W. Newcastle-under-Line, 19 N. Stafford. Pop (1841) town 12,631, par. 16,091. It stands on a gentle eminence, near the Trent and Mersey canal, and is the principal town in that important district called the Potteries, the principal seat of the earthenware manufacture. It contains many well arranged manufactories, neat and convenient dwelling-houses for the workmen and over-lookers or superintendants of works, and some handsome houses for the proprietors. Its principal buildings are, a neat market-house or town-hall, an edifice of modern erection nearly in the centre of the town, one part of which is used as a police office, and another as a news-room, which is well supplied with metropolitan and provincial papers; the old church, dedicated to St. Peter, built of brick, with a stone tower of much greater antiquity than the body; and a new district church, a handsome edifice, erected in 1828, under the authority of the commissioners for building churches. Burslem was originally a chapelry in the parish of Stoke, but was formed into a separate parish by act of parliament, in 1807. It is lighted with gas, and has a police force under the pro-

visions of a local act. The living is a curacy in the archdeaconry of Stafford. There are places of worship for Baptists, Independents, Primitive, Wesleyan, and New Connection Methodists, and Roman Catholics, all of which, as well as the churches, have Sunday-schools attached to them. There is also a national school, and a free grammar-school for a limited number of boys. In 1835 there were here in all 37 day and 11 Sunday schools. At a very early period Burslem was distinguished for its clay, and for its manufacture of earthenware and pottery, for which, in the 17th century, it was the principal place in the kingdom. The greater part of the inhabitants are engaged in the potteries, and in the earthenware manufacture, which has been brought to a state of beauty and excellence nearly approaching that of China. In Domesday Book this town is written Barcardeslim. The market days are Monday and Saturday. Fairs for cattle and horses are held in Feb., April, June, October, and December.

BURTON-ON-TRENT, a market town and par. of England, partly in the N. division of Offlow hund., co. Stafford, and partly in the hund. of Repton and Gresley, co. Derby. Pop. (1841) 8,136, of which were resident in the town 6,056. The town, situated in a fertile vale on the N. bank of the Trent, 12 m. N.E. Lichfield, 22 m. E. Stafford, 125 m. N.N.W. London, consists chiefly of one long street running from the place where the abbey stood to the bridge, and of another intersecting it at right angles. Of late it has been considerably improved, and is now paved and lighted with gas. The town-hall, erected at the expense of the Marquis of Anglesea (the lord of the manor), who owns the greater part of the property in the neighbourhood, is a handsome building, and contains, in addition to the usual offices for transacting public business, an elegant suite of assembly-rooms. The old church, dedicated to St. Mary and St. Modwen, formerly connected by a cloister with the abbey founded in 1004, was rebuilt in 1722. The new church, erected in 1823 in the Gothic style, is a handsome edifice. But the most celebrated structure of the town is the ancient bridge over the river, erected prior to the Conquest, and substantially repaired in the reign of Henry II. It has 37 arches, and is 1,545 ft. in length, being considered the longest bridge in England. The government of the town is vested in a high and low steward, and a bailiff, appointed by the lord of the manor. The bailiff is also justice of peace and coroner. A court leet and a court baron are held annually, as also two probate courts for proving wills. There is likewise a court called the "Genter's Court," held every third Friday before the steward or his deputy, for the recovery of debts not exceeding 40s., the jurisdiction of which extends over the whole parish. The power to try and to execute criminals, and to hold courts of pleas to any amount, was formerly enjoyed by the town, but has long since ceased. The inhabitants, by virtue of the letters patent granted in the 11th of Henry VIII., are exempted from serving the office of sheriff, and from being summoned as jurors at the assizes and sessions for the co. There are various places of worship for Independents, Wesleyan Methodists, and General and Particular Baptists. There are also Sunday-schools attached to the different churches and chapels; a national school, and a free grammar-school, founded and endowed in 1520 by the then abbot, William Beane. In 1835 there were in all 19 day and 6 Sunday schools. There is also a literary institution, entitled "The Burton Permanent Subscription Library;" an almshouse for 11 poor women; a dispensary; and a savings bank. Considerable estates for charitable and other purposes are vested in trustees. In the time of Leland, Burton was famous for its alabaster works, but how long they were continued is not known. The principal manufacture carried on at present is that of its justly famous ale. Contrary to general usage, the brewers prefer in its preparation hard water to soft; and though the Trent runs close by, they use that water only which they obtain from their pumps. It has also fabrics of hats, cotton, tammies, and light woollen stuffs; with iron furnaces and manufactories of tools; two or three rope-walks, tanneries, a cotton factory, &c. The Trent and Mersey canal (or Grand Trunk) passes Burton, and unites with the Trent about 1 m. lower down; and the Trent itself, which falls into the Humber, is navigable for vessels of some burden from Gainsbro' up to the town; so that, by means of the facilities thus afforded and otherwise, the town can easily communicate with almost all parts of England. The old abbey, a once magnificent pile, of which now scarcely a vestige remains, enjoyed many privileges: the abbots occasionally sat in parliament. Burton suffered greatly during the civil commotions in the reign of Charles I., and was several times taken and retaken by the contending parties. The market-day is Thursday. There are 4 annual fairs, one of which lasts 15 days. The 6 days before Oct. 29 are for horses; the others are for cattle, horses, and pedlary; a cheese fair has also recently been opened.

BURTSCHEID, or BORCETTE, a town of the Prussian states, prov. Rhine, reg. Aix-la-Chapelle, of which city it is almost a suburb. Pop. 5,200. It has broad streets, good houses and promenades. There are here important manufactures of cloth, cassimeres, and needles. The last, which is conducted on a large scale, and with great success (employing, with the needle manufacture in Aix-la-Chapelle, nearly 1,000 work-people), is principally carried on by Protestants driven from Aix-la-Chapelle. It has several hot springs; they, however, differ essentially from the springs of the neighbouring city, and resemble those of Wiesbaden. (*Schreiber; Murray's Hand Book.*)

BURY, a par., parl. bor., and town of England, co. Lancaster, div. Bolton, hunds. Salford and Blackburn. The town is situated on the left bank of the Irwell, 2 m. above its confluence with the Roch; 8 m. N.N.W. Manchester. The townships of Bury and Elton, included in the parl. borough, comprise an area of 4,360 acres; and had, in 1821, 13,480; and, in 1841, 25,912 inhab. The general appearance of the town has been greatly improved of late years, by widening the streets and approaches, and the erection of handsome modern structures. The church is a large handsome structure, rebuilt in 1773; besides this, there are 5 episcopal chapels in the parish, and about 20 dissenting places of worship; 1 of the former, and 7 of the latter, being in the town. There is a free-school, founded in 1726, the present income of which is 442*l*.: it has 2 exhibitions, either to St. John's Coll., Cambridge, or Brazennose Coll., Oxford: 75 scholars are educated, ½ in classics, under the head master; the rest in accounts, &c., under the second master; and 10 girls, under a mistress. Another school, founded in 1748, for 80 boys and 30 girls, has been changed to a national school, and a spacious school-room has been built for it. Here is, also, a dispensary, a public library, a mechanics' institute, several public news-rooms, and a horticultural society; all established within a recent period. The weekly market is held on Saturday; and three annual fairs on March 5, May 3, Sept. 18. The manufactures are annually increasing in amount and value. The principal branches consist of cotton and woollen spinning and weaving, both by hand and power-looms; with calico-printing, bleaching, and machine-making. Within a recent period, additional reservoirs have been formed on the banks of the Irwell, and the advantages of the numerous mountain-streams that feed it have been greatly extended. In 1836, there were in the parish 82 cotton-mills, and 15 woollen-mills, employing altogether 61 steam-engines, with an aggregate power of 1,205 horses, and 99 water-wheels, with the power of 977 horses. There were, at the same time, 2,067 power-looms, employed in weaving calico; 6,954 in weaving fustian; and 280 in weaving woollen goods. There were in all 8,195 hands then employed in these manufactories, independently of those employed in other factories, coal-mines, &c.; the last employ between 600 and 700 hands. Bury communicates both by canals and railways with Manchester, Bolton, and other towns in the vicinity, and, consequently also, with those at a greater distance. She is the head of a poor-law union, comprising 12 parishes and townships. Her own poor-rates amounted, in 1847, to 4,834*l*., assessed upon property of the estimated annual value of 62,665*l*. A joint stock banking company, and a private bank, are established in the town; and the deposits in the savings bank amounted, in Nov. 1848, to 60,520*l*. Three courts-leet for the manor are held annually, in April, Whitsuntide, and Oct.: their jurisdiction is co-extensive with the parish. A county court is established in the town, before which 1779 plaints were entered in 1848. The Reform Act conferred on Bury the privilege of returning 1 mem. to the H. of C. It had, in 1850, 897 registered electors, being all 10*l*. householders.

The parish of Bury extends over 22,600 acres; and had, in 1841, a pop. of 62,145. Besides that of Bury, it comprises 4 townships, and 3 chapelries. The greater part is a stiff loam, varying in fertility; a small portion only is under the plough. It contains good quarries of building stone, and those of Horncliff produce excellent flags and slates. There are 9 coal-mines wrought, so that the factories and inhab. have an abundant supply of fuel within the limits of their own parish. The first distinct notice that occurs of the manufactures of Bury is in Leland's Itinerary, in the reign of Henry VIII.; they were then exclusively of woollen, which is still carried on to some extent. In 1738, John Kay, a native of Bury (though at the time residing in Colchester) invented the fly shuttle; and in 1760 Robert, a son of the former, the drop-box, by which patterns of various colours are woven nearly with the same facility as plain calico; the setting of cards by machinery also originated in the same family, and in Bury. In 1791, Henry Whitehead, the postmaster of Bury, suggested the mode of piecing the ends of broken yarns, in spinning, without stopping the machinery, as had previously been necessary. But the circumstance which chiefly contributed to bring Bury into repute, as the seat

of any peculiar branch of the cotton manufacture was the establishment of large print-works by a firm, of which the late Sir Robert Peel, Bart., was at the head: the perfection to which calico-printing was there brought, not only enriched the parties, but added largely to the wealth and importance of the town. This establishment, with its numerous workshops, warehouses, and dwellings, is still in full activity; as are also the large manufactories of the same company on other streams, notwithstanding the many changes that have taken place in their ownership. The Right Hon. Sir Robert Peel, the present distinguished parliamentary leader, was born at Chamber Hall, in the immediate vicinity of the town. (*Baines's Hist. Lancashire; Parl. Papers and Reports.*)

BURY ST. EDMUND'S, a parl. bor. and town of England, co Suffolk, hund. Thingoe, 60 m. N.E. by N. London. Pop., in 1821, 9,999; in 1841, 12,538: houses at latter date, 2,519. It is finely situated on a gentle eminence, on the W. side of the Larke, amidst a richly cultivated, diluvial district. Streets broad, well paved, and lighted; houses mostly uniform, and well built, and the whole town has a cheerful, neat appearance. St. Mary's church (finished in 1433) is a fine Gothic structure, with a low Norman tower. St. James's church, finished after the Reformation, is a handsome building. Its belfry, at some little distance, was originally the grand entrance into the burial-ground of the old monastery: it is of a quadrangular shape, 80 feet in height, remarkable for strength and simplicity, and forms one of the finest extant relics of Saxon architecture. There are 2 Independent chapels; and the Catholics, Friends, Baptists, Methodists, and Unitarians, have each a place of worship. There is an ancient guildhall, in which the bor. courts are held; a shire-hall for the assize courts; a county gaol on a radiating plan, built in 1805; and a bridewell (an ancient Norman building). The free grammar-school (founded by Edward VI.) has 6 exhib. to either of the universities, a scholarship in Corpus Christi, and another in Jesus College, Cambridge; it educates 100 boys, and holds a highly respectable station amongst English schools. It has also a charity school for 40 boys; 2 others where 50 girls are clothed and instructed; and national, Lancastrian, and other schools. There are 98 almshouses, endowed by various benefactors, and under the management of trustees, who have about 2,000*l.* a year in their hands for various charitable purposes. Clapton's Hospital (whose annual revenue is 300*l.*) supports 6 widowers and 6 widows, decayed housekeepers; the General Hospital (established in 1825) accommodates 40 patients. Here is also a theatre, built in 1819, with concert, assembly, and billiard rooms; a good subscription library, a mechanics' institute, and botanical gardens, supported by subscription. Weekly markets are held, one on Wednesdays for corn, the other on Saturdays for general provisions. Annual fairs are held on Easter Tuesday; St. Matthew's day, a pleasure fair which used to be attended by all the surrounding nobility and gentry; a fair Oct. 1., for horses, cattle, butter, and cheese; a great fair, commencing Oct. 10., and lasting about 3 weeks; and Dec. 1. About a mile from the town the Larke becomes navigable to Lynn for barges, whence coals and other commodities are brought. Spinning yarn was formerly a great source of employment to the poor of the town, but at present it has no manufactures. Deposits in savings bank 20 Nov. 1848, 74,158*l.*

The bor. is co-extensive with the 2 parishes of St. James and St. Mary, the area being 3,040 acres; it is divided into 2 wards, and governed by a mayor, 3 aldermen, and 18 councillors. Petty sessions for the bor. are held every Thursday; and courts of general sessions, thrice a year, in Feb. June, and Nov. A county court is established here, before which 992 plaints were entered in 1848. The quarter sessions, and assizes for the co. are also held in the town. The property of the corp. consists of lands and houses in the bor., the livings and tithes of both parishes, and the tolls of the markets and fairs. Burgh rev. in 1848, 3,131*l.*; a fee-farm rent is paid the crown, and a stipend of 130*l.* to each of the church ministers. The poor-rates for the year ending Lady-day, 1847, amounted to 4,986*l.*, assessed upon property of the annual value of 47,023*l.* The bor. has returned 2 mem. to the H. of C since the 12th of James I.; previously to the Reform Act, the right of election was in an alderman and 36 burgesses; the former had a casting vote, and was returning officer; it was, in fact, a nomination bor., in the hands of 2 peers of opposite political principles. It had, in 1849-50, 765 registered electors, mostly occupiers of 10*l.* houses. Two weekly newspapers are published in the town.

A monastery was founded here in 633, to which, in 903, the body of St. Edmund, the Saxon king, was transferred: hence the name. Canute expelled the secular monks, and transferred thither a convent of Benedictines, from Norfolk; his, and other subsequent endowments, made this abbey inferior only to that of Glastonbury; it possessed the franchises of many separate hunds., and the right of coinage; its abbot sat in parliament, and had power to inflict capital punishment, and determine all civil suits within the liberty. The abbey gateway and bridge, and portions of the walls, still remain; its ann. value, in 26 Hen. VIII., was (according to Dugdale) 1,659*l.* (Speed) 2,336*l.* 18*s.* There were a few other establishments, of minor importance, in the town previous to the general suppression.

Sir Nicholas Bacon, bishops Gardiner and Prettyman, and Dr. Blomfield (the present Bishop of London), were born in the town. It confers the title of viscount on the Keppel family. Ickworth, the magnificent seat of the Marquis of Bristol, is within about 3 m. of the town.

BUSACO, a convent of Portugal, prov. Beira, on the ridge called the Sierra Busaco, 17 m. N. by E. Coimbra. Here, on the 27th September, 1810, a French army of 65,000 men under Marshal Massena, were repulsed with great loss in an attack on the position occupied by the Anglo-Portuguese army, about 40,000 strong, under the Duke of Wellington. But, though unable to force this position, Massena succeeded in turning it, when the allies retreated upon the lines at Torres Vedras.

BUSHIRE (more properly ABOUSHEHR, or ABU SHAHR, Arab. *the father of cities*), a sea-port town of Persia, prov. Fars, and, excepting Bussorah, the principal port of the Persian Gulph, on the N.E. coast of which it is situated; 120 m. W.S.W. Shiraz, and 255 m. S. by W. Ispahan; lat. 29° N., long. 50° 48′ E. Pop. uncertain, and variously estimated at from 8,000 to 15,000. It is built at the N. extremity of a low sandy peninsula, about 11 m. in length, by 4 m. in breadth at its widest part, on its E. side enclosing a deep bay or harbour. The town is thus surrounded on all sides by water, except towards the S. where a mud wall (useless as a fortification), about ¾ m. in length, has been built across the isthmus between the bay and the sea. Viewed from the sea, it has rather a handsome appearance. It is, however, a mean wretched place, without bustle or movement of any kind. The whole number of dwellings are said not to exceed 1,500, of which a third, at least, are reed enclosures, scarcely deserving even the name of huts, as most of them are unroofed. The houses are built chiefly of a friable stone, composed of sand and shells imbedded in clay, and the best of them are constructed of burnt bricks brought from Bussorah; but excepting the E. I. Company's factory, the residence of the governor, and a few good dwellings of the merchants, there is scarcely one comfortable, and certainly not one handsome, edifice in the place. Some of the principal houses have *baudgeers*, that is, wind-catchers, or spires of a square form, open at each side; and which, acting as a funnel, and admitting the air from every quarter, ventilate and cool the houses. The streets are so many narrow unpaved alleys, without order or regularity, or sufficient height of wall on either side to shelter the passenger from the sun. The mosques are all open buildings, and inferior to those seen in the smallest villages of Arabia; there are but few coffee-houses, and the solitary bath is small, filthy, and badly attended. Water is excessively bad; that fit for drinking having to be brought in goat-skins a distance of 16 m. In dry and windy weather, the dust and flies constitute an almost intolerable nuisance. On the S.W. side of the town, facing the outer road, the beach, which is level and sandy, is beat by an almost constant surf, though not so violently as to prevent the landing of boats in moderate weather. The N.E. side, facing the inner harbour, has a wharf or two for landing goods, and is better sheltered. Owing to the numerous sand-banks, the inner harbour is not always easily accessible even for boats; but it is always preferred as the safest and best landing-place. Ships of more than 300 tons burden lie in the outer roads 6 m. from the town, where there is good anchorage, subject, however, to all the fury of violent N.W. and S.W. winds, which are very prevalent, often obliging ships to part their cables and bear up for Karak, or elsewhere. Ships of 300 tons burden may anchor in the inner roads to the N. of the town, but still 6 m. distant. By reason of a bar, the inner harbour is only accessible, at high water springs, to ships drawing 18 ft., and at other times to vessels drawing 8 or 9 ft. The water immediately to the E. of Bushire is deep; and it appears from the older descriptions of the place, that the company's cruisers were formerly able to anchor close up to the N.E. side of the town; but the channel leading up to this will now scarcely admit of small dows, except they be lightened. Some islands in the N.E. part of the bay give sufficient shelter to native boats and other small craft.

Bushire is the principal entrepôt for the supply of Persia with Indian goods. It has a considerable trade with Bombay and Calcutta, especially the former; and through them receives most of the goods brought to it from Europe, China, and the E. Archipelago. Few ships touch at Bushire without also touching at Bussorah,

and conversely. The imports from Bengal are rice, sugar, indigo, pepper, and spices, with a small assortment of muslin and piece-goods. From Bombay are brought iron, steel, tin, lead, woollen cloths, cutlery, &c., with sugar, sugar-candy, preserved ginger, porcelain, &c., the produce of China, and cassia, cloves, nutmegs, and other productions of the E. Archipelago. The demand for English cotton prints is said to be increasing in Persia, while that for the fabrics of Germany and Switzerland is diminishing. Coffee is supplied from Mocha and other Arabian ports, but to no great amount, as it is not in very general use in Persia. The returns to India are mostly in horses for cavalry service, dates, and dried fruits, assafœtida, carpets, Cashmere, and Kerman shawls, Kerman wool, tobacco, old copper, turquoises, attar of roses, rosewater, &c., but chiefly in money. The other exports of Bushire are raw silk and silk goods, Shiraz wine, grain, gall-nuts, pearls, yellow-dye berries, and various drugs. The Russian provinces on the Caspian derive their supplies of indigo from Persia, by way of Bushire. The trade of the port is crippled by the imposts laid on goods passing to the capital, and the unjust and injudicious appropriation of goods on the part of the government. Formerly it was much injured by the pirates; but, thanks to British interference, these are now all but suppressed.

The merchants of Bushire are about equally divided between Persians and Armenians; the latter are the more active, intelligent, and wealthy. There are no Jews of any note, as at Bussorah; nor Banians, as at Muscat. The E. I. Company has a resident here. The pop. generally is a mixture of the Persian and Arab races. (*Niebuhr; Kinneir's Memoir; Buckingham's Travels; Dict. of Commerce.*)

BUSSORAH, called also BALSORA, BASRA, and BUSSRA (Arab. *a margin*), a city of Turkey in Asia, pash. Bagdad, the most E. place of note in the Turkish dom., and the principal port of the Persian Gulph, on the right or S.W. bank of the Euphrates, or, as it is here called, the Shat-ul-Arab (*river of the Arabs*), 70 m. from its mouth, and 45 m. below its junction with the Tigris, 270 m. S.E. Bagdad, and 220 m. W.N.W. Bushire: lat. 30° 29′ 30″ N., long. 47° 34′ 15″ E. Pop. probably 60,000.* The form of this city is an irregular oblong, lying E.N.E. to W.S.W., or at right angles with the course of the river, from which it is a few hundred yards distant. Length about 3 m., breadth opposite the river about 1 m.; circuit estimated at from 7 to 9 m. The space actually occupied by buildings does not, however, comprise above a fourth part of this area, the rest being laid out in cornfields, rice-grounds, date-groves, and gardens, intersected by a number of little canals. Bussorah is surrounded by walls, built of sun-dried bricks, with a parapet at the top, having loopholes for musketry, and occasional ports for cannon, but of these very few are mounted: it has five gates, and is divided into 70 *mahalle*, or quarters. Two canals, cut from the river, surround the city on either side, within a few yards of the walls, and uniting beyond the W. wall, form a complete ditch to the fortifications. A third canal leaves the river nearly midway between the other two, and is carried through the whole length of the city, serving at once to supply the inhab. with water for domestic purposes, to irrigate the fields and gardens within the walls, and to admit of the transportation of goods. These canals are filled by the flood, which usually rises 9 ft., and left nearly dry at ebb-tide. They are mere channels dug out of the soil, without being lined by masonry; and the few brick-built bridges thrown over them in different parts of the city are of the meanest kind. Bussorah is wretchedly built; the streets are narrow and unpaved; and, notwithstanding the facilities afforded by the ebb and flow of the tide in the canals for the removal of impurities, it is most disgustingly filthy. No stone of any kind, and scarcely any wood, excepting that of the date-tree, which is very unfit for carpentry, are found within many miles of the city, which is mostly constructed of sun-dried bricks. The English factory, the *serai* of the *Mutesellim* (residence of the governor), one or two of the principal mosques, and perhaps half a dozen mansions of the richest inhab., are the only buildings of kiln-dried bricks, and in fact, the only decent edifices in the place. There are about 40 mosques, innumerable *khans* and coffee-houses, and a wretched bath: the bazars, though stocked with the richest merchandise, are not arched, as in Bagdad and other Persian cities; but are miserable structures, covered only by mats laid on rafters of date-trees. Bussorah is a place of considerable trade, being the grand emporium of the Turkish empire for Indian and other eastern produce. Its situation is, in this respect, so favourable, that notwithstanding the obstacles arising from bad government and unsafe access, both by land and sea, it continues to command a considerable traffic; almost every inhab. being in some way or other concerned in trade. At the mouth of the Shat-ul-Arab there is a bar which has commonly only about 12 ft. water; but the channel within is deep, and ships of 500 tons burden, provided they cross the bar at spring tides, may, without difficulty, ascend the river as far as the city. At an average, 5 or 6 British ships arrive in the course of the year from India; but the principal part of the trade is carried on in Arabian bottoms, particularly in those belonging to Muscat. The imports are muslins and piece-goods, pepper, and other spices, drugs, rice, sugar, indigo, silk, cotton yarn, Surat manufactures, shawls, China-ware, and paper, dye-woods, coffee, lac, beads, sugar-candy, and other articles, the produce of India; with lead, iron, steel, tin, quicksilver, cochineal, &c., exported to that country from Europe The returns to India are mostly made in the precious metals, Arabian horses, pearls, dates (a staple product of Bussorah), copper, gall-nuts, raw silk, gold fringe, coral, gums, rosewater, assafœtida, almonds, dried fruits, &c. Of these, gold and silver coin and horses constitute the principal articles. The average cost of the horses sent to Bengal is, on their arrival at Calcutta, including all expenses, about 2,000 rupees, or 200*l*.; that of those sent to Bombay is about 800 rupees, or 80*l*., each. From Persia, Bussorah imports shawls, assafœtida, and fruits, and a few horses from Bushire; coffee, dates, and gums, from Arabia; pearls from Bahrein; coral from the Mediterranean, by way of Aleppo, &c. Amongst the returns to Persia, through Bushire, are a good many English cotton prints, received at Bussorah from the Black Sea, Smyrna, and Constantinople. A taste for British cottons and woollens is now forming in all the vast countries watered by the Euphrates and Tigris, which it is of importance to this country to promote and encourage. (For the import and export duties on commodities, *see* TURKEY.)

The trade with Aleppo and Bagdad is conducted by means of caravans. The naval force of Bussorah was once sufficiently powerful to command the whole of the Persian Gulph, and to suppress the marauding expeditions of the pirates who have infested it. It has now, however, dwindled to almost nothing.

The boats used upon the canals are of many different kinds, two of which may be worth notice. The first is a light canoe, long, narrow, and drawing only a few inches water, and impelled forwards by two boatmen, who stand in the head and stern, and often use short paddles alternately from side to side, presenting the appearance which Arrian, in his account of the voyage of Nearchus, describes as belonging to the boats at Kophos, the men in which seemed not so much to row as to dig the water with their oars, and to toss it up as a labourer throws up the earth with his spade. The second is a circular kind of boat of basket-work covered with bitumen, of shallow draught, capable of containing six or eight persons, and which are paddled or spun along, making a circular motion. The ebb tides occupying always twice as long a time as the flood, and the chief canal being much too small for the convenient passage of the vessels employed on it, great activity and corresponding confusion takes place for a short period only, after which most of the craft are grounded till next tide. Great inconvenience sometimes occurs from laden vessels losing the springs and lying till the next spring tide in the centre of the channel, and blocking up all passage for smaller vessels, an inconvenience which a little outlay in widening the canal would effectually obviate. But what improvement need be looked for from a Turkish government? About half the inhabitants are Arabs, one-fourth Persians, and the remainder a mixture of Turks, Armenians, Jews, Catholic Christians, and Koords. The Turks are few, perhaps not above 500; they, as well as the Arabs, are of the Sunite sect, excepting a small body of Arab Christians, who call themselves Subbees, or disciples of John the Baptist. The Persians, who are of the sect of the *Schiites*, engross most of the intermediate stations in commerce, as those of clerks, shopkeepers, mechanics, &c., while among the Arabs, a man is either in easy circumstances or a mere labourer. The Armenians do not exceed 50 families; they are chiefly merchants and brokers: they have a small church, with two or three priests. The Jews amount to about 100 families; they are similar to their tribe elsewhere. The Catholic Christians are about 20 families: some are natives of Bussorah, others are recent settlers from Bagdad and Aleppo. The Subbees are a singular sect, scattered over the plain of the Euphrates, very limited in numbers, and constantly intermarrying. They practise no fasts, but baptism is frequently performed on the same individual; their places of worship are all temporary; they are very particular as to the purification of their food; and are said to hold a breach of trust in abhorrence. They are mostly mechanics and handicraftsmen, especially smiths and workers in metals. The Indians in Bussorah are chiefly Banians; and the sepoys of the British factory guard are mostly Hindoos. Some few have their women with them; altogether, they may amount to 200. The few Koords are mostly engaged under the Turks in inferior offices of trust, and in the

* Niebuhr estimated the pop. at from 40,000 to, at most, 50,000 (*Voyage*, ii. 179. Fr. ed.); and Kinneir and Keppel at 60,000. Buckingham, a very inferior authority, estimates it at nearly 100,000.

army. Bussorah formerly constituted a separate pashalic; but its governor has for a long period been sent from Bagdad, to the pacha of which he is subordinate.

The country around Bussorah has no beauties to recommend it. It is for the most part a dead flat. Corn, dates, olives, pomegranates, and other fruit, vegetables, and pot-herbs, are cultivated, and there are whole fields of roses grown for the distillation of the attar, and rose-water. Wherever portions of this plain are enclosed near the city walls, and irrigated for a few years from the canals, fine garden plots are soon produced; and under a good government the whole of it would no doubt become of the most exuberant fertility. At present, however, few villages or people are to be seen without the walls of the city; a monotonous and gloomy silence prevails; and on the W. and S. nothing is seen but a dreary desert extending as far as the eye can reach, with no object to break the line of the horizon but the tops of the houses of Zobeir just seen above it, and the range of Geb-el Senam. For six months of the year Bussorah is quite surrounded by water, like an island in the midst of a sea. Summer is extremely hot, and in autumn the city is unhealthy. Winter and spring are delightfully cool, refreshing, and salubrious; and Bussorah is at these seasons resorted to by invalids from India.

In the English factory, established in 1640, there is an English resident; but with this exception, there are no Europeans in the place. The French factory has merely a nominal existence; the officer under whom it is placed resides at Bagdad.

Bussorah originated from a town now called Zobeir, 8 m. to the S.W., founded by the caliph Omar in 635 or 636, on a canal supposed to be the ancient Pallacopas. In a few years it became one of the largest and most flourishing cities of Arabia; but the canal being neglected, and becoming useless, the ancient site of the city was abandoned. The present city was taken by the Turks in 1668, by the Persians in 1777, and by the Montefik Arabs in 1787. A few months after the latter conquest it was retaken by the Turks, to whom it has ever since belonged. (*Kinneir's Persian Empire*, pp. 288—292.; *Niebuhr, Voyage en Arabie*, ii. 172—196.; *Keppel's Journey from India to England*, i. 69—72.; *Buckingham*, ii. 126. 207.)

BUTE, a co. of Scotland, consisting of the islands of Bute, Arran, the Cumbraes, and Inchmarnock, all in the Frith of Clyde. Its total area is estimated at about 165,000 acres, of which about 60,000 are cultivated, 40,000 improvable, and 65,000 unimprovable. It contained, in 1831, 5 parishes, 2,134 inhab. houses, 2,998 families, and 14,151 inhab., being 6.495 males, and 7,656 females. Valued rent, 15,042*l*. Scotch; annual value of real property in 1815, 22,541*l*. The co. returns 1 mem. to the H. of C.; registered electors, 1849-50, 394.

Bute, the island whence the above co. takes its name, in the Frith of Clyde: it is separated from the district of Cowall in Argyleshire by a narrow winding channel, called the Kyles of Bute, is about 5 m. W. from the nearest point of the Ayrshire coast, and is about 19 m. in length (N.N.E. and S.S.W.), by about 4 in breadth. Pop., in 1831, 6,830, of which 4,817 belonged to the bor. of Rothesay. Its N. extremity, towards Argyle, is bleak and rugged, but its central and S. parts consist for the most part of undulating grounds, with moderately good soil, fit either for tillage or pasturage. The climate is remarkable for mildness and salubrity, but is particularly humid, which renders it not so suitable for agriculture as for the raising of cattle. Agriculture has, however, been materially improved of late years; and a good deal has been done in the way of consolidating farms, building improved houses, opening new roads, &c. The town of Rothesay, on the E. coast, famous for its old castle, once the residence of the Scottish monarchs, is now become, in the summer seasons, a favourite resort of the citizens of Glasgow. The principal part of the island belongs to the Marquis of Bute, whose seat, Mountstuart, on the E. side of the island, a little to the S. of Rothesay, is its chief ornament. Most part of the inhab. speak Gaelic; but the use of English is daily becoming more prevalent. Kean, the eminent tragedian, had a seat, in a secluded situation, in the interior of the island.

BUXTON, a town, and fashionable watering-place of England, co. Derby, hund. High Peak, par. Bakewell, 140 m. N.W. by N. London. Pop., in 1821, 1,036; in 1831, 1,211: houses at the latter date, 221. It stands in a valley surrounded by hills of considerable elevation, except at one narrow opening, through which the Wye flows. The old town stands on much higher ground than the modern one, and consists of one wide street, in which are a few respectable inns and lodging-houses, but the greater number are low ancient buildings: it has a market-place, with an old cross in the centre. The new part, commencing with the Crescent, extends along the Bakewell road. This is an elegant range, in the Grecian style, comprising two hotels, a library, news and assembly-rooms, baths, and some private houses; the whole erected by the late Duke of Devonshire, in 1781, at a cost of 120,000*l*. The adjoining square has an arcade, continuing that of the Crescent, and forming, with it, a covered promenade of considerable extent. Connected with the range of stabling at the back, is a spacious covered ride; altogether, there is accommodation for about 1,500 visiters; and during its season (from June to Oct.) from 12,000 to 15,000 usually resort to the town. The church is an elegant modern structure, also built by the late duke of Devonshire. There are 4 dissenting chapels; an endowed school, on Bell's plan; and a "Bath Charity," supported by subscription, for poor invalids coming from any part, with a proper testimonial from the minister of their parish: they have the gratuitous use of a bath, and maintenance for a month. From 1,100 to 1,200 are thus annually relieved. At the W. end of the Crescent stands the old hall, built by the Earl of Shrewsbury, in the reign of Elizabeth, in whose custody Mary Queen of Scots was placed; who, being occasionally permitted to visit Buxton, occupied apartments in it. It is now an inn. The public and private baths are numerous, and fitted up with every attention to comfort. St. Anne's Well, where the waters are usually drunk, is a handsome Greek building: it supplies both hot and cold water from springs that rise at a short distance from each other: the temperature of the latter is 66° Fahr.; that of the Buxton hot waters is, in all seasons, invariably 82° Fahr. Besides these (which are properly *the Buxton waters*), there is a chalybeate spring, issuing from a chalk stratum behind the Crescent, which has a building over it, and is occasionally drunk: when mixed with that of the other springs, it forms a purgative. These mineral waters rise on the western edge of the limestone range which occupies that portion of Derbyshire called the Peak Forest, extending from Castleton southwards, and consisting of alternate beds of limestone and amygdaloid (road-stone), the former abounding in polypiferous and other fossils. A large fault traverses the whole, and in this dyke the thermal springs, both of Matlock and Buxton, rise; the latter being at the S. end of the out-cropping of the lowest limestone bed. Buxton waters have been celebrated for their medicinal virtues from the Roman period. According to Mr. Gardner, the following is their analysis:—

	cub. in. per gall.
Carb. acid - - -	1·50
Azote - - -	4·64
Gaseous matter, -	6·14

	grs. per gall.
Hydrochlo. magnesia -	·58
Ditto soda - -	2·40
Sulph. lime - - -	·60
Carb. lime - - -	10·40
Extractive matter and loss	1·02
Solid matter, - -	15·00

The water is hard, in consequence of the calcareous matter, but perfectly clear; nor does it become turbid by any length of exposure. It is used as baths, or topically, by pumping on particular parts of the body; and is also taken internally, in quantities varying from ½ pint to 1½ pint, in the course of a day: it is considered beneficial in dyspeptic cases; and as a bath in cases of gout and rheumatism. The chalybeate spring has ¼ grain carbonate of iron in 1 gallon: it is very soft water.

There is a weekly market on Saturday, and annual fairs on Feb. 3. April 1. May 2. and Sept. 8.; this last is for cattle. The ann. val. of real prop. in 1815 was 5,810*l*. The sale of the mineral productions of the district, and the manufacture of ornamental vases, &c. from fluor and alabaster, occupies many of the natives. About half a mile W. of the town, lime is quarried and burnt to a considerable extent, and conveyed along the High Peak Railway for some distance. There are many public walks laid out with great taste, and the neighbourhood in all directions is most interesting and romantic. Near the lime quarries is Pool's Hole, an immense natural cavern covered with stalactites, which have a very brilliant appearance when lighted by the guides who show the cave; beyond this is the Diamond Hill, so named from the profusion of well-defined hexagonal crystals dispersed through the soil. Five miles in the direction of Castleton is a curious intermittent spring. Buxton was a Roman station, and two great military roads intersect near it: vestiges of a Roman bath, and many Roman coins, have been discovered.

BUZANCOIS, a town of France, dép. Indre, cap. cant., partly on the banks of the Indre, and partly on islands in its channel; the connection between its different divisions being maintained by means of five bridges, 14 m. N.W. Chateauroux. Pop. 4,587. But though the situation be exceedingly good, the town is very ill built, and presents a confused mass of old houses, interspersed with narrow, crooked, and gloomy streets. There are in its environs some considerable foundries, and it carries on some trade in wool. (*Hugo*, art. Indre &c.)

C.

CABES, or GABES, a sea-port and city of Barbary, reg. Tunis, at the bottom of the gulph of the same name (*Syrtis Minor*), near the foot of Mount Hancara, on the right bank of a small river; lat. 33° 53′ 55″ N., long. 7° 44′ 1″ E. Pop doubtful, but said by Mr. Blaquiere to amount to 30,000. It is defended by a castle in pretty good repair. Streets regular, but narrow and filthy. Owing to the gradual filling up of the bay, its port is now only accessible to vessels of small burden. The chief article of export is a powder made of the odoriferous leaves of a plant called *hennah*, raised in the surrounding gardens. This powder is used as a pigment by the ladies of the East, and is, consequently, in great demand.

Cabes is said, by Dr. Shaw, to be the *Epictus* of Scylax, and the *Tacape* of other ancient geographers. Ruins of the ancient city, among which are several square granite columns, 12 ft. in length, are met with on a rising ground, about ¼ m. from the new city. The little river which runs through the city (the *Triton* of the ancients) is diverted into a great number of channels, for the purpose of watering the hennah gardens. (*Shaw's Travels*, p. 113. 4to ed.; *Blaquiere's Letters from the Mediterranean*.

CABINDA, a sea-port town of Lower Guinea, cap. En-Goyo, on the Atlantic, 50 m. N. from the mouth of the Zaire, lat. 5° 33′ S., long. 15° 40′ E. Pop. unknown. It is distinguished by its beautiful situation, and the fertility of its territory, which have obtained for it the title of the paradise of the coast. Its harbour is safe and commodious. The exports are slaves, ivory, honey, and wax. The natives are uncivilised, and difficult to deal with. The Portuguese have frequently attempted, but without success, to get a footing in this place.

CABRA (an. *Ægabrum*), a town of Spain, prov. Cordova, near the source of the river of the same name, partly on two hills and partly in a plain planted with vines and olives; 28 m. S.S.E. Cordova. Pop. 11,890. Some of the streets are wide and straight, with streams of water running through them, and good houses with magnificent fronts. There is a large, but irregular square; many public and private fountains and promenades; some ancient mosques, and other ruins. Here is, also, a college, with classes for the study of grammar, philosophy, mathematics, and design. The products consist of tiles, bricks, white soap, coarse linen and hempen cloths, with wines, brandy, vinegar, oil, and flour. There are nearly 400 gardens attached to the town, which supply most parts of the district with fruit and vegetables. The neighbourhood produces marble of various kinds, gypsum, and clay for bricks and pottery. The crater of an extinct volcano is situated in the precincts of the town. It was a place of consideration among the Romans, and also with the Moors. (*Miñano*.)

CABRERA, a small island of the Mediterranean, belonging to Spain, 9 m. S. Cape Salinas, Majorca.

CACCAMO, a town of Sicily, prov. Palermo, cap. cant., 24 m. S. E. Palermo. Pop. 6,563.

CACERES, a town of Spain, prov. Estremadura, cap. district; 41 m. N. Merida; on a mountain ridge, washed by three rivers, along one of which there are nearly 3 m. of gardens; 24 m. W. Truxillo. Pop. 10,000. It has an episcopal palace, some good public buildings, with many good private houses. It has, also, a Jesuits' college, the most sumptuous in the prov.; a public school; a seminary, or college, with professorships of grammar, and the Latin and Oriental languages, philosophy, divinity, medicine, and jurisprudence; an hospital for infirm persons, widows, and orphans. It was formerly united to Portugal, and was then of much more consideration than at present. It has some flour-mills, fulling-mills, with tanneries, *lavaderos* for washing wool, dyeing-works, &c. It appears to have been a Roman station, some magnificent ruins having been discovered in and within a short distance of the town. (*Miñano*.)

CACHAO, or KE-CHO, often called by the natives *Bak-than*, the largest city of the empire of Anam, cap. of its N. div. or Tonquin, on the right bank of the Tonquin river, about 80 m. W. the Gulph of Tonquin, and 325 m. N.N.W. Hué; lat. 21° N., long. 105° 34′ E. Pop. probably not far short of 100,000. (*Crawfurd*.) It is of great extent, but defended only by a bamboo stockade. Chief streets wide, and mostly paved with brick or small stones; the others narrow and unpaved. Some houses, chiefly those belonging to foreigners, are built of brick; but the greater number are of only mud and timber. Public edifices spacious, especially one royal palace, and the ruins of another; the walls surrounding each of which are reported to be of vast extent. It has a considerable trade, and had formerly both English and Dutch factories. The imports are long cloths, chintzes, arms, pepper, &c.; the exports, gold, fine silk fabrics, and lacquered wares, the best of the East. The N. branch of the Tonquin river, which once admitted much larger ships, is said, in consequence of the accumulation of sand at its mouth, to be now impracticable for those above 200 tons burden. The city being composed to so great an extent of inflammable materials, is very subject to destructive fires; and a rigid police is always on the alert to prevent the use of those for domestic purposes for more than a few hours in the day. It was nearly burnt to the ground by some incendiaries in the course of the 17th century. (*Crawfurd, Emb. to Siam, &c.; Hamilton, &c.*)

CACHAR, or HAIRUMBO, a territ. of India beyond the Ganges, formerly governed by its own rajah, but, since 1832, substantially a British gov., subordinate to the presid. Bengal. It lies between lat. 24° and 27° N., and long. 92° and 94° E.; having N. Assam; E. Cassay; S. Tipperah; and W. Sylhet and Jynteah: length, N. to S., about 140 m.; area and pop. as follows (*Pemberton*, 1835):—

	Sq. m.	Pop.
S. Cachar	2,866	50,000
Central Cachar	2,224	14,000
N. Cachar	1,417	(6,000)?
	6,507	70,000

This prov. is surrounded on three sides by mountain chains: on the N. the Naga mountains, cut it off from the Dharmpoor district and the valley of the Brahmaputra; on the W. the boundary is formed by the same chain, which, running S., forms the E. frontier of Chittagong and Aracan, and opposite Sylhet and Munepoor is from 2,000 to 4,000 ft. high: on the S. is an elevated chain, running E. and W., and inhabited by the Kookies. Another range runs parallel to the latter, in about lat. 25° 20′ N., dividing Southern from Central and Northern Cachar, and from 4,000 to 6,000 ft. high; all these ranges are covered from base to summit with vast forests. The plains are mostly in S. Cachar, where their height above the sea is about 200 ft. (*Pemberton*.) The chief rivers are the Barak, Kapilee, Jumona, and Dhunseree. The first rises amongst the mountains between Cassay and Assam, in lat. 25° 30′ N., and long. 91° 20′ E., and flows with a very tortuous course for 180 m. through S. Cachar, which it leaves at Banga (Sylhet). It varies considerably in width, but is sometimes 150 or 200 yds. across, and is navigable for boats of some burden to 20 m. above Bauskandee: during the rains it has 30 or 40 ft. depth of water, and the country through which it flows is inundated from June to November. The mountain-streams afford ready access to the forests, and are of farther service in floating down timber, rattans, bamboos, &c., from which much revenue has been realised by the former rajahs. No lakes have been enumerated. During the S. W. monsoon there are frequent and long-continued falls of rain, beginning in February or March, from which period vegetation proceeds with great rapidity. The excessive moisture renders the climate unhealthy; and ague, dysentery, and diarrhœa, are frequent: but it modifies the heat in summer, reducing it four or five degrees below the temp. of Calcutta. In the cold season fires, morning and evening, are found essential to comfort. The fertility of the soil is very great: rice and other grain, sugar-cane, and cotton, the latter especially, N. of the central hills, grow luxuriantly. Timber is very abundant in the mountain ranges, and has always been an important source of wealth: in other parts a dense and lofty reed and grass jungle rap dly springs up after the rains, affording cover for vast numbers of wild deer, buffaloes, elephants, &c.

S. Cachar is a valuable addition to our eastern possessions; its fertile plains, which are continuous on the W., with the well watered ones of Sylhet, extend E. as far as the Jeree river, a tributary of the Barak. There are 1,850 sq. m. of surface, S. the Barak; 1,700 of which are a fertile plain, now almost wholly unoccupied, although the traces of numerous villages abound on the banks of the rivers. N. of the Barak there are 1,000 sq. m. of surface, 480 of which are estimated to be arable land of a very fine quality. This tract is daily becoming better inhabited, and immediately along the banks of the Barak there is a belt of rich cultivation not surpassed in any part of Bengal, and the tracts contiguous to it are in process of being cleared: a considerable emigration appears to have taken place thither from Bengal. The pop. of S. Cachar consists of three or four different classes, viz., 1. Cacharees; 2. Mussulman Bengalese, who are the chief of the petty landholders; 3. Hindoo Bengalese; and, 4. mixed tribes, as Nagas, Kookies, and Cassayers: the first two have long inhabited the S. and E. hills, but tendered little homage to the Cachar rajahs; and the Cassayers have been settled there by the British government, and, by their bold and military qualities, form a valuable protection against the other hill tribes to the inhabitants of the plains. From 1831 to 1834 the revenue of S. Cachar increased from 30,600 to 40,400 rupees: the gross charges in the latter year were 31,000 rupees.

From the central ridge, looking N., is seen a vast mass

of dark and dense forest, bounded by the Kopili, Jumona, and Dhunseree rivers; extending for about 70 m., and broken only by a few specks of cultivation, and the scattered huts of a few Cacharees and Kookies, who earn a livelihood principally by the cultivation of cotton, which they barter for other produce to the inhabitants of Assam and Dhurrumpoor. About 6,000 of the pop., in Central Cachar, are probably aborigines; the remainder are Kookies and Loloongs, most likely from the S. and S.E. Emigration from Sylhet into Cachar has been greatly encouraged by the assignment of lands at the low rate of 8 annas per bega, to be held rent free for 1,000 days, at the end of which time the quantity of land cleared was to be assessed. Capt. Pemberton thinks that for some years neither N. nor Central Cachar will yield much revenue; but the tranquillity insured to their W. neighbourhood by the possession of these districts, renders them important. The revenue derived from the whole prov. by a former rajah is said to have been a lac of rupees a year. The people of the central hills bring cotton, ivory, wax, iron-ore, and bamboos, into Central Cachar: about 2,000 jarool timbers (half the number formerly exported) are sent down the Barak into Sylhet, for building large *chunam* boats. The other exports are salt, coarse silk, and limestone.

Routes. — Three routes through Cachar into Cassay part from Banskandee near the E. extremity of the cleared plains: viz., those of Aquee, Kala Naga, and Khongjnee. By the former, or most N., the distance from Banskandee to Jaeenagur, in the Cassay central valley, is 86 m.; the first 30 m. of which pass through a dense forest abounding in swamps, and intersected with small streams, which rapidly become impassable after rains. The Kala Naga route is in all these respects preferable, and also crosses the Juree river 8 m. from its confluence with the Barak, up to which point the latter is navigable for boats of 500 maunds. The third route passes over the hilly country of the Kookies, and is useless for military purposes. (*See* CASSAY.) Several roads toward the central hills traverse S. Cachar, which all unite in one valley, and thence run through the central and N. divisions toward Assam, into which there are three separate routes through Cachar from Sylhet. The military protection of this prov. is entrusted to two companies of the Sylhet light infantry. Cospoor is the anc. capital, but Silchar, S. the Barak, is the present residence of the chief authorities. The Cacharees are strong, robust, fairer than the Bengalese, and like the Chinese in features. The original Hairumbian dialect is said to have been monosyllabic, but is now nearly extinct; the language and written character of Bengal having usurped its place. The Kookies, who have been for years gradually advancing it, are supposed by Capt. Pemberton to be of Malay origin; they are seldom much more than 5 ft. in height; their complexions nearly as dark as those of the Bengalese; voices soft, and language harmonious. Small parties, of from 10 to 30 of them, formerly made frequent secret incursions within our frontiers, in search of human heads, which would seem to be necessary articles at the performance of certain of their religious ceremonies, if we may so abuse the phrase. Although checked, these incursions are still far from being prevented.

Cachar was unknown to the British until 1763; when Mr. Verelst led a small force into it. In 1774 it was invaded by the Birmese, and some time after rendered tributary by them. In 1810 they placed the rajah of Munnipoor on the throne of Cachar; and, from 1818 to 1823, a civil war for supremacy between that chief and his two brothers devastated the prov. By the treaty of Zandaboo, in 1826, Cachar was placed under British protection, and the rightful rajah re-established; but on his death, in 1830, without any heir, it became, in 1832, an integral part of the British territory. (*Pemberton's Rep. on the E. Frontier*, pp. 188—210.)

CADEROUSSE, a town of France, dép. Vaucluse, on the left bank of the Rhone, which at this point encloses a considerable island, 3 m. S W. Orange. Pop. 3,262. It has some silk filatures, and its territory is productive of corn, silk, and madder.

CADIZ, a famous city and sea-port of Spain, in Andalusia, on the Atlantic, 63 m. S. Seville, and 60 m. N.W. Gibraltar; lat. 36° 31′ 7″ N., long. 6° 18′ 52″ W. Pop. (1838) 58,525. The city occupies the rocky and elevated extremity of a long, low, narrow tongue of land, projecting about 5 m. N.N.W. from the Isle of Leon, and enclosing between it and the main-land a spacious bay, which has every where good anchorage, and some excellent harbours. The port of Cadiz is formed by a mole projecting from the city into the bay; but it is accessible only to small vessels, ships of large burden anchoring ¾ m. off shore. The bay is divided into the inner and outer bays by the promontory, having at its extremity the fort of Matagorda. The isthmus joining the city to the main-land is in parts not more than from 200 to 300 yards across, and is very strongly fortified: the access to the city from the sea is in some places rendered impracticable by the steepness of the rocks, the occurrence of sandbanks and of sunken ledges; and being every where defended by ramparts, bastions, and detached forts, it would, were these kept in proper repair and well garrisoned, be all but impregnable; so that, as respects convenience and security, Cadiz, with its bay and dependencies, is probably unmatched, and certainly not surpassed, as a naval dépôt. Streets straight, and though rather narrow, are remarkably well paved, clean, and lighted with lamps. The houses, in general lofty, have a court in the centre; they are mostly built of white freestone, and some of them are ornamented with painted balconies. There are several squares; but, with the exception of that of San Antonio, in the centre of the city, they are all of very limited dimensions. The ramparts afford, perhaps, the finest marine promenade that is any where to be met with: the view on the E. side extends across the bay to St. Mary's and the other towns by which it is lined, and to the mountains in the distance: on the W. the eye ranges over the boundless expanse of the Atlantic.

With the exception of the fortifications, Cadiz has no public buildings of any importance. The most conspicuous is the lighthouse of San Sebastian, on the bastion of that name, having the lantern elevated 172 ft. above the level of the sea. There are two cathedrals — an old and a new; but the latter is unfinished, and, when the city was visited by Mr. Inglis, its interior was converted into a rope-walk, and other parts into a mahogany warehouse. There is a custom-house, several hospitals, churches, convents, &c.; but none of them require any particular notice. The town labours under a great deficiency of water, having none that is potable but what is brought in vessels across the bay from St. Mary's, or what is collected in cisterns. Being almost surrounded by the sea, the climate is comparatively temperate; the summer heats are, in fact, less violent than in Madrid, though it be so much farther south, while the cold of winter is not nearly so severe. It is not unhealthy; but, like most other towns on the S. coast of Spain, is occasionally visited by epidemics. The great drawback upon it as a place of residence is its want of trees and shade, and the impossibility of getting into the fields or the country, except by crossing the bay, or travelling the whole length of the isthmus. There is a tolerable theatre, where Italian operas are sometimes performed; but those who wish to enjoy the national diversion of bull-fights must cross the bay to St. Mary's. Morals here are said to be, if possible, even at a lower ebb than in other Spanish cities. Lord Byron's statements (*Childe Harolde*, i. § 65.) may, perhaps, be suspected of poetical exaggeration: but, according to Mr. Inglis, "female virtue is a thing almost unknown, and scarcely appreciated."

The *Caracca*, or royal dockyard, is situated at the bottom of the inner bay, about 6 m. from the city, on the channel separating the isle of Leon from the mainland This used formerly to be a very complete establishment; and as many as 5,000 men were kept constantly at work in it. Now, however, it is all but deserted, and is said not to possess the means of fitting out a single ship. (*Scott's Ronda and Granada*, ii. 74.)

The commerce of Cadiz was formerly very extensive. For a lengthened period, indeed, she possessed a monopoly of the trade with the vast possessions belonging to Spain in the New World; and notwithstanding the abolition of the monopoly in 1778, she continued to engross by far the larger portion of the trade with the countries in question down to their emancipation. This event gave a blow to the commercial importance of Cadiz, from which it has not recovered. Its influence might, no doubt, have been in a great measure obviated, had the Spanish government adopted a more liberal policy in relation to its intercourse with other countries. But oppressive duties and restrictions have gone far entirely to destroy the foreign trade of Spain; and have thrown what little remains almost wholly into the hands of the smuggler; and Cadiz not being very suitable for the operations of the latter, has suffered accordingly. To raise its commerce from the depressed situation into which it had fallen, government made it, in 1829, a free port, that is, a port into which goods might be imported, and from which they might be exported, free of duty. In consequence of this privilege, it immediately became a principal dépôt for the foreign products destined for the Spanish market; and the smuggling carried on from the town was so great, that, in 1832, government not choosing to reduce the duties which occasioned it, and being unable otherwise to repress the abuse, withdrew the privilege, so that the trade again relapsed into its state previously to 1829. It has still, however, a larger share than any other Spanish town of the trade with Cuba, Puerto Rico, and Manilla, the only remaining colonies of Spain; and it, or rather its dependency, St. Mary's, is the centre of the sherry trade, all the wines of Xeres being shipped either from the one or the other.

The principal articles of import are fabrics of linen,

wool, silk, and cotton, of which, however, a large proportion is destined for re-exportation; sugar, cocoa (of which there is a very great consumption in Spain), coffee, and other colonial produce; timber, tobacco, hides, salted fish, &c. Wine forms by far the principal article of export; the quantity shipped from Cadiz and the different ports round the bay may be estimated at about 30,000 butts a year, of the value of near 1,000,000*l.* sterling; of which about a half in quantity, and far more than a half in value, comes to England: the other articles of export are — quicksilver, provisions, brandy, salt, wool, oil, &c. In 1834, the value of the articles imported is said to have amounted to 1,156,000*l.*, and that of the exports to 1,700,000*l.* In 1837, the import of sugar was 150,534,774 lbs.; of coffee, 36,654,516 lbs.; of leaf tobacco, 1,196,185 lbs.; and of cigars, 143,704,500 in number. Subjoined is a statement of the navigation of the port with foreign countries and the transatlantic possessions of Spain, in 1834: —

Ships of	Entered.		Sailed.	
	Ships.	Tons.	Ships.	Tons.
England - -	290	32,962	264	27,825
United States - -	43	8,390	55	13,471
Russia - -	21	5,093	25	6,718
France - -	45	7,107	17	1,773
Sweden - -	7	1,664	20	4,339
Portugal - -	57	6,160	20	805
Brazil - - -	4	501	15	3,410
Hanse Towns - -	18	2,656	10	1,139
Sardinia - -	8	1,336	11	2,143
Holland - -	14	2,463	5	532
Belgium - - -	10	2,110	1	120
Peru - - -	3	713	6	1,367
Buenos Ayres - -	6	1,049	4	967
Monte-Video - -	2	513	7	1,380
Denmark - -	2	192	11	1,621
Other countries -	36	1,523	37	3,562
Colonies - -	99	13,506	62	9,620
Totals - -	665	86,938	570	80,822

The pop. and wealth of the city have declined with its trade. The number of inhab. has fallen off from about 70,000 to under 60,000; and many of the houses are unoccupied, and even rapidly falling to decay. The sea-wall erected on the S. side of the city, to defend it against the encroachments of the sea, and which is justly regarded as one of the greatest works of the kind ever undertaken and completed, has been allowed, for want of timely repair, to fall into a state of dilapidation. The fortifications are also getting into a bad state; and the appearance of the city is characteristic of the paralysed and abased state of the monarchy.

Cadiz is very ancient, having been founded by the Phœnicians. In 1596 it was taken and sacked by the English, by whom it was again ineffectually attacked in 1623 and 1702. In 1809 it became the asylum of the Cortes, and was blockaded by the French till 1812. In 1823 it surrendered to the French under the Duc D'Angoulême. (*Scott's Ronda and Granada*, ii. 64—75.; *Inglis's Spain in* 1830, ii. cap. 15.; *Penny Magazine*, May, 1839; *Dictionnaire du Commerce*, art. *Cadix; Miñano; Townsend, &c.*)

CAEN, a town of France, dép. Calvados, of which it is the capital, in an extensive valley between two large meadows, at the confluence of the Odon with the Orne, about 8 m. from the embouchure of the latter, 30 m. S.W. Havre; lat. 49° 11′ 12″ N., long. 0° 21′ 38″ W. Pop., ex com., 39,886. This is a well-built, improving town. The streets are generally broad, straight, and clean; and the houses of freestone have a good appearance. It was formerly a place of considerable strength, being defended by a castle, and surrounded by massive walls, flanked with towers. The latter and the walls have almost disappeared: the castle, which was of great size and strength, was partly demolished at the Revolution; the portion of it that still remains is now used as a prison. There are 4 squares, of which the Place Royale, ornamented with a statue of Louis XIV., is the finest. A *cours*, or public walk, shaded by magnificent elm trees, extends for nearly a mile along the banks of the rivers. There are some fine old churches, of which the most interesting is the *Abbaye aux Hommes*, built by William the Conqueror; it is a large, plain building, with two very high spires; and contains, among other interesting monuments, the tomb of the Conqueror; but the latter was violated by the Huguenots, in 1562, and the bones dispersed. The *Abbaye aux Femmes*, also very ancient, is now the Trinity Hospital, one of the best managed establishments of the kind any where to be met with. The church of St. Peter has the finest spire in Normandy; and several of the other churches deserve notice. Among the other public buildings are the hotel of the prefecture, the Hôtel de Ville, the Palace of Justice, the Hôtel Dieu, &c. Caen has been long celebrated for its university, founded in 1431, by Henry VI., king of England. It was remodelled after the Revolution, and now exists under the title of an *académie universitaire*. There are here, also, a royal college, or high school, with from 450 to 500 pupils; a secondary school of medicine; a primary normal school; a school of hydrography; a public library, containing 47,000 volumes; a botanical garden, with a good collection of plants; a school of architecture and design; a deaf and dumb school; museums of pictures and natural history; with numerous societies for the promotion of literature, and the fine and useful arts; a theatre, &c. It is the seat of a royal court for the depts. of Calvados, Manche, and Orne; and for tribunals of original jurisdiction and commerce. In its vicinity is a *maison centrale de détention*, which, in December 1833, had 481 male, and 288 female inmates: when finished, it will contain 1,600. Manufactures important and valuable. They consist principally of laces, and of thread and silk, the making of which employs a vast number of people; stockings and caps, table linen, a variety of cotton fabrics, coarse and fine earthenware, cutlery, hats, with brewery, oil-works, &c. At high water, vessels of 150 or 160 tons come up the river as far as the town, where they lie alongside fine quays. In 1837, the value of the imports amounted to 1,092,980 fr., and that of the exports to 151,585 fr.

Several large fairs are held for the sale of the products of the town, and of the horses, cattle, butter, fowls, &c., of the surrounding country. In consequence of its excellent establishments for education, and other advantages, Caen is a favourite resort of English families. It has produced several distinguished men; among whom are Malherbe, the father of French poetry; the learned Huet, bishop of Avranches, Tannegui, Lefèvre, &c.

Caen is not very ancient. It became of importance under the dukes of Normandy, by whom it was fortified. It has undergone several sieges, and fell finally into the possession of the French in 1448, when it was taken from the English by Dunois. It was taken by the Protestants in 1562, when it suffered severely. (*Hugo*, art. *Calvados.*)

CAERLEON, a decayed town of England, co. Monmouth, hund. Usk, par. Llangattock, on the Usk, 18 m. S.W. Monmouth. Pop. in 1831 only 1,071. This was the *Isca Silurum* of the Anglo-Romans, and was then of great importance, being the cap. of the prov. of Britannia Secunda. At a later period, it was celebrated as a seat of learning, and, in the 12th century, Giraldus Cambrensis gave a lively, though perhaps exaggerated, picture of its wealth and magnificence. Several Roman antiquities have been dug up in the town and its vicinity, and in several parts the Roman walls are still visible. An elliptical concavity, the longest diameter measuring 74 yards, and the shortest 64, and 6 yards in depth, is situated in a field close by the Usk, near the S.W. side of the town. The country people call it Arthur's Round Table; but no doubt it is the remains of an amphitheatre. Within the course of last century stone seats were discovered on opening the sides of the concavity; and, in 1706, an alabaster statue of Diana was found in it. It has a well endowed charity school for maintaining and educating 30 boys and 20 girls, till they attain the age of 14, when they are apprenticed, the former having 7*l.* and the latter 4*l.* each. (*Beauties of England and Wales. Coxe's Monmouthshire, &c.*)

CAERMARTHEN, a marit. co. of S. Wales, having S. Caermarthen Bay, which unites with the Bristol Channel, E. the cos. of Glamorgan and Brecon, N. Cardigan, and W. Pembroke. Area, 623,360 acres, being the largest co. in the principality. Surface very various, in part mountainous, and in part consisting of low fine vales: the largest and most celebrated of the latter is the vale of Towy, stretching for about 30 m. along the river of that name, by which the co. is intersected, with an average breadth of about 2 m. Exclusive of the Towy, Caermarthen is separated from Cardigan by the Taafe, and in part from Glamorgan and Pembroke by the Longhor and the Tafe. The portion of this co., S. and E. of the Towy, adjoining Glamorgan, is included in the great coal-field of S. Wales: at Llanelly there is also an abundant supply of iron-stone, and considerable iron-works. Soil of the arable land mostly a sandy loam, easily wrought, admirably adapted to the turnip husbandry, and in general very productive. But agriculture here, and indeed in the greater part of Wales, is in an extremely backward state. The occupiers are, for the most part, uninstructed, and strongly attached to ancient practices. Drainage, though the first and most essential of improvements, is almost wholly neglected; tenants are not usually under any restrictions as to management, and the common practice is to take corn crops in uninterrupted succession from the land till it be completely exhausted. The farm implements and stock are also bad; and the whole system evinces the want of intelligence, capital, and industry. (*Kennedy and Grainger on Tenancy*, p. 169.) Average rent of land in 1843, 10*s.* 1½*d.* an acre. Manufactures, unimportant. Principal towns, Caermarthen, Llanelly, and Kidwelly. It contains 8 hunds. and 78 pars. and had in 1841, 23,449 inhab. houses, and 106,326 inhabs., of

whom 50,676 were males and 55,676 females. It returns 2 mems. to the H. of C. for the co., and 1 for the bor. of Caermarthen. Registered electors for the co. in 1849-50, 4,969. Sum paid for the relief of the poor in 1847-48, 31,308*l*. Annual value of real property in 1843, 396,955*l*.

CAERMARTHEN, the cap. of the above co., and a co. by itself, finely situated on an irregular acclivity on the N. W. bank of the navigable river Towy, 7 m. N. from its embouchure in Caermarthen Bay, Bristol Channel; lat. 51° 51′ 10″ N., long. 4° 19′ W.; 180 m. W. by N. London. Pop. (1821) 8,906; (1841) 9,526. A few of the streets are tolerably wide, well paved, lighted with gas, and contain many respectable houses; but the rest are narrow and crooked, and those leading to the river steep, and the pop. much crowded: the best houses are on the Milford line of road. The supply of water is bad and inadequate. There is a large plain church, several dissenting chapels, and a grammar school, from which scholars were admitted to take orders previously to the estab. of Lampeter college; a Presbyterian college for young men intended for that ministry (of which the corporation nominate the master and 6 scholars); a Lancastrian and a national school. The guildhall, a handsome edifice raised on pillars, has under it the market-place for corn. It has also a theatre, and bor. and co. gaols; the latter is on part of the site of the old castle (of which some remains are still left), on the brow of the hill rising abruptly from the river; along which the quay extends. The river is crossed by a fine bridge of 7 arches. Markets, Wednesday and Saturday; and cattle fairs, April 15., June 3. and 4., July 10., Aug. 12., Sept. 9., Oct. 9., Nov. 14. and 15. There are no manufactures of any importance in the town; but, as it furnishes the populous district in the vicinity with articles of general consumption, its trade is considerable. Principal exports (all coastwise), bark, marble, slate, lead ore, leather, corn, butter and eggs; imports, general cargoes of British and colonial produce, and manufactures, and timber and deals. At an average, 10 cargoes a year are imported from abroad, the vessels sailing outward in ballast. Custom duties between 2,000*l*. and 3,000*l*. a year. About 40 vessels belong to the port, and vessels of 50 to 150 tons are built here. It is a creek, comprised in the port of Llanelly. Vessels of 200 tons may ascend to the bridge at spring tides; but many obstructions are suffered to accumulate in the river, so that they are frequently obliged to discharge 2 m. below. The salmon fishery, which was once very extensive, has much decreased. Races are annually held in Sept., 4 m. up the vale of the Towy. It is the central town of a poor law union of 16 pars.; its own average rates amount to 4,026*l*.

Caermarthen has returned 1 mem. to the H. of C. since the reign of Henry VIII. The limits of the present parl. bor. coincide with those of the ancient bor., but Llanelly is now joined with it, as a contributary bor. Previously to the Reform Act, the elective franchise in Caermarthen was exercised by persons admitted *de jure* burgesses, under qualifications of a freehold estate within the bor., *ex gratiâ*, and servitude of apprenticeship for 7 years. Registered electors in both bors., in 1849-50, 718. The election of a mem. for the co. takes place here. The limits of the municipal bor. are now restricted to the town and a small space round it. It is divided into 2 wards, and governed by a mayor, 6 aldermen, and 18 counsellors; a sheriff and recorder. Courts of petty sessions are held weekly; fortnight courts, for the recovery of debts, and courts of general sessions twice a year, for the bor.: the assizes and 3 of the general quarter sessions of the co. are also held in the town.

Its ancient castle, in the last civil war, was at first garrisoned for Charles I., taken subsequently by the parliamentary forces, and dismantled by order of Cromwell, in 1648. Caermarthen must, on the whole, be considered a flourishing and increasing town. A column has been erected at its W. end by public subscription in memory of the public services of Sir T. Picton, who fell at Waterloo, and had previously represented this bor.

CAERNARVON, a marit. co. of N. Wales, separated from Anglesea by the Menai Strait, extending from Conway, on the N., in a S. W. direction along the shore to the extremity of the peninsula of Lleyn opposite Bardsey Island, having E. part of Cardigan Bay, and the cos. of Merioneth and Denbigh. Area 348.160 acres. This is the most mountainous co. in the principality, being traversed in its whole extent by the Snowdon range (*see* SNOWDON): it has, however, some limited tracts of comparatively low fertile land. The Conway, which has its sources in the co., and forms for a considerable distance the line of demarcation between it and Denbigh, is the principal river; but there are several streams of inferior dimensions, and some small lakes. Lead and copper ores have been found within the co., and have been wrought to some extent, but not with much success. The slate quarries belonging to Lord Penryhn, near Bangor, employ about 1,600 men and boys, and are the most extensive and valuable in the empire; and other slate quarries in this co. employ about 1,700 men and boys. Soil of the greater part of the arable land hazelly loam. Agriculture, though a good deal improved, is still in a comparatively backward state; leases are either not granted, or they contain no proper regulations as to management; a proper rotation of crops is not generally observed; the land is not generally clean and in good heart; and the implements are still, in many instances, defective. Oats is the principal corn-crop. Breed of cattle small and hardy. Average rent of land in 1843, 8*s*. 7½*d*. an acre. The older class of farm buildings and cottages, especially the latter, are as bad as possible; but luckily they have been in many parts replaced by others of a new and improved character. Manufactures unimportant. Principal towns, Bangor (a city), Caernarvon, and Conway. Caernarvon is divided into 10 hunds. and 69 pars; and had in 1841, 16.845 inhab. houses, and 81,093 inhab., of whom 39,625 were males and 41,468 females. It sends 1 mem. to the H. of C. for the co., and 1 for the town of Caernarvon and its contributary bors. Registered electors for the co., 1849-50, 1,983. Sum expended for the relief of the poor only in 1847, 26,500*l*. Annual value of real property in 1815, 131,213*l*.; do. in 1843, 251,043*l*.

CAERNARVON, a sea-port and parl. bor. of N. Wales, cap. of the above co., on the S. E. side of the Menai Strait, at the mouth of the Seiont, 7 m. S.W. from the Menai Bridge, and 205 m. N. W. London. Pop. in 1821, 5,210; in 1841, 8,001. This town, with its magnificent castle, was built by Edward I., between 1282 and 1284, as a place of strength to secure his newly achieved conquest of Wales. The walls, constructed by the Conqueror, round the town, are still pretty entire. They are flanked with round towers, and had originally two principal gates, but others have been since added. Within the walls, the streets, though narrow, are regular; but of late years, new streets and buildings have been erected without the walls, and the whole town has been much improved: it is well supplied with water, and lighted with gas. Pennant says of it, that it "is justly the boast of N. Wales, for the beauty of its situation, the goodness of its buildings, the regularity of the plan, and, above all, the grandeur of the castle, the most magnificent badge of our subjection." (*Tour in Wales*, ii. 404. 8vo. ed.) The par. church is ½ m. from the town; but the latter has a handsome chapel of ease, and 4 dissenting chapels, and a British and a national school. The town-hall is over one of the ancient gateways, and one of the old towers is fitted up as a prison: there is also a co. hall, a small theatre, and a modern market-house for provisions, the old one being now used for corn. Many opulent families reside in the neighbourhood, and the town is much resorted to in the proper season by sea-bathers. To accommodate them and other visiters, an excellent hotel has been built by the Marquis of Anglesea, and there are also hot and cold baths, assembly and billiard-rooms, &c. Outside the walls is a fine terrace walk along the Menai, resorted to in the summer evenings by all descriptions of people.

There are no manufactures of any importance. The harbour, which has of late been a good deal improved, admits vessels of 400 tons, but the trade of the port, which is mostly with Liverpool, Bristol, and Dublin, is principally by small coasting vessels and steamers. The principal export is slate, brought from the quarries by a railway. The removal of the coast duties on slate has occasioned a great increase of demand here and in other ports whence it is exported. (*Boundary Report.*)

Previously to the Reform Act, Caernarvon returned 1 mem. to the H. of C., conjointly with the contributary bors. of Conway, Criceieth, Nevin, and Pwlheli, the right of voting being in the resident and non-resident burgesses. To these contributary bors. the Reform Act added Bangor. The limits of the ancient bor., with which the parl. bor. coincides, are about 8 m. in circ. Registered electors in all the bors. in 1849-50, 861. The limits of the municipal bor. extend about 1¼ m. round the town. Corporation revenue about 225*l*. a year. The assizes and general quarter sessions for the co. are held here. Market-day Saturday; fairs, March 12., May 16., Aug. 12., Sept. 20.

Caernarvon Castle is one of the noblest and most magnificent ruins of its kind in the empire. The walls, which enclose an area of about 3 acres, are 7 ft. 9 in. thick, have within them a gallery with slips for the discharge of missiles, and are flanked by 13 strong pentagonal, hexagonal, &c. towers. A narrow chamber in the Eagle Tower was the birthplace of Edward II., the first Saxon prince of Wales. Near the steep bank of the river Seiont, at a small distance from the castle, is an ancient Roman fort, the walls of which are still pretty entire. At a small distance from this, and 1¼ m. from the Menai, is the site of the ancient Roman station of *Segontium*, whence, it is most probable, Edward I.

derived part of the materials for building the castle and town of Caernarvon. (*Pennant's Wales; Bingley's ditto*, &c.)

CAERPHILLY, a town and chapelry of S. Wales, co. Glamorgan, hund. Caerphilly, par. Eglwys-islan, between the Taaf and the Rumney, 7 m. N. Cardiff. Pop. of the par. in 1841, 3,813. The town is an irregular collection of ancient and modern houses; but it has a good appearance, and being surrounded by mountain ranges that open on the E. and W., the scenery is grand and picturesque. It has a neat episcopal chapel, and 3 dissenting places of worship. Market, Thursday, and fairs for cattle, corn, and cheese, April 5., Trinity Thursday, July 19., Aug. 25., Oct. 9., and Nov. 16. Manufactures of cheques, and linsey-woolsy shirting for miners, employ about 100 persons; the rest are engaged in the mines and quarries of the neighbourhood or in agriculture. It was anciently a bor., but lost its privileges in the reign of Henry VIII. Its castle, whose magnificent ruins show that it must have been one of the finest in the kingdom, was of Norman origin, and enlarged at successive periods, but chiefly by the favourite of Edward II., Hugh le De Spencer, for whom it was wrested from the Mortimers, its ancient possessors.

CÆSAREA, a ruined and deserted coast town of Palestine; lat. 32° 23′ 37″ N., long. 34° 44′ 45″ E. Under the Romans, it was the cap. of the district in which it stands, and the residence of a proconsul. An artificial harbour, a castle, the walls of the city, and two aqueducts, are among the most perfect remains, but a great extent of ground is covered with the ruins of public and private buildings. It owed its existence, or importance, to Herod the Great, who named it *Cæsarea*, in compliment to Augustus, B.C. 22. It figures in the early history of Christianity as the place where Peter converted Cornelius and his house (Acts x. 1.), and as the scene of Paul's memorable speeches to Felix and Agrippa (Acts xxiv., xxv. and xxvi.). Vespasian made Cæsarea a Roman colony, under the name of Flavia Colonia, and it continued to flourish till A.D. 635, when it fell into the hands of the Saracens. In 1101 it was taken by the Crusaders, and in the wars of this period it sank never to rise again. (*Robinson*, i. 189—192.; *Hogg*, ii. 185.; *Ptolemy*, v. 16.; *Josephus*, *Bel. Jud.* xxi. 5.

CAFFA. *See* KAFFA.

CAGLI (an. CALLIS), a town of the Papal States, deleg. Urbino and Pesaro, at the foot of Mount Petraro, at the confluence of the Cantiano and Busso, 14 m. S. Urbino. Pop. 4,000. It has a cathedral, and 4 convents for monks, and 4 for nuns.

CAGLIARI (an. *Calaris*), a marit. city of Sardinia, of which it is the cap., on a bay of the same name on the S. shore of the island, lat. 39° 12′ 13″ N., long. 9° 6′ 44″ E. Pop., in 1838, 27,989. In the middle ages, it appears to have been restricted to a triangular space, on the summit of a hill about 400 ft. above the beach, now called the "Castle," which is walled round, and has a citadel on its N. side. To this were successively added the Marina, a portion extending down the W. face of the hill from the Castle to the sea, which is surrounded by a slight wall, flanked by some bastions, and farther defended by a wide but shallow ditch; the quarter of Stampace, to the W. of the Castle; and that of Villanova to the E. The modern city consists of these four portions; there is besides a suburb nearly a mile in length, called St. Avandrés. Cagliari has an imposing appearance from the sea. The Marina is tolerably well built, but Villanova quite otherwise; and the streets generally are narrow, irregular, dirty, steep, and paved with round pointed stones. There are, however, some excellent and even splendid public buildings, and many spacious private houses. The Castle is the part in which the nobility and state officers reside. It contains, the vice-regal palace, a fine edifice; the cathedral, built by the Pisans, with a front in great part of marble; a handsome mausoleum of Martin, king of Sicily; a celebrated cryptic sanctuary; the citadel, and three large square towers, good specimens of Pisan art; the university, with its four faculties of theology, law, medicine, and philosophy, and between 200 and 300 students; and other public seminaries. The Marina is inhabited chiefly by merchants, and by the foreign consuls; it contains a good bonded warehouse, an arsenal, lazaretto, and mole. In Stampace are the corn-market and storehouses. Cagliari contains besides about 30 churches, 21 convents, to one of which, belonging to the Jesuits, there is a very handsome and richly ornamented church attached; 2 hospitals, a female orphan asylum, a public library, with 15,000 volumes, museums of antiquities and natural history, a college of nobles, a *seminario*, a small theatre, mint, 3 prisons for galley-slaves, &c. At the S. angle of the Marina wall there is a very commodious *darsena*, or pier-harbour, capable of containing 14 or 16 vessels of a tolerable size, besides small craft. The port is one of the best and safest in the Mediterranean. Ships usually lie about a mile S.W. by S. from the mole, in 6 or 8 fathoms water, on an excellent bottom of mud. The Gulph of Cagliari, which extends from Pula on the W. to Cape Carbonara on the E., 24 m. across by 12 m. deep, has good anchorage every where, after getting into soundings. The city being placed on a hill, is healthy, notwithstanding the immediate proximity on its W. side of the stagnant lagune of Cagliari, 6 or 7 m. long by 3 or 4 m. broad. This lake abounds with fish and aquatic birds. To the E. of the city, there are some good salt-works. Cagliari possesses a royal manufactory of tobacco, and has manufactories of cotton fabrics, cake saffron, soap, chairs, and other furniture, tanneries, &c. Its trade is chiefly in corn, legumes, salt, oil, and wine. From the portion of commerce it enjoys, Cagliari has, on the whole, a busy appearance. Provisions of all kinds are cheap and plentiful, except water. The Castle is supplied from cisterns and extremely deep wells. Extensive remains exist of a fine ancient aqueduct, which might be restored at a comparatively small expense. There are several other Roman antiquities, including a tomb in tolerably good preservation, and an amphitheatre excavated in the rock near the city walls. Vestiges of the ancient Greek city may be still traced beyond Stampace. A good carriage-road of recent construction connects Cagliari with Sassari.

Cagliari is the seat of a royal *audiencia*, or head tribunal, and of the *cortes*, or states-general of the island; of a tribunal of commerce, an intendent-general, a general-commandant, and an archbishop with the title of primate of Sardinia.

This city is very ancient, its foundation being carried back to the fabulous ages. It was the residence of the king of Sardinia from 1798 to 1814, during the occupation of his continental dominion by the French. The latter bombarded it unsuccessfully in 1793. (*Smyth's State of Sardinia*, p. 205—222., &c.; *Marmora, Voyage en Sardaigne*.)

CAHER, an inl. town of Ireland, co. Tipperary, prov. Munster, on the Suir, 96 m. S.W. by S. Dublin. Pop. in 1821, 3,288; in 1831, 3,408. Pop. of par. in 1834, 6,026; of whom 113 are of the established church, and 5,913 R. Catholics. The town is well built; the parish church and Roman Catholic chapel are large fine buildings; the Society of Friends have also a meeting-house. There is a market-house, bridewell, fever hospital, dispensary, schools on the foundation of Erasmus Smith, and large cavalry barracks. The staff of the Tipperary militia, and a party of the constabulary, are stationed here. The Earl of Glengall's mansion is in the town. Races take place annually in the neighbourhood. A manorial court is held every six weeks; petty sessions weekly. The linen and straw-plat manufacture are carried on upon a small scale; much is done in the corn trade. Markets are held on Fridays; fairs on 8th February, 12th April, 26th and 27th May, 20th July, 18th and 19th September, 20th October, and 7th December. The post-office revenue in 1830 was 388*l*., and in 1836, 511*l*. The contemplated railroad from Tipperary to Killaloe will pass through the town, as does one of the mail-coach roads from Dublin to Cork, and that from Waterford to Limerick. The mail car from Clonmel to Limerick also passes through Caher. (*Railr. Rep.*)

CAHORS, a town of France, dép. Lot, of which it is the cap., on the Lot, 60 m. N. Toulouse; lat. 44° 25′ 59″ N., long. 1° 27′ 17″ E. Pop., ex com., 10,944. It stands principally on an eminence, almost surrounded by the Lot, and is for the most part ill built, with narrow, crooked streets. It was formerly defended on the land side by towers and ramparts, that stretched across the isthmus; but of these only the ruins now remain. It is traversed by the great road from Paris to Toulouse, and has 3 bridges over the river, one of which, built in the 12th century, is surmounted by 3 enormous towers. The cathedral has been supposed to be partly of Roman construction; but it is pretty certain that the most ancient part of the building is not older than the 6th century. With the exception of the hotel of the prefecture, the ancient episcopal palace, few of the other public buildings deserve notice. It is the seat of a bishopric, and has tribunals of primary jurisdiction and of commerce. Cahors had a university, founded in 1332: the famous jurist Cujas was, for a while, one of its professors, and Fenelon was of the number of its pupils. The university was united to that of Toulouse in 1751. At present it has an *académie universitaire*; a royal college or high school, with about 250 pupils; a diocesan seminary, with 150 pupils; a primary normal school; a public library with 12,000 volumes; a theatre; a society of agriculture, &c. The manufactures, which are not very considerable, consist principally of some descriptions of woollen goods and paper. There is contiguous to the town a departmental nursery. The excellent red wine, called the *vin de grave*, is raised in its territory; and it has a good deal of trade in that and other wines, and in oil, hemp, flax, &c.

Cahors is supposed to be the ancient *Divona*, the capital of the *Cadurci*. The Romans embellished it with several fine edifices, of some of which there still remain a

few vestiges The principal of these are a portico, supposed to have made a part of the public baths; with the ruins of a large theatre or circus, and of an aqueduct for conveying water into the town. There have also been dug up fragments of columns, mosaics, and numerous medals of Tiberius and Claudius. In more modern times, it has undergone many vicissitudes. In 1580, it was besieged by Henry IV., and being taken, after an obstinate resistance, it was, despite Henry's efforts to the contrary, given up to military execution. (*Martinière*, art. *Cahors*; *Hugo*, art. *Lot*, *&c.*)

CAIPHA, or KAIFA, a small marit. town of Palestine, at the foot of Mount Carmel, on the W. side of the Bay of Acre. The harbour is one of the best along the coast (*see* ACRE), and the ancient river Kishon flows past the town. It has a fortress with a garrison; but the most important and interesting building in the place is a hospice maintained by the monks of Mount Carmel, where strangers of all nations and religions are lodged and entertained. The Kishon is referred to in the song of Deborah and Barak (Judges v. 21.). It is famous also as the place where Elijah slew the prophets of Baal (1 Kings, xviii. 40.). (*Robinson*, i. 193.; *Hogg*, ii. 178.)

CAIRO, or KAHIRA (*El Cka'hireh*, Arab., "the Victorious," called by the inhabitants *Musr*), the modern cap. of Egypt, and the second city of the Mohammedan world; chief residence of the Pacha, and seat of his government, near the right or E. bank of the Nile, about 12 m. above the apex of its delta, 112 m. S.E. Alexandria, 97 m. S.S.W. Damietta, and 75 m. W. Suez; lat. 30° 3′ 21″ N., long. 31° 18′ 45″ E. Pop., including its port of Boulac, Old Cairo, &c., about 240,000; of whom about 190,000 are Egyptian Moslems, 10,000 Copts, from 3,000 to 4,000 Jews, and the rest strangers from various countries. (*Lane's Mod. Egyp. &c.*) Shape oblong, being nearly 3 m. in length, by 1½ to 2 m. in breadth, on sloping ground, midway between the Nile, and the E. mountain range of Mokattem, and occupying an area of about 3 sq. m. The distance of its N. extremity from the Nile at Boulac is upwards of a mile; but from its S. extremity to the bank of the river where Old Cairo stands, is somewhat less than ½ m. The intervening tract is laid out in gardens or otherwise cultivated, and watered by a canal. Viewed from a distance, Cairo has a magnificent and interesting appearance; but, like most other E. cities, its interior has a very different aspect from its exterior. It has, however, though still susceptible of much improvement, been, within these few years, quite changed from the wretched place so often depicted by travellers. Filth of every description, putrid ditches, drains never cleaned, unburied carrion, fragments of vegetable matter, all in various states of decomposition; want of free circulation of air, clouds of dust, and multitudes of deformed beings, are amongst the nuisances formerly complained of: but, according to more recent observers, the rigid police established by Mehemet Ali has already effected so desirable a change, that, for cleanliness, as well as order, quiet, and the absence of crime, Cairo "may now rank with the best governed capitals of Europe." (*MS. Account of Cairo.*) The clouds of dust, apparently the most difficult to deal with, have, as well as the want of a free circulation of air, been in a great measure obviated, by the removal of a number of high mounds of sand, scoriæ, ashes, earth, broken pottery, and other rubbish, which formerly encircled the city, some of them elevated 150 ft. above its level; and by the continual watering of the public thoroughfares.

On entering Cairo, the European visiter is gratified and interested with the entire contrast this city presents to all he has left behind him in Europe. In the words of a British resident, "here every thing is oriental; the style of the buildings, the shaded streets, the aspect and costumes of the people, the quiet and repose universally prevailing; no rattling of carriages and carts; no rushing, busy crowds, intent on their different pursuits; but in their stead, the solemn camel and his patient little attendant, the donkey, making their noiseless way under their burdens; the people gathered in groups around the doors of the *cafés*, chatting or smoking; — the shopkeeper listlessly reclining in his stall; — the sentinel, half asleep at his post, while the guard within lie stretched in profound repose; — all yielding to the influence of a climate as delightful as it is salutary; and which fortunately acts as an opiate, to some extent, against the many physical ills the people are exposed to from a bad and rapacious government." Cairo at present contains 240 principal streets, 46 public places (squares), 11 bazars, 140 schools for the instruction of children, 300 public cisterns, 1,166 coffee-houses, 65 public baths, 400 mosques, and several considerable hospitals. The whole city is enclosed by a stone wall, terminated on the S.E. by a detached and scarped rock rising more than 200 ft. above the level of the Nile, on which stands the citadel. This fortress, with the city walls, was built or restored by Saladin, about 1176. The walls have battlements, and lofty towers at about 100 yards apart. They are, however, of little strength, and have been suffered, in many parts, to fall to decay. There are four gates, praised for their grandeur and magnificence. The streets still continue to be unpaved, and are mostly so very crooked, narrow, and irregular, that they might more properly be called lanes. There is but one as wide as Cranbourne Alley. Though deprived of a great deal of light, they are rendered cool, by the upper stories of the houses projecting over them, so as not unfrequently to meet each other. "By a stranger who merely passed through the streets, Cairo would be regarded as a very close and crowded city; but that this is not the case is evident to a person who overlooks the town from the top of a lofty house, or from the minaret of a mosque. The great thoroughfare streets have generally a row of shops along each side. Above the shops are apartments, which do not communicate with them, and which are seldom occupied by the persons who rent the shops. To the right and left of the great thoroughfares are by-streets and quarters. Most of the by-streets are thoroughfares, and have a large wooden gate at each end, closed at night, and kept by a porter within, who opens to any persons requiring to be admitted. The quarters mostly consist of several narrow lanes, having but one general entrance, with a gate, which is also closed at night; but several have a by-street passing through them." (*Lane's Mod. Egyptians*, i. 7, 8.) The Jewish quarter is, as in all other cities, the filthiest; the Copts, Franks, and other nations, generally speaking, inhabit distinct quarters, though there is no restriction in this respect, the whole city being free to all. In the Frank quarter, where also many of the Armenian and Syrian Christians reside, the streets are rather wider than elsewhere. The houses are solidly constructed and lofty, being mostly two stories high, and frequently more; their lower parts are built or cased with the soft calcareous stone of the Mokattem mountains, the layers of which in front are often painted alternately red and white; their upper parts are commonly of brick; their roofs, which are flat, serve for many domestic purposes, and are the resort of the family in the cool of the evening. Most considerable houses enclose an open unpaved court, into which the doors and the windows of the principal apartments open. The windows of the upper apartments generally project 1½ ft. or more, and are commonly formed of wooden lattice-work close enough to shut out much of the light and sun, and to screen the inmates from observation, while they admit the air; occasionally, glass windows, which sometimes are finely stained, are made use of. The front doors of the larger houses are handsomely carved, painted, decorated with Arabic inscriptions, and furnished with iron knockers and wooden locks. The court-yard and ground floors commonly contain wells, fountains, pools, stables, and other domestic offices, and a hall sometimes very handsomely fitted up, in which the master of the house receives his visiters; the upper apartments are those of the women and children. Lodging-houses or caravanseras, called by Mr. Lane *wekalehs*, and designed for the reception of merchants and their goods, are somewhat differently laid out; and such persons as have neither a wife nor a female slave are usually obliged to take up their abode in one of these buildings. (*Lane*, i. 30.) There are several open spaces or squares: *Esbekiah*, the principal, is surrounded by many of the finest palaces and other structures in Cairo; its centre is laid out as a garden, and is, like some of the other squares, annually overflowed by the inundation of the Nile. The waters of that river are conducted into the city by a canal, believed by Pococke, Shaw, and others, to be the *Amnis Trajanus* (ΤΡΑΙΑΝΟΣ ΠΟΤΑΜΟΣ) of Ptolemy's Geog. (lib. iv. c. 5.), and which, commencing at Old Cairo, runs through the whole length of the modern town, filling a number of public and private basins, and irrigating numerous gardens planted along its banks.* The citadel is, in many respects, one of the most interesting monuments in Cairo. Clarke (*Trav.* v. 127—129.) adduces several authorities to prove that it stands upon the spot once occupied by the Acropolis of the Egyptian Babylon, erected by Cambyses upon the site of the still more ancient Latopolis, a city almost as old as Memphis. This much, however, seems certain, that a similar structure existed here previously to the time of Saladin, to whom, according to Shaw (*Trav.* 295.), the restoration, rather than the construction, of the citadel should be ascribed. The rocky hill on which it is built is separated by a chasm about 400 yards wide from the Mokattem hills. Its walls are massive, rest on a foundation of scarped rock, and have recently been put into a respectable state of repair: but, being commanded by the Mokattem hill, on which a

* Previously to the annual inundation, the mouth of this canal is closed by a mound or pillar of mud, which, Dr. Clarke says, is called *Anes*, or "the Bride." The rushing in of the water carries away this mound; and this circumstance is believed by several authors to have given rise to the fabulous story of the *annual sacrifice of a virgin to the Nile*. (See *Clarke*, v. 108, 109.; *Niebuhr's Trav.* i. 69., *&c.*) The opening of the canal is celebrated with great rejoicings.

fort has been placed, and being open both on the E. and W. to the fire of artillery, it could not hold out for any length of time against a European force. Within its precinct are the palace and harem of the pacha, the mint, the council-chamber or divan, a mosque built by Mehemet Ali, a military arsenal, and various other public offices and works of the Mameluke monarchs. The pacha's palace and harem are plain white-washed buildings, presenting nothing remarkable, and the new mosque has some bas-reliefs in marble imported from Genoa, conceived and executed in the worst taste. The Egyptian coin is all struck in the mint, but the process hitherto pursued has been of the rudest kind. The arsenal contains foundries for brass and iron cannon, manufactories of small-arms, and workshops for the supply of all sorts of military equipments. Taken altogether, it is the finest establishment in Egypt. But the greatest curiosity in the citadel is Joseph's Well, supposed to have been dug by Saladin. It is 45 ft. in circ. at its mouth, being cut through soft calcareous strata to the depth of 276 ft., or to the level of the Nile, from which its water is most probably derived. A winding staircase conducts to its bottom, and Clarke observes, that for the general perfection of the work, "it may be compared rather to the labours of the ancient Egyptians than to any modern undertaking." From the ramparts of the citadel is displayed a noble panorama. To the E. are seen the obelisk of Heliopolis and the tombs of the Mamelukes, backed by an arid desert; to the S., the lofty quarries of Mount Mokattem, with ruined castles, mouldering domes, and the remains of other edifices, above, below, and stretching beneath the heights far into the plain; S.W. and W. are the grand aqueduct, mosques, and minarets, the Nile, the ruins of Old Cairo, and the island and groves of Rhoda; beyond the river, on the S.W., the town of Ghizeh, amidst groves of sycamore, fig, and palm trees; still more remote, the pyramids of Ghizeh and Saccara; and beyond these the great Libyan desert. N.W. and N., may be discovered the green plains of the delta, sprinkled with white edifices; and N. to N.E., at the feet of the spectator, is the city of Cairo, surrounded in the latter direction by heaps of sand. In 1811, this fortress was the scene of the massacre of the Mamelukes, by order of Mehemet Ali. In 1824, 4,000 individuals, and a great portion of the citadel, were destroyed by the explosion of a powder magazine.

Much yet remains in Cairo to evince the success with which the dynasties of Mussulman princes, who governed Egypt previously to the Ottomans, strove to beautify this city; and we might look in vain throughout the modern Saracenic world for any works at all approaching in excellence the metropolitan mosque of El-Azhar, with those of Sultan Hassan, the Muristan, Hassan Ain, El Ghoree, and Zittesenab, the gate called Bab-el-Nasr (*Gate of Victory*), and one or two of the other gates; the aqueduct on the road to Old Cairo, and the tombs of the Mamelukes. The principal mosque — that of El-Azhar, or Lazarus — is in the middle of the most populous quarter. That of Sultan Hassan, said to be a work of the 13th century, is the largest mosque; its dome is considered the finest in Cairo, and beneath it, in its interior, is the handsome tomb of the sultan whose name it bears. The body of the mosque is closed by a bronze door beautifully inlaid with silver, and is surrounded by a large open square court, with shrines under fine bold arches. This mosque is also remarkable for the height of its two minarets, the variety of marbles used in its construction, its arabesque ornaments, mosaics, and inscriptions. The mosque of Taglioum is the most ancient of all, having been erected about 887, by the sultan Achmed Ebn Taglioum, the founder of a new dynasty in Egypt, nearly a century before the city of Cairo was built. It consists of a vast open court surrounded by a colonnade of marble and granite pillars, supporting a double row of arches of the latest Saracenic style, and bearing a great resemblance to the Patio de los Naranjos adjoining the mosque at Cordova. It contains rich and delicate carving, but is now much neglected. The mosque of Hassan Ain, on the contrary, is greatly thronged, being considered by far the most holy in Egypt, and surpassed in sanctity by few in the Mohammedan states. Outside the walls of the city, and between them and the Mokattem hill, are the celebrated tombs of the Mameluke sovereigns, some of which are fine bold specimens of the Arabic style of architecture of the 13th and 14th centuries: they are chiefly of white marble, and abound with fine arabesque ornaments and carving. There are several other cemeteries in different parts of the environs.

Old Cairo, which is believed by Pococke to have succeeded to the town and fortress of the Egyptian Babylon (*Descr. of the East*, i. 95.), is chiefly occupied by Copts: it contains 12 Christian churches, some of them large and sumptuous buildings; the ancient granaries, bearing the name of Joseph; a grotto, castle, &c., and a machine for raising the water of the Nile into the ancient aqueduct. This, which is exclusively appropriated to the supply of the citadel with water, is raised on arches, and proceeds from Old Cairo by a winding course, and a length of about 2 m. Boulac, the port of Cairo, contains the principal manufactures, and is the seat of most of the trade. It is dirty, nearly as large as Blackwall, and presents the same busy scene, attended with much more noise. "On the banks of the river," says Captain Scott, "are heaped up pyramids of millet, peas, and corn, the property of the government, and placed there, exposed to the sun, dew, and rain, ready for shipment. The shore is lined with boats of all descriptions, discharging their cargoes or advertised for hire." Along the banks of the Nile, between Boulac and Old Cairo, embosomed in groves of orange, sycamore, and acacia, are a number of handsome palaces, the most conspicuous of which is that belonging to Ibrahim Pacha. This palace is built in the Turkish style, and contains some handsome apartments, gaudy furniture, and a large collection of Egyptian antiquities. Its extensive gardens and plantations occupy the plain between it and Cairo; towards the Nile the grounds are laid out in terraces ornamented with statuary, which give them quite a European appearance. In the Nile, immediately opposite Cairo, are the two considerable islands of Boulac and Rhoda; the latter, which is nearly 2 m. in length, is almost entirely the property of Ibrahim Pasha, and is laid out as pleasure-grounds open to the public. Its S.extremity, however, between Old Cairo on one bank, and Ghizeh on the other, is occupied by powder magazines and mills. Here also is the celebrated Nilometer, a graduated pillar in a large square well, having a subterraneous communication with the river. From a court leading to this structure a flight of steps descends to the water, called the Steps of Moses, from a tradition of that being the spot where the deliverer of the Jews was found amongst the bulrushes.

Most of the higher class of Turks, and individuals holding chief public employments, have their residences in Cairo, where they live in much splendour. These are principally in the square of *El Esbekiah*; and it was in the garden of one of these that the French general Klebe was assassinated. Some of the public baths are very spacious, and greatly ornamented; and several public fountains are worthy of notice. There are about 20 stone bridges over the canals of the city and plain, but none worthy of special notice. The coffee-houses are generally very plain, and the shops are merely small recesses capable of holding two or three persons. Each separate bazar is usually devoted to one kind of commodity.

The commerce of Cairo appears at present to be in a very depressed state, owing, as is said, to the injuries inflicted on it by the pacha's monopoly system, the rapacity of his government, the insecurity of property, the alleged corruption of the courts of law, the depreciation of the currency, and various other causes. The plan now acted on, of transporting all the produce to Alexandria to be disposed of, has also occasioned the removal of many of the principal merchants to that city. Numerous houses are becoming untenanted, and falling to ruin; and the new ones that are raised are comparatively mean and poor. There is now no display of Cashemeres, rich silks, jewellery, &c., as we are told the bazars exhibited in the times of the Mamelukes; no crowding of strangers to the capital of Egypt. Matters are every year getting worse; and we are assured that, "unless a change of system takes place soon, Cairo may be blotted out of the map as a place of commerce." The most flourishing trade is that of slaves, for which there is a regular market. Georgians, Nubians, Abyssinians, &c., are met with; but the principal supply comes from Darfur, and other countries in the interior. Black slaves are met with in every family in Cairo. Two English hotels have been opened for travellers since the steam communication with India has been established; but neither steam conveyances nor railroads, though much talked of, have yet come into operation, to aid the commerce of Cairo. The only Egyptian steamboat on the Nile is the private property of the pacha, and is reserved for his own use.

Within the city Mehemet Ali has established an extensive cotton factory; a gun factory, furnishing annually 10,000 muskets; a manufactory of saddles, bridles, knapsacks, belts, and every other leather equipment required for the army; a copper-mill, and machinery for boring gun-barrels, both driven by steam; a paper-mill, &c. At Boulac he has a foundry; a cotton-mill; a woollen cloth factory, with dye-works attached; a cotton-printing establishment; chemical works, &c.: and at Mabietta, not far distant, there is a large cotton factory worked by steam, and furnished with the newest machinery in use in Europe. Besides these, the pacha has large gunpowder and saltpetre factories in the neighbourhood, and a large tan-yard on the road to Old Cairo. These establishments supply the clothing and accoutrements required for the army and navy, as well as most articles in common use throughout the country.

Cairo has always been, and still is, the seat of the best schools for Arabic literature and Mohammedan theology. The mosque of El Azhar has attached to it a library and college, where lectures on the Koran, law, ethics, mathematics, medicine, &c. were formerly delivered to students, who flocked to it from every part of the Mohammedan world. But Mehemet Ali having appropriated the greater part of the property belonging to this mosque to the service of the state, the college attached to it has considerably declined. This, however, is but a trifling deduction from the advantage that has already resulted, and which, no doubt, will continue to result, from the teaching, introduced by the pacha, of the rudiments of European arts and sciences into the public schools. Nothing short of government interference could have effected this signal improvement. There are 3 primary schools in Cairo, which afford education to 600 boys, who are also clothed and fed. At Boulac there is a school of engineers, with 180 pupils. At Aboosabul, within a mile of the city, is a preparatory school, with 1,500 pupils; a school of medicine, with 200 students; a veterinary school at Schoobra; a school for accountants, &c.; and schools for the artillery and cavalry service at Ghizeh, and elsewhere in the vicinity. The prejudice against these schools was at first so strong that the pacha was obliged to resort to compulsion to obtain scholars, and to give them regular pay. The latter is still continued; but compulsion is no longer necessary to obtain pupils. Regimental schools are also established, and primary schools are attached to the greater number of the mosques. The pacha has established a printing press at Boulac, from which a weekly paper in Arabic issues; and at which many popular works in history and science have been printed for the use of students. The principal charitable institutions in and near Cairo are — a military hospital, in the square of El-Esbekiah, capable of accommodating 1,000 patients; another large military hospital about a quarter of a league from the city, composed of four ranges of buildings, enclosing a square, and containing 64 spacious apartments, with 40 beds each; museums of physic and natural history; a chemical laboratory, and all necessary offices. In the city is an hospital for the Egyptian navy, with two general hospitals; and a lying-in hospital, under the direction of a French female practitioner, with a number of pupils. There is also a lunatic asylum; but the unhappy inmates are caged and chained, and present a melancholy and revolting sight. All the medical establishments are under the superintendence of the well known Clot Bey, the originator of most of them. The courts of law are held in a large new building, erected by the pacha.

Most European nations have vice-consuls resident at Cairo; it is the seat of the patriarch of the Coptic church; there are both Roman Catholic and Greek convents presided over, by dignitaries called patriarchs; and two English missionaries are established in the city. There are, however, comparatively few European inhabitants in Cairo, and they are for the most part poor and without influence. The city is usually garrisoned by two regiments of 4,000 men each, one stationed within the citadel, and the other encamped outside the walls.

The neighbourhood of Cairo abounds with places and objects possessing great interest. The pyramids, and the remains of the city of Heliopolis, the *On* of the Scriptures, are treated of under the articles GHIZEH, EGYPT, &c. About 2 m. N. from the city, the country palace of Shoobra, belonging to the pacha, is pleasantly situated on the bank of the river, and connected with Cairo, for the whole distance, by a fine avenue of acacias and sycamores. Mehemet Ali resided here without any pomp for a great portion of the year, and the grounds, which have been agreeably laid out, are generally open to the public. A few m. to the N.E. of Shoobrah, is the scene of the victory obtained by Kleber over Yousef Pacha, in 1800.

Cairo is supposed to have been founded by Jauhar, an Arab general under the first Fatimite caliph, in 970. The caliph Moez afterwards made it the capital of his dominions, which distinction it retained till the overthrow of the Mameluke sovereignty by the Turks, in 1517. It was the residence of the pacha of the Turkish province of Egypt till 1798, when it was taken by the French, who retained it until its capture by the English and Turks, in 1801. Not long after the re-instatement of the Turkish rule in Egypt, Mehemet Ali became viceroy; and under him Cairo once more became the capital of a virtually independent and extensive empire. (*MS. Account of Cairo; Lane's Modern Egyptians*, vol. i.; *Clarke's Trav.* vol. v.; *Scott's Egypt and Candia*, pp. 125. 217., &c.)

CAITHNESS, a marit. co. of Scotland, occupying its N.E. extremity, having W. Sutherland, and N.E. and S. the ocean. Dunnet Head, on the N. shore of this co., lat. 58° 40½′ N., long. 3° 22′ W., is the most northerly point in G. Britain: area, 446,080 acres, of which above 90,000 are cultivated, 6,400 waste, and the remainder mountains, moors, and mosses. The mountains lie principally along the confines of Sutherland, terminating to the S. in the stupendous precipice called the Ord of Caithness. But with this exception, the rest of the country is mostly undulating or flat, consisting principally of vast tracts of mossy moors, covered with low stunted heath, and destitute of wood. Principal rivers, Thurso, Wick, and Dunbeath. Owing to its being nearly surrounded by the sea, the winters are less severe than might have been expected, but the summers are in general cold and wet. Property in a few hands, and mostly entailed. Farms often small: and the practice of underletting, and of stipulating for payment of a portion of the rent in services of various kinds, used to be very prevalent. These practices are now, however, on the decline; and notwithstanding its remote situation, this co. has astonishingly improved within the present century, by the opening of new roads, consolidating small farms, taking in waste land, improving the breeds of cattle and sheep, &c. A great number of superior farm-houses and offices have been constructed of late years; but, generally speaking, the huts of the peasantry are still poor and miserable. Oats, bear or bigg, and potatoes, are the principal crops. Average rent of land in 1810, 1*s.* 5*d.* an acre. Wick and Thurso, its only towns, are, at present, the principal seats of the British herring fishery. Limestone is abundant, and is burned with turf. The inhab. of Caithness are of Scandinavian or Gothic origin; and, except along the border of Sutherland, Gaelic or Erse is neither spoken nor understood. All ranks and orders speak English. Caithness contains 10 pars., and had, in 1831, 6,036 inhab. houses, 6,904 families, and 34,529 inhab., of whom 16,359 were males, and 18,170 females. It sends 1 mem. to the H. of C. for the co., and Wick unites with other boroughs in returning a representative. Co. constituency in 1838-39, 433. Valued rent, 37,256*l.* Scotch; annual value of real property in 1815, 35,469*l.*

CAJAZZO, a town of Naples, prov. Terra-di-Lavoro, cap. cant., on a hill near the Volturno, 11 m. N.E. by E. Capua. Pop. 4,000. It is very ancient, and is defended by a castle built by the Lombards. Besides a fine cathedral, it has several other churches, with convents, a college, an hospital, and a seminary. Its territory produces good wine.

CALABOZO, an inl. town of Venezuela, prov. Caracas, in the *llanos*, near the Guarico river, 11 m. N. E. by E. Capau; lat. 8° 55′ N., long. 67° 42′ W. Pop. 5,000. It has a good church, and several villages surrounding it: many of its inhab. are prosperous cattle-farmers. The pools in its neighbourhood swarm with electrical eels. (*Humboldt's Pers. Nar.* iv.)

CALABRIA, an extensive prov. of the Neapolitan dominions, the most S. portion of Italy, between 37° 46′ and 40° 7′ N. lat., and 15° 39′ and 17° 13′ E. long.; having N. the prov. Basilicata, N.E. the Gulph of Taranto, S.W. the Strait of Messina, and in the rest of its extent the Mediterranean: it comprises the chief of the two peninsulas at the extremity of Italy, and forms what is called the foot of the Italian boot. Shape very irregular; it is 165 m. in length, N. to S., but varying in breadth from 15 to 70 m. Area 6,789 sq. m. Pop. (1833) 969,180.

In most points, Calabria affords a striking contrast to the peninsula of Otranto, on the other side of the Tarantine Gulph; its shores are extremely irregular, and present many capes or headlands: the principal are those of Colonne and Rizzuto, on the E.; Spartivento, on the S.; and Vaticano, on the W. coasts: the principal gulphs are those of Taranto (which it assists in forming) and Squillace, on the E.; Gioja and S. Eufemia, on the W. shores. By far the greater part of Calabria is mountainous; the principal Apennine chain enters it at Mount Pollino, and runs at first S. near the shore, as in N. Italy, then E., and lastly in a S.W. direction to its extremity. It gives off a lofty and remarkable branch to the E., the Silese mountains, which occupy most of the central and wider region of Calabria. The Apennines here attain a greater height than in the central prov. of the king. of Naples, and the summits of many of them are covered with snow from Dec. till March. Monte Sila is 4,632 ft., Monte Alto (Aspromonte), 4,110 ft., and the pass of Nicastro, 3,246 ft., above the level of the sea.

The plains are few, and of no great extent; the largest are in the N.E., on the banks of the Crati and Coselle, and on the E. coast; in the W. the lowlands consist of only a succession of narrow valleys. The mountain streams are numerous, discharging themselves into both seas; the larger rivers, which, however, require no particular notice, are mostly in the central parts of Calabria. There are many small lakes around the E. shore, but none worthy of especial notice. Calabria produces corn, rice, oil, wine, agrumi, and fruits of every kind; silk, sugar, manna, wild honey, tobacco, saffron, resins, liquorice, many medicinal plants, and dyes; forests of oak, elm, chesnut, &c.; it has also veins of gold and silver, iron, marble and alabaster; and yields besides crystal, rock salt of the purest kind, and sulphur. Great

numbers of fish surround the coasts, and game abounds in its forests. It is divided as follows: —

	Area.	Pop.	Chief Towns.	Pop.
	Sq. m.			
Calabria Citra	3,519	385,360	Cosenza -	18,000
			Rossano -	
			Cassano -	
			Bisignano -	
Calabria Ultra I.	1,484	250,800	Reggio -	17,000
Calabria Ultra II.	1,786	333,000	Cantanzaro	11,464
			Monteleone	
			Squillace -	

No part of Europe presents more magnificent scenery than Calabria. On entering it from the N., at Monte Giordano, the undulating hills are lost; the Apennines assume a bold and steep character, and are broken by deep hollows and ravines, and clothed with forests of massive timber. The Bruttian forest of Sila, which occupies to a great extent all the S. part of C. Citra, and the N. of C. Ultra II., consists of oak, elm, sweet chestnut, beech; and pine and fir toward the summits of the mountains: in other parts the Apennines are covered almost to their tops with woods of fine cypress, laurel, hazel, olive, orange, and cedar trees; near Cariati the manna-ash prevails. There are many pastures, however, in the region of La Sila; but habitations are very thinly scattered through it, and towns or hamlets are very few. Around the coast of Calabria Citra there are some cultivated tracts; that near Roseto yields olives, capers, saffron, corn, and cotton, on the high lands near the sea; the latter is cultivated also at Cassano. Trees are wanting on the banks of the Neto, and the country about Cotrone is one of the most uninteresting in Calabria. From Cantanzaro to Squillace the ground is level; the soil full of broken shelly deposit, and fertile in corn, maize, and mulberry-trees. At Chiaravalle the fields are cultivated with flax; the vines are few, cherry orchards numerous, and hedges of holly, woodbine, and sweet-briar, and banks of hearts-ease and wild strawberry. S. Calabria has many towns and villages, various culture, and fine woods; its scenery is decidedly superior to that of Sicily. The environs of Reggio are celebrated for their beauty, and its neighbourhood is well stocked with cattle; from Tropæa to Monteleone the country is like a park, but quite unenclosed, adorned with large clumps of olive-trees. Thence to the Apennines is a wooded vale, through which the Angitola winds; beyond this is a marshy country; and on the banks of the Amato is the field of Maida, celebrated for the action fought there in 1806. N. of Nicastro the main road passes through a fine plain embraced by the mountains, and on the high grounds hence to Cosenza the breaks in the woods display on either side views of wooded vales, sprinkled with towns and villages, and the sea beyond. Some flat grounds prevail N. of Cosenza, as on the banks of the Crati, which are fertile in corn, vines, and mulberry-trees, but subject to malaria; towards the Gulph of Policastro there is a tract of pasture land, feeding many flocks of sheep.

Calabria is subject to earthquakes: a most terrific visitation of this sort occurred in 1783, which swallowed up a great many towns and villages. Near S. Basile there are traces of former volcanoes, and the soil is one mass of lava. Several spots are renowned for the events of ancient history; numerous are the sites of ancient Greek cities, as Sybaris, Crotona, &c.; near Cape Vaticano, Sextus Pompeius defeated at sea the navy of Augustus. Alaric the Goth, the conqueror of Italy, was buried under one of the tributary streams of the Crati. No Italian prov. of equal extent possesses so many Gothic remains.

The arts and manufactures of Calabria are in a very depressed and backward state. Silkworms are cultivated largely in some places, and silk is produced in tolerable quantity, and of good quality. It has a darker colour than in other Neapolitan provinces, in consequence of feeding the worms on the leaf of the red mulberry, which prevails in every part of this territory. The condition of the peasantry is generally bad; a consequence, principally, of the feudal privileges and exactions of the barons. Smuggling is very prevalent, and outlaws and mendicant friars are both very abundant. The country, and its inhabitants, though susceptible of the greatest improvement, are alike uncultivated and savage. No attention is paid to the education of the peasantry, so that the grossest ignorance and superstition are widely prevalent.

The peasants are neither so tall nor so good-looking as those of the rest of Italy. The outline of their faces is African; their complexion a pale olive, or copper-colour; their hair coarse, black and frizzled; but they have beautiful teeth, and their countenances are expressive, and mixed with a look of melancholy and wildness. They are vigorous, agile, active, and nervous; quick, gay, courageous, faithful, and hospitable; but irritable, and prone to passion. In the N. a solidity, like that of the Germans, is manifest in their disposition; while, in the S., their manners approach more to those of the Greeks. Many Greeks reside in S. Calabria, who are much handsomer in their persons and dress than the Calabrese. The dress of the latter varies; in the S. it is like that of the Sicilians, and bonnets are worn; in the N. they wear hats; the men dress in a short close jacket, and close hose, both of black cloth; leathern gaiters, and shoes of undrest skin, tied with thongs of the same; or else in a coarse long jacket, coming down far below the waist; wide hose full of plaits; and ill-cut gaiters of coarse cloth, fastened across with cords: the females wear a large full-plaited petticoat of dingy scarlet. The Calabrese speak a peculiar Italian dialect, pronouncing the *d* and *t*, the *p* and *b*, alike, &c. They are generally poor; the marriage portion of a girl is frequently only a small piece of vineyard, or even a single fruit-tree. Gipsies are numerous, occupying themselves in making small iron articles, bodkins, &c.

History. — Before the dominion of the Romans, Calabria was subdivided into many republics, forming part of Magna Græcia, a region that comprised all Italy S. of Naples. After the fall of the Western empire, it fell successively under the rule of Odoacer, Theodoric, and subsequently of the Greek emperors, who possessed it till the year 929, when the Arabs, from Sicily, established themselves in a few forts, whence they extended their rule over the rest of the province. A century and a half afterwards, it was conquered by the Normans, when it formed a part of the dominions of Robert Guiscard, Duke of Apuglia, with the history of which province its own is subsequently connected. (*Rampoldi, Corografia dell' Italia*, i. 350—352., ii. 350.; *Hoffmann, Europa und Seine Bewohner*, i. 41.; *Swinburne's Two Sicilies*, i. 281—332., ii. 426—472.; *Craven's Tour in the S. Prov. of Naples*, 201—340.)

CALAHORRA (an. *Calagurris Nasica*), a city of Spain, prov. Soria, on the Cidacos, near its confluence with the Ebro; 24 m. S.E. Logroño, 43 m. S.S.W. Pampeluna. Pop. 6,667. It has a cathedral and an episcopal palace. The neighbourhood produces grain, pulse, hemp, flax, fruit, wine, and oil. This was a Roman town of some note, the reputed birthplace of Quintilian.

CALAIS, a sea-port town of France, dép. Pas-du-Calais, cap. cant., on the Straits of Dover, 20 m. N.N.E. Boulogne; lat. 50° 57′ 31″ N., long. 1° 51′ 16″ E. Pop. 10,865. The town is of a square form, and is well fortified; being surrounded by walls and bastions, and protected on the W. side by a strong citadel, commanding the town and harbour, and towards the sea by several forts; the country round may, also, in case of necessity, be laid under water, by means of sluices. It is generally pretty well built, the houses being of brick, and the streets broad and straight; but it is said to be *peu animé*, and *très-monotone*. It labours under a great deficiency of spring-water, the want of which is but indifferently supplied by the rain-water, collected in cisterns. In the middle of the town is the *place d'armes*, having round it several good houses, and a handsome Hôtel de Ville. The gate on the road to Paris, constructed in 1685, is a fine piece of architecture. The parish church, erected by the English, is a large, fine building, with a lofty spire. A tower, near the Hôtel de Ville, serves as a light-house; the light, which is revolving, being elevated 118 ft. above the level of the sea. A pillar has been erected on the spot where Louis XVIII. landed on his return to France in 1814. The Hôtel Dessin, comprising, besides an excellent inn, a theatre, public baths, and a posting establishment, is the finest building in the town. The ramparts, which are planted with trees, form an agreeable promenade. Calais derives its principal importance from its being the nearest French port to England: it is only 20½ m. from the South Foreland, and 22½ m. from Dover, with which, and Ramsgate, London, and other English ports, it has daily or very frequent communication. The entrance to the harbour is between two wooden piers, nearly ¾ m. in length. Unfortunately it dries at ebb tide, and within the piers has only from 15 ft. to 18 ft. at high water, according to the winds. There is, however, excellent anchorage-ground in the outer road, from 2 to 3 m. N.W. from the harbour. There is here a tribunal of commerce, schools of hydrography and design, a public library, with 12,000 vols., &c. Manufactures trifling, consisting of soap and oil-works, salt refineries, &c. Vessels are fitted out for the cod, herring, and mackerel fisheries, and a considerable trade is carried on in salt and spirits; at present, however, its principal dependence is on the resort of travellers to and from England. It communicates with the Aa, and consequently, with St. Omer, by means of a canal about 21 m. in length.

Edward III. took Calais, after a lengthened and memorable siege, in 1347. The obstinate resistance made by the besieged is said to have so much incensed the conqueror that he determined to put to death six principal burgesses of the town, who, to save their fellow-

citizens, had magnanimously placed themselves at his disposal. But, if he ever really formed any such resolution, he was driven from it by the tears and entreaties of Queen Philippa. The English retained possession of Calais for more than two centuries, or till 1558, when it was taken by surprise by the Duc de Guise. In 1596 it was taken by the Archduke Albert; but in 1598 was restored to France by the treaty of Vervins. It deserves to be mentioned, to the honour of Calais, that it is one of the very few towns of France in which no individual lost his life on account of politics during the Revolution. (*Hugo*, art. *Pas-du-Calais; Purdy's English Channel; Hume's England*, cap. 15.)

CALAIS (ST.), a town of France, dép. Sarthe, cap. arrond., on the Anille, 26 m. E. S. E. Mans. Pop. 3,783. It has a fine Gothic church, a large square or place, and two promenades; and is the seat of a tribunal of primary jurisdiction, and of a communal college. There are manufactures of serges, linen, and cotton stuffs, with tanneries and glass-works. The country round is barren, being principally occupied with heaths and forests.

CALASCIBETTA, a town of Sicily, val Calatanisetta, cap. cant., 15 m. N.E. Calatanisetta. Pop. 5,073. There are in the environs numerous caverns.

CALATABELLOTA, or CALTABELLOTA, a town of Sicily, val di Girgenti, on the summit of a lofty mountain near to, and overlooking, the course of the river of the same name, 10 m. N. E. Sciacca. Pop. 4,662. It is very difficult of access, and is said by Swinburne to be the worst situated place, as respects the comforts of life, he had ever seen.

Triocala, a strong city of ancient Sicily, was situated within a short distance of the modern town. This city is famous in history, from its having been the stronghold of the revolted slaves during the dangerous servile insurrection that broke out in Sicily, 104 or 105 years B. C. Owing to the strength of the city, and the talents of their leader Athenio, the insurgents were able to defend themselves for 4 years; and were not subdued till a considerable army, headed by Aquilius, the colleague of Marius, was sent against them. (*Ancient Universal Hist.* xiii. 20. 8vo. ed.) In more modern times, Roger I. defeated the Saracens, with great slaughter, in the vicinity of this town. (*Swinburne's Two Sicilies*, ii. 258. 4to. ed.)

CALATAFIMI, a town of Sicily, val di Trapani, cap. cant., 7 m. S.W. Alcamo. Pop. 8,283. It is ugly and ill built. Its castle, now in ruins, stands on the summit of a hill, in a commanding situation. The environs are well cultivated. (*Swinburne*, ii. 231.)

CALATAGIRONE, or CALTAGIRONE, a town of Sicily, val di Catania, cap. distr., on the declivity of a mountain, 35 m. S.W. Catania. Pop. 21,616. It stands in a salubrious situation, and is said to be the richest and best governed city of Sicily. Streets clean, spacious, well paved, and tolerably lighted; many of the palaces and other public buildings are handsome, and the market is well supplied with provisions at moderate rates. It is the seat of a bishopric; has several churches and convents, a royal college, an hospital, and an orphan hospital. The inhabitants are industrious, and are said to have made the greatest proficiency of any in the island in the useful arts. A kind of soft argillaceous earth is found here, and manufactured into tolerable imitations of the Saxon porcelain; groups of figures, in the various costumes of Sicily, are also formed from it with infinite taste. The neighbourhood affords saffron and yellow ochre, bistre, soda, and other colouring materials. A grand festival and fair is held for 15 days in October, during which great sales are made of cattle, cloth, honey, wax, poultry, and agricultural produce. It is supposed, from the existence of sepulchres and other remains of antiquity, to occupy the site of the *Hybla Hæræa* of the ancients. (*Swinburne*, ii. 307.; *Smyth's Sicily*, p. 197.)

CALATANISETTA, a town of Sicily, cap. prov. of the same name, in a large and fertile plain, near the right bank of the Salso, 62 m. S. E. Palermo. Pop. 16,563. It is well built; has broad and straight streets, a fine square; is defended by a castle, and has a civil and criminal court. In its environs, at a place named Terra Pilata, are two salses that emit hydrogen gas.

CALATAYUD (an. *Bilbilis*), a city of Spain, Aragon, cap. district, on the Jalon, at its confluence with the Jiloca, at the foot of a hill, 45 m. S.W. Saragosa, 115 m. N.E. Madrid; lat. 41° 25′ N., long. 1° 33′ W. Pop. 8,998. It has a large square, full of shops; pleasant and shady promenades; a fountain with 11 *jets d'eau*, and a magnificent *lavadero*; an episcopal palace; a hall for the meetings of the Junta; a house of industry, two hospitals, and barracks for 4,000 troops. Streets and houses regularly built, and there are 3 bridges over the river. It has several elementary schools, and 2 grammar-schools, with manufactures of common cloths, brown paper, leather, &c. The soil abounds in cathartic salts, and there are several chalybeate springs, and extensive caverns, from whose roofs hang concretions, said to be sulphate of lead. The town has three suburbs. It is rather a desirable place to live in, though dull, provisions being good and abundant. This was a Roman town, and is celebrated as being the birthplace of Martial, who has eulogised its manufactory of arms. (*Miñano*.)

CALATRAVA LA VIEJA, in Spain, the remains of the ancient city of Calatrava, the *Oretum* or *Oria* of the Romans, on the Guadiana, prov. La Mancha, 12 m. N.E. Cuidad Real, 15 m. N. Almagro. The order of the Knights of Calatrava had its origin here. The city being menaced by the Moors, in 1158, was abandoned by the Templars, who had held it for 10 years, and Sancho III. promised it to any one who would undertake its defence. Raymond, abbot of Fitero, and Diego Velasquez, offered themselves for the task, and were furnished with money, arms, munitions, &c. A crusade was proclaimed, and plenary indulgences were granted to all who should be found at the defence of Calatrava. The Moors, alarmed at the report of these preparations, abandoned their enterprise, and Velasquez, in his turn, made several incursions into their territories. On this, the king confirmed the grant, with new donations. The order was then regularly organised, in two classes, one for the service of the choir, and the other for the field; but the knights, on the death of Raymond, separated themselves from the monks, and chose a grand master distinct from the abbot, who returned with his monks to Fitero. The knights subsequently acquired great fame and riches in their contests with the Moors; but having sustained serious reverses, and quarrrelling among themselves, the pope adjudged the grand-mastership in perpetuity to the crown of Spain. The order has at present about 80 commanderies. (*Perrot, Collect. Historique des Ordres de Chevalerie*; p. 79. Paris, 1820.; *Miñano*, ii. 265.)

CALCUTTA, a celebrated city of Hindostan, prov. Bengal, cap. of the British dom. in the East, and seat of the supreme governm., in a level tract on the E. side of the Hooghly river, an arm of the Ganges, about 100 m. N. of the Bay of Bengal; lat. 22° 23′ N., long. 88° 28′ E. Pop. (1837) about 230,000, exclusive of perhaps 150,000 more, who come daily from the suburbs into the city. On approaching Calcutta from the sea, the stranger is much struck with the magnificence of its appearance; the elegant villas on each side of the river; the government botanical gardens; the spires of the churches and temples, and the strong and regular citadel of Fort William. Including Fort William, the esplanade, &c., Calcutta extends along the bank of the river, from Kidderpore to Cossipore, a distance of 6 m., with a variable breadth, but averaging about 1½ m. A handsome quay, similar in many respects to that of Petersburg, called the Strand, is continued for 2 or 3 m. along the bank, from the point at which the esplanade meets the city: it is raised 40 ft. above low water mark, and furnished with about 30 principal *ghauts*; or flights of steps, for landing, &c. The Hooghly is here about a mile in width at high water, or at least twice as broad as the Thames below London Bridge, and is, like that river, crowded with shipping; vessels of all descriptions, up to 600 tons burden, being able to lie almost close to the quay. The residences of Europeans are mostly detached from each other, built in the Grecian style of architecture, and situated in Chowringhee (the S. portion of the city, lying at the edge of a portion of the esplanade), or in the suburbs in that quarter, as Garden Reach, where the villas exhibit much beauty, and are surrounded by plantations of mango, jack, and other fruit trees. The citadel, or Fort William, which stands near Kidderpore, about ½ m. S.W. the city, is not only the strongest and most complete fortress in India, but in the British dominions; it is, however, large, and would require for its proper defence, 10,000 men. It is an octagon; the five faces on the land side are regular, the three others, toward the river, vary according to circumstances. The bastions have very salient orillons, and every curtain is covered with a large half-moon, mounting 26 pieces of cannon: the outworks are very extensive, but not much raised above the level of the surrounding country, and Fort William does not, therefore, make an imposing appearance from without. It contains an excellent arsenal, and a cannon-foundry, &c.; its interior is beautifully laid out in walks and grass-plots, shaded with rows of trees, intermixed with piles of shells and cannon balls. It is usually garrisoned by one strong European regiment, two native regiments, and a strong detachment of artillery; was built by Lord Clive soon after the battle of Plassey; and has cost the E. I. Comp. from first to last 2,000,000*l*. Calcutta has no defence other than this fortress; the ditch and mound, constructed by the early settlers as a barrier against the Maharattas, were destroyed by Marq. Wellesley, and their place is now occupied by the "circular road," which marks the boundary of the liberties of Calcutta, and of the administration of English law. Between the fort and the city there is an extensive open plain called the Esplanade, being a continuation of the glacis, the fashionable resort for driving and riding, as Hyde Park

is in London. On it is the government-house, in a line with which there is a range of very handsome dwelling-houses. Chowringhee, formerly a collection of huts, is now a village of palaces, and extends for a considerable distance into the country. Calcutta, when viewed from the Chandpal ghaut, or from any other spot to the S., certainly gives the impression of a very noble city; this impression, however, as is common in all eastern cities, is soon dissipated on penetrating into its interior. Behind Chowringhee, the native or "Black Town" stretches along the river to the N., and exhibits a remarkable contrast to the part inhabited by Europeans. Its streets are dingy, narrow, and crooked, and consist of "huts of earth baked in the sun, or of twisted bamboos, interspersed here and there with ruinous brick bazars, pools of dirty water, cocoa-trees, and little gardens, and a few very large, very fine, and generally very dirty houses, of Grecian architecture, the residences of wealthy natives. There are some small mosques of pretty architecture, and very neatly kept, and some pagodas, but mostly ruinous and decayed; the religion of the people of Bengal being chiefly conspicuous in their worship of the Ganges, and in some ugly painted wooden or plaister idols, with all manner of heads and arms, which are set up in different parts of the city. Fill up this outline with a crowd of people in the streets, beyond any thing to be seen even in London; some dressed in tawdry silks and brocades; more in white cotton garments; and most of all black and naked, except a scanty covering round the waist; besides figures of religious mendicants with no clothing but their long hair, and beards in elf locks; their faces painted white, yellow, or dirty red; their beads in one ghastly lean hand, and the other stretched out like a bird's claw to receive donations; marriage processions, with the bride in a covered chair and the bridegroom on horseback, so swathed round with garlands as hardly to be seen; tradesmen sitting on the ground in the midst of their different commodities; and old men, lookers on, perched, naked as monkeys, on the flat roofs of the houses; carts drawn by oxen, and driven by wild looking men with thick sticks, so unmercifully used as to undeceive perfectly all our notions of Brahminical humanity; attendants with silver maces, pressing through the crowd before the carriage of some great man or other; no women seen, except of the lowest class, and even these with heavy silver ornaments on their dusky arms and ankles; while coaches, covered up with red cloth, are seen conveying the inmates of the neighbouring seraglios, to take what is called 'the air;' a constant creaking of cart wheels, which are never greased in India; a constant clamour of voices, and an almost constant thumping and jingling of drums, cymbals, &c., in honour of some of their deities; and add to all this, a villainous smell of garlic, rancid cocoa-nut oil, sour butter, and stagnant ditches; and you will understand the sounds, sights, and smells, of what is called the 'Black Town' of Calcutta." Under the administration of the Marquis of Hastings, large sums were spent in the improvement and ventilation of Calcutta; a street 60 ft. wide was carried through its centre in its longest diameter, and several squares were laid open, each having a tank, or reservoir in the middle, surrounded by planted walks. The largest square, which is near the S. extremity, is 500 yards on each side, and contains a tank 60 ft. deep. There are no covered ways, as in the cities of Persia, Turkey, &c., though, from the violent heats and rains, such would be very desirable. The bazars in the native town are very inferior, and the shops and warehouses have all a mean appearance: the public buildings there are few and small, and there is not a single minaret in the whole place. The most remarkable public edifice is the government-house, which is, "to say the least of it, a more showy palace than London has to produce;" it was built by the Marquis Wellesley, and consists of a centre and four wings, connected together by circular passages, so constructed as to obtain the benefit of the air from whichever quarter the wind blows. The wings contain the private apartments, and that on the N.E. the council-room; the centre has two very fine rooms, the upper one of which is the ball-room, and both are lighted by a profusion of lustres, while at the same time they exhibit much good taste: the architecture of most of the building is of the Ionic order. The other chief edifices are the town, and custom-houses, the mint, St. John's cathedral, and another English church, all of which are contiguous to the government-house; the Scotch Presbyterian church, a very handsome structure; the Portuguese, Greek, and Armenian churches; the courts of justice, barracks, gaol, hospitals, &c. There are many public colleges and benevolent institutions; as the Hindoo, Mohammedan, and Anglo-Indian colleges, and the college at Fort William; the Calcutta grammar, free, and other charity schools; the military and female orphan asylums; poor-funds, &c.; besides many bible, missionary, and other religious associations. On the N.W. side of the river are the extensive suburb of Howrah, opposite the "Black Town," and the botanic garden, opposite the citadel. Near the latter is the bishop's college, a handsome building in the Elizabethan Gothic style, occupying three sides of a quadrangle 150 ft. square, erected in 1820, for the education of a clerical body, by the Society for the Propagation of the Gospel, at the suggestion of Bishop Middleton. The botanic garden is beautifully laid out, and covers 300 acres of ground: between it and the bishop's college there is an extensive plantation of teak, which, although not in its native soil, thrives exceedingly well. There are several dry and other docks on both sides the river, in which vessels of any size may be built and repaired; but the ships constructed here are of inferior durability to those built at Bombay, in consequence of the framework being of inferior wood, and the visible portions and upper works alone of teak; all the timber in Calcutta also, without the fact being outwardly obvious, suffers greatly from the devastations of the white ant. In every part, this city is covered by an amazing multitude of little pools, or reservoirs, yet the soil on which it stands is remarkably deficient in springs, none having been met with even after boring down 140 ft., till 1828, and subsequently, when Dr. Strong found some in isolated spots, at a depth of 70 ft. The drainings of the place, with such portions of the refuse as are not devoured by crows, kites, vultures, adjutants, and pariah-dogs, which abound in the streets, and at night by foxes and jackalls from the surrounding country, are conveyed away, by a canal, to a large shallow salt lagune about 4½ m. distant, towards the E. Between the city and this lagune the country is filled with gardens, orchards, and villages, but is little inhabited by Europeans. The tract to the N. is drier, healthier, and more open; and the two great roads to Dumdum, the artillery cantonment, and Barrackpoor, the country seat of the Governor-general, lie over a vast extent of fertile country, divided into rice-fields, orchards, and gardens, and swarming with population. The vicinity of Calcutta is very pleasing; "as soon as its boundary is passed, the roads wind through beautiful villages, overhung with the finest and most picturesque foliage the world can show, of the banyan, the palm, the tamarind, and the bamboo. Sometimes the glade opens to plains covered with the rice-harvest, or to a sight of the broad, bright river, with its ships, and wooded shores; sometimes it contracts into little winding tracks, through fruit-trees, gardens, and cottages; the gardens fenced in with hedges of aloe and pine-apple; the cottages neater than those of Calcutta, and mostly of mats and white wicker-work, with thatched roofs and cane verandahs, with gourds trailing over them, and the broad, tall plantains clustering round them." The rainy season at Calcutta generally begins about June 12., and terminates October 14. The average fall of rain for three recent years was 59·83 inches; the annual mean of the barometer is 29·764; of the thermometer, 78° 13′. The most pleasant and temperate period of the year is from Oct. to March; by the middle of April, the weather becomes oppressively hot, often rising to 100° Fahr. The lowest temp. in Dec. 21. 1835, was found to be 62° 2′ Fahr.

Calcutta enjoys a very extensive internal navigation, by means of the Ganges, and its numerous arms and tributaries; and it monopolises the whole of the external trade of Bengal. It is now, in fact, Canton perhaps excepted, the greatest emporium of the East; the gross amount of its imports and exports amounting to from 10,000,000*l.* to 12,000,000*l.* a year. The principal foreign trade is in the hands of English merchants, but there are others amongst the Persian, Hindoo, Portuguese, Greek, Armenian, &c. inhabitants, who are in an extensive way of business. The native Portuguese and Armenian merchants have latterly been declining, both in wealth and importance, while, on the other hand, the Parsees have increased in numbers and opulence, and there are several possessing a capital of 250,000*l.*

In the Year 1848-49 the Value of Imports at, and Exports from, the Port of Calcutta was as follows: —

	Imports.	Exports.
	Rupees.	*Rupees.*
Great Britain - - -	3,11,08,651	5,06,42,168
France - - -	8,11,072	39,04,593
Malabar Coast - - -	20,55,033	27,81,339
South America - - -	3,79,679	
North America - - -	14,20,339	34,31,540
Madras Coast - - -	16,14,870	10,35,816
Ceylon - - - -	1,66,345	2,82,497
Maldives and Laccadives -	1,55,276	88,437
Arabian and Persian Gulphs -	5,81,859	18,08,735
Singapore - - -	47,34,980	36,61,647
Penang and Malacca - -	8,17,651	4,13,381
China - - - -	1,04,90,702	2,51,89,259
New Holland - - -	87,260	89,967
Java and Sumatra - -	91,267	1,13,688
Pegu - - - -	9,96,433	18,05,068
Mauritius - - -	7,12,071	22,38,599
Bourbon - - -	5,61,041	3,71,180
Cape and St. Helena - -	40,166	1,78,173
Other Places - - -	2,34,872	3,09,040
Total Company's Rupees -	5,70,59,767	9,88,48,[illegible]

An Account of the Quantities and Values of the Principal Articles of Native Produce exported from Calcutta in 1848-49.

Merchandise.		1848-49.	
		Quantity.	Value.
			Co.'s Rupees.
Opium	chests	32,287	28,375,483
Indigo	Ind. mds.	121,011½	19,776,777
Sugar	—	1,743,450	16,171,178
Saltpetre	—	650,011	3,627,694
Rice	—	3,669,787	4,165,809
Wheat	—	216,780	239,835
Grain	—	45,058	48,597
Dholl and peas	—	54,774	56,557
Raw cotton	—	35,771½	357,711
Raw silk	—	18,396	7,144,070
Silk piece goods	—	633,319	3,143,395
Mixed piece goods	—	134,855	306,196
Country woollens	—	6,578	52,045
Borax and tincal	—	6,812½	69,628
Castor oil	—	12,609	126,092
Canvas	bolts	2,159	13,120
Ginger	Ind. mds.	35,777½	160,902
Gunny bags	No.	8,108,817	1,038,961
Gunny cloth	pieces	79,158	355,319
Hemp twine	Ind. mds.	6,414	59,957
Hides of all sorts	No.	3,021,906	1,809,474
Horn tips	Ind. mds.	5,192½	36,317
Jute	—	459,928	690,088
Lac dye	—	20,852½	521,352
Lac { shell	—	31,634½	284,217
Lac { seed	—	3,482½	12,187
Lac { stick	—	1,318½	4,803
Linseed	—	252,210½	504,417
Molasses	—	30,835½	80,108
Mustard seed	—	36,055½	72,145
Putchuck	—	2,110½	14,804
Provisions and lard	—	- -	113,672
Rum (Bengal)	gallons	589,309	239,618
Safflower	Ind. mds.	11,805½	351,146
Soap	—	3,485½	21,367
Segars	—	- -	68,174
Tallow	—	6,068	60,680
Tobacco leaf	—	11,227½	56,632
Turmeric	—	6,962½	15,678

A Table showing the total amount of the import and export trade of Calcutta, &c. in 1847-48 and 1848-49, is inserted below.

Innumerable small craft daily arrive from the interior, laden with the produce and manufactures of the different provs.; and the Calcutta market is well supplied with an abundance of excellent provisions: game, snipes, wild ducks, teal, and ortolans, are comparatively cheap; stall-fed venison is as fat as in England, but without flavour: an immense variety of fruits of fine quality appear on European tables; and an exquisite luxury is met with in the *tapaswi* or mango-fish (so called because it is in season with the mango fruit), and which has been hitherto found only in the rivers of Bengal, the Birman empire, and the Camboja rivers.

The population of the city is unequally distributed: its N. and central portions, especially the former, are very densely inhabited; the S. part much less so, owing to the dwellings of Europeans being so much more widely dispersed. The following is the latest census (1837), giving the relative proportions of the different races of resident inhabitants: —

Hindoos	137,651	Brought up	209,466
Mohammedans	58,714	Chinese	362
Half Castes	4,746	Jews	307
English	3,133	Arabs	351
Portuguese	3,181	Madrasses, Parsees, and Native Christians	114
French	165	Low Castes	19,084
Armenians	636		
Mughs (Aracanese)	683	Total	229,714
Persians, called Moguls	527		
Carry forward	209,466		

Males - - 144,911 }
Females - - 84,803 } - 229,714

The number of houses, huts, &c., in 1837, was 65,495 exclusive of the suburbs. Calcutta is the seat of the chief Protestant bishop of India of the Established Church of England; of the supreme courts of justice; of one of the courts of circuit and appeal for the presidency of Bengal; of a vicar-apostolic of the Romish church, with authority over 14 priests and 10 churches, one of which is in that city.

European society in Calcutta is gay and convivial; and fêtes and dinner-parties, both numerous and splendid, are given by the government officers and wealthy private individuals. A certain degree of formality and stiffness is, however, very prevalent; and the Brahminical institution of *castes* would appear to have communicated itself to all ranks and classes of Europeans.

Bishop Heber observes, that the large dinner-parties, in addition to the geographical situation, and other local peculiarities; the aspect and architecture of the place; the multitude of servants, want of furniture in the houses, &c., tend, except in respect of climate, to give Calcutta a striking resemblance to Petersburg. Besides private parties, there are public subscription assemblies, with *conversazioni*, concerts, and a theatre, though the latter is but little frequented. It is usual with Europeans to rise early, the pleasantest part of the

Statement exhibiting the Proportion of the external Commerce of Bengal enjoyed by each Country and State during the Years 1847-48, and 1848-49.

Countries.	Import Trade.				Export Trade.			
	1847-48.		1848-49		1847-48.		1848-49.	
	Value.	Per Centage.	Value.	Per Centage.	Value.	Per Centage.	Value.	Per Centage.
EUROPE.	Co's. Rup.		Co's. Rup.		Co's. Rup.		Co's. Rup.	
United Kingdom	3,59,28,710	66·6	3,11,08,651	54·5	4,15,31,783	48·1	5,06,42,168	51·4
France	7,71,970	1·4	8,11,072	1·4	25,80,120	3·0	39,04,593	4·0
Hambro'	1,08,874	0·2	1,53,623	0·3	1,28,807	0·1	1,69,441	0·2
Portugal	12,580							
Antwerp	- -	- -	- -	- -	- -	- -	71,583	0·1
Genoa	31,845	0·1	35,938	0·1	- -	- -	50,630	0·1
Cadiz	47,196	0·1	28,646					
Gibraltar	- -	- -	- -	- -	- -	- -	3,347	
Norway	- -	- -	2,750					
	3,69,01,175	68·4	3,21,40,680	56·3	4,42,40,710	51·2	5,48,41,762	55·8
ASIA.								
Coromandel Coast	18,97,266	3·5	16,14,870	2·8	12,06,353	1·4	10,35,816	1·0
Ceylon	48,847	0·1	1,66,545	0·3	7,21,074	0·8	2,82,497	0·3
Malabar Coast	20,30,772	3·8	20,55,033	3·6	25,56,575	3·0	27,81,339	2·8
Maldives and Laccadives	2,05,732	0·4	1,55,276	0·3	1,44,026	0·2	88,437	0·1
Arabian and Persian Gulfs	8,64,516	1·6	5,81,859	1·0	14,51,440	1·7	18,08,785	1·8
China	44,59,726	8·3	1,01,90,702	18·4	2,14,42,209	24 8	2,51,89,259	25·5
Singapore	40,12,779	7·3	47,34,980	8·3	42,00,227	4·9	36,61,647	3·7
Penang and Malacca	7,86,394	1·5	8,17,651	1·4	4,98,630	0·6	4,13,381	0·4
Java and Sumatra	30,822	0·1	91,267	0·2	1,16,176	0·1	1,13,688	0·1
New Holland	84,483	0·1	87,260	0·1	48,194	0·1	89,967	0·1
Pegu	8,17,765	1·5	9,96,433	1·7	18,94,046	2·1	18,05,068	1·8
Manilla	-	- -	13,915					
	1,52,39,098	28·2	2,18,05,791	38·1	3,42,79,048	39·7	3,72,69,834	37·6
AFRICA.								
Mauritius	4,02,827	0·7	7,12,071	1·3	29,27,999	3·4	22,38,599	2·3
Bourbon	3,63,598	0·7	5,61,041	1·0	6,51,660	0·8	5,71,150	0·6
Cape and St. Helena	29,474	- -	40,166	0·1	1,18,200	0·1	1,78,173	0·2
	7,95,899	1·4	13,13,278	2·4	36,97,859	4·3	29,87,922	3·1
AMERICA.								
North America	10,45,495	2·0	14,20,339	2·5	41,58,102	4·8	34,31,540	3·5
South America	- -	- -	3,79,679	0·7	174	- -	14,039	
	10,45,495	2·0	18,00,018	3·2	41,58,276	4·8	34,45,579	3·5
	57,39,81,667	100	5,70,59,767	100	8,63,75,893	100	9,85,45,097	100

day being the first of the morning; after *tiffin* (lunch), which is taken between 2 and 3 o'clock, many persons, during the summer heats, retire to sleep for two or three hours; at sunset the fashionable drives of the Esplanade are crowded with European vehicles of all sorts, and the dinner-hour soon after succeeds. The equipages of Calcutta embrace barouches, chariots, tilburies, gigs, &c., as in England, drawn by a breed of horses which have been greatly improved through the government stud and importations from Europe and Arabia: but a grotesque and peculiar appearance strikes the eye of the European in the intermixture of Asiatic costumes, black coachmen, &c. in the scene. Most visits at a short distance are paid in palanquins, the bearers of which are from Balasore, Behar, or the northern Circars, and run silently, bare-headed, and almost naked. The Anglo-Indian, or half-caste population, the product of an intercourse between Europeans and natives, are more numerous in Calcutta than any where else in India; they are intelligent, industrious, and generally well educated, and possess a degree of consideration in the eyes of the native population, though they are without any political influence. All of them speak English, as well as the native dialect. Many of the half-caste females, daughters of mothers of high caste, are educated in the seminaries in and near Calcutta, and often marry Europeans, when they are said to make most unexceptionable wives and mothers: their children, in this case, lose in one or two generations all distinctive mark of their Indian origin. A considerable number of the new zemindars, and the retired traders who have become wealthy, reside in Calcutta; where they have houses handsomely furnished in the European style; drive the best horses and equipages; have adopted some English habits and tastes; speak the English language; enter into the politics of the British empire, and are not ignorant of English literature. With all this, the education of their sons is often miserably neglected, and they turn out mere spendthrifts; but the fact is sufficiently and generally manifest, that the native inhabitants of all ranks show a willingness to learn and speak English, an increasing anxiety to send their children to our schools, and a growing neglect of caste and other national prejudices; tendencies which, if properly taken advantage of, may, ere long, be turned much to our mutual benefit.

The great bulk of the natives have a very bad character, being proficients in intrigue, falsehood, and chicanery; prone to perjury, theft, gambling, and all kinds of dishonesty; and of a cowardly disposition: but it is generally admitted that the morality of the native inhabitants of Calcutta is at a lower ebb than that of those in the provincial districts. A perceptible amendment in the morals and pursuits of the people is, however, said to be taking place. The Bengalee dialect, which had long been looked on with much prejudice by the natives of India, is now reviving, and various works are published in it every year. Numerous periodical works, newspapers, &c., issue from the press. The Calcutta Quarterly Review is a publication of distinguished ability, ranking with the first of its class. Amongst the newspapers are the Bengal Hurkaru and Chronicle, the Calcutta Courier, and the Englishman, daily; one paper twice, and another three times, a week; 6 weekly ones; of which one is in the native tongue, and another, the Reformer, an English paper, conducted by native gentlemen; various other native publications; and 5 monthly, and 2 yearly (English) journals. There are several distinguished scientific, literary, and other associations, in Calcutta; as the Asiatic Society, which owes its origin to Sir W. Jones; the Medical and Physical, Agricultural and Horticultural, Societies; the Chamber of Commerce, Trade Association, &c. To the very able monthly journal of the Asiatic Society we have been much indebted in this and various articles of the present work.

In 1698 the British factory was removed thither from Hooghly; but in the early part of the last century Calcutta was but a paltry village, belonging to the Nuddea district, and inhabited chiefly by husbandmen. Chowringhee was also but a straggling village, and a forest jungle, interspersed here and there with patches of cultivated land, covered what is now the Esplanade, so late as 1756. In that year Suraja-ul-Dowlah, the soubahdar of Bengal, dispossessed the English of their settlement; on which occasion 146 Englishmen, who had been left to defend the factory, were shut up at night in the black hole (a part of the old fort, taken down in 1818), of which number only 23 were found alive next morning. Col. Clive, with some Madras troops, retook Calcutta Jan. 1, 1757; since which it has been quietly retained by the British, and risen to its present degree of importance. (*Hamilton's E. I. Gaz.* i. 315—325.; *Hamilton's Hindostan*, i. 48—61.; *Heber's Journal, &c.; Journals of the Asiatic Soc. of Great Britain and Bengal, &c.; Mod. Trav.* ix. 36—115.)

CALDER, a river of England, in Yorkshire, rises on the S.E. side of Bolesworth-hill, in the grand central range of English mountains, and flowing in an E. direction, at a little distance from Halifax and Dewsbury, and past Wakefield, unites with the Aire at Castleford. This river is of great importance in the canal system of Yorkshire and Lancashire, and has been rendered navigable for a great part of its course. Another river of the same name rises on the W. side of the same hill, and flowing W., falls into the Ribble. It is of very inferior importance. (*See* HUMBER.)

CALICUT, a marit. distr. of Hindostan, prov. Malabar, which see.

CALICUT, a marit. town of Hindostan, cap. of the above district, and of the prov. Malabar, 85 m. S.W. Seringapatam, and 380 m. W.S.W. Madras; lat. 11° 18′ N., long. 75° 50′ E. Pop. 25,000.? The principal exports are pepper, teak, sandal-wood, cardamoms, coir, cordage, and wax; but Calicut is destitute of any good harbour. This was the first place in India made by the Portuguese under Vasco de Gama, who arrived here 18th May, 1498. In 1509 the Portuguese were repulsed, with great slaughter, in an attack on the place, and their commander killed. In 1766 it was taken by Hyder Ali, and Tippoo afterwards destroyed the fort and town, obliging the inhabitants to migrate to Nelluru; but on the conquest of the prov. by the British in 1790, most of them returned to it, and in 1800 Calicut again numbered 5,000 houses. (*Hamilton's E. I. Gaz.* i. 326.; *Journal of the Asiat. Soc.* ii. 346.)

CALIFORNIA, a region of N. America, extending along its W. coast from 22° 48′ to 42° N. lat., and between long. 105° and 124° W., having N. and E. the W. territories belonging to the U. States, and the Gulph of California, and S. and W. the N. Pacific Ocean. It is naturally divided into Old or Lower, and New or Upper, California; which, as they differ widely, both as to formation, extent, and products, we shall notice separately.

CALIFORNIA (LOWER), a long narrow peninsula on the W. coast of N. America, stretching N.N.W. and S.S.E., between 22° 48′ and 32½° N. lat., having N. Upper California, E. the Gulph of California, which separates it in almost its entire length from the Mexican prov. of Sonora, and S. and W. the N. Pacific Ocean; length about 770 m.; breadth varying from 30 to 100 m., with an average of 50 or 60 m.; area 38,000 sq. m. Pop. perhaps not more than 10,000, or 15,000.

A chain of rocky mountains, not more than 5,000 ft. in height, runs lengthwise through the centre of the peninsula. The surface of the country consists of groups of bare rocks broken by ravines and hills, interspersed with tracts of sandy soil nearly as unproductive. It is, in fact, one of the most barren and unattractive regions within the temperate zone. In some sheltered spots, where the soil has not been carried away by the torrents from the mountains, or in others which chance to be fertilised by small streams (which are very scarce), there is mould of great fertility; but such spots are rare, and of limited extent. There are some tolerable harbours; but the same barrenness reigns around them that prevails elsewhere, and renders them ineligible as situations for towns. Lower California is said to be rich in minerals. At its S. extremity there are argentiferous lead ores; in other parts gold and silver have been discovered; but hitherto they have been obtained only in inconsiderable quantities. The climate is clear, dry and hot: unlike Mexico, the rains, except in the most southerly parts of the peninsula, occur during the winter months; summer rains scarcely occur N. of Loreto, near lat. 26° N. Violent hurricanes are frequent, but not earthquakes. Timber is very scarce, and by far the greater portion of the country is incapable of producing a single blade of corn. The sheltered valleys only near the different missions are cultivated with maize, and yield a variety of fruits. Dates, figs, &c., are dried, preserved, and exported; a little wine is also made and exported, and a kind of spirit is distilled from the muscat. Cattle are rather numerous as compared with the population, and feed in part on the leaves of the musquito tree, a species of acacia. Wolves, foxes, deer, goats, snakes, lizards, and scorpions are amongst the wild animals; and the fertility of the sea, if properly taken advantage of, would make amends for the barrenness of the land. The pearl-fishery in the Gulph of California has been famed from its first discovery, and in the 17th and 18th centuries large quantities of pearls were obtained by the Spanish adventurers. Pearls, tortoise-shell, hides, dried beef, dried fruits, &c., constitute the exports of Lower California, which are mostly sent to San Blas and Mazatlan, in small coasting vessels. The imports are — provisions, clothing, agricultural and domestic utensils, supplies for the ceremonies of the church, and a small amount of the ordinary luxuries of life.

This country was discovered by Hernando de Grijalva in 1534; but no settlement was made by the Spaniards till towards the conclusion of the succeeding century, when some Jesuits established themselves here, with the view of converting the natives. Loreto, the capital, and various other small settlements, were established in different parts of the country by the Jesuits, who instructed the natives in agriculture, and persuaded many of them to adopt settled habitations; but these settlements have been abandoned. Perhaps half the natives of Lower California have been nominally converted to Christianity. (*Forbes*, *Alex.*, *California*, 1839, 1—75.; *Coulter*, *Dr.*, in *Geog. Journ.*, vol. v. &c.)

California (Upper), a vast country of N. America, belonging to the U. States. It extends along the Pacific Ocean from about 32½° to 42° N. lat., having S. the Peninsula of Lower California and the river Gila, by which it is divided from Mexico; E. the Rio Grande or Del Norte; and N. the Oregon territory, from which it is divided by the 42nd parallel of lat. It is estimated to contain in all about 525,000 sq. m.

I. This immense territory is divided into two principal but very unequal portions, the western or maritime, and the eastern or inland. The last, and by far the most extensive of these divisions, comprises the entire country between the Rocky Mountains on the E., and the Sierra Nevada on the W. It consists of two well defined portions, the N.W. and the S.E. The last comprises the country drained by the great river the Colorado and its numerous affluents, including the Gila. It comprises a large extent of mountains and deserts; but it has, also, particularly along its rivers, a good deal of a comparatively fertile and well-wooded country.

The other, or N.W. portion of inland California, consists of a huge basin, some 500 m. in diameter, elevated from 4,000 to 5,000 feet above the level of the sea. It includes the country between the Sierra Nevada and the mountains to the E. of the Great Salt and Utah lakes, round by the Wahsatch and other mountain chains which separate the waters that lose themselves within its limits from those which flow into the Colorado. Though very imperfectly explored, by far the larger portion of this gigantic basin is known to be little else than a barren desert covered with sand and gravel, bald rocky mountains, and numerous salt lakes. But there are portions of its surface of a less sterile character; and on one of these, near the Great Salt Lake, in the N.E. part of the basin, a Mormon colony is established, being the only white settlement in this region.

II. The other division of the territory, or that comprising the country between the Pacific and the Sierra Nevada, or Snowy Mountains, is the only portion with which either Americans or Europeans can be said to be acquainted. All the accounts we have of California apply almost exclusively to it; and it only is alluded to in the following statements.

The Sierra Nevada extends, under different names, and with different altitudes, in a nearly continuous chain, from the S. extremity of the Peninsula of California to Russian America. It is remarkable for its parallelism and proximity to the sea, its great elevation, and its numerous volcanic peaks, stretching far above the line of perpetual snow. Its distance from the coast varies (in California) from 150 to 200 m., so that the area of this portion of the country exceeds 100,000 sq. m.

The great mountain-wall of the Sierra Nevada intercepts the warm winds charged with vapour, which sweep across the Pacific Ocean, precipitates their accumulated moisture in fertilising rains and snows upon its western flank, and leaves cold and dry winds to pass on to the E. Hence the characteristic difference of the two regions — mildness, fertility, and a superb vegetable kingdom on the one side, comparative barrenness and cold on the other. — (*Fremont.*)

Between the latitudes of 34° and 41°, a range of low mountains or hills runs close along the shore, the culminating point of which, the *Monte del Diavolo*, close to the bay of San Francisco, attains to the height of 3,674 ft. The valley between this coast chain and the grand barrier of the Sierra Nevada comprises the valleys of the Sacramento and San Joaquin, 500 m. in length, and by far the most valuable portion of maritime California. The western flank of the Sierra belongs, of course, to the latter. It is a long, wide slope, timbered and grassy, with intervals of arable land, copiously watered with numerous and bold streams, and without the cold which its name and altitude might imply. It is from 40 to 70 m. in width from the summit of the mountain to the termination of the foot hills on the edge of the valleys below. Timber holds the first place among the products of this slope, the whole being heavily wooded, first with oaks, which predominate to about half the elevation of the mountain, and then with pines, cypress, and cedars, the pines predominating; and hence called the pine region, as that below is called the oak region, though mixed with other trees. The highest summits of the Sierra are naked, massive granite rocks, covered with snow, in sheltered places, all the year round. Acorns of uncommon size, and not bad taste, used for food by the Indians, abound on some of the oaks. The cypress, pines, and cedar, are between 100 and 250 feet in height, and from 5 to 12 feet in diameter, with clean solid stems. Grass abounds on almost all parts of the slope, except towards the highest summits, and is fresh and green all the year round, being neither killed by cold in winter, nor dried by want of rain in summer. The foot hills of the slope are sufficiently fertile and gentle to admit of good settlements, while valleys, coves, beaches, and meadows of arable land are found throughout. Many of the numerous streams, some of them amounting to considerable rivers, which flow down the mountain side, make handsome, fertile valleys, and furnish good water power. The climate, in the lower part of the slope, is that of constant spring.

The principal feature in the country between the Sierra Nevada and the ocean is the great bay or inlet of the sea called San Francisco. It has a narrow entrance about 1 m. in width, in about 37° 48′ N. lat. Within it expands into a noble basin stretching N.N.W. and S.S.E. 60 or 70 m., and E. about 50 m., being divided into the three great compartments of San Pablo on the N., Santa Clara on the S., and Suisoon bay on the E., and affording accommodation to all the navies of all the countries in the world. Its coast line, which extends to about 275 m., is highly diversified, displaying a singularly rich and varied outline. The great rivers, the Sacramento from the N., and the San Joaquin from the S., fall into this bay. The lower parts of the valleys through which these rivers flow unite at the bottom of the bay, and form an immense plain, stretching N. and S. above 200 m. This great valley has at some former period been evidently a lake; and were it not for the streams which flow into them from the mountains, the rivers by which it is watered would be quite dry in the summer months. The soil is a deep, black, alluvial mould, porous and extremely fertile. It is, however, usually overflowed by the rivers in the rainy season; and their embankment will probably be one of the first objects to

which the attention of the settlers will be directed when the mania for gold-seeking has abated. Both rivers, but especially the Sacramento, afford every facility for steam navigation; and steamers have, it is said, been already introduced upon them.

In the upper part of the valley of the San Joaquin, between 35° and 36½° lat. is the Tulare (Bulrush) Lake, surrounded by extensive swamps overgrown with luxuriant bulrushes (whence its name), and receiving all the streams in the S. end of the valley. In the wet season it attains to a great size, its surplus waters being discharged into the San Joaquin. In the dry season it is reduced within comparatively narrow boundaries, and is in some places fordable.

The appearance of the N. and S. portions of maritime California differs considerably, the former being much better wooded than the latter. Below the 39th deg. lat. the forests are limited to some scattered groves of oak in the valleys and along the borders of the streams; and of red wood on the ridges and in the gorges of the hills, the latter being sometimes, also, covered with dwarfish shrubs. With these exceptions the country is clothed in the wet season with the finest herbage, consisting either of different grasses, or of wild oats, which, in the valleys especially, grow most luxuriantly. But in the latter part of the dry season it has a burnt-up, scorched appearance, and is often subjected to devastating fires. N. of the 39th deg. lat. the forests are extensive and valuable; and are fitted to afford all but inexhaustible supplies of timber.

Climate. — The temperature is a good deal higher than in the corresponding latitudes on the E. coast of America. The year is divided into two seasons, — the wet, extending from April to November, and the dry. In the former the rains, though not by any means continuous, are frequent and heavy. In the S. parts of the country the dry season commences earlier and continues longer than in the N. During the prevalence of the latter the district immediately contiguous to the shore is infested with fogs and cold winds from the sea. But within the coast range, the climate is said to be delightful; the heat in the middle of the day not being so great as to hinder labour, while the nights are cool and pleasant. When, however, we proceed still further inland the influence of the sea-breeze ceases to be perceptible; and the temperature in some of the valleys at the foot of the outer range of the Sierra Nevada is often very high.

Products. — The country, particularly in the N., is well suited to the growth of wheat, barley, rye, and oats. Wild oats, indeed, as already noticed, grow in vast quantities all along the coast, and as far inland as the sea-breeze has any material influence. Potatoes, turnips, carrots, and all the edible roots of the Atlantic coast of America, with apples, pears, peaches, vines, and other fruits, attain to the greatest perfection. In the southern valleys between the coast-hills and the Sierra the climate is sufficiently hot to mature maize, rice, and tobacco. The heat and drought of summer make irrigation a most important auxiliary in farming operations; but it is not, as has been alleged, indispensable. The present neglected condition of the country affords but slight data for forming correct opinions of its agricultural capacities and fertility. Vancouver found, in 1792, at the mission of San Buonaventura, lat. 34° 16′, apples, pears, plums, figs, oranges, grapes, peaches, and pomegranates growing together with the plantain, banana, cocoa-nut, sugar-cane, and indigo, and all yielding fruit in abundance, and of excellent quality. Humboldt says that the olive oil of California is equal to that of Andalusia, and the wine like that of the Canary Islands. Under the mild administration of the "fathers," the Indians were made available for labour, and many of them were employed in fields, orchards, and vineyards. But now little of this former cultivation is to be seen. The valleys are overgrown with wild mustard, the vineyards and olive orchards are decayed and neglected; and in a few places only do we see the evidences of what the country is capable. At San Buonaventura Colonel Fremont found the olive trees, in January, bending under the weight of neglected fruit; and the mission of San Luis Obispo (lat. 35 deg.) is still distinguished for the excellence of its olives, which are said to be finer and larger than those of the Mediterranean. Cotton might, perhaps, be grown in the S., the uniform heat and dryness of the summer being suited to the plant; but with the exception of the districts in the immediate vicinity of the missions, the settlers in California have hitherto been principally a pastoral people. In 1847 the stock of cattle was estimated at about 500,000 head, and that of sheep at about 160,000. This supply is, however, quite inadequate to the existing demand of the country; and hence it is that the prices of most sorts of provisions became extravagantly high. But the fertility and productive capacity of the soil are such that it might easily be made to supply the wants of a vastly increased population.

Among the wild animals are bisons, bears, wolves, foxes, wild cats, polecats, otters, beavers, hares, rabbits, and a profusion of other kinds of game. Large herds of a peculiar variety of deer, of a gigantic size, with horns of a corresponding magnitude, and great swiftness, are found in the forests and grassy plains. They used to be taken by the *lasso*, and sometimes by the artifice, described by Humboldt, of the Indians disguising themselves with the skins and horns of captured animals till the herd came within reach of their arrows! (*Nouvelle Espagne*, ii. 285.) The bison is hunted for its skin, which is used in many parts of Spanish America as a bed or carpet. Otters and beavers are found in all the rivers, lakes, and bays; but their numbers have greatly decreased since the country began to be settled. Captain Beechey estimated the annual export of beaver skins in 1824 at 2,000. The sea contains exhaustless stores of fish.

Mineral Produce. — But the vegetable and animal products of this region, however important, are at present reckoned of no account, compared with its mineral produce, or rather with the gold found in the beds of some of its rivers, ravines, &c. The discovery of these auriferous deposits has rendered California an object of universal interest, has directed to her shores an unparalleled amount of emigration, and increased her population, in two or three years, in a tenfold proportion! We subjoin from the valuable Report of Mr. Butler King, the Commissioner sent by the government of the U. States to inquire into the condition, capacities, and prospects of California, the following statements in regard to the gold districts: —

"The gold region of California is between 400 and 500 m. long, and from 40 to 50 m. broad, following the line of the Sierra Nevada. Further discoveries may, and probably will, increase the area. It embraces within its limits those extensive ranges of hills which rise on the eastern border of the plain of the Sacramento and San Joaquin, and, extending eastwardly from 50 to 60 m., they attain an elevation of about 4,000 feet, and terminate at the base of the main ridge of the Sierra Nevada. There are numerous streams which have their sources in the springs of the Sierra, and receive the water from its melting snows, and that which falls in rain during the wet season.

"These streams form rivers, which have cut

their channels through the ranges of foot-hills westwardly to the plain, and disembogue into the Sacramento and San Joaquin. These rivers are from 10 to 15, and probably some of them 20 m. apart.

"The principal formation, or substratum, in these hills, is talcose slate; the superstratum, sometimes penetrating to a great depth, is quartz. This, however, does not cover the entire face of the country, but extends in large bodies in various directions; is found in masses and small fragments on the surface, and seen along the ravines, and in the mountains overhanging the rivers, and in the hill-sides in its original beds. It crops out in the valleys and on the tops of the hills, and forms a striking feature of the entire country over which it extends. From innumerable evidences and indications, it has come to be the universally admitted opinion among the miners and intelligent men, who have examined this region, that the gold, whether in detached particles and pieces, or in veins, was created in combination with the quartz. Gold is not found on the surface of the country presenting the appearance of having been thrown up and scattered in all directions by volcanic action. It is found only in particular localities, and attended by peculiar circumstances and indications. It is found in the bars and shoals of the rivers, in ravines, and what are called the 'dry diggings.'

"The rivers, in forming their channels, or breaking their way through the hills, have come in contact with the quartz containing the gold veins, and by constant attrition cut the gold into fine flakes and dust, and it is found among the sand and gravel of their beds at those places where the swiftness of the current reduces it, in the dry season, to the narrowest possible limits, and where a wide margin is consequently left on each side, over which the water rushes, during the wet season, with great force.

"As the velocity of some streams is greater than others, so is the gold found in fine or coarse particles, apparently corresponding to the degree of attrition to which it has been exposed. The water from the hills and upper valleys, in finding its way to the rivers, has cut deep ravines, and, wherever it came in contact with the quartz, has dissolved or crumbled it in pieces. In the dry season these channels are mostly without water, and gold is found in the beds and margins of many of them in large quantities, but in a much coarser state than in the rivers; owing, undoubtedly, to the moderate flow and temporary continuance of the current, which has reduced it to smooth shapes, not unlike pebbles, but had not sufficient force to cut it into flakes or dust.

"The dry diggings are places where quartz containing gold has cropped out, and been disintegrated, crumbled to fragments, pebbles, and dust, by the action of the water and the atmosphere. The gold has been left as it was made, in all imaginable shapes; in pieces of all sizes, from one grain to several pounds in weight. The evidences that it was created in combination with quartz are too numerous and striking to admit of doubt or cavil. They are found in combination in large quantities. A very large proportion of the pieces of gold found in these situations have more or less quartz adhering to them. In many specimens they are so combined they cannot be separated, without reducing the whole mass to powder, and subjecting it to the action of quicksilver.

"This gold, not having been exposed to the attrition of a strong current of water, retains, in a great degree, its original conformation.

"These diggings, in some places, spread over valleys of considerable extent, which have the appearance of an alluvion, formed by washings from the adjoining hills, of decomposed quartz and slate, earth, and vegetable matter. In addition to these facts, it is, beyond doubt, true, that several vein-mines have been discovered in the quartz, from which numerous specimens have been taken, showing the minute connection between the gold and the rock, and indicating a value hitherto unknown in gold-mining.

"These veins do not present the appearance of places where gold may have been lodged by some violent eruption. It is combined with the quartz, in all imaginable forms and degrees of richness. The rivers present very striking, and, it would seem, conclusive evidence, respecting the quantity of gold remaining undiscovered in the quartz veins. It is not probable that the gold in the dry diggings, and that in the rivers — the former in lumps, the latter in dust — was created by different processes. That which is found in the rivers has, undoubtedly, been cut or worn from the veins in the rock, with which their currents have come in contact. All of them appear to be equally rich. This is shown by the fact that a labouring man may collect nearly as much in one river as he can in another. They intersect and cut through the gold region, running from east to west, at irregular distances of 15, 20, and sometimes 30 m. apart.

"Hence it appears that the gold veins are equally rich in all parts of that most remarkable section of country. Were it wanting, there are further proofs of this in the ravines and dry diggings, which uniformly confirm what nature so plainly shows in the rivers."

We may shortly state that the works, or "diggings" as they are termed, are divided into *wet* and *dry*; the former being those in the beds of the rivers and streams, and the latter in the higher grounds. It is a mistake to suppose that gold is found only in the beds of the rivers. It is distributed through all the *detritus* of certain valleys, or parts of valleys, and ravines; and is merely exhibited, as it were, in the banks and sands of the rivers and watercourses. The instruments used by the "diggers" were, in the first instance, at least, of the rudest description. After being dug up the ore is placed in a basket or sieve, and washed to free it from sand, earth, and other impurities. The hardships and fatigue hitherto undergone at the "diggings," have often been very great, and those only who had the advantage of a strong constitution could expect to brave them with impunity. Parties in the "wet diggings" are frequently immersed, under a broiling sun, in water up to the knees or higher; and though the labour in the "dry diggings" be perhaps less dangerous, it, also, is of a kind that nothing but the *auri sacra fames* would induce most persons to undertake. It is probable, however, that in consequence of the better settling of the country, these serious drawbacks either have been, or speedily will be, materially abated. The search for gold is occasionally prosecuted for a lengthened period without success; while, on the other hand, some fortunate individuals stumble at once on a rich deposit, where they make large sums with but little labour, and give fresh stimulus to the hopes and exertions of every one else. In the autumn, fever and ague prevail to a considerable extent in some of the valleys, and have proved fatal to not a few of the diggers.

Quicksilver is, also, a product of California. The only mine at present worked is situated near San Joseph, within a short distance of the S. angle of the bay of San Francisco. It belongs to, or is claimed by, Mr. Forbes of Tepic, is

wrought by miners from Mexico, and is very productive. Quicksilver, and, also, silver are said to be found in sundry other places.

It was known from the statements of the earlier visitors of the country, that gold had been found, or was believed to exist, in California *; but these statements had been either forgotten, or made no impression, and it was not till late in May, or early in June, 1848, that the auriferous deposits were discovered that have attracted so much attention, and have had such wonderful results. They were found on the S. fork of the American river, a tributary of the Sacramento, at a place now called Coloma. The news of the discovery and of the unparalleled richness of the deposits spread with extraordinary rapidity; and Mr. B. King states that before the end of the season about 5000 men had been attracted to the spot, and that their enterprise had been rewarded by the acquisition of gold worth 1,000,000*l.* stg. During the following winter information of the discovery spread on all sides, and to a great distance; and in the season of 1849, immigrants of all descriptions, and from the remotest countries, inc. Americans, Mexicans, Peruvians, Chilinos, Europeans, South-sea islanders, Chinese, &c., crowded in swarms to the Sacramento and its affluents. A camp of at least 10,000 Mexicans is said to have been formed. "They had," says Mr. B. King, "quite a city of tents, booths, and log cabins; hotels, restaurants, stores, and shops of all descriptions, furnishing whatever money could procure. Ice was brought from the Sierra, and ice-creams added to other luxuries. An inclosure made of the trunks and branches of trees, and lined with cotton cloth, served as a sort of amphitheatre for bull-fights; other amusements, characteristic of the Mexicans, were to be seen in all directions.

"The foreigners resorted principally to the S. mines, which gave them a great superiority in numerical force over the Americans, and enabled them to take possession of some of the richest in that part of the country. In the early part of the season the Americans were mostly employed on the forks of the American, and on Bear, Uba, and Feather rivers. As their numbers increased they spread themselves over the S. mines, and collisions were threatened between them and the foreigners. The latter, however, from some cause, either fear, or having satisfied their cupidity, or both, began to leave the mines late in August, and by the end of September many of them were out of the country."

Mr. King estimates the gold collected in 1849 at the immense sum of about 40,000,000 doll., or 8,000,000*l.* stg.!

Since then the immigration into the country has vastly increased; and still greater quantities of gold have been collected. Hitherto it has been principally taken from the N. rivers, or from those which flow into the Sacramento; the S. rivers, or those which flow into the San Joaquin, having been comparatively neglected. But Mr. King says that the latter are believed, by those who have visited them, to be richer than those more to the N.

It is also stated that deposits have been discovered in the Trinity, a river which, rising N. of the sources of the Sacramento, flows W. to the Pacific, into which it empties itself in about the 40th deg. lat. And it is further affirmed that gold has been discovered in other and still more remote localities, or in certain points of the Gila and Colorado. But the truth is that our information is a great deal too scanty and imperfect to enable any estimate to be formed either in regard to the extent or richness of the auriferous region. It is probable that in both respects there has been a good deal of exaggeration. Still, however, there can be no question, as evinced by the quantities already obtained, that the deposits are of the richest description; and if the surface over which they extend be anything like the reported extent, it will be long indeed before they can be exhausted; and the influx of the precious metal obtained from them will have a powerful, and, we think, a highly beneficial, effect in all parts of the commercial world.

Government, &c. — On their arrival in California the immigrants from the U. States, and other distant countries, found themselves in a singular position. There were very few inhab., and no government or police in the country; and the immigrants were totally unacquainted with the Spanish laws, by which the property and affairs of the settlers had hitherto been regulated. In consequence, the greatest confusion and disorder took place. The congress of the U. States soon became aware of this untoward state of things, and of the importance of the vast addition made to its territory. But the efforts of the government to organise the country into a new state, or to subject it to a constitutional regimen, were obstructed at the outset by the formidable difficulty of deciding whether slavery should or should not be allowed in the new state; and the disinclination or inability of Congress to decide this question prevented the admission of California into the Union either as a state or a territory.

In this dilemma the Americans in the country displayed their singular capacity for self-government, by promptly and unanimously adopting the manly and safe course of forming themselves into a state. In June 1849 representatives were chosen in all parts of the territory to meet for the purpose of forming a constitution. They in no very long time completed their labours; and it redounds to their credit that the non-existence of slavery in California was unanimously agreed to, and made a fundamental article of the constitution. There can be no doubt in regard to the admission of the new state into the Union. The American government had, indeed, already sent a military governor to the prov., and the convention for framing a constitution was summoned by him. The tribunals established in the other states will, of course, be established here; and the admitted necessity and salutary rigour of Lynch law has hitherto succeeded in preserving an extraordinary degree of security and good order among the many unruly and desperate characters that have crowded to the "diggings."

The American government has determined to confirm all the grants really made by the former Spanish and Mexican governments. But in making grants of land to individuals and corporations, the crown of Spain and the Mexican rulers jealously and carefully excepted their exclusive right to metallic deposits, and especially to the precious metals and quicksilver. And these have consequently become, by the cession of the country, the property of the Union. Hitherto, indeed, nothing has been made of this valuable acquisition; the adventurers having been permitted, without let or hinderance, to seek for gold wherever they pleased. But a state of things so pregnant with disorder, and injurious to the public interests, should not be permitted to continue. Mr. B. King proposes that an annual tax of 16 doll. should be imposed on every individual engaged in the search for gold; that a police should be organised to prevent collisions and disorder; and

* See a curious statement on this subject in Shelvocke's Voyage, in Harris's Voyages, I. 233. ed. 1744.

that a mint at which the gold should be coined should be established at San Francisco. It has since, however, been stated that the legislature of the state has imposed an oppressive monthly tax, or license duty, of 20 doll. on all foreigners working at the "diggings."

The population of Upper California was estimated by Humboldt in 1802 at no more than 16,862, of whom 15,562 were converted Indians. In 1839 the pop. of both Californias was estimated by Forbes at 23,025. There can be no doubt that the country had once been far more populous, the ruins of Indian villages being visible in all the valleys of the Sierra Nevada. But it is now abundantly certain that it will speedily be, if it be not already, far more populous than at any antecedent period; and it will be occupied by a widely different race. According to Mr. B. King about 80,000 Americans and 20,000 foreigners were in the country at the close of 1849; and as the immigration during the present year will, most probably, double the pop., the presumption is it will amount on the 1st of January 1851 to about 215,000. In no country is there so great a preponderance of males. But as the access to the country becomes facilitated it will be more and more resorted to by females; and the existing disparity between the sexes will be gradually reduced.

The Indians of Upper California are seldom much more than 5 ft. in height: complexion, especially in the more southerly parts of the country, an extremely dark copper-colour, approaching to that of the negro; forehead low; eyes black and hollow; hair long and straight; lips thick. They are indolent, timid, and without any of the boldness and activity which are sometimes evinced by the tribes of Indians nearer the pole. Excepting those that have been converted in the different missions, the women go nearly, and the men entirely, naked. They are filthy in their habits, have few articles of furniture, and live in wigwams built in great part of bulrushes, of which also they construct their rafts, and what clothing they use. They subsist principally on acorns, roots, insects, and the kernel of the pine burr; but occasionally they catch fish and game. Mr. B. King says that they never attempt to cultivate the soil, except when they are induced to enter into the service of the white inhabitants. They do not pretend to have any interest in the soil except as hunting ground; and they have not been treated by the Spanish or American governments as if they had any. They have murdered some of the whites who had wandered too far up the rivers in search of gold; but the latter, if they did not provoke, have at all events avenged these enormities.

The towns of California exhibit the most striking proofs of the extraordinary change that has come over the country. San Francisco, on the S. side of the entrance to the noble bay of the same name, lat. 37° 48′ 5″ N., long. 122° 24′ W., consisted, in the early part of 1848, of a few rude cabins; whereas, at the close of the ensuing year, it had an exchange, a theatre, sundry churches, and great numbers of houses, some of stone, but mostly of *adobe* (sun-dried bricks), with an all but countless multitude of tents and booths. The pop. is even more motley than the houses, comprising, in the wet season, immigrants from all countries, and of all shades of character. Our readers will not be surprised to learn that gambling would seem to be, next to the "diggings," which partake largely of its nature, the most profitable business carried on in California. During last season, about 100 gambling-houses were nightly crowded in San Francisco; and in these the gains of weeks and months of enterprise and privation were frequently squandered in a few days, and sometimes in a few hours. Some of the most skilful *chevaliers d'industrie* of Paris, London, Berlin, and Vienna have transferred themselves to this new region; and not a few of them have found it to be truly an El Dorado. But the excitement which has led to this amount of gambling will gradually subside. Hitherto it has been mostly carried on by "foreigners." The most expert adepts from Frascati's find it rather difficult to enrich themselves at the expense of Jonathan.*

Most of the other towns have grown up in situations contiguous to the "diggings." They are formed of the flimsiest materials, and consist, in fact, for the most part, of tents. In a short time no trace of them would be found were the "diggings" to become unproductive or to be deserted.

But the pop. in California and the demand for produce are now so great, that it is not to be doubted that the soberer and steadier pursuits of industry will, ere long, attract a progressively increasing amount of attention; and when such is the case, towns will be built with other views than for the mere accommodation of the pop. engaged in the "diggings" or the mines. In addition to San Francisco, Monterey and San Diego, near the S. frontier, are the principal ports.

In consequence of the extraordinary influx of immigrants, of the small amount of the native pop., and the extraordinary earnings made by those employed in the "diggings," the prices of labour, of houses, and of all sorts of provision, rose to an enormous height in 1849; and large sums were made by those who carried supplies to San Francisco. This, however, was not a state of things that could be of any very permanent duration. Already, indeed, the markets have been completely overstocked with some very important articles, and it is but too certain that the consequent losses will far more than balance the previous gains. Certain articles are, it is true, still scarce and dear, and lodgings alike bad and extravagant; but these inconveniences will no doubt speedily diminish. The formation of a railway or water communication across the Isthmus of Panama, by facilitating the intercourse of California with the U. States and Europe, would do more for its improvement than any thing else.

Steamers make the passage from N. York and N. Orleans to Chagres, respectively, in about 7 and 4 days; and allowing 3 days for the conveyance of freight across the Isthmus, and 10 days for the voyage from Panama to San Francisco, it results that the passage from N. York to the latter might be made in 20, and from N. Orleans in 17 days. This facility of communication would not be of less importance to the Atlantic states of the Union than to California; for there can be no manner of doubt, whatever may be the fate of the "diggings," that California will speedily become, or rather already is, an important market for the products of the former. Notwithstanding its present enormous distance, 247,417 tons of American shipping entered San Francisco during the year ended 28th February, 1850! The foreign shipping which entered the port during the same year amounted to 65,934 tons. The immigrants by these vessels, ex. sailors, of whom many left for the "diggings," were 41,709.

History.— California was discovered by Cabrillo, a Spaniard, in 1542. At a later period, or in 1578, Sir Francis Drake sailed along its shores, prolonging his voyage to the 48th deg. of lat. From this circumstance, the name of New Albion has sometimes been given to the country N. of San Francisco; though, as Humboldt states, this de-

* See a very clever article on California in the *Revue des Deux Mondes*, 15 Jan. 1850.

signation, if employed at all, should be restricted to the country extending from the 43rd (the N. limit of Cabrillo's voyage) to the 48th deg. of lat. — (*N. Espagne*, ii. 273.) It was not colonised by the Spaniards till 1768. The latter founded establishments in various parts of the country under the names of *Presidios* and *Missions*; the former being military posts, and the latter a sort of semi-religious foundations under the guidance of the Franciscan Friars. Like the Jesuits, these fathers exerted themselves to instruct the Indians in the art of husbandry, and apparently their efforts were crowned with success. But here, as in other parts, the civilisation of the Indians appears to have been wholly forced and factitious; and when the missions were deserted by the Friars the natives relapsed into their original barbarism. Their numbers have since rapidly declined; and it is probable that at no distant period the race will be entirely extirpated. The Americans seem generally to regard them as a sort of *feræ naturæ*, or at best as irreclaimable barbarians without the pale of humanity.

About 18 or 20 years since California began to be resorted to by American and English hunters and other adventurers; who soon began to think of emancipating themselves from the feeble dominion of Mexico. The latter was overthrown in 1836. Subsequently the country became a prey to all sorts of disorders; adventurers from the U. States, Mexico, &c., alternately getting the ascendancy. At length a war broke out in 1846 between the U. States and Mexico; and the latter, having been defeated at all points, finally ceded California to the Union in 1848.

CALLAH (EL), a town of Barbary, reg. Algiers, on a mountain, and surrounded by ramifications of the Atlas, 15 m. N. E. Mascara. It is a dirty and ill-contrived town, having neither drains, pavement, nor causeways. It has a citadel, and a large manufactory of carpets and *burnooses*, or woollen cloaks. Several villages in the neighbourhood are engaged in the same employment. Dr. Shaw thinks, that it may have been the *Gitlui* or *Apfac* of Ptolemy. (*Shaw's Travels*. 2d ed. p. 25.)

CALLAN, an inl. town of Ireland, co. Kilkenny, prov. Leinster, on the King's River, an affluent of the Nore, 72 m. S.W. by S. Dublin. Pop. of the town, liberties, and parish, in 1821, 5,678; in 1831, 6,111; and in 1834, 6,262; of which 197 were of the established church, and 6,065 R. Catholics. The town was anciently walled, and a place of considerable strength; but was stormed and dismantled by Cromwell in 1650. The streets form a cross, with lanes branching from them, and the houses are, in general, very indifferent. The parish church was anciently a monastic building; the Roman Catholic chapel is modern. There is also an Augustine friary, with a large chapel, a national school, a dispensary, and a loan fund. A party of the constabulary is stationed here. The corporation, which consists of a sovereign, burgesses, and freemen, returned 2 mem. to the Irish H. of C. till the Union, when it was disfranchised. The liberties extend to a considerable distance round the town. The only trade is in grain. Markets, held in a small market-house, on Tuesdays and Saturdays; and for pigs, on every Monday from January to May. Fairs held on 4th May, 13th June, 10th July, 21st August, 10th October, 4th November, and 14th December. Post-office revenue in 1830, 233*l*.; in 1836, 318*l*. The mail coach from Dublin to Cork passes through Callan, and a car plies to it from Clonmell three times a week, conveying an average of four passengers each trip. (*Stat. Surv.*; *Railway Rep.*)

CALLANDER, a bor. of Scotland, co. Perth, valley of Menteith, beautifully situated on the left bank of the Teith, 16 m. N.W. Stirling. It may be regarded as the threshold of the Highlands in this quarter, and is surrounded on all sides except the S. by stupendous mountains, forming part of the Grampians; Benledi, the highest and most striking, being 3,009 ft. above the level of the sea. Pop. 1,200. Gaelic and English are both spoken, and the Highland dress is partially worn. A classical interest has of late years been imparted to this town, and to the district with which it is connected, by Sir Walter Scott's poem of "The Lady of the Lake." Loch Katherine and the Trosachs ("bristled country"), so celebrated in that poem, lie 10 m. W. from Callander; and the activity and prosperity which mark this neat little town are chiefly ascribable to the advantages it derives from lying in the line of the great thoroughfare leading to these romantic scenes. Not fewer, at an average, than 50 strangers are said to sleep in Callander every night during five months of summer and autumn, on their way to and from the Trosachs. The place abounds with inns, and most families let beds for the accommodation of travellers. The head inn, lately built, would do no discredit to any town of the kingdom. Manufactures have not yet found their way to this place. The town is built on *feus*, or building leases, holding of the noble family of Perth, now represented by Lord Willoughby d'Eresby; to each of which is attached an acre or more of ground, varying in yearly rent from 1*l*. 10*s*. to 3*l*., so that each family has a source of employment within itself, almost peculiar to Callander. The only public building in the town is the parish church, a modern edifice, with a spire. It has also an efficient parish school.

CALLAO, a sea-port town of Peru, about 6 m. W. from Lima, of which it is the port, on the N. side of a projecting tongue of land, opposite to the barren island of San Lorenzo, which protects the W. side of its bay; lat. 12° 3′ 45″ S., long. 77° 4′ 10″ W. The houses in the town are mean and poor, with mud walls and flat roofs. It is well fortified. The roadstead is by far the best on the Peruvian coast, with good anchorage in from 7 to 10 fathoms. There is a rudely constructed pier, within which vessels of large burden may load and unload. There is a very good carriage road from Callao to Lima. The present town is of comparatively modern origin; the former town having been wholly destroyed and submerged in a dreadful earthquake that occurred in 1746, which also destroyed great part of Lima. In calm weather the ruins of the old town are still visible under the water at a short distance from the present town. In November, 1820, Lord Cochrane cut out the Esmeralda, a large Spanish ship of war, from under the guns of the castles of Callao. These surrendered to the independents in the course of the following year. (*Stevenson's S. America*, i. 134. *&c.*; *Hall's S. America, &c.*)

CALLE (LA), a factory founded by the French African Company, on the N. coast of Africa, reg. Algiers, near the Tunisian frontier. It stands on a peninsulated rock nearly surrounded by the sea, and was well fortified. This was formerly the principal seat of the coral fishery carried on along the Barbary coast. It was nearly destroyed by the Algerines in 1827.

CALLIANEE, an inl. town of Hindostan, prov. Aurungabad, presid. Bombay, 24 m. N.E. that city; lat. 19° 15′ N., long. 73° 15′ E. It is the cap. of a distr. of the same name, and stands on the S. bank of the Callas river, surrounded by ruins: it is, however, populous, and carries on some trade in cocoa-nuts, oil, coarse cloths, brass, and earthenware. It sustained many sieges during the wars between the Moguls and Mahrattas. The district of Callianee is a strong hilly country extending along the sea-coast, opposite the islands of Bombay, Salsette, &c. bounded E. by the W. Ghauts, and containing the towns of Bassein, Panwell, Chowl, Rajapoor, &c.: its towns are large and tolerably well peopled; but its villages small, meanly built, and thinly scattered. (*Hamilton's E. I. Gaz.* i. 327.)

CALLINGTON, a town and par. of England, co. Cornwall, middle div., E. hund. Area of par. 2,600 acres. Pop. of do., 1,388. The town, in a low and unpleasant situation, is 7 m. S.S.W. Tavistock. It was made a bor. in the 27th of Elizabeth, and returned 2 mem. to the H. of C. from that period down to the passing of the Reform Act, when it was disfranchised. The right of election was in the owners of burgage tenures paying scot and lot.

CALLOSA DE ENSARRIA, a town of Spain, Valencia, 18 m. S.S.W. Denia, near the confluence of the Guadalest and Algar, in a mountainous country that produces fine raisins, and excellent wine, almonds, and fruit. Pop. 6,100.

CALLOSA DE SEGURA, a town of Spain, Valencia, 4 m. E. Orihuela, on the river Segura. Pop. 4,443. Charcoal, known by the name of *granza*, is here manufactured from the stalks of hemp; it is said to be superior to any other for the manufacture of gunpowder, and is or was used in the preparation of that made for the Spanish artillery. (*Miñano, Sup.* p. 159.)

CALMAR, or **KALMAR**, a sea-port town of Sweden, cap. prefecture of same name, on the W. side of the narrow strait of the Baltic separating the island of Œland from the continent, 90 m. N. E. E. Carlscrona; lat. 56° 40′ 30″ N., long. 16° 26′ 15″ E. Pop. 5,346. It stands on the small island of Quarnholm, which communicates with the mainland, where there is a suburb, by a bridge of boats. It is built of wood, and is strongly fortified. The castle, in the suburb, formerly looked upon as one of the keys of the kingdom, is now occupied as a house of correction. Calmar is the seat of a bishopric, and has an academy and a dockyard. The cathedral is a fine stone building; and the hotel of the prefect, the hôtel

de ville, and some other public edifices, are of the same enduring material. Its port is small, but safe and commodious. There are manufactures of woollen stuffs, tobacco, and potash; with breweries, &c. Previously to the annexation of the provinces of Schonen and Blekingen to Sweden, this town was of much greater consequence than at present. Its importance as a fortress has declined; and its commerce, which was formerly very considerable, has been mostly transferred to Stockholm; but timber, alum, tar, hemp, &c., are still exported.

This is a very old town. Having been burnt down in 1647, it was rebuilt on the island of Quarnholm, being previously situated on the mainland where its suburb now stands. It has been the scene of some very important events in Swedish history. Here, in 1397, was concluded the famous treaty which united the kingdoms of Sweden, Denmark, and Norway, under the vigorous sceptre of queen Margaret, surnamed the Northern Semiramis. But in its consequences this treaty was very ruinous to Sweden. Here also, in 1520, Gustavus Vasa disembarked to deliver his country from the domination of foreigners and of a sanguinary tyrant. Louis XVIII. resided at Calmar in 1804, and erected at Stensæ a tablet in honour of Gustavus. In 1800 a fire destroyed a great number of the houses, with the buildings of the academy. (*Dict. Géographique, &c.*)

CALNE, a parl. bor., market town, and par. of England, co. Wilts, hund. Calne, the bor. being situated on the great coach road from London to Bristol, 82 m. W. from the former, and 25 m. E. from the latter. The bor. formerly comprised 885 acres, and had, in 1831, a pop. of 2,640; but the Boundary Act made the limits of the parl. bor. coincident with those of the par., which includes an area of 7,964 acres, and had, in 1841, a pop. of 5,100. The town is well built, with stone houses, and is well paved and lighted with gas. "It is clean and respectable; but the manufacture of cloth, which used to be carried on to a considerable extent, has for some years been on the decline; and several factories, which appear in perfect repair, are now untenanted." (*Municipal Boundary Report.*) "It has become a mere country town, of respectable appearance and considerable extent. It has the advantage of inland water communication by a cut from the Kennet and Avon canal, and is a place of much thoroughfare." (*Boundary Report.*) The church, a large ancient structure, has a tower by Inigo Jones; and there are various dissenting chapels. The town-hall was erected at the expense of the Marquis of Lansdowne. The grammar-school, founded in 1660, has two exhibitions to Queen's College, Oxford; and there are British and national schools, Sunday schools, &c. A court for the recovery of small debts is held once every 6 weeks.

Calne is a bor. by prescription: it began to send mem. to the H. of C. in the reign of Edward I.; and regularly sent 2 mem. from the reign of Richard II. down to the passing of the Reform Act, which deprived it of one of its mem., and at the same time extended the limits of the bor. as stated above. Previously to the Reform Act the right of voting was in the burgesses, who might be indefinitely increased. Registered electors, in 1849-50, 159. The municipal limits coincide with those of the old bor. Bowood, the magnificent seat of the Marquis of Lansdowne, lies about 1½ m. W. from the town. Market-day, Tuesday; fairs, March 6. July 22.

CALVADOS, a dep. of France, so called from a chain of rocks of that name that stretches along part of its coast, bounded N. by the English Channel, E. by the dép. Eure, S. by Orne, and W. by that of La Manche. Area 556,093 hectares. Pop. 501,775. Surface mostly flat, the only hills of any consequence being in the arrond. of Vire, in the S.W. corner of the dep. Soil of the plains composed principally of calcareous clay; the soil of the valleys, of which there are several of large extent, is principally alluvial, and that of the hilly parts sandy. Minerals unimportant, with the exception of coal, of which about 340 quint. (met.) are annually produced at Littry. Climate rather cold and moist. There are several rivers, but none of them is navigable for any considerable extent inland. Coasts in most parts inaccessible; and the dep. has no good harbour. Pasturage is more attended to than tillage; but the latter is in a more advanced state than in most other departments. The average produce of wheat is estimated at about 1,400,000 hect.; and that of barley, oats, rye, and buckwheat, may be taken at about as much more. Apples are largely cultivated, and cider is the common beverage of the country. The potato culture has recently been much extended. Oxen but little used in field labour. Meadows very extensive, extending over about 123,000 hectares, and their management well understood. In the valleys, large herds of cattle are fattened for the markets of Paris, Rouen, and Caen. They are bought lean in the departments of Finisterre, Côtes-du-Nord, Sarthe, Mayenne, &c. The dairy is also an object of much attention; and large quantities of superior butter and cheese are produced. Total stock of cattle estimated at 160,000 head. The horses of this part of Normandy are reckoned the finest in France: stock estimated at 80,000, exclusive of 12,000 mules and asses. Sheep have been vastly improved during the present century. Annual produce of wool 310,000 kilogs. Great numbers of hogs are fattened. The forests cover nearly 40,000 hectares. The lace manufactory is widely diffused, particularly about Caen; and the spinning and weaving of cotton and wool occupy a great number of hands; there are, also, paper-mills, oil-mills, tanneries, refineries of beet-root and foreign sugar, distilleries, &c. The mackerel and herring fishery is successfully carried on along the coast. The dep. is divided into 7 arrond., and sends 7 mem. to the Chamber of Deputies. Number of electors, 4,191. Public revenue in 1831, 18,943,556 fr. Principal towns, Caen, Lisieux, Bayeux, Falaise, Honfleur, and Vire. (*Hugo*, art. *Calvados.*)

CALVI, a sea-port town of Corsica, N.W. coast of the island, on an elevated peninsula in the gulph of the same name; lat. 42° 34′ 7″ N., long. 8° 45′ 16″ E. Pop. 1,457. It has a good harbour and road; but derives its principal consequence from its strong citadel, flanked with five bastions. It was taken by the English in 1794, but not till after a siege of 51 days.

CAMARGUE (LA), a river island of France, dép. Bouches-du-Rhone, being, in fact, the delta of the Rhone. It is of a triangular form, and extends from Arles to the sea; having E. the Great Rhone, or main branch of the river, N. and W. the Little Rhone, and S. the sea. It is quite flat, and is supposed to contain about 55,000 hectares, of which about 12,000, lying principally along the river, are cultivated; the rest consists of lagoons, marshes, wastes, &c. The lagoons, particularly that of Vulcaris, are very extensive: they are mostly situated in the centre of the island and along the sea coast, where the ground is lowest. Except in certain districts, where sand predominates, the soil is, in general, very fertile. The cultivated portion produces excellent crops of wheat and barley; and the marshes and other grounds feed large flocks of sheep during winter, with great numbers of cattle and horses. The latter have many properties of the Arab horses, and are hardy, and highly esteemed for the saddle. The oxen are a small breed, but strong and active; and being bred up in a state of the most perfect freedom, are very wild. Considerable tracts are covered with a salt efflorescence, a consequence of the subsoil consisting of sea sand. The pernicious influence of this salt impregnation is in some parts counteracted by inundating the country with the waters of the Rhone. A good deal of salt is produced. It is proposed to attempt the drainage of the lagoon and marshes, by cutting a canal for that purpose. In summer the air is very unhealthy. (*Dict. Géographique; Hugo* (tom. i. 223.) estimates the area of the island at 142,451 hectares, or at between ⅓ and ¼ part of the entire dep.; but this is an obvious exaggeration.)

CAMBAY, a marit. town of Hindostan, prov. Gujrat, in the Guicowar's dom., formerly a celebrated and flourishing sea-port, but now much decayed, through the filling up of the bay, at the head of which it stands, by the deposits brought down by the rivers. It is 72 m. N.N.W. Surat, 200 m. N. Bombay. Pop. about 10,000, almost equally divided between Hindoos and Mohammedans. Various Hindoo and Mohammedan edifices are still to be seen, amongst which is a very beautiful mosque, close to the nawaub's residence its main court contains 360 pillars of a handsome red sandstone, the material for which was brought, it is said, from Cutch. There are also the remains of a subterranean temple, said by some to be of Jain, but believed by others to be of Buddhic origin: it consists of two chambers, one over the other, and about 20 ft. sq. In the lower chamber three sides are occupied by empty niches; in the fourth there is a double row of white marble idols, having in their centre a gigantic idol 7 or 8 ft. high: they are all alike, with a mild aspect, the legs crossed, and a lotos flower on the sole of the foot. In the upper room the figures are similar, and in one corner there is a black marble idol of the same size and appearance as the one beneath; none of the other figures here are more than 2 ft. high Many emigrants from Persia formerly settled here, after the civil wars in that country and conquests of Nadir Shah; and it has still 30 or 40 Parsee families. The silversmiths here emboss very neatly, by filling the articles to be operated on with gum lac, and then punching the figures with a small chisel; but the chief industry consists in the manufacture of cornelian, bloodstone, agate, &c. ornaments. These stones, when intended for beads, are chipped into a roundish figure, and afterwards rolled together in bags for several weeks, till they become perfectly spherical: when a flat surface is required, the stones are sawn by means of a mixture of gum lac and quartzose substances, which readily fuse together, and harden as they cool, when they are formed into cutting instruments. Cambay formerly exported silks, chintzes, gold, stuffs, &c.; but these manufactures have dwindled away: the town was given up as a trading station by the E. I. Company, who keep only

a Parsee agent there. Heavy goods have almost ceased being shipped at Cambay, and most of the Gujrat cotton is now sent to Gogo. The surrounding country is pleasant and rich, but not generally well cultivated; it yields ample returns of wheat and Hindostanee grains, indigo, cotton, oil-seeds, and excellent tobacco: some grain and indigo are exported to Bombay, and tobacco, from which many imitations of Manilla cheroots are made. This city and territory prospered under the Moguls; in 1780 it was tributary to the Maharatta peishwa, since whose fall his rights have devolved on the British gov., to whom the nabob now yields allegiance. (*Hamilton's E. I. Gaz.* i. 328.; *Lord*, in *Journ. of Asiat. Soc.* vol. ii.)

CAMBERWELL, a par. of England, co. Surrey, E. div. Brixton, hund. a suburb of the metropolis, on its S. side. Area, 4,570 acres. Pop. (including the hamlets of Dulwich, Peckham, and part of Norwood) in 1821, 17,896; 1831, 28,231. The more ancient part of what is usually designated the village of Camberwell, including the green, is mostly occupied by shops, &c., and is paved, and supplied with water from the works of the S. London Company. The more modern mansions are mostly detached handsome houses, occupying the rising ground to the S. and S.E. of the former; known as the Grove, Champion, Denmark, and Hearne hills. These villas are mostly occupied by the families of merchants who either are, or have been, connected with the active business of the metropolis. The church, supposed to have been built in 1520, and enlarged and improved in 1786, is in the later Gothic style, having a low embattled tower, with many interesting monuments. There are 3 chapels of ease, — Camden church, another on Denmark Hill, and one beside the Surrey Canal, built by the church commissioners in the Grecian style, and forming the district church of St. George. There are also 3 dissenting chapels; a free grammar-school, founded in 1618, for 12 boys, is endowed with an estate valued at 200*l.* a year, but is at present let on a beneficial lease, producing 60*l.* There is also a green-coat school, on the national plan, on Camberwell Green, and a similar one, attached to Camden church, founded in 1810; 3 or 4 other schools have small endowments; and there are some minor charities. The grounds of the S. Metropolitan Cemetery, in this parish, form an extensive enclosure, tastefully laid out, with a chapel and other offices, catacombs, &c. The agricultural portion of the parish is fertile; and market-gardens and nurseries employ part of the population. The majority, however, are more or less engaged in the general business of the metropolis. The Surrey Canal terminates in it. On Ladland Hill, S. of the village, is a quadrilateral Roman camp, with a double entrenchment. In digging the canal, in 1809, a Roman way was discovered, formed of square blocks of chalk, secured with oak piles, which has made some suppose that this was the place where the Roman legions first crossed the Thames: 3 ancient wells, on Well Hill, in the parish, are supposed to have originated the name.

CAMBOJA, or CAMBODIA, a country of India beyond the Ganges, formerly one of the most flourishing in that peninsula; but at present divided between the empire of Anam and the kingdom of Siam. It lies between lat. 8° 30′ and 15° 30′ N., and long. 103° and 107° E.; having N. Laos, E. Cochin China, W. Siam, and S. the ocean. It is enclosed E. and W. by two of the great mountain chains, which, passing S. from Yunnan, traverse the Ultra-Gangetic peninsula: on the sea-shore, it presents a vast alluvial flat, stretching for a considerable distance inland. It has several rivers, one of which, the Mekon, ranks amongst the largest in Asia; and another, the river of Saigon, is perhaps, in all respects, the finest river in that continent for navigation. (*Crawfurd.*) The interior of Camboja is scarcely at all known by Europeans: it contains large forests, producing some teak, and many *sao* trees, a hard black timber called *guo*, eagle and rosewood, and various other woods fit for cabinet-work, dye-woods, areca, stick lac, sugar-cane, pepper, &c. The celebrated gamboge gum is said to be obtained from a species of *Garcinia*, by making incisions in the bark, from which the gum exudes, and is collected in vessels, in which it soon becomes concrete, and fit for the market without farther preparation. Besides the articles already named, Camboja exports cardamoms, ivory, hides, horns, bones, dried fish, &c. in considerable quantities, and imports silks, China and lacquered ware, tea, sweetmeats, tin, and *tutenague*. (*See* SAIGON.) In person, manners, laws, and state of civilisation, the inhabitants more closely resemble the Siamese than any other people: most of them are Buddhists; but there are a few Christians. The latter faith was first introduced by the Portuguese Jesuits in 1624.

In 1809, in consequence of dissensions in the country, it was invaded by both the Siamese and Anamese, when the latter made themselves masters of Penompeng, the modern capital, together with the person of the king, and took possession of a large tract of country on the sea-coast, from communication with which, the Emperor of Anam, in 1819, interdicted all foreigners, declaring Saigon the emporium of his S. provinces. In 1820, the final partition of this country took place. (*Crawfurd's Mission to Siam; Hamilton's E. I. Gaz.*)

CAMBOJA, an inl. town of India beyond the Ganges, the ancient cap. of the above territory, on both sides the Mekon, nearly 200 m. from the sea; lat. 13° N., long. 105° 35′ E. The Chinese writers of the 13th century give a very florid description of its magnificence at that period (see *Ritter, Asien Erdkunde*): it is now in a state of decay.

CAMBOURNE, a town and par. of England, co. Cornwall, hund. Penwith. Area of par. 6,900 acres. Pop. of do. (1821), 6,219; (1831), 7,699. This is a neatly-built and, for the most part, modern town, on an elevated site, 12 m. W. N. W. Falmouth, near the S. W. limits of the chief mining district of the co., many of the oldest and most productive mines of tin and copper being in its immediate neighbourhood, and furnishing employment, not only to the inhab. of the town, but to the 3 or 4 considerable hamlets, and the cottages every where dispersed over the parish. The church is a handsome structure, in the later Gothic style; there is also a chapel of ease, and several large dissenting chapels, chiefly for the various sections of the Wesleyan Methodists; a free school, founded in 1763, for 12 boys and 8 girls, has a revenue of 21*l.*; there are also several large Sunday schools. Market, Saturday; fairs, chiefly for cattle, March 7. Whit-Tuesday, June 29, and Nov. 11. Petty sessions for the hund. are held weekly in the town.

CAMBRAY, a well-fortified town of France, dép. du Nord, cap. arrond., on the right bank of the Scheldt, 32 m. S. Lille; lat. 50° 10′ 37″ N., long. 3° 13′ 47″ E. Pop. 17,846. Its fortifications were improved by Vauban, and it is further defended by a strong citadel. It is pretty well built, and has a magnificent *place d'armes*. Its principal public buildings are the cathedral, the hôtel de ville, and the theatre. It has a tribunal of original jurisdiction, a communal college, a diocesan seminary, with 330 scholars; a secondary school, a society of emulation; with schools of design, sculpture, painting, and anatomy; a public library containing 30,000 volumes, &c.

Cambray was formerly an archbishopric; and has to boast of having had Fenelon, who died here in 1715, among its prelates. It is painful to have to state that, in 1793, during the revolutionary phrenzy, the body of Fenelon was torn from the grave, and the lead of his coffin cast into bullets! The old cathedral was, at the same time, totally destroyed. To atone, as far as possible, for these enormities, a handsome monument, the work of David, the sculptor, was erected to the memory of Fenelon, in the present cathedral, in 1825, under which his remains have been deposited. In 1802, the archbishopric of Cambray was changed into a bishopric.

This town has been long famous for its manufacture of fine linens and lawns, whence all similar fabrics are called in England *cambrics*. It also produces thread; carries on several branches of the cotton manufacture; and has soap-works, tanneries, salt refineries, &c. A great number of hands are occupied in the adjoining communes in the linen manufacture. It has a considerable trade in wool, flax, butter, hops, &c. The navigation of the Scheldt begins here, and it communicates with St. Quentin by a canal.

This is a very ancient city, having been a place of considerable importance under the Romans. It is celebrated in diplomatic history for the famous league, known by its name, concluded here in 1507, against the republic of Venice; and for a treaty of peace negotiated in 1529 between Francis I. and Charles V. It was taken from the Spaniards by Louis XIV. in 1667, and was confirmed to France by the treaty of Nimeguen. The British took it by escalade in 1815, after the battle of Waterloo. (*Dict. Géog.; Hugo*, art. *Nord; Murray's Hand-book*, &c. p. 169.)

CAMBRIDGE, an inland co. of England, having N. co. Lincoln, E. Norfolk and Suffolk, S. Essex and Hertford, and W. Bedford, Buckingham, and Northampton. Area, 548,480 acres, of which about 500,000 are supposed to be arable, meadow, and pasture. Surface, except in the S. parts, where it is diversified, for the most part flat and naked. Soil clayey and stubborn. It is divided into two portions by the river Ouse, and is watered besides by the Cam and the Nene, or Nen. The most northerly portion of the co. consists principally of the district called the Isle of Ely, which has separate jurisdiction within itself. This district, which is naturally a marsh, is included within the great level of the fens; and is rendered habitable only by a most expensive system of drainage, by which the water is raised and conveyed away in channels, kept at a higher level than the surrounding country. Agriculture is in rather a backward state, the land under tillage being frequently foul and out of order. Wheat, oats, beans, and potatoes, are the principal crops in the fens; and barley in the elevated grounds. Flax and hemp are also raised in the fens; and cole is extensively cultivated as food for sheep. The

rich meadows in the valley watered by the Cam are principally appropriated to the dairy husbandry, and Cambridge butter has long enjoyed a high reputation. The large, thin, cream cheese, made at Cottenham, is admitted to be the first of its class. Heavy cart horses are extensively bred. The rich grass lands are mostly depastured by short-horned cattle, and long-woolled sheep. Cambridge, as well as Huntingdon, is overrun with pigeon-houses. Estates of all sizes: some large, but many small, some being worth only from 20*l.* to 50*l.*, and 100*l.* a year. Size of farms equally various, and held mostly at will. Farm-houses inferior, and cottages decidedly "bad." Average rent of land in 1843, 28*s.* 2¾*d.* an acre. Manufactures and minerals of no importance. The co. contains 14 hunds., exclusive of the Isle of Ely, and 167 parishes. Principal towns, Cambridge, Ely, Wisbeach. In 1841 it had 33,095 inhab. houses; and 164,459 individuals, of whom 81,611 were males, and 82,848 females. It sends 7 mems. to the H. of C., viz. 3 for the co., 2 for the University, and 2 for the bor. of Cambridge. Registered electors for the co. in 1849-50, 3,757. Sum expended for the relief of the poor in 1847, 81,334*l.* Annual value of real property in 1815, 705,372*l.*; do. in 1843, 1,102,415*l.*

CAMBRIDGE, a parl. bor. and town of England, co. Cambridge, hund. Hendish, the seat of one of the great English universities, on the Cam.; 48 m. N. by E. London. Pop. (1821), 14,142; (1841), 24,455; houses at the latter date, 4,780. It is situated in an extensive level tract, that scarcely presents any inequality, with the exception of the Gog Magog hills, 4 m. S.W. of the town; and the greater part of its public structures, with their walks and gardens, are embosomed in wood. Owing to these circumstances, the approach to Cambridge is unimpressive; but the noble chapel of King's College, the tower of St. Mary's, and the spire of Trinity Church, rise above the trees, and break the general uniformity of the outline. The greater portion of the town stands on the S.E. bank of the river. The streets are mostly narrow and irregular. There are two principal lines, which unite on the N.E. side, near the iron bridge over the Cam; from these smaller streets diverge on either side, all of which are paved, sewered, and lighted by gas. The chief supply of water is derived from a spring 3 m. distant, and conveyed by an aqueduct, under some of the principal streets, to a public conduit in the market-place. For this the town is indebted to Hobson, the horse hirer, whose determination to let his horses in strict rotation gave rise to the well-known proverb of "Hobson's choice." There are 14 distinct parishes, and a corresponding number of churches. St. Mary's, a stately Gothic structure, forms one side of a quadrangle, in which the public library and senate-house are also placed; it is occupied both by the parish and the university: St. Sepulchre's, built in the reign of Hen. I., in imitation of that of the Holy Sepulchre at Jerusalem; and Trinity Church, an ancient cruciform structure, are the only churches worth notice. The Baptists, Independents, Friends, Primitive Methodists, and Wesleyans, have each a chapel. There is a free grammar school, founded by Dr. Perse in 1615, originally for 100 scholars, but now educating 16; they have preference of the Perse fellowships and scholarships in Caius Coll.: a national school, founded in 1808, and extended in 1816, educates 600 boys and girls: in this the old, or Whiston charity schools, have merged. In 9 distinct sets of almshouses, 56 poor persons are wholly or partially supported: there are also benefactions for various other charitable purposes, held in trust by the corporation; and a general infirmary, called, from its founder, Addenbrooke's Hospital, in which about 1,000 patients are annually relieved. The market-place occupies two oblong squares in the centre of the town, at the head of which stands the shire-hall (built in 1747), and behind it the town-hall (rebuilt in 1782). The gaol, built on Howard's plan in 1810, is in the yard of the ancient castle (of which little more than the gateway remains) at the N.W. end of the town — the only comparatively elevated portion; near it is an artificial mound, whence an extensive view is commanded. The various structures connected with the university form, essentially, a part of the town, mostly on its W. side, but these will be more appropriately noticed in the subsequent article. No dramatic performances are allowed in the town; but there is a theatre in the adjoining village of Barnwell, which is opened in fair time. There is a musical society on a large scale, and great musical festivals are held, at intervals, in St. Mary's Church. The Cam, formed by the junction of several small streams about 4 m. from the town, is made navigable for barges up to the town: it joins the Ouse not far from Ely, by which a water communication is continued to Lynn Regis. There is a daily market for general provisions; but the chief supply is on Saturday. Two annual fairs are held — the first, commencing June 23, lasts 3 days: it is held on a common near Jesus Coll., and called Pot Fair, from the quantity of earthenware brought to it: there is a large horse-fair on the first day. The other is Stourbridge fair, anciently the largest in the kingdom, and still of considerable resort, though much curtailed both in duration and importance: it is held in a field near Barnwell, and now lasts 14 days; on 2 of these, horses are sold, and on the others the chief traffic is in wool, hops, leather, cheese, and iron. There are no manufactures carried on: but its situation, at the head of the inland navigation from Lynn, occasions a considerable trade in corn, coal, timber, oil, iron, &c. Since the more perfect drainage of the fens, and the formation of good roads towards and along the E. and S.E. coasts, over tracts previously impassable, it has become a considerable thoroughfare, and derives some business from that source: its chief traffic, however, is, directly or indirectly, connected with the university, and the supply of its various wants. The ann. val. of real prop. is 91,501*l.* Under the Poor Law Amendment Act its 14 pars. are formed into a union, the average annual rates of which are 9,907*l.*: there are 30 guardians. The paving and lighting are managed by commissioners under two local acts. The annual assessments levied for the purpose average 3,000*l.* The limits of the ancient bor. have been adopted both in the Parl. and Municipal Reform acts, and comprise an area of 3,196 acres. It is divided into four wards, and governed by a mayor, 10 aldermen, and 30 councillors. Courts of petty and quarter sessions, and a court of pleas, are held for the borough, from the jurisdiction of which the members of the university may claim personal exemption. The heads of it are united with those of the corporation in the commissions of peace that are issued for the borough. The police is also under their joint control. The improvements in the navigation (which of late years have been very considerable) are under the direction of conservators, 3 of whom are appointed by the university, 3 by the corporation, and 3 by the county magistrates. The corp. rev. of the town amounted, in 1847, to 6,418*l.*, being derived from rents of lands and tenements, and tolls of the fairs and markets, which the corp. receive, though the entire control of these, as well as the licensing of public-houses, be vested in the university: there are also 310 acres of common land under the management of the corporation, but on which the inhabitants generally have a right of pasturage. Cambridge has returned 2 mem. to the H. of C. from the earliest records of parliament. Previously to the Reform Act the right of election was limited to the freemen of the bor. not receiving alms. Registered electors, 1849-50, 1,963. The quarter sessions and assizes for the county are held in this town. The first historic mention that occurs of Cambridge is in 871, when it was ravaged by the Danes. The castle was built by Wm. the Conqueror. In 1249 the first notice of dissensions between townsmen and students occurs. In 1381 (the period of Wat Tyler's riots) the university charters were seized and destroyed by the townsmen, for which Richd. II. deprived them of their own, and vested the university with their privileges. Hen. VIII. restored their charter, but with modifications which made them, in many respects, still subordinate to the university. In 1643 the town was garrisoned by Cromwell, who had, previously, twice represented it in the H. of C. No subsequent event of public importance is connected with its history. Bishop Jeremy Taylor and Richard Cumberland (the dramatic writer) were natives of Cambridge.

CAMBRIDGE, a town of the U. S. of N. America, Massachusetts, co. Middlesex, on the Charles river, 3 m. W.N.W. Boston, with which, and the adjacent town of Charleston, it is connected with bridges. Pop. about 8,500. It is, in conjunction with Concord, the co. town, and the courts are held alternately in each. There is a court-house, county gaol, arsenal, and several places of public worship. It is the seat of Harvard University, formerly Harvard College, the oldest and best endowed institution of the kind in the Union: it was founded in 1638. The medical school connected with the university is at Boston. The university library, the second in America, contains upwards of 53,000 vols., besides a students' library, with upwards of 5,000 vols. The philosophical apparatus and cabinet of minerals are valuable and complete. Here are a chemical laboratory, an anatomical museum, and a botanical garden, occupying 7 acres of land. Since its establishment, this university has received large benefactions both from the state and private individuals. A greater number of students have been educated here than in any other college in the Union. The number attending in 1843 was 341.

CAMBRIDGE (UNIVERSITY OF). This celebrated seat of learning and education derives its origin from certain public schools, established in the town at a very remote but uncertain period, perhaps in the 7th century. The students who resorted to those seminaries lived in lodgings in the town; nor did they, till the 13th century, assume the regular form of a university, as that term was understood in the middle ages. In general, four branches of education, or faculties, were recognised: that of arts, initiatory to the others, and embracing the three superior,

and four subordinate sciences, or, as they were called in the language of the time, the *trivium* and *quadrivium*, — the first comprising the study of grammar, rhetoric, and logic; and the second, that of arithmetic, music, geometry, and astronomy; and the faculties of theology, law, and medicine. In each of these, there were usually two degrees, that of bachelor and master; and the functions of a university, as at present, was to impart the necessary instruction in each, and to confer degrees, or certificates of proficiency. Except the public schools, there were, at first, no other buildings appropriated to academical purposes; but subsequently, public halls or hostleries came to be established for the convenience of the students, and the introduction of some better system of discipline. The students resorting to each of these chose a principal, or rector, from amongst themselves, whose appointment was sanctioned by the governing body of the university: residence in those halls was, however, never insisted on as an essential requisite. The colleges are of still later origin, and derive their existence from private munificence; the object being to provide lodging and subsistence to a limited number of the poorer class of students. Originally, the masters of arts were the public instructors, and were bound to teach others some of the subjects pertaining to their respective faculties: convenience ultimately came to limit this function to a certain number of masters, who also came to form chiefly, or wholly, the governing body; and hence the distinction of *regent*, and *non-regent* masters. The appointment of professors in the different faculties, paid by salaries, instead of fees (as was the case with the regent masters) completed the university system on the recognised plan of the period. The general right of lecturing was, however, retained down to a recent date. Such, probably, was the system pursued through the 14th and 15th centuries. The greatest number of students frequenting the university during the period when the public halls formed the residences of the great majority, was in the 13th century. From the earlier part of the 14th, downward, the numbers diminished considerably; partly from civil war, partly from the declining reputation of scholastic philosophy, and subsequently, from religious differences; so that, at the Reformation, the halls had been mostly deserted, and the greater part of the students were those on the foundation of the different colleges, which had become numerous, and were nearly the only institutions that survived the religious confusion of the age. These came in the 16th century to admit independent members in residence, who were not on the foundation; others came to be established, and the remaining halls were converted into colleges. The ascendancy of the college system, however, was effected gradually, through a considerable period, till completed in the reign of Elizabeth. The following are the existing collegiate establishments of Cambridge, in the order of their foundation: —

Names.	Date of Foundation.	Founders.	Visiters.	On the Foundation.	Memb. in 1839.	
					Of the Senate.	Total on the Boards.
St. Peter's Coll., or Peterhouse	1257	Hugh De Balsam, Bp. of Ely	Bp. of Ely	14 Found. and 2 Bye Fellowsh. 55 Scholarsh. One fourth of Found. Fell. must be in Orders	94	194
Clare Hall	1326	Dr. Badew; but reconstituted by Eliz. De Burgh	Chancellor and 2 others app. by a grace of the Senate	10 Sen., 9 Jun., 3 Bye Fellowsh., 44 Scholarsh., 4 Exhib.	77	164
Pembroke Hall	1343	Countess of Pembroke	The Queen	14 Found., 2 Bye Fellowsh., 23 Scholarsh., several other bye ones	46	128
Gonville and Caius Coll.	1349	Edw. Gonville: John Caius, in 1558, increased and obtained a new charter	Master of Corpus Christi, Sen. Dr. of Physic, Mast. Trinity Hall	12 Sen., 17 Bye Fellowsh., 26 Scholarsh., 8 Exhib. 1 Scholarsh. in Chem. 4 in Physic	129	283
Trinity Hall	1350	W. Bateman, Bp. of Norwich	Lord High Chancellor	12 Fellowsh., 2 in Orders, 17 Scholarsh. Fellowsh. usually held by Graduates in Civil Law	47	140
Corpus Christi Coll.	1351	The Brethren of 2 Cambridge guilds	V.C., 2 Sen. D.D. in extraordinary cases, the Queen	8 open, 4 appropriated Fellowsh., 8 Found., many Bye Scholarsh. This Coll. possesses a valuable MS. library, left by Archbp. Parker	90	231
King's Coll.	1441	Henry VI.	Bp. of Lincoln	A Provost, 7 Fellows, and 70 Scholars: the latter supplied by a regular succession from Eton Coll. Scholars are exempted from Univ. exam. and authority of its officers within their own precincts, by a special composition between this society and the University	76	107
Queen's Coll.	1446 1465	Marg. of Anjou: refounded by Consort of Edw. VI.	The Queen	19 Found., 1 Bye Fellowsh., 26 Scholarsh.	128	345
Catharine Hall	1475	Robt. Woodlark	The Crown	4 Found., 6 Bye Fellowsh., 43 Scholarsh.	80	211
Jesus Coll.	1496	Jno. Alcock, Bp. of Ely	Bp. of Ely	16 Found., 1 Bye Fellowsh., 46 Scholarsh. and Exhib.	80	183
Christ's Coll.	1451 1505	Hen. VI., Countess of Richmond & Derby	V.C., and 2 Sen. D.D.	15 Clerical, 2 Lay Fellowsh., 50 Scholarsh. and Exhib. This Found. is for Divinity	101	217
St. John's Coll.	1511	Countess of Richmond and Derby	Bp. of Ely	32 Found., 21 Appropria. Fellowsh., 114 Scholarsh.	575	1125
Magdalen Coll.	1519	Lord Audley	Possessor of Audley End	4 Found., 13 Bye Fellowsh., 43 Scholarsh.	79	189
Trinity Coll.	1546	Hen. VIII., augmented by Mary: it occupies the ground of several suppressed Coll. and hostels	The Queen	60 Fellowsh., 69 Scholarsh., &c. The Fellows are chosen from the Scholars: ineligible if M.A., or of sufficient standing for that degree. The Master is appointed by the Crown	907	1754
Emmanuel Coll.	1584	Sir W. Mildmay	V.C., 2 Sen D.D. In some cases Mast. of Christ's, and 2 Sen. D.D. in others	12 Found., 3 Bye Fellowsh., 4 Found., and several other Scholarsh.	112	214
Sidney Sussex Coll.	1598	Lady F. Sidney, Countess Sussex	Sir J. S. Sidney	9 Found., 3 Approp. Fellowsh., 20 Scholarsh. A mathematical Lecturesh.	47	91
Downing Coll.	1800	Sir G. Downing	The Crown, by the Lord High Chancellor	This Coll. will consist of a Master, 2 Pro., 1 Engl. Law, 1 of Physic, 16 Fellows, and 6 Scholars. Charter states objects of Found. to be Law and Physic and other useful arts and learning: the buildings are being erected	27	52

Each of these colleges is governed by laws and usages of its own (for the most part established by the respective founders), and is subject to the inspection of its own visiter or visiters, appointed by the foundation charter. Except at King's and Trinity, the heads (masters) of these colleges are elected by the fellows, for life, from among themselves; in general, they must be in orders, and are allowed to marry; their incomes (which vary considerably) arise from the proceeds of a double fellowship, livings attached to the office, &c. They exercise supreme authority in the discipline of their college in respect to education, and the conduct of those *in statu pupillari*, and are associated with the general government of the university, as will subsequently be noticed; but, as respects the government of their college, they form part of the general legislative council, and are assisted by the foundation fellows, who form the governing body in each college. In regard to these last, the ordinary practice is to elect to vacancies, each from the respective students of its own establishment, and, for the most part, from amongst those studying with a view to taking holy orders; time, however, is allowed by the statutes for graduates to make choice of a profession, and, consequently, those who decline after the limited period taking orders have to vacate any fellowships they have been appointed to; vacations also occur by acceptance of college liv-

ings (which, as they fall in, are offered by seniority to the respective fellows,) or by other livings or situations, statutably incompatible, or by marriage, which is against the statutes in all the colleges; so that, from these and other circumstances, the succession of fellows, in most of the colleges, is tolerably rapid: when in residence, a considerable part of their board is provided. The incomes are very various, and in each college vary from year to year, being contingent on the college revenues, much of which is derived from rents, varying with the prices of corn, from the falling in of leases, &c. The college expenses also vary, and are paid from a fund set apart for general purposes, and derived partly from taxation of the fellowships, partly from room-rent, &c.

The *foundation scholarships* are subject to different regulations and conditions, peculiar to each college; but they are always elected from among the under graduates, and in the larger colleges, where these are numerous, they form a sort of minor prizes, to be contended for like those of the fellows. The emoluments attached to these scholarships are very various in amount; in regard to discipline and education, they are precisely on the same footing as the independent students.

The *exhibitions* are annual pensions, given in some instances by the colleges, but mostly by free endowed schools elsewhere, to assist such youths as, having been educated at them, are sent to the university: *exhibitioners* are not usually accounted on the foundation. Besides these, there are students of an inferior class, termed *sizars*, who are provided for wholly or in part by the foundation. The officers of the establishment, such as dean, bursar, &c., are selected by the fellows of each respective college from among their own body; as also the college tutors, &c., to whose charge all the students, whether on the foundation or not, are entrusted. The whole of these must necessarily be in residence; but in respect to the other fellows, this is not in general required, though a number usually do reside, some as private tutors, others for the purpose of study. In some colleges, probationers have to pass an examination previously to being admitted as fellows on the foundation. The instruction given at each of those colleges is preliminary to taking the first university degree of B. A., and is exclusively adapted and directed to that object. This is chiefly attained, not through the public lectures of the university professors, but through the private labours of the respective college tutors. The character and extent of this instruction is determined by the university, by which the degree is granted; but no one is admissible unless he have been entered at, and resided within the jurisdiction of one of the colleges or licensed halls, and has been under the collegiate instruction of his house. Thus the university is formed by the union of 17 colleges, devoted to academic pursuits and the study of all the liberal arts and sciences: it is incorporated (13 Eliz. c. 29.) by the name of "The Chancellor, Masters, and Scholars, of the University of Cambridge;" and though, as we have seen, each college is a body corporate, bound by its own statutes, it is likewise controlled by the paramount laws of the university. The statutes of the 12th of Eliz., which were sanctioned by parliament, and confirmed some former privileges, are the foundation of the existing government, and form the basis of all the subsequent legislation; in fact, no grace of the senate is considered valid which is inconsistent with the statutes of Eliz., and certain nearly cotemporary interpretations of them; or with king's letters, that have been accepted and acted on by the university.

Each college furnishes members both to the executive and legislative branches, collectively termed the senate; the present number of which is 2,705. It is divided into 2 houses, called the regents' and non-regents' house. The former, or upper house, is composed of masters of arts of less than 5 years' standing, and doctors of less than 2 years; its members wear hoods, lined with white silk; all the rest, who retain their names on their respective college boards (for which a small annual fee is charged), constitute the lower house, and wear hoods of black silk; hence the distinction of white and black-hood houses. Doctors of more than 2 years' standing, and the public orator of the university (who may be considered as the secretary), may vote in either house, at pleasure. Besides these, there is a council called the *caput*, chosen annually on the 12th Oct. It consists of the vice-chancellor; a doctor in each of the three faculties, of divinity, civil law, and physic; and 2 masters of arts, as the representatives of the regent and non-regent houses. In practice, these are mere nominees of the vice-chancellor; and as the approval of the caput is essential previously to any "grace," or legislative proposition, being voted on in either house, the substantive government of the university vests in him. He also fixes the days when congregations, or meetings of the senate, are to be held for transacting university business; these, in term time, are usually once a fortnight; but there are also certain fixed times by statute for congregations to be held, for conferring degrees, electing officers, &c. Graces which pass both houses, under the sanction of the caput, become acts of the senate, and if of a public nature, become statutes of the university. An assembly of the senate held out of term time is called a convocation; but, by a grace passed *pro formâ*, it is converted to a congregation, and the business proceeds in the usual way. The chief officers of the university are, a chancellor, in whom the executive authority vests, except in matters of mayhem and felony, within the limits of the jurisdiction, which is a mile round, reckoned in any direction from any part of the suburbs; the office is biennial, or for such longer period as the tacit consent of the university may choose to allow. A high steward, who has special power to try scholars impeached of felony within the limits, and to hold courts leet, which is done by deputy. His election is by a grace of the senate. A vice-chancellor, elected annually by the senate (on the 4th of Nov.) from the heads of colleges. In the absence of the chancellor, the powers of that officer vest in him, by the statutes, and he is also, *ex officio*, a magistrate for the university, town, and county. A commissary, appointed by the chancellor, to hold a court of record for all causes to be tried and determined by the civil and statute law and university custom, in respect to all privileged persons under the degree of M. A. A public orator, who may be said to be the speaker of the senate. The assessor, an officer to assist the vice-chancellor in his court. Two proctors, or peace officers, elected annually, to enforce proper discipline and behaviour in all who are *in statu pupillari*, as well as various other duties. They must be M. A of 2 years' standing, at least, and are nominated in turn by the different colleges, in a prescribed and peculiar cycle of 51 years. There are many other offices of minor importance; but the two moderators must be noticed, who are nominated by the proctors, and appointed by a grace of the senate, to act as the proctors' substitutes in the philosophical schools, and alternately superintend the exercises and disputations in philosophy, and the examinations for the degree of B. A.; and also the eight classical examiners, nominated by the several colleges in term (according to the same cycle as the proctors), and elected by a grace of the senate; four of these are examiners of inceptory bachelors, and four of the junior sophs. in Lent term.

The University is represented in the H. of C. by 2 mem., chosen by the collective body of the senate, the vice-chancellor being returning officer. The privilege was granted by charter, in 1 James I.

The public professorships in this university are, Lady Margaret's, of divinity, founded 1502; the regius professorships of divinity, civil law, physic, Hebrew and Greek, founded by Henry VIII. in 1540; those of Arabic, one founded by Sir F. Adams, in 1632, the other, the Lord Almoner's; the Lucasian professorship of mathematics, in 1663; that of music, in 1684; that of casuistry, founded in 1683; of chemistry, 1702; the Plumian professorship of astronomy and experimental philosophy, in 1704; that of anatomy, in 1707 (there is a good anatomical museum connected with this); those of modern history and of botany, 1724; that of geology, in 1727, by Dr. Woodward, who left his collection of minerals in connection with it; that of astronomy and geometry, founded in 1749; the Norrisian professorship of divinity, in 1760; of natural and experimental philosophy, in 1783; the Downing professorships of English law, and of medicine, founded in 1800; that of mineralogy, in 1808; and, lastly, of political economy, in 1828. These professors are paid from various sources: some of the foundations have estates appropriated to the purpose; others are paid by ancient stipends, in part; and some from the privy purse, or by government. One has 400*l*., another, 200*l*., the rest 100*l*. annually. The appointment of some of them rests in the senate, of others, in the crown, and of others, again, in special bodies of electors. None of them can be said to be directly concerned in the education of the students, as the attendance on the courses of lectures given by them is not made essential to any of the students (with the exception of those proceeding to the bachelor's degree in civil law and medicine, who are required to bring testimonials of attendance on the courses connected with those subjects). The public income of the university arises chiefly from the proceeds of the rectory of Burwell, from matriculation, and other fees (about 3,000*l*. a year from all these sources), and from the trading profits of the Pitt or university press. The funds are managed by the vice-chancellor and specific trustees, and 3 annual auditors are appointed by the senate to pass the accounts. Its library claims (under the copyright act) a copy of every volume, map, and print published in the United Kingdom; it is also endowed with a portion of the proceeds of two estates: besides this and occasional donations, a quarterly subscription of 1*s*. 6*d*. is paid by all the members, except sizars, towards its support. A new and splendid building, from designs by Mr. Cockerell, is now in course of erection intended for the reception of the library, and for public lecture-rooms. As this was much wanted, and

the university had no disposable funds for the purpose, a subscription was set on foot, and 20,000*l.* have been collected to effect it. The printing establishment has also, within a recent period, been enlarged and improved, from funds appropriated to that purpose by the committee for managing the sums collected for a public memorial of the late Right Hon. Wm. Pitt. The Fitzwilliam museum, consisting of a splendid collection of books, paintings, drawings, &c., was left by Viscount Fitzwilliam to the university, in 1816, together with funds for the erection of a building to receive it, which was commenced in 1837. The university also possesses a collection of pictures, left by Mr. Mesman; an observatory, built in 1824, at an expense of 18,000*l.*; and a botanic garden of 3 or 4 acres. The Cambridge Philosophical Society may also be briefly adverted to here; it was established in 1819, for the promotion of scientific inquiry, and the advancement of philosophy and natural history; in 1832, it was incorporated by charter, and all, except honorary members, are required to be graduates of the university.

The degrees conferred by the university are those of Doctors in the three faculties of divinity, civil law, and medicine, and also in the science of music; that of Master of Arts; and the degree of Bachelor, in each of the foregoing. Except in the iniatory degree, last named, all examination in regard to proficiency is in reality discontinued, and the higher degrees are conferred as of right on those who have obtained a particular standing, without reference to qualification, or (with trifling exceptions) to residence. The academical year consists of 3 terms, viz., Michaelmas, Lent, and Easter; and the following are the chief regulations necessary for proceeding to degrees: premising first, that the mode of admission on the boards of a college is either by personal examination of its tutors and officers, or (the more usual plan) through a recommendatory certificate, specifying the age, qualifications, &c., of the candidate, signed by an M.A. who has graduated at the university, and accompanied by a deposit called caution-money. This is usually done before the end of Easter Term; and, if deemed satisfactory, the name is at once entered on the boards of the college, and the student usually comes into residence the October following, when the academical year begins.

Bachelor of Arts. — 12 terms on the boards of some coll., 10 of which in residence.

Master of Arts. — B.A. of 3 yrs. standing.

Bachelor of Divinity. — M.A. of 7 yrs. standing: under the 9th statute of Eliz., those who have been admitted on the boards of a coll after 24 yrs. old, and have remained so 10 yrs. (the 2 last of which must be in res.), are admissible without having taken any other — these are called 10 *yrs. men.*

Doctor of Divinity. — B.D. of 5, and M.A. of 12 yrs standing.

Bachelor of Civil Law. — Of 6 yrs. standing complete, 9 terms of which in res., or B.A. of 4 yrs. standing.

Doctor of Civil Law. — B.C.L. of 5 yrs., or M.A. of 7 yrs. standing.

Bachelor in Medicine. — Of 5 yrs. standing, 9 terms of which in res.

Doctor in Medicine. — Similar to that degree in civil law.

Licentiate in Medicine — M.A. or B.A. of 2 yrs. standing.

Bachelor of Music. — The name must be entered on the boards of some coll., and an exercise performed.

Doctor of Music. — Usually B.M.

Persons having the rank of privy counsellors, bishops, noblemen, and eldest sons of noblemen, are entitled to have any of those degrees conferred on them without complying with the regulations; and knights and baronets from that of M.A. downward. By a grace passed in 1825, these are to be examined and approved in the same way as others, but they are admissible after keeping 9 terms, but though none can claim a degree in right of nobility, &c., yet honorary ones are often conferred, without examination or residence, on eminent individuals.

The respective orders in the different colleges rank as follows: —

1. *The Heads of Coll.*, who are generally of the degree of D.D.
2. *The Fellows*, who are doctors, masters, or bachelors of the different faculties.
3. *Noblemen*, who are graduates, *doctors*, and *Ms. A.*, not on the foundation (the name must be kept on the coll. boards, the cost of which varies from 2*l.* to 4*l.* a year.
4. *Bs.D.*, who are 10 yrs. men.
5. *Bachelors of Civil Law*, and of *Physic*: these wear the habits, and enjoy all the various privileges of M.A., except that of voting in the senate.
6. *Bachelors of Arts*, who are considered *in statu pupillari*.
7. *Fellow Commoners*, usually younger sons of the nobility, or sons of men of fortune, &c., who have the privilege of dining at the same table as the fellows.
8. *The Scholars*, who are on the foundation.
9. *Pensioners*, who pay for their chambers, commons, &c., and comprise the chief part of the students.
10. *The Sizars*, students of limited means, who usually have free commons, and other emoluments.

Since, as we have seen above, all substantial examination for degrees is limited to the initiatory ones of *bachelor* (of which that of B.A. is the first, and only really important step), the necessary education of the different coll. is of course directed to that object, and contingent, in its nature and scope, on the qualifications which the university deem fit to exact at their public examinations, and the class-books they order to be adopted for the purpose. The ordinary course of study for B.A. may be comprised under three heads: — natural philosophy, theology and moral philosophy, and the *belles lettres*; and for the attainment of these, the students attend the lectures of the college tutors, which are not formal harangues, but rather of a catechetical nature, intermixed with reading and discussion; at each of which a limited number of the students go through a certain portion of some mathematical or classical work with the tutors. Half-yearly or yearly college examinations usually take place, in addition to these lectures, when the names of the students are arranged in the order of their respective merits. The first public examination of a student takes place in the Lent and October terms of the second year from the commencement of his academical residence. After the examination, the candidates are arranged in two classes—those who have passed with credit, and those to whom the examiners have only not refused their certificate of *approval*. A second examination takes place, in Michaelmas term, of those who have been absent from the former by permission, or were not then approved of: this is termed, in university phrase, the "little go." Those anxious to take honours usually engage a private tutor (who is not necessarily of their own coll.) after this, in order to secure more exclusive attention and assistance. The usual fee of a private tutor is 50*l.* a year. After this preparatory step, those who are candidates for honours perform the college exercises under the superintendence of the moderators: these are usually Latin theses, propounded and opposed in a syllogistic form. The senate-house examination, for the degree of B.A., commences on the Monday preceding the first Monday in Lent term, and continues six days. The previous division of the candidates for honours into four classes has recently been discontinued, and the same questions are now proposed throughout the examination, to all whom the moderators judge, from the previous public exercises in the schools, to be qualified for examination as candidates for mathematical honours; and of the six examiners, two confine themselves to mathematical subjects, two to Homer and Virgil, &c., and two to Paley's Evidences and Moral Philosophy, and to Locke's Essay on the Human Understanding, &c. The whole is conducted by writing, and the various subjects and problems may be seen in the annual registers of the university. Those who are not candidates for honours, πολλοι, are classed and examined separately, the subjects being — the Acts of the Apostles in Greek, one Greek and one Latin classic, Paley's Moral Philosophy, and certain questions in mathematical and mechanical science, specified in a printed schedule. The degrees are conferred on such of the questionists as pass, to the satisfaction of the examiners, by a subsequent grace of the senate, when the oaths of allegiance and supremacy are taken, and a declaration of adherence to the doctrines of the Church of England is required to be signed; but previously to this, on the last examination day, the mathematical *tripos* or list of those who succeed in obtaining an honour, is exhibited, formed into three divisions, that of *wranglers*, and of *senior* and *junior optimes*, arranged according to merit, or "*bracketted*," where two individuals are considered on an equality. The senior wranglership is the highest academical honour obtainable in the kingdom. On the fourth Monday after the general admission *ad respondendum questioni*, an examination commences of all such as have obtained an honour at the mathematical examination of the previous January, and who voluntarily offer themselves for the purpose in classical learning at this examination (which continues five days), translations are required of passages from the best Greek and Latin authors, and written answers to questions arising immediately out of such passages. The names of those who obtain honours are arranged in three divisions (like those in the mathematical tripos), in a list which forms the classical *tripos* of the year. There are two *tripos* days, one for *wranglers* and *senior optimes*, the other for *junior optimes*, when these are publicly announced.

The *annual prizes* of the university form another subject of competition: the classical ones are — the chancellor's gold medals, given to 2 commencing Bs. A., who, having attained senior optimes at least, show themselves most proficient in classical learning: these prizes were first instituted in 1751. A third, first given by the Duke

of Gloucester, and continued by the present chancellor, is for the best English ode, or English poem in heroic verse. Many of these have been published, under the title of "Cambridge Prize Poems:" the competition is limited to resident under graduates. The members representing the university also give 4 prizes, of 15 guineas each, which are bestowed on 2 B. A.s and 2 under graduates, who compose the best dissertations in Latin prose. Brown's 3 gold medals, of 5 guineas each, to under graduates, are given for the best Greek ode, the best Latin ode, and the best Greek or Latin epigram. Porson's prize consists of one or more Greek books, given for the best translation of some passage in Shakspeare, B. Jonson, Massinger, or Beaumont and Fletcher, into Greek verse. The mathematical consist of 2 annual prizes, of 25*l*. each, left by the Rev. R. Smith, and given to 2 commencing B.A.s who prove the best proficients in mathematics and natural philosophy. The examination takes place soon after the admission of questionists: the competition is open, and the adjudicators are the vice-chancellor, the master of Trinity, and the Lucasian, Plumian, and Lowndean professors. The second or even lower wranglers occasionally become first prize men; hence it forms, in some sort, a court of appeal from the decisions of the examiners. *Cæteris paribus*, preference is given to candidates of Trin Coll. In theology, there are the Norrisian and Hales's prizes. The *Seatonian* is a poetical one; the subject is proposed in January, and the poem is to be sent in by Michaelmas: that which obtains the premium is printed from the produce of the estate left for the purpose, the remainder of which is given to the author. (A selection of these poems has been published in 2 vols. 8vo.) The *university scholarships* are also publicly contested for, and are given to the most successful candidates in classical reading and composition: in this respect they rank first in the classical competitions of the university, and are usually extended beyond the ordinary range of text-books. The examination is the same for all, but most importance is usually attached to the Pitt scholarship, it being less frequent as well as of greater pecuniary value.

Very different opinions have been, and may be, entertained as to the merit and demerit of the system of instruction pursued at this and the sister university. Mathematics, and the sciences closely connected with and dependent on mathematics, form the distinguishing characteristic of the studies pursued at Cambridge; and the chief examinations, as well as the public lectures, honours, and emoluments, are principally rendered subservient to their advancement. A critical knowledge of the structure of the Greek and Latin tongues is that to which attention is mainly enforced at this university, in respect to classical attainments. Original composition forms no part at either tripos examination, but it is made a leading feature in the competition for scholarships and other prizes.

Of the importance of mathematical studies no doubt can be entertained, but very great, and apparently well founded doubts may be entertained whether the exclusive attention given to them at Cambridge be the best means of educating accomplished statesmen, lawyers, divines, country gentlemen, or even manufacturers. The truth is, that this and the other university are institutions that belong to a different age; and though they have been materially modified, a great deal yet remains to be done before they become suitable places for educating the noble and aspiring youth of a great commercial and manufacturing country like Great Britain.

Lodging within the walls of a college is not enforced on under graduates, provided there be no vacant rooms; which may probably account for the greater increase of students matriculated in this than in the sister university, where residence within the walls is enforced. In 1748 there were 1,500 members on the boards; in 1838, 5,555; in the present year, 5,628; of whom 2,705 are members of the senate. The collegiate buildings of many of the establishments have been greatly improved and augmented of late years. Those of Trinity are the largest of any single college in either university; those of St. John have also been increased by a large quadrangle on the left bank of the Cam, forming one of the finest collegiate edifices in the kingdom.

N.B.— Some alterations and improvements have recently been made in the system of education carried on in the university; but we have allowed the article to stand as it was in the former edition. A Royal Commission is about to be issued to inquire into all matters connected with the English universities. And it cannot fail to elicit much valuable information, and to occasion considerable changes in the plans of education now carried on in them. It would, therefore, be to no purpose to enter into any very minute description of the latter.

CAMELFORD, a bor. and town of England, co. Cornwall, hund. Lesnewth. on the Camel, 205 m. W.S.W. London. Area of par. 3,750 acres; pop. of do. (1831) 1,359. The town is meanly built, but the streets are wide and well paved. It has a commodious town-hall, built in 1806; a free school, founded in 1679, has an annual revenue of 28*l*. 10*s*.; and there are a few minor charities. Market, Friday; fairs for cattle, Friday after March 10. May 26. June 17. and 18. and Sept. 5. Inhab. mostly engaged in agriculture. Camelford returned 2 mems. to the H. of C. from 1st Edw. VI. down to the passing of the Reform Act, by which it was disfranchised. The franchise vested in a self-elected corporate body, consisting of a mayor and 31 burgesses.

CAMERINO, a town of the Papal States, cap. deleg., on a hill, 5 m. S.S.W. Ancona. Pop. 4,900. It is pretty well built. Among the public buildings are the cathedral, which contains some pictures of the great masters, as does the church of Omanzia; and the archiepiscopal palace, a fine building surrounded with columns. In the principal square is a bronze statue of Pope Sixtus V. It has 12 monasteries, and 7 convents for women; and is the seat of an archbishopric, of a tribunal of primary jurisdiction, and of a university founded in 1727. A good deal of silk is spun and manufactured here; but the business is rather declining.

CAMMIN, a town of the Prussian States, prov. Pomerania, cap. circ., on the Dievenow, about 5 m. above where it falls into the Baltic, 38 m. N. Stettin. Pop. 2,200. It was formerly the seat of a bishopric, suppressed in 1648. The fine cathedral still remains, and the chapter continued down to 1812. There is here an asylum for noble ladies, and an hospital. Distillation is carried on to a considerable extent, and the fishery is very active.

CAMPAGNA, a town of Naples, prov. Principato Citra, cap. distr., surrounded by high mountains, 18 m. E. Salerno. Pop. 7,000. It is the seat of a bishopric; has a superb cathedral, 3 parish churches, several convents, a college, an hospital, and a *mont de piété*.

CAMPAN, a town of France, dép. Hautes Pyrenées, cap. cant., on the Adour, 16 m. S.S.E. Tarbes. Pop. 4,248. The houses are mostly built of marble. This town gives its name to a beautiful valley, fertile, *riante*, and full of life and industry. The cottages are clean and comfortable; and the neat, well laid-out gardens, and respectable dress of the peasantry, evince their comfortable condition. (*Inglis's Switzerland, &c.* p. 260.)

CAMPBELTON, a sea-port and royal bor. of Scotland, co. Argyle, being, though not the capital, by far the most important town in the co., on the E. coast of the long narrow peninsula of Cantire. Pop. 5,028. It consists of two leading streets crossing each other at right angles, with adjoining streets of an inferior description. It is built on the S.W. side of a large salt-water loch, or inlet of the sea, about 2 m. in length by 1 in breadth, forming an excellent harbour, having from 6 to 13 fathoms water. Two conical insular hills lying in the mouth of the bay, and intercepting the view of the sea, make the harbour look land-locked. Campbelton was at one time a small fishing village under the name of Dalaruan; but having begun to rise into importance, it was made a royal burgh in 1700, when its present name was conferred on it in honour of the noble family of Argyle, on whose property it is built. The parl. boundaries of the burgh are very extensive, including the entire parish, with a pop. in 1841 of 9,634. It has numerous distilleries and malt kilns. The inhab. also engage extensively in the herring-fishery, a branch of trade that at one period of the year gives employment to several hundred individuals. Many of the females are engaged in tambouring; while hand-loom weaving is pretty extensively carried on in connection with the cotton manufacture in Glasgow. Coal is got within 4 m. of the burgh, and is brought thither by means of a canal. There is a good quay projecting into the bay, but accessible only at high water. The expenditure of a small sum on its extension might render it available for vessels of any burden at all times of the tide. There is a regular steam communication with Glasgow and various parts of the mainland, as also, though less frequently, with Ireland. The climate of Campbelton, though moist in the extreme, is mild; and is regarded as particularly agreeable and salubrious: hence the number of families that resort thither, either as occasional visitors or permanent residents. The burgh has two places of worship connected with the established church, in one of which the service is performed in Gaelic. and three dissenting chapels. It unites with Oban, Inverary, Irvine, and Ayr, in sending a mem. to the H. of C. Registered electors in 1849-50, 274.

CAMPEACHY, a sea-port town of Mexico, W. coast of the peninsula of Yucatan, on the Rio Francisco, 95 m. S. by W. Merida, lat. 19° 51′ 15″ N., long. 90° 28′ 15″ W. Pop. fluctuates from about 7,000 to about 14,000. It is walled and defended by some fortifications, which, however, are of little importance. It has a pier about 50 yds. in length; but the water is so shallow that only small boats can come up to it, vessels of considerable burden anchoring at certain distances off shore, according to

their draught of water. It is, in common with the whole of this coast, ill-supplied with fresh water, that which is obtained from wells being brackish. It derives its entire importance from its being the great seat of the logwood trade; that valuable dye-wood, sometimes called Campeachy wood (*Hæmatoxylon Campeachianum*), being found in greater perfection and abundance in the adjoining district than any where else. The imports of logwood into this country in 1836, mostly from Campeachy, amounted to 5,637 tons. The other exports are wax, the produce of wild, stingless bees, with some small quantities of cotton, &c. Campeachy was founded in 1540, and suffered much at different times from hostile attacks, having been sacked by the English in 1659; by Scott, a pirate, in 1678; and by the buccaneers in 1685. (*Humboldt; Blount's American Pilot, &c.*)

CAMPLI, a town of Naples, prov. Abruzzo Ultra I., cap. cant. 5 m. N. Teramo. Pop. 6,892. It has a cathedral, three collegiate churches, an abbey of Celestine monks, several convents, an hospital, and a *mont de piété*.

CAMPOBASSO, a town of Naples, cap. prov. Sannio, on the declivity of a mountain, 53 m. N.E. Naples. Pop. 8,000. It is fortified; is the seat of a civil and criminal court; and has a collegiate and four parish churches, several convents, a royal college, an hospital, and an almshouse. The best cutlery made in Naples is produced here; and being traversed by the excellent road forming a communication between the capital and the towns on the Adriatic, it has an extensive commerce. (*Dict. Géog.; Balbi Abrégé*, ed. 1837, p. 414.)

CAMPO-FORMIO, a town of Austrian Italy, prov. Friuli, 4 m. S.W. Udina. Pop. 1,600. It is famous in diplomatic history for the treaty of peace concluded here on the 17th of October, 1797, between Austria and France.

CAMPO-MAYOR, a fortified and frontier town of Portugal, prov. Alentejo, 12 m. N.N.E. Elvas, and 15 m. N.W. Badajos. Pop. 4,500. It is ill-built, with narrow, dirty streets, and old low houses; has a collegiate church, two convents, an hospital, and a workhouse. It was nearly destroyed in 1712 by the explosion of a powder magazine. (*Miñano*.)

CAMPOS, a town of the island of Majorca, in an extensive plain, 22 m. S.E. Palma, and 7 m. from the sea. Pop. 4,881. It has in its vicinity a hot well that is in considerable reputation; and considerable quantities of salt are made along the coast. The surrounding plain is very fertile. (*Miñano*.)

CANADA, a vast territory of N. America, belonging to Great Britain, lying principally in a N.E. and S.W. direction, along the N. side of the St. Laurence, and the N. and E. sides of lakes Ontario, Erie, Huron, and Superior, between 57° 50′ and 90° W. long., and 42° and 52° N. lat. The other portion of Canada, or that on the S. side of the St. Laurence, is of comparatively limited dimensions: it stretches along the river from near Montreal, to point Gaspé, at its embouchure, having on the S. the territories of the U. States and New Brunswick. On the N. Canada has Labrador and the inhospitable territories belonging to the N.W. Company, the boundary in this direction being the elevated grounds, or water-sheds, separating the rivers which run S. to the St. Laurence and the great lakes from those which run N. to Davis Straits and Hudson's Bay. The length of Canada from Amherstburg, on Detroit river, the extreme S.W. limit of the prov., to Sablon Harbour, on the strait of Belle Isle, its extreme N.E. limit, is about 1,520 m., its breadth may vary from 200 to 400 m. Its area has been estimated at about 380,000 sq. m.; and its pop. is at present (1850) little, if at all, short of 1,600,000. It is wholly within the basin of the St. Laurence, of which it includes the entire N. and a small part of the S. division.

This great territory is divided into the provs. of Upper and Lower, or, as they are now sometimes designated, W. and E. Canada. The Ottawa or Grand River, which has its sources in about 48° 30′ N. lat., and 80° W. long., and flows in an E.S.E. direction till it unites with the St. Laurence, near Montreal, forms nearly in its whole extent, the line of demarcation between the two provs.; Lower Canada comprising the whole territory lying N.E. of the Ottawa, on both sides of the St. Laurence; while Upper Canada comprises all the territory lying S. and W. of that river. The latter is entirely an inland prov.; but from its having the great lakes and a part of the St. Laurence for its boundary, it has a vast command of internal navigation, and a ready access to the ocean.

In 1844 a census was taken in Lower Canada, from which it appears that the population (including 6,051 individuals temporarily absent) amounted to 693,649, whereof there were —

Natives of	England	11,886
—	Ireland	44,012
—	Scotland	13,341
—	Canada of French origin	518,565
—	Canada of British origin	85,075
—	Continental Europe	2,353
—	United States	11,943
—	Unaccounted for	7,097
		693,649

The pop. of the same prov. in 1848, has been carefully estimated at 770,000.

According to a census taken in 1842, the pop. of Upper Canada amounted at that epoch to 486,055: and so rapid has been its subsequent progress that it was found by a census taken in 1848, to amount to 723,332. Hence we shall not, perhaps, be far wrong if we estimate the total pop. of Canada in 1850, at 1,600,000. The inhab. of the Upper Prov. are almost wholly of British and Irish (the latter preponderating) origin, those of French and other foreign extraction being comparatively inconsiderable. The rapid increase of population in this prov., notwithstanding its greater distance from England, is ascribable to a variety of causes; partly and principally perhaps to the superiority of the soil and climate, and partly, also, to the circumstance of the prov. not being subject to French laws or customs.

The N. portion of both Upper and Lower Canada consists of a table-land, little of which has been hitherto explored. In Upper Canada, E. of Huron, it has an average elevation of perhaps from 1,200 to 1,300 ft. It is covered with forests interspersed with ravines, swamps, and torrents; and abounds with lakes, which, any where but in the neighbourhood of the immense lakes of this continent would be deemed of considerable size. The coast of Lower Canada, N.E. of the Saguenay, is less lofty than S.W. of that river; but of a very uninviting description. The interior of this part of the country is described by the Indians and Esquimaux, by whom alone it is traversed, as composed of rocky cliffs and low hills, scattered over barren plains, diversified with thick forests of stunted pines, and checquered with small lakes. There seems reason to suspect that the expectations once entertained of finding here tracts of cultivable land will never be realised; but hopes are still cherished that the district may contain valuable minerals. The greater part of the immense district of Quebec presents a "chaos of mountains, lakes, and torrents, tenanted only by wild beasts, and a few wandering Indians." (*Murray*.) From the mouth of the Saguenay to Cape Tourment, near Quebec, the shore of the St. Laurence is bold and desolate; but W. of this point a plain country begins to extend inland, with a variable breadth of from 15 to 40 m., rising into the table-land behind it by successive terraces. The cultivated country N. of Quebec does not extend far, being hemmed in by hill ranges. But as these ranges gradually recede from the St. Laurence, and the country, at first diversified by varied eminences, sinks into a level plain, the surface of settled and cultivated land increases; and this is especially the case as we approach and penetrate Upper Canada. The peninsula or great plain of this prov., between lakes Huron, Erie, and Ontario, comprising about 20,000 sq. m., consists, for the most part, of alluvial soil, on a calcareous substratum. It is of varying fertility; but, on the whole, is believed to be the best grain country of any of the more N. portions of the American continent. A large part of this fine plain is still covered with lofty forests: it has, however, some prairies, or natural meadows; but these are not extensive. At some remote period it had evidently formed part of the bed of a vast inland sea, of which the five great lakes having been the deepest, are now the principal remaining portions. N. of lake Ontario, two terraces intervene between the plain on the shore of the lake and the table-land in the N., decreasing somewhat in fertility as they increase in height, and separated from each other and from the plain by two ranges of hills of moderate elevation. The most S. of these two ranges unites near long. 80° with a third, which passes N. and S. from Natawasanga Bay, in Lake Huron, to the W. extremity of Lake Ontario. The combined range, after encircling the head of the latter lake, crosses the bed of the Niagara river, forming the ledge over which are the celebrated falls, and is finally lost in the territory of the United States.

That part of Lower Canada S. of the St. Laurence, extending between long. 72° 30′ and 74° 30′, and entering

into the distr. of Montreal, consists, for the most part, of an extended plain almost completely flat, except that some detached hills diversify the surface, one of which, that of Rouville, is 1,100 ft. in height. It is less extensive than the plain on the opposite shore of the river, and contains no large towns, but it is in many districts equally fertile and well watered, and the cities are dependent on it for a large proportion of their supplies. To the S. and E. it ascends by degrees into the mountainous region, forming the boundary between the British and U. States territories. The aspect of the S. shore of the æstuary of the St. Laurence, between long. 69° 30′ and 72°, though bold and hilly, is not mountainous, as on the opposite shore; and the hill ranges are interspersed with valleys and even plains of some extent, many of which, from the encouragement afforded by the contiguous markets of the cap., have been brought into very tolerable cultivation. E. of Kamouraska, the country is diversified by more abrupt eminences, while pop. and culture become more limited; and in the district of Gaspé the mountains rise into two chains of considerable elevation, enclosing between them a lofty table-land or central valley. The most southerly of these chains bounds on its S. side the valley of the Ristigouche and St. John rivers.

Besides the great lakes indenting the W. outline of the country, Canada contains, as has been already said, numerous minor, yet still considerable, bodies of water. In Lower Canada, the lakes and rivers have been estimated to cover 3,200 sq. m. of surface; the principal of the former hitherto discovered are Lake St. John, with an area of 540 sq. m.; those of Manicouagan, Piretibbe, and others N. of the St. Laurence, and Mephramagog, &c., S. of that river. In Upper Canada, the chief known are Nipissing Lake, Temiscaming and St. Ann's, in the high table-land; and the Simcoe Lake in the upper terrace country of the Home district.

Amongst the rivers falling into the St. Laurence, or into the lakes which form a part of its system, there are some deserving of especial mention for their utility as regards navigation, or their agency in fertilising the soil. In the peninsula of Upper Canada, the Thames originates in the district of London, by the union of several streams, near lat. 43° and long. 81°, and after a course of about 150 m. chiefly S.W., falls into Lake St. Clair, situated between lakes Huron and Erie. The Thames is navigable for large vessels to Chatham, 15 m. up, and for boats nearly to its source. It intersects and waters a fine and fertile country. Besides Chatham, small towns, with the pompous names of London and Oxford, are situated upon its banks. Next in magnitude to the Thames is the Ouse. This river rises in the Home district, about lat. 44°, long. 80° 10′, runs generally S.E., and falls into Lake Erie near its N.E. extremity. Parallel to this river for about 50 m., runs the Welland or Chippeway River, which in one part of its course forms a portion of the canal between the Ouse and Lake Ontario, by means of which the falls of Niagara are avoided. The Trent, in the district of Newcastle, connects the small lakes Balsam, Sturgeon, and several others in the upper terrace country, with the Rice Lake, and after a tortuous course discharges itself into the Bay of Quinté in Lake Ontario. It is said to be navigable for boats in the whole of its course. The Lake Balsam is separated by only a short portage from that of Simcoe, which discharges its waters into Gloucester Bay (Huron Lake) by the Severn River. A short and valuable line of direct water communication between the lakes Huron and Ontario is apparently impeded only by the intervention of this short portage, and by the rapids of the Severn, which river is, however, no more than 20 m. in length. The other affluents of the St. Laurence and the great lakes are elsewhere treated of. (*See* LAURENCE, ST., &c.) The Ristigouche, which bounds the district of Gaspé S., and falls into Chaleur Bay, is the only river of any importance in Canada not belonging to the St. Laurence basin. (*Bouchette, Darby, M'Gregor, Hall, &c.*)

Climate. — The climate of Canada is subject to great extremes of heat and cold; the thermometer ranging between 102° above, and 36° below, the zero of Fahr. In such an extensive region there is, of course, some difference in this respect: as we ascend the St. Laurence, not only a more S. parallel is reached, but the country is less wild and exposed than that near its entrance; so that, whilst Quebec has been said to have the summer of Paris, and the winter of Petersburg, the great plain of Lake Erie has the climate of Philadelphia. Still the Canadian climate, as a whole, must be considered very severe: all the streams are locked up by ice, and the ground is covered every where, to an average depth of 5 or 6 ft., by snow, for 4 or 5 months of every year. Frosts usually commence in Oct., whilst the weather, by day, is still mild and serene. But with Nov. begins a succession of snow-storms and tempests, from the N. and E., accompanied by a great increase of cold; and this sort of weather usually continues to the 2d or 3d week of Dec., when the atmosphere again becomes serene, but the cold still more intense, so that the rivers become suddenly frozen over. Towards the latter part of April, or, in late seasons, the beginning of May, the ice begins to break up (often with loud reports like the discharge of cannon); a sudden increase of temperature stimulates vegetation, and makes its growth almost perceptible to the eye; so that spring and summer can scarcely be recognised as distinct seasons. May and June are occasionally wet, to the hindrance of the farmer, whose seed-time this is (to be followed by harvest towards the end of Aug.); but usually the summers are very fine. Thunder-storms are often of great violence, and the aurora borealis is frequent and vivid: of the prevailing winds, those from the S.W. are usually accompanied by clear and serene weather; those from the N.E. by continued rain in summer, and snow in winter; whilst a N.W. breeze is usually dry, with severe cold. Fogs (except in the district of Gaspé) are of unusual occurrence; there, however, they are very prevalent, and seriously obstruct the navigation of the St. Laurence. It seems to be the general opinion of the inhab. that the winters are gradually becoming less severe; and this may be attributable to the clearance of the forests and the increased extent of cultivated surface; for, whilst the state of climate (especially of humidity) influences vegetation, that, in turn, reacts on climate.

The length and severity of the Canadian winter is a heavy drawback on the country, and lays the farmer under serious difficulties and privations not experienced in countries where the climate is milder, as in the contiguous territories of Indiana and Illinois. For five or six months almost all agricultural operations are suspended, so that time is not left in the rest of the year for the proper preparation of the ground for the crops and other necessary labours. It is clear too, that horses, cattle, and other farm stock, must require a proportionally large supply of fodder for their keep; and to these causes Mr. Shireff is principally inclined to ascribe the leanness of the animals, the high price of produce, and the cheapness of labour as compared with the U. States. (*Tour in America*, p. 354.) In these respects, however, there is a material difference between the lower and the upper province. In the latter the severity and the length of the winter are considerably diminished. The soil too is generally better; and the quality of the wheat improves as we draw nearer to the S. limit of the prov.

Most of the causes that contribute to make the climate of the northern part of America more severe, and subject to greater extremes than that of Europe, in the same parallel, bear with especial force on the Canadian regions. The greater portion of these provinces is covered by extensive forests; the trees composing which (especially in the more northern and eastern parts) do not, generally speaking, attain the same lofty size as those of the U. States, nor flourish with the same exuberant vitality: the pine family, and various species of evergreens, are the most numerous and predominant. Amongst various other kinds of trees, are, the silver and American firs, Weymouth and Canadian pines, white cedar (*Thuya occidentalis*), maple, birch, American ash, bass wood, hickory, two or three species of wild cherry, and numerous species of oak. Like the rest of the American continent, most of the plants and animals differ specifically from those of the Old World. Many of the smaller kinds of annual and perennial plants are common to Canada and regions lying much further to the S., which may be accounted for by the high summer temperature, whilst the deep winter snows effectually protect their roots through the severest seasons; but the trees and larger shrubs, which find no such shelter, belong for the most part to more northern and arctic regions. Of the smaller plants, the *Zizania aquatica* may be noticed as peculiar to Canada, and abounding in most of the swamps (a grass not unlike rice, and affording food to birds, and occasionally to the Indian tribes), and the Ginseng, and Canadian lily, common to this country and Kamtchatska. From the sap of the maple (*acer saccharinum*), as it rises in the earlier part of spring, sugar is made in considerable quantities; in collecting which, from trees scattered over thousands of acres, whilst the snow still covers the ground, much hardship is frequently endured: these districts are called sugaries, and are a valuable description of property. The mode of procuring it is by inserting a small cane shoot through an incision made in the bark, the sap being received in a wooden trough placed under it; it is afterwards boiled, and then left to cool into a hard solid mass, of a dark brown colour, which is moulded by the form of the jars which contain it; the value of the article is about half of that produced from the sugar-cane. Most of the oak growing in the woods is unfit for ship-building, and the greater part of the timber used for that purpose is imported from New England. The species called the live oak, which grows in the warmer parts of the colony, is, however, said to be well adapted for ship timber; the various kinds of wood available for no other purpose, serve to supply the pot

and pearl-ash manufactories. Amongst the wild animals, ranging through these unreclaimed regions, are the American elk, fallow deer, bear, wolf, fox, wild cat, racoon, martin, otter, and various species of *Viverræ* and *Mustelæ*; the beaver, hare, grey and red squirrel; and in the more southern parts, the buffalo and roebuck: the bears usually hybernate, if the season has enabled them to get sufficiently fat for the purpose; if not, they migrate to a more southerly climate. (*Richardson's Fauna Borealis*, p. 16.) Amongst the birds, may be noticed the wild pigeon, quail, partridge, and different kinds of grouse; of the water birds, the species are very numerous, as might be inferred from the general character of the region, where, in the basin of the St. Laurence, and the numerous lakes occupying the elevated table-lands around it, half the fresh water on the surface of the globe is collected; a humming bird (the smallest of its genus) is also indigenous, and may be seen in the Quebec gardens, flitting round the flowers, and constantly on the wing. Amongst the reptiles, the rattlesnake is occasionally met with. Fish, in great variety and abundance, are found in the lakes and rivers; in which respect few streams can rival the St. Laurence; the sturgeon is common, and the salmon and herring fisheries are considerable; seals are also met with occasionally, in large shoals, in the lower parts of the river. Forests can only exist where the prevailing winds bring with them sufficient moisture, but they may usually be taken as a measure of the fertility of the soil, no less than of the humidity of the climate: in this respect, therefore, taken generally, Canada must be considered a fertile region; the upper province much more so than the lower. Tobacco, hemp, flax, and the different kinds of grain and of pulse, are successfully cultivated; as are all the commoner fruits and vegetables of England; melons of different species abound, and are probably indigenous; as are also the strawberry and raspberry: these last flourish luxuriantly in the woods; and on the plains behind Quebec are gathered in great quantities, and taken to that market. Pears and apples succeed well, both there and at Montreal; and on the shores of Lake Erie, the grape, peach, and nectarine, as well as all the hardier kinds of fruit, arrive at the greatest perfection.

Canada does not appear to be rich in minerals, but iron abounds in some districts; veins of silver-lead have been met with in St. Paul's Bay (50 m. below Quebec), and coals, salt, and sulphur, are also known to exist in the colony. No volcanos have been discovered, but authentic accounts are preserved of several violent earthquakes; amongst others, one in 1663, when tremendous convulsions, lasting for six months, extended from Quebec to Tadeausac (130 m. below it), which broke up the ice of the rivers, and caused many great land-slips and dislocations; in 1791, earthquakes were also frequent and violent, in the same region; and the shores, both of the Gulph and River St. Laurence (like those of the great lakes, as previously noticed), present many proofs of former convulsions in the horizontal banks of recent shingle and shells, and in elevated limestone strata, with wave-scooped marks, and lithodomous perforations, that occur on various parts of the shores. (*Lyell's Geology*, vol. ii.)

People. — The majority of the population of Lower Canada are of French origin, and are for the most part descendants of settlers from Normandy, established in the colony previously to 1759. Their number at that period was about 70,000, and in 1841 they had increased (according to the census) to upwards of 518,000! Neither the conquest, nor the long period which has since elapsed, has wrought any great change in their character and habits; nor has their increasing numbers induced them to make any considerable encroachments on the wilderness around: on the contrary, they have continued within their original limits, subdividing the land more and more, and submitting to a constantly decreasing ratio of comfort. They are frugal, honest, industrious, and hospitable, but cling with unreasoning tenacity to ancient prejudices and customs; by temperament, cheerful, social, engaging, and (from the highest to the lowest) distinguished for courtesy and real politeness, they retain all the essential characteristics of the French provinces previously to the Revolution, and present the spectacle of an old, uneducated, stationary society, in a new and progressive world. A few seignorial families possess large, but not very valuable, properties: the class wholly dependent on wages is a very small one; and the great majority consists of a hard-working yeomanry (usually called *habitans*), amongst whom there is almost a universal equality of condition and property, and of ignorance too; for few of them can read or write. From the public colleges and seminaries established in the cities and other central points by the early possessors of the country, chiefly by the Jesuits (where the education resembles that of our public grammar-schools, and is entirely in the hands of the Catholic clergy), between 200 and 300 annually finish their education, and are dispersed through the community: nearly the whole of these are of the class of *habitans*, and return to reside amongst them, mostly as notaries or surgeons; and thus, living on terms of complete social equality, though with greatly superior knowledge, in communities which possess nothing in the shape of municipal institutions, they possess almost despotic influence over popular opinion and conduct in all public matters. The *habitans* under the old feudal tenures have cleared two or three belts of land along the St. Laurence, and cultivate them on the worst system of small farming; their farms and residences being all so connected, that the country of the seignories appears like a continuous village. They spin and weave their own wool and flax, and make their own soap, candles, and sugar. What energy and enterprise there exist in the community (beyond the portion required by this sort of routine) is exerted in the fur trade and in hunting, which, it appears, they still monopolise through the whole valley of the Mississippi. (*Lord Durham's Report*, pp. 11—13.) The Anglo-Saxon portion of the population of Lower Canada consists almost wholly of persons who have emigrated from the United Kingdom, or the descendants of such, subsequent to 1759. A considerable addition was made to their numbers by U.S. loyalists in 1787; at a subsequent period many families from Vermont have settled in the townships adjoining that state, and since the formation of the American Land Company many have emigrated through their exertions. A majority of the labouring class in this portion of the population are Irish Catholics; the rest are English or Scotch Protestants, by whom the resources of the country, so far as they have been called forth, have been mainly developed. It is also by these that the internal and foreign commerce has been created, which is wholly in their hands, as well as a large portion of the retail trade of the province; besides this, they possess the best cultivated farms in the province, and are owners of fully half the more valuable seignories. (*Lord Durham's Report*, p. 14.)

The inhabitants of the upper province consist principally, as already stated, of emigrants from the U. Kingdom. And owing to the distress that has prevailed in Ireland for several years past, and especially since the failure of the potato crops of 1846 and 1847, the Irish emigrants have far outnumbered the British. Latterly, also, there has been a rapid increase in the number of German and Dutch settlers in the prov., and they form a very valuable class of inhab.

A large proportion of the emigrants who land at Quebec, ultimately settle in the U. States; while a comparatively small number of those who land at New York find their way to Canada. Considerable numbers of half-pay officers of the army and navy have been, at different times, established in U. Canada. If we look to the well-being of the emigrants, which is the principal consideration, it is not much to be regretted that so many prefer the U. States. There can be no doubt that the valley of the Mississippi offers greater advantages to industrious immigrants, whether with or without capital, than can be enjoyed in any part of Canada. It has a milder climate, a better and a cheaper soil, and is free from the greater number of those social grievances that disturb and embitter society in Canada. The wonder, in fact, is, not that so many of the emigrants to Canada have left it for the U. States, but that any considerable portion of them should have remained behind.

The native Indian tribes still occupy portions of this colony on lakes Superior and Huron, and along the whole extent towards the N. boundaries; but their numbers are rapidly diminishing, and they are fast degenerating from their original spirit and character, so that the utter extinction of the race seems inevitable, as civilisation advances on the wilderness, to which only they appear to be adapted. It has been said, that without a change in their mode of treatment, "the fate of the Indians is sealed." But the truth is, that, however it may be changed, their fate is "sealed." Experience has sufficiently proved that the red men are incapable of any real civilisation; and nothing can prevent their extermination other than the abiding by a determination not to enter their territories, or to interfere in any degree with their grounds, habits, or pursuits. But would such a determination be either politic or proper? We answer, certainly it would not. America has been settled, civilised, and improved only through perpetual encroachments on the natives; and to say that these should cease, would be to say that vast tracts of fine country should be doomed to continued barbarism.

Tenure and Distribution of Lands in the Lower Province. — The land comprised in the seignorial districts amounts to about 9,000,000 acres; of this last, the whole has been granted by the crown, subject to an obligation to concede to actual settlers. The grants made by the French government previously to the conquest were on one uniform system. *Seignories* (or manors containing from 9 to 36 sq. leagues) were created in favour of certain leading individuals, who were bound to grant or

"*concede*" a specified portion to any applicant; the profit, to the seignor, being derived from payment of a small rent, from services which the *censitaire* (or tenant) was bound to perform; from 1-12th of the corn ground (by compulsion) at the seignorial mill; and from a fine on the transference of the property (other than by inheritance).

This wretched sort of tenure, copied in great part from the feudal system existing in France previously to the Revolution, was unfortunately maintained after the British acquired possession of the country. The consequence has been that the French pop. has been confined to a comparatively limited extent of territory, and has never amalgamated with the British; for, by enabling every individual to obtain a portion of land, which, as the pop. increased, became gradually less, without any immediate outlay, young men were tempted to remain at home; and being subject to feudal regulations and services, the occupiers were bound, as it were, to a routine system. Hence the French Canadians exhibit a singular want of activity and enterprise; and the portion of the prov. which they occupy has a dense and a poor pop., strongly attached, as already seen, to ancient habits and modes of existence.

Since the prov. came under the British government, the plans under which land has been granted and sold have differed very widely at different periods; but have very rarely, indeed, been established on sound principles. The lands, when surveyed, have been divided into townships, consisting each of about 70,000 acres, ex. 5 per cent. for high-ways. The townships have been granted in many modes, differing both in their character and object: at first, they were granted to settlers in free and common soccage, with a reservation to resume all, or any part, if required for military purposes, but subject to no other conditions: the quantity, so granted to each individual, being limited to 100 acres for himself, and 50 acres additional for each member of his family; the governor having authority to increase this amount, by 1,000 acres. These favourable terms were meant to attract settlers from the colonies, which now form the U. States. In 1775 this arrangement was superseded, and the *Quebec Act* of the preceding year having restored the French code and language, corresponding instructions were given, that future grants should again be made in fief and seignory, and three seignories were thus created. In 1791 the regulations of 1763 were revived, though with certain conditions annexed to them, which in practice were avoided; and this mode continued till 1826: but the constitutional act of 1791 also enacted that a reserve for the support of a Protestant clergy should be made, in respect of every grant, equal in value, as near as could be estimated, to 1-7th part of the land granted. The crown reserves, to a like extent, originated in the view of supplying, first by sales and ultimately by rents, an independent source of revenue, and obviating the necessity of taxes, and consequently of such disputes as had led to the independence of the U. States. These reserves, however, have proved most serious obstacles to the welfare of the colony, which the mis-construction, or violation, of the act, has aggravated, by increasing their extent beyond what appears to have been contemplated. (*Lord Durham's Report, Append. B.*, pp. 6, 7.) From 1806 downward, no new townships were granted; and the grants, on to 1814, were in lots of 200 acres, to actual settlers, and few in number. From the last date, grants were made on "location tickets," requiring the erection of a house, and the clearing and cultivating 4 acres, before the title was perfected. In 1826 the new mode of selling land by auction, at a *minimum* upset price, was adopted, the purchase-money being payable by four annual instalments, without interest. In 1831, the purchase-money was to be repaid by half-yearly instalments; and in 1837, to obviate the bad effects of giving credit on such sales, the purchase-money was made payable at the time of sale. Besides the grants made under these different regulations, other exceptional ones have been made — mostly in reward of public services; such as those to the militia of the revolutionary war, and of that of 1812 — there has also been an exceptional sale of nearly 800,000 acres to the British N. American Land Company. The crown reserves must be considered as virtually abandoned when the auction sales were introduced; and an act of the imperial legislature has authorised the sale of 1-4th part of the clergy reserves, at a rate not exceeding 100,000 acres annually. Latterly, however, the system for the disposal of the crown lands by auction, at a fixed minimum price, has been enforced in Canada as well as in the other colonies. A provincial act of 1841, authorises the governor, in council, to fix from time to time the price at which the crown lands shall be sold.

The prices fixed for the present (1850) are as follows: — For Canada, West (Upper Canada), 8s. currency (about 6s. 7d. sterling) per acre, for Canada, East (Lower Canada), in the county of Ottawa, and south of the river St. Laurence, to the west of the Kennebec road, 6s. currency (about 4s. 11d. sterling); and elsewhere in that division of the province, 4s. currency (about 3s. 3½d. sterling) per acre.

These prices do not apply to lands resumed by government for non-performance of the conditions of settlement on which they were granted under a former system now abolished, nor to lands called Indian reserves, and clergy reserves; which three classes are, as well as town and village lots, subject to special valuation.

The size of the lots of country lands is usually 200 acres; but they are sold as frequently by half as whole lots.

The following are the conditions of sale at present in force: —

"1. The lots are to be taken at the contents in acres marked in the public documents, without guarantee as to the actual quantity contained in them.

"2. No payment of purchase-money will be received by instalments, but the whole purchase-money, either in money or land scrip, must be paid at the time of sale.

"3. On the payment of the purchase-money, the purchaser will receive a receipt which will entitle him to enter on the land which he has purchased, and arrangements will be made for issuing to him the patent without delay.

"The receipt thus given not only authorises the purchaser to take immediate possession, but enables him, under the provisions of the Land Act, to maintain legal proceedings against any wrongful possessor or trespasser, as effectually as if the patent deed had issued on the day the receipt is dated.

"Government land agents are appointed in the several municipal districts, with full power to sell to the first applicant any of the advertised lands which the return open to public inspection may shew to be vacant within their districts."

Of late years a revenue has been derived from timber property in both provinces: originally the right of cutting timber was a monopoly in the hands of contractors, for supplying that article for the navy, who usually sold licenses to merchants and lumber-men, by whom all the legal trade was in consequence engrossed. In 1824 licenses to cut were first offered by government by auction: the value of an acre of timber, at the price charged for these, is often very much greater than that required for land, and the first instalment has been paid frequently for land solely in the view of cutting down the timber. The Ottawa is the chief seat of the trade, which is, in great measure, forced and factitious; and which, while it is of no real advantage to Canada, entails a heavy burden on Great Britain.

Lands, Upper Province. — Lands in the upper prov. have been granted in the same way as in the lower; and the profuse manner in which these grants have been made, many very extensive tracts having been given to parties who had no intention of settling upon them, coupled with the great extent of the clergy and state reserves, has had a most injurious influence over the colony, and has materially retarded its progress. The lands thus given away to individuals not settling upon them, and reserved, by interposing uncultivated desert tracts between the actual settlers, render it, in all cases, much more difficult and expensive, and sometimes all but impossible, to form roads and other means of communication; so that the cultivators are frequently cut off from a market for their produce; and being settled only in particular districts, they are less able to combine for municipal and such like purposes, and for the establishment of schools and churches, and the undertaking of public works that require co-operation.

Lord Durham ascribed the backward state of Canada, as compared with the adjoining districts of the U. States, mainly to the influence of the circumstances now glanced at. But though their disastrous operation be established beyond all doubt, they are by no means the only, nor even the principal, cause of the backward state of the colony. Quite as little providence was manifested in the granting of lands in the greater number of the American states, when they were colonies of England, and yet their progress was one of unexampled prosperity.

Were this the proper place for such investigations, it might be easily shown that the plan for the disposal of public lands by auction at a fixed upset price, which Lord Durham did so much to recommend, is far more objectionable than the system he so justly censured. "When," says Mr. Sheriff, "the extent of unoccupied surface, the extent of soil which is occupied and remaining uncleared, and the tens of millions of acres which have never been surveyed, are considered, the price of Canadian land is extravagantly high, and far above its intrinsic value to actual settlers. Land, like other things, is cheap or dear by comparison; government land in the U. States being sold at 6s. 3d. an acre, Halifax currency, ought to make the British government blush for its policy in Canada. The price of land surrendered by the six nations, and covered with forest, is fixed at 6s. 7d. an acre, which is more than its price in the western U. States, superior in quality, situated in a finer climate, clothed with luxuriant grass, and without an obstacle to immediate cultivation. It is population alone which imparts value to land, and a more effectual method could not be devised for preventing a further influx of inhab. to Upper Canada, and drawing away many of those already settled, than government adhering to the present prices of land." (*Tour through N. America*, p. 365.)

This is the statement of an excellent judge of agricultural matters, and is obviously quite conclusive. In fact, the present system would appear to have been devised and to be kept up for no other purpose except it be to turn the tide of emigration from our colonies to the U. States! That at least is its effect. But, whatever

the upset price may be, the plan of selling land in any colony, and especially in one in the situation of Canada, seems highly objectionable. The preferable plan would be to make grants of lands to all settlers, on a uniform system, in some proportion to their available capital, with a limitation of the maximum quantity to be assigned to any individual; and making it a condition of all grants, that they should be forfeited in a given time, unless certain specified improvements were effected upon them within that time.

The following statements, provided they may be depended upon, illustrate the progress of both provinces.

Produce of Lower Canada according to the Censuses of 1831 and 1844.

		Census, 1831.	Census, 1844.
Wheat - -	bushels	3,404,756	942,835
Peas - -	„	948,758	1,219,420
Oats - -	„	3,142,274	7,238,753
Barley - -	„	594,795	1,195,456
Rye - -	„	231,529	333,446
Indian corn - -	„	339,633	141,008
Potatoes - -	„	7,357,416	9,918,869
Buck-wheat -	„	106,050	374,809
Total of corn - -		15,928,211	21,364,596
Maple sugar -	lbs.	No return	2,272,457
Grist mills - -	„	395	422
Saw mills - -	„	No return	911
Fulling mills -	„	97	153
Neat cattle -	„	389,706	469,851
Horses - -	„	116,686	146,726
Sheep - -	„	543,343	602,821

Lands in Upper Canada, under the following Crops in 1848, with the Produce thereof, according to the Census of that year.

Wheat -	Acres	593,695	7,558,773	Bushels
Barley -	„	29,324	515,727	„
Rye -	„	38,452	446,293	„
Oats -	„	285,571	7,055,730	„
Peas -	„	82,516	1,753,846	„
Maize -	„	51,997	1,137,555	„
Buckwheat -	„	26,653	432,573	„
Potatoes -	„	56,796	4,751,331	„
		1,165,004	23,651,828	„
Add for omissions 10 per cent. -		116,500	2,365,182	„
		1,281,504	26,017,010	„

The *roads and bridges* of the province are under the control of a "grand voyer" and deputy for each district, a surveyor of roads for each parish or township, and an overseer of highways for each section of either of the latter. Two kinds of public highways are recognised — FRONT and BYE roads. The former are those which run between two ranges of "concessions," or through the front range of the river; the different portions of these are maintained by the farms which they limit: those of the townships are usually of a square form, whilst the seignorial farms have 10 breadths to 1 length; and hence the latter have the smallest extent of road to maintain. The bye-roads are repaired by "joint labour," and so, in fact, is a considerable portion of the other, such as hills, marshes, bridges, or any parts of more than average difficulty, as well as through all unconceded and all uncultivated lands, the contributors being "all those to whom the road is useful," that is, those who must pass over it to get to church or market. No local rates are levied for these purposes, but charges, usually defrayed in England by parish or county rates, frequently come out of the provincial treasury for such purposes, and large sums have from time to time been granted by the legislature, and disbursed by commissioners appointed by the governor. This heavy expenditure does not appear to have produced corresponding results, for the roads in general are very bad, and the lines of communication very incomplete: in this respect, the blocks of land called "crown," and "clergy reserves," have proved the greatest nuisances, for they are dispersed over every part of a township, one between every two settlements. The present law, whereby the roads are regulated, was passed in 1796, and the system sanctioned by it appears to be generally reprobated by the settlers; and turnpikes have been suggested as very desirable for the colony, and also the establishment of a highway rate.

Statement, showing the Annual Amount and Value of certain Articles assessed for Local Taxation in Upper Canada, with the Population at various Periods.

Years.	Population.	Cultivated Lands.	Houses of all kinds assessed.	No. of Grist Mills.	Horses 3 Years old and upwards.	Oxen 4 Years old and upwards.	Milch Cows.	Young Cattle.	Saw Mills.
1825	158,027	535,212	8,876	232	22,589	23,900	51,216	23,501	394
1830	211,567	775,014	12,082	273	30,777	33,771	80,909	33,396	555
1835	346,165	1,208,508	18,488	352	47,724	46,060	109,605	39,329	753
1840	427,441	1,710,000	25,857	420	72,734	49,317	141,900	48,625	963
1845	No Census.	2,311,238	37,214	478	98,598	65,127	199,537	78,665	1,272
1847	No Census.	2,673,820	42,937	527	113,812	72,017	218,653	76,935	1,489
1848	723,332	—	—	996	—	—	—	—	—

Commerce. — **Account of the Principal Articles of Export from Canada by Sea (exclusive of Timber), for the Years 1838 to 1847, both inclusive.**

Years.	Ashes.	Butter.	Beef.	Barley.	Flour.	Oatmeal.	Peas.	Pork.	Wheat.	Oats.
	Bbls.	*Lbs.*	*Bbls.*	*Bush.*	*Bbls.*	*Bbls.*	*Bush.*	*Bbls.*	*Bush.*	*Bush.*
1838	29,454	80,536	439	146	59,204	522	1,415	8,868		
1839	25,480	72,248	2,410	130	48,427	50	2,855	6,479	3,336	
1840	24,498	403,730	3,685	60	315,612	6,008	59,878	11,230	142,059	
1841	22,012	211,497	2,968	4,504	356,210	4,567	123,574	14,795	562,862	
1842	27,611	512,511	9,608	867	294,799	6,754	78,985	40,288	204,107	5,666
1843	31,916	874,207	7,195	6,940	299,957	5,327	88,518	10,684	111,233	3,651
1844	35,743	460,800	5,568	63,755	415,467	6,725	130,355	11,164	282,183	24,574
1845	30,916	812,475	2,140	27,626	442,228	1,570	220,912	3,493	395,252	53,530
1846	26,011	786,701	2,826	6,287	555,602	5,930	216,339	5,598	534,717	45,000
1847	19,243	1,036,555	1,809	23,102	651,030	21,999	119,252	4,674	628,001	165,805

The increase in the exports of corn and flour exhibited in this table, is, to a great extent, deceptive, inasmuch as the increased exports principally consisted of the corn and flour of the U. States, which, after 1840, found its way to our markets through this channel.

Timber, when imported from Canada and our other N. American possessions, pays a nominal duty of 1*s.* a load, whereas the timber imported from the N. of Europe and other foreign parts, pays a duty of 15*s.* a load. No wonder that, under such circumstances, we should import large quantities of Canadian timber. But, though the latter be well suited to some purposes, the presumption, or rather the certainty, is that, were the duties on it and foreign timber equalised, the imports would be reduced to a half, or less, of their present amount.

The entire value of the exports of British produce and manufactures to our N. American colonies amounted, in 1848, to 1,990,659*l.*; of which the exports to Canada might, perhaps, amount to 1,600,000*l.*, a considerable portion being destined for the U. States. The leading articles of export consist of woollen, cotton, linen, and silk manufactures; iron and steel; apparel, slops, and haberdashery; hardware and cutlery; leather manufactures, &c. We subjoin —

An Account of the Emigrants from the U. Kingdom to the N. American Colonies, Canada being the destination of nine-tenths of the number, from 1835 to 1849, both inclusive.

Years.	Emigrants.	Years.	Emigrants.
1835 -	- 15,573	1843 -	- 23,518
1836 -	- 34,226	1844 -	- 22,924
1837 -	- 29,884	1845 -	- 31,803
1838 -	- 4,577	1846 -	- 43,439
1839 -	- 12,658	1847 -	- 109,680
1840 -	- 32,293	1848 -	- 31,065
1841 -	- 38,164	1849 -	- 41,367
1842 -	- 54,123		

Shipping. — Shipbuilding is carried on to a pretty considerable extent in Canada. But considering the magnitude of the prov., the cheapness and abundance of timber, and the facilities for the employment of shipping afforded by the lakes, the St. Laurence, and the Ocean, the smallness of the mercantile marine of Canada may well excite surprise. It comprised on the 1st of January,

1850, 4?6 sailing vessels of the aggregate burden of 53,344 tons, and 69 steamers, burden 8,648 tons. The Canadian shipping hardly, therefore, amounts to that owned by a third rate English maritime town; and is not only very inferior to the shipping of the adjoining American states, but to that of the colonies of Nova Scotia and New Brunswick.

Former Government of the Lower Province.—Previously to its suspension, the constitution of this prov. rested on the authority of an act of the imp. parliament, passed in 1791 (31 Geo. 3. c. 31). The constitution established by this act bore a striking resemblance to that of the U. kingdom, and to the constitution now established in the united prov. The legislative authority was vested in a House of Assembly elected by the colonists, and a legislative council nominated by the crown. They met annually at least, and their consent, and that of the governor was necessary to the passing of all laws. At first the crown appears to have almost wholly relied on its territorial resources, and on duties imposed by imperial acts that had been passed prior to the introduction of this system into the colony. In the end, the government was obliged to accept the assembly's offer of raising an additional revenue by fresh taxes, which gave the latter some control in the levying and appropriation of part of the public income; and step by step they obtained the entire control over it, every portion of the reserved revenue being given up to them in 1832 (with the exception of the casual and territorial funds). But the assembly had no control or influence over the conduct or appointment of the public functionaries, by which the affairs of the province were administered: hence, the contest between it and the government was continued after its financial demands had been conceded; and the civil list was refused, in consequence of the determination of the assembly not to give up its only means of subjecting the executive council to any sort of responsibility; for the legislative council was confessedly merely an instrument in the hands of the executive council to restrain the popular branch of the legislature, to which it was generally opposed; hence, from first to last, "the assembly were in a state of continuous warfare with the executive, for the purpose of obtaining the powers inherent to a representative body, by the very nature of a representative government." (*Lord Durham's Report*, pp. 28—31.) The great business of the colonial legislature appears to have consisted of what is usually called parish business in England; this was the necessary consequence of there being no local bodies, with authority to manage local affairs, or levy local rates; hence the general practice of making parliamentary grants for local works; and the situation of such a colony makes these of such primary importance, that the number of roads and bridges constructed is the test by which the merits of a colonial legislature is usually estimated. In this respect, however, the views of the assembly of Lower Canada appear to have been very narrow and exclusive, and afforded just cause of complaint to the upper province, by obstructing their vigorous efforts to connect their territories with the great highway of the St. Laurence. Nor was the character of their other legislative measures such as to entitle the assembly to any great share of admiration or respect. During the 45 years of its existence, it effected little or no reform in the acknowledged evils of the civil code; and its attempts in this respect had exclusive reference, not to the law itself, but merely to its administration; and resulting, as they did, in statutes passed only for limited periods (which were sometimes renewed, and sometimes allowed to expire), they for the most part caused additional uncertainty and confusion. (*Lord Durham's Report, Append. B.*, pp. 9—12.)

Constitutional History. — Canada was ceded by France to England in 1763: it had previously been governed by French military authority; from thence, to 1774, it was under the rule of an English governor and council, with *English law*, administered in the English language only. From 1774 to 1791 it was governed by an English governor and a legislative council, appointed by the crown, with *English* criminal and *French* civil law; and from 1791 downward, by the constitution, previously explained; the colony being then divided into two provinces, each with an independent legislature. Down to 1774, the line of policy pursued was that which, had it been vigorously and systematically followed up, would certainly have redounded most, in the end, to the advantage of the colony; inasmuch as it would have gradually subverted the institutions and language of France, and established in their stead the institutions and language of England. But the Quebec Act of 1774 introduced a new and more liberal, but at the same time a short-sighted and most mistaken, policy. If Canada was to be preserved as an English colony, it is clear it should, in as far as possible, have been made English in its laws, its language, and in the feelings and prejudices of the people; and no institution should have been tolerated that might have prevented the gradual and complete amalgamation of the French with the English settlers. The Quebec Act unfortunately proceeded on totally different principles. In order to conciliate the colonists, it substituted the old system of civil law, or that called the *Coutume du Paris*, for the civil law of England, and it directed the use of the French language to be resumed in the law courts. It is probably true that these concessions, by gratifying the Canadians, had some effect in hindering them from joining the American colonists of English origin in their great and successful revolt; and consequently contributed to preserve the prov. for the British crown. Without stopping to inquire whether this has been of any advantage to Great Britain, we incline to think that the difference of language, and the peculiar circumstances under which the French Canadians were placed, would have effectually prevented them, though the Quebec Act had never been heard of, from making common cause with the colonists of New England and the other American colonies. But, whatever opinion may be come to as to this, there can be no doubt that the establishment of French laws and language in the prov. has tended to insulate the French pop., to maintain them as a distinct race, and to restrain, and in a great degree prevent, all intercourse between them and the colonists from England: in point of fact, the French in Canada are now almost as much a distinct people as in 1760. The *Nation Canadienne* has no sympathy, and but little communication, with Englishmen: on the contrary, a broad line of demarcation and a deep-rooted antipathy subsists between them; and we are afraid that there is but little hope of tranquillity being restored in the prov., otherwise than by the complete triumph and ascendancy of one or other of the races.

The institution of a representative assembly, in 1791, was intended by Mr. Pitt, as a boon to the Canadians, and it was supposed would attach them still more strongly to British interests. Most probably it could not have been much longer refused; but it might have been foreseen from the outset that a representative assembly, fairly chosen by the colonists, would not long act in harmony with a legislative council nominated by the crown, and having a veto on its measures. The two bodies were in complete contradiction to each other; and yet it is plain that, unless a veto on the proceedings of the assembly were placed in the hands of the legislative council, or directly in those of the executive government, the colony would have been independent in fact. The truth is, that it is not possible to establish a really responsible representative government in a colony; such government can exist only in an independent state. It is also obvious that, while the proceedings of a representative assembly, possessing the confidence of the inhab. of a colony, may be controlled and thwarted by the agents of the mother country, there must be endless dissensions and disputes, unless, indeed, the latter concede all that is demanded, and content themselves with the name of rulers, while all real authority is engrossed by others.

It would be to no purpose, even if our space permitted, to attempt to trace the history of the disputes that have prevailed in the colony during the last thirty years. They had all, or mostly all, their origin in the same cause — the desire of the assembly to acquire additional powers, and of the executive to withhold them, or to concede such only as it would have been unsafe to deny. In the course of this struggle the assembly succeeded in redressing some abuses, and in acquiring some valuable privileges. But in such cases the conceding of any privilege, how important soever, is productive only of a temporary respite from fresh demands. The pretensions of the leaders of the assembly rose at length to such a height, that to concede them, would virtually have been to concede the independence of the colony; and, as neither the government nor people of Britain were prepared for such a step, the rebellious proceedings on the part of the Canadians, and the subsequent suppression of the constitution, and the occupation of the country by British troops were, in truth, the necessary results of the new circumstances under which the colony had been placed.

The Constitutional Act of 1791 (which separated the provinces) gave a similar form of government to both, so that it is unnecessary to repeat what has been previously stated in respect to its working in Lower Canada. A lieutenant-governor, appointed by the crown, was at the head of the executive, and was also usually the commander of the forces. The civil and criminal code of England, and the forms of procedure in her courts, were adopted in those of the colony; which had, also, an unpaid magistracy, and sheriffs for each district, as in the lower province. The expenses of the civil administration were defrayed by duties on articles imported from the United States, by a portion of the customs' duties collected in Lower Canada, and by a small land-tax; the military expenditure, the funds for the partial support of ministers of the Churches of England, Scotland, and Rome, and for presents to the Indian tribes, being defrayed by the general gov., or, in other words, by the people of Britain.

The local revenue hardly sufficed to pay the interest of the debt incurred in the formation of the canals, in consequence of which the local works in different parts of the province have been left to be provided for by local assessments.

The political disorders that have occurred in the Upper Province may be dismissed very briefly. There is there no war of *races*, as in Lower Canada; and financial disputes, so long the subject of contention there, have been more smoothly arranged in this province, though it has a deficient, and the other a surplus, revenue; there was, however, great disorganisation, much bitterness of party feeling, and many real grievances requiring redress. There was no chief centre in the province, where the general sentiments of the different parties might be gathered, and a prevailing tone given to their purposes and actions; but, on the contrary, many local centres, differing in opinion and in supposed interests from each other, and having little intercommunication. The restrictions which made the subjects of the United Kingdom, who emigrated thither, be considered aliens, as much as if they had chosen to settle in the United States, and for a more prolonged period, were loudly and justly complained of. But these, after all, were subordinate matters, and here as in the lower prov., the real struggle was, whether the colony should be self-governed, or really independent. Other grievances may be redressed, and the connection of the colony with the mother country preserved; but the demand for a really responsible executive is, as already seen, substantially equivalent to a demand for separation.

It would be useless, even if we had space, to detail the various steps by which the discontent that had so long fermented in the upper province at length burst forth, in 1837, into treasonable acts. It was fanned into a flame by the efforts of American *Sympathisers*; that is, of lawless bands of adventurers from the U. States. The outbreak, however, was easily suppressed. But the fact of its having occurred, and of its being followed by an outbreak in the lower prov., satisfied all reasonable men that some comprehensive and bold measures were required to terminate intestine disturbances, and to restore tranquillity to the colony.

Various measures were proposed in this view; but at length it was resolved, during the administration of Lord Sydenham, which began in 1839, to abolish the separate provincial legislatures, and to subject the entire colony to one legislative body. And this plan, which appears to have been the best that could have been adopted, was happily carried into effect. We subjoin the following statements in regard to the existing (1850) government, judicial administration, &c., of the United Province, or of Canada generally.

Present Government and Legislature. — The government of Canada is now vested in a governor-general, a legislative council, and a legislative assembly; the first being appointed by the crown, the second by the governor, and the third elected by the people of the colony possessing certain qualifications. The chief powers vested in each will be noticed as we proceed. The Act of Union (3 & 4 Vict. c. 35.), which declares that the two provinces of Upper and Lower Canada shall be "reunited and form one province, for the purposes of executive government and legislature," regulates almost every branch of the constitution of the united colony. It provides that "there shall be within the province of Canada one legislative council and one assembly." It stipulates that the legislative council shall consist of not fewer than twenty British subjects, of the age of twenty-one, who are to be appointed for life by the governor, under authority of the crown; but any member may resign his seat, or it will be vacated by his absence, adhesion to any foreign power, bankruptcy, insolvency, conviction of treason, felony, or any infamous crime. The speaker of the council is appointed by the governor, by whom also he may be removed. Ten members of the council, including the speaker, form a quorum.

The act next determines the mode of calling together the legislative assembly. It is summoned by writ of the governor, and consists of representatives drawn in equal numbers from the upper, or western, and the eastern, or lower, portions of the United Province. Clergymen of all persuasions are declared ineligible, and each representative must possess unencumbered land or tenements in Canada of the value of 500*l.* The qualifications of voters are regulated by the act of 1791, the 31st Geo. 3. c. 31., which confers the franchise for the election of county members, on proprietors of lands or tenements, held in freehold, or fief, or roture, or under the governor's certificate, of the free yearly value of 40*s.*; and vests the right to choose members for towns in proprietors of dwelling houses and patches of ground of the yearly value of 5*l.*, and tenants of the same paying 10*l.* or upwards of yearly rent. Eighty-four members are now returned to the assembly. The cities of Toronto, Quebec, and Montreal return two members each. The speaker of the assembly is elected by the members, twenty of whom, including the speaker, form a quorum. The Act of Union empowers the governor to fix the most convenient place for holding the sessions of the assembly and council, and to prorogue and dissolve the same. It provides that there shall be at least one session held annually, so that a period of twelve months may never expire between each sitting; and the duration of each parliament is fixed at four years, subject to earlier prorogation or dissolution by the governor. The latter has the power to give or withhold the royal assent to bills passed by the legislative council and assembly, or to reserve the same till the royal pleasure be expressed. Such bills as are assented to by the governor in the name of the crown are, nevertheless, subject to disallowance by the sovereign, within two years after the receipt of authentic copies of the same by one of the principal secretaries of state in Great Britain; and no bills, reserved for the consideration of the crown, can have any force, unless the royal assent be signified within two years after they have been presented to the governor. All proceedings and records of the legislature are directed to be kept in the English language only.

Administration of Justice. — The criminal law of England is applicable to the whole of Canada: but, as regards the province of Quebec, the ancient law of Canada, that is, the French laws, are, by the 14th of Geo. 3. c. 83., reserved as applicable to all matters of controversy relative to property and civil rights. This reservation, however, does not hold where lands are held in free and common soccage; and wills, involving the destination of property, may be executed in conformity either with the laws of Canada or those of England, as the testator may deem expedient. In Western Canada the law of England is universally applicable. The judges enumerated in Schedule A. attached to the Act of Union, are the following: — For Upper, or Western, Canada, 1 chief justice and 4 puisne judges of Queen's Bench at Toronto, besides a vice-chancellor; and for Lower, or Eastern, Canada, 1 chief justice and 3 puisne judges of Queen's Bench at Quebec, and 1 chief justice and 3 puisne judges at Montreal; 1 resident judge at Three Rivers; and 1 judge each for the inferior districts of St. Francis and Gaspé. The judgments of these courts of Queen's Bench are subject to review in a superior court, or court of appeal, consisting of the governor, lieutenant-governor, or person administering the government, certain members of the executive council, and the chief justice or justices of the province, or any five of these functionaries, excluding always the judge or judges whose decision is appealed against. There are also various circuit commissioners of bankruptcy, and there is a Vice-Admiralty Court established at Quebec, the governor being, *ex officio*, vice-admiral of Canada. Much litigation goes on both in Upper and Lower Canada, and lawyers are of course numerous in the chief towns. Though the criminal returns for Canada are far from being complete, the extent of crime seems, on the whole, to be small, and on the decrease, when compared with the amount and rapid progress of population in the colony.

Religion and Religious establishments. — Provision was made by the 31st Geo. 3. c. 31. for the support of the Pro-

testant clergy in Canada. By this act, there is allotted for the maintenance of the clergy of the Church of England in the colony, about a seventh part of all the waste lands to be granted to settlers; and the tithes of such Protestants as live within Catholic benefices are to be reserved by the receiver-general of the province, and appropriated to the support of a resident Protestant clergy therein. These are designated the clergy reserves. The governor is empowered to present to any parsonages or rectories to be constituted in the colony. There are two Canadian bishops belonging to the Church of England, viz., one each for the dioceses of Montreal and Toronto, and these, with archdeacons and other lesser dignitaries, manage the affairs of the English Church in Canada. Eastern Canada constitutes the diocese of Montreal, and Western Canada that of Toronto; while about 10,000*l.* per annum of the public money is usually applied in aid of the clergy reserves, and other revenues of the English Church, in the two divisions of the colony.

By virtue of the acts, 14 Geo. 3. c. 83. and 31 Geo. 3. c. 31., the Catholic clergy enjoy, subject to the supremacy of the crown, all their accustomed dues and rights, with respect to persons professing their religion; but it is provided, that whenever property is transferred by a Catholic to a Protestant, it becomes, *i o facto*, free from any charge for the support of the clergy of the Romish persuasion. Upwards of 2,500*l.* are annually paid by the colonial government towards the support of the bishop of Quebec and the other R. Catholic clergy in Canada.

These are the chief religious bodies prevailing in the colony, but there are besides numerous sects belonging to other denominations dispersed throughout Canada. However, no public funds are appropriated to their support, except some trifling sums allowed to the clergy in connection with the Church of Scotland and other Presbyterians.

Ed cation.—There are good grammar schools at Montreal and Quebec in connection with the Church of England, which are partly supported by funds derived from the estates of the Jesuits, and partly by fees paid by the scholars. There are also excellent Catholic schools in the same cities, which were endowed with considerable estates by the French government, prior to the close of the 17th century. These estates they still enjoy. There are also, at a moderate calculation, between 1,600 and 1,700 common schools, and various colleges and other superior educational establishments distributed over the various counties of Lower, or Eastern, Canada. To support the common schools large sums are annually voted, in addition to the produce of certain estates of the Jesuits (generally exceeding 4,500*l.* a year), which are devoted to the same purpose.

In Upper Canada, still more liberal provision and more strenuous exertions are made for the education of the people. Besides the sums expended in building and repairing schoolhouses, it is estimated that about 78,000*l.* are annually paid to teachers of the ordinary schools throughout the province, which are managed by committees of householders, elected in each district or section. Though the returns of the number of schools in the several counties are very imperfect, it may safely be asserted that there are at present (1850) at least 3,000 common schools in Upper, or Western, Canada, over and above colleges and schools of a higher order. These schools are supported partly by grants and partly by school rates and fees.

The course of education prevalent in these schools is much the same as that pursued in similar establishments in Great Britain; but it may reasonably be doubted whether the funds allotted for their support might not be rendered much more efficient and extensively beneficial, were a different and yet uniform system of management adopted throughout the colony. However well a committee of householders may manage and restrain local expenditure, affecting themselves, they may very frequently, if not in nine cases out of ten, be totally unfit to choose, regulate, and promote the best plan of education. In such hands, teaching must be managed in a clumsy and expensive style.

Revenue.—Table showing the Nett Revenue of Canada for 1843, 1844, 1845, 1846, and 1847.

Heads of Revenue.	1843.			1844.			1845.			1846.			1847.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
Balance from previous year	79,347	8	11¾	115,505	2	10¾	183,197	5	5½	44,240	17	4	52,006	3	7
Customs	218,934	4	9¾	429,722	11	4¾	419,001	7	8¾	391,171	1	3	381,063	11	10
Excise	30,524	11	0	34,370	5	0	20,277	11	6¾	18,640	8	0	28,820	14	8
Territorial	27,223	7	10½	5,180	18	6¾	22,871	5	10	23,536	0	1	25,757	15	6
Light-house and Tonnage Duties	596	5	2	604	4	10	689	5	7	819	12	11	865	19	1
Bank Imposts	7,600	16	11	10,492	15	5	12,020	17	1	15,899	1	1	16,006	7	2
Casual Revenues, &c.	6,913	11	0	5,094	2	11½	11,480	11	0	8,552	16	9	8,455	10	2
Revenue from Public Works	26,076	11	1¾	25,624	11	1½	27,501	4	3½	48,480	7	4	42,557	8	5
Militia Commissions, Fines, and Exemptions	102	5	0	48	15	0	53	15	0	48	10	0	43	8	3
Fines and Forfeitures, including Seizures	3,016	0	9	3,214	18	10½	3,390	4	9¾	3,330	4	10	2,247	4	9
Interest on Public Deposits				1,430	6	5	6,080	13	11	2,525	16	5	1,008	14	10
Totals	400,335	2	6¾	631,288	12	5½	707,564	2	3	557,244	16	0	558,832	18	3

Expenditure.—Account of the Expenditure of Canada in 1848.

	£
Interest on Provincial Debt	166,014
Ditto on Turnpike Trusts	3,172
Civil Government	33,804
Administration of Justice	68,082
Provincial Penitentiary	15,000
Legislature	29,231
Education	64,870
Agricultural Societies	9,376
Hospitals and other Charities	12,709
Public Works	12,167
Militia	1,847
Lighthouse Maintenance	4,828
Emigration and Quarantine	752
Pensions	10,846
Miscellaneous	22,222
Indian Annuities	6,555
Redemption of Public Debt	15,000
Total	474,491

The *military force* employed in Canada, on the 1st of January, 1847, amounted to 6,968 men, no part of the expense of which is defrayed from the provincial revenues, but falls wholly on those of the U. Kingdom.

Cap. of Prov.—The separate legislatures of Upper and Lower Canada met at Toronto and Quebec. But on their being consolidated, the sittings of the united legislature were held at Montreal, a tolerably central situation for both provs. It has, however, been determined again to revert to the alternating system. This determination was occasioned by a disgraceful riot which occurred at Montreal in April, 1849, when the House of Assembly was burnt to the ground, with the colonial archives, and the public library. A city where such a gross outrage could be perpetrated was certainly no very fit place for the meeting of the legislative body. And it was soon after resolved that parliaments should in future meet alternately at Toronto and Quebec; the parliament then sitting being transferred to Toronto.

Present Political State of Canada.—In the united legislature the purely French party has ceased to have a preponderance; and all those knotty and irritating questions in regard to provincial duties, the facility of transit from the one prov. to the other, &c., are either satisfactorily solved or got rid of. Thus far, therefore, the measure has been successful. But we doubt whether it has had any material influence in strengthening the connection between the colony and the mother country. That connection is now, indeed, of the weakest possible description, and it is as unimportant as it is fragile, being in great measure restricted, on our part, to the appointment of the governor, and of a few of the superior functionaries; while we have to maintain, out of our own funds, the military force required for the protection of the colony.

The repeal of the British corn laws has occasioned some distress and irritation in Canada. She can no longer send her surplus corn to our markets; and, as the Americans now export direct to this country, she is deprived of a part at least of the transit trade which they latterly carried on through her. These circumstances, and the restrictions laid on her trade with the U. States, considerably strengthened the party of the *annexationists*, that is, of those who are anxious that Canada should be amalgamated with the U. States.

Arrangements are now, however, in progress, which may, perhaps, if completed, paralyse for a

while the efforts of the annexationists. The Americans have long been desirous to have the free use of the waters of the St. Laurence; and it is said that they are willing, on this point being conceded, to open their markets to the produce of Canada; a measure which would be as advantageous to them as to the Canadians.

But supposing these reciprocal concessions to be made, we are not inclined to think they will have much permanent effect. N. York is the real emporium of U. Canada. The intercourse of the latter with England, the W. Indies, and other foreign countries, by the St. Laurence, must always be tedious and difficult, the consequence of the length and dangerous nature of the navigation of the river, and of its long interruption by frost. The latter, indeed, equally interrupts the shorter and far more expeditious intercourse between U. Canada and N. York by the Erie canal; but it will not affect that which will be carried on by the railway, now in the course of being constructed, which will add immensely to the facilities of intercourse with the countries bordering on the great lakes; and which must materially affect the political as well as the commercial situation of U. Canada.

Should a very intimate commercial connection be formed between Canada and the U. States, it will serve still more to attach the former to the latter. The benefits which it will produce to Canada will be palpable and easily appreciated. But those which she derives from her connection with England, though, perhaps, more valuable than the others, are not so easily estimated. The chances, indeed, are ten to one that this connection will be reckoned prejudicial rather than otherwise. No interference with her government, how judiciously soever it may be exercised, ever has been, or ever can be, popular. Disagreeable questions must necessarily every now and then occur. And should we have, at any time, a dispute with the U. States, the probability seems to be that the Canadians would take their part; and that they would forfeit their allegiance to the crown of England, rather than endanger their commercial and friendly connection with their immediate neighbours.

But without further speculating upon contingencies of this sort, we take leave to say that we hold it to be visionary to imagine that Canada should ever be really and truly attached to British interests. She may continue for a longer or shorter period to be nominally connected with us, but that will be all. Nothing we may be assured will satisfy the Canadians, or any people in their situation, short of substantial or total independence; and the latter would be, in all respects, more for our advantage than the former. Were the duties on Canada timber reduced to the same level as those on Baltic timber, we question whether Canada would be found to possess a single article that could be advantageously exported to this country, or that we might not buy cheaper and better elsewhere. It no doubt has afforded an extensive outlet for emigrants, and has been in so far useful; but in all other respects its occupation has always been, and will most probably continue to be, productive of little except loss. And, even with respect to emigration, it is by no means clear that the field would be at all narrowed by Canada becoming independent, or connected with the U. States. The presumption seems, indeed, to be very much the other way; and notwithstanding the efforts that have been made to attract emigrants to Canada, they seldom have been so numerous as those to the U. States, and would have been much fewer, had they been aware of the real situation of the two countries. The people of Britain would, therefore, do well to reflect dispassionately on the state of the Canada question. We believe most men of sense admit that, sooner or later, Canada will be independent, or be incorporated with the U. States. But if so, what should be our policy in the mean time? Having re-established order and tranquillity, the question is, are we resolved to maintain an army of 8,000 or 10,000 men in Canada? to expend directly, and indirectly, some 2 or 3 millions a year in preserving a mere nominal ascendancy in a colony, by the independence of which we should certainly lose nothing? If such be our determination, it may be doubted whether we have profited much by the dear-bought experience afforded by the American war. We deny that Canada contributes, in any way whatever, either to the strength or security of Great Britain. On the contrary, the connection with it is an evident source of weakness; and, while it multiplies the chances of disputes with other powers, it supplies no means of carrying them on, and distracts and lessens those in our possession. National pride may prevent our relinquishing this costly and worthless dominion, but good sense, and the most obvious views of expediency, would suggest the policy of voluntarily anticipating what must, in the end, necessarily happen, and of providing for the independence of Canada, under a system of friendly and mutually beneficial relations with this country.

History. — Canada is said to have been first discovered by Sebastian Cabot, in 1497; if so, it was comprised with the rest of the extensive line of coast he explored, under the general name of Newfoundland, subsequently limited to the island so called. The French first attempted to make these discoveries available, and are said to have framed a map of the gulph as early as 1508. In 1525 the country was taken possession of in the name of the king of France, and in 1535 Cartier explored the river, naming it St. Laurence, from having entered it on that saint's day. Quebec, however, the first settlement, was not founded till 1608. For a considerable period subsequent to this, the colonists appear to have been engaged in a series of sanguinary conflicts with the native Indian tribes, and to have been often on the brink of being extirpated: the strife, however, ultimately terminated in a friendly compact, which converted the Indians into available auxiliaries against the English. Quebec was taken by the British forces under Gen. Wolf, in 1759, and the whole territory was formally ceded to us by the Treaty of Paris, in 1763. The seignorial rights, the various holdings and tenures under them, and the endowments of the Catholic Church, were left undisturbed; and all the estates, including all the unappropriated lands in the prov., held at the period by the French king, became vested in the British crown. In the years 1812-13-14, during the last war with the U. States, the lakes, and especially the shores of Niagara, were the scene of a succession of severe contests; the war was wholly a frontier one, and the militia on either side being engaged in it, near relatives were found often contending in opposite ranks, so that common was aggravated to civil warfare; and Indians also were employed, and increased its horrors. It would be idle to attempt giving in this place any account of the subsequent domestic history of the colony. It has been a long and singularly complicated tissue of intrigues, cabals, and party contests. We have already shortly noticed some of their causes and results; and to go deeper into the matter would be as repulsive to the mass of our readers, as it would be inconsistent with our limits.

CANANDAIGUA, a town of the U. S. of America, New York, cap. co. Ontario, beautifully situated on an acclivity at the outlet of the considerable lake of the same name, 88 m. E. Buffalo, and 95 m. N.N.W. New York. Pop. (1835) about 3,000. It consists chiefly of two parallel streets, running N. and S., intersected at right angles by several others. It contains a large square, in which are the court-house, prison, town-house, and principal hotel; and it has a state-arsenal, various places for public worship, 3 or 4 banks, male and female academies, several large mills and manufactories of different kinds, and (in 1836) 3 printing offices, each issuing a weekly newspaper. The inhab. are intelligent, liberal, and hospitable. Within 3 m. of the town, on both sides the lake, are several sulphuretted hydrogen springs. Canandaigua was founded in 1788, and from its position on its lake, and in the vicinity of the Erie Canal, is a place of considerable commercial importance. (*Gordon's Gazetteer of New York.*)

CANANORE (*Canura*), a marit. town of Hindostan, prov. Malabar, at the bottom of a small bay, 45 m. N.W. Calicut, and 66 m. S.S.E. Mangalore; lat. 11° 42′ N., long. 75° 27′ E. It trades with Bengal, Arabia, Sumatra, and Surat, from which it imports horses, piece goods, almonds, sugar, opium, silk, benzoin, and camphor: its exports are chiefly pepper, cardamoms, sandal wood, coir, and shark-fins. It is the cap. of the talook of Cherical, a lofty and uneven track, extending for 2 m. inland from the fort, and some years since containing together with the town about 11,000 houses. Its territory is now subordinate to the British, but has long been governed by a succession of female sovereigns, whose authority has extended over most of the Laccadive islands.

Cananore is the head military station of the British dominions in Malabar prov. (*Hamilton's E. I. Gaz.* i. 340.; *Madras Almanack.*)

CANARA, a marit. prov. of Hindostan, presid. Madras, comprising the ancient countries of Tulava and Haiga, with small portions of Malabar and the Hindoo Kaukana. It lies chiefly between lat. 12° and 15° N., and long. 74° and 76° E.; having N. Goa and Dharwar (Bejapoor), E. the latter province and Mysore, S. Coorg and Malabar, and W. the ocean; length, N. to S., 230 m.; average breadth about 35 m.; area 7,477 sq. m. Pop. (1837) 759,776. It is mostly bounded by the W. Ghauts, but includes a portion of the country above them, called Carnata, of which the name of this distr. is a corruption, most improperly applied. Surface generally rugged and uneven. It has no considerable river, but a number of minor ones, of which Mangalore is the chief. The coast in the S. is occupied by a chain of salt lakes. Soil and climate very similar to those of Malabar. Granite and laterite are amongst the prevailing rocks, and near the sea shore there is much sandy soil, on which cocoa-palms are grown in great number. The periodical rains are extremely heavy, and set in from the middle of May till the end of Sept., during which ships leave the coast, and a stop is put to all traffic. The country abounds in forests; those in the N. producing teak, and other large timber, sissoo, *bassia latifolia*, prickly bamboo, the varnish-tree of Birmah, *nux vomica*, *mimosa catechu*, cassia, sandal-wood, wild pepper, a species of nutmeg, &c.; those in the S. containing teak, mango, caryota palm, and much jungle, greatly infested with tigers. Canara is the granary of rice for Arabia, Goa, Bombay, and Malabar; and both the climate and soil, especially in the valleys, are highly adapted for its culture. Sometimes 50 bushels a year are obtained from an acre; and in the S. the land frequently yields two or three crops during the same period. Besides rice, sugar-canes, pepper, betel-nut, and leaf, cucurbitaceous plants, &c., are grown. Husbandry is better here than in Malabar; the plough is a neater implement, and manure of both leaves and dung is made use of: some cultivators employ 25 ploughs, although full half of them use no more than one. Rice is thrashed by beating handfuls in the straw against a bamboo grating. There are no barns, and the grain is kept in straw bags hung up in the houses: carts are not used, the roads are bad, and goods have to be conveyed on the heads of the peasantry. There are neither horses, asses, nor goats. Black cattle, in 1836-7, estimated at 573,412 head, sheep at 544,326 head; hogs are kept, and eaten only by the lowest ranks. All the lands in the S. are private property, but generally much encumbered with mortgages: in the N. mortgages are much less frequent, and the cultivated lands only are the property of individuals: government claims all the hill, forest, and waste land. In S. Canara inheritance in land, goods, honorary dignities, and whatever else is capable of being conveyed, descends in the female line; and instead of a man's own children, those of his sister, or maternal aunt (as is the case in all the country in the S. part of the Malabar coast) become his heirs, while he has a corresponding right over them, to the extent of selling them for slaves. In Karnata Proper, above the Ghauts, these laws are reversed, and a man's children inherit his property. The lands mostly belong to individuals, who let them, and even frequently mortgage them to cultivators; the land assessment is moderate, being about 30 per cent. on the produce; but the cultivators generally are as much depressed as elsewhere, since they have about 20 per cent. to pay to their landlords, and out of the remaining 50 per cent. to provide live and dead stock, and subsist the slaves. Land, when sold, usually fetches from 8 to 12 years' purchase-money on the clear rent. Slavery is very common, and almost all the supposed aborigines are slaves. Their total number was, a few years ago, estimated at 82,000; but their proprietors are said to treat them well. Many different tribes inhabit Canara. The Jains (*See* HINDOSTAN) are more numerous here than in any other part of India, and many ancient Jain temples exist in tolerable perfection. Nairs inhabit the inland parts, where, together with Bunts and Sudras, they own most of the land. There are about 50,000 R. Cath. in Canara, mostly descendants of the Portuguese, Dutch, French, and Danish colonists. Canara is not celebrated for manufactures; the chief are those of sugar from the palms, and salt on the coast. The exports consist principally of rice, betel-nut, black pepper, ginger, cocoa-nuts, and oil and raw silk; the imports are cloths, cotton, thread, blankets, tobacco, black cattle, and sandal-wood, for export to Bombay. The total public revenue, in 1836-7, was 2,758,460 rup., of which, 1,671,215 were derived from land, 274,438 from salt, 240,551 from land customs, &c. All the chief towns, viz. Mangalore, Barcelore, and Calliampore, are in the S.

Tulava was governed by its own princes till A.D. 782; from that year till 836 it was subject to the rajahs of Bijnagur; and afterwards to the princes of Ikeri. It escaped the Mohammedan conquests till 1765-6, when Hyder invaded and conquered it, after which it suffered all the horrors of anarchy, till the death of Tippoo in 1799, when it passed into the hands of the British, and under them has become a tranquil and orderly district. (*Hamilton's W. & E. I. Gaz.*, i. 330—340.; *Madras Almanack, &c.*)

CANARY ISLANDS (believed to be the *Fortunatæ Insulæ* of the ancients), a group in the N. Atlantic ocean, belonging to Spain, between 27° 40′ and 29° 24′ N. lat., and 13° 32′ and 18° 20′ W. long., 135 m. N.W. Cape Bojador, in Africa, and 650 m. S.W. Cadiz. This group consists of seven principal islands, as follows: —

Name.	Area, sq. Eng. m.	Pop. (1742.)	Pop. (1835.)
Teneriffe - - -	877·7	60,218	85,011
Canary - -	758·3	33,864	68,010
Palma - - -	718·5	17,580	33,089
Lanzarote - -	323·5	7,210	17,434
Fuerteventura - -	326·1	7,382	13,885
Gomera - -	169·7	6,251	11,742
Hierro - -	82·2	3,687	4,444
Total - -	3,256	136,192	233,645

Besides these, several small islands, viz. Graciosa, Clara, Allegranza, &c. called the Little Canaries, are situated to the N.W. of Lanzarote, and connected with that island by a bank, on which there is, for the most part, 40 fathoms water. Lanzarote is the most easterly, Allegranza the most northerly, and Hierro, or Ferro, the most southerly and westerly of the group. This last-mentioned island has acquired considerable celebrity, from its having been selected by the early modern geographers as the point where they placed the first meridian, or from which they began to reckon the longitude. In some countries this method of reckoning is still kept up; but the English and French adopt for their first meridians those passing through the Observatories of Greenwich and Paris. The most W. part of Hierro, or Ferro, La Dabessa, is 18° 9′ 45″ W. of the meridian of Greenwich, and 20° 30′ W. of that of Paris. The islands are all of volcanic origin, very mountainous, their coasts precipitous, and the channels between them very deep. The greatest height of some of them above the level of the sea is as follows: —

Teneriffe (Peak)	- 11,400 ft.	Lanzarote (Montana Blanca) - - -	2,000 ft.
Canary (El Cumbre)	- 6,648	Allegranza - -	939
Fuerteventura (India)	- 2,880		

Teneriffe and its peak, a half extinct volcano, which may be seen at a distance of more than 150 m., will be found elsewhere described (TENERIFFE). In all the islands there are plentiful traces of extinct volcanos; but in that of Lanzarote one burst forth in 1825, which still continues active. The basaltic cliffs in that island rise almost perpendicularly to the height of 1,500 ft.: Allegranza appears wholly composed of a mass of lava and cinders. The Canaries have no rivers, properly so called, but they are watered by numerous brooks, which rise in the higher mountain regions, and, during rains, suddenly swell to torrents. There are few safe roadsteads, and no close harbours: the Great Canary island has, perhaps, more safe anchorages than any of the others, and the Bay of Las Palmas at its N.E. extremity offers a spacious haven for ships, secure om all winds except those from the S.E.,

which seldom blow with any violence. The climate, though hot, is generally healthy; the heat being attempered by the elevation of the land, and the prevalence of N. and W. breezes. The temperature is in most parts very equable; the average in Dec. and Jan. has been found to be 67°, in Aug. 76° Fah. The range of temperature is seldom more than four or five degrees in the twenty-four hours. The S. and S.E. winds occasionally cause pestilential maladies in the E. Canaries, and bringing intolerable heats, and clouds of locusts, scorch up and desolate the country. The fertility of the lands is in proportion to their humidity. In some parts they produce abundance of wheat, maize, and other kinds of corn, dates, figs, guavas, lemons, olives, and numerous other fruits, of both the torrid and temperate zones; the sugar-cane, tobacco, cotton, orchill, and many perfumes and medicinal plants. They contain, also, woods of pine trees, laurel, arbutus, &c. and excellent pasturage. The average annual quantities of the principal articles of produce in the entire group, are said to be —

Wine - -	53,200 pipes	Rye - -	41,000 bushels
Wheat - -	360,500 bushels	Pulse - -	50,000 —
Millet - -	212,400 —	Potatoes -	782,000 cwt.
Barley - -	354,000 —	Barilla - -	330,000 —

Canary is, perhaps, the best watered and most fertile island; and it and Teneriffe are the two best cultivated. Teneriffe is the principal seat of the vine culture; the Vidueno and Malvasia wines are exclusively the produce of that island: the vine is, however, largely grown in the others, and the wines produced exported to Europe under the name of Teneriffe. The best wine in the E. Canaries is that of Lanzarote, where the grapes grow on a soil of decomposed scoriæ. Much brandy is distilled and exported. Amongst the other chief products are silk, honey, wax, and cochineal. Game is very plentiful; and they are said to be without either ferocious or venomous animals. Cattle and poultry have been introduced from Europe. The canary-bird (*Fringilla Canaria*, Linn.) is still found in these islands; but in its wild state its colour is grey or linnet-brown: the plumage of those we are accustomed to see, has derived its hue from repeated crossings. The fishery, which is principally carried on along the opposite African coast, occupies a great number of hands; and it is said that Spain might, in case of emergency, procure 2,000 able young seamen from the islands without distressing the fishery. Sugar, with coarse woollens, silks, and linens, are amongst the manufactures.

The quantities of the principal articles imported and exported in 1833 were as follows: —

Imports.		Exports.	
Sugar - -	6,832 arrobas	Silk - -	4,424 lbs.
Coffee - -	908 —	Almonds -	120 —
Brandy - -	20,058 —	Brandy - -	17,125 —
Coin - -	30,540 doll.	Coin - -	121,200 doll.
Paper - -	3,590 reams	Pulse - -	3,020 fanega
Soap - -	2,199 quintals	Fish - -	5,125 arroba
Oil - - -	13,389 arrobas	Barilla - -	180,461 —
Tallow Candles	107 —	Grain - -	9,391 fanega
Wine -	8 pipes	Wine - -	8,684 pipes
Leather for soles	46,000 lbs.	Orchilla - -	160 arroba
Wax - -	800 —	Moss - -	815 —

1,275 lbs. of cochineal were also exported in the same year, and flax, woollens, cottons, glass, earthenware, drugs, iron, staves, salt fish, hams, cheese and butter, are imported. The total value of the imports and exports were: —

	Imports.	Exports.
Foreign countries - -	11,573,228 reals vellon	5,870,188 r. v.
America - - -	1,069,698	422,356
Spain - - -	2,614,216	3,078,506
Total - -	15,257,216	9,371,050

Santa Cruz in Teneriffe, and Las Palmas in Canary, are the principal commercial ports. The present inhabitants are probably almost wholly of Spanish origin. The islands are governed by the Spanish laws, the administration of which is directed by an *audiencia* in Great Canary. The governor of the Canaries, who is president of the *audiencia*, resides at Santa Cruz. The three easterly islands form one bishopric, and the four westerly another. There are 41 monasteries, and 15 convents, with 423 regular clergy; and the people are said to be equally ignorant and bigoted. They are not, however, deficient either in industry or enterprise. On the contrary, many of them emigrate to America, the Philippine islands, &c., where they are distinguished by their adventurous spirit. But, at home, such of them as are not engaged in the fishery, are sunk in comparative apathy, produced by vicious laws and institutions. The lands are parcelled out in immense estates, held under strict entail, and the plan followed in letting them to the actual occupiers being as bad as possible, industry is at the lowest ebb, and few or rather no improvements are ever attempted, or even so much as thought of. The military force is composed of 25,000 men. (For descriptions of Santa Cruz, Lagunas, and Orotava, *see* TENERIFFE.) Las Palmas, in the Great Canary, near its N.E. extremity, lat. 28° 8′ N., long. 20° 23′ 30″ W., has a handsome sea-port town with 18,000 inhab., a cathedral, hospital, college, a mole, many public fountains, and a well-supplied market. In good weather ships anchor within half a mile of the town, but the roadstead is but indifferent. The other chief towns are, Arecife, or Port Naos, in Lanzarote, a well-built town, with 2,500 inhab.; Cabras, 1,000 inhab., in Fuerteventura; La Rila, in Gomera; and Santa Cruz, in Palma.

When these islands first became known to Europeans of modern times, they were inhabited by a race of people called Guanches, of a tall, athletic, and vigorous frame (though this has probably been exaggerated), and who made a determined resistance to the invaders. Though unacquainted with the use of iron, they appear to have arrived at a considerable degree of civilization; they cultivated music and poetry with success, had a kind of hieroglyphic writing, believed in a supreme being, in a future state of rewards and punishments, and embalmed their dead. Many of their mummies have been found in modern times in caves in various parts of the islands. They are placed erect upon their feet, and are in so remarkable a state of dessication, that some of them do not weigh above from 6 to 8 lbs. Their government was oligarchical. Humboldt and Dr. Prichard think that the Guanches were either intimately connected with, or descended from the Berbers of N. Africa. Many of the Guanches were reduced to a state of slavery by the Spanish and other European traders, by whom the islands were first visited; and those who escaped the scourge of slavery, war, and famine, were mostly carried off by a pestilence in 1494. The Canaries were first discovered by accident about 1330 by the crew of a French ship driven thither in a storm. After several unsuccessful Spanish expeditions, John de Bethencourt, a French gentleman, sailed with a fleet from Rochelle in 1400, and took possession first of Lanzarote, and subsequently of Fuerteventura, Gomera, and Hierro. Bethencourt's heir subsequently disposed of these to a Spanish nobleman, and they afterwards became the property of the Spanish crown: the conquest of the other islands was effected by Spain before the termination of the 15th century. (*Humboldt's Personal Narrative*, vol. i.; *Tables of Revenue, &c.* 1835.; *Journ. Geog. Soc.* 1836.; *Prichard's Researches*, ii. 34.)

CANCALE, a sea-port town of France, dép. Ille-et-Vilaine, cap. cant., 9 m. E. St. Malo; lat. 48° 40′ 40″ N., long. 1° 51′ 30″ W. Pop. 5,151. It is situated on the W. side of St. Michael's Bay. At a short distance from the town there are some large rocks, within which there is good anchorage in 5 or 6 fathoms. Excellent oysters are found in the bay, and make a considerable article of traffic. The English made, in 1758, an unsuccessful descent on the coast here. (*Dict. Géog.*)

CANDAHAR, a fortified city of Caubul, cap. (1838) of an indep. territory held by a Banrikzye chief, brother of the sirdar of Caubul, in a plain near the Urgundaub river; 200 m. S.W. Caubul, 260 m. S.E. Herat; lat. 32° 20′ N., long. 66° 15′ E. Pop. 50,000, the greater proportion of whom are Afghans. It is said to be of an oblong form, enclosed by a bastioned mud wall, on the ramparts of which three men may walk abreast, and a ditch, 9 ft. deep, recently constructed, surrounds the whole. Candahar is regularly built, most of the streets meeting at right angles: its houses are generally of brick, and often with no other cement than mud. Four long and broad bazars meet in the centre of the city, in a small circular space about 45 yards in diameter, and covered with a dome, where proclamations are made, and the bodies of criminals exposed. The principal bazars are each about 50 yards broad; their sides are lined with well-supplied shops one story high; and there is a gate at the end of each opening into the surrounding country, except the N. bazar, having the palace at its end, a structure in no respect remarkable externally, but containing many courts and buildings, and a private garden. There are many caravanseras and mosques: the principal building of the latter kind is the tomb of Ahmed Shah, an elegant, but not a large, structure, with a handsome cupola, formerly an inviolable sanctuary. A great variety of trades are carried on, and the streets are filled with a noisy and bustling crowd from morning till night; but, unlike most other Afghan cities, there are here no water sellers, the city being well supplied by canals from the Urgundaub, whence subterranean or open water-courses are carried to the different streets; and there are, also, numerous wells. Three of the principal bazars were at one time planted with trees, and had, it is said, a narrow canal running down the middle of each; but many of the trees have withered, and if the canals ever existed, they are no longer visible. The

vicinity of Candahar is fertile, and abounds with gardens and orchards, producing the finest fruits and vegetables, especially pomegranates; with corn, tobacco, madder, assafœtida, and artificial grasses. The climate is mild and healthy. Were the city the seat of a just government, it would be the centre of a rich circle of cultivation; but the chiefs who, by oppressions of all sorts, have contrived to raise about 50,000*l.* annual revenue from the land, have also, by their exactions, banished much of the trade and opulence of the city. Persian traditions, and the conjectures of European geographers, agree in assigning the foundation of Candahar to Alexander the Great. The present city was built by Ahmed Shah in 1753 or 1754, who made it the capital of his dominions, an honour which his successor Timour transferred to Caubul. (*Elphinstone's Caubul*, ii. 129—134.; *Conolly's overland Journey*, ii. 91—93.)

CANDEISH, a soubah or prov. of the Deccan, Hindostan, between lat. 20° and 22° N., and long. 73° and 77° E.; having N. Malwah, E. Gundwana, S. Berar and Aurungabad, and W. Gujrat: length, E. to W., about 210 m.; average breadth, 80 m. It contains parts of three mountain ranges, viz. the Sautpoora mountains in its N.; the Chandore, or Adjuntah range, S.; and the Sydaree mountains, or W. Ghauts, in its S.W. parts: its principal plain is between these ranges, and opens E. into the plains of Berar, and W. is continuous with those of Surat, from which it is separated by a thick and extensive jungle. The Tuptee river flows through this plain. The Nerbudda forms the N. boundary. Candeish, though interspersed with low barren hills, has a large extent of very fertile territory, watered by copious streams and limpid rivulets from the table-lands, which greatly enhance its natural beauties. For thirty years, however, before the British became possessed of it (1819), it had been the scene of continual anarchy, and much of the best land, especially N. the Tuptee, had become overspread with an uninhabited forest, abounding with the ruins of former villages, and swarming with tigers. This prov. is comprised within the several territories of the Guicowar, Sindia, the Nizam, and the British government; the land in those parts belonging to the latter is granted on the most easy terms to the cultivators, but some length of time must elapse before the country recovers its former prosperity. The existing villages are mostly built of mud, and protected by a mud wall and fort, without ditch or outwork. The hill ranges, and the whole country along the courses of the Nerbudda and Tuptee rivers, are inhabited by Bheels, who have been here less disturbed than in any other part of India. They are of small stature, dark complexion, prone to rapine and thieving, go armed with a bow and arrow, and in many respects resemble the hill-people of Bhaugulpore. They eat beef and pork, drink spirits, and bury their dead; yet they pretend to be Hindoos of the Brahmin and Rajpoot castes. They have contributed greatly to the devastation of the province.

Candeish formerly contained a large number of Mahratta fortresses: its principal towns are Boorhanpoor, Aseerghur, Hindia, Nundoorpoor, and Gaulna. Numerous Arab colonists settled here, and early in the 15th century Candeish was an independent kingdom, governed by sovereigns claiming descent from the caliph Omar, who had their capital at Aseerghur: toward the end of that century, it was completely subdued and annexed to the Mogul empire. The decline of Candeish may be dated from 1802, when Jeswunt Row-Holcar ravaged it; next year it was depopulated by famine, and subsequently ruined by the exactions of the peishwa's officers, and the predatory incursions of the Bheels, Pindarries, and insurgent bands of the Arabs, who had established themselves in the strongholds. On the British conquest, in 1818, when Holcar's possessions in Candeish fell under our dominion, these refractory tribes were either brought into subjection or pacified: or else, as the Arabs, obliged to emigrate from India, after having been paid what they were legitimately entitled to by the British government. (*Hamilton's E. I. Gaz.* i. 343—345.; *Reports, &c. on Affairs of the E. I. Company.*)

Candeish, an inl. zillah or distr. of Hindostan, prov. Candeish, presid. Bombay; between lat. 20° and 21° 42', and long. 73° 37' and 76° 22' E.; having N. the collectorate of Surat and Sindia's dom.; E. the latter, and those of the Nizam's; S. the Nizam's dom. and the collect. of Ahmednuggur; and W. a portion of the Guicowar's territory: shape somewhat rhomboidal; length, E. to W., about 180 m.; greatest breadth 115 m.; area 12,527 sq. m. Pop. 478,500. This distr. is capable of great improvement, being for the most part overgrown with jungle; very complete embankments on the various streams, and many dilapidated, though substantially-built dams and aqueducts for irrigation, are met with, which might be again rendered available at a small expense. In 1820, when Col. (now Gen.) Briggs entered upon the civil management of this distr., there were 80 distinct bands of freebooters ravaging it, and out of 2,700 villages, 1,100 had been altogether desolated during the preceding 30 years of anarchy. The Bheels were at that time in the habit of levying a kind of *black mail* upon the villagers, consisting of a portion of the produce of the land; but, by conciliatory treatment, in less than 10 years most of them had returned to their former occupations as village watchmen and guardians, and only one gang of 40 individuals remained to infest the country when Col. Briggs left it. The agricultural classes are peaceable and inoffensive, but timid and destitute of energy. There are no large or wealthy landholders, excepting the proprietors of certain jaghires granted for military services by the British government. The village constitution exists, but the ryotwarry system has been introduced into this distr., to which, in the opinion of gentlemen who have held civil offices in it for a considerable time, it is, from various causes, extremely ill adapted. Grain, cotton, and indigo, are the chief articles of culture; but there is a vast quantity of waste land, and the cultivation and revenue have both diminished of late years, owing to the difficulty of disposing of the produce, from the general fall of prices, want of roads, &c.

Civil justice is administered by the *punchayet*, or native arbitration; and in criminal cases, while Colonel Briggs superintended the distr., trial by jury was established, which is said to have worked exceedingly well. Schools are common in Candeish distr.; every Brahmin, and all who have any thing to do with mercantile business, are instructed in reading, writing, and accounts: in 1825 there were 189 schools in all, attended by 2,022 scholars, or 1 in 18 for the whole male population. The Mohammedans are said to be the most ignorant of the population. (*Hamilton's E. I. Gaz.* i. 345, 346.; *Brigg's Evidence*, in *Reports, &c.*; *Hodge's Evidence*, in ditto.)

CANDIA or MEGALO-KASTRON, a fortified marit. city, cap. of Crete, on the N. shore of that island, near its centre, 34 m. W. Spinalonga, and 64 m. E.S.E. Canea; lat. 35° 21' N., long. 24° 8' 15" E. Pop. 12,000, 9,000 of whom are Mohammedans. This city, and hence Crete itself, derived its name of Candia from the word *khandak*, signifying an entrenchment in the language of the Saracens, by whom it was built. Its present fortifications are of Venetian construction; they are massive, bastioned, and furnished with outworks; the scarp wall, a beautiful specimen of art, is in most places 50 ft. in perpendicular height; the sea wall is not above 20 ft. in height, irregular, and but badly flanked. The port is formed by two moles, which, bending towards each other, project about 250 yards into the sea, and are defended at their extreme points by forts. It is at present so choked up by sand and the ruins of the old Venetian docks and arsenal, that a vessel drawing more than 8 ft. water cannot enter. The city has four gates, three on the land side and one towards the sea. Principal streets wide, roughly paved, but clean, well furnished with fountains, and adorned with clumps of trees. Houses generally well built, but have seldom more than one story above the ground floor. The bazars, which are good, have quite a Turkish appearance. In the E. part of the city, the houses are mostly interspersed with gardens. Candia is the residence of the pasha and seat of the provincial council, and of a Greek archbishop. Chief buildings, — governor's palace, the Greek cathedral and other churches, many mosques, a synagogue, the remains of two Roman Catholic churches, a light-house on the W. mole, and some good baths. The arched vaults built for the Venetian galleys still exist, and several other relics of Venetian sway are found. The country immediately round Candia is not particularly fertile. Its prov. comprises all the E. part of the island, and produces chiefly wheat, barley, raisins, and a little cotton. (*Scott's Trav. in Egypt and Candia*, i.; *Pashley; Consular Report, &c.*)

Candia. *See* Crete.

CANDY, an inl. town of Ceylon, at the head of an extensive valley in lat. 7° 17' N., and long. 80° 36' E., about 1,400 ft. above the level of the sea, 80 m. E.N.E. Colombo, and 95 m. S.W. Trincomalee. Pop. about 3,000. It is surrounded by woody hills and mountains, varying from 200 to 2,000 feet in height, and stands on the border of an artificial lake; but its situation, though beautiful and romantic, is insecure. At a distance of 3 m. it is nearly surrounded by the Mahavilly Ganga, here navigable only for small boats. Excepting those inhabited by the chiefs, which are tiled, the native houses are built entirely of clay, and thatched. Temples very numerous, and considered almost indispensable appendages to the houses of the opulent; in the greater number lights are constantly kept burning; and in one of them the celebrated tooth, said to have belonged to Boodh, is still preserved! Since the capture of Candy, residences for the governor and commandant, and a gaol, have been built by the British, and several missionary and other schools established. There is no church, but the district court-house and missionary school-room are made use of for divine service. Candy was anciently the cap. of an indep. kingdom of the same name, which comprised the central mountainous country of Ceylon. It was

taken by the British in 1815. (*Heber's Nar.* iii. 172.; *Hamilton's E. I. Gaz.*)

CANEA or KHANIA (an. *Cydonia*), a sea-port and the principal commercial town of Crete, cap. prov. of same name, on the N. shore of the island, 25 m. from its W. extremity, 64 m. W.N.W. Candia, and about 140 m. S. the island of Syra. Pop. 8,000, about 5,000 of whom are Mohammedans, and 1,000 foreigners, chiefly Hellenes and Ionians, who engross most of the import trade. The town, inclusive of the port, forms an irregular square, enclosed by walls, with bastions and a ditch on the land side. The present fortifications were constructed by the Venetians, but are inferior, both in magnitude and disposition, to those of Candia. The port is formed by a mole about 1,200 ft. in length, prolonged from the N.E. extremity of the town to the N.W., where it is terminated by a light-house opposite to a fortress defending the harbour's mouth. The port has recently undergone great improvements: it is the best in Crete, and capable of containing many vessels of 300 tons burden. Streets wide and well paved, but not clean; houses lofty, old, and rickety, but shops good. At the N. part of the town is a kind of citadel, formerly containing the arsenal, docks, &c. The Venetian galley vaults are still in good preservation. There is a small but excellent lazaretto, and several soap manufactories. (For the exports, &c., *see* CRETE.) Canea is the residence of the provincial governor and of several European consuls, and the seat of the provincial council, and of a Greek bishopric. Strabo and Scylax describe the site and port of Cydonia so as to leave no doubt that Khania stands upon the identical spot. No vestiges of the ancient city are now to be seen, though some existed at the end of the 17th century. The plain around Canea is celebrated for its beauty; its province comprises all the W. portion of the island. (*Scott's Egypt and Candia*, ii. 306—312.; *Pashley's Trav. in Crete*, i. 1—17.; *Consular Report*, &c.)

CANICATTI, a town of Sicily, prov. Girgenti, cap. cant., 16 m. S.W. Caltanisetta. Pop., with cant., 17,384. It is well built. The greater part of the population consists of agriculturists.

CANNÆ, an inconsiderable place in Naples, prov. Terra-di-Bari, near the Ofanto (the anc. *Aufidus*), 8 m. W.S.W. Barletta. It is adjacent to the site of the ancient city of Cannæ, so famous for the decisive victory gained in its vicinity by Hannibal, over the Romans, in the year 217 B.C. Never were the talents of a great general more conspicuously displayed than on this occasion. The army of Hannibal was very inferior in numbers, and perhaps, also, in the quality of the troops, to that of his enemies; but the ability of the commander made up for every other deficiency, and, with a loss of only 4,000 of his own men, he put 50,000 Romans to the sword, and took 10,000 prisoners! (The English reader will find a good account of this great battle in Ferguson's *Roman History*, cap. 5.; the classical reader will resort to Polybius and Livy.)

The scene of action is marked out to posterity by the name of *Campo di Sangue*, "field of blood;" and spears, heads of lances, and other pieces of armour, still continue to be turned up by the plough.

The city of Cannæ was destroyed the year before the battle; but it was afterwards rebuilt, and was a bishop's see in the infancy of Christianity. It seems to have been abandoned in the middle ages for the cities along the coast. (*Swinburne's Two Sicilies*, i. 168. 4to. ed.)

CANNES, a sea-port town of France, on the Mediterranean, dép. Var, cap. cant., 25 m. E. Draguignan; lat. 43° 38′ 31″ N., long. 7° 1′ E. Pop. 3,997. It is situated on the declivity of a hill projecting into the sea; has a fine quay, an old Gothic castle, and an old church. Its port is neither deep nor commodious, and can only be used by fishing boats and small coasting vessels. Napoleon landed in the vicinity of Cannes on the 1st of March, 1815, on his memorable return from Elba. (*Hugo*, art. *Var.*)

CANOSA (an. *Canusium*), a town of Naples, prov. Terra-di-Bari, cap. cant., near the Ofanto, 15 m. S.W. Barletta. Pop. circa 4,000. The old city, said to have been founded by Diomed, or in a period antecedent to the records of Roman history, was in ancient times one of the most considerable cities in this part of Italy for extent, population, and magnificence in building. Its walls are said to have embraced a circuit of 16 m.; and various ruins still remain to attest its former grandeur. Among these are the remains of an aqueduct and of a vast amphitheatre, with tombs (of which a very singular one was discovered in 1813), columns, triumphal arches, &c. Great numbers of fictile vases of the best period have been found here, surpassing in size and beauty those found in the tombs of any other ancient city, not excepting even Nola. The modern town occupies the site of the ancient citadel; and is said by Swinburne to be a "most pitiful remnant of so great a city." The ancient cathedral, built in the 6th century, still remains. Its altars and pavements are rich in marbles; and the *verde antico* columns that support its roof are the finest that Swinburne, no mean judge, had ever seen. There is here, also, the mausoleum of Bohemund, so celebrated in the *Gerusalemme Liberata*.

Canusium was the place to which the wreck of the Roman army fled after the battle of Cannæ. It seems to have been at the acmé of its prosperity under Trajan. It was reduced to its present deplorable situation by a series of disasters inflicted on it by the Goths, Saracens, and Normans. (*Cramer's Ancient Italy*, ii. 292.; *Swinburne's Two Sicilies*, i. 400. 4to. ed.; *Craven's Calabria*, p. 90.)

CANOURGE (LA), a town of France, dép. Lozere, cap. cant., in an agreeable and fertile valley, on the Urugne, 9 m. S.S.W. Marvejols. Pop. 1,969. It carries on some branches of the cotton and woollen manufactures, the products of the latter being formerly in extensive demand, and has some trade in cattle and grain. Excavations made in the vicinity in 1829 have been the means of discovering a number of vases and other remains of Roman pottery, which appear to have been manufactured on the spot. (*Hugo*, art. *Lozère*.)

CANTAL, an inland dep. of France, formed of parts of the ancient districts of Haute Auvergne and Velay, between 44° 37′ and 45° 26′ N. lat., and 2° 5′ and 3° 14′ E. long., bounded by the following depts.; viz. N. Puy-de-Dôme, E. Haute Loire, S.E. Lozère, S. Aveyron, and W. Lot and Corrèze. Area, 582,959 hectares. Pop. 262,117. This is one of the least productive, poorest districts of France. Surface much encumbered with mountains. The highest summit, that of the Plomb-de Cantal, in the centre of the dep., and whence it takes its name, is elevated 1,856 mètres (6,040 ft.) above the level of the sea. We every where find indications of the action of subterraneous fires and volcanos: and though steep, the mountains furnish, in summer, excellent pasture. Valleys not very extensive. Between Murat and St. Fleur there is a level plateau, which may be said to be the granary of the dept. Climate severe, the snow generally lying on the summits of the mountains for seven or eight months together. Several rivers, flowing in different directions, have their sources here; among which may be specified the Cere, Alagnon, Rue, Arceuil, &c.: the Dordogne runs along its N.W. frontier. Agriculture in the most backward state; the occupiers being generally poor, and wedded to old practices. The produce of wheat and oats is insufficient for the consumption; but the inhabitants live principally on buckwheat, rye, potatoes, and chesnuts. The last, indeed, is the staple article of food in an extensive district, thence called *Chataigneray*. Hemp and fine flax are also raised, with various descriptions of fruits, and a little very bad wine. The principal wealth of the dep. consists in its mountain pastures and meadows; partly occupied, in summer, in dairy farming, and partly in the fattening of cattle and sheep. Large quantities of cheese and butter are annually produced. The ordinary yield of a cow is estimated at 75 kilogs. of cheese, and 15 ditto of butter. The best cheeses are made in the environs of Salers; they weigh from 70 to 80 lbs.: great numbers of pigs are fed on the refuse of the dairies. Large herds of cattle are also fattened on the mountains; and it is said that the value of an ox is increased, in the course of a summer, from 150 to 220 fr. The native breed of sheep is small, and have fine fleeces. Large flocks are brought from the more S. departments, to be fattened during the summer, the fattening and pasturage grounds being often let to the proprietors of herds and flocks from the neighbouring depts. Horses small and hardy, and used for the light cavalry. Numbers of mules, asses, and goats, are also raised; the skins of the latter are sent to Milhaud to be made into parchment. Honey is an important product. Manufacturing industry is at a very low ebb in this dept. There are a few fabrics of coarse woollens and linens; and these, with coarse lace, copper and braziers' work, wooden articles, paper, tanneries, &c., include almost all that is worth notice. Numbers of the people annually emigrate in search of employment to Paris, and other parts of France, Spain, &c. Hugo gives a most unfavourable account of the state of the bulk of the population, who are said to be ignorant, lazy, rude and brutal in their manners, and depressed by poverty. The inhabitants of the mountains and plateaux suffer severely from the scarcity of fuel, and cold in winter. To obviate the influence of the latter, they lie in bed as long as possible; and have their cottages so planned that the family occupies the middle space between the cattle and the barn! Cantal is divided into four arrond., and returns 4 members to the Chamber of Deputies. Number of electors between 1,100 and 1,200. Public revenue in 1831, 4,512,327 fr. Chief towns, Aurillac, St. Fleurs, Murat. (*Hugo*, art. *Cantal, Dict. Geog.*; *Malte-Brun*, viii. Eng. trans.)

CANTELEU, a town of France, dép. Seine Inférieure, on the summit of hills which command the right bank of the Seine, at the entrance of the forest of Roumaris, 4 m. W. Rouen. Pop. 3,591. It commands a fine view of Rouen and the hills by which it is surrounded, the course

of the Seine as far as Elbeuf, the valley of Déville, and vast meadows.

CANTERBURY, a city, co., and bor., and the metropolitan see of England, co. Kent, in a fertile, well-cultivated valley, intersected by various branches of the Stour near the base of the N. Downs, 53 m. S.E. by E. London, lat. 51° 18′ N., long. 1° 53′ E. Pop. in 1821, 12,745; in 1841, 15,435. The town was originally enclosed by turreted walls (the remains of which still exist), and had 4 main streets branching from the centre, each terminating by a gateway, of which the W. only remains. The modern town consists of these and of 4 suburbs, continued in the direction of each, that on the E. side being much the largest. The High Street, along which the main line of road from London to Dover passes, is of considerable width, with well-built houses on either side, and a handsome guildhall near the centre. The whole is well paved, lighted by gas, and supplied with water; the Stour, which flows through it, divides and makes an island of its W. part. There are 11 parish churches, but except that of All Saints (a plain modern structure in the high street), they are generally small and insignificant in external appearance. Within these few years they have generally undergone extensive repairs; the interiors have been renovated, and they contain several handsome monuments and tablets. The cathedral is a noble pile, and forms a conspicuous object from whatever part of the city it may be viewed. The approach to it from the street was formerly disfigured by a row of low, mean buildings. These have been removed, and a very fine view of nearly the whole S. front is now obtained. It stands on the site of the cathedral anciently founded by St. Augustine, in connection with the monastery of Christ Church, established by Ethelbert, king of Kent, on his conversion to Christianity, by St. Augustine, in 597. The oldest part of the present structure dates from 1184: the nave, cloister, and chapter-house, are two centuries later, during the best period of the pointed ecclesiastical style; the interior is very fine, and the styles of different ages skilfully adapted to each other; the choir is the most spacious in the kingdom, and the great stained window accounted one of the finest. The structure is of the usual cruciform shape, with a semi-circular E. end, and is 513 ft. in length inside, the central tower being 235 ft. in height; under the whole is an old crypt or under croft. The ancient celebrity of this cathedral is partly attributable to its being associated with the first establishment of Christianity in England, but more especially to the murder of its famous archbishop, Thomas-à-Becket, at the foot of one of its altars, in 1171. Becket having been canonised, his bones were, in 1220, removed, with great pomp and expense, from the under croft, where they had previously been deposited, to the Trinity Chapel, built for the purpose. The anniversary of the day on which they were removed, was celebrated as a great festival down to the Reformation; and devotees, not only from every part of England, but of Europe, made pilgrimages to the shrine of the saint, to the enrichment both of the establishment and of the city generally.* A supposed pilgrimage of this sort, such as was then usual, was made the medium of a lively description of the characters and customs of his day by the earliest of our great poets; and has been rendered familiar to most of our readers by the excellent engraving of Stothard's "Canterbury Pilgrimage," in which the characters described by Chaucer are admirably represented. Erasmus, who saw the fane in undiminished splendour a short time previously to its annihilation, gives a vivid account of its wealth and magnificence. In 1536, however, all high festivals occurring between July and September (which included the chief festival at Canterbury) were forbidden, on the ground of their taking people from the necessary labours of harvest. But this was merely a prelude to more energetic measures; and in the following year, Becket was thrust out of his place in the catalogue of saints, declared to have been a rebel, his bones being, at the same time burnt and scattered, and the treasury of his shrine appropriated to secular purposes. Subsequently to this vigorous and salutary exercise of the prerogative, the present collegiate establishment was ordained, consisting of a dean, 12 canons, 6 preachers, 6 minor canons, and other subordinates; 3 of the prebendaries being in the gift of the archbishop, the rest in that of the crown. In 1643, considerable injury was done to the cathedral in consequence of a parliamentary order to purify it, and subsequently the nave was converted into temporary barracks for Cromwell's troops. On the Restoration, the choir was refitted for divine service; and now, for many years past, considerable funds have been annually devoted by the chapter to the restoration and improvement of this magnificent old structure, which contains many interesting monumental remains; amongst others, that of the Black Prince. The diocese of Canterbury consists of the co. of Kent (with the exception of the city and deanery of Rochester, and of 8 other parishes, which last are in the London diocese,) and the parishes of Croydon and Addington, and district of Lambeth Palace, in the co. of Surrey.

The province comprises 20 other dioceses, and about 100 scattered parishes, called "peculiars:" its archbishop is primate and metropolitan of all England, and takes precedence of all great officers of state, and of all peers of the realm except those of the royal blood; he has also the privilege of conferring degrees in divinity, law and physic. The revenues of the see amounted, at an average of the three years ending with 1831, to 19,182*l*. a year. The succession is traced with tolerable regularity from St. Augustine, A. D. 597. Cardinal Pole was the 70th and the last archbishop under the Catholic system; and Dr. Howley, the present metropolitan, is the 91st. The site of the ancient palace, near the cathedral precincts, is occupied by modern buildings, leased to private individuals; the present archiepiscopal residence being at Lambeth. There are several dissenting chapels in the town, and a Jewish synagogue. A grammar school founded by Henry VIII. is in the patronage of the dean and chapter: there are 2 masters, and 50 king's scholars. The other public structures are a sessions-house, theatre, assembly-rooms, philosophic institution (with library, museum, and lecture-room), and the subscription wells, whose mineral waters were discovered in the latter part of the 17th century, and were for some time in great repute, but have since been comparatively neglected; one spring is a pure chalybeate, the other impregnated with sulphur. The city generally has of late years undergone considerable improvement; the Donjon-field, and a large artificial mound in it, is laid out in public walks, and forms a pleasant promenade. There is little or no trade carried on except what is required for the supply of the town and its immediate vicinity. The silk trade, originally established by Flemish and French refugees (to whom Elizabeth granted the under croft of the cathedral for public worship), and that of silk and cotton, subsequently introduced, have ceased: but there is a considerable traffic in hops and agricultural produce, large quantities of which are sent from it to London; the business caused by its being one of the chief thoroughfares to the Continent is also tolerably extensive. The Stour is navigable from Sandwich as far as Fordwich, for lighters; and by its means, much of the heavier merchandise, such as coals, timber, &c., formerly reached the city; but a railway for goods and passengers between it and Whitstable, opened in 1830, has drawn the entire traffic to that line of communication. There are four market-places for the sale of meat, and poultry, fish, cattle, corn, and hops: there is a daily supply of provisions, but the chief markets are held, one on Saturday, and another, for fat stock, every alternate Tuesday: there is also an annual statute fair, which begins October 10., and lasts 10 or 12 days, but little business of importance is transacted at it. Canterbury has long been noted for brawn, which forms an article of some importance in the trade of the place, and is sent to various parts of the kingdom. The hop-grounds of the vicinity afford employment to a large proportion of the labouring population of both sexes.

This city, which is a county of itself, contains within the walls 14 parishes, besides ancient monastic precincts. Before the passing of the Municipal Act the city magistrates had no jurisdiction over these precincts, but they are all now under the authority of the civic powers, with the exception of the ville of Christchurch, in which the city and county magistrates have concurrent jurisdiction. The city boundaries having been by the same parliamentary enactment greatly extended, several parishes without the walls are now jointly under the city and county authority.

Canterbury has sent 2 m. to the H. of C. from the 23 Edward I.: the right of voting being, previously to the Reform Act, in the resident and non-resident freemen; the freedom of the town being acquired by birth, marriage, apprenticeship, purchase, and gift. The present parl. bor. includes, besides the above par., parts of those of three others, and the bor. of Longport; and had, in 1841, a pop. of 15,422. No. of 10*l*. houses not exactly known, but probably exceeding 1,000. Registered electors in 1847-48, 1,625. The municipal limits comprise only the city and immediate suburbs, excluding several hundred acres of the agricultural part of the parl. bor. It is divided into three wards, and is governed by a recorder, mayor, 6 aldermen, and 18 counsellors.

This city is of great antiquity, as is proved by the notice of it in the itinerary of Antoninus, and by many Roman remains. A staple of wool was granted by Edward III.; but its chief importance previously to the

* The estimation in which the principal altars at Canterbury were held by the public may be inferred from the fact that in one year the contributions were: —

At Christ's altar - - -	*L*. 0	0	0
The Virgin Mary's - - -	4	1	8
Thomas-à-Becket - -	954	6	3

Lyttleton's Hen. II. vol. vi. p. 369.; see vol. iv. pp. 353—363. of the same excellent work, for a full account of the circumstances connected with the death of Becket, and a character of that turbulent priest.)

Reformation was derived from its numerous religious establishments, and the influx of pilgrims of all ranks and conditions. It was also the most frequented thoroughfare to the Continent, and is noticed as such in the charter granted by Henry IV., where it is called, "a city near the sea, and as it were a port and entrance by which foreigners come to the kingdom." During the last war, a large body of military were usually stationed here, for whose reception there are three sets of cavalry and infantry barracks. The outer walls of a castle of the Norman period still exist. (*Illustr. Views of Metrop. Church of Canterbury, and Hist. Descr.* 4to. 1636; *Canterbury Guide, &c.*)

CANTON (called by the Chinese *Sang-Ching*, the provincial city), a marit. city of China, on its S. coast, cap. prov. Quang-tong, and residence of the provincial authorities; the principal emporium of the East, and the only port in China at which any Europeans are established. It stands on the N. bank of the *Choo-kiang*, or Pearl River, and the E. bank of its affluent, the Pe-kiang, 60 m. N.N.W. the Chinese Sea, and 1,200 m. S. by W. Pekin. Lat. 23° 7′ 10″ N., long. 113° 14′ 30″ E. It is nearly square, about 6 m. in circ., built generally upon level ground, except on its N. side, and is divided into two unequal parts, the outer, or Chinese, and the inner, or Mantchou (Tartar) city, which are surrounded by one wall, and separated by another. The walls are partly of sandstone and partly of brick, about 20 or 25 ft. thick, and from 25 to 40 ft. high. A line of battlements, with embrasures at intervals of a few feet, raised on the top of the walls all round, are in some places mounted with cannon. The city is farther defended by three forts on the land side, and two on Pearl River; but as a place of strength Canton is insignificant. The outer walls are pierced with 12 gates, and 4 others lead through the inner wall from the old to the new city; all of these are daily opened at dawn, and shut at an early hour of the evening, and strictly guarded, to prevent the exit or entrance of any one, except upon special occasions. The suburbs are, perhaps, as extensive and populous as the city itself. They fill up the space between the walls and the water's edge on both rivers; those on the W. side are much the largest. The city and suburbs are laid out in a precisely similar manner. Streets numerous, and generally short and crooked, though sometimes of considerable length. They vary in width from about 2 to 16 ft., but are commonly from 6 to 8 ft. wide, paved with little round stones, and flagged, close to the houses, with larger ones, chiefly of granite. Each is closed by strong gates, secured and guarded at night; and streets of business are each devoted to one distinct branch of trade. Several canals, used for the conveyance of passengers and goods, intersect the city and suburbs. Two of the largest run along the outside of the E. and W. walls, and communicate by a third, which passes through the new city. Several smaller ones branch off from these on either side: they are crossed in many places by stone bridges. Houses built chiefly of brick; but mud, stone, and wood, are also used in their construction, and many of the habitations in the old city are said to be composed entirely of the former material. Near the river they are raised on wooden piles, and elsewhere are generally erected on solid foundations. Scarcely any are more than one story in height; the roofs of many are flat, and being surrounded with a breast-work, they form terraces frequented by the family in the cool of the evening. The floors are usually composed of indurated mud, marble, or other flagstones, or tiles joined by cement. Windows small, the place of glass being supplied by paper, mica, thin shell, &c. Very little iron is used. The better sort of residences are built within a court, surrounded by a wall, 12 or 14 ft. high, and the interior of those of the opulent Chinese are in general very richly furnished. The houses of the middle orders, in which about 1-3d part of the population reside, have no court, nor any superabundant room; those of the lower orders, which are very numerous along the banks of the canals, in the N. part of the old city, and in the extreme parts of the suburbs, are wretched mud hovels, in which 6, 8, 10, or sometimes even double that number of individuals, are crowded into one low, dark, and dirty apartment. The foreign factories, or *hongs*, as the Chinese call them, are situated in the S.W. suburb, where they extend from E. to W. for about 1¼ furlong. They occupy a muddy flat, which has been gained from the Choo-kiang river, which they face, being separated from it by a quay about 100 yds. wide. This space, which is considered as belonging to the European merchants, is railed in, and forms a promenade, called Respondentia Walk. Near it is another small open space, about 50 or 60 yds. sq., walled in, and laid out as a garden, with gravel walks, flower-beds, &c. These narrow limits bound all the territory assigned to foreigners within the Celestial empire: even the quay and enclosure were not obtained without considerable difficulty, and the European merchants cannot erect a few steps on the water's edge without express permission from the authorities. There are 13 hongs, or factories, including the British, Dutch, American, French, Austrian, Swedish, Danish, Parsee, &c. They are amongst the handsomest buildings in the city, and usually consist of 3, 4, or more brick or granite buildings surrounding a kind of close or court: two tolerable European hotels occupy portions of two of them. The English hong far surpasses the rest for elegance and extent; this, the Dutch, and the American hongs, are the only ones which have their national flags flying; the British flag, which had been hauled down at the expiration of the E. I. Company's charter, was again raised in April 1837. (*Fanqui in China*, i. 240.) Contiguous to the hongs are three noted thoroughfares, Old and New China streets, and Hog Lane. The first two are amongst the best streets in the suburbs, rather wider than the generality of the public ways, pretty regularly paved, and lined with shops, in which a considerable amount of business is sometimes transacted. The filthy street, or alley, appropriately named Hog Lane, has an infamous notoriety as being the place where foreign seamen are intoxicated, robbed, and maltreated, and where, owing in a great measure to their imprudence, most of the disturbances have arisen which have led to serious disputes between the Chinese government and the foreign traders. Except in those devoted to the European trade, most of the shops open to the streets, and the most valuable kinds of wares are exposed, apparently without any protection from theft: but the sharp eye kept by the dealers, the gates at the end of the streets, which may be shut in an instant, and a most vigilant police, commonly prevent any frauds. Burglaries are rare, but loss by fire is frequent; to avert which, in the winter months, an additional body of watchmen occupy watch-towers erected on bamboo poles high above the roofs of the houses, and an alarm, given by bells or other means, quickly spreads through the city. The Chinese have very generally adopted the use of our engines, which they occasionally manufacture sufficiently well to answer the purpose; but Mr. Davis says, that the foolish notion of fatalism which prevails among the people makes them singularly careless as regards fire. In 1822 a fire broke out, which destroyed the British factory and above 10,000 other houses. The loss of the E. I. Company on this occasion was estimated at 500,000*l.* sterling, 3-5ths in woollens. Canton is subject to inundations, which carry away many mud hovels, and frequently fill the lower apartments in the hongs to the height of several feet. The city is tolerably well supplied with water by several reservoirs, many wells, the canals, &c., and some fine springs on its N. side, both within and without the walls.

A large part of the pop. of Canton resides on the water. For 4 or 5 m. opposite the city, and both above and below it, the river is crowded with vessels and rafts of all descriptions and sizes. Every one is registered, and the whole number in the neighbourhood of the city is reported to amount to 84,000! (*Chinese Rep.*) Many of these, called egg-boats, which are no more than 12 or 15 ft. long, about 6 ft. broad, and covered with a low bamboo shed, not only accommodate whole families, but contain coops in which large broods of ducks and chickens are reared. Others are immense rafts of timber on which many individuals live. Some of the floating-houses are, however, handsome residences; their hull is large and broad, and the building in the centre is surrounded by a spacious wooden terrace, and supports another on its roof, both of which are ornamented with flowers, evergreens, &c. The narrow channel left between the stationary shipping and the shore is so incessantly thronged with barges, and craft of all kinds as to render landing or embarkation usually a difficult undertaking. Upwards of 120 different temples are enumerated in and adjacent to the city, and this does not include the whole number. The principal is the Buddhist temple on the island of Honan, in the river opposite Canton. Its buildings are numerous, and chiefly of brick; it covers, with its courts and gardens, 6 or 8 acres, which are surrounded by a lofty wall. The stillness which reigns within this barrier forms a striking contrast to the turmoil which prevails without. The pathway to the great central temple leads through two wide court-yards laid out with gravel walks, and planted with rows of trees; in the gateway separating these courts are two fierce-looking colossal figures, seated on huge pedestals of granite. The principal hall is about 80 ft. sq.; its walls are hung with crimson tapestry, tablets, &c., and its roof is ornamented with grotesque paintings and figures in relief; in the centre of the hall are three enormous, heavy, gilded figures representing the "Past, Present, and Future," before which incense is continually burning. In various other halls there are shrines of inferior deities, and the remainder of the building is occupied chiefly by the dwellings and offices of the priests, of whom there are nearly 200. There are two other considerable Buddhist temples in the N.W. part of the old city, one of which, founded about A.D. 250, has about 200 inmates, and 3,500 acres of landed property. In the old city there is also a Mohammedan mosque, with a

dome and minaret 160 ft. in height; there are about 3,000 Mohammedans in Canton. Without the walls, on the N. side, there is a lofty pagoda 5 stories high. There are several charitable institutions, but they are mostly of recent foundation. Vagabonds and beggars are very numerous in Canton, but not more so than in many large cities of Europe. A foundling hospital established in 1698, with accommodations for 200 or 300 children, and supported with about 840*l.* a year; a retreat for the aged, infirm, blind, &c., supported by imposts on foreign ships bringing rice to the port, and an hospital for lepers, all on the E. side, without the city walls, are amongst the chief native charities. A general hospital in the S. W. suburb, established by an American missionary society in 1835, has been productive of much benefit. But the best maintenance for the poor consists in the manner in which both law and custom enforce the claims of kindred. In the old city are the residences of the lieut.-governor, Tartar-general, treasurer of the provincial revenue, literary chancellor, criminal judge, &c.; and in the new city, those of the prov. governor, and the grand *hoppo* or commissioner of the customs on foreign trade. These residences, and others of the hong-merchants, and some wealthy citizens, are little inferior, except as respects size, to the imperial palaces. In the old city is the grand hall for the examination of candidates for literary honours. There are 14 high schools, and about 30 colleges, in Canton; three of the latter have each 200 students. It is estimated that about half the inhab. are able to read.

We have no information on which it would be safe to place any reliance as to the pop. of Canton. It is estimated in the *Chinese Repository* (vol. ii. 307.) at 1,236,000; but the data on which this estimate is made are far too loose to entitle it to any weight. Mr. Davis does not think it possible that 1,000,000 could be stuffed within its precincts; and it is probable that the pop. does not exceed half the number mentioned in the *Repository*.

The manufactures of Canton are numerous and important. It is said in the *Chinese Repository* that there are about 17,000 persons employed in the weaving of silk, and that 50,000 are engaged in the manufacture of all kinds of cloth. There are said to be 4,200 shoemakers; besides great numbers of persons who work in wood, brass, iron, stone, &c. The book trade is considerable. The persons engaged in these trades are all formed into distinct communities, and have each their own laws for the regulation of their business. But a large portion of the manufactures required for the consumption and trade of Canton are carried on at Fuh-shan, a large city a few miles W. from Canton.

Trade.— All the legitimate trade of China with European nations (Russia excepted) used to be conducted at Canton. The Russians are the only nation not permitted to have a resident or factory here; the commerce between the two empires, which is very extensive, centres at Kiachta, on the border of the empire, in Mongolia. The policy which determined this regulation, as well as that which fixed the only foreign mercantile port at almost the greatest possible distance from the capital, was probably dictated not only by a jealous fear of strangers passing the boundaries of the empire, but also from a desire, on the part of the government, to obtain the greatest amount of transit duties. The European trade, now so immense, originated in a commercial treaty between Emmanuel, King of Portugal, and the Emperor of China, in 1517. In 1634, some British ships first touched at Canton. In 1680, the direct trade of the E. I. Company with China commenced. In consequence of the extraordinary increase in the demand for tea, which, from being a luxury seldom seen, so late as the reign of Queen Anne, even in the houses of the nobility, has become a necessary of life, used by the poorest classes, the British trade with Canton has progressively and rapidly increased since 1700; and the great mass of the foreign commerce (which, inclusive of that of the junks, is estimated at 80,000,000 dollars yearly) is carried on by the English and Americans. Until the expiration of their charter, in 1834, the British trade was entirely in the hands of the E. I. Company; and during the last 3 or 4 years of their monopoly, that body imported tea (which has always been the principal export from China) into England to the amount of 31,500,000 lbs. annually. After the expiration of their charter, the quantity imported was still greater. In 1834, 150 British vessels, with a united tonnage of 82,470 tons, resorted to Whampoa, near Canton, and brought away 43,641,200 lbs. of tea. The import of that article subsequently diminished; but it is now (1845) greater than at any former period.

In 1844, no fewer than 228 ships under British flags, of the aggregate burden of 111,350 tons, arrived at Canton; and of these 108 cleared out for the U. Kingdom, exclusive of those that cleared for it after touching at Hong Kong. The value of the imports by these ships (ex. opium, which is contraband) was estimated at 15,506,240 doll., and that of the exports at 17,925,360 doll. The total exports of tea during the same year were, for

	Lbs.		*Lbs.*
The U. Kingdom	52,179,533	Cape of G. Hope	80,864
——— States	15,825,800	Peru	43,675
Holland	2,338,867	Mexico	2,188
France	101,856	Brazil	6,000
Belgium	17,109	Nova Scotia	130,000
Hanse Towns	449,643	Destination	334,423
India	470,887		
Australia	557,765	Grand Total	72,566,311
East India Islands	28,001		

Total value of tea exported, 19,307,759 doll.

Next to tea, raw silk and silk piece-goods are the principal articles of export.

The trade between British India and China has been greater in amount and importance than that between China and England. The principal export from India was formerly raw cotton, chiefly from Bombay; but opium has long surpassed that article in importance, having latterly been clandestinely imported into China to so vast an amount, that its value has rather exceeded that of the tea exported. In 1839, the Chinese government, having attempted to suppress the trade, confiscated and destroyed the opium belonging to English subjects; and this outrage having led to hostilities with this country, a total change has since been effected in the commercial policy of the empire by the treaty negotiated with this country in 1842. The Chinese authorities bound themselves by this treaty to pay to the English 21,000,000 doll. as an indemnity; to open the ports of Amoy, Foo-choo-Foo, Ningpo, and Shanghai, as well as Canton, to the ships and goods of England; to cede to us the island of Hong Kong in the æstuary of the Canton river; and to establish a just tariff of duties on exported and imported articles. And these conditions have since been carried into full effect. (For recent and ample details in relation to the trade of Canton, &c., see *Commercial Dictionary*.)

A fleet of 50 or 60 vessels, of about 400 tons burden, is annually despatched to Canton from the United States, the whole of the American trade being valued at about 10,000,000 dollars. About 15,000,000 lbs. of tea are annually imported into America. The Dutch usually send 10 or 15 vessels during the season; but many come from Batavia; and the import direct of tea from Canton into Holland is not more than 3,000,000 lbs. a year. From 2 to 3 or 4 French ships have appeared of late years at Whampoa: the trade of Spain, Sweden, Denmark, and Austria, with Canton, is very small.

The Choo-kiang opposite Canton is deep enough for vessels of 800 or 1,000 tons burden; but foreign ships only come up the river as far as Whampoa, about 15 m. below the city, loading and unloading by means of native boats. All the dealings of foreigners with the Chinese used to be carried on by the intervention of a few leading merchants, called *Hong* or security merchants, from their becoming security for the payment of the duties on ships, on the goods imported and exported, and for the peaceable behaviour of the crews. But this restriction is now abolished, and foreigners may here, as anywhere else, deal with any merchant or other party they think fit to employ. The *linguists* or government interpreters usually procure permits for delivering and taking in cargoes, and transact the custom-house business. The state-officers of this city, receiving little or no salary from government, but frequently purchasing their appointments, derive their profits chiefly by extortion; and Canton has the character of being not only the most licentious, but the most corruptly-governed city of the empire. We incline, however, to think that in these respects it is not so bad as is represented; and that foreigners, from impatience of the restraints under which they are placed, exaggerate the rapacity and capriciousness of the Chinese, in order to prejudice their governments against them, and to induce them to adopt coercive measures.

Canton is peculiarly the emporium of Chinese manufactures, and the shops are crowded with articles of the neatest and most minute workmanship. The markets devoted to eatables are less attractive to European tastes: puppies, cats, owls, horse-flesh, worms, slugs, and even snakes and other reptiles, are exhibited as tempting delicacies. All are sold by weight, and a cat and a pheasant frequently fetch the same price. The arts of *puffing* are not forgotten in Canton; in the suburbs, staring labels and boards are common enough over the shop doors, inviting the custom of the passengers, by means of laudatory mottos, &c., written in English and other languages; and many of the Chinese shopkeepers have acquired sufficent English, and the free and easy style so well adapted to captivate the British seamen, and make them part with their money. The streets are generally clean, but abound with cripples and miserable objects, beggars, and vagabonds of all descriptions. No wheeled carriages are ever seen in them; the only vehicles used are sedan chairs slung on poles, which some of the government functionaries and

more opulent natives are privileged to use. They are not allowed to Europeans, who are also destitute of any place of public amusement, prohibited entering the walled city, and interdicted all female society.

As soon as the season for business has terminated, an edict from the emperor comes to Canton, ordering the removal of the foreign merchants to Macoa, where they remain for several months. During the summer, excursions are made by both Chinese and Europeans to Fahtëen, a village about 2 m. higher up the river, above Canton, where there are some gardens laid out in the English style. The scenery in this direction is delightful. "Beyond the city, and when clear of the buildings, and the crowds of boats which throng the passage, the river winds about in a beautifully serpentine manner. The country opens gradually, and displays both hill and dale covered with luxuriant vegetation. On every remarkable eminence, pagodas are erected, and *ghos*-houses adorn the banks in every direction. In the midst of the stream, often dividing it into two or three separate channels, are romantic islands, either under the hand of the agriculturist, or covered with trees to the water's edge." (*Fanqui in China*, iii. 203.) Canton, although extremely hot in summer, is much colder in winter than might be expected from its lat., and fires are often agreeable.

According to native historians, Canton was founded by one of the last sovereigns of the Chow dynasty, who reigned about 2,000 years ago. About the year 700, it became a regular mart for foreign trade, and the residence of an imperial commissioner of customs. The former city was utterly destroyed in 1650 by the Tartar dynasty now on the throne, after a siege of 11 months, during and subsequent to which, vast numbers of persons are said to have perished. (*Chinese Repository, Cant.; Davis, The Chinese, &c.; Hamilton's E. I. Gaz.; Downing's Fanqui in China; Official Tables, &c.*)

CAPACCIO, or CAPPACCIO NUOVO, a town of Naples., prov. Principato Citra, cap. cant., 25 m. S.E. Salerno, and 4 m. from the sea. Pop. 2,500. It has 2 fine parish churches, and a convent. The cathedral is at Cappaccio Vecchio, a small place in the vicinity, destroyed in the 13th century by the emperor Frederic II. The inhabitants having fled to S. Pietro, gave it the name of Capaccio Nuovo.

CAPE BRETON, a large and most irregularly shaped island of British America, separated from the N. extremity of Nova Scotia, of which prov. it is a part, by a narrow, navigable channel. It forms the S.E. boundary of the Gulph of St. Laurence, and lies between 45° 27′ and 47° 2′ N. lat., and 59° 45′ and 61° 38′ W. long. Area estimated at near 4,000 sq. m. Pop. (in 1839) probably about 35,000. Militia (in 1834) 6,651. The coast is, for the most part, rocky and elevated; and it is every where indented by deep gulphs and arms of the sea, by one of which, the Bras d'Or, it is very nearly separated into two great divisions. This inland sea has deep water throughout, and affords the greatest facilities to navigation. The island has many fine harbours; that of Sydney, the cap., on the E. coast, being one of the best in the prov. Louisbourg, so famous in the history of America in the reign of George II., lies on the S.E. coast of the island. It was a strongly fortified settlement established by the French in 1720, and reckoned the key of their possessions in this part of the world; but having been taken by the English in 1745, was first dismantled, and afterwards entirely abandoned.

The *climate* of Cape Breton is subject to considerable extremes. The mean summer heat is said to be 80° Fahr., whilst in winter 20° below zero is not a very uncommon degree of cold. The temperature, however, is subject to more variation, and is less uniformly severe than the continent in the same parallel. The frost usually sets in about Dec., and between that and the end of April, there are sometimes intervals of a week or two of mild weather. The spring is short, and vegetation very rapid: May is the sowing season, and the harvest is gathered in Aug. and Sept.: on the E. coast, the summers are usually dry; on the W. they are usually more moist.

This island terminates a low mountain range, which traverses the whole province of Nova Scotia (from S.W. to N.E.), and consists of granite, trap, and slate, in alternating strata; the slate being in narrow, and the trap in broad belts: beyond these, are grauwacke, sandstone, limestone, gypsum, and several other formations, which for the most part rest on an amygdaloid base. In this more recent portion are extensive beds of coal, said to resemble that of Newcastle, and well adapted for steam, and other general purposes; it also yields an abundance of excellent gas. Cape Breton is supposed to contain a sufficiency of this, to supply the world for centuries. The mines at present in work are near Sidney: they were leased by the crown (in 1827) for 60 years to the General Mining Association, on payment of 3,000*l.* sterling a year for 20,000 chaldrons, and 2*s.* currency for every chaldron beyond that quantity; which terms embrace the other mines of the prov., wrought by the same company, who have several steam-engines, and employ regularly about 500 men. Since the commencement of their operations, the demand has steadily increased, and is supposed likely to proceed in an increasing ratio, from the circumstance of the only available mines of the U. States, at present, being those of Anthracite, in Pennsylvania, to which, for general purposes, the Cape Breton coal is much superior: the produce, in 1837, was 70,000 tons; above half of which went to the States, the remainder to Nova Scotia and Newfoundland: the price at Sydney was 14*s.* 6*d.* per ton, currency. These mines were first opened about 50 years since, and have continued from that period to be wrought; but, previously to 1827, on a very imperfect system, and to a very limited extent. Iron and copper have also been met with, but neither has yet been attended to. Lime (gypsum), well adapted for agricultural purposes, is abundant, and at places perfectly accessible to shipping: there are also brine springs of great strength, which it is supposed may be in time made available, by means of the refuse coal, in the manufacture of salt for the fisheries: excellent freestone for building purposes is also met with.

The vegetable products resemble those of the neighbouring continent; the woods being composed of hemlock, black and white spruces, the white and red pines, oak, beech, birch, maple, &c.: the timber trade has been gradually diminishing. The greater part of the shipments at present are from the W. basin, opening from the little Bras d'Or; on the Atlantic side, the spruce firs, &c. are mostly of stunted growth, but supply fuel to the different fishing settlements: these, however, are conducted with little energy, and to a much more limited extent than the great capabilities of the stations would seem to admit of. The fish most commonly taken are cod, hallibut, haddock, mackerel, shad, smelts, and alewives; sturgeon and salmon are also caught in the streams, and these and the lakes abound with trout and perch. The inhabitants engaged in the fisheries are chiefly French Acadians, and Scotch, from the Western Islands. Those engaged in the timber trade and agriculture are chiefly Scotch and Irish emigrants, and a few are the descendants of U. S. loyalists. Those engaged in the coal-mines are mostly skilled labourers from Scotland. There are also about 300 Indians, for whom some tracts are reserved, on which they cultivate maize and potatoes: they are an inoffensive tribe, and support themselves chiefly by fishing; wandering along the shore in summer, and returning to a fixed winter station. The returns relative to farming produce, cattle, &c., show the same figures for several successive years, so that probably little reliance can be placed on them. The quantity of land in cultivation, in 1831, was said to be 85,000 acres (*Bouchette*); the common kinds of grain, maize, and potatoes, are cultivated; but the island does not, at present, produce sufficient for its own consumption. The exports consist of timber to the U. Kingdom, fish to the W. Indies, and coals to the U. States, and corn. The imports consist of British manufactured goods; corn, meal, &c., from the U. States, and colonial products. Total value of the imports, in 1834, 10,501*l.*; of the exports, 22,188*l.* Between 300 and 400 vessels, varying from 20 to 200 tons, are registered in the island, and some shipbuilding is carried on, which is included in the provincial returns.

Sydney, which is the chief settlement, contains 80 or 90 houses, all with gardens attached, and regularly disposed, so that its appearance is very neat and respectable; the courts of justice for the island, and the residences of the gov. officers are in this little town, which was founded in 1823: its pop. is between 500 and 600. The rest are all small fishing settlements, on different parts of the sea coast, or round the borders of the Bras d'Or. Cape Breton is a co. of the province of Nova Scotia, and returns 2 m. to the H. of Assembly in Halifax. It is comprised within the diocese of the Bp. of Nova Scotia; but the great majority of the inhab. are Catholics. Legal provision is made for the poor, and there are also other local assessments to defray co. charges. The French formed the first settlement on it, in 1712; a detachment of British troops, from New England, took possession of it in 1745, and from that period it has remained under British government. (*Bouchette's Brit. Dom.; Lord Durham's Report and Append.; Geog. Trans.; M'Gregor's Brit. America, &c.*)

CAPE CLEAR, a bold promontory, rising 400 ft. above the level of the sea, on the S. side of Clare Island, near the W. extremity of St. George's Channel, and about 7 m. S.E. from Baltimore, co. Cork, Ireland. Adjoining the Cape is a lighthouse of the first class, with revolving lights, having the lantern elevated 455 ft. above the level of the sea. The lighthouse is in lat. 51° 26′ 3″ N., long. 9° 29′ 20″ W. This is the point from which ships leaving St. George's Channel for the W. usually take their departure, and those arriving prefer making it their landfall.

CAPE DE VERD ISLANDS (Port *Ilhas Verdes*), a group in the N. Atlantic Ocean, belonging to Portugal, between lat. 14° 20′ and 17° 20′ N., and long. 22° 20′ and

25° 30′ W., about 320 m. W. Cape de Verd, on the W. coast of Africa, which, as well as the islands, derives its name from the greenish tinge given to the adjoining sea by the abundance of sea-weed. The group consists of 10 or 12 islands, besides islets and rocks, having a united area of about 1,790 sq. m., and a pop. (1831) of 88,460, —30,000 of whom are said to have been swept off by a famine in 1833. (*Cannabich.*) They are, in general, mountainous, rocky, and very ill supplied with water; are all evidently of volcanic origin; and in Fogo, the most elevated of the group, an active volcano still exists. The heat is extreme from November to July, and for the rest of the year storms and fogs are prevalent, and the climate is exceedingly unhealthy. Droughts are of frequent occurrence; and sometimes, as was the case previously to 1833, no rain falls for 3 or 4 years together. The soil, where not composed of volcanic matters, is chiefly calcareous or sandy, dry, stony, and in many parts barren. Vegetation is consequently partial; but, in various places, it is very vigorous, and rice, maize, bananas, oranges, melons, pomegranates, and other fruits, both of Europe and the tropics, grow abundantly. The first two products constitute the chief food of the inhabitants; but agriculture is neglected, and the wheat that is consumed is brought from America. This, however, is not so much a consequence of the poverty of the soil, or the indolence of the inhabitants, as of the rapacity and short-sightedness of the government which fleeces the cultivators of every thing that can, under any pretext, be laid hold of. Oranges, lemons, melons, &c., come to great perfection, and the guavas, figs, sweet potatoes, and gourds, are excellent. Vines and sugar-canes are cultivated to some extent; but the making of wine is prohibited. Indigo and cotton are indigenous. One of the principal products is orchilla weed, which here attains to great perfection; it is monopolised by the government, and is supposed to yield a revenue of about 50,000*l.* a year. Some parts are well wooded, chiefly with the tamarind tree, Adansonia, palms, &c. Goats, asses, and poultry, are the most numerous domestic animals; monkeys, wild cats, wood pigeons, and other birds, and turtles are plentiful. There is no dangerous animal; but clouds of locusts often do much damage to the crops. Chief manufactures those of leather and salt. Notwithstanding the severe droughts, the actual produce of these islands in cotton, indigo, fruits, salt, goat-skins, and turtle-oil, might give them a considerable value under a more intelligent government. The other chief articles of export are cotton, indigo, some cattle, ox hides, cotton cloths, and rum. St. Jago, the principal island and most southerly of the group, contains the town of Ribiera Grande, formerly the cap.; but during the dry season, the governor-general now usually resides at Port Playa, which has a good harbour, and is occasionally touched at by vessels bound for India. Porto Grande, in the island of St. Vincent, is however decidedly the best harbour in the group. Ships in it are completely sheltered from wind and sea. In St. Nicolo, the island second in importance, very good cotton stuffs, stockings, &c., are made. The pop. are a mixed race of Portuguese and negroes; but all have an exceedingly dark colour.

These islands were first discovered in modern times, in 1450, by Antonio de Noli, a Genoese navigator, in the service of Prince Henry of Portugal, by which nation they were soon after taken possession of, and colonised. (*Malte Brun*, iv. 467—469.; *Purdy's N. Atlantic Ocean, &c.*)

CAPE HAYTIEN, a seaport town of Hayti, originally called by the Spaniards Guarico, and afterwards by the French Cape François, or Le Cap., on the N. shore of the island, 90 m. N. Port-au-Prince, lat. 19° 46′ 20″ N., long. 72° 14′ W. Pop. probably from 12,000 to 16,000. This town, formerly the cap. of the island, was, previously to the revolution, "remarkably beautiful, and must have been, during its glory, the most agreeable residence in the W. Archipelago." Streets broad and well paved; houses chiefly of stone, with handsome squares, large markets, and a copious supply of water. "But now little more is to be seen than the traces of its former grandeur: even in the Place d'Armes, the handsomest square in it, some of the finest houses are unroofed, and plantain trees are growing in the middle of the ruins. The church, which was handsome, is in ruins, as are the theatre, government house, Jesuit's college," &c. (*Mackenzie.*) It is built on the verge of a very extensive, well-watered, and fruitful plain; but being screened on the N. and W. by a mountain (Morne Cap), it is exposed to all the violence of the sun's rays, and is, in consequence, not very healthy. The harbour and road, to the E. and S. of the town, are protected on the N. by a projecting tongue of land. The entrance is rather difficult; but the anchorage is good, and the quays handsome. The defences towards the sea are respectable. The arsenal was constructed in the reign of Louis XV. Under the French, Cape Haytien was, as well as Port-au-Prince, occasionally the seat of government; and it continued to enjoy this distinction under Toussaint and Christophe. Its trade, though greatly fallen off, is still very considerable. It is principally carried on with the U. States. (*Mackenzie's Notes on Hayti*, i. 152., &c.)

CAPE HORN, a famous promontory of S. America, commonly regarded as the S. extremity of that continent. In point of fact, however, Cape Horn does not belong to the continent, but to a small island of the same name, the most S. of the Tierra del Fuego group, separated from the continent by the Straits of Magellan, or Magalhaens. Cape Horn is the most S. point of the island; and is high, black, precipitous, destitute of all vegetation, and having a most desolate appearance. According to Weddell, it is in lat. 55° 59′ 21″ S., and long. 67° 14′ W.; Malespina places it in lat. 55° 58′ 30″ S., and 67° 21′ 15″ W. The dangers attending the doubling of Cape Horn have, in consequence of the improvements in navigation, been very greatly diminished. The coast may be approached with comparatively little danger; the water being deep, and free from either rocks or shoals. Different opinions are entertained as to the proper season for passing the Cape. Captain Hall prefers the summer (that is, the winter of the N. hemisphere) on account of the greater length of the day, and the comparative fewness of icebergs and floating masses of ice, which are always dangerous. (*Hall's S. America*, ii. Append. 16.)

CAPE OF GOOD HOPE, a celebrated promontory near the S. W. extremity of the African continent, lat. 32° 23′ 40″ S., long. 18° 32′ 25″ E. It was first seen by Europeans (in modern times) in 1486, Bartholomew de Diaz, a Portuguese commander, having been its discoverer. Diaz, however, merely saw it; the violence of the winds, the shattered condition of his ships, and the turbulence of his crews, prevented him from doubling it; and these circumstances doubtless induced him to name it *Cabo Tormentoso*, or "Stormy Cape." But his sovereign, John II., of Portugal, believing it to be at or near that remote extremity of Africa which the Portuguese had been so long endeavouring to reach, designated it *Cabo di Buena Esperanza*, of which the name we give it is a translation. Vasco de Gama doubled it in 1497, after which it continued for more than a century and a half to be indiscriminately resorted to by European navigators. (For the rest of its history, see succeeding article.)

Cape of Good Hope (Colony of), an extensive colony, or rather territory, so called from the above cape, belonging to Great Britain, in S. Africa, comprising the greater portion of the extremity of that continent S. of lat. 29° 30′, and between long. 17° and 27° 30′ E. It has N. the country of the Bosjesmans (Bushmen), Hottentots, &c., from which it is separated N.W. by the Koussie or Sand River, and N. E. for a considerable distance by the Nu-Gariep, afterwards called the Orange River; E. it has the country of the Kaffers or Caffres, from which it is in part separated by the Keiskanna River, and S. and W. the Indian and Atlantic Oceans, on which it has a coast line of about 1,150 m., broken by numerous bays, the principal of which are St. Helena, Saldanha, and Table Bays on the W., and False Bay, St. Sebastian's, Mossel, Plettenburg, St. Francis, and Algoa Bays on the S. coast. Length of the territory, E. to W., about 500 m.; average breadth, N. to S., 220 m., giving an area of about 110,000 sq. m. Pop., subdivisions, &c., in 1848, according to the Cape Register of 1850, were as follows: —(See Table top of next page.)

Topography.—The whole country consists of three successive plateaus increasing in elevation according to their distance from the sea, and separated from each other by as many chains of mountains. The first great chain running E. and W., the Lange Kloof, or Long Pass, "encloses between it and the S. coast an irregular belt of land from 20 to 60 m. in width, indented by several bays, covered with a deep and fertile soil, intersected by numerous streamlets, well clothed with grass and small arboreous or frutescent plants, well wooded in many parts with forest trees, supplied with frequent rains, and enjoying, on account of its proximity to the sea, a more mild and equable temperature than the more remote and interior parts of the colony." (*Barrow.*) The next great chain, the Groote Zwarte Bergen (Great Black Mountain), is considerably more rugged and lofty than the first, reaching sometimes to 4,000 ft. in height, and consisting in many places of double and even treble ranges. The belt or terrace enclosed between it and the first chain is about the mean width of that between the first and the sea. Its surface is very varied; it is composed in some parts of barren hills, in others of naked arid plains of clay, called *karroo*, and again in others of fertile and well-watered patches of land. The temperature is here less uniform than in the grounds skirting the sea. The third great mountain chain, the Niewveldt Gebirgte, between lat. 32° and 33°, is continuous towards the E. with the Schneeuw-bergen (Snow Mountains), the highest range in S. Africa, the loftiest summit of which is estimated at not less than 10,000 ft. in height, and is covered with snow for nearly half the year. Between this and the second chain is the *Great Karroo*, an arid desert plain nearly 300 m. in length by from 80 to 100 m.

Districts.	Area in Sq. Miles.	Whites.		Coloured.		Grand Total.	Births.	Marriages.	Deaths.	Chief Towns.
		Males.	Fem.	Males.	Fem.					
Cape Town	about 9½	—	—	—	—	22,543	656	194	267	Cape Town (the cap.)
Cape Division	3,584	2,915	2,863	3,964	3,437	13,209	521	296	214	Simon's Town.
Stellenbosch	2,280	3,792	3,760	5,840	4,549	17,459	1,012	185	530	Stellenbosch.
Worcester	20,000	2,076	2,012	2,264	1,917	8,299	250	67	164	Worcester.
Clanwilliam	22,111	1,413	1,445	3,162	3,172	9,192	301	81	455	Clanwilliam.
Zwellendam	7,616	5,483	5,120	5,671	5,025	21,299	744	219	391	Zwellendam.
George	4,032	3,603	3,314	3,279	3,095	13,291	431	111	149	George Town.
Beaufort	13,050	1,759	1,456	1,610	1,597	6,422	297	16	124	Beaufort.
Uitenhage	8,960	2,523	2,225	3,426	3,034	11,208	377	225	205	Uitenhage.
Albany	1,792	4,860	4,650	3,750	3,120	15,880	650	200	320	Bathurst.
Somerset	4,000	1,355	1,055	1,193	1,224	5,807	571	171	87	Somerset.
Cradock	3,168	2,264	2,222	2,193	2,480	9,059	295	149	121	Cradock.
Graaf Reinet	8,000	2,204	2,201	2,270	2,140	8,815	319	75	175	Graaf Reinet.
Colesbery	11,654	2,339	2,164	1,630	1,595	7,728	674	66	182	Colesbery.
Aliens	—	—	—	—	—	10,493				
Total	110,256½	36,596	34,517	40,052	35,985	180,186	7,126	2,054	3,365	

SUMMARY of the Population.

	Males.	Females.	Total.
Whites	36,596	34,517	71,113
Coloured	40,052	35,985	76,037
	76,648	70,502	147,150
Aliens and resident strangers			10,493
The army, 1st Jan. 1847			5,473
Grand Total			163,116

in breadth. "This is not a sandy plain, and bears no resemblance to the Sahara or Arabian deserts. It consists of a sort of table-land, or elevated basin, thinly covered with an argillaceous soil, largely impregnated with iron, upon a substratum of rock or gravel. Some large portions of it are perfectly level, but in others the surface is diversified by slaty hills, and eminences, some of which would appear considerable save for the lofty mountains which bound the Karroo on all sides except towards the E., where it extends into Camdeboo. Its medium height above the level of the sea is estimated at about 3,000 ft. It is crossed by many beds of rivers, or rather torrents, most of which run from N. to S., and find an exit for their waters to the coast through a few breaks in the S. chain of mountains. These rivers, however, are for the greater part of the year either entirely dried up, or furnish only a few scanty pools barely sufficient for the wild animals, zebras, quaggas, ostriches, &c., which frequent this inhospitable region. Not unfrequently even those brackish pools and fountains also fail, as was the case at the time of our journey; and then the Karroo becomes almost impassable by man, and a large portion of it uninhabitable even by the wild beasts.

"In such a region, where rain is rare, and dews almost unknown, the vegetation must of necessity be at all times extremely scanty: and in summer, when the sun has dried the soil to the hardness of brick, it ceases almost entirely. Except along the courses of the temporary rivers, which for the most part are marked by a fringe of mimosas, not a tree nor a bush, nor a blade of grass, decks the wide expanse of the waste. Low stunted shrubs resembling heath; numerous species of fig marigolds, and ice-plants (*mesembryanthemum*), ghanna-bosch (*salsola*), gorteria, asters, &c.; some sorts of prickly euphorbia, and other succulent plants; and bulbs, whose roots nature has fortified with a tenfold net of fibres under the upper rind, to protect them during the long droughts, are alone able to subsist in the arid Karroo. During the dry season even these appear to be for the most part parched into a brown stubble, thinly scattered over the indurated or slaty soil; but in the early spring, when the ground becomes moistened with the fall of rain, these plants rush into vegetation with a rapidity that looks like enchantment; and in a few days millions of flowers of the most brilliant hues enamel the earth. It is chiefly at this season, when the whole dreary waste may be said to be transformed into a vast flower-garden, that the colonists of the Schneeuwberg, the Nieuwveldt, the Bokkeveldt, and the Roggeveldt, whose alpine farms are then chilled with keen frosts and the piercing mountain winds, descend into the Karroo to pasture their herds and flocks on the short-lived vegetation." (*Pringle's Sketches*, p. 297.)

From the W. coast the country ascends in a similar manner towards the interior by successive plateaus, separated by mountain chains, the loftiest of which, the Roggeveldt (Rye-field) Mountains, reach to upwards of 5,000 ft. above the level of the sea, and unite about long. 21° with the Nieuwveldt chain. To the N. of all, and near the boundary line of the territory, there is a chain of mountains, the height of which is estimated at 9,000 ft. The whole tract of country to the N. is much more sandy, barren, and thinly inhabited, than that to the E., which seems to increase in beauty and fertility in proportion as it is distant from the Cape. The third great chain of mountains forms the watershed, or division between the streams which flow N. into the country of the Bosjesmans, and those which have a S. or W. course through the colonial territory. On its N. side rise the Great Riet, Braak, and other affluents of the Orange River; on its S. side, the Great Doorn (Thorn), the Gamba, or Great Lion, Camtoos, Sunday, Great Fish, and other rivers. The principal streams on the W. coast are the Great Berg (or Mountain) and Olifant or Elephant River; both are navigable by small craft for about 20 m. inland, but the mouth of the former is choked up with a bed of sand, and that of the latter has a reef of rocks across it. The chief of those which discharge themselves on the S. coast are the Breede or Broad River, the Gauritz, Camtoos, Sunday, and Great Fish Rivers. Nearly all of them, unfortunately, have bars or other obstructions at their mouths, rendering them in great part useless for navigation. The Broad River, however, may be navigated by small craft for about 30 m., and its mouth, which is called Port Beaufort, allows vessels of 200 tons to enter in safety. The Gauritz, formed by the union of several other streams, is in the rainy season a large and rapid river; but in the summer months has only a very weak current, while the bar at its mouth is then generally dry. The Camtoos has within its bar a wide basin deep enough to float a ship of the line, but the bar itself is fordable at full, and frequently dry, at ebb-tide. Besides the above there are a number of smaller rivers; but, for the most part, they are either dried up during a part of the year, or run in such deep chasms as to be nearly unserviceable.

Considering the great extent of coast, good harbours are few. Saldanha Bay, 65 m. N.N.W. Cape Town is by far the most commodious. Ships lie safely in Table Bay at Cape Town during the prevalence of the S.E. monsoons from Sept. to May; but after this, when the N.W. winds set in, they are obliged to resort to Simon's Bay, in False Bay. This harbour is protected on the W. by the peninsula of the Cape, and affords shelter all the year round; it is consequently much frequented by our ships of war, transports, and store ships in their voyages to and from the E. Indies, and is the station of the Cape squadron. Plettenburg's Bay is open to the S.E.; but affords safe anchorage in 8 or 10 fathoms water, and desirable shelter, during strong N.E. or N.W. gales, to vessels intending to make Table Bay. Algoa Bay, the most E. but one, is exposed to the prevailing winds; but it contains good anchorage; Port Elizabeth, the principal port next to Cape Town, is seated on it.

Climate. — Though in general temperate and healthy, the climate is neither steady, agreeable, nor suitable for agricultural purposes. In the S.W. districts rains, in the cold season, are profuse; but in summer they are of rare occurrence, and during the greater part of that season the ground is parched up with drought. The deficiency and irregularity of the rains are, in fact, the great drawbacks on the colony. In some of the more northerly tracts bordering on the Great Karroo there has occasionally been no rain for three years together; and even in the more favoured districts of Albany and Uitenhage, and generally throughout the greater part of the colony, the rain, when it does come, descends in torrents that swell the smallest streams to an extraordinary magnitude, and occasion great damage. Sometimes the S.E. wind is really a species of simoom, and is not only excessively hot, but is loaded with impalpable sand, which it is all but impossible to shut out; but as the breeze continues, it gradually cools, and usually, in about 24 hours, becomes supportable. The mean temp. of the year, at the cap., is about 67½° Fahr., that of the coldest month being 57°, and of the hottest 79°. Cape Town is a customary place of resort for invalids from India, who certainly benefit by the change; though perhaps they

have been led to visit it as much from its being within the limits of the E. I. Company's charter, which entitles servants of the Company resident there to full pay, as from its salubrity.

The beautiful white cloud frequently seen during the S.E. monsoon, resting on Table Mountain, and thence called the "Table Cloth," is occasioned by the condensation of the moisture in the air, cooled by contact with the mountain. During the prevalence of this phenomenon, the cold air often rushes down the sides of the mountain with such impetuosity, as to be fatal to shipping in the bay. Hail storms are occasionally very violent and destructive. Owing probably to its elevation, the cold of winter in the Great Karroo is much more severe than could have been anticipated from its latitude. (See *Cape Almanac for* 1838, &c.)

Geology, Minerals, &c. — The general geological character of the Cape is that of a region of sandstone resting upon a base of granite. In proportion as the latter rock is near the surface, as occurs on and round Table Mountain, springs are abundant; but wherever the granite lies at a considerable depth, as is the case throughout a great portion of the country, the contrary obtains. The territory generally suffers from a deficiency of water. Limestone is found in the E.; clays and sand of various kinds compose most of the surface of the plains; an alluvial loam and black peat mould are very abundant in some of the lands skirting the sea. Very pure and white alum; saltpetre and salt, with which the ground in some of the N. parts of Graaf Reinet and in the Great Karroo are impregnated, coal, iron, galena, argentiferous lead, a little copper, cornelians, bloodstone, &c., are amongst the chief mineral products. Sulphurous, nitrous, and other mineral springs, are not rare, and several natural salt-pans exist at a considerable distance from the coast. In Beaufort district fossil remains of the mammoth have been met with. (*Mod. Trav. &c.*)

Vegetable Products. — The *Flora* of the Cape is very remarkable; its species are extremely numerous, varied, and elegant; but they want the aroma, whose sweetness fills the flower-gardens of Europe. Bulbous plants are particularly plentiful; and the tribes of *ixia, iris, antholiza, gladiolus, amaryllis*, and *geranium*, are both abundant and beautiful; and some of the most magnificent plants that adorn our gardens and greenhouses are brought from this part of the world. Still, however, as Malte-Brun has judiciously remarked, "the vegetation of the Cape Colony does not satisfy either the eye or the ideas of a European. Rocks and sands every where prevail. The fields are separated by deserts; the green turf, scattered and thin, nowhere presents a close sward; the forests, filled with pointed trees, have neither a delicious coolness nor a solemn darkness." (Book 70.) The Cape olive tree, and the *sophora* (a tree like the ash), furnish some wood for joinery; but, except on the E. frontier, in the distr. of George, and in some spots near False Bay, there is generally a great deficiency of timber and fire-wood. The only spontaneous vegetable product that is turned to much account, is the aloe, which grows over a large surface in the distr. of Zwellendam, and for which the farmers sometimes get as much as 20*l.* a load at Cape Town.

Animals. — The elephant, rhinoceros, hippopotamus, lion, leopard, hyæna, jackall, zebra, quagga, masked boar, antelopes of various kinds, monkeys, racoons, squirrels, &c., are natives of the Cape; but many of these have now become comparatively rare, at least within the old limits and accessible districts of the colony. The rhinoceros is nearly extirpated; the hippopotamus is found only in the Great Fish and Kei rivers; and the elephant and lion have retired from all the old settled districts. Leopards and hyænas are still, however, by no means uncommon, particularly in the eastern districts, and are exceedingly voracious and destructive. The Cape buffalo (*Bos Caffer*) is a powerful and a formidable animal, which has not hitherto been tamed, and is probably untameable. Antelopes of all kinds are exceedingly numerous; and it is said that as many as 5.000, 10,000, and even 40,000 springboks have sometimes been seen bounding along in a single herd! Eagles, vultures, and other large birds are met with. In the Great Karroo, and along the skirts of the N. deserts, the ostrich is abundant: it is occasionally seen in large flocks, and is eagerly hunted for the sake of its plumage, which meets with a ready and advantageous sale. It is very wary and difficult to come near: small birds are numerous and beautiful, but deficient in song. Lizards and other species of amphibia are met with; and the serpent tribe is both numerous and dangerous. Some rivers are well stocked with fish; but in general this is not the case, a consequence probably of the greater number of the rivers being nearly dried up in the hot season. A particular variety of locust (*Gryllus devastator*, Lich.) occasionally commits dreadful ravages. They always come from the N., and are no doubt bred in the interminable deserts of the interior. Their inroads appear to be periodical. They are devoured by the Bushmen and Hottentots.

People. — The European inhabitants consist in part of the English authorities and English settlers; but the majority are of Dutch, German, or French origin, being the descendants of the original settlers. The black are Hottentots and Kaffers; the remaining portion of the pop. consists of Malays and Africanders (the offspring of a black woman and a Dutch father). The Dutch, in the more civilised districts, are distinguished for sobriety, prudence, and economy, and by their hospitality and benevolence towards whites; but various travellers, and Mr. Barrow in particular, have given a very unfavourable picture of the boors, or farmers of the interior, describing them as indolent, rude, and brutal in their manners, and cruel and unfeeling towards their slaves and the native inhabitants. But whatever of truth may be in these statements is accounted for by the circumstances under which the boors are placed, at a great distance from each other, and leading in general a pastoral semi-barbarous life. We believe that there is really no ground whatever for accusing the Dutch of unusual barbarity in their intercourse with the natives. In this respect they are quite on a level with other European nations. And those who read the works of Dr. Philip and Mr. Pringle, and the official papers with regard to the Kaffer wars, will most probably be of opinion that we, at all events, have no very peculiar right to censure them. We have elsewhere given pretty full accounts of the Hottentots. Like other savage and uncivilised tribes, they have suffered severely from the settlement of whites among them, by whom they have been despoiled of their lands; and those that were not exterminated or driven into the desert, were reduced to a state of substantial slavery. At length, however, the British government interposed in favour of all classes of natives; and by an order in council dated the 15th of Jan. 1829, placed them on the same footing, in respect of civil rights, as the other free subjects of the colony. This wise and liberal measure made less immediate change than was anticipated in the condition of the natives. They can no longer, indeed, be flogged at the pleasure of their masters, nor their children forcibly taken from them, nor be sold along with the estates on which they lived; but in other respects their condition is nearly the same. They continue to be without consideration in society, and are now, as formerly, the servants of the colonists; who employ them, partly as cultivators, but mostly as shepherds and herdsmen, occupations for which they are extremely well fitted.

The Kaffers on the E. border are both physically and mentally a far superior people to the Hottentots. They are tall, robust, and muscular. Their complexion varies from a dark bronze to a jet black. They practise agriculture to some extent, raising maize, millet, kidney beans, and water melons. But they are, notwithstanding, a pastoral rather than an agricultural people; have large herds of cattle; and are, in fact, semi-nomadic. They have the art of working iron, and manufacture a rude sort of earthenware. (*Prichard's Researches*, ii. 287.) They practise polygamy and circumcision; and have some of the worst vices of savages, being treacherous, cruel, and vindictive. They appear to consider the cattle of their neighbours as a sort of *feræ naturæ* which it is meritorious to attack and carry away. The greater number of the contests in which we have been engaged with them, have originated in this thievish propensity, or in their attempts upon the cattle of the colonists. The eastern parts of the colony have suffered very severely from these contests; and it was only with difficulty, and by the employment of a strong military force, that some of their late irruptions were repelled. It is, we are afraid, in vain to expect that the conflicting interests of the colonists and the aborigines should ever be reconciled, or that European civilisation should ever take any firm root amongst the latter. Very little communication takes place between the negroes, Africanders, and Malays, each race holding the others in contempt. (*Pringle's Sketches; Thompson's Trav.* ii.; *Quarterly Review; Cape in* 1822; *Ritter, &c.*)

Agriculture. — According to the official returns for 1833, the land in cultivation in the colony was estimated at about 224,000 acres, of which 124,494 were in wheat, 46,626 in barley, 12,939 in rye, 49,645 in oats, 20,554 in vineyards and gardens, &c. The pasture land was, at the same time, estimated at 17,510,000 acres, and the waste lands at 9,757,000 acres. (*Colonial Returns for* 1833; *Board of Trade Papers.*) The crop lands are principally situated in the districts of Worcester, Stellenbosch, and the Cape in the W., and in Albany in the E. Agriculture is in a backward state, though perhaps not so much so as is usually stated. The boors are industrious, sober, and parsimonious; but they are, at the same time, strongly attached to ancient habits and routine practices. Better implements have, however, been

introduced, and various improvements effected of late years. Agriculture is injured by the Dutch law of succession, which, by dividing a man's property equally among his children, hinders the accumulation of capital in masses, and the formation of proper farming establishments. (*Thompson's Travels*, p. 324. 4to. ed.) In some limited districts the soil is very fertile, and the crops and quality of the grain excellent; but the greater part of the arable land is but of indifferent quality, and the crops are very liable to be injured by droughts, hail-storms, rust, &c. It would appear, from the official returns already referred to, that 124,500 acres in wheat, in 1833, produced only 528,147 bushels! But this must evidently be an error, as a return of less than 5 bushels an acre would not defray the expense of cultivation. Probably *muids* (a muid is equal to about 3 bushels) are meant; and even on this hypothesis, the return would be very indifferent.

The farms occupied by grazers are often of very great extent, comprising from 3,000 to 10,000 acres, and upwards: those in tillage are comparatively small. The boors are, for the most part, proprietors of the farms which they occupy, paying a quit rent to Government as the original owner of the soil. Such a thing as land on rent, from the owner to another, is almost unknown. The transfer of land from one individual to another is effected with the utmost facility, and "without the possibility of fraud." Property seldom remains long in one family. Owing to the law of equal succession, farms are frequently sold on the death of the owner; sometimes the whole is purchased by one son, but it is frequently split into parts. Hence there is here, as Mr. Colebrooke says, no attachment to or preference of one's native place: so much land of such a quality, or worth so much, no matter where, is the only thing a Cape Dutchman cares for! (*Cape in* 1822, p. 104.)

The vineyards are mostly in the vicinity of the Cape, where the vine-growers occupy freehold farms of about 120 acres each. The vine (*Vitis vinifera*) has been long introduced to the Cape, and has for a lengthened period been cultivated with more or less attention. The culture, however, made no great progress till 1813, when the duty on Cape wines imported into this country was reduced to a third part of the duty levied on the wines of Portugal and Spain. But, excepting Constantia, Cape wine, whether from the vines being planted in an unsuitable soil, or from a want of care in the preparation of the wine, or both, has an earthy taste, and is generally very inferior; and the consequence of this reduction of the duty has merely been to increase the quantity grown and imported, without in any degree improving its quality, and to make it be employed as a cheap and convenient menstruum for adulterating more expensive wines. It were well, therefore, were this fictitious encouragement withdrawn, and Cape wine charged with the same duty as other wine. At present (1850) the average consumption amounts to about 270,000 gallons a year; of which we believe two thirds or more is employed to adulterate sherry and Madeira.

Constantia is produced on a farm of that name at the E. base of Table Mountain, 8 or 9 m. from Cape Town. Its soil consists of decomposed sandstone, and is consequently more analogous to the soils which produce fine wine in Europe than the richer clayey soils where the ordinary vineyards are planted. Greater care is also taken in the production of the wine, and in consequence of these, and probably other causes, it is very superior. It is luscious, sweet, has a strong flavour, and being produced in limited quantities only, fetches a pretty high price. It is probable, however, that Constantia, or a wine closely approaching to it, might be produced in other parts of the colony, were sufficient pains taken. (*Henderson on Wines*, p. 256, &c.)

Potatoes yield two crops a year. The fruits of N. Europe, as cherries and apples, have somewhat degenerated, but figs, apricots, almonds, and oranges are as good as in France. Grapes are particularly good on the W. coast. Tobacco succeeds well except in clayey soils, or in situations exposed to the S. E. winds: but its culture is, notwithstanding, confined within very narrow limits. Tea was introduced by the Dutch, and some was raised of a tolerably good quality; but, how favourable soever in other respects, labour is too dear in the Cape colony to allow of tea being made a profitable article of culture. Dried fruit and aloes are important articles of export. There are large herds of horses and cattle.

The climate is suitable for sheep, and great endeavours have been made to improve the breed by the introduction of merinos from England and Australia; and we are glad to have to state that these efforts have proved successful, and that the numbers of sheep and the export of wool have been largely increased. The native breed of sheep is very inferior; it is remarkable only for the size of the tail, which sometimes weighs 20 lbs.: its wool is good for nothing. Goats, which are very numerous, serve for the food of the Hottentot farm-servants; oxen are used for draught in large teams. Herds of all these animals wander during the day over large grazing farms of from 3,000 to 6,000 acres, and at night are shut up in *kraals*, or inclosures. Hogs attract only a small share of attention, but turkeys, geese, ducks, and other poultry, are reared in great numbers. (*Barrow*, ii.; *Ritter*, *Géogr. Générale*, p. 161, 162.; *The Cape in* 1822; *Mod. Trav.*, &c.)

Fisheries, Mines, Manufactures, &c. — The fisheries are somewhat important. In 1836, 47 boats were employed in the whale, seal, &c. fisheries, and during that year, 18 whales, 68 seals, and other fish were taken, their total value amounting to 3,349*l.* Mining industry has made little progress; but slate, lime, and building stone are quarried. Almost every farmer in the interior makes his own candles and soap, the alkali necessary for the latter being furnished by the consumption of a kind of *salsola*, which grows plentifully on such parts of the waste tracts as are at all watered. The other manufactures are mostly confined to those of leather, hats, snuff, saddles, tiles, rope, and a few other articles of a necessary kind; a few wind, water, and saw-mills now exist in most of the districts, and in Cape Town there is a steam flour-mill. There are several breweries and spirit distilleries, which, as well as other manufacturing establishments, are most numerous in the W. part of the territory.

Commerce. — The cultivators of the interior send their surplus agricultural produce, wool, butter, soap, candles, ostrich feathers, skins, &c., to the principal towns at stated intervals, and take back in return European manufactures, tobacco, brandy, coffee, &c. The chief foreign imports of the colony consist of woollens, cottons, hardware, earthenware, fire-arms, furniture, paper, books, haberdashery, soap, and portions of most other articles in use in the U. Kingdom, piece goods; sugar and teak timber from India; tea from China; sugar from the Mauritius, &c. The principal articles of export are — wool, wines, corn and flour to the Mauritius and Rio Janeiro, hides, skins, horns, salted provisions, horses, butter, ivory, whale oil, aloes, argol, &c. The hides, skins, and horns come chiefly from the E. province. The salt beef and other cured meats are very good, and are largely exported to the Mauritius. The export of wool, especially from the eastern districts, has, for some years past, been greatly on the increase, and it is now become the greatest and most profitable of the colonial staples. We subjoin an account of the quantities and values of the principal articles of colonial produce exported from the Cape colony in 1818.

Description and Quantity of Articles.			Value. £.	s.	d.
Aloes	312,787	lbs.	3,686	0	0
Argol	58,520	—	881	0	0
Beef and Pork	2,301	casks	6,549	0	0
Bone (Whale)	2,852	lbs.	141	0	0
Butter	122,735	—	5,324	0	0
Candles	51,519	—	2,017	0	0
Corn, Grain, and Meal, viz. —					
Barley	5,474	muids	2,167	0	0
Beans and Peas	1,506	—	1,955	0	0
Bran	359,752	lbs.	1,162	0	0
Flour	927,496	—	9,490	5	0
Oats	5,465	muids	2,263	0	0
Wheat	72	—	71	0	0
Feathers (Ostrich)	1,083	lbs.	5,141	0	0
Fish (cured)	1,422,691	—	8,154	0	0
Fruits (dried)	290,785	—	4,188	8	0
——— (green)	35,160	—	64	0	0
Hides (Horse and Ox)	28,085	No.	11,493	0	0
Horns	68,403	—	1,052	0	0
Horses	96	—	3,230	0	0
Ivory	22,427	lbs.	4,536	0	0
Mules	21	No.	210	0	0
Oil, viz. Whale	4,604	galls.	355	0	0
Skins, viz. Calf	258	No.	16	0	0
Goat	153,922	—	16,502	0	0
Seal	168	—	100	5	0
Sheep	223,468	—	8,149	5	0
Spirits, viz. Brandy	4,401	galls.	672	0	0
Tallow	211,864	lbs.	3,428	0	0
Wax	980	—	50	5	0
Wine, viz. Constantia	2,665	galls.	2,041	0	0
Ordinary	513,234	—	46,994	0	0
Wool	3,670,920	lbs.	155,213	0	0
Other Articles	-	-	20,018	0	0
Total			327,115	3	0

The gross amount of the trade in 1849 was as follows:

Ports.	Imports.	Exports.
Cape Town	822,373	368,400
Simon's Town	3,163	2,401
Port Elizabeth	326,482	143,575
Total	1,152,01‹	514,376

During the same year, 515 ships entered the different ports of the colony from foreign parts, having a united

tonnage of 175,819 tons; outward bound ships for foreign parts, 506, tonnage 176,083 tons.

Weights, Measures, &c. — The weights generally in use are those which were introduced by the Dutch. Some of these are as follows: — Pound $\left\{\begin{matrix}\text{16 ounces}\\ \text{32 loods}\end{matrix}\right\} = \frac{91\cdot5}{100}$ lb. avoird.; muid (4 schepels) = 3 imp. bushels nearly; leaguer = 126·6 imp. gallons; pipe = 91·6 do.; Aum = 31⅜ do.; anker = 7·9 do.; flask = 0·4946 do.; 128¼ ells = 100 English yards; $49\frac{71}{100}$ morgen = 100 English acres.

The coin in circulation is exclusively British. There was estimated, in 1838, to be 530,000*l.* gold and silver circulating medium; the amount of paper currency in the same year was set down at 198,740*l.* (*Cape Register*, 1838.) The paper rix-dollar is worth 1*s.* 6*d.*

Public Revenue is derived from custom duties imposed in 1847 on goods imported and exported, stamps, licenses, auction and transfer duties, port dues, land store and rents, postage, assessed taxes, tithes, and duties on stock and produce, interest of money in the government banks, discounts, &c., tolls and ferries, fines, &c. It amounted, in 1845, to 243,758*l.*, or, deducting the expenses of collection (19,062*l.*), to 224,696*l.*; the expenditure during the same year was 218,816*l.*

Government. — Until very lately the government was vested in a governor and a legislative council nominated by the crown. But a more liberal and responsible system of government having been demanded by the colony, it has, after much discussion, been granted. The principles of the new constitution are embodied in a Report by the Board of Trade, approved by Her Majesty in Council on the 30th of January 1850. The legislative authority is henceforth to be vested in, 1st, a governor appointed by the crown; 2d, in a House of Assembly elected for 5 years by persons whose property has been assessed for the expense of the public roads; and 3d, in a Legislative Council chosen for 10 years by a class of electors which it is proposed shall consist of the parties elected by government, or by their fellow-citizens, to fill certain situations of trust and responsibility. With the exception of the introduction of the elective principle into the composition of the legislative council, this constitution is modelled upon that of the U. Kingdom. It could not have had a better archetype; and it is to be hoped that it may be equally successful with the latter in maintaining the property, rights, and privileges of those subject to its authority, and in providing for their prosperity. Each prov. is administered by a lieutenant-governor, and each district by a civil commissioner, subordinate to whom are the field cornets, magistrates superintending tracts of country 15 or 20 m. in circuit each, with jurisdiction in trifling disputes, and power to call out the burghers of their field-cornetcy armed. These magistrates, unless on the Kaffer frontier, receive no salary, but are exempted from all direct taxes.

Justice is administered by a supreme court of judicature, presided over by a chief justice, with a salary of 2,500*l.*, and three puisne judges, whose salaries are 1,500*l.* a year, a high sheriff, and deputy sheriffs for each district, a court of vice-admiralty, police and matrimonial courts, &c. Civil and criminal circuit courts are held. The laws in operation are a modification of the Dutch civil and criminal code, and "Statutes of India," established before our taking possession of the colony, and supplied, when found deficient, by the *Corpus Juris Civilis*. Trial by jury in criminal cases has been established. The Dutch language, formerly used in courts of law, has been superseded by the English.

Religion, Education, &c. — The Dutch and English Reformed Lutheran, Roman Cath., and Presbyterian churches in the Cape are all entirely or in part supported by the government. There are numerous missionary schools; and Bell's, Lancastrian, and other free schools in each district, which, in 1836, were attended by 1,559 pupils, and received the support of the government to the amount of 1,465*l.* A joint stock institution, entitled the "South African College," with five professors, was established at Cape Town in 1829.

The Military Force in the colony on the 1st of January, 1847, amounted to 5,975 men, of which 502 were native troops. They are usually stationed at Cape Town and Graham's Town. They include a detachment of royal artillery, a party of the royal engineers, and a regiment of mounted riflemen, termed the Cape cavalry, the privates and non-commissioned officers of which are principally Hottentots.

The naval force is under the command of a rear-admiral, with authority along the E. and W. coasts of Africa, and the Mauritius and St. Helena.

The possession of this colony is important from its being, as it were, the key of the Indian Ocean, and forming a depôt whence ships and troops may be despatched with facility and expedition to most parts in S. India, the E. Archipelago, and Australia. It is probable, too, that in time it may become, intrinsically, a valuable colony; though, from the limited extent of its fertile land, and the other disadvantages attending it, a rapid progress need not be looked for. The average number of emigrants leaving the U. Kingdom for the Cape of Good Hope, during the six years ending with 1837, has been 325 a year.

History. — In 1620, two English E. India commanders, by a proclamation dated from Saldanha Bay, took possession of the Cape in the name of Great Britain; but no settlement was subsequently established by the English, and in 1650, the Cape promontory was colonised by the Dutch, who afterwards made settlements in Saldanha Bay and elsewhere; and disregarding, like other colonising adventurers, the rights of the original inhabitants, gradually extended their encroachments, till their territory reached nearly to the boundaries of that of the British territory at present. In 1795, the English took possession of the Cape; but at the peace of Amiens, in 1800, restored it to its former masters. In 1806, it was again taken by the English, to whom it was finally ceded in 1815.

CAPE TOWN, a sea-port town of S. Africa, the cap. of a small distr. and of the above described British territory, on its S. W. coast, S. shore of Table Bay, at the foot of Table Mountain, about 32 m. N. from the Cape of Good Hope; lat. 33° 55′ 56″ S., long. 18° 21′ E. Pop. (1848, including its distr.) 22,543, of whom about two-thirds were whites. It is regularly laid out, and contains several good squares; its streets, which are straight and wide, cross each other at right angles, many of them being watered by canals, and planted on either side with trees, in the Dutch fashion. Houses, mostly of brick or red granite, are "flat roofed, and chiefly white, with green windows; they are spacious and convenient, having an elevated terrace, here called a stock, in front, and small gardens behind, usually with a treillage, clothed with vines." (*Colebrooke.*) Upon the shore, at the E. extremity of the town, is the castle, a pentagonal fortress of considerable strength, containing some public offices, barracks, &c., and having outworks which command both the bay and the roads to the country. On the W. side of the town, Table Bay is defended by four batteries, placed round and on the hill called the Lion's Rump; on its E. side, the town is protected by fortified lines of defence.

The principal public buildings are the government house, with extensive gardens, the burgher senate house, barracks, commercial exchange, custom house, town and distr. gaol, military depôt, tax office, English, Dutch, Lutheran, and Presbyterian churches, R. Cath., Independent, Wesleyan, and missionary chapels, Somerset Hospital, and two others, the theatre, Freemasons' Lodge, South African College, police office, &c. Cape Town is the seat of the supreme court of justice for the colony, of the Vice-Admiralty Court, and a court for the recovery of small debts. It has several joint stock associations for banking, insurance, and other purposes; a savings' bank, a public library, four public free schools, and many literary, scientific, religious, and benevolent associations. The town and distr. contain several water mills, tanneries, hat, candle, snuff, and soap factories, an iron foundry, breweries, distilleries, sawing and steam mills, &c. It is plentifully supplied with good water.

Table Bay is capable of containing any number of ships, and forms a safe and, on the whole, good harbour, except during the months of June, July, and August, when it is exposed to a heavy swell from the W. A wooden jetty projects for half a furlong into the bay from the E. end of the town, near the castle, alongside of which ships discharge or take in cargoes. Ships that only take in water or refreshments lie in the outer anchorage.

A lighthouse, furnished with double lights, stands on the shore, near the W. extremity of the bay, about 2 m. N.W. the town. In the year ending Jan. 5. 1849, 352 British ships, of the burden of 129,521 tons, and 52 foreign ships, burden 19,582 tons, entered; and 350 British, and 52 foreign ships cleared from the port. The value of the imports during the same year amounted to 770,671*l*., of which those from G. Britain made 546,147*l*. The value of the exports was estimated at 356,332*l*.: those destined for the U. Kingdom being reckoned at 218,471*l*.; the Mauritius, 47,922*l*.; Port Natal, 33,722*l*.; St. Helena, 26,552*l*., &c.

British residents in India frequently resort to the Cape for their health; and the town has generally the appearance of bustle and gaiety; balls and the theatre are the favourite amusements; but "music is here a passion with the negro only." The environs of the Cape are very picturesque, and between it and the mountains which surround it, many handsome private gardens have been laid out. The people of Cape Town, in common with those of the other parts of the colony, distinguished themselves, in 1849, by their uncompromising and successful opposition to the ill-advised attempt of the government to send convicts to the colony.

Cape Town was founded by the Dutch in 1650, and remained subject to them until taken by the British in 1795. It was restored by the treaty of Amiens, but being again captured by the British in 1806, was finally ceded to us with the rest of the colony in 1815. (*Cape Almanac and Register; Cape in* 1822, *&c.*)

CAPITANATA, a prov. of Naples, which see.

CAPO D'ISTRIA (an. *Ægida*), a sea-port town of Illyria, gov. Trieste, circ. Istria, on a small island in the Gulph of Trieste, connected with the main land by a causeway, ½ m. in length, 8 m. S. Trieste. Pop. 5,000. It is fortified and defended by a citadel, and contains a cathedral, with about 30 other churches, and several handsome buildings; but the streets are narrow, and have a gloomy appearance. It is the seat of a bishopric, and has some superior schools, and a prison. Its inhab. manufacture salt, leather, and soap, and trade besides in wine, oil, and fish. The town is ill supplied with water, and not remarkably healthy. Its harbour is large, but little frequented except by fishing boats. Capo d'Istria belonged, in the middle ages, alternately to the Venetians and the Genoese. (*Oesterr, Nat. Encyc.; Dict. Géographique, &c.*)

CAPPOQUIN, an inl. town of Ireland, co. Waterford, prov. Munster, on the Blackwater, 105 m. S.W. by S. Dublin. Pop. in 1821, 1,826; in 1831, 2,289. Pop. of the parish of Lismore, in which it is situated, in 1834, 15,838, of whom 494 were of the established church, 45 Protestant dissenters, and 15,299 R. Catholics. The town, which was a place of some celebrity in the wars of 1641, is finely situated on the N. bank of the river, over which it has a wooden bridge. The public buildings are, a church, a Roman Catholic chapel, and a school-house. Petty sessions are held every alternate week, and a party of the constabulary is stationed here. At Mount Melleray, near the town, is an abbey of Trappists, who lately removed thither from France. Fairs are held on 17th March, 31st May, 5th July, 20th September, and 29th October. Post-office revenue in 1830, 249*l*.; in 1836, 282*l*. The mail-coach from Waterford to Cork passes through the town, and a car, carrying an average of three passengers each trip, plies between it and Lismore. The tide flows up the Blackwater to this place; but the navigation to Lismore is chiefly by a canal, four miles long. (*Smith's Waterford; Railway Rep.*)

CAPRI (an. *Capreæ*), a small island belonging to Naples, on the S. side of the entrance to the Gulph of Naples, about 4 m. W. Cape Campanella (an. *Promontorium Minervæ*). Pop. about 3,000. It is about 10 m. in circ., and is mostly surrounded by lofty perpendicular cliffs. It principally consists of two great masses of rugged calcareous rocks; but though the largest portion of its surface be wild and impracticable, it is in parts very fertile; and these being cultivated with great assiduity yield the finest crops, with the choicest grapes, olives, and other fruits. But the most valuable product of Capri is its stock doves and quails, particularly the latter, which at certain seasons of the year are caught in vast numbers. Swinburne says that rows of nets are placed across every break in the woods, or chasm in the rocks, to intercept these birds in their annual flights; and that the quantity taken is almost incredible.

Capri is famous, or rather, perhaps, infamous in history, from having been for about 10 years the retreat of Tiberius, who is reported to have here abandoned himself to the most detestable debaucheries, while his proscriptions filled Rome with blood. The crafty tyrant was most probably led to select this spot for his favoured residence, as well from the difficulty of its access, as from the mildness and salubrity of the climate, and the unrivalled magnificence of the prospects which it affords. He is said to have built no fewer than 12 villas in different parts of the island, some close by the sea, and others in more elevated situations. (*Tacit.*, Annal. iv. § 67.) After his death, these were destroyed by order of the senate; but the ruins of some of them still remain; and the sculptures found in these, and the medals that have been dug up, go far to establish the accuracy of what would otherwise appear to be the singularly exaggerated statements of Tacitus and Suetonius, as to the private life of the emperor.

There are two towns on the island, Anacapri, near its W. (*see* ANACAPRI), and Capri, the cap., on its S.E. shore. The latter, situated on the acclivity of a ridge, has about 1,200 inhab., and a cathedral and some other churches. (*Swinburne's Two Sicilies*, ii. 1—9., 4to ed.; *Cramer's Ancient Italy*, ii. 182, &c.)

CAPUA (an. *Capoa* or *Capua*), a city of Naples, prov. Terra di Lavoro, cap. cant., on the left bank of the Volturno, in a fine plain, 18 m. N. Naples; lat. 41° 7′ N., long. 13° 56′ 30″ E. Pop. 15,000, ex. gar. It was fortified Vauban; has a strong citadel, and is reckoned one of the keys of the kingdom; for though far removed from the frontier, it is the only fortress that really covers the approach to Naples. Swinburne calls it a "neat little city;" but it is said by Simond to be "an ugly, dirty place, and noisy beyond all bearing;" and we suspect that the latter statement is nearer the mark than the former. It has 3 principal streets, 2 magnificent gates, 2 fine squares, and 3 public fountains. The principal public buildings are the cathedral, the cupola of which is supported by 18 antique columns, the Church of the Annunciation, the palace of the governor, the Hôtel de Ville, the barracks, and the theatre. It is the seat of an archbishopric; has no fewer than 18 parish churches, several convents for both sexes, a royal college, a seminary, a military school, and 4 hospitals. A great fair is annually held on the 26th November.

The ancient Capua was situated about 2½ m. from the modern city, which has nothing in common with the former, except that it was partly built out of its ruins. The remains of its amphitheatre, said to have been capable of containing 100,000 spectators, and of some of its tombs, &c., attest its ancient splendour and magnificence. The considerable town of Santa Maria di Capua occupies part of the spacious enclosure of the old city. The amazing fertility of its territory, and the commercial spirit of its inhabitants, rendered Capua one of the largest and richest cities of ancient Italy. Its citizens warmly espoused the side of Hannibal, and that great general took up his winter quarters here after the campaign of Cannæ. It has been said that this was a false step; that he ought to have marched direct from Cannæ to Rome; and that his soldiers, enfeebled by their residence in this luxurious city, henceforth lost their former superiority. But there seems to be little or no foundation for these statements. Hannibal, though victorious at Cannæ, was so far from being able to attack Rome, that he was repulsed in an attempt upon Naples; and the fact that he maintained himself, without assistance from home, for a dozen years in Italy after he had wintered in Capua, and defeated, during that period, several Roman armies, completely negatives the idea of his troops having been enervated. It was hardly, perhaps, necessary to say so much on such a point; the authority of Hannibal being of incomparably greater weight than that of those who have presumed to find fault with his proceedings. The old city was destroyed by the barbarians. (*Swinburne's Two Sicilies*, ii. 490., 4to. ed.; *Simond*, p. 393.; *Cramer's Ancient Italy*, ii. 205.; *Montesquieu, Grandeur et Décadence des Romains*, cap. 4.; *Ferguson's Roman Republic*, cap. 5.)

CARACAS, an inland city of Colombia, cap. of the repub. of Venezuela, prov. Caracas, in a mountain valley nearly 2,900 ft. above the level of the sea, 12 m. S.S.E. La Guayra; lat. 10° 30′ N., long. 66° 55′ W. Pop., previously to 1812, 40,000; in 1834 only 23,000. This city is finely situated, and in the enjoyment of a temperate and healthy though variable climate; but it is exposed to the attacks of earthquakes: it has the advantage of being nearly surrounded by the Guayra and several other rivulets, which supply many public and private fountains, and wash the streets. It is well and regularly built; the streets are sufficiently wide, paved, and cross each other at right angles; there are several squares, the principal of which, the Plaza Mayor, has the cathedral on the E., the university on the S., and the prison on the W. side; but is disfigured by ranges of low shops collected in its centre, where the fruit, vegetable, and fish markets are held. Most of the public buildings are of a religious character; the cathedral is spacious, but heavily built, and it is probably to this circumstance that its preservation was owing during the great earthquake of 1812. Previously to that year there were 8 other churches, the handsomest of which, Alta Gracia, was built by people of colour; but this and the other churches, 9-10ths of the houses in the city, and between 9,000 and 10,000 inhab., were totally destroyed by the terrible catastrophe that then happened. There are 3 convents, 2 nunneries, and 3 hospitals; besides a theatre capable of holding

perhaps 1,800 persons, the pit of which is not roofed. The houses in Caracas are at present inferior to what they were before the earthquake of 1812, at which period those of the upper classes were also very well furnished; they are now chiefly of sun-dried clay or mud, the roofs tiled, and the walls whitewashed. La Guayra, which is the port of Caracas, is the chief trading town in Colombia; but its merchants are for the most part the agents of others in Caracas, and all negociations are conducted in the capital. This city was founded by Diego Loseda in 1567, and, under the Spanish government, was the seat of the captain-general of Venezuela.

CARAVACA, a town of Spain, prov. Murcia, 42 m. W.N.W. Murcia, on a river, and at the foot of a mntn. ridge, both of the same name; lat. 31° 6′ N., long. 1° 58′ W. Pop. 12,458. It has 4 convents, 3 hospitals, a Jesuits' college, &c. The remains of the ancient castle of Santa Cruz are on a height commanding the town. In a mountain on the W. is the cavern of Barquilla and its beautiful stalactites. The vicinity contains marbles of various colours, and produces grain, pulse, wine, oil, hemp, flax, *esparto* or Spanish rush, and pasture for sheep and goats.

CARCAJENTE, a town of Spain, prov. Valencia, 7 m. N.N.E. San Felipe. Pop. 8,300. It is in the centre of a large plain, planted with white mulberry trees, and intersected by canals. Its streets are spacious, and the comfortable appearance of the houses announces the prosperity of the place. Many Roman remains are found here. Its vicinity produces silk, wheat, maize, pulse, rice, abundance of oranges, pomegranates, and garden stuffs. (*Miñano.*)

CARCASSONNE, a city of France, dép. Aude, of which it is the cap., on the Aude, by which it is intersected, 34 m. W. Narbonne; lat. 43° 12′ 54″ N., long. 2° 21′ E. Pop. (ex. cant.) 15,380. It consists of two parts—the city, situated on a hill on the right bank of the river, and the new town, on a plain on its left bank, the communication between them being maintained by a bridge of 10 arches. The city, which is very ancient, is surrounded by double walls, and has an old castle; it is ill built and filthy, and is said to be at once *un cloaque et un labyrinthe!* The new town is well built; has broad streets intersecting each other at right angles, a square shaded by magnificent plane trees, and numerous fountains. There is a fine promenade along the canal. The fortifications by which the new town was formerly surrounded have been demolished to make room for gardens and boulevards. Principal public buildings — cathedral, with a fine spire, the church of St. Lazarus in the city, formerly the cathedral, the episcopal palace, the hotel of the prefecture, the hôtel de ville, the barracks, the theatre, &c. The halles or covered markets are worth notice. It is the seat of a bishopric; has tribunals of primary jurisdiction and commerce, a departmental college, a primary normal school, a diocesan seminary with 116 pupils, a secondary ecclesiastical school, a royal society of agriculture, a public library with 6,000 vols., &c.: it has also an hospital and a workhouse. Carcassonne has long been famous for its manufacture of fine woollen cloth, patronised by Colbert: this, however, has much fallen off, though, exclusive of minor articles, it still furnishes annually about 30,000 pieces of cloth, of which about 24,000 are sold in France, and 6,000 in the Levant. There are also fabrics of stockings, linens, and soap; with paper-works, distilleries, tanneries, nail-works, &c. Its commerce, which is very considerable, is greatly facilitated by the canal du Midi, a branch from which comes to the town, and serves it as a port.

Carcassonne is very ancient, having been of considerable importance in the days of Cæsar. It fell successively into the hands of the Visigoths and Saracens, and suffered much during the wars of the Albigenses. Its last count ceded it to France in 1247. (*Hugo*, art. *Aude*, *Dict. Géog.*)

CARDIFF, or CAERDIFF, a parl. bor. and sea-port of S. Wales, cap. co. Glamorgan, on the E. bank of the Taaf, about 1½ m. above its embouchure in the æstuary of the Severn, 25 m. W. Bristol, and 20 m. S. by E. Merthyr Tydvil. It has increased very rapidly, the pop. in 1801 having been only 1,870, while in 1841 it was 10,077. The two principal streets, at right angles to each other, are well built; but behind these there are several courts, alleys, and lanes of very inferior houses; and some new streets, mostly occupied by Irish labourers, are of the same description. The castle, on the N. side of the town, is of great antiquity; it is in excellent repair, and is partly occupied by its noble proprietor, the Marquis of Bute. Besides the church of St. John, which has a lofty tower, there are places of worship for Baptists, Methodists, Independents, &c. There is here, also, a co. gaol, a guildhall, where the assizes are held, a theatre, a bridge over the Taaf, of five arches, and numerous schools and charities. Cardiff has become a place of very considerable trade, being, in fact, the port of Merthyr Tydvil, and of the principal mining district of S. Wales. The exports of iron amount to about 350,000 tons a year, and those of coal amounted, in 1848, to 661,870 tons, exclusive of corn and other agricultural produce. The products of Merthyr and Aberdare are brought down to Cardiff by the Glamorganshire canal, which unites with the sea about 1 m. below the town, and by the Taaf Vale railway. But as the canal was constructed about 50 years ago, its basin did not afford sufficient accommodation for the vastly increased traffic of the place. To obviate this inconvenience, the late Marquis of Bute constructed, at his own expense, a ship canal and docks a little below the town. These works are on the most magnificent scale. The inner basin occupies a space of not less than 18 acres; and there is an outer basin occupying a space of about 1½ acre, for the accommodation of ships and steamers of large burden. These great works have done much to increase the trade and importance of Cardiff; and, it is to be hoped also, the fortune of their public-spirited proprietor. The limits of the parl. and municipal boundaries coincide, and comprise an extent of 1,191 acres. It is joined with the bors. of Cowbridge and Llantrissent, in sending 1 mem. to the H. of C. Previously to the Reform Act, the franchise was vested in the burgesses. Registered electors in 1847-48, 880. Markets, Wednesday and Saturday; fairs, June 29., Sept. 19., Nov. 30.

CARDIGAN, a marit. co. of S. Wales, stretching, in the form of a crescent, along the S. E. shore of Cardigan Bay, having N. the cos. of Merioneth and Montgomery; E., Radnor and Brecon; and S., Caermarthen and Pembroke. Area 432,000 acres. Surface mountainous and hilly, interspersed, however, with several fine valleys, of which the principal are those of the Teify, or Teivy, Rheidiol, and Ystwith, so called from the rivers, the largest in the co., by which they are intersected. The soil along the shore of this co., particularly between Llan Rhystyd and Llan Non, is a light sandy loam, and is, perhaps, the finest turnip and barley soil in the empire; it is, in f ct, in some places alleged to have produced, with little or no manure, an uninterrupted succession of good, or at least tolerable, barley crops, for a period reaching beyond the memory of man! (*Davies's S. Wales*, i. 163.) But this continued succession of corn crops has unhappily been tried in places where the soil is less capable of supporting such abusive treatment; and, altogether, agriculture is here at a very low ebb, being quite as far behind, if not more so, than in Caermarthen, which see. Estates of all sizes, from the smallest patches, which in some distrs. are very numerous, up to several thousands a year. Farms similarly divided. Average rent of land, in 1843, 7*s.* 4¾*d.* an acre. Silver, lead, and copper, have all been found in Cardiganshire; and at one time the silver mines were an object of great attention, and yielded a considerable produce; but for a lengthened period they have been wholly abandoned, and little or no attention is now paid to those of copper and lead. Slates are quarried in different parts of the co., and are largely exported from Cardigan and Aberystwith. Manufactures unimportant. Principal towns Cardigan, Aberystwith, Tregaron, Lampeter, &c. At the last-mentioned place is a college, established in 1822, for the education of the Welsh clergymen. Cardiganshire contains 5 hunds. and 65 pars., and had, in 1841, 15,123 inhab. houses, 68,766 inhab., of whom 32,215 were males, and 36,551 females. It returns 1 mem. to the H. of C. for the co., and 1 for the bors of Cardigan, Aberystwith, Lampeter, and Adpar. Registered electors for the co., 1847, 2,278. Sum paid for the relief of the poor in 1846-47, 18,030*l.* Annual value of real property in 1815, 145,933*l.*, ditto in 1843, 205,328*l.*

CARDIGAN, a sea-port and parl. bor. of S. Wales, cap. co. Cardigan, on the N. bank of the Teivy, 5 m. from its embouchure in St. George's Channel, 198 m. W. N. W. London. Pop. of old bor. (1841) 2,925; but the present parl. bor., which includes the suburbs of Bridgend and Abbey Hamlet, had, in 1841, a pop. of 3,800. The principal street is spacious, but the others are narrow and irregular, and the town contains a large proportion of small, mean tenements. Recently, however, not only the number of houses has been a good deal increased, but their quality has also been materially improved. (*Boundary Report.*) A stone bridge crosses the river, and connects the town with Bridgend, in Pembrokeshire; and there is another bridge across a deep inlet of the river on the W. side of the town. It has an ancient church, a free grammar-school for 30 boys, a national and another charity school (in which 130 children are educated), a handsome co. hall, and a co. gaol. Two towers, the remains of its ancient castle, still exist on a commanding site above the river. Market, Saturday; annual fairs, Feb. 13th, April 8th, Sept. 6th, and Dec. 19th. The town has no manufacture of any consequence. A bar at the river's mouth is a great impediment to navigation, and makes the entrance to the harbour very dangerous in rough weather. In moderate weather, and at spring tides, vessels of from 300 to 400 tons may come up to the town; but the general trade is confined to vessels of from 15 to 100 tons. There belonged to the port, on

the 1st of January 1850, 249 vessels, of the burden of 14,368 tons, manned by about 1,100 seamen; but of these ships a good many very rarely visit the port. Exports, slate, corn, and butter; imports, coal, culm, timber and deals, limestone, and articles of general consumption.

Cardigan, conjointly with Aberystwith, Lampeter, and Adpar, returns 1 mem. to the H. of C. Previously to the Reform Act, the franchise (in Cardigan) was vested in the burgesses, who were created by being presented by a jury of burgesses at the court of the corporation. Registered electors in the 4 bors., in 1847-48, 556. The town is divided into 2 wards, and governed by a mayor, aldermen, and councillors.

CARDONA, a fortified town of Spain, Catalonia, in a rugged country on the Cardanet, 55 m. N.W. Barcelona. Pop. 2,962. Near it, on the S.W., is a mountain of solid rock-salt, which neither the erosion caused by the rains, nor the mining operations that have been continued for ages, seem to have power materially to diminish. (*See* CATALONIA.) Being exceedingly hard, the rock is first blasted with gunpowder, and afterwards dug out with pickaxes: it is then ground, and laid up in the government storehouses. Vases, crucifixes, and other articles, are made out of it, which stand very well in the atmosphere of Spain, but soon liquify in a moist climate. (*Miñano; Townsend*, i. 190.)

CARENTAN, a town of France, dép. La Manche, cap. cant., on the Tante, near its embouchure, 15 m. N.N.W. St. Lô. Pop. 2,801. It is situated in the middle of a marsh, and is indifferently fortified, and unhealthy. Small vessels come up to the town, which has some manufactures of lace and cotton.

CARIACO, a marit. town of Venezuela, prov. Cumana, in a large plain near the head of the gulph of the same name, 38 m. E.N.E. Cumana; lat. 10° 30′ N., long. 63° 40′ W. Pop. 7,000. The town is small, and its climate is unhealthy; but it has some trade, and its vicinity is extensively cultivated with cotton, &c. (*Geog. Account of Colombia.*)

CARIATI, a sea-port town of Naples, prov. Calabria Citra, cap. cant., on a high promontory washed by the Ionian Sea, 18 m. S.E. Rossano. Pop. 8,000. Though the seat of a bishopric, it is a desolate, wretched-looking place, surrounded by dilapidated walls, and having a castle in ruins. It has suffered much from the attacks of the Turks and Algerines, and more recently from the depredation of brigands, who, in 1806, made the cause of legitimacy subservient to their own predatory purposes. It is now, however, beginning to improve. The best manna of Calabria is found in its environs, and the rivers furnish fish in abundance. (*Craven's Calabria*, p. 223.)

CARIGNANO, an inl. town of N. Italy, king. of Sardinia, div. of Turin, cap. distr., on the left bank of the Po, which is here crossed by a wooden bridge, 11 m. S. Turin. Pop. 7,000. It is surrounded by old walls, has a handsome square, a fine church, several convents, two hospitals, and a college, and some remains of its ancient castle. A good deal of silk is produced in the neighbourhood, and there are several filatures in the town. Carignano is also celebrated for its confectionary. It has been several times taken; the French sacked it in 1544. (*Rampoldi; Dict. Géog., &c.*)

CARINI, a town of Sicily, prov. Palermo, cap. cant., on the rivulet of the same name, near where it falls into the sea, 12 m. W.N.W. Palermo. Pop. (inc. cant.) 8,684. It stands on a rising ground in a beautiful situation; is a respectable and clean town; and has a Gothic castle, with several churches, convents, and public buildings.

Near Carini are the ruins of the ancient *Hyccara*, a small but rich city, sacked by Nicias, who, on that occasion, captured Lais, the famous courtezan. (*Smyth's Sicily*, p. 69.)

CARINTHIA and CARNIOLA (Germ. *Karnthen* and *Krain*) DUCHIES OF, two contiguous inland provinces of the Austrian empire; the former being included in the ancient *Noricum*, and the latter in *Illyricum*: they now respectively form the northern and central portions of the kingdom of Illyria as established in 1815, chiefly between lat. 45° 30′ and 47° 10′ N., and long. 12° 40′ and 15° 40′ E.; having N. Salzburg and Styria, E. Styria, S. Croatia and Istria, and W. a part of the government of Trieste, the Lombardo-Venetian kingdom, and the Tyrol. Area, 6,930 sq. m. (326·69 Germ.). Pop. (1838) 748,785, about 3-5ths of which belong to Carniola. These provs. compose that part of Illyria forming the government of Laybach, and are divided into 5 circles, viz. Carinthia into Klagenfurt and Villach, or Lower and Upper Carinthia; and Carniola into those of Laybach, Adelsberg, and Neustadtl. The whole country is mountainous: the great Alpine chain which passes from the Tyrol through Styria into Hungary (*see* AUSTRIA, EMPIRE OF, p. 235.), bounds Carinthia on the N., and its southern parallel chain, with its second ramification or the Julian and Carnic Alps, run through the W. and S. parts of Carniola, and on its N. separate it from Carinthia. The great Alpine chain consists in its whole extent of granite, gneiss, quartz, mica, and clay-slate, and other primary rocks, and contains many metallic ores: the Carnic and Julian Alps have chiefly a calcareous formation, and the latter abound with ravines, caverns, and grottos. They are comparatively poor in metallic products. There are fertile valleys between the mountain ranges; but the country generally is sterile and bare, and does not yield corn enough for the consumption of its inhabitants, the deficiency being made up by imports from Hungary. Carinthia is more abundantly watered than Carniola; the Drave intersects the former prov. in its whole length; the Save rises in the latter, and runs with a S.E. course through its N. and E. divisions: both greatly assist the traffic of these provinces. There are several moderate-sized lakes, as the Worthsee, Ossiacher-see, Muhlstadter-see, in the central part of Carinthia, and the Czirknitzersee and others in the W. and N.W. parts of Carniola, besides many small ones. The temperature depends chiefly upon the elevation; but, except in S. Carniola, the climate is generally cold, and unfavourable to agriculture. According to Becker (*Handel's Lexicon*, 1836), the surface of the conjoined provs. is thus divided: — Arable land, 678,993 Eng. acres; vineyards, 23,909 do.; meadows and gardens, 792,015 do.; commons, 1,085,069 do.; forests, 2,174,177 do.: total, 4,755,285 do.

The respective quantities of the chief agricultural products are stated to be — Wheat, 88,134 Eng. quarters; rye, 187,261 do.; barley, 126,862 do.; oats, 351,674 do.; wine, 3,350,601 Eng. imp. gall.

Wheat, barley, and wine, are principally produced in Carniola; rye and oats in Carinthia. Buckwheat, millet, hemp, and flax, are also grown, and the flax of Carniola is said to be the best in the empire. The extent of surface devoted to gardens and vineyards in Carinthia is very inferior to that so appropriated in Carniola, in the S. of which duchy the finest apricots, peaches, apples, pears, and plums, are produced, besides a considerable quantity of good wine. On the other hand, in Carinthia, the pasture lands are extensive, and cattle are reared in much larger numbers than in Carniola, as will be seen by the following table from *Becker's Handel's Lexicon*, 1836; and the *Nat. Encycl.*: —

	Horses.	Oxen.	Cows.	Sheep.
Carinthia -	38,352	110,346	165,842	227,671
Carniola - -	14,803	48,369	65,696	63,004

The horses, which are large and strong, are bred mostly in the valley of the Gail, and elsewhere, in Upper Carinthia. The sheep yield only inferior wool. Hogs and goats are plentiful. The Alps are inhabited by bears, which make great havoc amongst smaller animals. Chamois, deer, hares, foxes, &c., are, however, found, as well as a great variety of feathered game. The rivers and lakes, and especially the Drave and the Ossiachersee, abound with salmon, trout, and other superior fish. Bees are numerous, especially in S. Carniola; of late years the rearing of silk-worms has increased. The principal wealth of Carinthia is in the produce of its mines. Iron is found throughout the whole extent of the primary Alpine chain, and is also procured in the Carnic Alps. Copper is mined in several places, but although the quantity of ore be inexhaustible, the hardness of the stone in which it is found, and other difficulties oppose serious obstacles to the attainment of any great supply of metal. The lead mine of the ore-mountain near Villach is the largest and most produceive of that metal in the empire: it yields annually 33,000 centner of pure metal; other mines in the duchy afford yearly about 20,000 centner. Zinc, silver, and quicksilver, are likewise met with, and near Hüttenberg antimony is found in conjunction with iron. There are some iron and lead mines in Carniola, but those of the greatest importance in that prov. are the celebrated quicksilver mines of Idria, the richest in Europe. Coal, peat, marble, building stone, various clays, talc, asbestos, jasper, beryl, opal, emerald, garnets, are found in various parts of the country. The following shows the average annual produce of some of the mines in both provinces: — Bar iron, 271,925 cwt.; cast iron, 9,942 cwt.; lead and lead ore, 60,893 cwt.; copper, 78 cwt.; coals, 49,614 cwt.

Manufacturing industry in Carinthia is mostly confined to working up its raw produce, and especially its metallic ores. The *Nat. Encyc.* a few years since enumerated 20 furnaces, and 61 forges, iron-plate and steel works. It gives 130,537 centner as the quantity of iron and steel wares annually made. Besides these manufactures, there were 2 of woollen, one of silk, and many of cotton fabrics, and a white-lead factory: most of these were in the capital. In Carniola the manufactures are more important, although still inferior in amount to those in many other Austrian provinces. Most of the rural male population follow linen weaving, in addition to their agricultural occupations; while their wives spin thread. Both these articles are generally coarse; but there are some fine linen and lace manufactures, and many of woollen cloth, flannel, worsted stockings, lea-

ther, &c. Iron manufactures, and others of wooden articles, also occupy many hands, and in Laybach there is a very extensive porcelain and earthenware factory. The principal exports from Carniola are steel wares, timber, and wooden articles (to about 163,500 guilders), glass wares, linens (about 2,600 pieces), felt hats, wax, wine, to Carinthia; flour to Trieste; quicksilver to Lower Austria, &c. Its imports are Hungarian and Italian wines, salt, oil, fruit, colonial produce, with coffee, sugar, various manufactured fabrics, tobacco, a large supply of horned cattle, &c. The exports of home produce are not probably much below the value of its imports; but considerable wealth is derived to the prov. from the traffic through it, and conveyance of goods from Austria, Carinthia, Croatia, &c., to Trieste, and the other ports on the Adriaitc. The town of Gottscheer, where a German colony is situated, has a remarkable commercial activity, and its goods are widely diffused over Hungary and the N.W. provinces of the empire, as well as in many other parts of Europe: Laybach, the cap., is the other chief place of trade. The exports of Carinthia are almost confined to its raw and manufactured mineral products, and cattle. Klagenfurt, the cap., and Villach, are its principal commercial towns. The inhab. of these provs. are mostly of the Slavonian race, denominated Wendes or Vandals; in Carinthia, however, those of German are to those of Slavonian stock as 172 to 95. The Drave formerly separated the two races. Carinthia has been always considered as a German prov. of the Austrian empire, and has enjoyed peculiar privileges. It has its own diet, consisting of 4 ranks — the upper clergy, nobility, knights, and the representatives of the royal burghs and market towns; but its internal administration is subordinate to the government authorities at Laybach. The high criminal and other judicial courts of Carinthia are at Klagenfurt. The Lutheran religion made considerable progress in this prov. in the 16th century, until checked by the government: there are now scarcely 20,000 Protestants, mostly in Upper Carinthia. The state assembly in Carniola is in most respects similarly constituted with that of Styria, with which prov. it was formerly united. The whole pop. of Carniola is Roman Catholic — a robust, contented, and frugal people. The Carinthians have, to a great extent, the character and disposition of Italians. They are said to be more inclined to indolence than their southern neighbours, and are often ignorant and superstitious. Both provs. formed parts of the empire of Charlemagne, and afterwards belonged to the dukes of Friuli. After passing through various hands, the house of Austria became possessed of Carniola in 1245, and of Carinthia in 1321. In 1809 these countries were annexed to the empire of Napoleon, and remained connected with it till 1814, when they were restored to Austria. (*Oesterr. Nat. Encyc.* art. *Karnthen* and *Krain; Dict. Géographique.*)

CARIPE, a town and valley in Venezuela, prov. Cumana, 40 m. S.E. that city. The town is the chief seat of the Chayma Indian missions. The valley is celebrated for a remarkable cavern in a limestone formation, at least 2,800 ft. in depth, and for some distance 60 or 70 ft. high. It is inhabited by multitudes of birds, called guacharos, a species of *Caprimulgus*, the young of which are annually destroyed in great numbers by the Indians, for the sake of the fat with which the lining membrane of their abdomen is laden, and of which excellent oil is made. Humboldt visited this cavern. (See his *Personal Narrative*, vol. ii.)

CARISBROOKE, a par. and village of England, Isle of Wight, liberty W. Medina, situated by a rivulet, at the base of a conical hill, surmounted by its castle or fortress, 78 m. S.W. London. Area of par. 8,880 acres: pop. of do. (1831) 4,713. Some portions of the fortress are very old; but it was repaired and greatly augmented in the reign of Elizabeth. The walls of the old fortress (a parallelogram enclosing an area of 1½ acre, with its keep in the centre) are comprised within the more modern fortifications, which enclose an area of about 20 acres. The latter have 5 bastions, and a deep moat; and are connected with a fine terrace, nearly 1 m. in length. The par. church stands on an acclivity opposite the castle: it is a Norman structure, originally attached to a Cistertian monastery, founded in the reign of the Conqueror; some remains of which exist at a farm-house on its site. The most celebrated event in the annals of Carisbrooke Castle is the confinement of Charles I. for 13 months within its walls, immediately previous to his being delivered up to the parliamentary forces. Subsequently, his children were also imprisoned in this castle; and his eldest daughter died in it, at the age of 15. It continues to be the residence and head-quarters of the governor of the Isle of Wight; and a considerable body of troops are usually stationed in it. There are many pleasant villas scattered over the parish; within which, also, is the general workhouse of the island; whose inmates, in 1831, made an augmentation of 676 persons to the pop.

CARLEE, a small village of Hindostan, prov. Aurungabad, 34 m. N.W. Poonah, near which are some remarkable cave-temples, excavated in a spur from a chain of hills running E. and W.; the chief cavern is said to be 6,000 ft. above the level of the sea, and faces due W. A little to the left, before the entrance, stands a large pillar, surmounted by three sculptured lions back to back. The temple is entered under a noble horse-shoe arch, through a small square doorway in a kind of portico screen, which in great part fills up the arch, and abounds with laboured workmanship. To one third of its height, it is covered with various figures in bas-relief; and one of these in a dancing attitude is exceedingly graceful: the ends of this screen are occupied to the same height with the figures of gigantic elephants, projecting in alto-relievo, and well carved. After entering the cave, which is 40 paces long by 14 broad, Mrs. Graham observes, "when we looked round, we almost fancied ourselves in a Gothic cathedral." Unlike the Buddhic cave-temples of Baug, Ellora, &c., the roof is arched, rising to an astonishing height, supported by 21 pillars along each side, and above these by ribs of teak, which are fitted by teeth into corresponding holes in the rock above. The pillars are mostly hexagonal, each with a bell-shaped capital, surmounted by two elephants with their trunks entwined, and each carrying one female, and two male, figures. On several of the columns there are inscriptions, which have recently been translated (see *Journal of the Asiat. Soc. of Bengal*, vol. iii.), and from one of them it would appear that this temple was constructed A.D. 176. The cave is semicircular at its termination: opposite the entrance is a structure with a dome, on which is fixed a huge teak umbrella, an ornament common in the temples of Buddha; but no separate cells, opening from the main temple, have been noticed, though such have been supposed characteristic of Buddhic structures. (*Erskine in Bombay Trans.* iii. 512., &c.; *Graham, Journal of a Resid. in India*, pp. 63—65.; *Mod. Trav.* x. 269—272., &c.)

CARLENTINI, a town of Sicily, prov. Syracuse, 19 m. N.W. Syracuse. Pop. 4,178. It was built by Charles V. for the head-quarters of the Sicilian army; but the design was never completed, and since the earthquake of 1693, by which it was partially destroyed, it has become a miserable place. (*Smyth's Sicily*, p. 159.)

CARLINGFORD, a sea-port town of Ireland, co. Louth, on the S. side of Carlingford lough, 10 m. E. Dundalk. Pop., in 1831, 1,319. Carlingford lough is 8 m. in depth, by from 1 to 1½ m. wide, with deep water and secure anchorage, but being situated between lofty mountains, is liable to sudden squalls. The bar at the entrance has 8 ft. water at low-water springs, 17 ft. at ordinary high water, and 26 ft. at springs. This bay is well stocked with excellent oysters, the fishing of which employs most part of the pop. of Carlingford. It returned 2 mems. to the Irish parliament, but was disfranchised at the Union. (*Nimmo's Sailing Directions for the Irish Coasts, &c.*)

CARLISLE, a city of England, co. Cumberland, on a gentle eminence, in an extensive plain at the confluence of the Eden, Caldew, and Peteril, which nearly surround it; 240 m. N.N.W. London, and 102 m. N. by W. Manchester. Pop., in 1801, 10,221; 1821, 15,486; and 1841, 23,012. The great increase of pop., particularly since 1821, is attributed to the increase of manufactures, and the influx of Irishmen and Scotchmen to the mills and railroads.

The Eden is crossed by an elegant and expensive bridge, finished in 1817, consisting of 5 large and 5 smaller arches; the Caldew has two bridges, and the smaller stream of the Peteril one. The principal streets diverge from the market-place, an irregular area in the middle of the town: though not regularly arranged, several of them are well built, and they are generally well paved and lighted, and plentifully supplied with water.

Carlisle is the seat of a bishopric, founded by Henry I., and remodelled by Henry VIII. after the dissolution of the monasteries, with whose lands he largely endowed it. The ecclesiastical jurisdiction extends over 93 pars., containing the whole of Westmoreland and great part of Cumberland. The revenues of the see amounted, at an average of the three years ending with 1831, to 2,213*l.* a year. The cathedral, having been repaired at different periods, exhibits various kinds of architecture; the E. window is said to be the finest specimen of the kind in England. The dignitaries, beside the bishop, are a dean, 4 prebendaries, and 8 minor canons. The only part of the nave of the cathedral which remains forms the parochial church of St. Mary: that of St. Cuthbert is a plain building, erected in 1778. There are two chapels of ease, both built in 1828 — Trinity church, in the perpendicular Gothic style, in the suburb of Caldew-gate; and Christ Church, in the early English style, in the suburb of Botcher-gate: each has accommodation for 2,000 persons. The other places of worship are those of Presbyterians, Independents, two denominations of Methodists, Baptists, R. Catholics, and the Society of Friends. The grammar-school was founded by Henry VIII. There are also Lancastrian and national schools, St. Patrick's

school for educating 400 children of all denominations, a school of industry for females, &c. The county infirmary is in the town, and it has a fever hospital, a dispensary, &c. An academy for the encouragement of the fine arts was formed in 1822, a mechanics' institute in 1824, and a literary and philosophical institution in 1835: a handsome building, erected in 1839, for the accommodation of these societies, contains a museum and a theatre for lectures. There are two subscription libraries and news-rooms — one of the latter, a chaste new building, opened in 1831, — and two weekly newspapers. The environs afford many delightful rides and walks. Races take place in autumn at the Swifts, a fine course on the S. bank of the Eden. The ancient castle, which stands on an eminence over the river, consists of an outward and inner wall, each of great thickness, and of a great square tower, constructed according to the ancient mode of defence. The ramparts command a very fine view. It has a governor, lieut.-governor, &c.; but is now used only as an infantry barrack and armoury.

The *city*, technically so called, which formed the ancient bor. of Carlisle, is confined within limits which, in 1831, had only a pop. of 8,356. It is a corporation by prescription; and obtained confirmations and extensions of its privileges by a series of 18 charters, terminating with 13 Charles I., which was the governing charter. Under the new municipal act, the government is vested in a mayor, 10 aldermen, and 30 common-councilmen, chosen annually by the rate-payers, whose number in 1838 was 989. There are eight guilds or fraternities of trades, admission into any one of which is by birth or apprenticeship only; and admission into one of the guilds is a preliminary requisite to the freedom of the city. Carlisle has sent 2 mem. to the H. of C. since the reign of Edward I.: the right of election, previously to the Reform Act, being in resident and non-resident freemen. The boundaries of the parl. bor. were extended by the Boundary Act, so as to embrace, not merely the city, but also the suburbs and a considerable contiguous circle. Pop. of parl. bor. in 1841, 20,815. Registered electors in 1847-48, 1,067, of whom 703 were 10*l*. householders. The election of members for the E. division of the co. is also held here.

The court of the mayor and bailiffs sits weekly, and holds personal pleas to any amount. Petty sessions are held on Wednesdays and Saturdays. A county court is established here, before which 629 plaints were entered in 1848. There is no city gaol, prisoners being confined in the county gaol, an extensive and well-constructed building at the S. entrance to the city, or in the house of correction: a subterraneous passage, through which the prisoners are brought to trial, connects both these places of confinement with the county court-house. The county assizes, and the quarter sessions, at Easter and Midsummer, are held in this building, which was erected in 1810 on the site of the ancient citadel: it has two magnificent towers. The revenues of the corporation, amounting, in 1848, to 3,815*l*., arise from tolls, rents, and shares in public companies.

The buildings for corporate and other public purposes connected with the government of the place, are the town-hall, guildhall, and council-chamber. Cotton is the staple manufacture of the town, 8 mills for the spinning of cotton, employing 1,486 hands, having been at work here in 1839, exclusive of factories for weaving checks, ginghams, and other fabrics, both in the city and along the Caldew. One of the mills recently erected has a chimney 305 ft. high! The hatting trade is also extensive; and there are several dye-works, print-works, iron-foundries, tan-yards, and breweries. Coal for manufacturing and domestic purposes is brought from Gilsland, 12 m. distant; and from other collieries, about 20 m. distant. A considerable part of the manufacturing pop. of Carlisle used to be in a very depressed condition; but, on the whole, the city is thriving, and its general aspect is good. Its situation, on the great N.W. line of railway from London and Manchester to Glasgow and Edinburgh, gives great facilities to its trade, which is still further promoted by the railways connecting it with Newcastle, on the one hand, and with Maryport and Whitehaven, on the other. The navigation of the Eden being greatly impeded by shoals, a canal, suitable for vessels of 100 tons' burden, has been cut to Bowness, on the Solway Frith, 1 m. distant. The trade with Liverpool and Ireland is carried on by steamers. It has been made a seaport and there belonged to it, on the 1st of January, 1850, 38 sailing vessels, of 2,203 tons burden, besides 4 steamers. Gross customs' revenue in 1845, 49,216*l*., do. in 1846, 48,122*l*.

The rate of mortality in the city of Carlisle has been supposed to correspond pretty closely with the average rate of mortality in England and Wales; and Mr. Milne, proceeding on this hypothesis, has constructed a table of mortality from observations made by Dr. Heysham in this city. This table has been adopted by various insurance offices. It gives a decidedly lower rate of mortality than the Northampton table, which, previously to its appearance, was the only one in use.

Markets on Wednesdays and Saturdays; fairs on the Saturdays before Whitsuntide and Martinmas; also a statute-fair on 26th Aug. and 14 days after, during the continuance of which no attachment from the city civil courts can be executed; and another on 19th Sept. The banks are, the Carlisle City and District Bank, the Carlisle and Cumberland Banking Co., a branch of the Cumberland Union Banking Co., the house of Monkhouse, Head, and Co., and a savings' bank. The village of Stanwix, N. of the Eden, may be considered as a suburb of Carlisle, though not included within its corporate or parliamentary limits. Its ancient church, dedicated to St. Michael, is built on the site and out of the ruins of the Roman station of Congava a, which stood along the rampart of the wall of Severus. Pop. of the village in 1831, 545. (*Hist. and Antiq. of Carlisle; Municipal Reports; Sessional Papers; Dugdale's Cathedrals.*)

Carlisle was a Roman station, under the name of Luguvallum, as is attested by vestiges of the Roman wall, and by many Roman relics discovered here at various times. The Saxons called it Caer Luil, whence its present name is derived. William the Conqueror built the castle; and during the wars between England and Scotland, Carlisle was a frequent object of attack. It surrendered, without making any opposition, to the pretender Charles Edward, in 1745; but, on his being compelled to evacuate it on the approach of the British forces, he left behind him a small garrison, which surrendered at discretion: the officers of this garrison were subsequently executed at London as traitors, and their heads exposed on the gates and walls of Carlisle.

CARLOFORTE, a sea-port town of the Sardinian States, on the small island of San Pietro, near the S.W. coast of Sardinia; lat. 39° 8′ 28″ N., long. 8° 17′ 28″ E. Pop. 2,830. The streets are in "tolerable" order, and it is surrounded by a wall, and has some fortifications. It is moderately healthy. The inhabitants are engaged in the anchovy and coral fisheries, and in the manufacture of salt. (*Smyth's Sardinia*, p. 310.)

CARLOTA, LA, a town of Spain, prov. Cordova, cap. dep. of its own name, 17 m. S.W. Cordova. Pop. 3,102. It is one of the chief seats of the foreign colonists planted in Andalusia, in 1768, in the view of peopling and fertilising the Sierra Morena. It is a pretty town, and the inhab., who are clean and thriving, have some manufactures of hempen and linen cloths. (*Inglis's Spain in* 1830, ii. 42.; *Miñano.*)

CARLOW, or CATHERLOUGH, an inl. co. of Ireland, prov. Leinster, lying mostly on the E. side of the Barrow, having S. and E. Wexford and Wicklow, N. the latter and Kildare, and W. Queen's co. and Kilkenny. Area 219,863 acres, of which 23,030 are unimproved mountain and bog. Surface on the S. border mountainous, but elsewhere gently undulating. Besides the Barrow, by which it is partly intersected and partly bounded, it is watered by the Slaney. Soil in the uplands a light gravel; in the lowlands a fertile loam. This is one of the principal dairy cos. in Ireland; and the stock of cows has latterly been a good deal ameliorated by the introduction of Ayrshire, and other improved breeds from Great Britain. Estates middle-sized; and that minute division of land among the occupiers, so destructive of the best interests of the country, has prevailed less here than in most other parts of Ireland. Agriculture is, in consequence, in a much more advanced state here than in many other Irish cos.; there is a considerable breadth of land under green crop; and improved farming implements are pretty generally introduced. Average rent of land 20*s*. an acre. Manufactures and minerals of no importance. Carlow is divided into 5 baronies and 50 parishes, and sends 3 mems. to the H. of C., viz. 2 for the co., and 1 for the bor. of Carlow. Registered electors for the co. in 1849, 1,334. Pop. in 1841, 86,228. Annual value of property assessed for the relief of the poor, 193,838*l*.

CARLOW, a parl. bor., the principal town of the above co., and the place where the assizes are held, on the Barrow, where it is joined by the Burren, 45 m. S.S.W. Dublin. The town, properly so called, lies wholly on the left bank of the Barrow; but it is connected by a bridge with the suburb of Graigue, on the opposite side of the river in Queen's co.: this suburb has been included in the parl. bor. which extends over a space of 572 acres, and had, in 1841, a pop. of 10,409. It is a well-built, thriving town. It has an old castle now in ruins, but once a place of considerable strength and importance; a parish church with a spire; a handsome R. Cath. cathedral church, opened in 1834; a R. Cath. college and convent; barracks; a lunatic district asylum for the cos. of Carlow, Wicklow, Wexford, and Kilkenny, erected in 1830 at a cost of nearly 26,000*l*.; an elegant new court-house, a co. gaol, co. infirmary, &c. Besides the R. Cath. college, fitted for the accommodation of 200 students, there is a diocesan school, and numerous charity-schools both for Protestants and Catholics. There are also several charitable institutions.

Being situated on a navigable river, communicating with Waterford on the one hand, and with Dublin, by means of the Grand Canal, on the other, Carlow has a very considerable trade. It is a great mart for the agricultural produce, particularly the corn and butter, of the surrounding country, great quantities of which are sent down the river to Waterford for exportation. It has also some large flour mills, and an extensive malting business; and furnishes considerable supplies both of flour and malt to Dublin. Postage, in 1841, 655*l.*; in 1848, 933*l.* The Bank of Ireland has a branch here.

Carlow is a place of great antiquity, and has various charters; by the last of these in 1671, the bor. consists of a sovereign, elected annually, and 12 self-elected free burgesses. From 1613 down to the union with Great Britain it sent 2 mems. to the Irish H. of C., and since the union it has sent 1 mem. to the Imperial H. of C., who, till the passing of the Reform Act, was returned by the sovereign and burgesses. Registered electors in 1849, 471. (*Railway Report; Boundary Report, &c.*)

CARLOWITZ, a town of the Austrian states, Slavonia, within the military frontier, circ. Peterwardein, on the right bank of the Danube, 4 m. S.E. Peterwarde n. Pop. 5,800, mostly of Servian descent. Most part of its houses are mere huts, and it is only in part paved. It contains a Greek cathedral, two other Greek churches, a R. Cath. church, a hospital, seminaries for the Greek and Cath. clergy, a Greek lyceum, and a Cath. high-school. The subordinate jurisdiction of the town is in the hands of an equal number of R. Cath. and Greek magistrates. It is the seat of a Greek archbishop, the only one belonging to that Church in the Austrian empire, to whom all the Austro-Greek clergy are subordinate. (*Oesterr. Nat. Encycl.*)

CARLSBAD, a town of Bohemia, famous for its hot springs, on the Tepel, near the Eger, 72 m. W.N.W. Prague. Stationary pop. about 2,700. It lies in a low narrow valley, surrounded by hills, covered with every variety of foliage, and affording the most extensive and varied prospects. The town consists principally of lodging-houses, hotels, &c., for the accommodation of visiters to the waters; but it has some good shops and private houses, with a theatre, assembly and reading rooms, a hospital, &c. The Sprudel, the principal spring, is the hottest in Europe; its temperature being about 59° Reau., or 165° Fah. The expansive force of the steam below forces up the water in jets to a considerable height; and to guard against the danger that has sometimes arisen from the obstruction of the apertures by which the water and vapour escape, it has been covered over by a solid bed of masonry. There are several other springs; that of Muhlbrunnen, which is the most commonly drank, has a temperature of 138° Fah. Baths of all sorts are fitted up with every accommodation. The waters are efficacious in a great variety of complaints, but chiefly in those of the liver and kidneys. The walks and promenades in the neighbourhood of the town have a great deal of romantic beauty and interest. The number of visiters in the season varies from 4,000 to 5,000.

This, which is the most fashionable and aristocratical watering place in Europe, is of comparatively recent origin. The springs are said to have been discovered in 1376, by the emperor Charles IV., who, when hunting in the vicinity, was attracted to the spot by the cries of a hound that had fallen into one of the springs. The town belongs to the emperor. A congress was held here in 1819. (*Murray's Hand-Book for S. Germany; Spencer's Germany and the Germans*, i. 222.)

CARLSBURG, or KARLSBURG, a royal town of Transylvania, co. Unter-Albens, on the N. bank of the Maros, 32 m. N.W. Hermanstadt; lat. 46° 5′ 21″ N., long. 23° 25′ 10″ E. Pop. 11,300. It consists of the Upper town or citadel built on a hill, and the Lower town, situated beneath it. The citadel is surrounded by walls with 7 bastions, and its principal gate is adorned with some fine sculptures. The town has a handsome R. Cath. church, containing the tombs and monuments of John Huniades, and several royal and other personages; the fine residence of the bishops of Transylvania, a canons' college, containing the provincial archives, royal mint, observatory with a fine collection of apparatus, several libraries and scientific collections, an arsenal, barracks, &c. There are also an hospital, an ecclesiastical lyceum, college, and primary school. From the Lower town a bridge 210 paces in length passes over the Maros. It is worthy of remark that the Jews, who are naturalised in no other part of Transylvania, enjoy in Carlsburg the full rights of citizenship, under the protection of the bishop. (*Oesterr. Nat. Encyc.*)

CARLSCRONA, or CARLSCROON, a sea-port town of Sweden, on the Baltic, cap. prefecture Bleking; lat. 56° 10′ 9″ N., long. 15° 33′ 25″ E. Pop. 11,500. The greater part of the town is built on the small rocky island of Tros-oe, and the rest on some adjoining islets; the communication with the mainland being maintained, partly by a mound, and partly by a wooden bridge. The harbour is large and safe, with water sufficient to float the largest ships It has 3 entrances, but the only one practicable for large vessels is on the S. side of the town, and is defended by two strong forts. The dry docks constructed here, for the building and repair of men-of-war, have been formed at a vast expense; they are of great extent, and have been cut out of the solid granite rock. It is the principal, or rather, the only, station of the Swedish fleet. The town is well built, consisting partly of brick, but principally of wooden houses. The arsenal, and other buildings connected with the docks and shipping, are on a large scale; and there are also 2 handsome churches, an hotel for the prefect, an hospital, a lazaretto, &c. There is a great deficiency of good water; that which is obtained from the wells sunk in the town is brackish, so that when rain-water fails, recourse has to be had to springs distant about 3 m. There are some manufactures of canvas and linen, with anchor forges, tanneries, &c. The trade of the town is but inconsiderable; the exports consist principally of iron, copper, steel, potash, tar, pitch, &c.

Carlscrona derives its name and origin from Charles XI., who, in 1680, conferred on it considerable privileges, and removed the fleet thither from Stockholm. It has since continued to be the principal station of the Swedish fleet; but the Admiralty, which had been long seated here, was, in 1776, transferred to Stockholm. In 1790, it suffered severely from a fire. (*Coxe's Travels in the North of Europe*, iv. 288.)

CARLSHAMN, a sea-port town of Sweden, prov. Bleking, cap. hærad., on the Baltic, at the mouth of the Nie, 55 m. W. Carlscrona; lat. 56° 12′ 40″ N., long. 14° 51′ E. Pop. 4,150. It has 2 churches, an hospital, with considerable manufactures of canvas, woollens, and tobacco, and building-yards. The harbour is small, but safe. The exports consist of iron, timber, potash, pitch, and tar, tobacco, &c. Being built principally of wood, it has sometimes suffered severely from fires.

CARLSRUHE (*Charles's Rest*), a city of Germany, cap. of the grand duchy of Baden, circ. Middle Rhine, residence of the grand duke, and seat of the administration and principal state authorities, in the fine plain of the Haardwald (Stag's Forest), which surrounds it on the N. and W.; 4 m. E. the Rhine, 37 m. W.N.W. Stuttgardt, 57 m. S. by W. Darmstadt, and 42 m. N.E. Strasburg. Lat. 48° 56′ N., long. 8° 22′ E. Pop. 20,500 (*Berghaus*), more than 2-3ds of whom are Protestants. It is built in the form of an outspread fan, or rather wheel, round the grand-ducal palace, from which, as a centre, 32 public routes radiate, 11 of which, forming the principal streets, have been built on both sides: several of these streets stretch into the forest. The high, or long street, runs from E. to W., intersecting those above alluded to, and dividing the city into a N. and S. portion. Carlsruhe is in part walled, and has 7 gates. It is a handsome, but rather dull town. Streets broad, well paved, furnished with foot-paths, and well lighted at night. Houses built in a great variety of styles, but those of wood are daily giving place to brick edifices. There are 9 public squares, and facing the palace, at the point of union of the principal streets, is a semicircular range of elegant buildings, comprising the government offices, and others attached to the palace. The grand-ducal residence, a plain building, composed of a centre and two wings, contains the *Bleythurm* (lead-tower), from the summit of which there is an extensive prospect; a cabinet of coins and natural objects; a library of 80,000 vols.; and the church attended by the court. Towards the E. extend the large gardens and park belonging to the palace, which are thrown open to the public. There are several other palaces belonging to the nobility deserving of notice, and 90 public buildings, including 4 Protestant and Catholic churches, a synagogue, town-hall, in which both chambers of the senate meet; a museum, the grand-ducal, and another theatre, a new mint, the post-office, infantry and cavalry barracks, arsenal, cannon-foundry, and several hospitals. It may be worth mentioning, that Stultz, the fashionable London tailor, is the founder of one of these hospitals, which he endowed with 100,000 florins: in return for his generosity, he has been created a baron. The city is supplied with water by an aqueduct from Durlach, distant 2¼ m. E. by S.; it is adorned by several public fountains, and in the centre of the principal square is a stone pyramid, erected to the memory of the founder of the city. Its chief establishments for education are a lyceum, polytechnic, military, medical, and veterinary schools, and academies of architecture, painting, &c. It possesses an excellent botanic garden, a gallery of paintings, and a society of arts, under the patronage of the grand-duke. Carlsruhe is not a place of considerable trade. It has some manufactures of silks, carpets, woollens, snuff, chemical products, furniture, carriages, clocks, jewellery, and articles of luxury, but the prosperity of its inhabitants mainly depends on its being the seat of the court, and the residence of the principal

officers of state. It is quite a modern city, and has risen around a hunting-seat built by Charles William, Margrave of Baden, in 1715. (*Berghaus, Allg. Lander und Volk.* 1838; *Cannabich, Lehrbuch der Geogr.* pp. 490, 491.; *Murray's Handbook, &c.*)

CARLSTAD, a town of Sweden, cap. prefecture of the same name, on the island of Tingvalla, at the mouth of the Klar, on the lake Weser; lat. 59° 16′ N., long. 13° 30′ E. Pop. 2,600. It is built of wood on a regular plan; has a handsome cathedral, a gymnasium, an observatory, an agricultural society, a cabinet of natural history, and a tobacco manufacture; and is the seat of a bishopric, and the residence of the prefect. The opening of the Gotha canal has added considerably to its commerce. It exports copper and iron, corn, salt, timber, &c.

CARLSTADT, a royal free town of Austrian Croatia, co. Agram, cap. circ. of same name, at the confluence of the Korana and Dobra with the Kulpa, immediately beyond the limit of the military frontier, 32 m. S.W. Agram. Pop. inclusive of its suburb Dubovacs, 6,300. It is well built, though mostly of wood; has a small fortress, originally intended to resist the incursions of the Turks, and which is surrounded by ramparts, trenches, and palisades; and contains a handsome parade, barracks, and arsenal. It has 5 Cath. churches, a Greek church, a gymnasium, superior and girls' schools, a civic and military hospital, &c., and is the residence of a Greek bishop. Considerable quantities of the liqueur called *rosoglio* are produced here. Its trade is unimportant, but its inhab. derive considerable profit from the conveyance of goods to the ports of the Adriatic. It was founded by the Archduke Charles, whose name it bears. (*Oesterr. Nat. Encyc.*)

CARMAGNOLA, an inl. town of N. Italy, and Sardinia, div. Turin, cap. distr., near the Po, 15 m. S. by E. Turin. Pop. 3,200. It is said to be well built and laid out: many of its streets, as well as its principal square, are ornamented with porticos. It contains several churches and convents, and an hospital, and has 2 suburbs. It has considerable trade in silk, flax, hemp, corn, and cattle, for which 2 large markets are held weekly. This town formerly belonged to the marquisate of Saluzzo: it was taken by the French in 1691 and 1796.

CARMEL (MOUNT), a famous mountain of Syria, extending from the plain of Esdraelon in a N.W. direction till it terminates in the steep promontory, forming the S.W. extremity of the Bay of Acre. The name, Mount Carmel, is usually confined to this promontory, the height of which is variously estimated at from 1,500 to 1,800 ft. This mountain is famous in Scripture history, more especially in that of Elijah, being the place where he destroyed the prophets of Baal. (1 Kings, xviii.) In more modern times, the mountain has been occupied by monks, who have resided in grottos cut out of the rock, and in a monastery built near the summit. The latter was destroyed in 1821, but has since been rebuilt. (*Robinson's Palestine, &c.* i. 194.)

CARMONA (an. *Carmo*), a city of Spain, prov. Seville, cap. dep. of same name, 20 m. E.N.E. Seville, 56 m. W.S.W. Cordova. Pop. 20,296. It stands in a picturesque situation on an isolated hill, looking down upon the plains of Andalusia; it is well built, and has 7 churches, 9 convents, and 2 hospitals, some Roman antiquities, and a beautiful Moorish gate. It has some manufactures of coarse woollen and hempen cloth, hats, glue, soap, delft, shoe leather, and wax candles; but most of them are in a decaying state. Its environs are very fertile, particularly in vines and olives; and Townsend says that there were above 100 oil-mills in the town and its immediate vicinity (vol. ii. p. 196.). It was a place of importance under the Romans, and Cæsar conferred on it the privileges of a Roman city. Under the Moors it was celebrated for its castles, palaces, and fountains, of which hardly any remains now exist. (*Miñano; Inglis*, ii. 47.)

CARNAC, a village of France, dép. Morbihan, on a height at a little distance from the sea, 20 m. S.E. L'Orient. It is remarkable for very extensive remains of what is believed to have been a druidical monument. These consist of 11 ranges of granite stones, standing in lines nearly perpendicular to the coast. These stones are of great thickness, and from 9 to 10, perhaps 20 ft. in height. The French writers say that they are generally about 20 ft., and that the highest are 22 (French) feet above ground. But Mrs. Stothard distinctly affirms that this is an exaggeration; that the highest do not rise more than 15 ft. above ground, and that the medium height is from 9 to 12 ft. (*Letters from Normandy*, p. 256.) Their number is said to exceed 4,000: the smallest end is fixed in the ground, and in some instances flat stones, supported by two of those that are upright, form vast gateways. The object, and the epoch of the construction of this extraordinary monument, are alike unknown. It has exercised the ingenuity of the antiquaries of Bretagne; but their researches have not been more successful than those of our own antiquaries on the subject of Stonehenge.

CARNATIC, a very extensive marit. prov. of S. Hindostan, comprising a considerable portion of the territory under the Madras presidency. It extends along the Coromandel coast, from Cape Comorin to the river Goudegam, or between lat. 8° and 16° N., and long. 77° 15′, and 80° 30′ E., having N. the Northern Circars, W. the Balaghaut ceded districts, the provs. Salem and Coimbatoor, and the Cochin and Travancore dominions, and S. and E. the Indian Ocean, the Gulph of Manar, and the Bay of Bengal. Length N.E. to S.W. 560 m., average breadth about 90 m. Its area, population, divisions, &c., are as follows: —

Districts.	Area in sq. m.	Pop. (1836-7.)	Land revenue	Total revenue (1836-7)
			Rupees.	*Rupees.*
Nellore and Ongole -	12,000	846,572	1,399,814	2,474,880
N. division Arcot -	8,200	506,831	1,875,486	2,277,181
S. division Arcot -	4,500	550,239	1,975,598	2,409,07[illegible]
Chingleput - -	2,253	336,219	875,352	1,592,582
Madras - -	30	630,000	65,364	
Trichinopoly - -	3,169	554,730	1,428,855	1,613,338
Tanjore - -	8,625	1,128,730	3,467,765	4,469,442
Madura - -	7,656	1,135,411	1,750,791	2,401,459
Tinnevelly - -	5,590	850,891	1,660,439	2,340,94[illegible]
Total -	52,023	6,539,623	14,499,464	19,612,001

The E. Ghauts intersect this prov. in a N.E. or N. direction, throughout its whole extent N. of lat. 11° 20′, dividing it into the Upper and Lower Carnatic, or the countries above and below the Ghauts, differing of course greatly in elevation and proportionally in climate. The principal rivers, the Pennar, Palaur, Cavery, and Vagah or Vaygaroo, all rise in the table-land above the Ghauts, and fall into the ocean on the Coromandel, or E. coast of India. The climate of the Lower Carnatic is one of the hottest in the peninsula, though in the immediate neighbourhood of the coast it is sometimes mitigated by sea-breezes; that of the Upper Carnatic is similar to that of Mysore. The primitive rocks of this region are chiefly sienite, with a small proportion of felspar, and all the soil of the prov. appears to consist of the *débris* of disintegrated sienite mountains. Near the sea, sand and loam prevail upon the surface, sparingly intermixed with the remains of marine animals. Elsewhere, according to circumstances, loam is more or less prevalent, mixed with various proportions of gravel and sand, strongly impregnated with iron, and containing frequently large quantities of soda and common salt, which effloresce upon the surface in dry weather. Near Madras the soil is heavy, and abounds with salt: thence to Vellore, and in many other parts, it is so sterile as to nourish only the common bread tree (*Melia azadirachta*), the *Robinia mitis*, &c. Rice is the principal crop in the low country; in the highlands all kinds of small grains are cultivated. Sugar is grown only in small quantities, the soil not being rich enough for the canes. Tobacco and a little indigo are cultivated; but the latter not for exportation. The cotton raised is chiefly of the dwarf kind (*Gossypium herbaceum*). Irrigation being here generally of extreme importance to the success of the crops, numerous and extensive tanks have been constructed in such districts as are not traversed by considerable rivers. Famines and scarcities are not unfrequent in this part of India. The farms are mostly tilled by Sudras. During the first few years after our acquisition of the Carnatic, the land revenue of extensive tracts was rented out to a set of middle-men or temporary zemindars, who under-let certain parts to the heads of villages. That this system was not without its defects, is certain; and partly in the view of obviating these, and partly in order to secure a greater amount of revenue, the *ryotwar* system has been generally introduced. The principle of this system is to supersede all middle-men and head farmers, and to bring the collectors into immediate contact with the *ryots*, or cultivators, who are directly assessed with such a rent as it is supposed the land will bear: the more prosperous persons in a village being at the same time compelled to make up for the deficiencies of their less fortunate neighbours, and the assessment is perpetually varying. Notwithstanding our respect for the able men by whom this system has been recommended, it is not going too far to say, that it is a curse upon the country, and that till it be abolished, or very materially modified, nothing but impoverishment need be looked for. Most of the pop. are Hindoos of the Brahminical sect; there are comparatively few Mohammedans, and Hindoo customs are retained in wonderful purity throughout the prov. Madras, Pondicherry, Tranquebar, Tanjore, Arcot, Dindigul, &c., are the chief cities and towns. Formerly there were a vast number of strong hill forts; but most of them are now crumbling into ruin. Few provs. exhibit so many large temples and other public monuments of former civilisation and wealth: the temples are all built on a uniform plan, and inclosed within a four-sided wall, 15 or 20 ft. high.

The Moguls first invaded the Carnatic in 1310, but it was not finally in their possession till the reign of Au-

zungzebe. In 1717, it was severed, with the Mogul territories in the Deccan, from the throne of Delhi. After the wars, which lasted with little intermission throughout a great part of the 18th century, the Carnatic was conquered by the British in 1783; but it was not finally ceded to us till 1801. (*Hamilton's E. I. Gaz.* i. 359—364; *Madras Almanac.*)

CARNIOLA. (*See* CARINTHIA and CARNIOLA.)

CARNWATH, a village of Scotland, E. part of Lanarkshire, 25 m. S.W. Edinburgh. It has of late been greatly increased and improved; the numerous new houses that have been erected are handsome, and built according to a definite plan; and manufacturing industry has been introduced. The inhab. amount to about 900, "the great body of whom are employed in weaving, and dependent on Glasgow for employment." (*New Statist. Acc. of Scot.*) But the par. is not less important than the town, containing, as it does, rich and apparently inexhaustible fields of coal, limestone, and iron-stone. The Wilsontown iron-works were commenced in 1780-81; and, in 1807, the monthly pay of the workmen employed was not less than 3,000*l.* (*Ib.*) Owing, however, to the embarrassments into which the company (the Messrs. Wilson) fell, the works, after languishing some years, entirely stopped in 1812, and continued suspended till 1821, when, having passed into other hands, they were revived, and have ever since been in operation, though not to the former extent. The following extract from the *New Statist. Account* contains ample information respecting the busy villages by which Carnwath is surrounded, and which have sprung into existence within the last 60 years. "Newbigging contains a population of 200, entirely weavers; Braehead, a mixed population of 120, weavers and labourers; Forth 300, chiefly miners, as being close upon Wilsontown; and Wilsontown 400, miners and labourers of all kinds belonging to the works." Here is a plain new church, a dissenting chapel, a parochial and other schools, and a subscription library.

CAROLINA (LA), a town of Spain, prov. Jaen, 35 m. N.N.E. Jaen; lat. 38° 18′ N., long. 3° 35′ W. Pop. 2,880. This is the cap. of the foreign colonies settled in the Sierra Morena in the reign of Charles III. The district where they are established was previously a desert, and abandoned to banditti; but Don Pablo de Olavido, who then held a high office in the government of Seville, conceived the design of colonising the Sierra with foreigners, who should support themselves by their own labour. Most of the settlers were Germans, and each received 500,000 sq. ft. of land, free from rent for 10 years, and after that to be subject to tithes only. With each allotment the government gave, also, 10 cows, 1 ass, 2 pigs, 2 fowls, and seed for the land, with a house and a bakehouse. The settler was restrained from disposing of the land to any one in possession of another lot; but was to be entitled to another equal grant on bringing the first into cultivation. But notwithstanding these and other advantages, the scheme has not been very successful. The funds assigned to carry it into operation were not regularly supplied, and the government was in too much haste to draw a revenue from the new pop. to reimburse itself for the first advances. Still the people present a striking contrast to the villagers in most other parts of Spain, being comparatively industrious and active. Corn, pasture, potatoes, and cabbages, are raised in the spots best suited to them. The cottages are of better construction than the cabins of the Spanish peasantry, and have most necessary articles of household furniture; and their inhab., instead of sitting wrapped up in cloaks in a state of stupid apathy, are all busy with something or other. They have assimilated themselves in language and religion with their neighbours: there are 58 of these townships. (*Inglis*, ii. 28. *et seq.*; *Miñano.*)

CAROLINA (NORTH), a marit. state of the N. American Union, between 33° 50′ and 36° 36′ N. lat., and 75° 30′ and 84° 20′ W. long.; having N. Virginia, W. Tennessee, S.W. and S. Georgia and S. Carolina, and S.E. and E. the Atlantic. Length, E. to W., 430 m., average breadth 118 m. Area 51,000 sq. m. Pop. (1840) 753,419, of whom 245,817 were slaves. The greater part of the coast is fenced by a line of long, low, narrow, sandy isls., separated from the mainland in some places by narrow sounds, in others by broad gulphs or lagoons. The passages between them are mostly shallow and dangerous, and Ocracoke Inlet is the only one N. of Cape Fear, through which even small vessels can pass. The shores of the isl. are generally regular and unbroken, while that of the mainland is deeply indented by numerous inlets, the principal of which are Albemarle and Pamlico sounds. The only harbour of any importance is formed by the æstuary of Cape Fear river, near the S. extremity of the state, and has 18 ft. water.

The surface may be classed under three divisions — the low level, hilly, and mountainous country. The low country comprises nearly all the E. half of the state, and for 60 or 80 m. inland consists of a dead flat, intersected with swamps and marshes, the most extensive of which, Alligator Swamp, more than 50 m. long, by 30 broad, occupies the peninsula formed by Albemarle and Pamlico sounds. The swamps are mostly covered with a luxuriant vegetation, and have extensive forests, chiefly of pine, cedar, and cypress trees. Beyond this region, the surface swells into hills, and in the most W. part rises into mountains. These belong to the Apalachian chain, which here rises to an elevation of 3,000 ft. They form two principal ranges, the most W. called the Iron Mountains, and the more E. the Blue Ridge; the intermediate valleys are estimated at about 1,000 ft. above the level of the Atlantic.

Most of the rivers in this state have more or less a S.E. course, and flow directly into the Atlantic. The principal are the Roanoke, Neuse, and Cape Fear rivers. The latter is the only one wholly within the state; it is navigable for small vessels to Fayetteville, 130 m. from its mouth. The Neuse, which opens by a wide æstuary into Pamlico Sound, traverses the centre of the state, and is navigable for boats in most parts of its course. The Roanoke enters the state from the N., and flows into Albemarle Sound, after a course about 370 m. It can be ascended by vessels of considerable tonnage for about 30 m. from its mouth, and by small craft to 70 m. higher.

The climate varies according to elevation; a difference of more than 5° Fahr. exists in the annual mean temp. of the E. and W. extremities of the state. In the low country, the summer is sultry, and pestilential diseases prevail; elsewhere it is very healthy, and the winters often severe.

Soil in the plains for the most part sandy and sterile. In the hilly country also there are some pine barrens; but these are less extensive than in Virginia, &c. Along the banks of the rivers, and W. of the mountains, there are lands of a rich black mould and of great fertility. The forests of the interior contain oak, hickory, maple, ash, cypress, cedar, black walnut, &c. Apples, pears, strawberries, the fig tree, vine (*Vitis vinifera*), wild vine, &c., attain perfection; the cherry-trees grow to an immense size, and peaches thrive every where. Snake-root, sarsaparilla, and other valuable drugs are found. Cotton and rice are staples. Large quantities of the former are grown on the sandy isls., and in the low country; rice is cultivated principally on the more solid tracts, interspersed amongst the swamps. All kinds of European grain, pulse, and flax are produced in the interior; and a great deal of pitch, tar, turpentine, and lumber are obtained from the pine forests. Maize thrives well; but the wheat is generally of inferior quality. The leaves of the canes, with which many of the lower lands are overgrown, afford good fodder for the cattle during the winter. Hogs are the most numerous of the domestic animals. The wolf and wild cat are almost the only formidable wild quadrupeds. Wild turkeys are plentiful. The Roanoke and other rivers abound with large fish. Alligators of an enormous size infest the swamps and lower courses of the rivers; and snakes, including the rattlesnake, are numerous.

The portion of N. Carolina lying along the E. declivity of the Apalachians comprises the principal portion of what is called the gold district of the U. States. The metal is partly obtained from mines and partly from washings: at one time it promised to be of considerable importance, gold to the amount of 475,000 dollars being supplied to the national mint by this state in 1833; but it has since progressively declined, and in 1838 only furnished 66,000 dollars. Iron of excellent quality is plentiful, and coal and lead have recently been discovered.

Cotton factories are rapidly springing up, but with few exceptions are confined to the spinning of coarse yarn. In consequence of its want of harbours, N. Carolina has little direct foreign trade, and nearly all its commerce is with the neighbouring states. Its principal exports are cotton, rice, tobacco, lumber in vast quantities, tar, pitch, turpentine, wheat, and Indian corn. There are several canals, but none of any great extent. Only two railroads lie wholly within this state; the Raleigh and Gaston, and the Wilmington and Raleigh. Both were expected to be completed in 1838; their united length is nearly 260 m., and the cost of their construction was estimated at about 2,500,000 dol. Others intersect the N. portion of the state, and several railway companies have been either incorporated, or projected. In 1837 N. Carolina had 3 banks, and 7 branch banks, with a united capital of 2,525,000 dol. This state is divided into 62 counties. Raleigh is the cap.; the other chief towns being Fayetteville, Wilmington, and Newbern.

The legislative power is vested in a senate and a house of representatives. Both are elected annually by the people, each co. sending 1 mem. to the senate, and 2 to the H. of R. Electors of senators must possess 50 acres of freehold property; but the right to elect mems. of the H. of R. belongs to all freemen above the age of 21. The executive power is in the hands of a governor, assisted by a council of 7 mems., chosen by a joint vote of the two houses. The state sends 13 representatives to Congress.

N. Carolina is divided into six circuits, in each of

which a circuit court is held half yearly. The judges are appointed by a joint vote of the two houses, and hold office during pleasure. The number of the militia in 1838 was upwards of 65,000. Education is rather backward, but advancing. There is a university, and academies are established at various places. An act passed in 1839 will, it is believed, occasion the establishment of a common school in every district: unluckily, however, the schools have hitherto been open only to whites. The earliest attempts made by the English to colonise America took place in this state; but the first colony, planted on the Roanoke river, in 1587, is supposed to have been cut off by the natives. In 1650 fresh settlements began to be made, and in 1667, the colony obtained a representative government. In 1717 Carolina was brought under the direct control of the crown, and in 1720 divided into N. and S. This state zealously joined in the revolutionary struggle. (*Darby's View of U. S.; Mitchell's U. S.; American Almanac for* 1840; *Stuart's Three Years in America, &c.*)

CAROLINA (SOUTH), one of the U. States of America, in the S. part of the Union; chiefly between lat. 32° and 35° N., and long. 78° 40′ and 83° W., having N. and N.E. N. Carolina; E. and S.E. the Atlantic; and S.W. Georgia; from which it is separated by the Savannah. Shape somewhat triangular. Length, N.W. to S.E., 240 m.; average breadth 130 m. Area about 31,000 sq. m. Pop. (1820), 502,741; (1840), 594,398; of whom 327,038 were slaves. Surface very different in different parts; but its changes are, for the most part, gradual. The whole coast S. of Winyaw Point is broken into a number of low islands, and is flat, sandy, and alluvial. It continues so for nearly 100 m. inland, where a range of small and sterile sand hills stretches across the state N.E. to S.W. This tract is succeeded by a picturesque country of hills and valleys, clothed with extensive forests; and farther W. the country continues to rise till, at the border of the state, it terminates in a table-land, some peaks of which are estimated to rise to more than 4,300 ft. above the level of the Atlantic. This region forms part of the Apalachian, or Alleghany chain. The coast has several excellent harbours of the second class; but few of the first order. Those of Charleston and Port Royal are the best, and the only ones accessible for large ships. The chief rivers are the Savannah, Santee, and Pedee; but all of them are shallow at their mouths: further inland, the river navigation is much better than on the coast. The Savannah may be ascended by small river craft, and steam-boats, as far as Augusta, 130 m. from its mouth. Much of the soil consists of a swampy land, applied to the culture of cotton and rice; more of the latter being produced in S. Carolina than in any of the other states. The low sandy islands along the coast, though apparently of very little value, furnish what is called the "Sea-island" cotton, being the very best description of cotton that is any where produced. It is longer in the staple than any other variety, and is strong and even, of a silky texture, and a yellowish tinge. It degenerates if it be attempted to be raised at any considerable distance from the shore. It brings a much higher price than any other sort of cotton: but as it can be raised only in certain localities, its quantity is limited, and, apparently, unsusceptible of increase. The export of Sea-island cotton from the U. States—that is, from S. Carolina and Georgia—during the year ended 30th June, 1849, amounted to 18,111 bags. Short-stapled cotton is raised in the more inland parts of the country; and wheat, maize, and other grain, as well as tobacco and indigo, are grown upon the high lands. There are many pine barrens, and some unproductive sandy wastes; but the soil is generally extremely fertile, especially in those tracts lying along the courses of the rivers. In the lower parts of the country the winters are very mild, and snow does not lie long on the ground. Hurricanes and heavy periodical rains occur there: the summer is extremely hot, and pestilential fevers and other diseases are then generated. The N. and W. parts of the state are, on the contrary, reckoned very healthy; frost and snow occur annually, from Nov. to Jan. The changes of temperature are, however, every where very sudden; and at Charleston the thermometer has been known to vary 46° in a day! The forests yield large quantities of oak, beech, hickory, ash, cypress, and other fine timber. Cotton, rice, and maize are the only considerable articles of export. The swamps on the banks of the rivers are well adapted for hemp, corn, and indigo. The culture of wheat, barley, oats, and Indian corn was, until lately, much neglected; and large quantities were annually imported. Tobacco is now more generally cultivated than indigo, which was formerly next in importance to cotton and rice; the sugar-cane is chiefly confined to the district of Beaufort in the S. Field labour is performed entirely by slaves, who, in the low country, comprise more than three fourths of the pop. Planters and farmers generally wealthy, hospitable, and charitable; the former lead somewhat luxurious lives; but the latter are of frugal and industrious habits. Wild animals, such as bears, wolves, foxes, wild cats, &c., are much scarcer than formerly. The rattlesnake has become rare. Alligators, of large size, infest the marshes and mouths of the rivers. Iron, of good quality, is found; and some gold has been found in the sands of some of the rivers: the latter, however, is not so plentiful as in either N. Carolina or Georgia; and the quantity, which latterly has been decreasing, only amounted, in 1838, to 13,000 dollars. The value of the domestic produce exported during the year ending 30th June, 1848, was 8,081,917 dollars. The value of the imports, which consist chiefly of manufactured goods and wines, amounted, in the above year, to 1,485,299 dollars. The state is divided into 30 counties. Columbia, situated near the centre, is the cap. and seat of government; but Charleston is the largest town, and the principal emporium. The other chief towns are Savannah, Augusta, Camden, and Beaufort. The state contained, in 1837, 10 banks, with a united capital of 8,636,118 dollars. The establishment of free schools throughout S. Carolina, commenced in 1811; and the sum appropriated annually for this purpose is usually from 37,000 to 38,000 dollars. According to a report made in 1835, there were 709 free schools, which afforded instruction to 8,715 pupils. The head college of the state is at Columbia. (Respecting this and others, *see* art. COLUMBIA and CHARLESTON.) The S. Carolina railroad, from Charleston to Hamburg, on the Savannah road, 150 m. in length, was completed in 1833, and others are in progress. The state government consists of a senate and house of representatives; the executive power is vested in a governor and lieut.-governor, who are both elected for 2 years, and are again eligible for office after a lapse of 4 years. The senate consists of 45 members; half of whom are chosen for 4, and the other half for 2 years. The house of representatives is composed of 124 members, chosen every 2 years. The legislative assembly meet annually at Columbia. The chancellors and judges are chosen by ballot of the senate and house of representatives; and hold office so long as their conduct is approved. This state sends 9 mems. to the H of representatives, and 2 to the senate in congress. S. Carolina was first colonised about 1670; but no permanent settlement was formed till the foundation of Charleston, in 1680. In 1695, the cultivation of rice, and subsequently of cotton, was introduced by Governor Smith. The 2 Carolinas were separated, and a royal government established in 1719; and the state continued prosperous until the beginning of the disturbances, caused first by Indian warfare, and afterwards by the revolution, in which it took a prominent part, and suffered severely. Its constitution was formed in 1790; but has undergone several amendments in 1801, 1816, and, as regards judicial matters, again in 1835. (*American Almanac*, 1837-38-39.; *Darby's View of the U. States; American Encyclopædia; Mitchell's U. States; Stuart's Three Years in N. America*, p. 89—91.)

CARORA, an inland town of Venezuela, prov. Coro, in a dry and sterile plain, 94 m. S.S.W. Coro; lat. 10° 13′ N., long. 70° 26′ W. Pop. 6,000? It is well built and contains three handsome churches and a convent: its climate, though hot, is salubrious; it is supplied with water by a small rivulet. Its vicinity abounds with the Indian fig, aromatic balsams, gums, &c., and excellent cochineal; but these resources are neglected for the breeding of cattle, which occupies many of the inhab. The town has manufactures of leather, and of hammocks from the fibre of the *agave-fœtida;* the inhab. are industrious, and have a brisk trade in the products of their industry with Coro, Maracaybo, and Carthagena. Most of the inhabitants are Mestizoes, Mulattoes, and Indians. (*Geog. Account of Colombia*, i. 136, 137; *Mod. Trav.* xxvii. 213, 214., &c.)

CARPATHIAN, or KARPATHIAN, MOUNTAINS, a very considerable range, enclosing Hungary on the N. and E., covering the principality of Transylvania, and forming the N.E. portion of the great mountain system of S. Europe. Including a lower range, called Kleine Karpathian (Little Carpathians), these mountains commence on the left bank of the Danube, in the neighbourhood of Presburg; lat. 48° 8′ N., long. 17° 6′ E.; thence they run N.E. to the borders of Silesia, where, in lat. 49° 30′ N., long. 18° 35′ E., they meet the mountains of Moravia, through which they are connected with the Sudetes and other Bohemian ranges. After this they bend round to the E. and S.E., separating Hungary from Galicia and the Buckowine, and Transylvania from Moldavia: they continue the last course as far as lat. 45° 30′ N., long. 26° 30′ E., where the main ridge turns due W., and forms the boundary between Transylvania and Wallachia. Finally, about the long. of 23° E., it turns S.W., and again meets the Danube at the town of New Orsova, lat. 44° 44′ N., long. 22° 30′ E. Between its extreme points, therefore, the Carpathian system describes a curve of about 800 m., and, except at its S.E. corner, one of a very regular and gradual kind. Its width is various, but generally considerable; the longest

line that can be drawn across it, in a direction perpendicular to its course, is from Boksan, in the Banat, N.E., through Transylvania, to Puttna in the Buckowine, about 240 m. From the great S. bend of the Danube at Waitzen, or from Mount Matra (about 35 m. E. of the bend) to the neighbourhood of the Vistula, the mountains measure 140 m. from S. to N.; but towards the N.E., between the Upper Theiss and the sources of the Dniestr in Galicia, they are not more than 70 m.; and on the W., between the rivers Waag and Morava, they are less than 30 m. across. At a rough calculation, they may be said to cover 90,000 sq. m. With regard to elevation, the Carpathians do not attain the height of other great ranges, as the Caucasus, or the Alps; the highest measured peaks being under 9,000 ft. The highest ascertained eminences are in the county of Zips, the most N. part of the chain, between the meridians of 19° and 21°; and among these, the following are the most noted:—

	Ft.
Lomnitz Peak	8,779
Great Kesmark ditto	8,647
Great Krivan Ridge	8,482
Gold mine on ditto	7,063
White Sea Peak	7,075
Limestone rocks, above the Fleisch Bank	6,529
Fleisch Bank	6,307
Kohlback	6,307
Grun See (Green Lake)	5,191
Brook at foot of the Fleisch Bank	4,999

The lower peaks, and subordinate ranges, vary from 2,000 or 3,000 to a few hundred feet in elevation. But if height be not, ruggedness is a very striking feature of the Carpathians: the roads among them are generally difficult, sometimes impracticable for horses; and the whole effect of their appearance is one of great majesty. The descent towards Galicia is much more abrupt than that towards Hungary, and in the S.E. and S. the steepest sides of the mountains are towards Moldavia and Wallachia. The rivers, which mark the limits of the Carpathian system, are, on the N., the Vistula, as far as its junction with its most important affluent the San, and the Dniestr; on the E. the Sereth; on the S. the Danube, from the mouth of the Sereth to that of the Morava, which marks the extreme limit of the mountains towards the W. Within these bounds, however, are contained a large quantity of flat land in Galicia and Wallachia, together with the greater part of the Hungarian plain; on the other hand, the bed of the Danube at Orsova is nothing but a cleft between the Carpathians and the N. branches of the Balkhan, and at Waitzen, in like manner, it can scarcely be said to break the continuity of the former with the offshoots of the Styrian Alps. (*Townson's Trav. in Hung., passim; Born's Trav. in Banat and Transyl., passim; Clarke's Trav.* ii. 597. &c.; *Bright's Trav. in Lower Hung.* p. 101. &c.; *Korabinsky's and Bright's Maps.*)

Geology. — The most ancient rocks are found only on the highest parts of the Carpathians, and not always there (*Born*, p. 202.); one of the highest ridges in the Alpine country of Zips consisting of calcareous limestone. (*Townson*, p. 348.) Granite, however, forms the substratum, or rather the main bulk and nucleus of the whole mass, and sometimes, even at slight elevations, lies at no great depth. Hornblende in small quantities, gneiss in much larger, and trap very considerably distributed, form the mass of the other older rocks; but the formation most worthy of notice is a kind of conglomerate, formed of hardened clay, quartz, sharl, spar, and lithomarga, which, from its richness in ore, has obtained in Hungary the title of *Metallic Rock*, and which is met with most abundantly throughout the whole range, from Presburg to Orsova. (*Born*, p. 208.) Limestone, old and recent, occurs in immense quantities, and in the Alpine regions, Townson found stratified rocks of the first kind, of the amazing thickness of 2,100 ft. (*Trav.* p. 355.) Basalt, porphyry, porphyritic basalt, jasper, petrosilex, lava, obsidian, and a whole host of substances, volcanic, and the result of aqueous deposition, are scattered in the wildest confusion among the lower ranges, giving unquestionable evidence of the extensive agency of both fire and water, but so little defined, that the best observers decline to offer an opinion as to the origin of many of the appearances. (*Born*, p. 202—214. *et pass.; Townson*, pp. 275—303. *et pass.*) It is worthy of observation that the more recent formations, as sandstone, &c., observable in other countries, are singularly scarce in the Carpathians. (*Born*, pp. 206. 211. &c.)

Hydrography. — These mountains form the dividing line between important river systems. The N. faces give birth to the Vistula and Dniestr; but with these exceptions, no river that reaches the sea has its source within them. The affluents of these two, from the N. slope, are, however, extremely numerous, though not comparable to those that pour from the S. and E. faces, to swell the stream of the Danube, to which river, also, the drainage of the N.W. face is conveyed, with the exception of an insignificant portion, which finds its way to the Oder. The running water of the Carpathians belongs, then, to two systems, the Black Sea and the Baltic; and there are no lands better irrigated than those over which it flows; the Theiss, Maros, Aluta, and many others, would be called important rivers in most parts of the world, and the smaller streams and sub-tributaries are absolutely innumerable. (*See* DANUBE, VISTULA, DNIESTR, HUNGARY, &c.)

Mineral Productions.—The sides of the Carpathians are rich in the productions of the vegetable kingdom, and abound in animals of the most useful kind. The decomposed volcanic matter, which forms so large a portion of the soil, accounts for the first, and consequently for the second of these results. The particulars of both will be, however, better treated of under the heads of the different countries through which the mountains run. (*See* HUNGARY, TRANSYLVANIA, GALICIA, &c.) It is intended here to restrict ourselves to a brief account of their mineral wealth, in which respect they stand pre-eminent among the various ranges of Europe. Nearly every metal, and all in abundance, are produced in the Carpathians. The richer mines of Transylvania and the Banat yield for 1 cwt. of ore 125 oz. of gold, and 68 oz. of silver (*Born*, p. 102.), and all the mountains of these beautiful countries are full of signs of undiscovered metals. It appears, however, that native gold and silver is scarce, except in the S.E. districts, but all the other ores are mixed with these precious metals throughout the whole range. (*Born*, pp. 215. 217.) Clarke says (ii. 678.) that the stamping-works at Schemnitz employ 1,000 hammers, each hammer stamping three quintals of ore per day; the return averaging 12,000 florins per month, clear profit to the government. It would be endless to go through a detail of all the wealth of these mountains; suffice it to say, that copper, iron, lead, cobalt, antimony, sulphur, and saltpetre, are found in large quantities; cinnabar also appears, but not in sufficient abundance to tempt the miner; and in many places there are large fields of coal. Rock-salt is also one of the treasures of these mountains. The Polish mines of Galicia have long been famous, and from all appearances, their treasures are actually inexhaustible. In a word, the Carpathians appear to be one extensive mine, where nearly all the varieties of metallic wealth are produced; in addition to which, their recesses yield the opal, one of the noblest and most valuable of gems. (*Born*, pp. 99. 178. 215. *et pass.; Townson*, pp. 305—310. 378—391. *et pass.; Clarke*, ii. 656—678.; *Bright*, pp. 146—182.)

Name.—The Carpathians were known to the ancients, and by their present name, Καρπατης (*Ptolemy*, iii. 5.); and they applied the same name to that part of the Mediterranean which lies about the island of Rhodes. (*Ptolemy*, v. 2.; *Strabo*, x. 488.) Its etymology is not very clear; but Strabo, in speaking of the sea, calls it also Crapathian (Κράπαθον); and though it be not very easy to connect the ideas of these mountains with that of the remote shore of Asia Minor, it is something remarkable that the German term for the former is *Krapack*, of which the Greek of Strabo seems only a softened form. The Hungarian name for these mountains is Tatra.

CARPENTARIA (GULPH OF), an extensive arm of the sea, deeply indenting the N. coast of New Holland, between 10° 40′ and 17° 30′ S. lat., and 137° and 142° E. long. No settlements have, as yet, been founded on its coasts.

CARPENTRAS, a city of France, dép. Vaucluse, cap. arrond., in an agreeable situation, at the foot of Mont Ventoux, and on the left bank of the Auzon, 15 m. N.E. Avignon; lat. 44° 3′ 28″ N., long. 5° 2′ 43″ E. Pop. 9,224. The town is surrounded by high walls in good repair, flanked by several towers, of which the most remarkable is that surmounting the *port d'Orange*. It is well built, but the streets are narrow, winding, and filthy. There are some good houses without the walls, in the suburbs. It is well supplied with fountains, and water is conveyed into the city by two aqueducts, one constructed by Clement V., and one by the town, in the early part of last century. The principal public buildings are the hospital, erected in 1757, without the walls; the cathedral, a large Gothic pile, with a spire of the age of Charlemagne; the ancient episcopal palace, now the palace of justice: contiguous to the latter is an ancient triumphal arch. There is also a public washing-house, theatre, &c. It is the seat of a tribunal of primary jurisdiction, and has a departmental college, a Jewish synagogue, a society of rural economy, a public library, with 22,000 vols., and some valuable manuscripts. It has distilleries, dye-works, tanneries, and madder-mills, with fabrics of soap and aquafortis; and has a considerable trade in silk, madder, and excellent fruits.

Carpentras is very ancient, having been, under the Romans, a principal town of Gallia Narbonensis. It was successively attacked and pillaged by the Vandals,

Lombards, Saracens, and other barbarians. During the residence of the popes at Avignon, it began to revive; and was, for a short period, under Clement V., the seat of the holy see. The bishopric of Carpentras, said to have been founded in the 3d, was suppressed in the course of the present century. (*Hugo, art. Vaucluse, Dict. Géog, &c.*)

CARRARA, a town of the duchy of Massa, on the Lavenza, about 3¼ m. from the Mediterranean, and 60 m. W.N.W. Florence. Pop. 6,000. It has an unfinished cathedral, several churches, a convent, and an academy of sculpture. Several artists have fixed their residence here, attracted by the convenience of obtaining marble almost cost free; and the sale of rude marble and of articles of sculpture forms an important branch of traffic.

The marble quarries from which this town derives its entire celebrity and importance, have been wrought from the age of Augustus, and probably from a still more remote epoch. They are found in the lower ridges of the hills which unite in the Monte Sagro. The beds of the dove-coloured (*bardiglio*) marble are the nearest to the town. Higher up the valley are the beds of white marble. Only a few of these beds produce marble of such a grain and transparency as to be highly prized by the statuary; and if the quarrymen succeed in obtaining one block in ten that preserves throughout a good colour, they are satisfied. Still higher up, the marble becomes of a dull, dead, colour; but of this much larger blocks may be obtained. The principal quarries of veined marble are in a parallel valley. Notwithstanding the vast quantities that have been dug up since these quarries began to be wrought, the supply of marble in this district seems to be now as inexhaustible as ever. About 1,200 men are, or lately were, employed in the quarries. It is pretty certain, however, that the demand for Carrara marble would be much greater were it not for the heavy duty imposed on its export. This has led to the opening of rival quarries at Serravezza and in other parts of Italy. (*Conder's Italy*, ii. 45.; *Simond's Italy*, p. 576.; *Bowring's Report on the Statistics of Tuscany, &c.* p. 53.)

CARRIBEAN SEA is the name given to that arm of the Atlantic Ocean included between the Carribee islands on the E., Hayti and Jamaica on the N., Guatimala on the W., and the N. coast of S. America on the S.

CARRIBEE ISLANDS, or LESSER ANTILLES, the name sometimes given to that portion of the W. Indies that includes the vast chain of islands which extends, in a circular sweep, from Anguilla on the N. to Trinidad on the S. They comprise the whole of the Windward and the more S. portion of the Leeward Islands. The principal islands, reckoning from the N., are St. Christophers, Antigua, Guadaloupe, Dominica, Martinique, St Lucia, Barbadoes, St. Vincent, Grenada, Tobago, and Trinidad. They derived their name from having been mostly occupied, at the period of their discovery, by a tribe of Indians, called Carribs or Carribees, now nearly extinct. The reader will find an excellent account of the Carribs in Edward's *Hist. of the W. Indies*, book i. cap. 2.

CARRICKFERGUS, a parl. bor. and sea-port of Ireland, co. Antrim, prov. Ulster, on Carrickfergus Bay, or Belfast Lough, 95 m. N. Dublin, 9 m. N.N.E. Belfast. Pop. in 1821, 8,023; in 1841, 9,379; and in 1834, 8,860; of whom 1,387 were of the established church, 6,499 Protestant dissenters, and 974 Roman Catholics. The castle, on a rock projecting into the sea, was built or much strengthened by the English shortly after their first landing in Ireland under Strongbow. It is still kept up as an arsenal, and is mounted with heavy guns. King William landed here on the 14th of June, 1690, 16 days previously to the battle of the Boyne. In 1760, it surrendered to a French naval force under Thurot, who soon after evacuated it on the appearance of the English squadron under Commodore Eliot, by which Thurot's squadron was captured, after an engagement in which he lost his life. On the 24th of April, 1778, Paul Jones captured the Drake sloop of war in the bay; but sailed off without making any hostile attempt on the town.

Carrickfergus consists of the town within the walls, parts of which still remain; and of suburbs on the E. and W. sides, called the Scotch and Irish quarters. It is pretty well built, and has a respectable, though antiquated appearance; it is not lighted, and is but indifferently supplied with water. The church, a large cruciform building, with a fine modern spire, has, in one of the transepts, a large mural monument of the Donegal family; there is also a Roman Catholic chapel, and places of worship for Presbyterians, Independents, Methodists, Covenanters, and Unitarians. The castle, kept up as a fortress and magazine, has a number of heavy guns mounted on the walls, and is garrisoned by a company of foot. The town and the adjoining district, containing 16,700 acres, forms a co. independent of that of Antrim, within which it is enclosed on every side, except towards the sea. By its ruling charter, granted by James I. in 1612, the corporation consisted of a mayor, sheriffs, 16 aldermen, 22 burgesses, and an indefinite number of freemen; but this body is now extinct, and the government of the town and the corp. property is vested in a board of commissioners. Bor. revenue in 1847, 394*l.* It returned 2 mem. to the Irish H. of C.; and sends 1 mem. to the imperial H. of C. Registered electors, in 1849-50, 787. The assizes for co. Antrim are held here in the court-house in the county prison, a large and expensive, but ill-arranged building. There is a small local police. The rural district is watered by numerous streams, and in it is Lough Mourne, covering 90 acres, at an elevation of 556 ft. above the level of the sea. Tanning is carried on to a considerable extent. There were in the town, in 1839, 2 cotton mills, and 1 flax ditto; the former employing 256, and the latter 113 hands. The inhab. derive their principal support from the concourse of strangers at the assizes, and during the bathing season; and from the fisheries. Excepting haddock, all kinds of fish that frequent the Irish coast are abundant; as are oysters celebrated for size and flavour, scollops and lobsters. A pier has been lately built for the use of the fishermen; but it is defective in not being accessible at low water. The greater part of the fish is sent by land to Belfast for sale. Markets are held in an antiquated market-house on Saturdays; fairs on 12th May and 1st November. A branch of the Northern Bank was opened in 1836. Post-office revenue in 1842, 147*l.*; in 1848, 258*l.* Two *caravans*, conveying 10 passengers each, and 16 cars, with four passengers each, ply daily to Belfast; and two coaches, with 10 passengers each, daily to Larne. The port was long the chief mart on this part of the coast; but in 1637, the corporation having sold its exclusive privileges to the crown, the business has since been almost wholly transferred to Belfast; its trade being, at present, confined to the import of coal, and the export of cattle and grain. It had, in 1845, 362 registered vessels employing 1,074 men and boys. The largest vessels may enter the bay at low water, but are prevented from discharging at the town, through the want of a landing-pier with sufficient depth of water. The appearance and manners of the inhab. exhibit striking indications of their Scotch descent. The lower classes are industrious, frugal, and honest. Though wealthy residents are not numerous, many are in a state of respectable independence; most industrious persons attain the means of comfortable subsistence, and very few are in a state of destitution. (*M'Skimin's Carrickfergus; Stat Surv.; Fishery Rep.; Railway Rep.*)

CARRICKMACROSS, an inl. town of Ireland, co. Monaghan, prov. Ulster, 46 m. N.W. by N. Dublin. Pop. in 1821, 1,641; in 1831, 2,979. It consists of one long street, in which is the church, a R. Cath. chapel, which serves as the cathedral for the R. Cath. bishop of Clogher, and a Presbyterian meeting-house. A grammar-school, endowed by Lord Weymouth, is now (1838) being rebuilt. There is also a dispensary, a mendicity society, a savings' bank, and a bridewell. Petty sessions are held every fortnight: a party of the constabulary is stationed here. There is a tanyard, a brewery, and a distillery; which last paid duty, in 1836, on 168,509 gallons of spirits; duty was also paid on 14,964 bushels of malt. Markets are held on Thursdays, and on corn on Wednesdays and Saturdays: fairs on 27 May, 10 July, 27 Sept., 9 Nov., and 10 Dec. Post-office revenue in 1830, 398*l.*; in 1836, 471*l.* The mail-coach from Dublin to Londonderry passes through the town; and a mail-car, carrying at an average 2 passengers each trip, plies daily to Dundalk. (*Stat. Survey; Railway Rep.*)

CARRICK-ON-SHANNON, an inl. town of Ireland, prov. Connaught, cos. Leitrim and Roscommon, on the Shannon, 85 m. W.N.W. Dublin. Pop. in 1821, 1,673; in 1830, 1,428. Pop. of par. 17,093; of which, 2,091 are of the estab. church, and 15,002 R. Cath. It lies principally on the Leitrim bank of the river, being connected with a small suburb on the Roscommon side by a bridge; and has a new church, a R. Cath. chapel, 2 Methodist meeting-houses, and a co. infirmary and dispensary. It was incorporated by James I. in 1613, under a provost, 12 burgesses, and an unlimited number of freemen; and returned 2 mem. to the Irish H. of C.; but was disfranchised at the Union. The assizes for the co. Leitrim, of which it is the co. town, are held here, as are general sessions, in Jan. and July, and petty sessions on alternate Mondays. The co. court-house, gaol, and bridewell, are in the town. A party of the constabulary is stationed here; and it has an infantry barrack. A smart trade in butter, grain, and provisions, is carried on by the Shannon, now rendered navigable to Lough Allen. Yarn is also manufactured. Markets are held on Thursdays, in an enclosed marketplace; and fairs on 18 Jan., 20 Mar., 12 May, 6 June, 11 Aug., 14 Sept., 22 Oct., 21 Nov., and 16 Dec. Post-office revenue in 1830, 356*l.*; in 1836, 811*l.* The mail-coach from Dublin to Sligo passes through the town; and a mail car plies daily to Cashcarrigan, conveying, at an average, 2 passengers every trip. (*Stat. Surv.; Railway Rep.*)

CARRICK-ON-SUIR, an inl. town of Ireland, prov. Munster, cos. Tipperary and Waterford, on the Suir, 85 m. S.W. by S. Dublin. Pop. (1821) 7,466; (1831) 9,626: being almost wholly R. Cath. The town, situate at the S.E. extremity of the Golden Vale, and near the junction of the cos. Tipperary, Kilkenny, and Waterford, consists of an open area surrounded with houses, and a long street leading to a bridge across the river, connecting it with the suburb of Carrick-beg, formerly C.-magriffin, in co. Waterford. It has a par. church, a R. Cath. chapel, an abbey, a nunnery, a fever hospital and dispensary, an almshouse, and the ruins of the castle built by an ancestor of the Earl of Ormonde. Some traces of the town walls are still visible. The woollen manufacture was carried on under the auspices of the Ormonde family till the close of last century; but all traces of it have now disappeared, and the labouring pop. are very poor and miserable. Tanning and brewing are still carried on; duty was paid in 1836 for 13,941 bushels of malt; and there is a considerable trade in grain and provisions. Large vessels come up the Suir to Piltown, about 4 m. lower down, whence their cargoes are conveyed to the town by lighters. A local act, lately passed, authorises river improvements, which, if effected, will enable vessels of larger tonnage to discharge at the town. Petty sessions are held every fortnight. A party of the constabulary is stationed here. Markets are held on Saturdays; fairs on the first Thursday of every month. A branch of the National Bank was opened in 1835. The post-office revenue in 1830 was 613*l*., and, in 1836, 716*l*. By a grant of William III. the par. is exempted from co. rates. A mail-coach and a car, from Waterford to Limerick, pass daily through the town; as do cars from the former city to Clonmel and Thurles: a car, plying 6 days in the week, from the town to Kilkenny, carries, at an average, 3 passengers every trip. (*Mason's Paroch. Survey; Railway Rep.*)

CARRON, a village of Scotland, celebrated for its iron-works, co. Stirling, 2 m. N.E. Falkirk, on the Carron, a stream which falls into the Frith of Forth, at Grangemouth. The iron-works were first set on foot in 1760. The Carron company, which is chartered, had an original capital of 50,000*l*. sterl., divided into 600 shares; but that is understood to have been greatly augmented since its formation. In addition to the periodical dividends, "there is an accumulating undivided capital of landed, mineral, and other fixed property, with a large stock of materials and implements" for carrying on the works. (*Nimmo's Hist. of Stirlingshire*, edit. 1817, p. 721.) The Carron iron-works were long the most extensive in Scotland, and were for a while, perhaps, the most extensive in Britain; but they are now far surpassed by similar establishments in Scotland, such as those of Gartsherrie, Calder, and Clyde, and by vast numbers in England. The works are employed in the smelting of iron ore, and the manufacture of all kinds of cast-iron goods, whether for civil or warlike purposes. But they were chiefly celebrated during the late French war, for the manufacture of cannon, mortars, howitzers, carronades, (so called after Carron, where they were first made), bombs, and such like warlike instruments. Since the peace, this branch of business has been well nigh annihilated, except for the supply of a limited foreign demand. These pieces of ordnance, after being cast and bored, are proved by water forced into the chamber by a powerful compressing machine, — a method more esteemed than the old powder-proof. (*Ib.* p. 721.) The consumption of coal in the works is about 200 tons per day. The company convey their goods to Liverpool and London (at both of which they have warehouses), and other places, in their own vessels, which vary from 15 to 20 in number. The Forth and Clyde canal runs within a ½ m. of the works, so that the access to both seas is most convenient. The company have cut a canal from the interior of the works down to the Carron Wharf at Grangemouth, 3 m. dist., on which lighters ply and carry their goods for shipment at the latter place. The supply of water is abundant, derived partly from the river, and partly from artificial reservoirs, which cover about 250 acres of ground. The whole people employed in the works, mines, and pits, or otherwise by the company, is, on an average, about 2,500.

CARTAGENA, or CARTHAGENA, a marit. city of New Granada, and the chief naval arsenal of that repub., cap. prov. of same name, on a sandy peninsula in the Carribean Sea, connected with the continent by a narrow neck of land, 410 m. N. Bogota; lat. 10° 26′ N., long. 75° 34′ W. Pop. 18,000? It has, on its E. side, a suburb called Ximani, standing on an island, and almost as large as the city itself, with which it communicates by a wooden bridge. Both the city and its suburb are surrounded by strong fortifications, and at a short distance from them on the mainland they are overlooked by a strong fort placed on an eminence about 150 ft. high. These works are, however, commanded by a contiguous hill, rising to the height of 550 ft. above the sea, and which, instead of a fortification, has on its summit an Augustine monastery! The possession of this hill has several times led to the capture of the city.

Cartagena is famous for its port, one of the largest and best on the N. coast of S. America. It lies to the S. of the town, between the peninsula on which it is built and the island of Tierra-Bomba, and the mainland. The anchoring ground is excellent; and being completely land-locked, vessels lie in it as if in dock. It had originally two entrances, — the *Boca Grande*, close to the city, and the *Boca Chica* (narrow passage), several miles farther S. The former, however, was blocked up by the Spaniards, subsequently to Adm. Vernon's attempt upon the place in 1741, by sinking several ships in the channel. The *Boca Chica* is defended by two strong castles. Cartagena contains a handsome cathedral, several other churches, convents, &c., and some fine public cisterns. The city and its suburbs are well laid out; streets regular, and well paved; houses mostly of stone, and of one story above the ground floor, with balconies in front, and lattices instead of windows. A recent French traveller, speaking of the town, observes that it presents a melancholy aspect with its long galleries, short and clumsy columns, and streets darkened by projecting terraces, &c.; but he admits that, how singular soever the construction of the houses, they appear to be well contrived for supplying the indispensable luxury of fresh air. The great drawback upon the place is its climate, which is intensely hot. It is not unfrequently visited by the yellow fever; and is infested with tormenting and destructive insects. The importance of Cartagena has greatly declined of late years; but it is still the principal dépôt for the goods of Bogota, Popayan, and Quito, and has a considerable foreign trade. Its artisans are ingenious, and excel in the manufacture of shell articles. The packet boats between Colombia, the U. States, and Europe, sail from this place. In 1837 the value of the specie and bullion exported is supposed to have amounted to about 340,000*l*., and that of ordinary merchandise to about 20,000*l*. (*Board of Trade Papers*, viii. 336.) Cartagena was founded in 1533, and was long considered as the great bulwark of the Spanish possessions in S. America. It was taken by a Corsican pirate in 1544, by Sir F. Drake in 1583, and by the French in 1697. Under the Spaniards, it was a bishopric, and the seat of a captain-general, and of one of the three tribunals of the Inquisition in America. It is still the residence of a bishop. (*Geog. Account of Colombia; Mod Trav.* xxvii. 282—288.)

CARTAGO, or CARTHAGO, an inl. town of New Granada, prov. Popayan, on the left bank of the Vieja, a little before its junction with the Cauca, 165 m. N.N.E. Popayan; lat. 4° 45′ N., long. 76° 8′ W Pop. 5,500. It has a handsome appearance, and contains a cathedral, two parish churches, and a Lancastrian school. Its trade is chiefly in cattle, dried beef, fruits, cacao, and tobacco. Its whole district is rich in mineral products: its climate is hot and dry, but healthy. (*Mod. Trav.* xxvii., &c.)

CARTHAGE (Lat. *Carthago*, Gr Καρχηδών), a famous marit. city, long the rival of Rome, with which she waged a lengthened, doubtful, and desperate contest for the empire of the world, situated on the N. shore of Africa, in the immediate neighbourhood of Tunis. But such is the mutability of human affairs, and so complete the destruction that has overtaken this celebrated city, *dives opum, studiisque asperrima belli*, that even her position has been matter of dispute among the learned!

> Giace l'alta Carthago, e a pena i segni
> De l'alte sue ruine il lido serba:

But the plans of M. Falbe seem to have put to rest all doubts as to the situation of Carthage; and, combined with the learned and elaborate dissertation of Dureau de la Malle, give not only a satisfactory explanation of the form and situation of the city, but of all that can be ascertained respecting it from the most careful examination and comparison of ancient authors. Referring such of our readers as may wish for full information as to this interesting subject to the sources now mentioned, we shall content ourselves with stating that Carthage was principally built along the coast of the peninsula to the N.E. of Tunis, from a little N. of the goletta or entrance to the lagoon of Tunis to Cape Carthage (lat. 36° 51′ 30″ N., long. 10° 26′ 45″ E.), and then round to Cape Quamart. It was defended on the land side, where it was most open to attack, by a triple line of walls of great height and thickness, flanked by towers, that stretched across the peninsula from the lagoon of Tunis to the sea on the N. The harbour lay to the S. of Cape Carthage, and was entered from what is now the Gulph of Tunis. Having less to fear from attacks by sea than by land, the city had on that side only a single wall.

At the period of its greatest splendour Carthage must have been one of the richest and finest cities of the ancient world. It consisted of three principal divisions, viz. the *Byrsa*, or citadel, built on an eminence, the summit of which was occupied by a magnificent temple in honour of Æsculapius; and it also contained the fa-

mous temple of the Phœnician Astarté, the Juno of Virgil: the *Megara*, or town so called, lay to the W. of the Byrsa, along the triple wall, and was of great extent, comprising extensive squares and gardens: the third division was called the *Cothon*, or port; this, as its name implies, was artificially excavated, and consisted of two great basins, an outer and an inner; the first for merchantmen, and the latter for ships of war. The access to both basins was by a common entrance, which was shut up by a chain; and each was supplied with quays, warehouses, stores, &c., suitable to its destination. It was in this quarter that the seamen, shipwrights, merchants, and others connected with the warlike and mercantile marine of the republic principally resided.

Besides the public buildings already alluded to, Carthage had a famous temple in honour of its tutelar deity, Melcarthus, or Saturn, whose altars were sometimes stained with the blood of human victims; with temples to Ceres, Jupiter, &c. It had also all the usual places of public resort and amusement, including a magnificent forum, a circus, and a theatre. The water within the precincts of the city seems to have been at once scarce and bad; and to obviate the inconvenience thence arising, vast cisterns, of which the ruins still exist, were constructed for the saving and preservation of rain-water. The streets were all paved; and this essential improvement in the construction of streets is said to have been originally introduced by the Carthaginians. Strabo states that the pop. of Carthage amounted to 700,000; but M. Dureau de la Malle has shown that no reliance can be placed on this statement, and that the pop., previously to the destruction of Carthage by the Romans, cannot safely be estimated at above 250,000 persons, slaves included. (*Recherches sur la Topographie de Carthage*, pp. 1—100.)

The early history of Carthage is involved in the greatest obscurity. All that is certainly known with respect to it is that it was founded by a body of emigrants from Tyre; but of the occasion and epoch of their emigration we have no certain knowledge. The common opinion is that Utica, also a Tyrian colony, was founded before Carthage; and that the foundation of the latter took place anno 1259 B.C. It is probable that the colony subsequently received fresh accessions of immigrants from the mother country; and it is supposed that one of these was headed by Eliza or Dido, to whom Virgil has ascribed the foundation of the city. (*L'Art de Vérifier les Dates*, iii. 414., 8vo. ed.)

The Carthaginians appear to have inherited in its fullest extent the enterprising character of their ancestors; and, like them, were principally addicted to navigation and commerce. After extending their sway over a considerable part of Africa, they began to make settlements in, and to endeavour to subjugate, more distant countries. The fine and fertile island of Sicily seems to have early excited the ambitious views of the Carthaginians; but, though they had several valuable settlements in it, they were uniformly thwarted in their efforts to effect its complete subjugation. After the destruction of Tyre, Carthage inherited the possessions of the former in Spain, to which she afterwards made large additions; and she also subjugated the island of Sardinia.

Of the long-continued struggle between Carthage and Rome, it would be useless, even if our limits permitted, to say any thing. It is a favourite subject of every classical reader, and has been ably treated of in many modern works; but it is much to be regretted that we have no Carthaginian history of this memorable contest, and that we are constrained to depend wholly on the one-sided, prejudiced accounts of the Latin historians, and the Sicilian Greeks. The reader will do well to bear this in mind, and to modify most of their statements unfavourable to the Carthaginians.

Government.— As far as can be gathered from Aristotle, and the incidental allusions of other writers, the government of Carthage seems to have been one of the wisest and best constituted of ancient times. Like that of the mother country, it is generally supposed to have been originally monarchical; though on its first emerging into authentic history we find it an aristocracy of birth and wealth, with a slight mixture of democracy. At the head of this aristocracy was a senate analogous to the senates of Sparta and Rome, and composed of the most illustrious citizens. Its members appear to have been very numerous; but all statements with regard to the mode of their election, or the duration of their authority, must be purely conjectural. The senate had the management of all affairs of peace and war, the arrangement of treaties and negociations, and, in short, the power of deliberating, and to a certain extent, of deciding upon all public affairs. Within itself, the senate contained a committee of 104, called, by a round number, *centumviri*, originally instituted as a check upon the encroachments of the aristocracy. It afterwards became a high court of judicature, vested with such authority as rendered it in effect the depository of all the sovereignty which lay in the senate itself. Aristotle compares this committee, or council, to the *ephori* of Sparta, but it should seem that the pentarchies, or *quinquemviri*, had a better title to the comparison. These were composed of several bodies, each consisting, as the name implies, of five persons selected from the *gerousia*, or committee, and possessed of almost despotic authority. They had cognisance of all affairs both public and private, and appear to have constituted a court of appeal in the last resort for all causes. They continued in office a long time, and had not only the power of filling up vacancies in their own body, but the right of choosing those who composed the tribunal of the centumviri. This, no doubt, was a highly aristocratical institution; and Livy says of it, that *vis, fama, vitaque omnium in illorum potestate erat*. At the head of the senate were two magistrates, or *suffetes*, answering to the Spartan kings or the Roman consuls. Originally the right of electing the suffetes was vested in the senate; but in the decline of Carthage it fell into the hands of the people. In their nomination, according to Aristotle, regard was had chiefly to birth, riches, and popularity; and a passage in the recently discovered work of Cicero, *De Republicâ*, in which he compares them with the Spartan kings, and contrasts them with the Roman consuls, would lead us to infer that they were elected for life. Their province was to convene the senate, in which they presided, to propose subjects for deliberation and to collect the suffrages. In time of war, one of the suffetes was usually appointed general of the forces of the state, while his colleague remained at home. But besides the suffetes there were other subordinate magistrates, with the nature of whose duties we have become acquainted only through the Roman writers. We hear, for instance, of a *præfectus morum*, *prætor*, *quæstor*, &c., with powers analogous to those of the Roman magistrates so called; but these statements must be received with great caution, considering the tendency of the Roman, as indeed of all authors, to represent the institutions of other people as corresponding with or analogous to their own, though, in reality, there might be very little in common between them. The people were divided into guilds or corporations; and though in the infancy of the state they did not directly participate in the administration of affairs, they possessed, from the first, the important privilege of deciding upon those questions about which there was a difference of opinion in the senate. They had also, like the Spartans, their public or political festivals, at which questions of policy were discussed; and thus public opinion was enabled to exercise a salutary influence over the deliberations of the senate. Upon the whole it should seem, that although, as indeed might have been expected in a commercial state, the influence of wealth preponderated in the administration of affairs, still so well had the constitution of Carthage been balanced, that while, on the one hand, the nobles did not engross the whole power, as was the case in Sparta, Corinth, and Rome, the people seldom or never exhibited the factious spirit of the "fierce Athenian democracy," or the ferocity of the Roman rabble. "The excellence," says Aristotle, "of the Carthaginian government is evinced by a single reflection: though its origin mounts to a very ancient date, and though, for many centuries, it has contained within its bosom a numerous and a free people, yet Carthage has never, to the present day, experienced any one sedition worthy of record, nor has it ever endured, for a moment, the cruel yoke of a tyrant." (*Gillies' Aristotle*, book ii. § 9.)

Possessions, Commerce, &c.— At this distance of time, and with our scanty means of information, it is almost impossible to trace the various stages of Carthaginian encroachment on the neighbouring territory; but we are enabled to state pretty accurately the extent of country in Africa subject to Carthage at its most flourishing epoch. E. it stretched to the Syrtes and the confines of Cyrene; S. to Lake Triton and Mount Atlas; and W. (though this point has been less accurately ascertained) to the territories of the Numidian princes; while in the same direction the whole African coast was studded with Carthaginian colonies. Hence its subjects were divided into three different classes: the first were the cities on the coast, such as Utica, Hippo, Zaryta, and others, which, like itself, were colonies from Phœnicia. These were at first not so much its subjects as its allies; though at a later period a supremacy was conceded to it which soon passed into sovereignty. The next class consisted of its own colonies — the maritime colonies on the coast and the agricultural settlements in the interior of the country. The third class were the native Libyans, to whom Carthage had originally been tributary, but who now submitted to her authority. These were partly a fixed agricultural people, who, from a gradual amalgamation with the Carthaginians, were called Liby-Phœnicians, and were kept in restraint by the agricultural colonies planted among them; and partly nomadic tribes, whose allegiance was partial and precarious. The agricultural pop. only,

which the Carthaginians had trained and accustomed to that mode of life, could be treated as subjects, properly so called; for the nomadic tribes were subject to Carthage only so far that they paid her tribute; and their hatred of those who disturbed their aboriginal mode of life, fomented as it was by the oppressions of the Carthaginian government, frequently broke out in revolt when the approach of an enemy gave the signal. But the Carthaginians appear to have attached less importance to their possessions in Africa than in other parts. At an early period they became masters of Sardinia, the Balearic Islands, and Malta. We have already noticed their vigorous and long-continued efforts to make themselves masters of Sicily; and had they succeeded in this, the foundations of their power would probably, as Heeren supposes, have been established on a solid basis. The failure of their efforts to effect the conquest of Sicily, and the loss of Sardinia, that was taken from them by the Romans, seem to have impelled them to attempt the subjugation of the entire Spanish peninsula. They had also several settlements along the W. coast of Africa; and it is probable, though not certain, that Madeira and the Canary Islands (*Fortunatæ Insulæ*) were included in their dominions.

The commercial operations of Carthage embraced the whole ancient world, and have only been surpassed by those of Europe since the discovery of America and the passage to the East Indies by the Cape of Good Hope. But the greatest difference of opinion exists as to the extent to which the Carthaginians carried their maritime expeditions; and while some geographers restrict their limits between the S. coast of Britain on the N. and Cape Bojador on the S., others contend that they reached the coasts of the Scandinavian peninsula, circumnavigated Africa, and even visited the shores of the New World! We have elsewhere seen (*antè*, p. 34.) that it is probable, from the statement of Herodotus, that the circumnavigation of Africa was really performed by Phœnician mariners; but there is no ground whatever for supposing that it was ever performed by the Carthaginians, or that they ever approached the shores of America. The only really authentic information, as to their navigation, is embodied in the account of the voyage of Hanno along the W. coast of Africa; and it is so very difficult to identify the localities mentioned in it, that some critics assign to it a length of 3,000, and others of not more than 700 miles.

The merit of being the first who, in modern times, drew attention to the *land trade* of the Carthaginians belongs to Heeren, whose researches have placed the connection of Carthage with the central nations of Africa in a clear and striking light. We have already, however, adverted to this interesting subject, and must refer those wishing for more comprehensive details to Heeren's work. It is sufficient here to remark that the internal trade of Africa seems to be alike unchanged and unchangeable. The countries to the S. of the great desert of Sahara are destitute of two most important articles, salt and dates, which abound in the countries N. of the Sahara; while, on the other hand, the S. countries have ample supplies of gold dust, ivory, drugs, gums, and slaves, all articles in great demand along the Mediterranean. Here are the wants and materials that go to form an extensive and mutually beneficial intercourse; and the oases found in the desert, and the camel furnish the means of carrying it on. It is, in fact, carried on at this moment by caravans, nearly in the same manner that it was carried on by the Carthaginians and negroes 2,500 years ago; and the probability is that it will continue in time to come to flow in the same channels. (See *antè*, p. 31.) It is impossible to enumerate the various articles of Carthaginian traffic, seeing that they most probably included the commodities of every known country and climate. The exports from Carthage consisted chiefly of articles of native produce, and of those procured by its land trade from the interior of the continent. She freighted her ships with the wines of Italy, Sicily, and Sardinia, and carried these articles to Cyrene, the Balearic Islands, and W. Africa. She carried on a large trade in oils and other articles, which she sent to Cerne, the "ultima thule" of her African colonies, and received skins, gold, and ivory in exchange. She procured iron from Elba, alum from the Lipari Islands, and tin from the N. of Spain, the Scilly Islands, and Cornwall. The Baltic supplied her with amber; but whether it was procured by sea, or conveyed overland to the head of the Adriatic, and thence imported into Africa, has not been ascertained. From Tyre, with which she always maintained the most friendly relations, she received not only trinkets, glass, pearls, and other ornaments, and Sidonian cloths, the chief branches of the industry of Tyre itself, but cassia and cinnamon, and the other precious spices, which were imported into Tyre from India. Malta, too, supplied her with articles of woollen manufacture equal if not superior to those of Tyre. Her traffic in slaves, which she procured from the interior of Africa and from Corsica, was most important, and formed a large source of revenue. So abundant were slaves, that during the second Punic war, Asdrubal is said to have purchased 5,000 at a time. The commercial policy of the Carthaginians has been said to be of a peculiarly grasping, jealous, and selfish character; but it is not entitled to any such distinction, and really differed in very few respects from that of most other commercial nations. Her object was, in as far as possible, to monopolise the trade of the world; and in this view she practised most of the favourite schemes and devices of the mercantile system. The privilege of trading was vested exclusively in the citizens (in contradistinction to the slaves or tributaries of Carthage); no commodities were suffered to be exported or imported except in Carthaginian vessels; the trade of her colonies was restricted to the mother city; and the ships of the foreign nations with whom she had entered into commercial treaties were absolutely excluded from her harbours; but this regulation appears to have been dictated more by political than commercial jealousy.

But though Carthage was from the first a trading city, it would be wrong to regard the Carthaginians as a mere nation of merchants. On the contrary, it is sufficiently proved that they found leisure to engage in other pursuits, among which agriculture held a prominent place. This science, in its widest range, was so well discussed by them in their writings, that the Romans considered them worthy of translation. No where, indeed, was agriculture better understood, or practised with more zeal, than in Carthage; and most families were in the habit of applying the produce of their commerce to the cultivation and improvement of the soil. All accounts concur in assigning a high state of cultivation to the neighbourhood of Carthage. "The territory," says Diodorus Siculus (ii. 411.), "through which Agathocles led his army was covered with gardens and large plantations, every where intersected with canals, by which they were plentifully watered. A continual succession of landed estates was there seen adorned with elegant buildings, which evinced the opulence of their owners. Vineyards, olive-grounds, and meadows spread on every side; and the whole region was thickly studded with the country seats of the wealthy citizens of Carthage and the other towns in its vicinity."

Revenue. — Our information on this subject is, unfortunately, extremely meagre; but there is little doubt that the revenues of Carthage were more considerable than those of any state of antiquity. They were derived from three sources; the *tribute*, levied on the subject and confederate states; the *customs*, and the *mines*. To what extent tribute was levied in time of peace is unknown; but examples are not wanting to prove that, in cases of urgency, the tributary nations were very heavily taxed. It is a curious fact that the contributions paid by the allied states and the cities along the African coast were in money, and by all the other tributaries in kind. The *customs* were levied with great rigour both in Carthage and in all her colonial ports; and in later times they became so important that they are said to have supplied all the wants of the state without the imposition of any other tax. The *mines* formed an important source of revenue: in working these all the inventions which ingenuity and industry could suggest were rendered available. The most considerable mines were situated in the neighbourhood of Carthago Nova in Spain; they gave employment to 60,000 slaves, and yielded about 50,000 drachms daily. At first they belonged entirely to the state; but we afterwards find them in possession of some of the great families, who worked them on their own account. What use the Carthaginians made of the great quantity of precious metals which they procured from the mines, cannot be ascertained with certainty. The circumstance that no Carthaginian coin has been handed down to us will scarcely warrant the belief that no coined money was employed in Carthage; and though it be true that many, and indeed the most important, expenses of the state were not paid in money, it is highly improbable that a city, whose colonies confessedly coined money, should herself be without a coinage.*

These were the ordinary revenues of the state; but in cases of emergency, the Carthaginians resorted to other means of recruiting their exhausted treasuries, either by procuring foreign loans, by legalising piracy, or by the imposition of a property tax, which should press more heavily on the rich than the poor. But with regard to all that concerns the administration of the revenue, we are still in the dark; though it has been said that one of the pentarchies above mentioned, with a magistrate at its head, formed a board for its management.

* A singular circumstance connected with this branch of the history of Carthage is the contrivance which they made use of in their colonies, nearly answering the purpose of our paper-money, or bank notes. It consisted of a small piece of leather, stamped by the state, upon which a fictitious value was bestowed, and which could be exchanged at pleasure for the precious metals.

Naval and Military Forces.—To maintain the sovereignty of the sea, the chief source of her prosperity, and to protect her commercial marine, as well as to extend her conquests and preserve them, rendered the formation and support of vast fleets and armies indispensable. The ordinary number of ships or galleys of war possessed by Carthage, at the period immediately preceding the Punic wars was from 150 to 200. It was increased in the first Punic war, when their naval power appears to have attained its highest pitch; and in the fatal naval engagement by which Rome opened its way to Africa, the Carthaginian fleet consisted of 350 galleys with (but this is no doubt exaggerated) 150,000 men, exclusive of transports. Their war-ships were manned partly by fighting men and partly by rowers; the latter of whom consisted entirely of slaves bought by the state for this particular purpose, and amounting, even in time of peace, to 50,000. But though the genius and position of Carthage naturally led the citizens to regard the navy as their main bulwark, the wars of conquest in which the republic was perpetually engaged, and the maintenance of its foreign possessions, obliged it to keep large armies continually in the field. These were composed almost entirely of mercenaries, collected from every part of the world, and exhibiting every diversity of blood, complexion, tongue, garb, and weapon: "*Exercitus mixtus ex colluvione omnium gentium quibus non lex, non mos, non lingua communis; alius habitus, alia vestis, alia arma, alii ritus, alia sacra.*" (*Livy*, 28. 12.) Hordes of half-naked Gauls stood side by side with bands of white-robed Iberians; wild Ligurians were arrayed with far-travelled Nazamones and Lotophagi; Carthaginians and Phœnician Africans formed the centre or main army; Balearic slingers formed the advanced guard; and lines of colossal elephants, with their Ethiopian drivers, preceded their march like a front of movable fortresses; but the main strength of their army consisted in its light cavalry, which was provided in abundance by the nomadic tribes which flanked their dominions. All these tribes, including the Massyles and the Maurisii, the Numidians, the nomadic races of the Syrtes, the Nazamones and Lotophagi, were accustomed to serve in the Carthaginian armies, and receive their pay. The heavy cavalry were formed from Carthaginian, Libyan, Spanish, and in later times Gallic, levies. In cases of emergency the Carthaginians could raise an army of 40,000 from the citizens alone, besides the battalion called "the sacred legion," which consisted entirely of the *élite* of the Carthaginian nobles, and amounted, even in time of peace, to 2,500 men.

Language, Literature, Religion, &c.—The destruction of the Carthaginian records, which would otherwise have thrown a flood of light, not only on the history of Carthage, but on that of the numerous nations with which she came in contact, must be considered as one of the greatest losses the civilised world has sustained. It has, no doubt, been usual to regard the Carthaginians as wholly immersed in commercial pursuits, and thence to infer that their attainments in literature and the arts must have been very inconsiderable. But there is not so much as the shadow of a foundation for this opinion. So far from commercial pursuits being unfavourable to literature and the fine arts, their effect is distinctly and completely the reverse. The experience of Athens and Corinth in antiquity, of the Italian republics in the middle ages, and of England in modern times, is conclusive as to their humanising influence. Had the literature of the Carthaginians survived the wreck of their empire, we believe it would have been found to be at least as valuable intrinsically as that of Rome, and less exotic. It is worthy of notice that they began their career under the most favourable circumstances. Their descent from the Tyrians, confessedly one of the most civilised nations of antiquity, gave them, as it were, an almost intuitive knowledge of many of the most useful and ornamental arts and sciences, and placed at once within their reach all those means and contrivances which both facilitate the prosecution of commercial undertakings, and extend the boundaries of civilisation. Surely then it may be reasonably inferred, even in the absence of all monuments of genius, that the rich legacy of their ancestors, increased as it must have been by the intercourse they carried on for *seven* centuries with the most renowned nations of antiquity, and by the researches and inquiries which their wealth afforded the means of prosecuting, must have produced, in the end, a vast accumulation of science and literature. But, like the city itself, nothing remains of all this. The only traces of the language of Carthage are to be found in a comedy of Plautus, from which it is clear that, like the Phœnician, it formed a branch of the original Asiatic languages, bearing a strong resemblance to the Hebrew, Syrian, and Chaldaic, with a slight admixture of purely Libyan idioms and phraseology. The voyage of Hanno, and a few other fragments, are known to us only through the medium of translations.

Like all colonies, they brought with them the religion of their fathers; but the authentic information respecting it is very limited indeed; and the learned disquisitions of Bochart, Vossius, and Munter, on this subject, have little other foundation than the ingenuity of their authors. It appears, however, that, like the religion of most other Asiatic nations, it was chiefly directed to the worship of the supposed intelligences of the celestial luminaries, and those of the elements. The chief of these were Melcarthus or Baal, the Chronos of the Greeks, the Saturn of the Romans, and probably, from the sanguinary rites offered to him, the Moloch of Scripture, and Ashtaroth or Astarté, the goddess of the moon, whom the Greeks identified with their Hera or Juno. The Carthaginians endeavoured, in periods of extreme public calamity, to avert the wrath of the offended deities by offering up some of the noblest children of the state in sacrifice to Saturn; but in less urgent circumstances the children of slaves were the usual victims, and even their immolation was of rare occurrence. It does credit to Gelon, tyrant or king of Syracuse, that, having defeated the Carthaginians in a great battle (anno 480 B. C.), he made it a condition of the peace which he granted to them, that they should abolish these sacrifices. But we are not to judge of the civilisation of the Carthaginians by these horrid rites, distinct traces of which may be found in the religious worship of most nations of antiquity. It is rather to be regarded as one of those deplorable exhibitions of superstition and fanaticism which have, under other circumstances, lighted the *auto da fes* of Madrid, and the fires of Smithfield. Of the other Phœnician deities worshipped at Carthage little can be collected. We know, however, that they were by no means bigoted in their attachment to their Phœnician deities; but as their intercourse with other nations extended, frequently introduced the worship of foreign gods.

In conclusion, we may again observe, that the Roman writers, who, while they admit the skill, address, and industry of the Carthaginians, have depreciated all their moral qualities, are authorities on which no reliance can be placed. The lengthened prosperity and great power of Carthage are, in fact, a sufficient refutation of their calumnies. "*Nec tantum Carthago habuisset opum sexcentos ferè annos, sine consiliis et disciplinâ*," is the unwilling admission of Cicero. The Romans, it should be remembered, despised that commerce and industry of which their rivals were the successful cultivators, holding them to be employments unworthy of freemen, and fit only for slaves and the very dregs of the populace: and in extenuation of their misrepresentations and anti-Punic prejudices, it may be observed, that they knew only the worst part of Carthage, that is, her seamen and soldiers. These, as already seen, consisted of slaves and recruits from all parts of the world, allured to her standards by the prospect of pay and plunder, and held together only by a severe system of discipline. The fact of their performing so many great actions with such materials sets the abilities of the Carthaginian admirals and generals in a very striking point of view. The campaigns of Hannibal, even had his troops consisted wholly of native citizens, and each had felt that the fate of his country depended on his exertions, would have placed him on a level with the most renowned generals of his age. But when we take into account the quality of his troops, and the difficulties he had to contend with in a foreign country, depending mainly on his own resources, and thwarted by faction and jealousy at home, his achievements appear almost miraculous, and place him above all the commanders of antiquity, and perhaps also of modern times.

The last struggle of Carthage was not unworthy of her ancient reputation, and of the great men she had produced. The conduct of the Romans on this occasion was most treacherous and base. They now practised that bad faith (*Punica fides*) and contempt of engagements, of which they had gratuitously accused the Carthaginians, to an extent and with a shamelessness of which history has happily but few examples. But though betrayed on all hands, deceived, without allies, and all but defenceless, Carthage made a brave defence; and all that she had that was brave and really illustrious fell with her fall.

The Romans having glutted their vengeance and quieted their fears by the total destruction of Carthage (B. C. 146), it remained for a while in ruins. But about 30 years after its fall, Caius Gracchus, by order of the senate, carried a colony to Carthage, the first that was founded beyond the limits of Italy. Julius Cæsar, on his return from Africa, settled in it some of his troops and a number of colonists collected from the adjoining country. During the early ages of the Christian æra it was regarded as the capital of Africa. It fell under the dominion of the Vandals A. D. 419; and under that of the Saracens in 698. Under the latter its destruction was again effected; and so completely that it is now *propriis non agnoscenda ruinis.*

CARTHAGENA, or CARTAGENA (an. *Carthago Nova*), a fortified city and celebrated sea-port of Spain, prov. Murcia, on the Mediterranean, 17 m. W. Cape Palos, and 32 m. S.S.E. Murcia; lat. 37° 33′ 50″ N.

long. 1° 0′ 11″ W. Pop. 29,550. It occupies the declivity of a hill and a small plain extending to the harbour. It has several pretty good streets and houses, with numerous churches, convents, an arsenal and park of artillery, and a royal hospital of great extent. The W. division of the city is occupied by the naval arsenal, with docks for building men-of-war, and a fine rectangular basin, in which the ships are moored during the time they are being rigged. Adjoining to the arsenal is the *bagne*, or prison for lodging criminals employed on the public works. It has also a foundling hospital, a school of mathematics and navigation, an observatory, theatre, circus, &c. The harbour, which is one of the best in the Mediterranean, consists of a circular basin, opening to the S., and having the city at its N. extremity. It has deep water throughout; is protected from every wind by the surrounding heights, and by an islet at its entrance; and is, as well as the city, strongly fortified. The excellence of the harbour gave rise to the common saying among the Mediterranean sailors, that there are but three good ports — the months of June and July, and the harbour of Carthagena. This has always been the grand rendezvous of the Spanish fleets in the Mediterranean, and large sums have been expended on its naval establishments; but these are now in a state of decay; many houses in the city are also unoccupied; and it has an impoverished, deserted appearance. The pop. is stated by Mr. Townsend to have amounted, in 1787, to 60,000; whereas, according to Miñano's statement, given above, it is now under half that amount. Cables and cordage of the *esparto* rush, and canvass, used to be largely manufactured here, and large quantities of barilla, with corn, wine, oil, &c., were formerly exported. Its trade, however, has declined quite as much as its naval establishments. A valuable fishery is carried on in the port and the adjoining sea.

This city was founded or occupied by the Carthaginians, who made it the capital of their possessions on the E. coast of Spain. It was taken by the Romans, anno 208 B. C., at which period it is said by Livy to have been, next to Rome, one of the richest cities in the world. Its importance in modern times dates from the reign of Philip II. (*Miñano; Townsend*, iii. 121., &c.)

CARUPANO, a town of Venezuela, very pleasantly situated in the immediate neighbourhood of Cariaco; prov. Cumana. Pop. 8,000. It has some trade, especially in horses and mules.

CASALE, an inl. town of N. Italy, king. Sardinia, div. Turin, cap. prov. of the same name, in a fertile plain, on the Po, 37 m. E. by N. Turin. Pop. 16,000. It was formerly considered one of the strongest fortresses in Europe, but its ramparts have been converted into public walks, and it is at present defended only by an old castle, once the residence of the marquisses of Montferrat. It has a cathedral, several churches with fine paintings, numerous palaces, and handsome private residences, several convents, hospitals, and charitable institutions, a college, public library, theatre, corn magazine, and many silk filatures. It is the residence of the provincial governor, and is the seat of a bishop, and of the prov. court of justice. It originated in the 4th century. (*Rampoldi, Corog.; Dict. Géographique.*)

CASAL-MAGGIORE, a town of Austrian Italy, deleg. Cremona, cap. distr., on the Po, 22 m. S.E. by E. Cremona, and 21 m. S.W. Mantua. Pop. about 4,200. It has manufactures of glass, earthenware, and cream of tartar; with distilleries, tanneries, and numerous mills. It contains a superior and other schools, an hospital, orphan asylum, almshouse, *monte-di-pietà*, and other charitable establishments, and a theatre. Its origin is uncertain, but it existed in the 6th century. It is very liable to suffer from inundations of the Po; by one of which, in 1705, it was laid under water. (*Rampoldi; Oesterr, Nat. Encycl.*)

CASAL-NOVO, the name of several small towns in Calabria and other provs. of Naples. The largest of these towns is situated in Calabria Ultra I., 12 m. E. Palmi, and has 4,000 inhab. This town, in common with most others in the same district, was almost totally destroyed by the dreadful earthquake of 1773; and to guard against the effects of a similar catastrophe in future, the houses are now all low, and of wood. Swinburne says that the people of this place are noted for their taste for *dog's flesh*; and that any cur that should follow its master into this *kunophagic* town would have little chance of escape! (*Craven's Calabria*, p. 274.; *Swinburne*, i. 220., 4to. ed.)

CASERTA, a town of Naples, cap. prov. Terra-di-Lavoro, in an agreeable plain, 16 m. N.N.E. Naples. Pop. 5,000? The town is irregularly built, but has several churches, a convent of noble ladies, a *monte-di-pietà*, an hospital, a military school, and superb barracks. But the pride of Caserta consists in its royal palace, begun in 1724, from the design of the architect Vauvitelli. It is of vast extent; the two principal fronts being each 787 ft. in length, and containing 5 stories of 37 windows each. The portico, which divides the internal space into 4 courts, is truly magnificent, as is the staircase leading to the apartments. The vast dimensions of the latter; the bold span of their ceilings; the excellence and beauty of the materials employed in building; and the strength of the masonry, claim the admiration of all beholders. The park is of vast extent, as are the gardens, supplied with water, brought from a great distance by a noble aqueduct. A silk manufacture has been established in buildings attached to the palace, which produces very rich and fine stuffs. (*Swinburne's Two Sicilies*, ii. 84.; *Simond*, p. 436.)

CASHAN, a city of Persia, prov. Irak, in a stony plain, ill supplied with water, 95 m. N. by W. Ispahan; lat. 33° 55′ N., long. 51° 17′ E. Pop. 30,000. It is one of the most thriving towns in Persia, and is indebted for its prosperity to its extensive manufactures of silk, carpets, and copper wares. The king has a hunting-seat and garden about 3 m. from the town, at the foot of the mountains. (*Olivier*, v. 169.)

CASHEL, an inl. city and parl. bor. of Ireland, prov. Munster, co. Tipperary, 86 m. S.W. Dublin. Pop. in 1821, 5,974; in 1836, 6,971. The city was the residence of the kings of Munster, and in 1142 was made an archbishopric. But by the late act for reducing the number of bishoprics in Ireland, Cashel, on the demise of the present prelate, will cease to be an archbishopric, and it has already been united with the bishopric of Waterford. The town is irregularly built, and, with the exception of the main street, and of one or two others, the houses are mean, and exhibit every appearance of poverty. Its supply of water is very scanty. The cathedral and the R. Cath. chapel are modern and spacious edifices. Here is also a convent of nuns and a Methodist meeting-house. The archbishop's late palace (he has gone to reside at Waterford), a large and well-built mansion, has attached to it a small library, and is surrounded by an extensive pleasure-ground. There is also an infirmary, market and court houses, a well-arranged bridewell, and infantry barracks. The place contains many very interesting relics of antiquity. On the rock of Cashel, which rises precipitously over the city, are the ruins of Cormac M'Culinan's chapel, built in the ninth century, and presenting a fine specimen of ancient Saxon architecture; also the ancient cathedral, in the pointed Gothic style, the castle, and a pillar tower, all within an enclosed area, commanding an extensive prospect of the surrounding fertile district. There are some other monastic ruins in the city and its vicinity. The corporation, under a charter of Charles I., in 1639, consists of a mayor, 17 aldermen, 2 bailiffs, and an unlimited number of freemen. It returned 2 mem. to the Irish H. of C., and sends 1 mem. to the imperial H. of C. Previously to the Reform Act, the right of election was vested in the mayor, bailiffs, aldermen, and 6 freemen. The boundaries of the present parl. bor. extend over 3,974 acres. Registered electors (1837-38) 289. The corporation estates comprise 3,278 acres. There are no manufactures of any consequence. During the corn season, there is a great traffic on the line through the city, from Thurles to Clonmel. A distillery paid duty, in 1836, for 50,784 gallons of whisky; duty was also paid on 1,195 bushels of malt. Markets on Wednesdays and Saturdays; fairs on 26th March, 7th August, and the third Tuesday in every month. A branch of the National Bank was opened here in 1835. Post-office revenue in 1830, 683*l*.; in 1836, 843*l*. A mail-coach from Dublin to Cork passes through the city, and cars from Clonmel to Roscrea and Thurles: a car plies between the city and Tipperary 6 days in the week, carrying at an average, 2 passengers each trip. (*Railway Rep.*)

CASHGAR or KASCHGHAR, a considerable city of Chinese Turkestan or Tartary, of which it was formerly the capital, and the farthest W. place of note in the Chinese empire; on the W. side of a mountain, in which several streams have their sources, on one of which the city is placed, 140 m. N.W. Yarkund, and 2,250 m. W. by S. Pekin; lat. 39° 28′ N., long. 73° 55′ E. Pop. said to be about 16,000, exclusive of a garrison of 8,000 Chinese troops. It is surrounded by a wall of earth, entered by 4 gates, and is divided into two portions, — the Mohammedan and Chinese city. The Chinese governor and troops occupy a citadel. Cashgar was much more flourishing and populous before a rebellion which broke out here in 1826. (*Burnes's Bokhara*, iii. 192.) Most of the inhab. are Mohammedans, and speak a dialect probably of Turkish origin; but there are some Nestorians. (*Ritter*.) The upper classes are opulent, luxurious, and extravagant; the artisans ingenious in working gold and jasper, in dyeing, and in producing cotton manufactures. There is a weekly market, especially celebrated for horses. Cashgar has a large trade with Bokhara, to which it sends a great deal of inferior tea, porcelain, Chinese silks, raw silk, rhubarb, &c., and from which it receives Russian and other merchandise, including woollen cloths, coral, pearls, cochineal, cloth of gold, velvets, gold and silver wire, ploughshares, mirrors, needles, Russian nankeen,

&c. The whole of this trade amounted before the rebellion to 700 or 800 camel-loads yearly. The intercourse with Kokan is conducted by means of horses; but it is very small, owing to hostile feelings between the Chinese and the inhab. of that khanat. The trade with the country to the N.E. and the Russian town of Semipolatinsk is brisk, as well as that with Yarkund. Cashgar was a celebrated commercial city before the Christian æra. Under the names of Sule, Chaje, &c., it is spoken of by Ptolemy, Ebn Haukal, and many subsequent authors. Its territory is extensive, well watered, fertile in corn, rich fruits, the vine, cotton, flax, and hemp, and contains numerous considerable towns. Under several dynasties it formed an independent kingdom. The Chinese possessed themselves of it about 80 years since. (*Ritter, Asien Erdkunde*, vii. 422. 490.; *Klaproth, Mémoires, &c.; Calcutta Journal*, iv. 655.; *Burnes; Elphinstone.*)

CASHMERE (an. *Caspira*), a prov. of N. Hindostan, dom. of the maharajah of the Punjab; consisting of the upper valley of the Jhylum, chiefly between lat. 33° 30′ and 34° 30′ N., and long. 75° and 76° E., having N.E. the central chain of the Himalaya or Hindoo Koosh, which separates it from Tibet, and on all other sides secondary ranges belonging to that chain, by which is it divided from the rest of Runjeet Singh's territories. Shape, somewhat oval; length, W.N.W. to E.S.E., about 80 m.; breadth of its central plain, varying to 30 m., or, from summit to summit of the opposite mountain chains, 50 to 60 m. Pop. estimated in 1832 at 800,000, but said to be reduced, by war, famine, and disease, to no more than 200,000 in 1836! The Himalaya has here an elevation of from 18,000 to 19,000 ft.; the Pir Panjahl, belonging to the oppposite chain, is 15,000 ft. above the level of the sea. There are 12 passes into the neighbouring countries; viz., 8 to the Punjab, 1 to the W., and 3 to Tibet; some of these are open the whole year, and two are 13,000 ft. above the sea. Cashmere is copiously watered; a great number of rivulets and mountain torrents from either side unite in the central valley to form the Jhylum, which intersects it in nearly its whole length: many lakes are spread over its surface, the largest of which is nearly 13 m. across. Granite, schist, limestone, gypsum, and slate, are the predominant primitive rocks; some fossil shells have been found in the limestone; good iron is met with in the mountains, and copper and lead are said to exist in Cashmere: the upper soil of the central plain is a rich clay. In some places inflammable gas, which spontaneously ignites, escapes from the ground; and these being reckoned peculiarly holy, temples are built over them. The limate is healthy, except in the rice-grounds in hot weather, and appears to have become milder within a few years, since there are now usually but two or three yards' depth of snow in places where the depth was formerly 10 yards: towards the end of July the thermometer stands at 95° F.: the periodical rains fall only in light showers; but the soil never suffers from drought. The chinar (*Platanus orientalis*) grows to a great size; fir and deodar forests, walnut-trees, and much jungle, abound on the S. side of the valley; the N. declivities are comparatively bare of trees, but are plentifully covered with grass; European plants in a wild state are common, and fruit-trees numerous, but neither palm, mango, nor orange-trees, are found; roses, irides, lotus-flowers, and others, are met with in profusion. The elk, and bears of large size, the musk deer, no hares, but plenty of other game, various kinds of serpents, six or seven kinds of fish, and a great variety of insects, are natives of this region. "Nature has done much for Cashmere — art more;" the whole valley is like a nobleman's park; the villages, which are pleasant looking, being surrounded with immense plane, poplar, and fruit-trees, and having between them one sheet of cultivation, "through which the noble river winds itself in elegant sweeps." Different kinds of rice are grown, but they do not arrive at any perfection; wheat, barley, and the other dry grains, are more cultivated, and are said to yield a large return; saffron of excellent quality is planted to a considerable extent, and some of it sent even to Yarkund. In the gardens many kitchen herbs of cold countries are grown; turnips are the only produce yielding two crops a year; the apple, pear, plum, apricot, nuts, and an abundance of vines, are raised. The wine of Cashmere resembles Madeira, and acquires with age a superior quality; a spirit is distilled from the grape, which is used freely by all classes. The farm implements in use are very inferior; the harrow is unknown, and the clods are broken with a kind of mallet. Neither indigo nor opium is cultivated; the poppy is grown for the sake of its seeds, which are used as food; 8-10ths of the people eat rape-oil, linseed, or sesamum, instead of ghee or butter. Sheep, which are numerous, are used to carry burdens; the other domestic animals are horses, small, but hardy and sure-footed; and cows, which, though ill-shaped, yield excellent butter and plenty of milk: bees are kept on every farm. The principal commercial wealth of Cashmere is derived from its shawl manufacture, which branch of industry is thought to have originated in this valley. The Cashmere shawls are the very best that are made, possessing unequalled fineness, delicacy, and warmth; they are formed of the inner hair of a variety of goat (*Capra hircus*) reared on the cold, dry, table-land of Tibet, from 14,000 to 16,000 ft. above the level of the sea, and which degenerates in any country at a lower elevation. The great mart for the shawl wool is Kilghet, about 20 days' journey N.E. Cashmere, whither it is conveyed on the backs of mountain sheep: its colour varies from white to ashy grey; about 2 lbs. are obtained from a single goat yearly; at Kilghet the best wool fetches about 1 rupee per lb. In Cashmere, after the down has been carefully separated from the hairs, it is repeatedly washed with rice-starch. This process is reckoned important; and it is to the quality of the water of their valley that the Cashmerians attribute the peculiar and inimitable fineness of the fabrics produced there; the thread is always dyed in rice-water. After the shawls are woven, they are softened at a particular spot near the capital, where most of them are washed with *kritz*, the root of a parasitical plant; soap is used for white shawls only; the border is attached last. The manufacture of a large and rich pair of shawls worth 250*l.* will occupy 15 men for 8 months. Under the rule of the Moguls there is said to have been 40,000 shawl looms; in the time of the Afghan dynasty, when Forster visited Cashmere, this number had been reduced to 16,000; in 1837 there were only about 3,000 looms, and 2 or 3 men employed at each. The manufacture has not, however, degenerated in excellence. Runjeet Singh took a number of shawls in part payment of his revenue from this province; the amount of which varies considerably, according to the caprice of the maharajah: in 1835 he demanded nothing; in 1836 he asked 23 lacs rupees, which the country could not afford to give. Little silk is woven; the chief manufactures, next to shawls, are writing paper, lackered ware, cutlery, and sugar, formerly in much greater quantities than at present.

Cashmere is divided into 36 pergunnahs, and contains 10 towns and 2,200 villages; the chief towns are, Cashmere, the capital; Chupinian, 3,000 inhab.; Islamabad and Pampur, 2,000 inhab. each. Famine, cholera, and emigration, have greatly thinned the population, and rendered many of the villages desert. There are here about 25,000 Brahmins, who are the only Hindoos; they are of a darker colour than the rest of the natives, being descended from a body of colonists from the Deccan. The Cashmerians are a stout, well-formed people, of Hindoo stock, although Mohammedans. Their complexions are what would in France be termed brunette; the women are handsome, prolific, and much sought after by the Mogul nobility of Delhi. The people are brave, active, industrious, lively, and fond of music, literature, and art; but said to be avaricious, cunning, and proverbially false. Their language is a dialect of Sanscrit, but their songs, &c. are in Persian. Independent of its celebrity for romantic beauty, Cashmere has been always regarded as a holy land throughout India, and as such has been continually resorted to by pilgrims. The source of almost every brook is adorned with some Hindoo monument; but nearly all the remaining temples appear to be of Buddhic origin, and by their peculiar shape remind the traveller of those of Ellora. Koran-Pandah, near Islamabad, formerly built of black marble, is one of the finest ruins in India. Abul Fazel enumerates 150 Hindoo kings who reigned in Cashmere previously to the year 742 of the Hegira, subsequently to which the Mohammedans and Tartars successively had possession of it. In 1586 it was conquered by Acbar, and Ahmed Shah afterwards annexed it to Caubul. In 1809 the governor asserted his independence; since 1819 Cashmere has belonged to Runjeet Singh. (*Elphinstone's Caubul*, ii 237—242.; *Hamilton's Hindostan, and E. I. Gaz.; Hygel, Vigne, Moorcroft, &c.*, in *Journals of Asiat. Soc. of Bengal; Geogr. Soc.*)

CASHMERE, or SERINAGUR, the cap. of the above prov., on the Jhylum, 6,300 ft. above the sea; lat. 33° 23′ N., long. 74° 47′ E. Pop. (1836) 40,000. It extends for about 3 m. on either side the river, over which there are four or five wooden bridges: in some parts the city is 2 m. in width; streets narrow and exceedingly filthy; houses sometimes three and four stories high, the better sort having fire-places and chimneys, with sloping roofs of wooden frame-work, over which there is a layer of earth, which is found very warm during winter, and in summer is covered with flowers. Except a fortress at its S.E. quarter, formerly the residence of its governor, Cashmere contains no building worthy of remark: covered floating baths are ranged along the bank of the river; on the latter many different kinds of flat-bottomed boats are continually plying, bringing rice, &c. to the city.

The lake of Dal or Cashmere stretches N.E. the city in an oval circuit of 5 or 6 m., and joins the Jhylum by a narrow channel. It has been much celebrated for its

beauties, and contains many small islands, one of which derives its name from the plane-trees, which cover it, besides many floating gardens, in which water-melons and other fruits are cultivated: its banks are adorned with the blue lotus and other flowers in large number. In the plain near the lake, one of the Delhi emperors, probably Shah Jehan, constructed a spacious garden. (*Hamilton's Hindostan*, i. 541, 542.; *Hugel and Vigne*, in *Asiat. Journ.*, *Bengal.*)

CASOLI, a town of Naples, prov. Abruzzo Citra, cap. cant., on a mountain, 12 m. S.W. Lanciano. Pop. 5,051. It has several churches, and 2 normal schools.

CASORIA, a town of Naples, cap. distr., 3 m. N.N.E. Naples. Pop. 4,000. It has 4 fine churches; is the residence of a *juge d'instruction*, and the birthplace of Pietro Martino, the celebrated painter.

CASPE, a town of Spain, prov. Aragon, in the angle between and near the confluence of the Guadaloupe with the Ebro, 58 m. S.E. Saragosa. Pop. 9,100. It has a castle, a par. church, 5 convents, and 4 hospitals; with manufactures of coarse hats, soap, brandy, and cloth. There are in the vicinity extensive plantations of olives and mulberry trees, that yield abundance of oil and silk; and pastures which feed 30,000 sheep. The town is noted for the congress of the Aragonese, Catalonians, and Valencians, held in it in 1412, to settle the succession to the crown, after the death of Don Martin, king of Aragon, without sons; when Ferdinand, son of John I. king of Castile, was chosen to succeed him. (*Miñano.*)

CASPIAN SEA (the *Mare Hyrcanum* of the ancients) a great salt lake of W. Asia, between 36° 35′ and 47° 25′ N. lat., and 46° 15′ and 55° 10′ E. long. It is wholly inclosed, having no outlet whatever to the ocean, and is surrounded by Tartary, Persia, the Caucasian countries, and the Russian governments of Astrakhan and Orenburg. Its direction is from N. by W. ½ W. to S. by E. ½ E., but at its N. end it turns due E., terminating in a considerable gulph called Mervoi Kultuk, or the Dead Sea. It is here almost 400 m. from E. to W., but in general it is not much more than half that width, and at its narrowest part (about 40° 20′ N.) it does not exceed 120 m. across: its greatest length from N. to S. is 760 m., and its area may be estimated at 119,000 or 120,000 sq. m. (*Hanway's Travels*, i. 344. &c.; *Great Russian Map*, 1800; *Rennell's Gen. View of W. Asia*, pl. 6. 10. 12.; *Arrowsmith's Atlas.*)

The coast of the Caspian is considerably broken, but its gulphs and bays are more remarkable for their number than their size; the most important, after Mervoi, is the Balkhan Gulph, or *lake*, as it is sometimes, though improperly, called, which projects from the main body of the sea, near its S.E. corner, and stretches E. over nearly 2° of long. The others are mostly little more than very large harbours, nearly surrounded by the land; such as Alexander Bay, Karabogas Lake, Astrabad Gulph, and others on the E. coast; the gulphs of Kesilgatch, Agrakhan, Kolpichi, and others on the W. The S. coast has an almost unbroken line, but the N. is frittered in pieces, especially towards the W., by a countless number of sandy marshy islands, the shores and positions of which are continually changing. The depth of the Caspian is very variable; on the N. shore there is nowhere more than 12 ft., and usually not more than 5 ft., water; and this extraordinary shallowness continues for more than 20 m. from the land; on the E., W., and S. shores, on the other hand, the depth is sometimes 150 ft.; though here, also, shoal water is far from uncommon. In the middle the bottom has not been reached at a depth of 2,800 ft. From the general result of the soundings it would appear that, in some parts, at least, the bed of the sea descends by terraces; for, on the S.E. coast, the depth lies very regularly between 12 and 15 ft. for some distance from the land, when it suddenly increases to 40 or 50 ft., at which depth the soundings run in a line, equal in extent, and parallel to, the former one. A similar phenomenon is observed on the N. shore, and in several other parts. (*Georgi, Geog. Phys. and Stat. des Russ.* i. 257—260.; *Gmelin's Reise der N. Russland*, iii. 231. &c.; *Hanway's Travels*, i. 135. 155. 392. &c.)

The basin of this sea is extremely limited on the S., and, *at present*, on the E. also. On the S. the Elburz mountains press so closely on the water that the fact of their allowing a passage for the wind at one point on the S.W. corner is remarked as a singularity,—the roads and passes being generally so impracticable that many lives are annually lost in travelling them, without reckoning those who fall victims to the robber population. (*Hanway*, i. 221—227. &c.) It will be seen that there is good reason to believe the Caspian was formerly much more extended towards the E., but it is now shut in, in that direction, by high cliffs and sand hills close to its shores, beyond which a flat desert, full 90 ft. higher than its present surface, stretches to the shores of Lake Aral. (*Hanway*, i. 133. *et seq.*; *Pallas's Trav. in S. Russia*. i. 80. &c.) On these sides, therefore, the drainage is insignificant; the Elburz indeed, gives forth a great many streams, but they are all of the nature of mountain torrents; and in the dreary desert to the E. scarcely a single rivulet is found between the Attruck, at the S.E. corner, and the Yemba, at the extreme N.E. (*Hanway*, i. 130—138.)

The W. shore presents a singular appearance. As high as 43° of lat. the whole space between this sea and the Euxine is filled by the immense masses of the Caucasus; yet from this region the Caspian receives rivers which have their sources at nearly 300 m. distant from its coasts; they flow, however, over high plateaus, and through narrow ravines, apparently cut by their own action, and which are sometimes scarcely wide enough to afford them passage. (*Col. Monteith, Geog. Journ.* iii. 39. *et pass.*) Col. Monteith believes the narrow bed of the Terek to be the Pilæ Caspiæ of the ancients; and it answers exactly, in both description and situation, to the pass which Pliny says (vi. 11—13.) was *erroneously* so called; but the true Caspian gates were an artificial opening cut through the Elburz mountains on the S. coast. (See Caucasus.) N. of the Caucasus, the country W. of the Caspian spreads into a wide flat; but, remarkably enough, between the Terek and the Wolga, there is only one river mouth, that of the Kuma (an. *Cambyses* or *Udon*); for the land, though flat and sandy, is elevated suddenly at a little distance from the sea, so that the edge of the latter consists of extremely swampy ground, and all the running water that is not absorbed in the soil flows N. and W. to the Don or the Black Sea. (*Pallas*, i. 78. &c.; *Gmelin*, iii. 236. &c.) On the N.W. and N. the Caspian opens on the great European plain; its mighty rivers run courses varying from 300 to upwards of 2,000 m. (*see* Ural, Wolga, &c.), and its basin becomes so mingled with those of the Euxine, Baltic, and Arctic oceans, that it is impossible to assign, with any accuracy, the limits of each. (*See* Baltic Sea.) So closely, indeed, do the several branches of these waters approach each other, that a short canal near Tver, by uniting the little rivers Tvertza and Schlina, has connected the Caspian with the Baltic for upwards of a century; and much of the timber used in the imperial yard at Petersburg is cut in the woods of Kasan, being conveyed up the Wolga to this point of artificial communication. This canal was the work of Peter the Great; and the same prince projected the union of the Caspian and Euxine, by another, between two small streams, affluents respectively of the Wolga and Don, which, in the neighbourhood of Tsaritzen, approach each other within 2 m.; the whole distance between the larger rivers being here less than 15 m. (*Algarotti's Letters*, 67.; *Hanway*, i. 98.; *Tooke's Russia*, ii. 144.; *Pallas*, i. 91.) With respect to its basin and drainage, therefore, the Caspian is much more of a European than an Asiatic lake; the former is extensive only on the side of Europe, and the latter carries off at least 1-6th of all the running water belonging to that division of the world. The rivers which descend from the Caucasian mountains, the only ones of consequence which the Caspian receives from Asia, are quite insignificant when compared with such streams as the Wolga and Ural; the former of which alone drains 140,000 sq. m. (*Lichenstein's Cosmog.* i. 328.)

There are, of course, no tides in this close lake, nor do there seem to be any regular currents, in the usual acceptation of the word; but, from the freedom with which the wind blows over so large a surface, many considerable and very irregular changes are effected in its motions and character. A strong breeze from the S. drives the waters over the low lands of the N. coast, sometimes to the distance of several miles; vessels, at such times, are said to have been carried so far inland, that, on the retiring of the sea, it was found necessary to break them up where they lay, from the impossibility of transporting them back to the shore. It must be remembered, however, that these vessels are of peculiar construction, the numerous and extensive shoals preventing the general use of any (on the N. coast) that would require much depth of water. Such a wind, too, by driving the sea into the mouths of the great rivers, causes these to rise in their beds, and, consequently, when the wind subsides, a very violent S. current is produced by the water returning to its usual level. A N. wind produces the same effect on the S. shore; only, from the nature of the coast, the water cannot extend so far over the neighbouring land; but it is frequently raised from 3 to 4 ft. above its natural level; the return to which, therefore, causes a rushing and confused motion of the waters to all points of the compass. Vessels drawing 9 or 10 ft. are, during these changes, exposed to great hazard, and, as the winds are extremely uncertain, the navigation of the Caspian is one of very considerable danger.* (*Hanway*, i. 142. 393. &c.; *Georgi*, i. 258.; *Monteith*, *G. J.* iii. 23.) There is another motion of this sea much more remark-

* The Caspian sea has this property, however, in common with most close waters. It is a familiar observation that there is less danger in a voyage across the Atlantic than in a passage across a Swiss lake.

able, however, than the preceding. It appears to increase and decrease in *actual bulk*, in periods, according to native report, of about 30 years each. When navigated by Hanway, its surface was incontestibly rising, if the united testimony of the inhabitants upon the coasts be credited; and this testimony received confirmation from the appearance of the coasts themselves. Tops of houses were seen in water several feet in depth; the sea had visibly risen on the walls of fortified towns; and these encroachments were going on equally on all parts of the coast at the same time; so that the natives round the whole circuit were living in a state of great alarm. (i. 155—157. 371. &c.; see also *Algarotti*, 78. *et seq.*) Now Hanway makes his remarks in 1743, when the sea had certainly been rising more than 20 years,—that is, from before the expedition of Peter the Great, in 1722 (i. 155.); and, therefore, if the native tradition were founded on fact, it had nearly reached its greatest height. It is, at least, a remarkable circumstance, that, in 1784, the sea was again (*or still*) rising, having, by its action, levelled the outer wall of Baku, which was standing in the time of Hanway (*Forster's Travels*, 227.); while, between 1811 and 1828, it had very sensibly decreased (*Col. Monteith, Geog. Journ.* iii. 23.), and, in 1832, it had receded from the S. shore full 300 yards. (*Burnes's Travels to Bokhara*, ii. 121.) It is clear that, in the 41 years between the observations of Hanway and Forster, there had been time, upon the native hypothesis, for the sea to reach its greatest depression, and begin again to rise. At all events, the facts, meagre as they are, seem to warrant the conclusion of periodic variations; though what law these follow, the data are at present far too limited to determine. If a conjecture may be hazarded, they probably depend upon meteorological causes, and the general state of the atmosphere. Hanway (though he disbelieves the *periodic* variation) appears to hold an opinion similiar to this; for he remarks, that the summers, from the time of Peter the Great to that of his own observations, had been less hot than formerly; that consequently evaporation had been less, while the supply of water had continued the same. (i. 156.) It would be a corroboration of this theory, could it be established that, from 1811 to 1832, when the Caspian was unquestionably and rapidly sinking, the summer heat had been peculiarly great; but on this point nothing certain is known. In the mean time it is worthy of remark, that, between the observations of Hanway and those of Monteith and Burnes, 90 years (a multiple of the asserted period) had elapsed; that the time during which the sea was known to be constantly rising in the one case, and sinking in the other, was the same, namely, 21 years; and that, on the supposition of the trigentennial alternation of the phenomena, it should have been found sinking, as it was, by the last named travellers. That there is something very peculiar in the atmosphere of this region is evident. Monteith found its extra pressure to be equivalent to a column of 390 ft. in height (*Geog. Journ.* iii. 22.); Burnes, some 4 or 5 years later, to one of 800 ft. (*Travels*, ii. 122.) These results were obtained, not by the barometer, but by the boiling point of water; the difference of pressure would, however, cause a rise of nearly ½ an inch in the former (*Nettleton, Phil. Trans.* xxxiii. 308.), and consequently a depression of almost 7 inches in the surface of the Caspian. This co-existence of phenomena is similar to that observed in the Baltic, only much more powerful and longer continued; it is, therefore, at least, probable that in both cases the varying level depends upon the varying pressure, and that, with extended knowledge, the explanations of the Swedish mathematicians may be brought to bear, generally, upon this peculiar feature of physical geography. (See Baltic Sea.)

But whatever may be the variations in the present surface of this lake, there can be little doubt but that it was formerly much more extensive on three sides, —the N., N.W., and E.; and it is still, most likely, diminishing. The fact that it never increases, in any thing approaching to the ratio of the water poured into it, has been, combined with its want of outlet to discharge that water, a standing wonder for centuries; and the most extravagant hypotheses have been adopted to account for a phenomenon apparently so paradoxical: among others, a filtration through a shelly sand into an imaginary abyss; and a subterranean communication with the ocean. The latter is the prevalent opinion among the natives; the former, to the discredit of philosophy, has found abettors among Europeans, who should have known better. (*Hanway*, i. 156.; *Algarotti*, 67.; *Tooke*, i. 138.; *Burnes*, ii. 188. &c.) But evaporation is in these regions great, beyond belief; not from the temperature, which is lower than might be expected, but from the extreme dryness of the air. In an experiment made by Dr. Gerard in the E. desert, a bowl full of water disappeared altogether in two days. (*Burnes*, ii. 189.) Without pretending to decide the proportion between this exhaustion and the supply afforded by the rivers, which could not be done without much more extensive data, it is clear that the first, unchecked by the latter, would be sufficient to dry up the Caspian, or a much larger body of water, in the course of a few years; and that the waste *is*, or, at all events, *has been*, greater than the supply, is shown by the appearance of the plain country in the neighbourhood of this sea. It has been observed that the present bed appears to descend in terraces, and on the E. and N.W. shores the land rises in the same manner. This land presents, also, incontestible proofs of having been formerly covered with sea water; it is uniformly flat, except where it rises in sandy ridges, to form the terraces before mentioned; it is uniform in soil, consisting of sand combined with marine slime, without a trace of terrestrial vegetation except the common desert plants), or the slightest indication of minerals: the substratum is clay, at a considerable depth from the surface; and the surface itself abounds in sea salt, sea-weed marshes, salt pits and lakes, together with innumerable shells exactly resembling those of the Caspian Sea, and *which are not found in any of the rivers*. This uniform and dreary country terminates suddenly towards the N., at a comparatively high tract running from the Wolga to the Ural, near the 51st parallel; and on the N. W. at a similar tract between the Wolga and Don, a little to the E. of the 46th meridian. The change of soil is here striking and instantaneous; salt, sea-weed, shells, and sand, disappear, and are replaced by black mould, solid turf, and all the usual appearances of vegetable soil upon reasonably old land, though still belonging to a period *geologically* recent, as is demonstrated by its horizontal strata and the continued absence of mineral productions. These high grounds formed, therefore, in all probability, the ancient shores of the Caspian; but that to the N.W. terminates abruptly on the little river Mantysh, near the 46th parallel, between which and the Caucasian mnts., a low and narrow tract, exactly resembling that on the immediate borders of the Caspian, stretches without interruption to those of the Sea of Azoph, having every appearance of the deserted bed of a strait formerly uniting the two waters. Towards the E. the whole country has the same appearance of a deserted sea-bed; and the conclusion, therefore, appears inevitable, that, at comparatively no distant period, the Sea of Aral, the Caspian, and the Black Sea, formed one body of water, uniting the present anomalous salt lakes of Asia with the ocean. This conclusion is further strengthened by the presence of the same species of fish, seals, &c., in the three seas; a fact which it is impossible to account for on the supposition that they were always separated. (*Pallas*, i. 78—87. 279—304. &c.; *Gmelin*, iii. 231—248.; *Georgi*, i. 259. &c.)

When it is considered that Russia is extremely flat; that its slope from the Arctic Ocean to the Caspian is uninterrupted; and that this slope is so considerable, that the Wolga, though rising in a flat country, has *rather* a rapid current (*Pallas*, i. 25.),—it will be evident that the position of the Caspian must be very low. A suspicion having long existed that it was lower than the level of the ocean, Messrs. Englehardt and Parrot, in the beginning of the present century, performed a series of barometric levelling between its shores and those of the Black Sea; the result of which gave a depression of 333 ft. (54 *toises*) for the surface of the Caspian. (*Reise in die Krym und der Kaukassus*, ii. 55.) It is to be remarked, that at this time the sea was *sinking*; and, therefore, if the opinion hazarded on the cause of its variations be correct (see *antè*), the atmospheric pressure on its coasts was greater than it would be in the ordinary state of the air. This seems, also, to be borne out by the observations of Monteith and Burnes, upon the boiling point of water. Results depending upon the height of the barometric column would, under such circumstances, be inevitably excessive; and this was, upon other grounds, suspected by Humboldt, from the very first publication of Messrs. Englehardt's and Parrot's memoir. (*Parrot, Voy. à l'Ararat*, ii. 192.) To determine the question, the Russian government, in 1836, despatched an expedition, which, after two years' labour, completed, in 1838, a splendid series of trigonometrical levelling; from which it appears that the Caspian is 101·2 Prussian ft. (about 116 ft. English) below the Black Sea. (*Geog. Journ.* viii. 135.) The known elevation of the desert steppe E. of the Caspian will, according to this survey, place the Sea of Aral very nearly on a level with, or even something higher than, the Euxine.

Considering its lat., that of S. France and Italy, the temperature of this sea and its neighbourhood is extremely low; the N. part is very frequently frozen, and the ice in the mouth of the Wolga (lat. 46°) does not usually break up till April. (*Hanway*, i. 140.; *Pallas*, i. 89. &c.) Even the Aral, as low as 45°, is *sometimes* frozen; and the inhabitants have a tradition that one of its islands was peopled by a colony which crossed the ice, with all their flocks and herds. (*Burnes*, ii. 189.) This fact is the more remarkable, from the low, level, and S. aspect of the region round the Caspian; but the want of

mountains towards the N. exposes it to the influence of chilling winds from the Arctic Sea, while the intervention of snow-capped ranges on the S. prevents the counterbalancing effects of the hot breezes from the equator. The summer heat is, however, generally great, and is towards the S. attended with a humidity, which renders it very unhealthy; though, from this very cause, the S. and S.W. districts present a luxuriance of vegetation strongly contrasted with the bare salt deserts on the N.W., N., and E. Rice, maize, cotton, fruits of all kinds, and a countless variety of forest rees, are among the productions of these districts; which, with the exception of the Russian colony in the steppe of Astrakhan, are the only parts of the coast possessing a settled population; but such is the deadly nature of the climate, that all who are able leave the towns in the beginning of summer, and retire to the mountains, where the atmosphere is of course more salubrious. The deserts are occupied by the wandering Kalmucks, Kirghis, and Turkomans, who preserve unaltered the roving and predatory habits of their earliest ancestors. (*Pallas*, i. 92. 115. &c.; *Frazer's Trav. on the S. Bank of Casp.* ii. 15. &c.; *Conolly's Narrative*, i. 35—49. 146. &c.; *Burnes*, ii. 100—127. &c.)

The waters of this sea are less salt than those of the ocean, and considerably less so near the mouths of rivers than at a distance from the shore. The waters of Lake Aral are even drinkable (*Burnes*, ii. 189.); but all have a bitter taste, ascribed by some to the great quantities of naphtha with which the soil abounds, but by others to the presence of glauber salts, among the substances held in solution. The fish are principally salmon, sturgeons, and sterlets; a kind of herring is also found, and there are likewise porpoises and seals. It has been already said, that the same inhabitants are found in the waters of the Caspian, Aral, and Black Seas. The fisheries employ many vessels annually, and the shores abound in aquatic fowl, storks, herons, bitterns, spoonbills, red geese, red ducks, &c. (*Gmelin*, iii. 233—257.; *Pallas*, i. pass.; *Tooke*, i. 238. &c.)

It is somewhat remarkable that, though situated on the confines of Europe, this sea should have remained nearly unknown, except by name, till the beginning of the last century. It is scarcely less remarkable that the oldest observer, Herodotus, described it truly, as an ocean by itself, communicating with no other, and of such size that a swift-oared boat would traverse its length in 15 days, its greatest breadth in 8 days. (*Clio*, 203.) These proportions are accurate according to the best modern observations, and at 50 m. per day for the swift boat's progress, would give the actual measurement. After this clear account, it is startling to find the Caspian transformed by Strabo into a gulph of the Northern Ocean, and otherwise distorted, according to a theory which must be regarded as purely fanciful. (*Geog.* xi. 507.) Ptolemy restored the Caspian to its lake-like form: he had some knowledge of the Wolga, which he calls Rha; but he gives the greatest length of the sea from E. to W., and makes it a vast deal too large. (v. 2., vi. 9. 13. &c.) It is to be remarked, that Herodotus does not *state* in what direction lay the greatest length; but it may be very readily deduced, from his descriptions of the surrounding countries, that he meant it to be understood as stretching N. and S. The authority of Ptolemy remained paramount and unquestioned for many centuries; and the first modern account of the Caspian, at all consistent with the truth, is due to Anthony Jenkinson, an Englishman, who, in 1558, traversed its waters, and gave an account of its dimensions and bearings, agreeing in all its main points with the more brief description of Herodotus. (*Hakluyt's Voy.*, i. 326—329.) Jenkinson's voyage did not, however, gain much attention; and in 1719 a regular survey was commenced, by command of Peter the Great. Vanverden's map, the result of that survey, and which was partly constructed by the emperor himself, is still, and justly, held in high estimation. The voyages of Hanway had for their object the establishment of a trade (in English hands) between Russia and Persia. The failure of that object was owing to the ambition of a Mr. Elton, who, attaching himself to the Persian court, gave such offence to that of Russia, that the latter eventually prohibited the English commerce on the Caspian. (*Hanway*, ii. 279. *et pass.*) A mass of valuable information was, however, collected, during these transactions, by Hanway himself, Elton, Woodroffe, and others. The more modern travellers, Gmelin, Georgi, Pallas, Englehardt, Parrot, Forster, Frazer, Conolly, Burnes, Monteith, Fuss, Sabler, and Sawitch, have added immeasurably to that information; but much still remains to be done; and as the Russian government seems fully alive to the importance of accurate knowledge on geographical subjects, and as their power or influence is nearly established on all parts of this sea, it may be reasonably hoped that every year will make W. Europe better acquainted with this very remarkable region.

The largest class of vessels that navigate the Caspian, are called by the Russians *schuyts*, and belong wholly to Astrakhan and Baku; their burden varies from 90 to 100, and sometimes 150, tons. They are not built on any scientific principle, and are constructed of the worst materials,—that is, of the timber of the barks that bring corn down the Wolga to Astrakhan. There are supposed to be in all about 100 sail of these vessels. A second class of vessels, called *razchives*, employed on the Caspian, carry from 70 to 140 tons, and sail better than the schuyts, and there are great numbers of small craft employed in the rivers, in the fisheries, and as lighters to the schuyts. But steam-boats will, no doubt, in the end, supersede most of these vessels; they have already, indeed, been introduced, not only upon the rivers, but upon the Caspian itself. The trade of the sea is entirely in the hands of Russia; and, whatever objections may, on other grounds, be made to her conquests in this quarter, it is certain that, by introducing European arts and sciences, and comparative good order and security, into countries formerly immersed in barbarism, she has materially improved their condition, and accelerated their progress to a more advanced state.

The Caspian Sea, Κασπίη Θάλασσα (*Herod. Clio*, 203.), is the oldest name of this water. It was derived from the Caspii, a people who inhabited its banks; as the *more modern* term Hyrcanian Sea, Θάλασσα Ὑρκανία (*Strabo*, xi. 507.), was similarly derived from the more important Hyrcanii, a principal branch of the great Persian family. In the present day it is called *More Gualenskoi*, by the Russians; *Kulsum*, by the Persians; *Bahr Kurzum*, by the Arabs; *Kulzum Denghis*, by the Turks; and *Akdinghis*, by the Tartars. (*Tooke*, i. 232.)

CASSANO, a town of Naples, prov. Calabria Citra, cap. cant., in the concave recess of a steep mountain, round an insulated rock, on which are the ruins of an ancient castle, 7 m. E.S.E. Castrovillari, and 10 m. from the Gulph of Tarentum. Pop. circa 5,000. It is well built; is the residence of a bishop; has a cathedral, 4 convents, a seminary, and a workhouse. The inhabitants are industrious, and manufacture maccaroni, stamped leathers, and table-linen. Cotton and silk are also grown, spun, and woven; and the environs are productive of excellent timber, fruits, and corn. (*Craven's Calabria*, p. 212.)

CASSAY, KATHEE', or MUNNEEPOOR, a country of India beyond the Ganges, between lat. 24° and 26° N., and long. 93° and 95° E.; having N. Assam and the Birman empire; S. a hill country, inhabited by independent Khyens (*see* BIRMAH), Kookies (*see* CACHAR), &c.; and W. Cachar. Area about 7,000 sq. m. Cassay consists of a central fertile valley, of comparatively small extent, surrounded on every side by a wild and mountainous country. The Naga mountains bound it N., averaging in height 5,000 or 6,000 ft. above the sea; although in some parts they are as much as 8,000 or 9,000 ft. high. Two branches, passing S. from the Naga mountains, inclose the Cassay valley E. and W., and the S. boundary, from the confluence of the Chikoo *nullah*, or rivulet, with the Barak, is formed by the same ranges, which run E. and W., bounding Cachar S., and Tipperah N.E. The W. mountain range is more elevated and extensive than any other, and runs from the banks of the Barak S.S.W. for 80 m., steep and precipitous, towards Cachar; but in some parts almost cleared of forest, and annually cultivated with rice and cotton. This range has nine principal peaks, varying in height from 5,790 to 8,200 ft. above the sea, which, from superstitious motives, are left covered with wood by the inhabitants of the hills, and are often capped with a dense stratum of clouds. The E. hills vary from 4,900 to 6,730 ft. above the sea. The valley thus inclosed is about 36 m. long and 18 m. broad, having an area of 650 sq. m. of rich alluvial soil, 2,500 ft. above the level of the sea.

The chief rivers are the Khongta, or Munnepoor river, Eeril, and Thobal. The first rises in the Naga mountains, in lat. 25° 12′ N., long. 94° E.; it completely traverses the central valley N. to S., and falls into the Ningthee or Kyen-dwem river. It is the only outlet for the waters of the Cassay valley; and, as the latter is 2,000 ft. above the Ningthee, it is probable there are several considerable falls in its course through the mnts. Almost all the centre of the Cassay valley is a series of jeels and marshes; there is a small lake (Logta) at its S.W. corner: compact sandstone, slate, and limestone are the prevailing geological features of this region.

Iron is the only metal found in Cassay; it is met with under the form of titaniferous oxide, and is detected by thrusting spears into the ground, and, where iron is present, small particles soon adhere to them. (*Pemberton.*) The Cassay valley is rich in salt springs, especially on its E. side; and more than enough salt for home consumption is made. The climate of the valley is lower by many degrees than in Calcutta, but not so low as might have been expected from the elevation. There are more rainy days in the year, but less rain falls, than at Calcutta: from March the showers become continual; the permanent rise of the streams begins in May, and continues till the middle of October, from which time they rapidly de-

crease. From Nov. to Jan. fogs settle during the whole night in the valley, and hoar frosts prevail on the hills; yet the climate of the former region is decidedly salubrious, and peculiarly healthy to European constitutions. The surrounding mnts. are, in most instances, covered with the noblest varieties of forest trees, common both to tropical and colder climates; and, according to Capt. Pemberton, there is no part of India where the forests are more varied and magnificent; but, from the small number of streams, and the want of good roads, their utility is entirely local; there being at present no means of conveying the timber to any distance. The valley is perfectly free from forest, though every village is surrounded by a grove of fruit-trees: the soil of the detached hills, and their S. faces especially, are highly adapted to the culture of fruit. Herds of wild elephants are constantly seen in the glens and defiles of the N.: wild hogs and deer of the largest size abound every where; and the chase is a favourite sport with the Cassayers. Tigers are not common, and have retired to the mountain fastnesses: there are no jackals; but wild dogs, greatly resembling that animal, abound on the hills, where they hunt in packs. With the exception of woollen cloth, this country furnishes every article essential to the comfort and prosperity of its inhabitants. All the tribes N., W., and E. of the central valley partake strongly of the Tartar countenance, and are probably the descendants of a Tartar colony who passed hither from the N.W. borders of China, during the sanguinary struggles for supremacy between the Chinese and Tartar dynasties, in the 13th and 14th centuries. They have much more affinity, both in person and manners, with the Hindoos, than with the Birmese, to which latter race they bear little similarity. They differ from the Kookies of the S. hills in their superior height, finer complexions, higher foreheads, inharmonious voices, and harsh language. They are highly ingenious, and are good horsemen, on which account they were formerly exclusively employed in the Birmese cavalry service. The upper classes are worshippers of Vishnu, and this country may be regarded as the extreme E. limit of Brahminism: the Cassay tongue is, however, widely different from Sanscrit. There are many other distinct tribes in different parts of Cassay and its neighbourhood. All cultivate tobacco, cotton, ginger, and pepper, and manufacture cloths; which articles they barter for others with the inhab. of the neighbouring plains of Bengal, Assam, and Birmah. In the central valley rice is the chief object of agriculture, and the land there is well irrigated, and highly suited to it: but scarcely ¼ part of the land available for it is under culture, owing to a paucity of inhabitants. The whole pop. of the valley in 1835 was barely 20,000. Tobacco, sugar-cane, indigo, mustard, dhal, and opium are also grown; and each house is surrounded by a little garden, in which culinary vegetables are raised in large quantity. Almost all the garden produce of Europe is found here, having been introduced by the British since the Birmese war; and the pea and potato are found so acceptable, that their culture is nearly universal, and they are constantly exposed for sale in the bazaars. The pine-apple attains an excellence in Cassay, not surpassed in any part of the world. Buffaloes are used for ploughing; there are about 3,000 in the central valley, and perhaps an equal number of bullocks, which are superior, both in size and symmetry, to those of Bengal.

The ponies of Munneepoor are much and deservedly esteemed, by both the Cassayers and Birmese, who use them for the *élite* of their cavalry. They average from 12 to 12½ hands, and are rarely more than 13 hands in height: they are hardy and vigorous, and have a peculiar blood appearance, but are now nearly extinct; and scarcely more than 200 could be found fit for active service. Formerly, every inhab. had two or three; and the Cassayers affirm that, in a military sense, they have lost one of their arms by the decrease of the breed. Sheep were unknown till introduced by the British; they thrive on the slopes of the central valley: goats are bred by the Naga tribes on the hills, but invariably deteriorate if brought into the lowlands: poultry are plentiful in the latter districts, and the mountaineers purchase fowls thence at a very high price. The chief manufactures are coarse white cottons; a very soft and light muslin; a coarser kind, used for turbans and jackets; silks, remarkable for the brilliancy of their colours, and which are much prized at Ava; iron articles; and salt. The chief iron articles made are axes, hoes, ploughshares, spear and arrow heads, for home use; and blades, 1 or 2 ft. in length, which, fixed into wooden or other handles, form the *dao*, the inseparable companion of the Cassayer, Shan, and Singpho. Salt is got from wells, sunk in the valley to about 40 or 60 ft.; all of which are the property of the rajah, who levies a tax of 1-5th upon the water drawn. The quantity of salt obtained by evaporation is about 1-20th the weight of the water, or nearly double the quantity obtained by evaporation from sea water at Newcastle: the labourers engaged are paid in salt to the value of 3 or 4 rupees a month each, which they barter for other commodities. Wax, cotton, and elephants teeth, form part of the tribute of the hill tribes; the same articles, with ponies, &c., are bought by the Chinese merchants of Yun-nan; and similar products, with silks, iron, dammer, wood, oil, sandal-wood, camphor, thread, &c., were taken in lieu of money payments by the British, for assistance to the rajah about the middle of the last century.

Government, &c. — Cassay is independent, and, at present, governed by a regency in the name of an infant son of the rajah Gumbheer Sing. The capital is Munneepoor. The military force consists of 3,000 infantry, 100 cavalry, and 100 artillery men, to a train of 4 three-pounders. Instead of pay, the men and officers have grants of land. Their arms and ammunition are supplied by the British gov., and they are occasionally drilled by a British officer. Their discipline is very imperfect; but they are more than a match for an equal number of Birmese, who refuse to face their cavalry. Religious prejudices, and among the Cassayers a sense of ancient wrongs, tend to keep alive the enmity of the two races.

The records of Cassay bear some character for truth, and, it is said, reach back to a remote epoch. In 1475, the Kubo valley was annexed to Cassay by conquest; and in 1738, the Cassayers conquered Birmah, and took its then capital, Sakaing. Subsequently, Cassay was frequently invaded and devastated by the Birmese; and from 1774 to 1824 was subject to Ava. By the treaty of Yandabeé, in 1826, it became independent. In 1833, the valley of Kubo was ceded to the Birmese by British authority. (*Pemberton's Report on the E. Frontier of Calcutta*, 1835.)

CASSEL (anc. *Castellum Cattorum*), a town of W. Germany, prov. Lower Hesse, of which, and of the electorate of Hesse Cassel, it is the cap., and residence of the elector. It is finely situated on both sides the Fulda, 72 m. S. by W. Hanover, and 89 m. N.N.E. Frankfurt on the Mayn; lat. 51° 19′ 20″ N., long. 9° 35′ 18″ E. Pop. about 31,000. (*Berghaus*.) The town is divided into three separate parts, and has three suburbs. The Old Town and Upper New Town, with the Wilhelmshöhe and Frankfurt suburbs, are built on the left or W. bank; while the Lower New Town, and the Leipzig suburb, are on the E. bank of the river. The two divisions are connected by a stone bridge across the Fulda, 273 Germ. feet in length. Cassel is walled, and has numerous gates; it was formerly well fortified, but its ramparts were demolished in 1764. The Old Town, by the river, consists of narrow dirty streets; but the Upper or French New Town, so called because originally built by French refugees, on a height above the former, is one of the best laid out and handsomest towns in Germany. It contains, among others of less dimensions, the largest square in any German city (the Friedrichs Platz), and one street, nearly a mile in length, and proportionally broad. Houses in the New Town and the Wilhelmshöhe suburb, generally well and tastefully built. In this quarter of Cassel are — the elector's palace, a structure nowise remarkable, and surpassed by many bankers' residences in Frankfurt; the museum, the handsomest building in the city, containing a library with 70,000 volumes (*Cannabich*); an observatory; and cabinets of natural history, mineralogy, coins, artificial curiosities, statuary, and antiquities; the latter comprising several interesting Roman relics found in Hesse Cassel; a picture gallery, containing some valuable paintings by Rembrandt, Rubens, Vandyke, &c.; the Bellevue palace, with others belonging to the electoral family; the electoral stables, and riding-school, mint, town-hall, arsenal, old and new barracks, opera-house, &c. In the Old Town are the Kattenburg, a large unfinished structure, begun upon the site of the old electoral palace destroyed by fire in 1811; the old town-hall; government offices; and St. Martin's, the principal church in the city, and the burial-place of the sovereigns of Cassel. The Lower New Town contains the castle, an ancient fortress, now used as a state prison; and several other prisons, &c.

Cassel has 8 churches, 7 of which belong to the Lutheran or Reformed faith; and 1 synagogue. It has altogether 20 edifices devoted to military purposes, and 51 other public buildings. Amongst the institutions for public education, are a lyceum, academies of painting and design, a teachers' seminary, a military school, a school of mechanical employments (*Bau-und-Handwerksschule*), a Jewish theoretical and practical school, &c. There are societies for the promotion of agriculture, trade, and manufactures, and numerous charitable establishments; the latter includes the *Wilhelms Institut*, at which many poor are provided for, and taught different trades; a large general hospital, with several smaller ones, orphan asylums, &c. Notwithstanding the Fulda is navigable, and that Cassel is on all sides surrounded by large commercial towns and districts, its own trade is not very considerable. It possesses manufactures of cottons, silk and woollen fabrics, leather,

hats, carpets, snuff, gold and silver lace, porcelain, earthen and lacquered ware, playing-cards, wax-lights, chemical products, dyes (Cassel yellow and black), soap, starch, hardware, musical instruments, linen, damask, chicory, and some machinery. It has two fairs annually. S. of the Upper New Town is the *Karlsane*, or *Ausgarten*, a fine park containing an orangery, a pheasantry, and a marble bath; but the last is overloaded with ornament, and in bad taste. A straight and handsome road, shaded by an avenue of limes, 3 m. in length, conducts from the Wilhelmshöhe gate to Wilhelmshöhe, the summer palace of the elector, a magnificent residence, sometimes called the German Versailles.

During the short period that Jerome Bonaparte was on the throne of Westphalia, Cassel was the cap. of his king. and the place of his residence. (*Berghaus, Allg. Lander und Volkerk*, iv. 329, 330.; *Cannabich, Lehrbuch der Geogr.* pp. 454, 455.; *Murray, Handbook for N. Germany, &c.*)

CASSEL, a town of France, dép. Nord, cap. cant., on an isolated mount in the middle of an extensive plain, 28 m. N.W. Lille. Pop. 4,495. It is well built, and, notwithstanding its situation, is well supplied with spring water. It has fabrics of lace, thread, hats, oil, earthenware, &c. It is very ancient, having been the capital of the *Morini* when Cæsar invaded the country. It was united to France in 1678, by the treaty of Nimeguen. Several battles have been fought in its vicinity. (*Hugo*, art. *Nord*.)

CASSIS, a sea-port town of France, dép. Bouches-du-Rhone, in a narrow valley on the Mediterranean, 10 m. S.E. Marseilles. Pop. 2,065. It has a tribunal of *prud'hommes*, an office of health, a workhouse, and yards for the building of small vessels. Its port is confined, and admits only vessels of small burden. The figs and grenades of Cassis are held in much estimation; and it has a considerable trade in excellent muscatel wine, produced in the environs. This is the native country of the learned and excellent Abbé Barthelemy, author of the *Voyage d'Anacharsis*, who was born here on the 20th of January, 1716. (*Dict. Géog.; Biog. Universelle.*)

CASTEL-A-MARE, a city and sea-port of Naples, prov. Naples, on the Gulph of Naples, 15 m. W. Salerno. Pop. 15,000. It is the seat of a bishopric, and the residence of a sott' intendente; and is well built, partly along the shore, but principally on the site of the mountain, rising immediately from it. It has a royal palace, a cathedral, 5 churches, several convents, a military hospital, fine barracks, a royal dockyard, with hot baths, &c. There are manufactures of linen, silk, and cotton, with tanneries. The port, which is small, is defended by two forts. Being exposed to the N., and elevated, Castel-a-Mare has acquired great celebrity as a summer residence, in consequence of its coolness, the salubrity of its air, and the beauty of its environs. But in autumn it becomes damp, chill, and disagreeable.

Castel-a-Mare is built on the site of the ancient *Stabiæ*, which, having been destroyed by Sylla during the civil wars, was afterwards principally occupied by villas and pleasure-grounds. It was here, A.C. 79, that the elder Pliny, wishing to approach as near as possible to Vesuvius during the dreadful eruption that overwhelmed Herculaneum and Pompeii, fell a victim to his curiosity and thirst for knowledge. (*Craven's Calabria*, p. 400.; *Cramer's Ancient Italy*, ii. 181.)

CASTEL-A-MARE, a sea-port town of Sicily, prov. Trapani, cap. cant., on a gulph of its own name, 6 m. N.W. Alcamo; lat. 38° 1′ 51″ N., long. 12° 52′ 43″ E. Pop. (cant. inc.) 8,102. It is a mean dirty town, with a castle falling fast to decay. The bay is spacious, but it is not safe with northerly winds which throw in a heavy sea. The neighbouring country is well cultivated; and considerable quantities of wine, fruit, grain, manna, andopium, are exported. (*Smyth's Sicily*, p. 67. &c.)

CASTELLON DE LA LLANA (an. *Castalio*), a town of Spain, Valencia, cap. dep., 4 m. from the coast, and 41 m. N.N.E. city of Valencia, on the high road from thence to Barcelona. Pop. 15,000. (*Miñano.*) It is finely situated in a well-watered, extensive, and fertile plain. It is worthy of remark, that this fertility is entirely the result of industry,—the water which gives life and verdure to the plain being brought by an aqueduct, cut in great part through the solid limestone rock, from the Mijares, which flows about 5 m. S. from the town. This great work has been ascribed to the Romans and Moors; but Mr. Townsend says that it was certainly constructed, about 1240, by James the Conqueror, king of Aragon. (iii. 198.) The town, which is very well built, has 3 churches, 6 convents, 1 hospital, 2 houses of charity, and a public granary. It has, or at least had when it was visited, in 1787, by Mr. Townsend, a good collection of pictures, mostly by Ribalta, a native of the place. The agreeableness of the situation, the mildness of the climate, and the abundance and excellence of the fruits, make this one of the most desirable residences in the prov. Mr. Swinburne is ungallant enough to say that the ladies of Castellon de la Llana are "very ugly." (*Travels*, i. 131.)

CASTELNAUDARY, a town of France, dép. Aude, cap. arrond., on an elevated fine situation, contiguous to the Canal du Midi, 21 m. W.N.W. Carcassonne; lat. 43° 19′ 4″ N., long. 1° 52′ 36″ E. Pop., ex com., 8,656. It is very indifferently built, and there are few edifices worth notice, if we except the church of St. Michael, said to be the finest in the dep. It has a tribunal of primary jurisdiction, a departmental college, and a philotechnic society. The canal has a superb basin contiguous to the town, surrounded by fine quays and warehouses, which, with the vessels by which it is sometimes crowded, give it the appearance of a sea-port. The public promenade commands this basin and a fine view extending as far as the Pyrenees. There are here manufactures of cloth and silk, with establishments for the spinning of cotton, print-fields, and tanneries; and a considerable trade is carried on in the manufactures of the town, and the produce of the adjoining country.

In 1632, in an encounter under the walls of the town, the Duc de Montmorenci, commanding the troops of Gaston, Duc D'Orleans, was wounded and taken prisoner; and being conveyed to Toulouse, was convicted of treason, and executed in the course of the same year. (*Hugo*, art. *Aude; Henault, Abrégé Chronologique*, anno 1632.)

CASTELO BRANCO, a city of Portugal, prov. Beira, on a hill on the Liria, 51 m. N.E. Abrantes. Pop. 5,720. It is the see of a bishop, and the residence of the captain-general of Lower Beira. Streets narrow and steep, and the houses mean, except some modern ones without the walls; the latter are double, and flanked with 7 towers. The cathedral also is without the city; and there is an old ruined castle on the summit of the hill on which the town stands. It has a college, 2 collegiate churches, &c.

CASTEL-SARRASIN, a town of France, dép. Tarn-et-Garonne, cap. arrond., pleasantly situated in a fertile plain on the Songuine, 1 m. from its confluence with the Garonne, 13 m. W. Montauban. Pop. 7,408. It is well built, and the walls and ditches by which it was surrounded have been converted into promenades. It is the seat of a court of primary jurisdiction, of a departmental college, &c.; and has manufactures of serges and other woollen stuffs, hats, and tanneries. (*Hugo*, art. *Tarn-et-Garonne*.)

CASTELVETRANO, a town of Sicily, prov. Trapani, cap. cant., on a hill, 6 m. from the sea, and 12 m. E. Mazzara. Pop. 12,669. It is well built with stone, the streets being spacious and disposed with some attention to regularity; and there are several churches and convents. It has, however, a decaying appearance, and, in fact, the population has declined above 2,000 since 1798. (*Giornale di Statistica*, i. 94. &c.)

CASTIGLIONE-DELLE-STIVIERE, a town of Austrian Italy, prov. Mantua, on a hill, 22 m. N.W. that city. Pop. 5,300. It is surrounded by a low wall, and contains several churches, the ruins of a castle, and a conventual seminary; but is chiefly noted for a decisive victory gained here by the French over the Austrians, 5th August, 1796; from which Marshal Augereau derived his title of Duc de Castiglione. (*Oesterr. Nat. Encycl., &c.*)

CASTILE, the central and largest division of Spain, lying between lat. 38° 25′ and 42° 50′ N., and long. 1° 2′ and 5° 37′ W.; it has, N. and N.E., the territory of Reinosa, Alava, and Navarre; E., Aragon and Valencia; S.E., Murcia; S., Andalusia; W., Estremadura and Leon: length about 306 m. from N. to S.; mean breadth about 160 m. Area about 48,600 sq. m. It is divided into 2 parts by a range of high mountains, called, in different parts, Urbians, Carpetanos, Sierra de Guadarama, Gata, Somosierra, and De Estrella. The country to the N. of the ridge, having been the first recovered from the Saracens, is called Old, whilst that to the S. is named New Castile. Old Castile comprises the modern provinces of Burgos, Soria, Segovia, and Avila, so named after their chief towns. New Castile comprises the provinces of Madrid, Guadalajara, Cuença, Toledo, and La Mancha; each also so called after the names of their chief towns, except La Mancha, whose cap. is Ciudad Real. Principal towns, exclusive of the capitals, are Osma, Calahorra, Logroño, Calzada, Haro, Alfaro, Miranda, Briviesca, Almazar, Toledo, Aranjuez, Alcala de Henares, Talavera de la Reina, Illescas, Zurita, Tembleque, Villanueva, &c. The Ebro, Douro, Tagus, and Guadiana have their sources in this province. The first flows S.E., along the N.E. boundary, to the Mediterranean; the Douro and Tagus, to the Atlantic; and the Guadiana, W.S.W. to the same. There are many other rivers, affluents of the above. The Xucar, flowing E. to the Mediterranean, also rises in this province. Besides the chain of mountains that separates Old and New Castile, there are 3 other important chains that traverse these provinces. First, the Sierra de Toledo, which winds

semicircularly past Daroca, from the Castilian chain, and then runs S.W. nearly parallel to it, to the hills of Santa Cruz, near Merida. Next, the Sierra Morena, or Black Mountains, beginning above Alcarez, near the source of the Guadalquivir, and running, like the two former, nearly S.W., to the narrow pass of Montegil. Lastly, the Sierra Nevada, or Snowy Mountains, that commence between the sources of the Xucar, Gaudiana, and Guadalquivir, and extend into Andalusia. These last are here extremely steep and bare, mostly schistose, and often coated with limestone. They have white quartz in considerable veins; and valuable dark green, and a profusion of other marbles. The N.E. part of the Sierra Morena is of considerable height, and rather resembles table-land than a ridge of hills. The seasons are very different on the two sides of this range. In Andalusia, the vines are all in leaf, and the fruit is set, when, on the N. side, hardly a leaf is to be seen, or a bud to be found in the vineyards. There are here a few remains of former forests, which might have existed when Cervantes made these parts the scene of the exploits of his hero; and a variety of flowering shrubs, particularly the rock-rose, or gum cistus, from which manna is procured, and sumach. In this chain are vertical beds of argillaceous schist, and beds of grained quartz, with entire hills of pudding stone, and some porphyry, and the finest jasper. It is the richest in minerals of any in the kingdom; and has veins of gold and silver. The quicksilver mines at Almaden have been worked for nearly 3,000 years, and furnished the vermilion sent to ancient Rome. They produce annually 2,000,000 lbs. of quicksilver. (*Bowles, Historia Natural de España*, p. 12.; *A Year in Spain, by a young American*, i. 199.) The Castilian mountains are composed of gneiss granite, which often terminates in peaks of great height; schist, limestone, sandstone, breccia, quartz, marble, gypsum, &c. The Guadarama mountains, about 20 m. N.W. Madrid, are bleak, dreary, and barren near their summits, which, in many places, are covered with nearly perpetual snow, indicating that they must be 8,000 or 9,000 ft. above the level of the sea; the limit of perpetual snow in these latitudes being about 9,900 ft. The height of Moncayo, the highest mountain in Castile, is estimated at 9,600 ft. The rock, being partly decomposed, forms a light soil that produces the *juniper europeus, Daphne mezereon, matricaria suavis, genista*, thyme, and a great many other aromatic herbs. The cistus tribes abound at every level on the granite mountains, not covered with snow; pines appear on the summits; the noble oak and the elm near their bases. (*Townsend*, ii. 106.) The scenery is often of the wildest description; the mountains full of deep cuts and ravines, mostly the beds of winter torrents; aged and stunted pines hang upon their edges, and are strewn upon the brown acclivities around; and bare rocks frequently project over the passes, and force them to the very edge of undefended precipices. (*Inglis*, i. 355.) The quality of the soil is various; in some parts a blackish or brown nitrous clay, which is extremely fertile; in others, light and stony, and little productive. New Castile is in great part clayey, and covered with ratchil. Besides the minerals mentioned above, the Castiles produce calamine, ochre, bole armeniac, fine emery, rock crystal, salt, many curious stones and fossil shells, hot and cold saline springs; and in the mountains are many remarkable caverns, that contain beautiful stalactites, in a variety of fantastic forms. Near Molina is the hill of La Platilla, which has a remarkable mine of copper, in masses of white quartz. Though the ore is near the surface, the hill is covered with plants. Townsend had no doubt that there is tin near Daroca. (i. 218, 219. 303.; ii. 106.; *Miñano, Diccionario Geografico*, ii. 467. *et seq.*; *Dillon's Travels through Spain*, p. 110. 112. 115. 196. 202. 205—207. 237. 239.; *Antillon Géographie d'Espagne*, p. 8—14.)

The climate of the Castiles is in general healthy; that of Old Castile is rather cold and moist. In New Castile it is excessively dry; but rendered healthy by the purity of the prevailing winds, and the great elevation of the country; but this altitude sometimes exposes it to strong dry winds, which, not meeting with the thick woods by which they were formerly tempered, are found very unpleasant, and at times, even dangerous, at Madrid, in winter, by producing pulmonary complaints. The height of the *plateau* of Castile reduces the mean temperature to 59° Fahr., while on the coasts of Spain it is from 65° to 75°. The ordinary extremes of temperature, in Madrid, are 90° Fahr. in summer, and 32° in winter; but the thermometer often rises to above 100°, and falls below 14°.

Products. — The principal product of the Castiles is corn, some of which they export to Valencia, Andalusia, and Estremadura. Link says that no country has wines so strong, and yet so sweet, though but little exported, or known abroad. (p. 115.) The most celebrated is that of the Val de Peñas, or, "Valley of Stones," in La Mancha. It is a dry, strong, red wine of the Burgundy species, and is said to be so plentiful and cheap that a bottle may be had in the country for 1½d. (*Year in Spain*, ii. 81.) It is drunk by the better classes all over the Castiles; but in the greatest perfection in its native district, on account of the taint given it by the skins in which it is carried to a distance. (*Inglis*, ii. 20.) The Castiles produce also pulse, and some fruit and oil. Hemp, flax, madder and saffron, are partially cultivated. Garden stuffs are not abundant. On the mountains and in the pastures considerable numbers of black cattle, sheep, and mules are raised; but the increase of the latter has almost annihilated the race of good horses in the Castiles. (*Bourgoing*, ii. 92.) There are fallow deer, wild boars, wolves, hares, peacocks, and all kinds of poultry, and small game in abundance. The larger game has decreased through the breaking up of the land near the royal seats during the absence of Ferdinand VII. Bears are seen in some parts, and lynxes are not uncommon in the high mountains. (*Link*, p. 101. 113.) Not only the fallow land, but the cultivated fields in New Castile, are full of two species of broom (*genista sphærocarpa* and *monosperma*), and the *Daphne gnidium*. They grow to nearly six feet in height, and have a great effect on the prospect. These plants, with the *asphodelus ramosus*, and several other bulbous plants that abound in the pasture fields, give a peculiar character to the landscape of Spain. There is a want of trees, which is partly attributable to the flat and unsheltered nature of the plains, and the dryness of the climate, but chiefly to a prejudice against them, entertained from time immemorial; the peasantry thinking that they are good for nothing, unless it be to attract and shelter vermin. They dislike them so much that they destroy those planted by government along the high roads. It is believed that the want of trees to attract humidity has promoted that drought which, next to bad government, is the curse of the Castiles. From the Douro to the Tagus there is not a stream ankle deep, except when swollen by floods. (*Year in Spain*, i. 136.; *Inglis*, i. 368.) Agriculture is in the most backward state: but with a comparatively thin population, having little interest in the soil, which is monopolised by the clergy and nobility, and there being few great towns, to take of any surplus produce that might be raised,—what else could be expected? Irrigation, which, in such a country is indispensable, is but very little practised, and even manuring is all but neglected: and thus, while three fourths of the country remain fallow, the rest produces only poor crops of grain or potatoes. The great distance between the towns, the badness of the roads, and still more the insecurity of life and property, which prevents the farmer from living insulated on his farm, are additional checks to agriculture. Eight or ten miles frequently intervene without a single habitation, and the country looks, what it really is, poor and miserable in the extreme. Nothing can be more gloomy than the appearance of the towns, with old-fashioned towers projecting out of a dismal group of houses plastered over with clay. At the entrance of each is a gate for receiving the duties on all articles that pass; and in the centre a square, round which are the buildings occupied by the Ayuntamiento, or municipality, the posada, or inn, and the butcher, baker, tailor, cobbler, and village surgeon, or barber. Most of the towns exhibit every symptom of decline. (*Slidell*, i. 136.; *Inglis*, i. 56.) There is nearly a total want of free communication, all but the main road to France being neglected. The road between Madrid and Toledo is mostly carried over ploughed fields, sometimes with hardly a visible track. The diligences are drawn by seven or eight mules, with two drivers. *Galeras*, or wagons on springs, are also used for travelling. (*Inglis*, i. 368. 56.; *Link*, p. 85. 90.) Several canals have been projected and commenced at different periods; but not one of them has been finished.

Manufactures, though formerly considerable, are now at a very low ebb. The cloths of Segovia were once the best in Europe; and there are still some woollen fabrics, among which is the famous vigogna cloth and coarse camlets, serges, and flannels, and some of wrought silks, silk stockings and gloves, galloons, blond lace, coarse linens, hats, caps, soap, saltpetre, gunpowder, the celebrated plate-glass of St. Ildefonso, white earthenware, tanned leather, paper, &c.; but they are all inconsiderable. Castile has little commerce: wool is the staple commodity. The exportation of sheep was always strictly forbidden, till by the treaty of Basle the French were allowed to purchase 5,000 Merino rams and as many ewes; and from this stock, and subsequent exportations from Spain, the quality of the wools of France, England, Germany, and other parts of the world, has been greatly improved.

The following table has been given as a pretty accurate account of the area and population of the two Castiles in 1833. Valladolid and Valencia are sometimes included in the Castiles; but they did not formerly belong to them, and are excluded in this table.

Provinces.	Square Miles.	Inhabit-ants.	Inhab. per Sq. M.
Burgos, inc. Logrono & Santander	7,700	541,182	70
Soria - - -	4,070	115,619	28
Segovia - - -	3,461	134,854	39
Avila - - -	2,566	137,903	54
Madrid - - -	1,313	320,000	244
Guadalajara - -	1,944	159,375	82
Cuença - - -	11,279	334,582	30
Toledo - - -	8,761	282,197	32
La Mancha - -	7,532	277,788	37
Total - -	48,626	2,303,500	47

People. — The Castilians have the characters of probity, sobriety, and moderation; they are serious and contemplative, which makes them, at first, seem gloomy and haughty; but, after a time, they are found not deficient in the agreeable qualities. They have to boast of many illustrious men; at the head of whom stand Cervantes, the inimitable author of Don Quixote, and Lopez de Vega. They are not what would be called hospitable, but they are, notwithstanding, generous. The middle and upper classes are fond of display and ostentation to an extraordinary degree, while inconsiderateness and carelessness are conspicuous in the characters both of the lower and middle classes. Almost every one lives up to his income; even the *employées*, whose tenure of office is so uncertain, seldom lay by anything, and generally die pennyless. But the love of ease and pleasure, and proneness to indolence, is less marked, perhaps, in Castile than in the southern provinces. Their want of industry is the result of the circumstances under which they have been placed, and of their vicious institutions. No man will be industrious, where industry does not bring along with it a corresponding reward; and this it very rarely does in Spain. Had the Castilians the means of improving their condition by labour, their apathy and listlessness would speedily give place to activity and enterprise. In Madrid, and generally in Castile, there is something more of luxury at the table than in the N. provinces, though the Spaniards in general are abstemious, and little addicted to its pleasures. The dining-room is generally the meanest apartment; but the houses of respectable persons are scrupulously clean, particularly the kitchens and bed-rooms. (*Inglis*, i. 142.) Female education begins to improve; besides embroidery and music, a little history and geography is taught in the schools, though not in the convents, where the higher orders are educated. In the time of the constitution of the Cortes, there were two Lancastrian schools for boys and one for girls at Madrid; but those for the boys were suppressed on the king's return. The influence of the regular clergy is diminished much more than that of the monks, who are still, through the austerities they practise, and the alms they distribute at the convent doors, held in considerable veneration, except in Madrid, where less attention is paid to religious ceremonies and processions than in any other city of Spain. The large towns have a sombre aspect, the women being nearly all in black, without a bonnet or a riband. Every one has a mantilla or scarf thrown over the shoulders, which varies in quality with the station of the wearer. Besides a waistcoat and jacket of cloth, covered with abundance of silver buttons, the men usually wear a sheepskin jacket with the woolly side outwards; or, instead of this, an ample brown cloak, the right fold of which is thrown over the left shoulder with a Roman air. The head is covered with a pointed cap of black velvet, the ends of which being drawn down over the ears, leave exposed a high forehead and manly features. They have tight breeches, sustained above the hips by a red sash, and fastened the whole way down the outside of the thigh by bell buttons, woollen stockings, stout shoes, and leather gaiters, curiously embroidered, and fastened at top with a gay-coloured string. (*Slidell*, i. 138.) The love of dancing is universal among them: the ladies usually dance well, but in a style quite different from the French; they laugh and talk while they dance, and are strangers to that burlesque silence and gravity that prevail among the quadrillers of France and England. Music is much cultivated; and it is rare to find a female, even in the middle ranks, who is not a good pianist (*Inglis*, i. 109.). Among their amusements, the bull-fights, to which all classes are passionately addicted, must not be forgotten. These have been prohibited several times; and the cruelties practised at them are, as Mr. Inglis justly observes, sufficient to stamp them with the character of brutality and barbarism. Yet there is nothing of deliberate cruelty in the character of the Spaniards, and they have as little, perhaps, of hard-heartedness as other people. The use of the toledo, or bravo, to revenge private wrongs, is now unknown. Horse-racing was attempted to be introduced by the duke of San Carlos, at Madrid, in 1830, with an English horse against a Spanish one: but the English horse was beaten by foul play, and the duke insulted as he left the ground.

The Castilian is the standard dialect of the Spanish language. During the struggles with the Moors, many dialects of the *Romanzo*, or mixture of the Latin with the Germanic tongues, grew up in Spain, which finally melted into three — the Galician, Castilian, and Catalonian. On the marriage of Isabella, queen of Castile, with Ferdinand of Aragon, the Castilian Romanzo became the language of the court, and has maintained its pre-eminence ever since.

History. — The Castiles anciently formed parts of *Cantabria*, and the country of the *Celtiberi*, *Oretani*, and *Carpetani*; and, like the rest of Spain, were successively over-run by Romans, Goths, and Saracens. After the expulsion of the Saracens, and various vicissitudes, the sovereignty of Castile came by marriage to Sancho III., king of Navarre, whose son Ferdinand was made king of Castile in 1034. He married the sister of Veremond III., king of Leon, but afterwards killed his father-in-law in battle, and was himself crowned king of Leon, in 1037. The crowns of Castile and Leon were afterwards separated and again united several times, till, by the marriage of Isabella, who held both crowns, with Ferdinand, king of Aragon, in 1479, the three kingdoms were, as at present, consolidated into one. Castile, as well as the rest of Spain, has for a lengthened period been exposed to the scourge of a civil war carried on without zeal on either side, but with the most detestable perfidy and cruelty.

CASTILLON, a town of France, dép. Gironde, cap. cant., on the Dordogne, 11 m. E.S.E. Libourn. Pop. 2,960. In 1451, an obstinate engagement was fought under the walls of this town between the English and French, when the latter were victorious. In the commune of Castillon are the remains of the *Château de Montaigne*, to which the illustrious essayist of that name retired in 1572, and where he breathed his last on the 13th of September, 1592. (*Hugo*, art. *Gironde*; *Biog. Universelle*.)

CASTLEBAR, an inl. town of Ireland, prov. Connaught, co. Mayo, at the N. extremity of the lake of the same name, 126 m. W. by N. Dublin. Pop. in 1821, 5,404; in 1831, 6,373; pop of par. in 1834, 12,727; of whom 1,123 were of the estab. church, 10 Prot diss. and 11,594 R. Catholics. It was taken by a French force under General Humbert, which landed at Killala in 1798, but was shortly after evacuated on the approach of the main army of the British under Lord Cornwallis. It is the assize town of the co., and consists of a square, and a long street with some branches. The par. church and a R. Cath. chapel are new, large, and elegant buildings; there are also a meeting-house for Methodists, a large parochial school, a national school, an infirmary, and two dispensaries. There are barracks for artillery and infantry, fit to accommodate 650 men. The constabulary and the revenue police have stations here. By a charter of James I. in 1613, the corporation consists of a portreeve, 15 burgesses, and a commonalty, which returned 2 mem. to the Irish H. of C. till the Union, when it was disfranchised. The assizes for the co. are held here; also general sessions in Jan. and Oct., and petty sessions every Saturday. The court-house is an elegant, well-arranged building. The county prison, lately erected on the radiating principle, has 128 cells, and 33 other sleeping-rooms: average number of prisoners, in 1837, 163. Linen and linen yarn is manufactured to some extent, and sold in the linen-hall; there are also tobacco and soap manufactories, a tannery, and a brewery. Duty was paid, in 1836, on 2,597 bushels of malt. There is an extensive trade in grain, and other agricultural produce. Markets on Saturdays; fairs, 11th of May, 9th of July, 16th of Sept., and 18th of November. A branch of the National Bank was opened here in 1836. Post-office revenue, in 1831, 908*l.*; in 1836, 857*l.* A mail-coach plies between the town and Bellina; and that from Ballinasloe to Westport passes through it, as does a car from Westport to Tuam. The trade of the town is not sufficient to afford permanent employment to the working classes, who depend chiefly on the temporary work procured from the surrounding farmers, and are therefore often subject to the pressure of want. Turf fuel is abundant. (*Stat. Surv.*; *Railway Rep.*)

CASTLECOMER, an inland town of Ireland, prov. Leinster, co. Kilkenny, on the Deen, an affluent of the Nore, 52 m. S.E. Dublin. Pop., in 1821, 905; in 1831, 2,436. Pop. of par., in 1834, 13.435, of whom 1,439 were of the estab. church, 9 Prot. diss., and 11,987 R. Cath. The town, which suffered much in an unsuccessful attack by the insurgents in 1798, consists of a main street planted on each side, and of some others branching from it, and is remarkable for neatness and good order. The par. church on a neighbouring hill, a large R. Cath. chapel, a convent, a Methodist meeting-house, a court-house, a dispensary, and a barrack, are the principal buildings. Little trade is carried on, the place deriving its support chiefly from the neighbouring collieries, which furnish a copious supply of fuel to the adjoining counties. The quantities raised in 1836, were, 42,554 tons of coal, valued at from 10*s.* to 15*s.* per ton; and 53,354 tons of

culm, at from 4*s.* to 5*s.* per ton: the mineral is of the carbonaceous or stone coal species, which burns without flame, being the slaty, glantz coal of Werner. Fairs are held on March 27., May 3., June 21., Aug. 10., Sept. 14., Oct. 28., and Dec. 14. General sessions in June, and petty sessions every Friday; also a manorial court for small debts. A party of the constabulary is stationed here. Post-office revenue, in 1830, 196*l.*; in 1836, 306*l.* Two coaches from Dublin to Kilkenny pass through the town. A mail-car from it to Carlow plies every day, conveying at an average 2 passengers; and a car to Kilkenny 6 days in the week, with an average of 5 passengers each trip. (*Stat. Surv.*; *Railroad Rep.*)

CASTLEDOUGLAS (formerly *Carlinwark*, from the name of a lake in its immediate vicinity), an inl. burgh or barony of Scotland, co. or stewartry of Kirkcudbright, par. Kelton, on the high road from Dumfries to Portpatrick, 18 m. from the former, and 68 from the latter. Pop. 1,500. It is neat and well built, and consists of a main street along the road, with several lesser streets running at right angles or parallel to it. It is quite a modern town, and is wholly indebted for its existence and prosperity to the advancing wealth of the thriving agricultural district by which it is surrounded. Its consequence has been of late years materially increased by the transfer to it of the weekly corn and cattle markets, the most important in the co., originally held at Rhone House, a small village, distant 1½ m. The famous horse-fair of Kelton Hill is still held at Rhone House; but it has lost much of its original importance, as horses from Ireland, which formed its staple, are now generally sent direct to the fairs in England by steam, instead of taking a circuitous land route by Kelton Hill. It has an extensive retail trade, but no manufactures, unless we include a brewery under that designation. The town had till recently a native bank: it has at present two branch banks.

CASTLETON, a par. of England, co. Derby, hund. High Peak. Area 10,100 acres. Pop. (1831) 1,329. The village is 143 m. N. by W. London. The vale of Castleton is in the heart of the Peak district, about 1,000 ft. below the level of the surrounding hill ranges, and is 6 m. in length, and from 1 to 2 m. in width, with several smaller dales opening to it on the N. and S. It is a fertile tract watered by several rivulets, and approached from the Chapel-le-Frith side, through a long and deep chasm, crossing the mountain range, and called the "Winnets" or windgates, from the strong gusts and currents of air that usually prevail: the road winds down a considerable declivity, between precipices rising upwards of 1,000 ft. on each side, and opens, by a sudden turn, on the vale, in which there are 3 villages, Hope, Brough (both in the parish of Hope), and Castleton. The latter is at the base of a steep rock, whose summit is crowned by the ruins of the Castle of the Peak, considered by King (*Munimenta Antiqua*) a genuine specimen of the Saxon period; though the traditions of the neighbourhood ascribe it to Wm. Peverell, a natural son of the Norman Conqueror. The keep is still nearly entire; and some portions of the outer walls, in many places 20 ft. high and 9 ft. thick. The church is small, but considered a very interesting relic of the early pointed style: here are also a Wesleyan chapel, and an endowed charity school, in which 23 scholars are educated. The inhabs. are chiefly employed in the mines of the surrounding district, which produce lead, calamine, and the coloured fluor spar called "blue John," much in request for vases and other ornaments. The whole of the calcareous strata in the vicinity are remarkably deranged, and are also characterised by numerous cavernous fissures and the frequent disappearance of streams (through what are termed swallow-holes), which, after subterranean courses of various lengths, again emerge to the light. The outer chamber of the Great Peak, or Devil's Cavern, has a natural arch of about 120 ft. span; several small cottages have been built in it: the rest of the chambers are only to be explored by torches; they extend about 2,300 ft. from the entrance to the innermost end, where, though there are probably others beyond, the rocks close down so near a subterranean stream as to prevent further access: this stream has to be crossed two or three times in proceeding, and at one part a small boat is kept for the purpose. The average depth from the floors to the upper surface of the mountain is about 650 ft. The strata abound in marine fossil remains. The Eldon hole, 3 m. W. of Castleton, is of a similar character, and also that approached by the level of the Sheedwell mine, near the Winnets. This mine has been given up; but the Odin mine, in the vicinity, which was worked in the Saxon period, is still productive. Mam Torr, or the Shivering Mountain, rises 1,300 ft. above the vale, and is composed of alternating strata of shale and micaceous grit. There is an ancient encampment on its summit, and British and other ancient remains are frequent in the district, which is one of the most remarkable in the kingdom for its picturesque character, and the abundance of natural objects and phenomena interesting to science. On the attainder of the grandson of William Peverell of the Peak (for poisoning the earl of Chester), the castle was granted by Hen. II. to his son, afterwards King John; subsequently Edw. III. gave it to John of Gaunt; since which it has formed part of the duchy of Lancaster, and is at present leased by the duke of Devonshire. (*Beauties of England and Wales*; *Lyson's Mag. Brit.*; *Rhodes's Peak Scenery*; *Lond. Geol. Trans.* vol. vi.; *Anthracologia*; *Faraday's Account of Derbyshire Denudation.*)

CASTRES, a town of France, dép. Tarn, cap. arrond., in an agreeable and fertile valley, on the Agout, 23 m. S.S.E. Alby; lat. 43° 37′ 3″ N., long. 2° 15′ E. Pop., ex com., 13,230. This, though not the capital, is the principal town of the dep., and is thriving and industrious. It is divided into two parts by the river, over which it has two bridges. It is but indifferently built, and the streets are narrow and winding. The principal building is the old episcopal palace, now the *sous préfecture*; it has also barracks, workhouses, an exchange, a theatre, and a fine promenade. It is the seat of a court of primary jurisdiction; and has a model school, a diocesan seminary, with 113 pupils, a Protestant consistorial church, a class of linear design, a public library with 6,500 volumes, &c. There are here extensive manufactures of cloth and woollen stuffs, with establishments for the spinning of cotton, linen fabrics, paper fabrics, dye-works, bleachfields, tanneries, &c. It has also copper forges and foundries.

Castres espoused, in the 16th century, the Protestant party, and Henry IV. resided in it for a lengthened period. Its ramparts were demolished by Louis XIII., and the bishopric was suppressed at the Revolution. It is the birthplace of Dacier the critic, of Rapin the historian of England, and of the Abbé Sabatier. (*Hugo*, art. *Tarn*, *Dict. Géog.*)

CASTRO, a sea-port town of Naples, prov. Terra d'Otranto, on the Adriatic, 28 m. S.S.E. Lecce; lat. 40° 0′ 26″ N., long. 18° 26′ 26″ E. Pop. 8,000. It has an old castle and a cathedral, and is the seat of a bishopric. It was sacked by the Turks in the 16th century; and since then has suffered much from the inroads of Barbary cruizers. Its harbour admits only small vessels. The environs are productive of corn, wine, cotton, and fruits.

CASTRO DEL RIO EL LEAL (an. *Castra Julia*), a town of Spain, prov. Cordova, on the Guadajos, 16 m. S.E. Cordova. Pop. 9,700. It has 2 churches, 2 hospitals, a foundling hospital, 2 seminaries for the education of boys and girls, and a castle; with manufactures of wool and hemp.

CASTROGIOVANNI (an. *Enna*) a town of Sicily, prov. Catania, cap. cant., almost in the centre of the island, 65 m. E.S.E. Palermo, in a plain about 5 m. in circ., being the summit of a lofty and almost inaccessible mountain, more than 4,000 ft. above the level of the sea. Pop. 12,743. This city, so celebrated in antiquity as the birth-place of Ceres, and the site of her most sacred temple, is now one of the poorest and most decayed towns in the island. It still, however, commands an extensive and delightful prospect, is well supplied with excellent water, and has a clear salubrious atmosphere. The surrounding country, which is very fertile, was, in antiquity, ornamented with innumerable groves, temples, &c., appropriated to the worship of Ceres and Proserpine. Livy has correctly described the city as built in *excelso loco ac prærupto*; and Cicero has given an eloquent description of the town, temple, and statue of Ceres, carried off by the wholesale plunderer, Verres: "*Simulacrum Cereris Ennæ, ex suâ sede ac domo, sustulit, quod erat tale, ut homines, quum viderent, aut ipsam videre se Cererem, aut effigiem Cereris, non humanâ manu factam, sed cælo delapsam, arbitrarentur.*" But all traces of the temple, as well as of the worship of the goddess, have disappeared. The castle in the modern town, which is going fast to ruin, is, according to Sir R. C. Hoare, evidently of Saracen or Norman origin.

About 5 m. from the town, at the foot of the mountain, is the famous lake, on the borders of which

> "Proserpine gathering flowers,
> Herself a fairer flow'r, by gloomy Dis
> Was gather'd.'

The orators and poets of antiquity have exhausted their powers in describing the beauty and sublimity of this famous lake. (See, among others, *Cicero in Verrem*, iv. § 48.; *Ovid, Met.* lib. v. lin. 385.) But it no longer wears the livery of perpetual spring; its groves have been cut down, and its temples levelled with the dust! All is desolate and deserted: —

> "Pro molli viola, pro purpureo narcisso,
> Carduus, et spinis surgit paliurus acutis."

Its naked borders are fetid and loathsome, and in the summer months exhale a pestilential air.

> "Tantum ævi longinqua valet mutare vetustas."

Enna was the head quarters of the revolted slaves under Eunus during the first servile war in Sicily. Here

they defied for several years the power of Rome, and defeated three Prætorian armies. At last they were entirely defeated under the walls of Messina, by the consul Piso; and Enna was subsequently taken by the consul Rupilius, and the slaves put to the sword or crucified. (Besides the authorities already referred to, see *Sir R. C. Hoare's Classical Tour*, ii. 247. &c.; *Russell's Sicily*, p. 114.; and the *Ancient Universal History*, xii. 416.)

CATALONIA (Span. *Cataluña*), a prov. of Spain, occupying the N.E. portion of the k., between lat. 40° 30′ and 42° 51′ N., and long. 0° 15′ and 3° 21′ E. It is of a triangular shape, and has the E. Pyrenees, which separate it from France, on the N.; the Mediterranean on the E.; and Aragon, and a small part of Valencia, on the W. Greatest length and breadth, 190 and 130 m.; area about 12,150 sq. m., including Andorre. Offsets from the Pyrenees spread themselves through the whole prov. from N. to S., forming valleys of larger or smaller extent, like those of Ampuridan, Urgel, Aran, Lerida, &c. Towards the middle of the prov., 29 m. N.W. from Barcelona, is the celebrated Monserrat, 4,500 ft. in height; and farther S., on the Ebro, is the Sierra de la Llena. The Pyrenees are not so rugged on this as on the French side, and descend gradually towards the Mediterranean. They are mostly granitic. The other mountains of Catalonia are in many respects similar. The mountain of Cardona, 17 m. N.W. Monserrat, almost in the centre of the prov., is a solid mass of pure rock-salt, without the least crevice or fissure, between 400 and 500 ft. high, and 3 m. in circ. This prodigious mass of salt is unparalleled in Europe, and perhaps in the world. In almost any other country it would be turned to great account, and be made the means of an extensive trade; but here, owing to the badness of the roads and the difficulty of access, this inexhaustible source of wealth is but little known, and comparatively neglected. (*Dillon's Travels in Spain*, p. 390.) Near Olot, in this prov., about 55 m. N. Barcelona, is a remarkable district of extinct volcanos, that has been visited and described by Mr. Lyell. It contains about 14 distinct cones, with craters. The greatest number of perfect cones are close to Olot; and the level plain on which the town stands has clearly, according to Mr. Lyell, been produced by the flowing down of lava from the adjoining hills. Most of these volcanos are as entire as those near Naples, or on the flanks of Etna. Some of them contain caverns called *bufadors*, from which a current of cold air blows during summer. There is no record of any eruption here; but the town of Olot was nearly destroyed by an earthquake in 1421. (*Principles of Geology*, ii. 38., 3d ed.) The mountains in the S. of the prov., near the coast, are limestone. On the E. of Cervera gypsum only is met with; but more to the W. it gives place to chalk. The coast is mostly bold and rugged. In the N. is Cape Creus, the most E. point of Spain, being the extremity of a rocky peninsula stretching out into the sea, and separating the Gulph of Lyons from that of Rosas, lat. 42° 19′ 53″ N., long. 3° 20′ 10″ E. The prov. is well watered. One of the affluents of the Ebro, the Naguera, forms for nearly 60 m. the line of demarcation between it and Aragon. The Ebro itself enters the prov. at Mequinenza, and flowing through its most S. portion by Tortosa and Amporta, falls into the Mediterranean 15 m. E. from the latter. The Segre, with its affluents, unites with the Ebro at Mequinenza. The principal rivers, unconnected with the Ebro, are the Llobregat and Ter, the one flowing S.E., and the other E., to the Mediterranean.

The Pyrenees furnish iron, copper, zinc, and manganese. There are lead mines in various districts. Coal is abundant, but much difficulty has always been encountered in working it, from the want of capital and of improved means of communication. Townsend says, that copper and silver abound in the valley of Aran, and that coal, silver, and gold, have all been found in the vicinity of Lerida. There is abundance of alum in the valley of Aran; nitre is produced spontaneously in the plains of Urgel, and cathartic salts at Cervera. The mountain of rock-salt at Cardona has been already noticed. There are marbles, jasper, and other stones useful in architecture and sculpture; alabaster, amethysts, topazes, and coloured rock crystal; quartz, barytic spa, fluor spa, limestone, chalk, and gypsum, in all varieties; amianthus, talc, serpentine, chalcedony, &c. There are many mineral waters and hot springs. (*Miñano; Townsend*, iii. 345.; *Bourgoing*, iii. 344.)

The air is dry and usually bright and clear in the interior; but on the coast it is variable and moist; and in summer pestilential diseases not unfrequently prevail. The mountains are every where covered with snow during the winter, and in the Pyrenees frequently even in June.

Soil and Produce. — About half the surface is susceptible of cultivation, the rest consisting of rocks, naked barren hills, and woodland. The mountain land is stony, and full of fragments of granite; but the valleys are mostly fertile. All sorts of grain are grown; viz. wheat, rye, maize, barley, oats, and millet. The plains of Ampuridan are suitable for rice; but its cultivation is prohibited, as prejudicial to health. (*Miñano.*) Pulse is produced in all parts. Hemp, flax, saffron, madder, woad, anise, liquorice, and barilla, are also produced. The E. districts yield good strong wines, which are frequently employed to give body to the wines of other provs., and are sometimes exported for that purpose to Cette, and thence to Bordeaux. Oranges, lemons, and citrons, are found on the coast; figs and almonds are grown in the plain of Tarragona; and apples, pears, cherries, quinces, medlars, apricots, peaches, walnuts, chestnuts, and filberts, in all the plains. Oil, though not of the best quality, is produced in all the warmer parts of the coast district. Silk, honey, and wax, are also produced in considerable quantities. Timber is plentiful, especially the roble-oak, beech, fir, elm, evergreen poplar, cork-tree, &c. Nuts and cork constitute important articles of export from the prov., being in this respect second only to linen and cotton goods and brandy. Bears and wolves are sometimes seen in the Pyrenees. Laborde estimated the produce of wool at 30,000 quintals.

Catalonia is the best cultivated, and the people the most industrious, of any of the Spanish provs. This is owing to a variety of causes, but principally, perhaps, to its exemption from the *alcavala* and other oppressive imposts (*see* SPAIN), and to the mode in which lands are occupied. Generally, throughout Spain the land is divided into vast estates, held under a system of strict entail, and administered by stewards on account of the proprietors. The disastrous influence of this system is apparent in the low state of agriculture, and the wretchedness of the peasantry, in most parts of the monarchy. But in Catalonia its influence is materially modified by the landlords having power, by what is called the *emphyteutic* contract, to lease a portion of their estates. This they may do for a term of years, either absolute or conditional, for lives or in perpetuity; always reserving a quit-rent, as in the English copyhold, with a relief on every succession, a fine on the alienation of the land, and other seigniorial rights dependent on the custom of the district. The reserved rent is commonly paid in money; but the agreement is often for wine, oil, corn, or poultry. If the tenant quits before the end of his term (which he may do), he loses all claim for improvements, for which he must otherwise be paid. (*Townsend*, iii. 330.) Persons occupying land under this tenure have an obvious interest in its profitable cultivation; and wherever it prevails the country is in a comparatively flourishing state.

Irrigation is the leading feature in the husbandry of the prov., and is carried to a great extent by means of canals and trenches cut from every available source; the maintenance of which, together with the distribution of the water, is committed to the care of a particular junta. Great numbers of farms are also watered by means of the *noria*, a machine introduced by the Saracens for raising water from wells. The soil is in parts so very light that it is ploughed with a couple of oxen, and sometimes with one horse, or even mule; but with the help of the water it is rendered fertile, and produces on the same spot corn, wine, oranges, and olives. According to Mr. Townsend, the common produce of wheat is 10, and in rainy seasons, 15 for 1. (*Year in Spain, by an American*, i 19. 33. 44. 60.; *Townsend*, i. 92. 103. 179. 196., iii. 304. 316. 328.; *Miñano.*)

The silk and woollen manufactures of Catalonia were formerly carried on to a great extent, and are still of considerable value and importance. In the latter part of last century the cotton manufacture was introduced; but it has not succeeded; and Miñano says, that for some years past its progress has been *de mal en peor* — from bad to worse. Exclusive of silks, cottons, and woollens, a good deal of linen is made, with paper, hats, cordage, &c. All kinds of weaving are carried on upon the slopes of the Pyrenees, where wages are lowest; the webs being brought to Barcelona to be bleached and printed. Leather is largely manufactured, and shoemaking used to be one of the principal employments. In 1786, the export of shoes from Barcelona only was estimated at 700,000 pairs, mostly for the colonies. Since the emancipation of the latter, this trade has greatly declined. Miñano reckons the export of shoes in 1826 at 200,000 pairs; and according to Inglis, the shoe-making business, which formerly employed 2,000 hands in Barcelona, had entirely ceased in that city. Distillation is also extensively carried on; the exports of brandy amounting, according to Miñano, to 35,000 pipes a year. Cannon and small arms, soap, glass, sheet-iron, and copper utensils, are also produced. Women, in the agricultural districts, are employed in the making of blond and other laces. The shipbuilding, formerly carried on at Barcelona, Mataro, and other places on the coast, where timber was cheap, has nearly ceased. Tarragona is the chief place in the prov. for the export of nuts, al-

monds, wines, brandy, cork wood, and cork bark. (*See* TARRAGONA.)

The pop. of Catalonia was estimated in 1788 at 814,412. According to the *estimate* of Miñano, it amounted to 1,100,000 in 1826 (iii. 23.); and later estimates give nearly the same result. The principal towns are Barcelona, Tarragona, Gerona, Lerida, Reus, Manresa, Tortosa, &c.

The language of the Catalans is a dialect of the Romance or Provençal, at one time the common language in the S. of France, and in some other parts. But it is now a good deal intermixed with Castilian and other words. Letters were successfully cultivated at the court of Barcelona; and some of the counts attained to distinction as troubadours.

Catalonia had for a lengthened period its states, composed of the clergy, nobility, and commons, who shared the legislative power with the sovereign. It had, also, particular and very extensive privileges, and a peculiar form of jurisdiction in the hands of magistrates, called *viguieros*, whose districts were named *viguieries*. The highest court of appeal was the royal council established in Catalonia. Their contributions to the king were not considered as imposts, but as voluntary gifts; the Catalans were to be tried by the laws of Catalonia only, and by native judges; and their estates were never to be confiscated, unless for treason. But these privileges were suppressed by Philip V. when he subdued the province; and the laws of Catalonia were then assimilated to those of Castile. They have always, as already seen, been exempted from the *alcavala*, *cientos*, and *millones*, in lieu of which they paid 10 per cent. on all rents, whether belonging to individuals or communities, and on the supposed gains of merchants and mechanics.

The Catalans are hardy, active, and industrious; and used to be distinguished by their attachment to their privileges, and their opposition to arbitrary power. But in this respect they seem to have undergone a material change; being now distinguished by their veneration for the apostolical party in church and state — a consequence probably of their ignorance and subservience to the priesthood. There seems, indeed, to be little or no provision made for education. Philip V. suppressed the universities of Barcelona, Lerida, Gerona, &c.; and established in their stead only that of Cervera. There are academies in the principal towns; but the great bulk of the people appear to be without the means of instruction. Their improved condition is not therefore in any degree owing to their superior intelligence, but to the comparatively favourable circumstances under which they have, in other respects, been placed.

The difference between the cottages of Catalonia and those of the other provinces of Spain is very visible. The houses and cottages here have an air of convenience and comfort; there is glass in the windows, and the insides display the articles of furniture in common use. No beggars, and few ragged people, are seen; industry is every where active; stones are removed from the ground and collected in heaps; fences are more general and more neatly constructed; nobody is seen basking in the sun; even the women and girls who attend the cattle do not sit idle, wrapped up in their plaids, but every one has her spindle in her hand. (*Inglis*, ii. 304.)

Catalonia anciently made a part of the *Hispania Taraconensis* of the Romans. The Goths were its next masters, who spread themselves from it over the rest of Spain. On the fall of the Gothic empire, the Catalans submitted to the Moors, but the dominion of the latter was not of long duration. In the 8th and 9th centuries, Catalonia, with the adjoining country of Roussillon, became an independent state, subject to the counts or earls of Barcelona. Under their government, liberal institutions were established in the prov.; it was distinguished by its naval power, commerce, and proficiency in the arts; and its fleets and armies frequently interfered with decisive effect in the contests of the time. In 1137, Catalonia was united with Aragon, by the marriage of one of its counts with the heiress of the latter; but the Catalonians retained their separate legislature, and distinct privileges. In 1640 the prov. revolted against Philip IV., and was not recovered till 1659. In the war of the succession, the Catalonians were the most zealous adherents of the Archduke Charles; and even after England and Austria had withdrawn from the contest, they refused to submit, and defended Barcelona with an obstinacy of which there are but few examples. On its capture, their ancient cortes, and most of their peculiar privileges, were suppressed.

CATANIA, an ancient and celebrated city and seaport of Sicily, cap. prov. same name, on the E. coast of the island, at the foot of Mount Ætna, at the extremity of a vast plain, 31 m. N.N.W. Syracuse; lat. 37° 28′ 20″ N., long. 15° 5′ 15″ E. Pop. (1831) 52,433; viz. 25,578 males, and 26,855 females. Though it has suffered much from earthquakes, by one of which, in 1693, it was all but totally destroyed, it has always risen from its ruins finer and more magnificent than ever. Captain Smyth says, "It has a noble appearance from the sea; and what is rare in an Italian town, the effect is not diminished on landing; for the streets are regular, spacious, and handsome; and the numerous churches, convents, palaces, and public establishments, principally constructed of lava, faced with magnesian limestone from Malta and Syracuse, and enriched with marbles from the ruins, are magnificent." Mr. Hughes says that its exterior aspect reminded him of Oxford; but "that the interior may defy competition. It is nobly situated," Mr. H. continues, "on the roots of Ætna, its despoiler and its benefactor. Overwhelmed, as it has often been, by torrents of liquid fire, it has risen, like the phœnix, more splendid from its ashes. The very substance which once ravaged its plains has, by its own decomposition, covered them with soil fertile as the fabled garden of the Hesperides; and on all sides the material of destruction is turned to the purposes of ornament and utility. The streets are paved with lava; houses, palaces, and churches, are built of lava; of lava they form ornamental chimney-pieces, tables, and a variety of toys; whilst a natural mole of lava defends the shipping from the fury of the tempest. Ask a Catanian what is the subject of almost every thing you behold in art or nature, and his reply will be, with a most significant elevation of his hands and eyebrows, *Lava, signore; tutta tutta lava*. The plan of the city is superb, and no one is permitted to deviate from it." The cathedral, founded in 1094, was rebuilt on a simple and grand scale, after the earthquake of 1693; the senate-house, *monte di pietà*, theatre, and most of the municipal establishments, are also fine, appropriate buildings. Near the cathedral is a fine square, ornamented with an antique statue of an elephant bearing on its back an obelisk. It has 49 churches, of which that of St. Maria dell' Ajuto, and several others, are magnificent structures; it has also 19 convents for men, and 11 for women. The Benedictine convent of San Nicolò d'Arena has long been justly celebrated for its vast extent, superb church, excellent organ, large museum, ancient mosaics, and great riches. Among the charitable establishments, exclusive of the *monte di pietà*, are several hospitals, a workhouse, a foundling hospital, a lying-in hospital, a Magdalen asylum, &c. The university, founded in 1445, by Alphonso of Aragon, is an extensive foundation with an annual revenue of above 2,000*l*. It has able professors, and is well attended: its library and museums are open on holydays to the public. The heirs of Prince Biscari and others have also fine museums. Catania is the seat of a bishopric, of a court of appeal, a criminal court, a civil court, and of the provincial authorities; and enjoys extensive privileges. The humanity, hospitality, and good-breeding of the inhabitants, have been eulogised by all travellers. On many occasions they have shown a singular unanimity in public affairs; they had the courage to practise inoculation so early as 1742, and to introduce the potato while an ignorant prejudice existed against it among their neighbours. The principal manufacture is that of silk, which is largely carried on. The working of the yellow amber found on the S. coast of the island affords employment to some thousands of the population. The snow of Mount Ætna is also a great source of wealth. The harbour is not equal to the importance of the city; but it is generally full of small craft that resort thither for corn, macaroni, potatoes, olives, figs, silk, wine, almonds, cheese, oil, soda, manna, cantharides, amber, snow, and lava. The environs are fruitful, and well cultivated.

Catania is very ancient. It is believed to have been founded by the Chalcidians, and had Charondas for its early legislator. Under the Romans, it was the residence of a prætor, and was adorned with many noble buildings. Owing, however, to the repeated occurrence of earthquakes, and the irruption of lava from Ætna, its ancient monuments have been mostly destroyed; but the remains of its amphitheatre, the circumference of which exceeds even that of the colosseum, as well as of its theatre, odeum, hippodrome, temples, aqueducts, baths, &c., attest its former extent and magnificence. (*Giornale Statistica*, No. i. p. 83.; *Swinburne*, ii. 356. 4to. ed.; *Smyth*, p. 135.; *Hughes's Greece and Albania*, i. 110. 8vo. ed.)

CATANZARO, a town of Naples, prov. Calabria Ultra II., of which it is the cap., in a healthy and agreeable situation, on a mountain near the Gulph of Squillace, 29 m. S.S.E. Cosenza. Pop. 12,000. It suffered very severely from the dreadful earthquake of 1783, which overthrew several of its principal buildings; it still, however, has a cathedral, several churches and convents, a seminary, a royal academy of sciences, a lyceum, a foundling hospital, a *mont de piété*, and two hospitals; and is defended by a castle. It is the seat of a bishopric, of one of the four great civil courts of the kingdom, of a criminal court, and of an ordinary civil tribunal. There are considerable manufactures of silk, velvet, cloth, &c.; and a good deal of trade is carried on in silk, corn, cattle, wine, and oil. The inhabitants are affable and industrious, and the women are reckoned the handsomest in the three Calabrias. (*Rampoldi*.)

CATEAU-CAMBRESIS, a town of France, dép. du Nord, cap. cant., on the Salle, 15 m. E.S.E. Cambray. Pop. 6,015. It was formerly fortified; and has manufactures of starch, soap, and tobacco, with tanneries, and some trade in lace, lawns, &c. It is celebrated in diplomatic history for the treaty concluded in it, in 1559, between France and Spain.

CATHERINA (SANTA), or NOSSA SENHORA DO DESTERRO, a marit. city of Brazil, cap. prov. St. Catherine, on the W. side of the island of same name, on the narrow strait separating it from the mainland, 520 m. S.W. Rio Janeiro; lat. 27° 36′ S., long. 48° 40′ W. Pop. probably from 5,000 to 6,000. From the landing place in the harbour, which is at the bottom of a verdant slope of about 500 yards, "the town has a most beautiful appearance, and the perspective is nobly crowned by its fine cathedral. The green is interspersed with orange trees, and forms an agreeable parade. The houses are well built, have two or three stories with boarded floors, and are provided with neat gardens well stocked with excellent vegetables and flowers." Besides the church of Nossa Senhora do Desterro, which gives name to the place, there were some years ago two chapels, a convent, an hospicio, and good barracks. Notwithstanding its excellent port and convenient situation, the trade of the town is not very considerable; but it is frequently visited by ships passing to and from the Pacific, and by those in the S. Sea whale-fishery. Sperm-whales used to be frequent on this coast, and even in the bay of St. Catherine, but they are now comparatively rare. There are some manufactures of coarse cotton and linen stuffs, and earthenware. When it was visited by Mr. Mawe, it was principally occupied by merchants, ship-captains, and others retired from business, attracted thither by the beauty of the situation, the salubrity of the climate, and the cheapness of most necessary articles. He speaks very favourably of the courtesy of the inhab. The ladies, he says, "are handsome and lively; their chief employment is making lace, in which they display great ingenuity and taste." (*Mawe's Travels*, p. 58.)

The island of St. Catherine may be entirely circumnavigated, and many good anchorages are found between its W. coast and the continent; but the N. part of the channel is the only one suitable for large vessels. Here they anchor in 5 fathoms on a mud bottom which holds well, and are protected from all winds, except from the N.E., which are rarely dangerous. Opposite to the town the channel narrows, and the depth of water decreases to 2 fathoms. The roadstead is defended by 2 forts. This is one of the very best places at which to refit: excellent water may be had in any quantity for nothing, and provisions of all kinds are cheap and abundant. (*Blount's American Pilot*, p. 537.)

The island of St. Catherine is about 35 m. in length, N. to S., and from 4 to 8 m. in width. Its shores rise abruptly from the sea to such a height, that in fair weather it is visible 45 m. off. Its most N. extremity, Point Rupa, is in lat. 27° 22′ 31″ N., long. 48° 32′ 7″ W. The surface of the island is singularly varied, presenting granite mountains, fertile plains, swamps fit for the growth of rice, lakes stocked with fish, and several small streams. Mandioc and flax are the chief articles of culture; but wheat, maize, pulse, onions, rice, sugar, cotton, indigo, and an abundance of fruit are also grown. The climate is rather humid, but temperate and salubrious.

CATMANDOO, or KHATMANDU, an inland city of N. Hindostan, cap. of the Nepaul dom., built in a mountainous region, 154 m. N.N.W. Patna, and 4,784 ft. above the level of the plains of Bengal. Pop. 20,000.? It extends for about 1 m. along the bank of a river; and contains many wooden and brick temples, with the palace of the Nepaul rajah. The houses are mostly mean brick or tile buildings, often 3 or 4 stories high; streets narrow and dirty. (*Hamilton's E. I. Gaz.*)

CATRINE, a manufacturing village of Scotland, co. Ayr, parish Sorn, on the N. bank of the Ayr, 32 m. S. Glasgow. Pop., in 1837, 2,702. Cotton-works were erected here in 1786, and a bleaching-work in 1824. Both works are, generally speaking, carried on by means of water-power, but in case of a deficient supply of water, steam-engines have been constructed to make good the deficiency. The weight of yarn spun in 1836 was 351,973 lbs.; and the quantity of goods produced, 172,175 pieces of 25 yards each, or an aggregate of 4,304,393 yards, equal to 2,445 m. The bleaching establishment, in addition to what is manufactured at Catrine, bleaches all the cotton produced at the other mills belonging to the same company, the quantity varying from 15,000 to 25,000 yards per day. Every part of the process is carried on within doors, and without interruption, at all seasons of the year. To have bleached the same quantity in the old way, or by exposure to the sun's rays out of doors, would have required from 150 to 200 acres of land! 913 hands are employed in the works, of whom 315 are males, and 598 females, besides about 30 masons and other labourers. The sum paid as wages by the company in 1836 was 27,568*l.* 18*s.*, being, at an average, a little less than 30*l.* a year to each individual. There are 7 schools, 6 of which are supported by the school fees (which average 3*d.* per week), and one maintained by a fixed salary paid by the company; 4 libraries, one of which is attached to a Sunday-school; and two places of worship, one connected with the established church, the other belonging to a sect of Presbyterian dissenters. (*New Statist. Account of Scotland*, part xvi.)

CATTARO, a town of the Austrian states, cap. circ. of same name, at the S.E. extremity of the Gulph or *Bocca di Cattaro*, 210 m. S.E. Zara; lat. 42° 25′ 26″ N., long. 18° 46′ 16″ E. Pop. about 4000. It is walled, and is farther defended by a fort built on an adjoining eminence. Streets narrow, dark, and gloomy. Notwithstanding its small size, it has a cathedral, a collegiate church, 17 other R. Cath. churches and chapels, a Greek church, 6 convents, and an hospital. It is the seat of the administration of the circle and of a bishop, and has a government high-school. The harbour is one of the best in the Adriatic. At its mouth there are two rocks dividing the entrance into three separate channels, two of which admit the largest ships. Internally the gulph is spacious and secure, though little frequented by shipping. The trade of Cattaro is chiefly with the Turkish distr. of Montonegro. The vicinity is very picturesque; but from being surrounded on three sides by mountains, Cattaro has this disadvantage, — that the sun rises an hour later and is lost an hour earlier than in most other places. The district of Cattaro was the seat of a Roman colony; but the town itself only dates from the 6th century. It has suffered much from earthquakes, especially in 1563 and 1667. It was long the cap. of a small republic, which, falling into debt, placed itself under the government of Venice on the single condition of having its debts paid. Previously to the treaty of Tilsit this town was for some time in the occupation of the Russians. (*Oesterr. Nat. Encycl.; Malte-Brun; Dict. Géographique, &c.*)

CATTEGAT, or KATTEGAT, a portion of the N. Sea, or of the Baltic, between Jutland and Sweden. (*See* BALTIC.)

CAUBUL, or CABUL (an. *Aria, Arachosia*, &c.), an extensive region of Centr. Asia, formerly the centre of a powerful kingdom reaching from Meshed to Cashmere, and from the Oxus to the ocean, but now comprising only the country between lat. 28° and 37° N., and long. 59° 30′ and 72° E.; and divided into four chiefships, independent of each other, viz. those of its principal cities, Caubul, Peshawer, Candahar, and Herat. Caubul, in its extended sense, includes the greater portion of Affghanistan, Seistan (an. *Drangiana*), and Sewestan, with parts of Khorassan, Caufiristan (the Kohistan), and Lahore: length and breadth each about 600 m.

The pop. was estimated by Mr. Elphinstone, in 1809, at about 14 millions, or —

Affghans	4,300,000	Persians and Tadjiks	1,500,000
Beloochees	1,000,000	Hindoos, Juts, &c.	5,700,000
Tartars	1,200,000	Miscellaneous tribes	300,000

But this estimate is believed to have been too high when it was framed; and since that period civil wars and foreign conquests have deprived Caubul of the provs. of Beloochistan, Sinde, Moultan, Damaun, Cashmere, Balkh, &c., and have diminished the pop. to little more than the Affghan portion. At present, besides the cities already named, the chief towns are, Ghiznee, Dooshak, and Furrah.

The N. and E. portion of Caubul is a lofty table-land, its mountains belonging to the Hindoo Koosh (or Indian Caucasus), and two of its offsets, viz. the Solimaun and Paropamisan ranges. The Koosh mountain, about long. 69° E., gives its name to the range which extends from it both W. and E., and beyond the Indus is continuous with the Himalaya, running generally S.W. to N.E., and in the Kohistan forming the N. boundary of Caubul. Between long. 70° and 72° it makes a remarkable curve to the S., opposite to which the Bolor-Tagh (or cloudy mountains) unites with or approaches it, from Budukhshan on the N. The highest, as well as the most S. point of this curve, is apparently a mountain, called Coond, or Kooner, near long. 71°, where the Affghans believe the ark to have rested after the deluge; a tradition current, however, respecting the Tukhte Solimaun also. The Koosh is covered with perpetual snow; its peaks are visible from Bactria, India, and even Tartary, and one of them, measured by Sir A. Burnes, was found to be 20,493 ft. high. Mr. Elphinstone observed at Peshawer three inferior mountain ranges, progressively decreasing in height beneath the former; the description of which will serve, he says, to give an idea of the rest of the Koosh chain: the lowest range was destitute of snow, and its sides were clothed with forests of pine, oak, and wild olive, European fruits and flowers, fern, and elegant shrubs. The tops of the second range are covered with snow, and the third are so to half their

height. On the high central range Mr. Elphinstone observed that "no diminution in the snow could be perceived in any part in the month of June, when the thermometer in the plain of Peshawer was at 113° Fahr." The Koh-i-Baba range, between Caubul and Baumian, is the continuation W. of the Koosh; but its peaks are not so lofty, probably not more than 18,000 ft. (*Burnes*, iii. 203.), although "covered with eternal snow for a considerable distance beneath their summits." The passes of Hajeeguk and Kaloo on this range are respectively 12,400 and 13,000 ft. above the sea; the other passes are none more than 9,000 ft. in height, and all, without exception, are free from snow by the end of June. In the defiles the road often winds at the base of a mural precipice, rising to 2,000 or 3,000 ft. perpendicularly, and in one part, called Dura-i-zundan, or the "Valley of the Dungeon," the height is such as to exclude the sun at noonday; at the height of 10,000 ft., however, the ground in some parts is ploughed when the snow disappears, the grain sown in May being reaped in October. The ranges N. of the Koh-i-Baba are much inferior in height, and often free from snow, but rise from the plains of Balkh in a bold and precipitous line, 2,500 ft. high. The valley of the Caubul river separates the Koosh from the Teera mountains, which run in a parallel direction, decreasing in size to the E.; but in their higher parts are covered with perpetual snow, and are certainly as much as 15,000 ft. high. (*Burnes*, ii. 105.) The Solimaun range commences with the Sufued-Koh, S. of the Caubul valley; across which it may be considered as connecting itself with the Koosh, by means of cross ranges, causing many cascades and acclivities in the bed of the river. This range stretches from nearly 34° to 29° N. lat., where it becomes connected with the high table-land of Kelat (Beloochistan). It is not so high as the Koosh: its principal points are the Sufued-Koh, or "White Mountain," and the Tukhte Solimaun, or "Throne of Solomon," the last near lat. 31° 30′ N.: the former is always covered with snow, and the latter so for three months in the year. Between these two points this range decreases considerably in height, especially where it is intersected by the Gomul river. The Solimaun chain has several parallel ridges, and gives off many lateral and other ranges, especially a remarkable one to the S.W., including the Khojeh Amram hills; a broad range, though of no great altitude, which appears to join the table-land of Kelat. On the E. a high and broad range, abounding in salt, passes off near the Teera mountains, across the Indus, into the Punjab, with a S.E. direction. The Paropamisan mountains (for which as a whole there is no modern name) occupy a large space of country, extending 350 m. E. to W., and 200 m. N. to S.; W. of the Koosh, and between the Helmund river and Toorkistan. They are a maze of mountains, difficult of access, and little frequented; their E. portion is cold, rugged, and barren, although nowhere covered with perpetual snow: in the W. they contain rather wider valleys, and are somewhat better cultivated. Their greatest declivity is on the N. side, from which they send off several ranges towards Balkh; the slope of the whole tract is towards the W.

The Koosh, collectively called the Caubul Kohistan, or "Land of Mountains," contains, in its higher ranges, a number of narrow valleys; in its lower portions the valleys are of some size; Mr. Elphinstone calling them "plains." Many open laterally into the valley of Caubul, which occupies the space between the Indian Caucasus and the Solimaun and Teera mountains, and which in some places is 25 m. wide. The narrow plain, or valley of the Swaut river, is well watered; yields two harvests of most sorts of grain; and abounds in orchards, mulberry gardens, and plane-trees: others are by no means so wide or productive, and are often bounded by a number of narrow glens. There are many fertile and well-watered valleys on both sides the Solimaun range.

Besides those of the desert, which extend over the S. and W. parts of Caubul, there are many extensive and productive plains: that of Peshawer, about 35 m. in diam., is well watered; its streams fringed with willows and tamarisks; and has numerous gardens and orchards scattered over it: the latter contain a profusion of apple, plum, peach, pear, quince, and pomegranate trees. The greater part of this plain is highly cultivated and irrigated by canals, &c., and the uncultivated parts covered with a thick elastic sod, scarcely equalled, except in England: its villages are generally large, very clean and neat, and surrounded with groves of date, peepul, tamarisk, &c. The valley of Caubul encloses some small plains, of which that of Jellalabad is the principal. Most of the cities and large towns are in fertile plains: one of great luxuriance surrounds Herat; and the site of Furrah, and other places in the W., as well as the banks of the Helmund, seem "rich oases in the midst of a waste." The desert in Seistan, Gurmseer, and Shorawuk, has an ill-defined boundary, and often encroaches on the habitable country.

The Indus forms, for a short distance, the E. boundary, and excepting it, there is no river which is not fordable throughout its course for the greater part of the year. The principal of the minor rivers are the Caubul, Helmund, Furrah-Rood, and Lora. The only lake of any importance is that of Seistan, or Zurrah (*Aria Palus*), which receives the waters of the Helmund (*Etymander*).

The *Climate* varies with the elevation; the temperature is much higher at Peshawer and Candahar than at Caubul and Ghiznee; but, generally speaking, the average heat of the year does not equal that of India, nor the cold that of England. At Caubul the snow lies on the ground for five months, and Burnes found the thermometer stood no higher than 64° Fahr. during the hottest period of the day in the month of May. The prevailing winds throughout Caubul are westerly. The rains brought by the S.W. monsoons are much diminished in power by the time they reach the N.E. part of the country, where the rainy season is limited to a month of cloudy weather, and occasional showers. At Candahar the influence of this monsoon is not felt in the least degree: at Caubul there is no regular wet season; but showers are frequent at all times of the year, as in England. At Peshawer, by the first week in March, peach and plum trees begin to blossom, and by the end of that month are in full foliage; from July to Septr. the weather is cloudy; the winter lasts from the latter month till Feb. Caubul generally is healthy; the most prevalent diseases are fevers, small-pox, and ophthalmia. Sir A. Burnes found the inhabitants of the Koosh, at 10,000 ft. above the sea, quite free from *goître*, so common in the lower ranges of the Himalaya.

Geology and Minerals. — A core of granite, and resting on it a deep bed of slate, are the prominent geological features of the Koosh: the slate formation includes gneiss, mica, and clay-slate, chlorite, carbonate of lime, and quartz; gneiss generally occupying the lower portion. The Solimaun chain is composed of a hard black stone; its accompanying ranges on the E. of an equally hard red stone, and a friable grey sandstone: the hills between Herat and Dooshak consist partly of a mixed reddish and black rock, streaked with ore, and partly of greywacke slate. Iron, lead, copper, antimony, tin, zinc, &c., are found in various parts of the mountain region, and 10 or 12 lead mines near Baumian, and elsewhere, are worked; gold is washed down by the rivers that come from the Hindoo Koosh; there are extensive deposits of sulphur in Seistan, at Cohut, &c.; coal, naphtha, and petroleum, are met with in the latter district; salt in the E. part of the country, both in springs and beds; and saltpetre is procured from the soil in many places.

Many of the forest trees, and most of the finer fruits of Europe grow wild. The timber in the mountain region consists chiefly of pine, oak, cedar, gigantic cypress, and wild olive: the Hindoo Koosh is destitute of wood, and in many places of verdure. Some of the hills produce the birch, holly, hazel, mastic, &c., the wild vine, berberry, blackberry, and many other bushes bearing edible berries; the valleys abound with extensive orchards, particularly of apricot-trees; the other trees most common on the plains are the mulberry, tamarisk, plane, willow, poplar, &c. The assafœtida plant grows luxuriantly at an elevation of 7,000 ft.; hemlock, fennel, peppermint, nettles, and other such plants, common in Europe, are equally common in the higher parts of Caubul, with a profusion of roses, poppies, hyacinths, jessamines, &c. The vegetation of the lowlands approximates more to that of India; and, on descending into them, the contrast with the country just passed, is so striking that it is thus adverted to by the Emperor Baber, in his commentaries: — "I saw another world. The grass, the birds, the trees, the animals, and the tribes of men: all was new! I was astonished."

Lions of a small species are said to have been found in the hilly country about Caubul; tigers are met with in most of the wooded tracts; wolves, hyenas, jackals, wild dogs, the elk, and various other kinds of deer, wild sheep and goats, on the E. hills; the wild ass in the desert; foxes, hares, porcupines, ichneumons, ferrets, &c., are also found. Birds are very numerous, and include several kinds of eagles, hawks, and other birds of prey; herons, cranes, wild fowl, and game, in plenty; doves, magpies, thrushes, nightingales, &c.: parrots and birds of rich plumage are found only in the E. Turtles and tortoises are numerous; there are no crocodiles in the rivers; the snakes are mostly harmless. Large scorpions infest Peshawer; mosquitoes, except in Seistan, are less troublesome than in India; large flights of locusts are rare, but occasionally cause a famine in Khorassan.

Races of Men. — The Affghans, who call themselves Pooshtoon, bear a considerable resemblance to the Jews; and, though they consider it a reproach to be called Jews, they claim descent from a son of Saul. Sir W. Jones and Sir A. Burnes contend for their Jewish origin; Mr. Elphinstone discredits it. They are divided into a num-

ber of tribes, often at war with each other, especially those in the E. of Caubul, and each under the authority of a chief, who, however, is usually assisted by a council (*jerga*), consisting of the heads of the tribe. Mr. Elphinstone conceives their political condition to bear a strong analogy to that of the Scottish clans, in former times; but the genius of the Affghans is more decidedly republican; they resist every encroachment of their rulers, and have a boldness and elevation of character unknown to most other Asiatic nations. They are Mohammedans of the Soonite sect, but use the Persian alphabet: their literature bears a similarity to that of the Persians; but it has a superior dignity and refinement, and in many respects is not unlike that of Europe. The Affghans are hospitable, and tolerant in religion; but extremely superstitious and addicted to astrology, divination, alchymy, &c. They are plunderers by profession; in the W. they live in tents, in the E. in fixed habitations: only a few of them reside in the large towns. Their chief amusements are the chase, feasting, songs and recitations: they have slaves, but traffic very little in them. (*For further particulars, see* AFFGHANISTAN.)

The Eimauks and Hazaurehs, two races of Tartar origin, although using dialects of the Persian tongue, inhabit the Paropamisan mountains. The Eimauks, who are divided into four principal tribes, subdivided into numerous clans, each governed by its chief, occupy the lower parts of the country, between Caubul city and Herat; Mr. Elphinstone estimated their number at about 450,000. In war they are ferocious and cruel: they retain many Mogul customs, mixed with others of Persian origin; they live almost entirely in camps, and use the same kind of food as the Afghans, with the addition of horse-flesh and bread of an oily kind of nut. They cultivate wheat, barley, and millet; keep many sheep, and rear a small but active breed of horses: they are Mohammedans of the Soonite sect. The Hazaurehs have been estimated at about 350,000; they inhabit a higher region than the Eimauks, a cold and sterile country, where little corn can be grown: their sheep, oxen, horses, and the produce of the chase, furnish them with their principal articles of food; sugar and salt are the foreign commodities most in demand amongst them. They live in villages of thatched houses, and are divided into different clans, constantly at war with each other, and each governed by an absolute chief. The Hazaurehs have strong Tartar features, and many similarities in customs, dress, &c. with the Uzbeks; the women, who are frequently good-looking, possess an unexampled license and ascendancy over their husbands. These people are passionate, fickle, and capricious; but conversable, hospitable, and very fond of music, recitation, visiting, and other sociable kinds of amusement. Many of them are performers on a guitar, poets, and *improvvisatori*. They belong to the sect of Ali. The Tadjiks, or Taujiks (*see* BOKHARA), are probably descendants of the original Persian inhab. of the country, and of the Arabs who conquered it in the first century after the Hegira. They live mostly in and round the larger towns, and every where reside in fixed habitations, having settled employments. They are zealous Soonees, mild, sober, peaceable, and industrious; and assimilate much more with the Afghans than their brethren of Bokhara do with the Uzbeks. The Tadjiks are most numerous towards the W. of Caubul; as the Hindkees (Hindoos, Juts, Sindians, &c.) are towards the E. The Hindoos are, however, to be met with all over the country, chiefly as money-changers, tradesmen, &c.; they are mostly of the Kshastriya or military caste. The Kuzzilbashes, or Persian Toorks, inhabit the towns; the Belooches are generally almost confined to the S.; there are about 2,000 Arab families, besides Armenians, Abyssinians, European Turks, Jews, Caufirs, &c., amongst the population.

Agriculture. — There are five classes of cultivators — 1st, proprietors, who cultivate their own land; 2d, tenants, who pay a fixed rent in money, or a proportion of the produce; 3d, *buzgurs*, or metayers; 4th, hired labourers; 5th, *villeins*, who cultivate their lords' lands without wages. The lands are more equally divided in Caubul than in most countries, and the first class, or that of small proprietors, is very large, as by the Mohammedan law every man's estate is at his death divided equally amongst his sons. The class of tenants is not numerous. Leases are generally from 1 to 5 years, and the rent varies from 1-10th part to half the produce; the landlord generally providing the seed, cattle, and farm implements. Labourers are principally employed by the *buzgurs*; they are fed and clothed by their employers, and paid for 9 months' work about 30 rupees. The *villeins* are many of them of foreign descent, and always attached to the service of some master; they are subject to taxation, and even death-punishment from their lord, but have the privilege of removing from the service of one master to another: they are most numerous amongst the Eusofzyes and other Afghan tribes in the N.E. There are two harvests in the year; one crop, consisting of rice, millet, *jowaree*, maize, &c., is sown in the spring, and reaped in autumn; the other, which consists of wheat, barley, legumes, &c., is sown at the end of autumn, and reaped in summer. Rice is grown in most parts of the country, but wheat is the common food of the people: barley is usually given to horses. The vegetables and pot-herbs of Europe and India are cultivated largely, especially turnips and carrots; melons, cucumbers, &c., are abundantly grown in the neighbourhood of the towns; and ginger, turmeric, and the sugar-cane in the E.; but the latter plant is confined to rich plains, and most of the sugar, as well as the cotton, used in Caubul is brought from India. The palma Christi, sesamum, mustard, &c., are grown for the sake of their oil; tobacco is cultivated in most parts; madder abounds in the W.; and Caubul furnishes to India its chief supply of that article: lucerne and other artificial grasses are sown for the cattle. Much of the land fit for culture has been brought into that state by irrigations undertaken by individuals singly, or associated for the purpose. Cultivable land in Caubul is generally valued at from 9 to 12 years' purchase. Irrigation is effected by means of canals and subterraneous conduits, beneath the slopes of hills, termed *caurats*, which are common in Persia. The plough is heavier and makes deeper furrows than that of India, but still only employs one pair of oxen. All grain is sown broadcast; and drill husbandry is unknown. The place of a harrow is supplied by a plank dragged over the field, on which a man stands. The sickle is the only instrument used for reaping. The flail is unknown; and the corn is trodden out by oxen, or forced out by a frame of wood filled with branches, on which a man sits, and is dragged over the straw by cattle. It is winnowed by being thrown against the wind, and when cleaned, is kept in hampers plastered with mud, unbaked earthen pots, and coarse hair-cloth bags.

For grinding the corn, windmills are used in the W., but these are very different from ours, for the sails are inside, and there is an opening in the erection to admit the wind. Water-mills are not unknown; but handmills are most generally used. The manure employed is composed of dung, straw, ashes, &c., but the dung of camels is carefully avoided. Horses are employed in ploughing only by the Eimauks; in Seistan camels perform this work. There are no carts. The horses of Herat are very fine, and somewhat similar to the Arabian breed; and there is a strong and useful breed of ponies, especially about Baumeean. Mules preferable to those of India; but asses, camels, and dromedaries mostly are used for carriage. The ox resembles that of India; sheep chiefly of the broad-tailed kind; and the goats, which are numerous, have often long and tortuous horns. The greyhounds and pointers are excellent. A great number of horses are annually sold in the N. and W. of India, under the name of Caubul and Candahar breeds; but no horses are bred in large numbers in Caubul, nor are those of Candahar exported in any quantity.

Trade. — *Exports.* — The principal foreign trade is with India, Persia, and Toorkistan: the exports to the first-named country are principally horses and ponies; furs, shawls, chintz; madder, assafœtida, tobacco, and fruits: those to Toorkistan are shawls, turbans, chintz, white cloth, indigo, and other Indian produce: to Persia the same articles, with the carpets of Herat. The latter-named article, with woollens, furs, madder, cheese, and some piece-goods, are sent from the W. to the E. provs.; and Bhawupoor and Mooltan cloths, silk, cotton, and indigo, are sent back in return. Iron, salt, alum, sulphur, and the other natural produce, are also exported.

Imports. — From India are coarse cotton cloths, worn by the mass of the people; muslins, silks, and brocade; indigo, in great quantities; ivory, chalk, bamboos, wax, tin, sandal-wood, sugar, and spices: from Toorkistan horses, gold, and silver; cochineal, broad cloth, and tinsel: cast-iron pots, cutlery, hardware, and other European articles, from Russia, *viâ* Bokhara. Silks, cottons, embroidery, and Indian chintz, come from Persia; slaves from Arabia and Abyssinia; silks, satins, tea, porcelain, dyes, and the precious metals, from the Chinese dominions; and dates and cocoa-nuts from Beloochistan. The merchants are chiefly Tadjiks, Persians, or Affghans, and Hindkees in the E.; but no Affghan ever keeps a shop, or exercises any handicraft trade. Caubul is the great mart for the trade with Toorkistan; Peshawer for that with the Punjab; and Candahar and Herat for that with Persia. The dismemberment of the kingdom has had no ill effect upon commerce generally: the produce of the town duties of Caubul city rose 1-4th between 1829 and 1835, without any fresh imposts. The demand for British manufactures has increased so much latterly, that Russia, which before 1816 supplied a great many articles, now only sends nankeen and broad chintz, of a description not manufactured in Britain, into the market. The greater part of the trade between India, Caubul, and Bokhara, is conducted by the Lohanees, a pastoral tribe of Affghans, often of considerable wealth. About 1,000 camel-loads of Indian goods are annually consumed in Caubul. The Caubul merchants have latterly

begun to frequent the annual fairs on the borders of the Russian dominions, and most of the Russian trade with Bokhara has fallen into their hands. Sir A. Burnes remarks, that were such fairs to be established on our N.W. frontier, and encouragement given to the Lohanee merchants, who are every way deserving of it, a large export of British manufactures would take place.

Caravans, Roads, &c. — In an inland country, without navigable rivers, and not suited to wheeled carriages, traffic must be carried on by means of beasts of burden; camels are the principal of these in Caubul, and constitute great part of the wealth of many individuals, as they are let out to merchants by those who cannot afford to trade themselves. The merchants commonly travel in bodies, called *caravans*, and place themselves generally under the conduct of some chief whom they elect as a *caufila baushee*, or an officer with absolute command over all the arrangements of the journey. There are but two great routes through the country; one from Balkh across the mountains at Baumian, through Caubul to Peshawer, and thence into the Punjab; and the other from Herat to Candahar: on this line there are few obstacles to oppose a European army, and the latter city could furnish abundant supplies. From Candahar there are two routes; the former through Ghiznee to Caubul, not difficult for 9 months in the year, but next to impassable in the winter, from the snow and intense cold; the second through the valley of Pisheen and Quetta to Shikarpore in Sinde; a country furnishing supplies of food, but deficient in wood and water. There is another road across the Solimaun range from Candahar to Dera Ghazee Khan, in Damaun; but it is said to be hardly practicable for a European army, and is not travelled by merchants. The Khyber pass from Peshawer to Caubul has, in consequence of enormous exactions on merchandise at the former place, been deserted by traders, and is unsafe. Camels, horses, mules, &c., are cheap enough throughout Caubul; but fuel is very scarce and dear, and water is not generally to be had in abundance: two great drawbacks in travelling. (*Conolly*, ii. 323. &c.)

The Public Revenue, in settled times, amounts, according to Mr. Elphinstone, to nearly 3,000,000*l.*; but before the revolution, which dethroned Shah Shoojah, 1-3d part was remitted to different tributary princes, who consented to hold their dominions as grants from the khan of Caubul: of the rest, half was assigned for military services to the chiefs, and the remainder for the maintenance of moollahs, dervises, &c. The chief sources of the revenue under the present khan are, the land, the tribute of certain tribes, the town duties and customs, certain fines and forfeitures, the profits of the mint, &c. The land revenue is collected by the head-man of each village, and paid either through the head of the tribe, or the *hakim* or governor of the province: great peculation is often practised by the *hakim*, as the current expenses are paid before the balance is sent to the treasury.

Government. — Under the monarchy, the crown was hereditary in the family of the Suddozyes, who belonged to the tribe of the Dooraunees, said by Mr. Elphinstone (in 1809) to be the greatest, bravest, and most civilised of all the Affghan tribes. The right of succession was not always vested in the eldest son; but the future heir was determined either by the reigning sovereign or a council of the great officers of state.

Justice is administered in the cities by the *cauzy*, (or *cadi*) assisted by muftis and other officers; but where the khan happens to reside, criminal complaints are made to him. The cauzies have deputies over the whole country. The police of towns is managed under one head, in three departments; viz., watchmen, inspectors of public morals, and superintendents of weights and measures. In the country the people to whom the land belongs are answerable for the police. In cases of robbery and theft, if the chief of the village or of the division of a tribe in whose lands a crime was committed, fail to produce the thief, he pays the value of the property stolen, and levies it on the people under him. The police is very bad, and does not interfere in murders for retaliation, except in towns and their vicinity.

Religious establishment. — Moollahs or priests always fill the duties of inspectors of public morals: under the police established in the country, they have grants of land from the head-man of the tribe, and a tax similar to tithes, but by no means equivalent to them in amount: in the towns they are maintained by fees on marriages, burials, &c., and the gifts of their congregations. A superintendent priest and a registrar are established in each city; several are connected with the royal household; and at the visit of Mr. Elphinstone, there was a professor and a body of students in theology at the king's palace, each of whom received a daily allowance for his support.

Armed force is chiefly cavalry, 3-4ths of whom are Kuzzilbashes. They are collected in bodies, varying in number from 6 to 300, under their several chiefs, and tolerably mounted. Their dress is a *loongee* or turban, one end of which is tied under the throat in the field; a *kummerbund* or garment, which serves for a coverlid at night; a *koorla* or shirt, *ulkaliq* (low trowsers), and boots to the knees, and over all a *caftan* or cloak: their arms are a sabre, a gun, with a good flint lock, and long bayonet; a powder and ball pouch round the waist, and always a shield: their saddles are high both behind and before, and they all carry a rope with a twisted chain attached, by which they can secure their horses at any place or time. There are about 12,000 infantry, all Affghans, armed with a sword, shield, and match-lock, which carries twice as far as a musket; but being too heavy to be brought up to the shoulder, is furnished with a prong or rest, which is fixed in the ground. These troops are but skirmishers, and fight generally in ambush: there are besides two regiments raised seven years ago in Bombay, one of 800, and the other of 300 men, dressed in European uniform, but ill paid and disciplined; and wretched artillery of about 50 field-pieces of different sizes, only half of which are used.

History. — Caubul was amongst the countries invaded by Alexander, and several spots may be almost confidently identified with those mentioned by the historians of that conqueror. A remarkable rock near Bajour is probably the celebrated Aornus; Jellalabad is supposed to be in the neighbourhood of the spot where Alexander revelled in imitation of Bacchus; many topes or artificial mounds are situated along the skirt of the mountain ridges, and on the banks of the Caubul river, some of which having been opened, have been found to contain Grecian coins, gems, bones, cups, lamps, &c. A.D. 997 Caubul was conquered by the Tartars under Sebuctaghi, whose successors extended their empire over great part of India, Khorassan, Balkh, and Budukshan. In 1737 Nadir Shah possessed himself of the country; and in 1747 Ahmed Shah Abdalli, the founder of the Dooraunee dynasty, was crowned at Candahar. His successor Timour Shah died in 1793 without naming an heir, and, in consequence of the uncertainty of the succession, a protracted civil war broke out among his three sons. One of them, Schah Shoojah-ul-Moolk, having succeeded in placing himself on the throne, was defeated and deposed, in 1809, by Futteh Khan, chief of the Baurickzye family, who espoused the cause of Mahmoud, brother of Schah Shoojah. But notwithstanding his great services, Futteh Khan was treacherously murdered, in 1818, by Mahmoud. On this event taking place, the brothers of Futteh Khan, who had been made governors of provinces, revolted; and one of them, Dost Mohamed Khan, established himself on the throne of Caubul. Runjeet Singh seized about the same time on Cashmere, Peshawer, &c.; and Herat and its dependencies were the only part of the old monarchy that continued in the possession of the Dooraunee dynasty.

Sir A. Burnes expressed himself in very favourable terms as to the character and talents of Dost Mohamed. — "The justice of this chief affords a constant theme of praise to all classes: the peasant rejoices at the absence of tyranny; the citizen at the safety of his home, and the strict municipal regulations regarding weights and measures; the merchant at the equity of his decisions, and the protection of his property; and the soldiers at the regular manner in which their arrears are discharged." (iii. 263.) The account which Sir A. Burnes gave of Schah Shoojah formed a very disadvantageous contrast to his eulogy on Dost Mohamed; but the former was, notwithstanding, again placed on the throne. Dost Mohamed having assisted the Persians in their attempts on Herat; and having, it is alleged, on various occasions evinced his hostility to British interests, the Indian government determined upon dethroning him, and on placing Schah Shoojah on the *musnud*. For this purpose a powerful army crossed the Indus, and advanced as far as Ghiznee without meeting any opposition, other than that arising from the nature of the country, and the deficiency of supplies. The latter having been taken by storm, after a short but sharp contest, on the 23d June 1839, a panic seized the troops of Dost Mohamed, who immediately disbanded themselves; and Schah Shoojah was shortly after enthroned at Caubul, whence he had been driven 30 years before. But he was unable to maintain himself on his slippery elevation even with the assistance of the strong British force unwisely left in Caubul. We have elsewhere noticed the singularly disastrous retreat of that force from that city early in 1842; with the subsequent invasion of the country by the British, and their final withdrawal from it. (See art. AFFGHANISTAN in this Dict.; *Elphinstone's Caubul, passim*, — one of the best and ablest works ever published on a semi-barbarous country; *Conolly's Journey to India; Burnes' Trav. into Bokhara*, 1835; *Journal of the Asiat. Soc. Bengal, &c.*)

CAUBUL, the ancient cap. of the above country, under the Dooraunee dynasty, situated in the plain, and on both banks the river of same name, 6,600 ft. above the level of the sea; 56 m. N. N. E. Ghiznee, 140 m. W. N. W. Peshawer: lat. 34° 22′ N., long. 69° 15′ E. Pop. about

60,000. (*Burnes*, 1835.) It is compactly built: on three sides it is enclosed by a semicircle of low hills, along the top of which runs a weak wall, with an opening surrounded by a rampart towards the E., by which the principal road enters through a gate, after passing a bridge over the river. The Balla Hissaur, or "palace of the kings," which stands on the part of the hill N. of this entrance, is a kind of citadel, and contains several halls, distinguished with the royal ornament of a gilded cupola: there is an upper citadel, formerly used as a state prison for princes of the blood; but as fortresses both are contemptible. In the centre of the city is an open square, whence issue four bazars, with shops about two stories high; the houses are constructed of sundried bricks and wood, but few of them have any pretensions to elegance. Caubul is, however, a bustling place; the chief mart of trade in the country; and its bazars are superior to most in the E.: the great bazar is a handsome roofed arcade 600 ft. long by 30 ft. broad. Each different trade has its separate quarter. Provisions in summer are moderate, but both wood and grain are dear in winter. Its climate, and the scenery around it, are both very fine; the banks of its river are beautifully adorned with poplar, willow, and mulberry; but the most pleasing spot in its vicinity is the tomb of the Emperor Baber, who made Caubul his capital. His grave is marked by two erect slabs of white marble, situated in a small garden at the summit of a hill overlooking the city: outside Caubul also stands the tomb of Timour Shah, an unfinished octagonal brick building 50 ft. high.

In the 7th century of our æra, the Arabian writers mention Caubul as the residence of a Hindoo prince; it was, as already stated, the capital of the empire of Baber; and taken by Nadir Shah in 1739. At his death it was taken by Ahmed Shah Abdalli, and remained the capital of Affghanistan till the destruction of the monarchy.

The chiefship of Caubul extends N. to the Hindoo Koosh and Baumian; E. to Neemla half way to Peshawer; S. to Ghiznee, which city it includes; and W. to the country of the Hazaurehs: much of the country is mountainous, and of great natural strength, but small resources; there is plenty of fruit, and forage for cattle, but grain grows scantily. The revenues of Caubul amount to 18 lacs rupees a year: those derived from the city customs are 2 lacs annually, which amount they have reached in consequence of the encouragement given to trade by the lately deposed khan. (*Elphinstone's Caubul; Burnes's Trav.; Hamilton's E. I. Gaz.*)

CAUCASUS, a great mountain-range, extending in a N.W. and S.E. direction, between the Black and Caspian Seas. Its extreme points are those of the main ridge or back bone of the system, which, commencing at Anape, on the Black Sea, in lat. 44° 50′ N., runs first S.E. as far as the parallel of 42° 50′, and meridian of 40° 45′; then almost due E. to the long. of 46°, and finally, again S.E. to Baku, on the Caspian Sea, in lat. 40° 20′, where it terminates. The direct distance between Anape and Baku is 690 m., but, following its windings, the ridge of the Caucasus measures 800 m. The extent of the mountains towards the N. is very well marked by the courses of the rivers Kuban and Terek; the one flowing W., along their bases, to the Black Sea, the other E. to the Caspian. The natural S. limit is the Araxes; so that the breadth of this range, in its widest part, is about 5°, or nearly 350 m.; and in its narrowest, along the shores of the Caspian, not much short of 250 m. The area enclosed by these two seas, and three rivers, taken as the boundaries of the Caucasian system, is not less than 100,000 sq. m., but it must be remarked, that within these limits there is, though not much, some level land; and that the least elevation is found, not in the bed of the Araxes, but in that of the Kur. (*Klaproth's Trav. in Cauc. and Georg.* p. 158. *et seq.; Mignan's Winter Journey through Russia*, i. 27. *et seq.; Col. Monteith's Geog. Journ.* iii. 21–57.

The highest peak of the Caucasus attains an altitude of 17,785 ft., which is more than 2,000 ft. higher than Mont Blanc. (*Bontzkoffskoi's Lettres sur le Caucasse*, p. 23.) This peak, or rather mountain-knot, is found nearly at the intersection of the 43d parallel with the 42d meridian. Among European geographers it has been called, improperly enough, ELBOURS, ELBURZ, or ELBROUZ; a name which, in the spread of information concerning E. countries, is likely to be productive of no little confusion. It is already applied to a peak of the Caucasus, and a range on the S. of the Caspian Sea, and may, unless care be taken, be multiplied indefinitely, since it is not a proper name, but a common designation for any mountain *which reaches the snow line*. (*Klaproth*, p. 170.) From this point, as from a centre, the mountains descend in all directions, but much more rapidly towards the N. and W. than towards the E. and S. (*Klaproth*, p. 276.) The Mquinvari peak, to which the Russians have improperly given the name of Kasbek, is said by Klaproth to attain an elevation of 4,419 metres, or of 14,500 ft. (*Lettres sur la Caucase*, p. 40.) Farther E., the ridge declines towards the Caspian; and where it approaches that sea, as in the Cape of Absharon, or at the town of Derbend, the eminences do not probably exceed 1,500 or 2,000 ft. The ridge W. from Elbours is very considerably lower, and presents fewer peaks; it appears to descend gradually, till at Anape, on the Black Sea, its elevation is only about 180 feet above the *water*; but this height rises perpendicularly, and the face of the rock is continued downwards for several hundred fathoms; such being the depth of the sea at this point. The N. ranges run nearly parallel to the main ridge, and extend about 100 m., when they suddenly and abruptly terminate in the low steppe of the Don and Wolga. This frontier, as it may be termed, of the Caucasus, is called the Black Mountains. (*Schernye Gory*.) The Bechtag, the highest point, is probably not less than 6,000 ft. in height, and there are several summits which appear to have a nearly equal elevation; extreme ruggedness is, however, a stronger characteristic of these hills than altitude. The Elbours (Osha Makhua) appeared to Pallas to rise in the horizon to more than double the height of the Bechtag, when viewed from a station very near the base of the latter. S. of the main chain, the country spreads into table-lands, terraces, and slopes, broken and intersected by transverse ranges and peaks, of which last the highest is Ali Guz, in 40½° N., 44½° E., its elevation being about 15,000 ft. About 50 m. S. of this, but on the other side of the Araxes, is Mount Ararat; but it cannot with any propriety be reckoned as part of the Caucasus. Towards the S.E., between the Kur and Araxes, the mountains spread into a level but considerably elevated plain, 24 m. in width, and terminated by a strong defile towards Erivan. The various plains, valleys, and defiles of this part of the mountains seem to vary between 4,000 and 6,000 ft. in height. On the N. the Caucasus is absolutely unconnected with any other mountain-range, unless the Chain of the Crimea may be regarded as an exception; but on the S. it mingles with the high land of Azerbijan; on the S.W. it combines with the mountains of Armenia, and through them with the Taurus; and on the S.E. its offshoots appear to be continued by the mountains of Ghilan and Mazunderan, to the Elbours (Persian), Paropamisan, Hindoo Koosh, and Himalayas. (*Guldenstadt, Reise durch Russland*, i. 433. *et seq.*, ii. 23. *et seq.; Gmelin, Reise durch Russland*, iii. 34. *et seq.; Annales des Voy.* xii. 5. *et seq.*, 167. *et seq.; Pallas*, i. 339. *et seq.; Klaproth*, 158. *et seq.; Monteith's Geog. Journ.* iii. 31. *et seq.*)

The above results as to the extent and elevation of the Caucasus are deduced from a very full comparison of the authorities cited, and of others not named. It is right, however, to state that they cannot be wholly depended upon. There is the most extraordinary discrepancy among authorities as to the extent of the mountain-system, its elevation, &c.; but the above results seem to be those on which most reliance may be placed.

The ancients mention two principal passes of the Caucasus, the Caucasian Gates and the Albanian Gates; of which the former is at present the great, indeed almost the only frequented pass. It runs close by the base of the Kasbeck mountain, in lat. 42½° N., long. 44½° E., and is, in fact, a deep ravine, through which the Terek seems to have cut its way in a channel, sometimes scarcely wide enough to allow of its passage. The commencement of this cleft on the S. is 4,000 ft., and it continues to rise, till, at the neck of the pass, it is full 8,000 ft. above the sea. Precipitous walls of porphyry and schist, 3,000 ft. in height, press upon its sides; and awful abysses open beneath it, sometimes, it is said, to the depth of 10,000 ft. Avalanches are frequent in this pass, carrying with them not only any unfortunate travellers who may be in the defile, but very often the *road* itself, and even when the snow does not descend in masses, its meltings in the spring and summer cause occasional floods, which carry every thing before them. The direct length of this defile may be about 120 m., from Mosdok to Gory; and some idea may be formed of its difficulty from the fact that Strabo (xi. 500.) describes it as occupying four days in the passage. This must be understood also of summer travelling, since in winter the pass was wholly unapproachable. The Russians have, however, made it passable even for carriages; and in January, 1830, it was crossed by the Persian embassy, but this winter transit employed *six days*. (*Mignan*, i. 46.) About midway stands the old castle of Dariel, in the narrowest and highest part of the gorge, where the statement of Pliny (vi. 2.), that an iron gate would be sufficient to close the opening, seems to be any thing but an exaggeration. This castle is, therefore, in all probability, the fortress which, according to the Roman naturalist, was called, though improperly, the *Pylæ Caspiæ*. (*Klaproth*, p. 311.; *Monteith, G. J.*, iii. 39.) The Albanian Gates appear to answer to a pass between Georgia and Daghestan, in lat. 42° N., long. 47° E. (*Ptolemy*, v. 9.; *Lapie's Map; An. Voy.* xii. 1.) This is, however, very little known; it is almost wholly in the possession of the native tribes, and

probably is not passable except for hunters, and in the summer. Ptolemy's E. Sarmatian Gates (*Geog.* v. 9.) appear to be the pass of Derbend, on the Caspian Sea: this is always available; its narrowness makes it a strong military position, and the swampy nature of the shore renders travelling along it often difficult. A similar remark applies still more forcibly to the pass between the W. termination of the Caucasus and the Black Sea. Along this road Prince Goshakoff, in the last war, succeeded in marching an army, with incredible difficulty, from Anape to Sokhumkulla (about 150 m.); but here he found it equally impossible to advance or retreat, and was compelled to return by sea. (*Monteith, G. J.*, iii. 37.) The impediments to the coast roads appear, however, to consist only in the number and power of the mountain torrents, which, without bridge or boat, are quite impassable; and as a very wide bank of hard sand stretches along the whole shore, it may be practicable to throw bridges over all the streams; but very considerable height and strength will be necessary to secure them from the effects of sudden floods. These are all the passes over the main ridge, and the transverse ranges do not seem to be better provided; one only appears to exist between Imeritia and Georgia, and that has been rendered available only within modern times, and is still encumbered with great difficulties.

Geology. — The bases of the Caucasus on the N. seem to be covered with sand or a sandy marl, from which the first eminences rise in low but abrupt hills of sandstone, tufa, and iron-stone. These are rapidly succeeded by higher and more mountainous elevations of white calcareous limestone, many of which exhibit unquestionable evidence of decay, the rivers that flow through and round them depositing thick layers of a yellow and grey sandy consistence. Occasionally the limestone rises into great rocky peaks and ridges, between which marshy plains of sandy mud are not unfrequent, apparently formed by the débris of the mountains themselves. This limestone, of which the Bechtag, the Metshuka, and nearly all the frontier line of the Caucasus is formed, is very ancient, and exhibits scarcely any petrifactions; behind this rises a ridge of slate, from the appearance of which the term *Black Mountain* is given to the range. The higher ranges, which rise to the snow line, consist of basalt, schistus, porphyry, granite, and other old formations, so that whether its actual material, or the absence of organic remains, be considered, it is probable that the Caucasus is one of the oldest mountain systems in the world. The S. slope exhibits the same succession of formations, as far as regards the three principal strata, but much less rapidly. Sandstone is far less abundant in the S. than in the N., but, on the other hand, calcareous spar, milk-quartz, and other fossils, are frequently met with, indicating a much greater degree of wealth in mineral ores. Lava and other volcanic matter is common enough among the formations; but, though *mud* volcanos exist in various parts of the Caucasus, igneous eruptions are unknown; and neither Klaproth nor Pallas could come to any satisfactory conclusion as to their former existence. Monteith is of opinion that the volcanic rocks are rather to be ascribed to the sudden rise of a great extent of country, than to emissions from particular mountains. (*Guldenstadt*, i. 434—441., ii. 23—29.; *Pallas*, i. 337. 347. 358. 365. &c.; *Klaproth*, pp. 386—390.; *Monteith, G.J.*, iii. 49. &c.)

Hydrography. — The Caucasus, like the Alps, does not form the dividing line between rivers flowing in opposite directions; other ranges rise immediately on its S., which shut it out from communication with the Persian Gulph and the Mediterranean; while on the N., the great plain of the Wolga and Don, after rising from the beds of those rivers for some distance S., subsides again, leaving a positive, though scarcely perceptible, ridge between the sources of Mantyeh and Sarpa and the bases of the Caucasus, with a positive though very gentle slope towards the latter. In consequence of this formation, every drop of water from the Caucasus falls into the Black or Caspian Sea. The principal streams, besides the Kuban, Terek, and Araxes, already mentioned, are the Kur (an. *Cyrus*), and the Phasis, rising on opposite sides of the transverse range which divides Imeritia from Georgia, and running, the first S.E. to the Araxes, the other W. to the Black Sea. The Shorak or Jorak (an. *Apsarus*) is another tolerably large river, running to the Black Sea, and the Koisu (an. *Cassius*), a still larger, falling into the Caspian. The torrents that run short courses to these seas from the flanks of the mountains in their neighbourhood are quite innumerable, as are the affluents of the principal streams which pour from the mountain sides in every direction, sometimes with respectable length of course, and always in immense volume. It may, indeed, be reasonably concluded that the store of moisture in the Caucasus cannot possibly be exceeded by that of any other country of like extent; and since, from the causes before named, it is prevented from spreading beyond the bounds of the mountains, it follows necessarily that no land can be more abundantly watered. Most of the streams are flooded by the melting of the winter snows; and their action on the substance of the mountains is at all times very violent, especially on the slate and limestone. The former is brought down in the form of a black glistening sand, the latter, in that of a soft white substance, so fine and so abundant, that it is used by the natives, in its natural state, for whitening their houses. (*Klaproth*, p. 386.; *Pallas*, i. 365.)

There is, perhaps, no other mountain region in the world so destitute of lakes as Caucasus. The lake of Sevan or Goukcha, between the Kur and Araxes, is the only one of any size in the whole region, and it can hardly be regarded as belonging to the Caucasus. It is a salt lake, of the kind so common in Central Asia, without any outlet, and occupying nearly the whole extent of a small elevated plain about 48 m. long, by 12 m. in width, 5,300 ft. above the sea. (*Pallas*, i. 337. &c.; *Klaproth*, 159. 241—407. &c.; *Monteith, G. J.*, iii. 43. *et seq.*; *Spencer, pass.*)

Climate. — This, of course, varies with the elevation; but perhaps still more with the degree of shelter afforded by the neighbouring ranges from the different winds. Some of the N. valleys, notwithstanding their exposure to the bleak gusts from the Snowy Mountains, are so perfectly protected from the N. wind, that their winter is as mild as in the S. parts of the Crimea. (*Pallas*, i. 339.) They are subject, however, to sudden and fierce, though brief, vicissitudes; and the very shelter which they possess, by confining the air, makes them unhealthy. With the sharp ascent of the land, the temperature rapidly decreases, and a few hours serves to convey the traveller from the climate of the temperate zone to that of everlasting winter. The cold in the upper ranges is intense; but observations are wanting on which to found any conclusion as to its average; Mignan, at a comparatively low part of the range, found it, in Jan. 1830, a very cold winter, at 4° Fahr., or 28° below the freezing point. (i. 35.) A better idea may, perhaps, be formed on this point, from the quantity of snow deposited in the defiles: 1,400 men were employed a fortnight in cutting a road for the Persian embassy, which, after all, was scarcely passable. (*Mignan*, i. 40.) Notwithstanding this intensity of cold, the plague is very common on the mountains.

On the S., the countries on the Black Sea and Caspian may be described as warm; those of Imeritia and Georgia as rather cold; but this, again, must be taken with considerable limitation, the N. parts of the two seas being subject to winter frosts. The melting of the ice in them frequently causes chilly summers on their shores, while, on the other hand, some of the higher valleys are among the hottest spots in the Caucasus. The abundance of running water, and the neighbourhood of the two bounding seas, cause a great accumulation of vapour; indeed, so extensive is the exhalation constantly going on, that it may be said every wind, if long continued, brings with it a mist, which nothing can disperse except a storm. These last are, consequently, frequent and terrible. Luckily, however, the cause that produces them gives warning of their approach; the vapours, when grown too heavy for the atmosphere, collect themselves in dense masses round the sides and tops of the mountains; and the Caucasians, warned by this clothing of their Alps, prepare for the explosion, which they know, by long experience, will speedily follow. They wrap themselves in their *tchaoukas* (large cloaks made of wool and goat's hair, and perfectly waterproof), and under a low tent made of felt, expressly for such emergencies, or under the lee of a rock or tree, await, generally in safety, the passing of the tempest. (*Spencer's W. Cauc.* p. 129.) Sometimes, however, the falling of the cliff or tree destroys those who have sought its shelter; but these accidents are of rare occurrence, as it is not often that the natives are compelled, for want of their felt tents, to run such risks; but to strangers unprovided with the means of combating these storms, the effect is sure to be ultimately fatal. One, or, at most, two years' exposure to the varying influence of a Caucasian climate, sends the Russian soldier either to his grave or to the hospital, with a constitution irrecoverably broken. The uncertain temperature and the humidity of the atmosphere appear indeed to make it very unhealthy to strangers, especially on the slopes and flats towards the sea. Intermittent and bilious fevers of a very grave kind are endemic, and exceedingly obstinate; and the plague, as before observed, is also very common.* The varying humidity, or some other cause, seems likewise to impress the air with very peculiar qualities; observations of altitude by the barometer, or the boiling point of water, give very inconsistent results at different times (*see* CASPIAN SEA), and the extent of horizontal vision is frequently quite startling. The Caspian Sea is sometimes seen from the summit of the Bechtag, 164 m. distant; and the Snowy Mountains from Sarepta, on the Wolga, a length of 322 m. (*Pallas*, i. 370.; *Klaproth*,

* For a singular statement connected with the climate of the Caucasus, see Herodotus, *Clio*, p. 105.; Klaproth, p. 160.

p. 158.) The distance of the visible horizon, exclusive of refraction, would be in the first case about 94½ m., in the second about 163¼ m.; the amount of refraction is, therefore, equal to more than 1°, and nearly 2¼° respectively; but, in ordinary states of the atmosphere, the maximum being only 33′, the excess of 27′ and 1° 57′, indicates a variable density in the medium which is truly surprising. Some of the larger clefts are said, in the traditions of the natives, to have been caused by earthquakes; but there are no authenticated records of these phenomena. (*Guldenstadt*, i. 217—432.; *Pallas*, i. 340. 358. 447. *et pass.*; *Gmelin*, iii. *pass.*; *Klaproth*, pp. 163. 165. 309. 333. &c.; *Chardin*, p. 165.; *Spencer*, *W. Cauc.*, p. 125. *et seq.* 320. &c.; *Circass.* i. 286. &c.; *Monteith*, *G. J.* iii. 31. &c.)

Productions. — 1. *Minerals.* — Except in its deficiency of lakes, the Caucasus has many points of resemblance to the Alps; among others, an apparent poverty of mineral treasures. It is true that this, in the case of the Caucasus, may be apparent only. The ancients unquestionably believed these mountains to be rich in the precious metals, but this they also believed of most other districts that were but slightly known to them; and the limited observations of scientific men in modern times tend to the opposite conclusion. A yellow mineral, called cat gold, is indeed found, which may, perhaps, have occasioned the stories as to the gold mines of the Caucasus; but it is perfectly worthless. Iron, copper, saltpetre, sulphur, and lead, are found, the last in tolerably large quantities. Salt is almost wholly wanting, and of gems there does not appear to be any vestige. Indications of coal have lately been discovered; and, from the enormous quantity of lime deposits, it is likely that marbles may be found. (*Pallas*, i. 429.; *Guldenstadt*, i. 441. 456.; *Klaproth*, p. 391.; *Spencer*, *W. Cauc.* i. 331.)

2. *Vegetables.* — In amount and variety of vegetation, the Caucasian regions seem to be unrivalled. Chardin, writing in 1692, says, "Mount Caucasus, till ye come *to the very top of it*, is extremely fruitful," and Spencer, in 1838, says, "However high the ascent, we see luxuriant vegetation mingling even with the *snow of centuries*." Nearly every tree, shrub, fruit, grain, and flower, found from the limit of the temperate zone to the pole, is native to or may be raised in the Caucasus. The N. bases consist of arable land of an excellent quality, meadows of the finest grass, and dwarf wood in great abundance. At a very little distance the increase of wood indicates a higher and colder country, but the plants which delight in a warm situation still continue to be very numerous. From the more rapid rise of the ground, bare rocks are more numerous on the N. than on the S., but every shelf, however limited, is marked by a rich vegetation to a height almost inconceivable. The S. slopes and table-lands are still more abundant and varied in their productions than those on the N.; to say nothing of the swampy shores of the Euxine and Caspian, which are, in most cases, nearly impenetrable jungles of the rankest and most varied vegetation. The rising country consists of a succession of small flats, each covered with a most productive earth. The mountain sides and higher plains are clothed with dense forests; and the rivers are frequently unapproachable for a great distance. The forest trees consist of oaks of every species, cedars, cypresses, beeches, savins, junipers, hazels, firs, boxes, pines, alders, and a host of others. Among the standard fruits are found the date palm, the jujube, quince, cherry, olive, wild apricot, and willow-leaved pear. Pomegranates, figs, and mulberries, grow wild in all the warmer valleys; and vines twine round the standard trees to a very great elevation up the mountains. A hard-wood tree, called by the natives *outchelia*, is apparently peculiar; it is of a deep rose colour, very closely grained, and susceptible of an extremely high polish. In addition to the vine, the other climbing plants are innumerable, which mixing with the standards, the bramble fruits (raspberries, blackberries, &c.), and other dwarf woods, form a density of vegetation which it is impossible to penetrate, unless a passage be hewn with the hatchet. Rye, barley, oats, wheat, and millet, are abundantly raised, even as high as 7,500 ft. above the sea; and besides these grains, the warmer plains and valleys produce flowers of every scent and dye, cotton, rice, flax, hemp, tobacco, and indigo, with every variety of cucumber and melon. This list is of necessity very imperfect, as will be evident when it is stated that Guldenstadt has filled 18 quarto pages with the mere names of the various plants seen by him on the banks of the Terek and in Georgia (i. 188—197. 418—430.). It may serve, however, to exhibit the vegetable riches of a region which seems to produce every thing necessary for the existence, and, with the exception of salt, even for the luxurious accommodation of man. (*Guldenstaat*, as above, *et pass.*; *Gmelin*, iii. 22—58. *et pass.*; *Pallas*, i. 340. 357. 364. 368. 379. &c.; *Klaproth*, pp. 167. 309. 391. &c.; *Spencer*, *Circassia*, i. 317. 330., ii. 233. 318. 367. &c.; *W. Cauc.* i. 29. 188—195. 216. &c.; *Monteith*, *G. J.*, iii. 31—35. &c.)

3. *Animals.* — Animal life in the Caucasus is on a scale of magnitude and variety equal to its vegetation. Wolves, bears, lynxes, jackals, foxes, wild cats, a peculiar beast of prey called *chaus*, together with many varieties of deer, wander in the forests and on the sides of the mountains. The smaller fur-bearing tribes are also common, as weasels, polecats, ermines, and moles of many varieties. Hares and every other species of game abound, with chamois and goats, of which the Caucasian goat (*Capra Caucassica*) seems peculiar. Sheep with peculiarly long wool are numerous; and it is even doubtful if, among the mountains, this creature be not yet living in a state of nature. This also is one of the homes of wild cattle; the largest species (the aurochs) being found in its forests; while of the domesticated kinds the varieties are numerous and serviceable. The horses of the Caucasus have been famous from a very high antiquity, the Bechtag Mountain having formerly been called Hippicon (Ἱππικον), from the number of these animals which were grazed upon its sides. (*Ptolemy*, v. 9.) They are not less numerous in the present day, and are among the very finest varieties of the species. Of birds, there are pheasants, partridges, grouse, and the whole tribe of mountain game, a great variety of the crow kind, nearly every species of birds of prey and passage, and some of the best specimens of the domestic varieties. Among insects, the bee and silkworm claim pre-eminence: they are both numerous, and their productions, particularly the honey, formed a considerable branch of trade with Turkey, till the power of Russia sealed the ports of the Black Sea. Other insects are equally numerous, as are also the reptile tribes, among which are some fine species of tortoises and snakes, both harmless and venomous. (*Guldenstadt*, i. 418. *et passim*; *Gmelin*, iii. 58. *et passim*; *Pallas*, i. 341. 410. &c.; *Klaproth*, p. 344. &c.; *Spencer*, *passim*.)

Inhabitants. — There is probably no other part of the world, except Africa, S. of the Sahara, where so many nations and languages are collected within so small a space as in the Caucasus. Guldenstadt gives a list of seven different nations, besides Tartars, who speak languages radically different, and who are again subdivided into almost innumerable tribes, among whom the varieties of dialects are nearly infinite. The principal nations he thus enumerates: — 1. Georgians; 2. Basians; 3. Abchasians; 4. Tcherkessians; 5. Oketiens; 6. Kistiens; 7. Lesghians; 8. Tartars. (*Reise*, i. 458—495.) Of these the most numerous and important are the Georgians and Circassians or Tcherkessians; but the Abchasians and Okesians, called by Pallas and Klaproth Abassians and Osetians, are also powerful tribes. In habits and manners a strong resemblance is observed among them all; they are usually wandering hunters and warriors, for which occupations their country is peculiarly fitted, and only in an inferior degree shepherds or agriculturists. A partial exception must, however, be made to this general character in favour of the Georgians, who reside in towns, and have long possessed a fixed form of government and internal polity; but for the rest, they appear to possess the erratic disposition, reckless courage, boundless hospitality, and much of the predatory habits which mark the Arab and other half barbarous people. (*See* CIRCASSIA, GEORGIA, &c.) It is well known that Blumenbach looked here for the origin of his first and most intellectual race of men (the Caucasian); but for this, as already stated (*ante*, 183.), there is not a particle of evidence, historical or philological. The Caucasians, though surrounded by the means of improvement, and occupying a country more favourably situated than that of Switzerland, have made no progress either in arts or arms; and continue to this day the same unlettered barbarians as in the days of Herodotus. (*Clio*, 203.) They have fine physical forms; but their mental endowments are of the most inferior description.

Name. — This has in all ages been the same among neighbouring nations, though, according to Strabo (xi. 500.), the range was called by the natives Κασπιον ὄρος (Caspian mountains). The names Caspian and Caucasus have, in the opinion of Klaproth (p. 169.), a similar etymology, namely, *Koh-Chaf or Ckasp*, the mountain of *Ckasp*, so called from the Caspii, a powerful people on its sides. (*See* CASPIAN SEA.) Pliny (vi. 2.) derives the name, but with no great appearance of probability, from *Graucasus*, which, he says, in the Scythian tongue, means *nive candidus*. At present the term Caucasus is but little used by the Asiatics, the name for the mountains among the Tartars being *Jal-bus*; among the Turks, *Ckaf-daghi* (Mount Ckaf); and among the Armenians, *Jalbusi-ssar*, a modification of the Tartar term; but Caucasus is still in use among them.

CAUDEBEC, a sea-port town of France, dép. Seine Inférieure, cap. cant., on the Seine, at the mouth of the Caudebec, 6 m. S. Yvetot. Pop. 2,713. The parish church, built in the 15th century, is remarkable for the boldness and delicacy of its architecture. It has some manufactures of cotton, &c. Previously to the revocation of the edict of Nantes, it was comparatively flourishing; but that disastrous measure gave a blow to its manufactures and commerce, from which it has not recovered.

its port, though safe, commodious, and advantageously situated between Havre and Rouen, is but little frequented. (*Hugo, Seine Inférieure; Dict. Géog.*)

CAUDETE (an. *Biggera*), a town of Spain, prov. Murcia, 8 m. N.N.W. Villena, 12 m. N.E. Yecla. Pop. 6,000. It was formerly fortified; and has a church, 2 convents, an hospital, several distilleries, and a palace of the Bishop of Orihuela. On the heights in the vicinity a battle was fought in 1706, the day after the great victory gained by the Duke of Berwick at Almanza, between a detachment of the combined French and Spanish forces and those of the Archduke Charles, which ended in the defeat of the latter.

CAUFIRISTAN or CAFFRISTAN, a region of Central Asia, occupying a great part of the Hindoo Koosh and a portion of the Bolor Tagh mountains, chiefly between lat. 35° and 36° N., and long. 70° E. and the W. limits of Cashmere; having N. Budukshan, E. Little Tibet, S. the dom. of the Punjab and Caubul, and W. those of Caubul and Koondooz. The hills N. of Bajour and Kooner form its S. limit; its other boundaries have been very imperfectly defined. The whole of this country is a lofty Alpine tract of snow-capped mountains, deep pine forests, interspersed with small but fertile and often populous valleys, and table-lands sometimes 10 or 15 m. across. Torrents and rivers are numerous, and are crossed by stationary wooden bridges or hanging bridges of rope and osiers. The cold of the winter is severe, but the valleys afford an abundance of grapes and other fruits, and the hills good pasture for sheep and goats. The Caufirs (infidels) who inhabit this region are an independent nation, said by Baber and Abul Fazel, and believed by themselves, to be descended from the troops of Alexander the Great. They are supposed by some to have been driven thither from the valley of the Oxus, on its being overrun by the Mohammedans; but Sir A. Burnes and Mr. Elphinstone suppose they had emigrated, through a similar cause, from the neighbourhood of Candahar. They are remarkable for the fairness and beauty of their complexions; are liberal, social, and extremely hospitable: they never combine in war against their neighbours, but retaliate invasions fiercely, and fight with great bravery and determination. They indulge an unceasing hatred against Mohammedans, and a Caufir adds an additional ornament to his dress, or another trophy to a high pole before his door, for each Mussulman he has slain. All wear tight clothes; those of some tribes made of black goat skins, and of others of white cotton: all suffer their hair to hang over their shoulders, and each looks upon every one else as a brother who wears ringlets and drinks wine: to the latter they are much addicted, and grape juice is given to children at the breast. They eat the flesh of all kinds of animals, except the dog and jackal, and use both tables and chairs of a rude construction: the women perform the business of tillage, as well as all laborious domestic occupations. Fine rice, wheat, and barley, are the principal grains cultivated; honey, vinegar, cheese, butter, milk, bread and fruit, constitute the rest of their food. Both sexes drink wine to excess. Their dwelling-houses are usually built of wood upon hill-slopes, the roof of one row of houses forming the street to those above it: the only roads in the country are footpaths. Their weapons are spears, scimitars, and bows and arrows. After battle the victors are crowned with chaplets of mulberry-leaves. Both sexes wear ornaments of gold, silver, and other metals; and drinking-cups of the precious metals are often used, and much prized by them. Their language is unintelligible to Hindoos, Usbecks, or Afghans; it contains a mixture of words from the Hindoo, Afghan, and Persian tongues; but the major part of its roots are different from either: they have no books, and neither understand reading nor writing. They adore a supreme being, whom they call Doghan, and to whom they sacrifice both cows and goats; but address themselves to subordinate deities, represented by idols of wood or stone, who, they say, intercede with the chief deity in their behalf: fire is a requisite in every religious ceremony, although no veneration is paid to that element itself. They neither burn nor bury their dead, but expose the corpse in an open coffin, in a forest jungle or on a mountain, and after a certain time collect as many of the bones as possible, and deposit them in a cave; these ceremonies are solemnised with triumph, dances, and sacrifices. Music, dancing, which is eagerly practised by all classes, conversation, and carousals, form their chief amusements. They have priests, but they do not possess an extensive influence: they live under different chiefs, but little farther is known respecting their government. The slavery of such as have lost their relations is universal: some of the Caufirs possess many slaves and cattle, and much land. By old writers this region is often named Kuttore: it was invaded by Timour, and in 1780, unsuccessfully, by a confederacy of the surrounding Mohammedan nations. (*Elphinstone's Caubul*, ii. 373—377.; *Burnes's Trav.* iii. 183—185.; *Hamilton's E. I. Gaz.* i. 310—313.; *Journal of Asiat. Soc. Bengal*, iii.—vi.; *Wilson's (H. H.) Notes to Indica of Ctesias.*)

CAUNES (LES), a town of France, dép. Aude, on the Argent-Double, 11 m. N.E. Carcassonne. Pop. 2,258. It has a fine parish church, formerly belonging to the Benedictine abbey suppressed at the Revolution; with distilleries, tanneries, dye-works, marble-works for working the marble found in the neighbouring mountains, &c. (*Dict. Géog.*)

CAUSSADE, a town of France, dép. Tarn-et-Garonne, cap. cant., in a fertile country, near the Caude, 12 m. N.E. Montauban. Pop. 4,540. It is handsome, well built, and has broad and straight streets; has numerous flour-mills, with manufactures of woollen and linen stuffs, and carries on some trade in corn, saffron, and truffles.

CAVA, a town of Naples, prov. Principato Citra, cap. cant., in the middle of the agreeable valley of Fenestra, 26 m. E.S.E. Naples. Pop. 24,000.? but this includes the pop. of several surrounding villages. It has a cathedral, three other churches, a convent for noble ladies, a charity workhouse, an hospital, and a seminary. Silk, cotton, and woollen stuffs are manufactured in the town and the adjacent villages. The territory is not very fruitful, but the inhabitants have become rich by their industry and commerce. About a mile from the town is the magnificent Benedictine convent of La Trinità, with a fine library. (*Dict. Géogr.; Swinburne*, ii. 114., 4to. ed.)

CAVAILLON (anc. *Cabellio*), a town of France, dép. Vaucluse, cap. cant., on the Durance, near where it is joined by the Coulon, at the foot of a mountain, 13 m. S.E. Avignon. Pop. 7,041. It is *triste*, ill built, with narrow and dirty streets. The fortifications by which it was formerly surrounded were destroyed during the Revolution; the bishopric of which it was the seat has been also abolished. It has a considerable trade in dried fruits and preserves, shoes, and nuts.

This is a very ancient town. The Romans are believed to have planted a colony in it, and, at all events, they embellished it with several magnificent edifices. But having been since repeatedly overrun and pillaged by barbarians, and having suffered much from an earthquake in 1731, comparatively few remains of antiquity are to be found either in the town or in its vicinity. The best preserved, though even that is much dilapidated, is a fragment of a triumphal arch supposed to belong to the age of Augustus. (*Hugo*, art. *Vaucluse*.)

CAVAN, an inl. co. of Ireland, prov. Ulster, having N. Fermanagh, E. Monaghan, S. Longford, Meath, and Westmeath, and W. Leitrim and Longford. Area, 473,749 imperial acres, of which 30,000 are unimproved mountain and bog, and 21,987 water, consisting principally of loughs Shillin, Ramor, and Oughter. The Shannon has its principal source in the N.W. part of this co., and it is traversed by the Erne, Annalee, &c. Surface hilly, and soil generally poor. There are some large estates, but the greater number are of moderate size. About 4-5ths of the land under tillage. Agriculture in the most depressed state; holdings generally small, and the competition for them excessive. Spade cultivation is very general, so much so that in some parishes there is hardly a plough. Oats and potatoes principal crops, but some wheat is raised, and flax. Cottiers have generally pigs and goats; the former being sold to pay the rent, and the latter kept for their milk. Average rent of land 13*s*. 7½*d*. an acre. Linen manufacture widely diffused, having not a little contributed to the subdivision of the co. It is affirmed that the condition of the peasantry has been materially deteriorated during the last 20 years. Minerals little known. Cavan is divided into 7 baronies and 30 parishes, and sends 2 mems. to the H. of C. for the co. Registered electors in 1838-39, 2,406. Principal town Cavan. The co. had, in 1831, 38,917 inhabited houses, 40,338 families, and 227,933 inhab., of whom 113,174 were males and 114,759 females.

CAVAN, an inland town of Ireland, co. Cavan, prov. Ulster, 60 m. N.W. Dublin. Pop. in 1821, 2,322; in 1831, 2,931. Pop. of par., in 1834, 5,534, of whom 1,690 were of the estab. church, 103 Prot. diss., and 3,741 Rom. Cath. Cavan, though the assize town, is with few exceptions, meanly built, long lines of suburbs being formed of thatched mud cabins. The public buildings are—a large parish church and Rom. Cath. chapel; an endowed school of royal foundation, having accommodation for 100 resident students; a fine court-house, a co. prison on the radiating plan, and an infirmary. A garden of Lord Farnham's near the town, has been thrown open as a promenade for the inhabitants. The corporation, under a charter of James I., in 1610, consisted of a sovereign, 2 portreeves, 2 burgesses, and an unlimited commonalty; but having been deprived at the Union of the right of sending mem. to the H. of C., it has fallen into desuetude. The assizes for the co., general sessions at Hilary and midsummer, and petty sessions every week, are held here. Trade inconsiderable, and chiefly in oats and butter. Markets are held on Tuesdays; fairs on Feb. 1., April 4., May 14., June 30.

Aug. 14., Sept. 25., and Nov. 12. Branches of the Provincial and Agricultural banks were opened here in 1834 and 1836. Post-office revenue in 1831, 762*l*.; in 1836, 817*l*. A mail-coach and a stage-coach from Dublin to Enniskillen pass daily through the town, and a coach from Dublin to Cavan plies 6 days in the week, carrying at an average 9 passengers each trip. (*Stat. Survey; Railroad Rep.*)

CAVERY, a river of S. Hindostan, the most considerable and useful S. of the Krishna; both Mysore and the Carnatic owing much of their agricultural wealth to the water it distributes. It rises in Coorg, bounds Coimbatoor N.E., and after a winding course of 450 m., chiefly in an E. direction, falls into the sea by various mouths in the district of Tanjore, where it is industriously made use of for irrigation. It is filled by both monsoons, but is not navigable for large vessels.

CAVERYPAUK, a town of Hindostan, prov. Carnatic, 57 m. W.S.W. Madras, in the neighbourhood of which is an immense tank 8 m. long by 3 m. broad, faced with large stones, and supported by a mound of earth 30 ft. high. This is perhaps the finest work constructed for the purpose of irrigation throughout the S. of India. (*Hamilton's E. I. Gaz.* i.)

CAVITE', a town of Luzon, one of the Philippine Islands, in the Bay of Manilla, 3 m. S.W. that city, of which it is the port; lat. 14° 34′ N., long. 120° 48′ E. Pop. 4,000.? It is the naval dépôt of all the Spanish possessions in the East, and is built on the E. extremity of a low bifurcated peninsula, stretching into the sea for about 3 m., having between its two extremities the outer harbour, while the inner harbour is situated to the S. of the town: neither has more than 4 fathoms water, though very large ships moor in the inner harbour. The houses of Cavité, which are two stories high, are built chiefly of wood, their windows being furnished with a semi-transparent shell instead of glass. It has an arsenal, a marine hospital, some well-built churches, and several convents; but has of late years greatly decreased in size and importance. (*Hamilton's E. I. Gaz.* i. 377.; *White's Voyage, &c.*)

CAWNPORE or CAUNPOOR (*Khanpura*), a district or collectorate of Hindostan, prov. Allahabad, presid. Bengal, composed of cessions from the nabob of Oude, between lat. 26° and 27° N., and long. 79° 30′ and 80° 30′ E., having N.W. the distrs. of Etawah, Belah, and Furruckabad, N.E. the Oude reserved territories, S.E. the Futtehpoor and Kalpee distrs., and S.W. Bundlecund. Area 2,650 sq. m. Pop. probably nearly a million. This distr. is bounded N.E. by the Ganges, and intersected in its entire length by the Jumna: it is therefore almost wholly comprised within the Doab. Surface flat; soil highly productive, and upon the whole tolerably well cultivated, though in some parts there are extensive wastes. Maize, barley, and wheat, turnips, cabbages, and other European vegetables; grapes, peaches, &c., are grown, and the sugar-cane flourishes in great luxuriance. Agriculture prospers in the neighbourhood of the cap., owing to the presence of a European market, and consequent high prices. The assessment on the land is high; and in fact the prov. was on its first coming into our possession very much over-assessed, and suffered greatly in consequence. In 1814, 1,768,745 bigas, or about 3-5ths of the surface, were reported to be under tillage. The land-tax for the same year was 273,630*l*., being about 1¼ rupee per biga; nearly all of which sum was realised. In 1829-30 the land revenue amounted to 317,580*l*. There are about 2,000 villages in this distr. which possess lands; but the perpetual settlement is also established. Nearly all the pop. are Hindoos, the heads of the villages being mostly of the Rajpoot caste. Offences are frequent, but yearly diminishing as the efficiency of the police increases; *dacoity*, or gang-robbery, was frequent in 1823, but was committed only by gangs out of the Oude reserved territory. *Thuggee*, or murder by professional murderers, has also prevailed greatly in this distr.; and in the above-named year, the average was about 10 *thuggees* yearly. The principal towns are Cawnpore, the cap., Resoulabad, Jaugemow, and Acberpoor.

CAWNPORE, the cap. town of the above distr., and chief British military station in the ceded provinces, on the W. bank of the Ganges, 38 m. S.W. Lucknow, and 100 m. N.W. Allahabad; lat. 26° 30′ N., long. 80° 13′ E. The town extends irregularly for 6 m. along the bank of the river, which is here a mile broad, and lined by the bungalows of European officers. It is built in a very straggling manner, with the exception of a tolerable main street nearly parallel with the military lines, composed of well-built brick houses two or three stories high, with wooden balconies in front. Excepting its size, few circumstances about Cawnpore attract much notice; the European public buildings are of simple architecture, and confined to works of absolute necessity; the chief are the military hospital, gaol, assembly-room, and custom-house. A Protestant church has been erected by public subscription within the last few years: most of the other religious edifices are mosques, some of which are handsome. Shops large and tolerably well supplied, provisions being about half the price they bring in Calcutta. The European private houses are roomy, one story high, with sloping roofs, first thatched and then tiled. The officers' bungalows along the banks of the Ganges are encircled by gardens surrounded by mud walls. At the N.W. extremity of the town are the public magazines protected by a slight entrenchment; and farther on, in the same direction, is the old town of Cawnpore, a place of no consequence, and containing no interesting relics of antiquity. A free-school was established here in 1823, which is attended by Europeans, Mohammedans, and Hindoos, who receive instruction together, and the progress of which is most satisfactory. It is supported partly by a government grant of 4,800 rupees a year. Cawnpore is not a pleasant place of residence for Europeans. Its great heat and the clouds of dust to which it is subject are represented as most distressing. (*Hamilton's E. I. Gaz.* i. 375, 376.; *Mod. Trav.* ix.; *Parl. Reports, &c.*)

CAXAMARCA, a city of Peru, cap. prov. of same name, in a fertile and well-cultivated valley in the Andes, 370 m. N.N.W. Lima; lat. 7° 8′ 38″ S., long. 78° 36′ 15″ W. Pop. about 7,000, chiefly Indians and Mestizoes. Its name is equivalent to "place of frost," and has been probably derived from its being sometimes visited by frosty winds from the E.; but, in general, the climate is excellent. Most of the houses are tiled and whitewashed. The churches, which are numerous and handsome, are built of stone richly cut, and are ornamented with spires and domes. They were formerly celebrated for the quantity of gold and silver decorations they contained. There are also some convents and nunneries. The inhab. are industrious, and considered the best silver and iron workers in Peru. "I have," says Mr. Stevenson, "seen many very handsome sword-blades and daggers made here; pocket-steels and bridle-bits most curiously wrought, beside several well-finished pistol and gun locks. Literature would prosper here, were it properly cultivated; the natives are fond of instruction, and scholars are not rare; many of the richer inhab. send their children to Truxillo and Lima to be educated." (*Stevenson's Peru*, ii. 132.) The inhab. of the interior resort thither to sell their own produce and manufactures, and to purchase such other as they may require. Hence, a considerable trade is carried on with Lambayeque, and other places on the coast, to which Caxamarca furnishes manufactured goods, such as baizes, coarse cloth, blankets, and flannels; and receives in return European manufactures, soap, sugar, cocoa, brandy, wine, indigo, Paraguay tea, salt-fish, iron, steel, &c. Some of the shops are well stored with European goods. The markets are well supplied with fresh meat, poultry, bread, vegetables, fruit, butter, cheese, &c. at very low prices. About a league E. from the city are some hot and cold springs, which were used by the incas for baths, and are still employed for the same purpose.

Caxamarca is a place of considerable celebrity in the history of Peru, and of Spanish atrocity. The incas had a palace here; and it was here that Friar Vincente Valverde (a fit priest for such a hero as Pizarro) delivered his famous or rather infamous harangue to the Inca Atahualpa, which was immediately followed by the butchery of the Peruvians, and by the imprisonment, accusation, and murder of the inca. It is a singular fact, that a family claiming a lineal descent from Atahualpa is now living in Caxamarca, in a part of the palace in which their ancestor was murdered. (*Stevenson's Peru*, ii. 129. &c.; *Robertson's America*, book vi.)

CAYENNE, a sea-port town of French Guyana, cap. of that colony, at the N.W. extremity of the isl. of same name, at the mouth of the Oyaque; lat. 4° 50′ 15″ N., long. 52° 14′ 45″ W. Pop (1837) 5,220, of whom 2,841 were free, and 2,379 slaves. The town covers a surface of about 70 hectares, and contains about 500 houses, mostly of wood. It is divided into the old and new towns: the former, which is ill-built, contains the government house and the ancient Jesuits' college: it is separated from the new town by the Place d'Armes, a large open space planted with orange-trees. The new town is larger than the old, and was laid out at the end of the last century; its streets are wide, straight, mostly paved, and clean; it has a handsome church, with some large warehouses and good private residences. The old town is commanded by a fort, which, with some low batteries, protects the entrance of the harbour. The latter is shallow, but otherwise good, and well adapted for merchant-vessels of moderate size. There are two quays for loading and unloading. The roadstead at the mouth of the Oyaque, though small, is the best on the coast. Its holding-ground is good, and it has every where from 12 to 13 ft. water; trading vessels lie in it within 1 m. of the land, and 2 m. of the town. Ships drawing more than 15 ft. water anchor about 6 m. from Cayenne, near a rocky islet called "L'Enfant Perdu." Cayenne is the centre of the whole trade of the colony. (*See* GUAYANA, FRENCH.) It is the seat of a royal court, a court of assizes

and of tribunals of the peace and original jurisdiction. It was founded about 1635. (*Hugo*, iii. 313.; *Notices Statist. sur les Colonies Françaises*, 1838.)

CAYENNE. *See* GUIANA (FRENCH).

CAYLUS, a town of France, dép. Tarn-et-Garonne, near the right bank of the Bonnette river, and the high road between Montauban and Rhodez, 24 m. N.E. the former city. Pop. (1836), with commune, 5,424. It has a considerable trade in corn, and 11 fairs annually.

CAZALLA DE LA SIERRA, a town of Spain, prov. Seville, on the crest of the Sierra Morena, 13 m. S.E. Guadalcanal. Pop. 9,437. It has a church, five monasteries, and two hospitals. Its environs have many Roman and Arabic antiquities, and ruins of country residences of more modern date; with mines of silver, iron, sulphur, amianthus, and copper; and quarries of beautifully variegated marbles. The mountains are the resort of wild boars and wolves, which make much havoc among the cattle.

CAZE'RES, a town of France, dép. Haute Garonne, cap. cant., on the Garonne, 31 m. S.W. Toulouse. Pop. 2,620. A handsome promenade separates the town from the suburbs. There are fabrics of hats, with dye-works and tanneries.

CEFALU, a sea-port town of Sicily, prov. Palermo, on the Tyrrhenean Sea, at the foot of a rock, 40 m. E.S.E. Palermo; lat. 38° N., long. 14° 13′ 57″ E. Pop. 8,793. It is surrounded by a bastioned line wall, but the works are old and weak. The streets are tolerably regular, and there is a good cathedral and some other churches, with a school of navigation. The port is small, and the trade of the place but inconsiderable. On the summit of the hill above the town are the ruins of a Saracenic castle. (*Smyth*, p. 95.)

CEHEJIN (*Segisa*), a town of Spain, prov. Murcia, on the river Caravaca, 3 m. E. Caravaca town, and 40 m. W.N.W. Murcia. Pop. 10,000. It is situated in a well cultivated and fertile district. The principal streets are well paved, and the houses good — some of them magnificent — marble being abundant in the neighbourhood. It has a church, a convent, and an ancient castle, with several distilleries, and manufactures of coarse paper, linen, and sandals.

CELANO, a town of Naples, prov. Abruzzo Ultra II., cap. cant., near the lake Fucino or Celano, 20 m. S.S.E. Aquila. Pop. 4,087. It has one collegiate and some other churches, and a manufactory of paper. For an account of the Lake of Celano, see FUCINO (LAKE OF).

CELEBES, a large isl. of the E. Archipelago, forming the centre of its 2d division; stretching from lat. 2° N. to nearly 6° S., and from long. 119° to 125° E.; having N. the Sea of Celebes, W. the Straits of Macassar, E. the Molucca and Pitt's Passages, and S. the Flores Sea. Area estimated at 75,000 sq. m. Pop. unknown, but supposed to be between 1,500,000 and 2,000,000. Its shape is singularly irregular; it is deeply indented by three great bays, separated by four peninsulas, diverging N., E., and S.

Celebes, unlike most of the other great islands of this archipelago, abounds in extensive grassy plains, free from forests, which are looked upon as the common property of the tribes who live upon them, by whom they are carefully guarded from the intrusion of aliens. There are only three rivers of any consequence; the Chiurana, which rises near the centre of the island, and running S. through the state of Boni, falls by several mouths into the bay of the same name; a second stream, having a N. direction; and a third, which discharges itself on the W. coast, S. of Macassar. The Chiurana is navigable for ships to some distance; and native boats pass up it considerably farther into a fresh-water lake. Volcanos are said to exist in the N. division of the isl. Gold is found in Celebes; but in a less quantity than in Borneo, and chiefly in the sands of the streams. Timber is not very plentiful; teak-trees are generally few; but a large forest of them exists in one part of the isl., which the natives report to have been raised from imported seed. The vast plains afford abundant pasture and cover for a variety of the best game, deer, wild hogs, &c. The tiger and leopard, though common in the W. parts of the archipelago, are here unknown. The horses of Celebes, though seldom exceeding 13 hands high, are larger built, and unite a greater share of blood and strength, than any other breed of the E. islands; they are regularly trained for hunting, and are noted for fleetness and perseverance. Rice, maize, and cassava, with cotton and tobacco, are the chief articles grown. The S. peninsula being the most healthy, is by far the most extensively peopled, and contains the two principal states of the island, those of Boni and Macassar. The centre of the island is said to be inhabited by Horaforas (*see* E. ARCHIPELAGO), supposed to be aborigines: the brown race consists of a number of tribes, agreeing remarkably in person, but divided into four or five different nations, of which that of the Bugis is by far the most considerable. They are usually squat, robust, and somewhat heavily formed, though not ill built; their medium height is a little above 5 ft.; faces round; cheek-bones high; nose small, and neither very prominent nor flattened; mouth wide, and teeth fine, when not discoloured by art. They are more distinguished for a revengeful disposition than any of the other natives of this archipelago. Notwithstanding most of the tribes have long passed that stage of society in which the chase is pursued for subsistence, they follow it with great ardour; and no sooner is the rice seed cast into the ground, than the chiefs and their retainers turn with enthusiasm to the sports of the field, in parties of frequently not less than 200 horsemen.

The Wadju, or Tuwadju tribe, inhabiting the body of the island, are distinguished as a commercial and enterprising people. The natives of Celebes and Bali are the most celebrated in the archipelago for their manufactures of cloth, their fabrics ranking before all others for fineness and durability; they are, however, ignorant of the art of printing cloths, or of giving them the brilliant colours of the fabrics of the Asiatic continent. The inhabitants import cotton, birds' nests, tripang, sharks' fins, tortoise-shell, agar-wood, &c.; and, together with gold in small quantities, and hides, re-export these articles to China, by the junks which annually trade to Celebes. The several chiefs have often a monopoly of some article of produce, as brass, betel-nut, opium, salt, &c.

The various independent nations of Celebes have each their peculiar form of government; but these are for the most part limited monarchies, the sovereign being controlled by the subordinate chieftains, and these again frequently by the mass of the people. The federal state of Boni consists of eight petty states, each governed by its own hereditary despot; while the general government is vested in one of the number elected from among the rest, but who can do nothing without the assent of the others.

In the state of the Goa Macassars, the king is chosen by 10 electors, who also choose an officer invested with powers similar to those of the mayors of the palace of France, or the ancient justiza of Aragon, and who can, of his own authority, remove the king himself or any one of the council, and direct the electors to proceed to a new election.

In the Bugis state of Wadju, 40 chiefs constitute the great council of the nation, which is divided into three chambers, from each of which two members are nominated, who, in their turn, elect the chief of the confederacy. The "Council of Forty" decide on all questions of peace and war. Women or infants of the privileged families in Celebes are commonly eligible to the throne; and women very frequently actually exercise the powers of sovereignty; they are throughout the island associated on terms of equality with the men, taking active concern in all the business of life. They appear in public without scandal, and are often consulted on public affairs. Though the husband invariably pays a price for his wife, she is never treated with contempt or disdain.

Notwithstanding the symptoms of a considerable advance in civilisation now enumerated, a great deal of rudeness and barbarity exhibit themselves among the inhabitants. Crimes are frequent; thefts and robberies extremely so: a total disregard of human life seems to prevail, and murder and assassination for hire are by no means rare. Mohammedanism is the predominant religion, especially in the S. part of the island: it was introduced by the Malays; but the inhab. generally are by no means strict as to its injunctions. The languages spoken belong to the great Polynesian family, but differ from those common in the W. of the archipelago, in being more soft and vocalic, and having less intermixture of Sanscrit: the two dialects of the Bugis and Macassars are the principal, and amongst the most improved tongues of the archipelago: the Bugis have a literature by no means contemptible. In their costume, the people of Celebes avoid showing the knee; they wear a long coloured cloth, the end of which they throw over the shoulder. They blacken the teeth, and use unctuous cosmetics: their ornaments are flowers, gold trinkets, and diamonds, krisses, betel-boxes, &c. They appear to have no scientific treatises; but are not wholly ignorant of some of the constellations, by the observation of which they navigate their prows.

Celebes was first visited by the Portuguese in 1512, who were expelled by the Dutch in 1660. In 1811 the territories belonging to that nation fell under the British dominion; but in 1816 were restored. The principal Dutch settlement is Macassar, which contains Fort Rotterdam, the residence of the governor. The Dutch have other settlements on the bays of Tolo and Tominie; and most of the native states are subordinate to them. (*Crawfurd, Hist. of the Indian Archipelago*, 3 vols.; *Hamilton, E. I. Gazetteer*, i. 377—380.)

CEPHALONIA (an. *Cephallenia*), an isl. in the Mediterranean, and the largest of those composing the Ionian republic, near the W. coast of Greece, opposite the

Gulph of Patras; between lat. 38° 3′ and 38° 29′ N., and long. 20° 21′ and 20° 49′ E.; 8 m. N. Zante, 5 m. S. Santa Maura, and 64 m. S.S.E. Corfu. Length, N.N.W. to S.S.E., 32 m.; breadth very unequal. Area 348 sq. m. Pop. (1833) 56,450. Its aspect is generally mountainous and barren, and though some spots are rich and fertile, the soil is, for the most part, only scantily spread over the limestone rock, of which the country consists. The shores are indented by numerous bays, of which that of Argostoli in the S.W. is the principal. It extends for 7 or 8 m. inland, and has, in most parts, deep water and good anchorage. In the interior of the island an elevated range, called the Black Mountain, runs N.W. to S.E., the highest point of which (an. *M. Œnos*), is 5,000 ft. above the level of the sea. Surface generally uneven; the only plain is in the S.W. near Argostoli, which is also the most densely inhabited part of the island. Climate mild; but storms and heavy rains, sudden changes of temperature, and earthquakes are frequent. In 1833, the island contained 32,934 acres of cultivated, and 189,786 acres of uncultivated land. Wheat, Indian and other corn, pulse, currants, olive oil, wine, cotton, flax, and salt, constitute the chief products. The principal article of export is currants; and next to it, wine and oil. When Dr. Holland visited Cephalonia, the annual produce of currants was estimated at from 5,000,000 to 6,000,000 lbs. The Valonea oak abounds. Tenures of land are mostly annual, on the *metayer* system. Property is much divided, few proprietors having a revenue of 1,000*l.* a year. Cephalonia is divided into 4 districts; sends 7 mem. to the legislative assembly, and 1 to the senate. Argostoli and Lixuri are the chief towns; they are situated on either side the Bay of Argostoli. At the mouth of this inlet there is a lighthouse; and at Lixuri, a mole for the security of trading vessels has been recently constructed. Near Argostoli, a curious undershot water-mill was built by an English merchant in 1835. The roads were formerly very bad, but have been greatly improved since the island has been placed under British protection. Cephalonia had, in 1833, 11 public schools attended by 544 scholars, and supported by the government at an annual expense of 770*l.*: there were besides 78 private schools, with 1,220 students. Most of the pop. belong to the Greek church; the remainder are chiefly Roman Cath. Lixuri is the seat of a Roman Cath. bishop. The inhabitants of this island are active, enterprising, noted for their industry and commercial spirit, "bustling, loquacious, and verbose; and with a temper disposed to litigation and intrigue." (*Holland*, p. 40.) A great number of them are physicians; and, like many other of their countrymen, emigrate and settle elsewhere. The island was anciently known by several names: Thucydides calls it Tetrapolis, from its four principal cities; Samos, Pali, Krani, and Pronos, remains of which still exist. The site of Samos exhibits very extensive ruins, amongst which many medals, vases, statues, &c. have been found, and Dr. Holland traced the Cyclopean walls of Krani, at the head of the Gulph of Argostoli, in almost their entire extent. Cephalonia belonged successively to the Byzantine empire, Normans, Venetians, Turks, and Venetians again; from whom it was taken by the French in 1799. (*Private MS. Report; Parl. Papers*, 1834; *Hobhouse and Holland's Trav. in the Ionian Isl.*, &c.)

CERAM, a considerable island of the E. Archipelago (third division), chiefly between lat. 3° and 4° S., and long. 128° and 131° E.; length, E. and W., about 185 m. by 30 m. average breadth; area 5,500 sq. m. A mountain chain runs E. and W. through the centre of the island, the highest peak of which is apparently about 7,000 ft. above the level of the sea. Ceram is chiefly distinguished for its large forests of sago-palm, and its fine woods for cabinet-work; in one portion of it great quantities of nutmegs and cloves were formerly produced; but the trees were extirpated by the Dutch about 1657. The shores of Ceram abound with rare and beautiful shells; its interior is peopled by tribes of Horaforas. (*See* ARCHIPELAGO, EASTERN.) A cluster of small islands, called Ceram Laut, lies off the E. end of Ceram. (*Hamilton's, E. I. Gaz.*, &c.)

CE'RET, a town of France, dép. Pyrenées Orientales, cap. arrond., near the Tech, 15 m. S.S.W. Perpignan, and 5 m. from the frontiers of Spain. Pop. 3,302. It is the seat of a departmental college and of a court of primary jurisdiction. It was here that the plenipotentiaries met to fix the limits between France and Spain, in 1660.

CERIGNOLA, a town of Naples, prov. Capitanata, cap. cant., 23 m. S.E. Foggia. Pop. 9,000. It is a well-built town, with a college, several convents, and an hospital. In the neighbourhood of this town, in 1503, Gonsalvo de Cordova gained a decisive victory over the French forces commanded by the Duc de Nemours, who was killed in the action.

CERIGO (an. *Cythera*), the most southerly of the 7 principal Ionian islands, situated at a considerable distance from the others, near the S. extremity of the Morea, between lat. 36° 7′ and 36° 23′ N., and long. 22° 52′ 30″ and 23° 7′ 30″ E. Length, N. to S., 20 m.; greatest breadth, 12 m. Area 116 sq. m. Pop. (1833) 8,760. Surface mountainous, rocky, and mostly uncultivated; but some parts of it produce wheat, maize, pulse, cotton, flax, wine, and olive oil; the latter of which is highly esteemed. The honey of Cerigo is also of very good quality. It has a greater number of horned cattle than any of the other islands. The shores are abrupt; the sea round Cerigo is much disturbed by currents; and gales dangerous to shipping are frequent. The best anchorage is at St. Nicolo, on the E. coast. The principal town is Kapsali, at the S. extremity, with a pop. of about 5,000; houses mostly of wood and ill-built. Though now comparatively insignificant, Cythera was formerly a place of considerable importance, and probably of wealth, if we may judge from the ruins still extant in various parts of the island. It was the birthplace of Helen, and sacred to Venus, in honour of whom a temple, said to have been founded by Æneas, was erected. (*Larcher, Mémoire sur Venus*, 144.) Cythera was originally called *Porphyris*, from the nature of its rocks. It was long a naval station of the Lacedæmonians; and belonged successively to Macedon, Egypt, Rome, and Venice. The little island of Cerigotto, an. *Ogilia*, 4 m. long, and inhabited by about 30 families, lies midway between Cerigo and Crete, about 20 m. from either. (*MS. Rep.; Parl. Papers*, 1834, &c.)

CERRETO, a town of Naples, prov. Terra-di-Lavoro, cap. cant., on the declivity of Mont Matera, near the Cusano, 10 m. E.S.E. Piedimonte. Pop. 5,000. It is well built, and is one of the most agreeable towns in the province: it has a fine cathedral ornamented with superb pictures, a collegiate church, 3 convents, a seminary, 2 *monts-de-piété*, and considerable manufactures of coarse cloth. In 1656, it was wasted by the plague, and in 1688, an earthquake destroyed great part of the town.

CERVERA, a city of Spain, prov. Catalonia, on an eminence, 57 m. N.W. Barcelona, 102 m. E. Saragosa. Pop. 6,000. It stands on a considerable eminence, is surrounded by walls, and has an ancient decayed castle. It has a church, five convents, an hospital, and five colleges. Some of its streets are well paved. The church is a Gothic building, with three naves; and the university, established in this city by Philip V., is a large, magnificent structure. The vicinity produces wine, oil, almonds, grain, pulse, cattle, and plenty of game. The prospect from the town is very fine, particularly towards the extensive plain of Urgel on the W.

CERVIA, a town of the Papal States, leg. Forli, near the Adriatic, with which it communicates by a canal, 11½ m. S.E. Ravenna; lat. 44° 15′ 49″ N., long. 12° 21′ 7″ E. Pop. 3,500.? It is a seat of a bishopric; is regularly built; has a cathedral and several churches and convents. To the W. of the town is a vast marsh, called the *Valle di Cervia*.

CESENA, a town of the Papal States, leg. Forli, on the Sario, at the foot of a mountain, 10 m. S.E. Forli. Pop. 15,000. It is the seat of a bishopric; is well built; has a cathedral, a handsome town-house, 14 convents for men, and 7 for women, a seminary, a society of agriculture, arts, &c., with silk filatures, and a considerable trade in wine and hemp, produced in its territory.

CETTE, a fortified sea-port town of France, dép. Herault, cap. cant., on the narrow tongue of land separating the lagoon of Thau from the sea, and on the declivity and at the foot of a calcareous hill, which advances into the Mediterranean in the form of a peninsula, 15 m. S.W. Montpellier; lat. 43° 23′ 37″ N., long. 3° 41′ 5″ E. Pop. 11,648. The town is well built, but it derives its entire importance from its harbour, and from its being the port, on the Mediterranean side, of the Canal du Midi. The harbour is formed by two lateral moles, with a breakwater across the entrance. There are forts on both these moles, and on the principal is a lighthouse, the lantern being elevated 84 ft. above the level of the sea. The harbour is perfectly safe in all weathers; has from 16 to 19 ft. water; and can accommodate about 400 sail of large and small ships. A broad and deep canal, bordered with quays, establishes a communication between the port and the lagoon of Thau; and, consequently, with the Canal du Midi on the one hand, and with the canals leading to the Rhône on the other. Cette is the centre of a great deal of traffic, particularly of the coasting description; and from about the middle of November to the end of March freights are generally to be met with. The articles of export and import are, of course, those conveyed thither by the canal, or brought thither to be carried away by it. About 36,000 tons of wine, and 4,000 tons of brandy, are annually exported. A good deal of Benicarlo wine from Spain, for mixing with claret, is imported. It has a court of summary jurisdiction, a school of navigation, an exchange, barracks, theatre, &c. Ships are built here, and there are glass, soap, and tobacco-works, with distilleries, and a manufactory of highly esteemed liqueurs. The fishery of sardines is successfully carried on along the coast; and the salt-works on the adjoining lagoon are extensive, and

furnish employment to many individuals. Cette is of modern date, having been founded in 1666, to serve as a port for the great canal. (*Hugo*, art. *Herault*; *Plan of Cette*; and *Private Information*.)

CEUTA (an. *Septum* or *Septa*), a sea-port town of N. Africa, in the possession of Spain, coast of Morocco, directly opposite Gibraltar, and at the S.E. extremity of the straits, on a narrow peninsula stretching about 3 m. E.N.E. into the Mediterranean, and having a capacious bay on its S., and a smaller one on its N. side. The E. part of the peninsula is occupied by the mountain of Almina, on the highest point of which is the Castle of Ceuta, 14 m. S. by E. from Europa Point; lat. 35° 54′ 4″ N., long. 5° 17′ W. This mountain, which, towards the sea, is fenced round by inaccessible rocks, is the *Abyla* Proper of the ancients, and is famous as one of the pillars of Hercules; the rock of Gibraltar (*Mons Calpe*) being the other. The citadel, a very strong fort, is built across the narrowest and lowest part of the peninsula, at its junction with the mainland. The town, immediately to the E. of the citadel is situated at the foot and on the declivity of the mountain. Pop. (ex garrison) 9,237. (*Miñano.*) Ceuta has many points of resemblance with Gibraltar, and, like it, if properly garrisoned, would be all but impregnable. It is well supplied with water; is the seat of a bishopric; has a cathedral, two convents, an hospital, a *bagne* or prison for criminals employed on the public works; with schools, &c. It is also used as a place for the confinement of state prisoners. It is the most important of all the Spanish *presidios* or settlements in Africa, and is the seat of a military governor, a royal tribunal, and a financial intendant. Most of the provisions and other necessaries required for the supply of the town and garrison are brought from Spain. Ceuta was taken from the Moors by John, king of Portugal, in 1415. Since 1640 it has belonged to Spain. It has been several times besieged by the Africans, especially in 1697. (*Miñano; Dict. Géogr.*)

CEVA (an. *Ceba*), an inl. town of N. Italy, k. of Sardinia, prov. Mondovi, cap. mand., at the confluence of the Cevetta with the Tanaro, 10 m. E. by N. Mondovi. Pop. about 4,000. It is built at the foot of a rock, formerly surmounted by a castle, which was used as a state prison previously to its destruction by the French revolutionary forces. The town was formerly surrounded with walls; but these were in great part destroyed by an inundation of the Tanaro, in 1584. It contains a church, and several convents; some forges, and silk factories; and, in both ancient and modern times, has been celebrated for its cheeses. (*Rampoldi, &c.*)

CEYLON (an. *Taprobana*), a large island belonging to Great Britain, near the S. extremity of Hindostan, bearing the like relation to the Indian that Sicily does to the Italian peninsula. It lies between lat. 5° 56′ and 9° 50′ N., and almost entirely between long. 80° and 82° E.; having N.W. the Gulph of Manaar and Palk's Straits, which separate it from Hindostan; S. and S.W. the Indian Ocean, and E. the Bay of Bengal. It tapers to a point towards the N., and is shaped like the section of a pear cut lengthwise through the middle. Length, N. to S., 270 m.; average breadth nearly 100 m.; area 24,500 sq. m. Pop. (1843) 1,442,062.

The Coasts, on the N. and N.W., are low and flat; those on the S. and E. bold and rocky, and in some places fenced with reefs: in many parts they are deeply indented by the sea, and present some large and many small harbours. Trincomalee harbour, on the N.E. coast, is one of the finest any where met with. Point de Galle, in the S., is the next in importance; the inferior harbours are Batticaloa, Matura, and Caltura, on the S. and E., and Negumbo, Chilaw, Calpenteen, Manaar, and Point Pedro, on the W. coasts. The deep water along the E. shores admits the safe approach of large vessels, but the harbours on the N. and N.W. are full of sands and shallows, whose position varies with the monsoons. Columbo, the marit. cap., has merely a roadstead, which is practicable for large ships only from the beginning of Dec. to the latter end of March. So large a number of inlets causes a corresponding proportion of small islands, promontories, and peninsulas; of the latter the principal are the peninsulas of Jaffnapatam, on the N.W., and that of Calpenteen, on the W. coast. At its N. extremity especially, the shores of Ceylon are studded with numerous small rocky and verdant islets. The ridge of sandbanks called Adam's Bridge, which crosses the Gulph of Manaar from Ceylon to the island of Ramisseram, near the opposite coast of India, is connected by the natives with a variety of curious traditions, and forms a great obstacle to the more speedy communication with the continent, by its hinderance to navigation. It consists of loose sand, resting on firm foundations, but constantly varying in form from the action of the monsoons. There are three principal openings or channels through this ridge; one near the island of Manaar, another 8 m. farther to the W., and a third about 11 m. from the island of Ramisseram; but all of them are impracticable except for small native boats in fine weather, and even then the navigation is attended with some danger. Near these openings the bank rises above the water for some miles, broken occasionally by smaller channels, but towards the centre it is mostly covered by water, the depth of which does not in any part exceed a few feet. By the late accounts (see *Asiat. Journ.*, April, 1839.) attempts at enlarging the passage between Ramisseram and the continent are now in progress.

Interior.—Mountains, &c.— The belt of country along the shore surrounding the interior, or old kingdom of Candy, is, for the most part, flat, varying in width from 8 to 30 m., and, in the N., to nearly 80 m.; its extensive green plains giving to the shores of Ceylon an advantageous appearance when contrasted with the barren and sandy shores of the opposite continent. The interior consists of three distinct natural divisions,—the low country, the hills, and the mountains. The centre of the island S. of lat. 80° N, is occupied by an extensive tableland, 67 m. in length, by about 50 m. in width, and estimated at from 2,000 to 3,000 ft. above the sea. The interior of the N. and central divisions consists of ranges of mountains running mostly N.E. and S.W., and varying from 1,000 to 4,000 ft. above the sea, clothed to the summits with magnificent forests, and intersected by numerous ravines, cataracts, and cascades. From these regions various conical-shaped hills rise up at intervals to an additional height of from 2,000 to 3,000 ft. The most conspicuous summit is that which is known by the name of Adam's Peak (the Samenella of the Singalese), in lat. 7° N., and long. 80° 40′ E., 46 m. E.S.E. Columbo, rising to 6,152 ft. above the sea. Namany-Cooli-Kandy, the next in elevation, is about 5,548 ft. above the sea.

The mountains are generally in continuous ranges, and are seldom or never found isolated. This region is skirted by a hilly country, from 10 to 20 m. wide, and varying in elevation from 100 to 500 ft., with occasional summits of more than twice that height. This tract is destitute of the ravines and other bold features of the mountainous country.

Rivers and Lakes.— Ceylon has numerous small rivers and perennial streams; but few of them are navigable, even by a canoe, to many miles from their mouths. The principal is the Mahavilly Ganga: it rises near the highest part of the central table-land, about 30 m. S. Candy; and, having received many tributaries, falls into the sea, a little S. of Trincomalee, after a course of about 200 m. It is the only river navigable for any considerable distance. The next most important river is the Kalani-Ganga, which has its source in the country at the foot of Adam's Peak, and empties itself into the ocean by several mouths in the neighbourhood of Columbo: it is made considerable use of for internal traffic.

There are no lakes of any consequence in the interior, the largest being no more than 4 m. across; but along the E. coast, from Batticaloa northward there are several extensive lagoons, which by means of artificial channels, are made serviceable to traffic: other lagoons exist in the neighbourhood of Negumbo and Columbo. (*Davy's Account of the Interior of Ceylon, &c.*, pp. 1—5.; *Percival's Account, &c.*, pp. 55—60.)

Geology and Minerals.— The rocks met with in Ceylon are mostly primitive, and consist, with little exception, of granite or gneiss, with large veins of quartz, hornblende, and a snow-white dolomite: limestone occurs only in Jaffnapatam, and the N. districts. A belt of grey or black sandstone, together with coral formations, nearly encompasses the whole island. The upper soil is in general sandy, with but a small mixture of clay, and chiefly derived from the disintegration of primitive rocks: the cinnamon soil near Columbo is perfectly white, and consists of pure quartz. Ceylon is rich in valuable minerals; its metallic products are, however, comparatively unknown: ores of iron, lead, tin, and manganese, are found in the interior, but are made little use of: plumbago is the only article amongst these which has become of any commercial importance. Mines of quicksilver were formerly worked by the Dutch. It has numerous gems; and common salt-beds are found in various places. No volcanos exist in Ceylon, nor are mineral waters very abundant; but they are met with near Trincomalee.

Climate.— The mountain ranges which separate Ceylon almost completely into two parts, by arresting the course of the monsoons, occasion a radical difference at the same moment in the climate of the E. and W. parts, whole floods of rain deluging the island on one side, while on the other the natives are carefully hoarding all the water left from previous inundations. In the S. and S.W. the climate is moist, temperate, and similar to that of Malabar; in the E. and S.E. it is hot and dry, and more like that prevalent on the Coromandel coast. The S.W. monsoon lasts from April to Sept.; the N.E. from Nov. to Feb.: in the intervening months the winds are variable. The S.W. monsoons are usually accompanied by violent storms of thunder and lightning, and torrents of rain, which sometimes extend themselves to the central table-land, especially in March and April;

but this high region is generally out of the influence of either monsoon, and both its winds and temperature are greatly modified by its own physical character, the directions of its principal ridges, &c. The quantity of rain which falls during the year is about three times as great as in England; the rains being, though not more frequent, far heavier, so much so that a fall of 2 or even 3 inches in 24 hours is not uncommon: 84 inches is the annual estimate in the alpine region, and 100 inches at Columbo. The seasons depend more on the monsoons than on the course of the sun; and the coolest season is during the summer solstice, while the S. W. monsoon prevails. The heat is, however, nearly the same throughout the year, and much less oppressive than on the continent of India. Along the coast, the annual mean temperature is about 80° Fahr.; at Candy, 1,467 ft. above the sea, it is 78°; at Columbo the annual variation is from 76° to 86°; at Galle, 70° to 90°; at Trincomalee, 74° to 91°. For a tropical country, Ceylon has a comparatively salubrious climate; but some of the less inhabited parts, and the low wooded hilly country between the mountains and the sea, are highly insalubrious. Near Columbo and Trincomalee, where the jungle has been cleared away, and the land drained, the country has been rendered perfectly healthy. The prevalent diseases are those affecting the liver and intestines, often accompanied by fever: diseases of the lungs, urinary organs, and nervous system, are very rare: gout is unknown. Elephantiasis, *Lichen tropicus*, and other cutaneous complaints, are common. The small-pox was formerly very destructive, but is now guarded against by vaccination, to which the natives raise no objection; measles and hooping-cough both occur in a mild form. The beri-beri (*Hydrops asthmaticus*) is a disease nearly peculiar to Ceylon. (*Hamilton's Hindostan, &c.*, vol. ii.; *Davy*, pp. 53—77. 477—496.)

Vegetable products are numerous and valuable. The most important, next to rice and other grain, is the cinnamon (*Laurus Cinnamomum*), called by the Singalese *corundoo*, which here arrives at its greatest perfection, and has always been a chief article of export. It delights in a poor sandy soil, with a moist atmosphere, and is almost exclusively confined to the S. E. part of the island, between Negombo and Matura. In the N., where the climate is dry and sultry, it is totally unknown, and the endeavours to propagate it at Batavia, in the W. Indies, and on the opposite coast of Tinnevelly have not been so successful as was anticipated. In its wild state it grows to the height of 20 or 30 ft., and bears a white blossom in January: while in bloom, the cinnamon forests have a very beautiful appearance; but the aroma of the plant resides wholly in the bark, and the fragrance of the groves is not nearly so great as strangers have been led to believe. The soil is peculiarly suitable for the growth of coffee; and its culture has of late years been so much extended that it is now the principal article of export. The cocoa-nut tree flourishes with singular vigour, and is of great importance to the native pop., almost every part of the tree being converted into articles of food or domestic use: the best trees produce from 50 to 100 nuts annually, and grow so close to the sea, that the roots are even washed by its surge. The Palmyra palm grows principally in the N. part of the island, and is scarcely of less importance than the cocoa-nut tree. The talipot palm, the leaves of which are large enough to shelter many individuals, grows luxuriantly here, though rare on the continent of India. The bread-fruit-tree attains an immense size; cotton is not equal to that of India; indigo is found wild, but its culture is neglected; the areca and betel-nut, as well as tobacco, all of which are of excellent quality, grow abundantly; the cardamon seeds are inferior to those of Malabar. Gum-lac and gamboge are also produced in this island. The Flora of Ceylon is not so extensive as beautiful and various: the rose, pink, mignonette, &c. are as fragrant as in England, and the jessamine much more so; the *gloriosa superba*, and amaryllis, grow in profusion, and the jamba, or rose-apple, strews the ground with its scarlet blossoms. (*Hamilton's Hindostan*, vol. ii.; *Heber's Narrative*, iii. 143—145, &c.; *Percival*, pp. 319—337.)

Animals. — Ceylon has been from an early period celebrated for its breed of elephants, which, though inferior in size to those of other countries, are more valued for their greater strength and docility. The chase of these animals has always been with the Singalese an object of great importance; but the avidity with which they have been pursued has greatly diminished their numbers, and they are now chiefly confined to the N. and N. E. districts. The royal tiger is not met with, but bears, leopards, the cheta (a small species of leopard), hyænas, jackals, and tiger-cats, are numerous; besides elks, deer, gazelles, buffaloes, wild hogs, monkeys, &c. Near Jaffna a large baboon is very abundant, and fearless: a large variety of the monkey tribe, porcupines, racoons, armadilloes, squirrels, and mungooses, are met with. There are no foxes; but the flying fox, and rats, are very common and troublesome. Pheasants, snipes, red-legged partridges, pigeons, peacocks, and a great variety of birds; with serpents, alligators, and reptiles of all sorts, are abundantly plentiful. The fishing of the pearl oyster is an important branch of industry.

People. — The pop. of Ceylon, exclusive of the various colonists who have at different times possessed themselves of the coasts, may be divided into four classes: — 1st, the native Singalese or Ceylonese, who may be again subdivided into those occupying the Candian territories, and those of the coasts; 2d, the Moors, who are found in all parts of the island, and form the chief population of the district of Pultam; 3d, the Veddahs, a savage race, who are supposed to be the aborigines, and inhabit the mountainous regions and unexplored fastnesses, almost in a state of nature; 4th, the Malabar and other Hindoos, who are chiefly confined to the N. and E. coasts. The Singalese of the coasts, whose complexion, features, language, and manners, closely resemble those of the Maldivians, are about 5 ft. 8 in. in height, of a slim figure and fair complexion, especially the women; they are represented as remarkably mild, bashful, and timid, and rather deficient in intellect. The Candian Ceylonese are in all respects superior to those of the coasts, and differ from Europeans less in feature than in colour; they are taller, better made, and more robust, than the Singalese; and for Indians are stout, with large chests and broad shoulders. They have small bones, rather short but muscular legs and thighs, and small hands and feet; heads well formed, and, like those of other Asiatics, longer than those of Europeans; features often handsome. The colour of their skin, eyes, and hair varies from brown to black; they have a profusion of hair, which is allowed to grow to a considerable length. The Candian character differs essentially from that of the Singalese, having none of the effeminacy and timidity which distinguish the latter, and there is a certain haughtiness and independence in their whole bearing and demeanour. They will not generally, however, attack an enemy in the open field; but resort to ambush, in the same manner as the Singalese. Indolence, hypocrisy, and revenge may be regarded as national vices. Some traits may be recognised as common to the natives of Ceylon with the Bengalese, but they are still more closely allied, both in physical and moral characteristics, as well as language, religion, and traditions, with the Indo-Chinese nations, and especially the Birmese. The Malabars of Ceylon differ but little in any respect from those of the continent, though varying somewhat in their manners and customs. They retain, in great measure, the religion and manners of their congeners of S. India, and are much less numerous than formerly. The Moors have a tradition that they are the descendants of a tribe of the posterity of Hashem, expelled by Mohammed from Arabia. They retain many customs similar to those of the ancient Jews.

Of the Veddahs little more is known than that they chiefly inhabit the great forests which extend from the S. to the E. and N., and also the most inaccessible parts of the central table-land, having neither clothing nor habitations, subsisting upon wild fruits and animals, and having the branches of large trees for their resting-places. They are conjectured by some to be a portion of the original inhabitants, who, upon the invasion of the island, retreated to the inaccessible haunts in which they are now found. They are divided into two tribes, — the Village and the Forest Veddahs; the former, who are the more civilised, occasionally go down into the lower districts to exchange their game and cattle for rice, cloth, iron, &c. They live in huts and cultivate the ground; though, in common with their more savage brethren, they seek their chief subsistence in the forests. They are peaceable and inoffensive, never commencing, although easily persuaded to join in any insurrection; and in times of disturbance they have occasionally been employed as mercenaries.

The other inhabitants of the coast consist of Dutch, Portuguese, and English colonists: some Caffres and Javanese; a few Chinese and Parsee traders; and a various pop., sprung from the intermixture of these with each other and with the native races. The burghers, many of whom fill public offices and subordinate situations under government, are the descendants of Europeans and half-castes. The distinctions of caste are recognised, and in some instances scrupulously preserved, by the Ceylonese; but they respect them only in their civil, rejecting their religious, influences.

Till latterly, the pop. had been diminishing for four or five centuries. But a considerable increase has taken place in the pop. of the maritime provinces during the last few years. Several parts of the interior are, however, very thinly peopled, there being in some districts, not more than 4, 5, or 6 persons to a square mile. In the central prov. the pop. is dense in certain parts; but with the exception of the country round Candy, and the districts of Ouva and Mattele, seven eighths of the ground is

covered with wood and jungle, and nearly unpeopled. (*Davy; Hamilton; Mod. Trav.*, vol. x.; *Journal of Asiat. Soc. Calcutta*, iii. 337.)

Ceylon is now divided into five provinces, the area and population of which, according to a census taken in 1843, are —

	Area in Square Miles.	Whites.	Coloured Pop.	Aliens and resident Strangers.	Total Pop.
Western prov. -	4,452	3,007	523,864	4,020	530,891
Southern do. -	6,032	904	327,308	553	328,765
Eastern do. -	4,895	896	69,301	1,928	72,125
Northern do. -	6,053	926	297,453	495	298,854
Central - -	3,016	493	190,366	13,435	201,294
Military - -	- -	2,019	5,081	- -	7,133
Total (1843) -	24,448	8,275	1,413,456	20,431	1,442,062

Agriculture, &c. — In 1836 it was calculated that about 1,676,000 acres of land were cultivated or in pasture, and 2,818,000 acres left waste: of the former 464,580 acres were sown with paddy, 108,560 acres with fine grains, and 1,070,480 acres were in pasture. In the same year there were nearly 600,000 horned cattle, and less than 100,000 sheep and goats. The tract of country near the Coromandel coast is only in some parts fit for tillage, the ground for many miles exposing only a barren and naked surface. The soil of the central parts is capable of producing luxuriant crops were it properly cultivated. All products requiring a moist soil and climate flourish most in the S. W., and rice is grown chiefly in the level lands there, or in the valleys of the hill region, but often also on the slopes, on account of the facilities they present for irrigation. Around the fields, on the level lands intended for its reception, small embankments, about 3 feet in height, are raised, and water let in upon them; they are afterwards trodden over by buffaloes or turned up with a sort of light plough. On the hill slopes the rice-fields are dammed up, and form a succession of terraces, for irrigating which the water is conveyed sometimes for a mile or two along the mountain sides, and let off from one terrace to another, as the state of the grain requires it. There are two rice harvests during the year: the first crop is sown from July to October, and reaped from January to March; the second is sown from March to May, and reaped from August to October. What is called a plough consists of a piece of crooked timber shod with iron, which tears rather than ploughs up the ground. After the first ploughing, the fields are flooded; then ploughed again, and carefully weeded. Rice is industriously cultivated by the Malabars of the N. and N. E. districts; but the produce is insufficient for the consumption of the island, and large quantities are annually imported from both the Malabar and Coromandel coasts. Hemp is raised in abundance, the sandy soil of the maritime districts being well adapted for it. Cotton of different sorts grows with the greatest facility, the buds ripening within four months after being sown. Each village or hut has its sugar and tobacco plantation: coffee is raised of a very superior quality.

As cinnamon forms a chief article of export and revenue in Ceylon, its cultivation is one of great interest, and is conducted with much care. The neighbourhood of Colombo is particularly favourable for its growth, being well sheltered, and having a high and equable temperature. About 2,000 acres of land, chiefly near that town, are laid out in cinnamon plantations, furnishing employment to 30,000 individuals, and latterly yielding annually about 500,000 lbs. of bark, worth 138,000*l*. sterling. In its wild state, the plant grows to the size of a large apple-tree; but when cultivated, is not allowed to attain to more than 10 or 12 ft. in height, after 7 or 8 years' growth. May and June are the months for stripping the bark from the plant, which is done by two methods. In the first, the rough bark is removed with knives, and the inner rinds stripped off by a peculiarly shaped instrument; by the other method, the outer bark is not artificially removed, but the process of fermentation which the strips undergo when tied together in large quantities spontaneously removes it. The bark, in drying, gradually contracts, and rolls itself into a quill-like form; and, after being subsequently dried in the sun, the smaller are inserted in the larger pieces, and the whole are made up into bundles of about 30 lbs. weight. Layers, shoots, and transplanted stumps, are the best means of extending the growth of the *cinnamon plant*.

Wages are considerably higher, and provisions proportionally dearer, in Ceylon than in Bengal; the wages of the labouring class vary, in different parts, from 6*d*. per day, in Columbo, to 3*d*., and 4½*d*. per day in the interior; the government having interfered to fix this ratio; but higher wages are demanded from and given by private employers, according to circumstances. Those of the poorer classes, who possess small portions of land, rarely derive their support from it exclusively, but employ themselves in fisheries, trades, manufactures, and the petty traffic of the country; the wages of mechanics and artisans are proportionally higher than those of the labouring population, but still very moderate. A very minute subdivision of property often exists, and the inheritance of one person will sometimes consist of 9-10ths of a seer of rice land, 5-12ths of the produce of a cocoa-nut-tree, or 2-3ds of that of a jack-tree. Notwithstanding this, the peasantry of Ceylon are thought by Colonel Colebrook to be generally in better circumstances than those of the adjoining continent. They are not under either a zemindary or ryotwarry settlement, and the demands of the government on the land rarely exceed 1-10th part of the produce, and are sometimes less. Under the Candyan government, the tenures of land were of three kinds. Some lands belonged wholly to the sovereign; others were cultivated by individuals at a government rent, of some fixed proportion of the produce; and others, again, were granted as payment for the performance of specific services to the headmen of different districts, chiefs, &c., and reverted again to the crown on the death of such individuals. The latter could neither be mortgaged nor alienated; the second class of lands might be transferred in any way as long as the permanent rent continued to be paid. The lands belonging to the sovereign himself were cultivated on his account, or let out to the highest bidder, and sometimes brought a rent of 1-3d or half the produce. The plan of redeeming the whole rent, above 1-10th part of the produce, has been adopted by the British government with much success, and in those districts where the practice has prevailed the revenue has increased rather than diminished: for more lands having been brought into cultivation, 1-10th part of the crops now yields as much as 1-3d or 1-4th part formerly did. Domestic animals are not numerous. The horse is a degenerate breed, and not aboriginal; oxen, though small, are well tasted, and the chief food of the British troops, though eaten by none else: poultry of all kinds are abundant. (*Reports on the Affairs of the E. I. Comp., Evid. of Sir A. Johnston, Col. Colebrooke*, &c.)

Pearl Fishery. — The pearl fishery in the Bay of Condatchy, which was formerly a government monopoly, is now free; but, whether from the banks having been over-fished, or otherwise, the produce is now of comparatively little importance. The pearl banks are formed by coral ridges from 6 to 10 m. off shore, and of a variable depth, but commonly from 5 to 7 fathoms below the surface. The oysters are attached by fibrous bands to these ridges, from within a short time of their bursting from the egg, to about 6½ years old, when they loose their hold, and drop to the sandy bottom, where they lie in heaps. Soon after attaining the age of 7 years, the animals are said to perish. As many as 60 pearls have been found in one oyster; but such instances are rare, as is, indeed, the presence of pearls generally. The season commences in Feb. and finishes in April: six weeks or two months, at the utmost, is the time allowed for its continuance. Each of the boats carries a *tindal*, or master, and 23 men, 10 of whom are divers, and relieve each other, 5 divers being constantly at work during the hours of fishing. After they are taken out of the boats, the oysters are left to open spontaneously, die, and rot; the stench of their putrefaction filling the air for many miles round Condatchy, till it is swept off by the S. W. monsoons. The Ceylon pearls are whiter than those of Ormuz, or the Arabian coast; and the natives are extremely expert in cutting and drilling them. Upwards of 16,000,000 of pearl oysters were taken in 1836. The usual Cylonese boats are like the catamaran of Madras and other parts of the peninsula. A great number of chank shells are found, and exported to India from the N. shores of Ceylon. (*Raschenberger, Dr.*, in *Martin's Statistics*, p. 400.; *Percival*, pp. 86—100.; *Sturt*, in *Philo. Trans.* iii. 3.)

Salt is a government monopoly, and its manufacture, in leeways and pits on the sea shore, is carried on to a great extent in the N. and E., where it is of fine quality, and may be procured in greater abundance than the government requires, or has been able to collect. Col. Colebrook believes that, before the Dutch monopoly existed, this coast supplied Bengal with salt; and, indeed, the Ceylon salt may be imported at Calcutta for two thirds the price of the salt produced in India. There are no other manufactures of any extent or importance, if we except that of arrack, which is distilled from the blossoms of the cocoa-nut-tree, as toddy and jaghery are from the juice; while ropes, brushes, baskets, brooms, matting, rafters, thatch for cottages, &c., are obtained from the various parts of the tree, in addition to the valuable oil now in extensive use in England. Saltpetre is made from the chipping of rocks, in which nitrate of lime is prevalent, mixed with wood ashes; the mixture washed, and the liquor evaporated to a concentrated solution, and suffered to crystallise. Lime of a most admirable quality, and possessing a power of adhe

sion much greater than that procured from shells, is made by burning the coral found upon the shores. Gunpowder is made by a rude process; the native pottery is coarse and unglazed. Little progress has been made in weaving; the loom is somewhat similar to the primitive loom of Ireland: all the cloths used are of domestic manufacture; no muslins are woven, nor indeed any thing but coarse cottons, and some silks. Rude images and implements of husbandry are made of the native metals, and the Singalese can work with dexterity and taste in gold and silver. They are generally more capable of setting gems than cutting them; and excel in the manufacture of lacquered ware. (*Davy*, pp. 265—269.; *Reports on E. I. Affairs, &c.*)

Trade.—Since the Dutch monopoly system has been abandoned, both the internal traffic and foreign trade have greatly increased.

Account of the Principal Articles of Native Produce exported from Ceylon in 1845, with their Values.

Articles.	Quantity.	Value in Stg.		
		£	s.	d.
Arrack -	121,612 gallons - - -	5,641	9	11
Arrecanuts -	59,178 cwts. 0 qrs. 19 lbs. -	31,838	1	3
Chanks -	2,120,403 - - - -	2,185	17	3
Cinnamon -	408,211 lbs. - - -	40,821	2	0
Coffee - -	178,606 cwts. 3 qrs. 0 lbs. -	363,259	11	3
Coir-rope -	19,508 — 2 — 18 — -	8,655	8	1
Horns, sorts of -	2,812 — 3 — 20 — -	2,541	17	8
Cocoanut oil -	282,006½ gallons - - -	15,936	1	10
Plumbago -	19,215 cwts. - - -	2,151	19	7
Tobacco and Cigars -	1 Package and 17,353 cwts. 3 qrs. 16 lbs. - -	16,826	17	3
All other articles	- - -	35,162	12	4
		525,320	18	5

To which has to be added, to get the total exports, the value of the specie exported, and of the imports re-exported.

The total value of the imports and exports, and imports re-exported, in each of the five years ending with 1848, has been as under:—

Years.	Imports.	Exports.	Imports Re-exported.
1844	£1,366,037	£531,586	£15,634
1845	1,495,127	583,100	35,859
1846	1,372,701	679,286	161,506
1847	1,421,787	961,116	306,641
1848	1,235,443	1,448,901*	570,051

The imports consist principally of grain, especially rice; and next, but at a great distance from it, of cotton goods, haberdashery and millinery, machinery, cutlery, fish, metals wrought and unwrought, &c.

The cultivation of coffee has been vastly extended of late years.

An Account of the Quantities of Coffee imported into the U. Kingdom from Ceylon during each of the following Years.

	Lbs.		Lbs.		Lbs.
1835	- 1,870,143	1840	- 8,244,816	1845	- 16,657,464
1836	- 5,026,504	1841	- 7,098,543	1846	- 17,735,406
1837	- 7,389,971	1842	- 11,152,637	1847	- 27,190,024
1838	- 4,946,356	1843	- 9,515,619	1848	- 30,521,869
1839	- 4,097,492	1844	- 14,971,832	1849	- 35,610,885

Under the government of the Dutch, who were the first to cultivate the cinnamon plant, that spice was strictly monopolised, and severe laws were enacted against those who cut down or peeled trees without the cognisance of government, though on their own property. This monopoly was abolished in 1833; but the advantages that would have grown out of this wise measure were counteracted by laying a duty of no less than 3*s*. per lb., or 300 per cent. *ad valorem*, on the exported article! This oppressive duty amounted almost to a prohibition of export; it hindered a taste from being formed for the article in other countries, and confined its growth and the trade in it to perhaps 1-10th part of what it would otherwise amount to. Subsequently the export duty was reduced to 1*s*. per lb., and more recently to 3*d*. per do.; but it either is, or is to be, abolished. Salt may be exported free of duty.

There is a canal between Calpenteen and Columbo, by which cargoes are conveyed during the S.W. monsoon. A fine road has been constructed from Columbo to Candy, on which a mail-coach runs; carriage-roads also extend from Columbo N. to Chilaw, and S. to Matura. Many rapid and unfordable streams have had iron and wooden bridges thrown across them, amongst which is that of Paradeinia, across the Mahavilly Ganga, which consists of a single arch, with a span of 205 ft., principally composed of satin-wood.

English weights, measures, and monies are becoming universal in Ceylon.

But it is necessary to remark that the above is the amount of expenditure incurred in Ceylon only, and that it does not include the heavy expenditure incurred in England on account of Ceylon.

* The export of specie this year amounted to 276,874*l*.

Account of the Revenue of Ceylon in 1845 specifying the Principal Items and their Amount.

	£	s.	d.
Sea customs, viz.:—			
Export duty on cinnamon - - -	20,453	3	11
,, on other articles - - -	12,108	13	10
Import duty on rice and paddy - - -	75,111	11	10
,, on other articles of food - -	5,812	9	3
,, on other articles not used as food	30,973	13	5
Assessment on lands growing rice and paddy -	41,262	4	8
,, on other grain - - - - -	6,025	2	11
Duty on arrack, wines, and spirits - -	61,518	6	1
Salt - - - - - - -	36,160	17	7
Sale of lands - - - - - -	37,946	13	4
Stamps - - - - - -	22,342	16	3
Tolls - - - - - - -	24,934	9	2
All other sources of revenue - - -	59,378	12	4
	£434,028	14	7

Total Revenue and Expenditure of Ceylon in 1845, 1846, 1847, and 1848.

	Revenue.			Expenditure.			Excess of Expenditure.		
	£	s.	d.	£	s.	d.	£	s.	d.
1845	434,028	14	7	448,232	11	10	14,203	17	3
1846	416,403	15	2¼	498,205	8	10	81,801	13	7¾
1847	440,619	5	7¾	444,763	18	4	4,144	12	8¼
1848	414,765	16	1¾	431,325	10	4	16,559	14	2¼

Government is vested in the hands of a British governor, assisted by a council of European civil servants, selected either by the governor himself or the secretary of state for the colonies; but the power of the council is limited, and totally subservient to the authority of the governor. The administration of the governor of the Candyan province is somewhat less absolute than in the rest, as there is a special council for the enactment of its laws, for whose approval he usually submits his measures, which have afterwards to be approved by the Queen in council; the governor has, however, complete control over the financial department in the interior, while in the maritime provinces he is restricted to a certain sum for contingent expenditure, unless authorised in exceeding it by his council, to whom, except on this point, he refers, or not, at pleasure, being empowered to carry into effect any law without their concurrence. All laws, before being acted upon, are published in the official gazette, for the purpose of their general diffusion, with translations into the Singalese and Malabar languages.

The active business of the government is conducted by individuals of three different classes. Offices of the first and second classes are usually filled by Europeans; the subordinate situations by natives; but by recent regulations, any person judged to possess sufficient qualifications may fill the most important offices without reference to nation or faith; a knowledge of the English language being, however, considered indispensable. Each village and caste has its elected headman, who is recognised by the government, which commonly selects native servants from amongst this class of people: the *modeliars* of *corles*, or lieutenants of districts, are appointed from this body.

Armed force.—Exclusive of native troops there were employed in Ceylon, in 1847, a British force of 3,135 officers and men, the pay of which amounted to 63,676*l*.

Justice.—A supreme court of justice is established at Columbo, with powers equivalent to those of the Court of Queen's Bench and Court of Chancery. It is presided over by three English judges, aided by two other functionaries, all of whom are appointed from England. Trial by jury was introduced into Ceylon by Sir A. Johnston, and is now established in every district. Exclusive of Columbo, the whole island is divided into three circuits, viz. the N., S., and E.; the last of which comprises the old kingdom of Candy, with all the country to the E. of it. The circuits are subdivided into many districts, each of which has its own court, with a judge and three assessors, and with jurisdiction in all cases not punishable with more than a fine of 10*l*., one year's imprisonment, or 100 lashes. The supreme court in Columbo is the sole court of appeal. Excepting in the maritime provinces, where arrack drinking is prevalent, atrocious crimes are in general rare; so that the courts are more occupied with petty litigations than serious offences.

The Religion of the Singalese is Buddhism; but the upper classes profess Christianity, and many of the others have been converted to Mohammedanism. There are 16 Protestant churches in the island, subordinate to the Archdeacon of Columbo, and 32 dissenting places of worship. Roman Catholic chapels are very numerous, and 10 years ago it was believed that half the Ceylonese population were Christians, following the ritual mostly of the Romish and Dutch churches. There is a tradition amongst the natives that Buddh himself visited this island, which, before his advent, had been inhabited by demons. There are numerous temples to that deity in the island, especially in the central parts, where the Buddhic sect is most prevalent; and the British govern-

ment, having succeeded to the temple patronage and other privileges belonging to the old kingdom of Candy, has the appointment of the Buddhic priests. When the palace of Candy was taken by the British, a celebrated relic, believed by the natives to be a genuine tooth of Buddh, was captured; the possession of which is considered to insure its possessors the sovereignty of the whole island! This relic is annually exposed with great state and ceremony, and is worshipped by multitudes flocking from all parts of the country, and bringing offerings of various kinds to the priests, who thereby realise considerable sums. (*Journal of the Asiat. Soc.*, iii. p. 101.)

Public Education.—In 1844 there were 769 public and private schools in the island, 54 of which were supported by government. The others have been established by the Church Missionary and Dissenters' Missionary societies. Free elementary education in the English language, arithmetic, geography, &c., is given in these schools. The government schools are chiefly in the Singalese maritime districts. At Columbo there is a superior academy, where the usual branches of a classical and mathematical education are taught.

Civilisation, Habits, Arts, &c.—In civilisation the Singalese appear to be nearly, if not quite, on a par with the Hindoos; in courtesy and polish of manners they are inferior to none, but in intellectual acquirements, and proficiency in the arts and sciences, they have made little advancement. Many of the male Singalese read and write in their own tongue, but this is no part of female education. They write with a sharp iron style, on talipot leaves, and colour the traces afterwards with lamp-black. They excel more in lacquered painting than in any other art. Their statuary is better than their pictures, though the figures of Buddh have been subject to no innovation of style, and are always in the same posture, of whatever material they may be formed. The Singalese colour the statues of their gods, and give a pupil to the eye; which last ceremony is supposed to confer all the holiness belonging to the figure, and is done with much mystery and solemnity. There seems to be no peculiar national style of architecture: the Buddhic temples are like Tartar structures. The Ceylonese rise at dawn, and retire at 9 or 10 o'clock at night; they sleep either on mats on the floor, or on couches. Their meals are short and unsocial, the men and women not often eating together; there are two principal meals, one taken at noon and the other at 7 or 8 o'clock in the evening. The standing dish consists of rice with curry; some eat eggs and poultry; but beef is never eaten excepting by a very low class, who are in consequence held in great abhorrence: milk, ghee, oil, and fruits, are the other important articles of diet. The best of their houses are commonly of mud, with tiled roofs, and a single storey in height; built on a low terrace, presenting outwardly dead walls, and having in the interior an open space, into which the rooms open by doors, which, as well as the windows, are very narrow. The floors are composed of clay, plastered with manure, to keep off the insects, and the walls are covered with the same material, or a coat of white clay: lime is used for the walls of temples only. The furniture of the houses consist of 2 or 3 stools, a few mats, and porcelain dishes, a stone hand-mill, a pestle and mortar for rice, a rattan bag for compressing seeds to procure their oil, and a few other indispensable articles. The dress of the men is a handkerchief wrapped like a turban round the head, leaving the top exposed, and a long cloth, called *topetty*, reaching from the loins to the ankles. That of the women is very similar; they leave the head uncovered, but the end of their dress is thrown across the left shoulder. On occasions of ceremony, both sexes wear a small jacket. Rings, and silver and crystal bugles, and other ornaments, are commonly worn, and certain privileged persons are permitted to wear gold and silver chains and trinkets; but the Ceylonese look with extreme jealousy on every assumption of dress which is not strictly in conformity with the caste of its wearer. Like the Hindoos, they admit of the four chief subdivisions of castes, viz. the religious, and military orders; *Toiessea* cultivators, merchants, &c.; and *Rshoodras*, artisans: the first two ranks have however scarcely any actual existence in Ceylon, and all the honours and hereditary rank in the island are monopolised by the cultivators, at the head of the third class, with whom all Europeans are ranked, while the Moors are classed with the fishermen at the head of the fourth order. The male Singalese marry generally at the age of 18 or 20, the females earlier. Matches are determined on and concluded by the parents of the parties to be affianced; the dowry of the women generally consists of household goods, or cattle; seldom of land: the husband always pays a price for his wife. The women seldom have more than four or five children; but sometimes suckle them for as many years: the latter are in consequence very backward, and often neither speak nor walk till upwards of two years old. Infidelity is little regarded, provided it be not an intrigue with a person of inferior caste: concubinage and polygamy are indulged in by the men, but plurality of husbands is more common than that of wives; one woman belonging equally to several brothers of the same family. This, as well as other usages, is, however, fast disappearing before new habits, acquired by the extending intercourse with Europeans. The Ceylonese appear to be sincere and warm in their attachments. Dr. Davy disbelieves the report of the practice of exposing female infants, "excepting in the wildest parts of the country, and then never from choice, but necessity, and when the parents are on the brink of starving." The sick and dying, though not openly exposed, are certainly removed to temporary buildings. Every respectable family burns its dead; low castes are not allowed to do so, but bury them with the head towards the west. Immediately after a decease, the relations, with their hair dishevelled, and beating their breasts, cry and embrace each other, giving utterance to lamentations of a highly poetical nature. (See *Journal of Asiatic Society*, ii. 63, 64.) A common exhortation is, "When I die, pay me due honours." The common language of the Singalese is a dialect of the Sanscrit; the sacred language, like that of the Birmans, is the Pali. (*Davy*, pp. 226—259.; *Modern Traveller*, x. 304—344.)

Antiquities and History.—The proper name of this island is Singhala; but there is considerable uncertainty whence the people originated who gave it that name, and who are called Singalese. They have a tradition that their ancestors came hither from the eastward nearly 2,400 years ago; some modern authors think, on the other hand, that they were a colony of *Singhs*, or Rajpoots, who arrived here about 500 years B.C. Toljeya (perhaps of the royal house of *Sakya Singh*, of Magadha, the native country of Buddh, but evidently the same as the Sanscrit Vijaya) is the first king of Ceylon mentioned in history. The numerous ruins of cities, tanks, aqueducts, extensive canals, bridges, temples, &c., show that Ceylon had been, at a remote period, a rich, populous, and comparatively civilised country. In 1505 the Portuguese formed settlements on the W. and S. coasts, and received a tribute of cinnamon from the king of Candy, on condition of defending Ceylon against the Arabian pirates. They, as well as the Dutch who expelled them, after a long and sanguinary struggle in the next century, and the English, who superseded the latter, became, soon after the conquest of their first enemies, involved in hostilities with their native allies. In 1815 the Candyans entreated the interference of the British, to drive a tyrannical sovereign from the throne, an object soon effected; and Candy has since become a part of the British dominions. The best account of the vexatious restraints under which Ceylon has laboured down to a late date, is given in the excellent Report of Sir James E. Tennent, Colonial Secretary. That report has been productive of various reforms, inc. the abolition of the monopoly of chank shells, the export duty on cinnamon and other articles, &c. Owing to a combination of circumstances to which we cannot here advert, an outbreak took place in the centre of the island in 1848; but it was speedily suppressed. We may, perhaps, farther notice Ceylon in the Supplement.

CHABLIS, a town of France, dép. Yonne, cap. cant., on the Seray, 10 m. E. Auxerre. Pop. 2,458. It is principally distinguished by its excellent white wines, which the French epicures take with oysters. According to Jullien, they are *spiritueux, sans être trop fumeux; ont du corps, de la finesse, et un parfum très-agréable.* (*Topographie de Vignobles*, p. 101.)

CHAIBAR, or KHEIBAR, a town of Arabia, in El-Hedjas. Lat. 25° N., long. 39° 30′ E., 150 m. N.E. Medina. Pop. said to be 50,000. It is the cap. of, and gives name to, an independent sovereignty of *Jews*, the descendants, according to their own assertion, of the Trans-Jordanic Tribes, Reuben, Gad, and Manasseh. They have a character for bravery and learning; but the term Beni-Chaibar is so odious among Mohammedans that its application is regarded as an insult. In manners and appearance the Jews of Chaibar do not differ from other Arabs: their state has existed upwards of 1100 years; and though the town was captured by Mohammed in the 7th Hejra, A. D. 628, it is still said to be flourishing and powerful. It was here that Mohammed received from a Jewess a poisoned egg, professedly to test his prophetic powers, which laid the seeds of the disorder under which he finally sank, about 4 years afterwards.

CHALONS-SUR-MARNE, or CHAALONS, a city of France, cap. dép. Marne, on the Marne, in the middle of extensive meadows, 27 m. S.E. Rheims; lat. 48° 57′ 16″ N., long. 4° 22′ E. Pop., ex. com., 12,[illegible]. The Marne formerly traversed the town, but since 1768 it has skirted it in a new channel dug for the purpose, and crossed by a magnificent stone bridge. Two [illegible]fluents of the Marne run through the town. It is surrounded by old walls in pretty good preservation. With the exception of that which leads from the bridge to the Hôtel de Ville the streets are narrow and crooked; houses

generally mean, not a few being of wood. The cathedral, consecrated in 1147, and rebuilt in 1672, is a large fabric, partly of Greek and partly of Gothic architecture. The Hôtel de Ville and the Hôtel de Préfecture are both fine buildings: the Porte St. Croix has a good effect, and there is a splendid promenade, called the *Jard*. It is the seat of a bishopric, and has a court of primary jurisdiction, a commercial tribunal, a departmental college, a primary normal school, a diocesan seminary, a school of practical geometry, design, &c., a botanical garden, a society of agriculture, commerce, &c., and a public library, with 20,000 vols. But the most important establishment belonging to the town is the royal school of arts and trades, at which 450 pupils are maintained, at the expense of government, exclusive of those who pay. It has also a theatre, manége, &c. Different branches of the woollen, linen, and cotton manufactures, are carried on in the town; there are also extensive tanneries, and a good deal of trade is carried on with Paris, &c., in wine, corn, wool, hemp, rape-oil, &c. La Caille, the astronomer, and D'Ablancourt, the translator, were natives of Chaalons.

This is a very ancient town: it has been repeatedly taken and pillaged, and was once much more considerable than at present. Attila was defeated under its walls in 451. In 1591 and 1592 it burned the bulls of Pope Gregory XIV. and Clement VIII. against Henry IV. In 1814 it was for a while the central point of the operations of Napoleon. (*Hugo*, art. *Marne*.)

CHALONS-SUR-SAONE, or CHALLON, a town of France, dép. Saône-et-Loire, cap. arrond., in a fertile plain, on the right bank of the Saône, which here forms an island, in which is situated the suburb St. Laurent, 34 m. N. Mâcon; lat. 46° 46′ 53″ N., long. 4° 51′ 8″ E. Pop., ex cant., 12,400. It is pretty well built, but the streets are narrow, dirty, and ill paved: it has a fine quay on the Saône, and is connected with its suburb by a stone bridge of five arches. There is a cathedral, and a hôtel de ville; but the objects most worthy of attention are the Hospice St. Laurent, in the suburb of that name, and the Hôpital St. Louis, both large establishments, and exceedingly well managed. The latter is an asylum for indigent old persons and orphans. There are some fine promenades, one of which, at the head of the Canal du Centre, is ornamented with an obelisk, in honour of Napoleon. The bishopric has been suppressed; but it has a court of primary jurisdiction, a tribunal of commerce, a dep. college, a school of design, a public library with 10,000 volumes, a theatre, &c.

Challon is very favourably situated for a commercial entrepôt, communicating with the Mediterranean by the Rhône and Saône, and the canals connected with them, and with the North Sea by the canal of the centre, constructed in 1792. It is also crossed by several great roads.

It is very ancient, and was for some time the capital of the kingdom of Burgundy. It suffered severely during the civil wars of the 16th century, and not a little from the invasion of the allies in 1814. It was formerly very unhealthy; but in this respect it has been materially improved, by the better drainage of the surrounding country, and the greater attention paid to cleanliness in the town, though in both these respects it might still be very considerably improved. The famous Abelard died here in 1142. (*Hugo*, art. *Saône-et-Loire*.)

CHAMAS (ST.), a town of France, dép. Bouches-du-Rhône, on the N. bank of the lagoon de Berre, 23 m. N.W. Marseilles. Pop. 2,433. It is well built, has a handsome church, and is celebrated for its oils and olives, which it ships from its port on the lagoon. It is divided into two portions by a hill, through which a large tunnel has been cut for a channel of communication. It has an important powder magazine, which supplies Toulon and the fortresses dependent upon it. In the vicinity is a Roman bridge, of a single arch, having a triumphal arch at each extremity. (*Hugo*, art. *Bouches-du-Rhône*; *Dict. Géog.*)

CHAMBERTIN, a famous vineyard of France, dép. Côte d'Or, a few miles N.E. Beaune. It occupies about 25 hectares, and produces at an average from 130 to 150 pipes of burgundy, — "qui joint à une belle couleur beaucoup de sève et de moëlleux, de la finesse, un goût parfait, et le bouquet le plus suave." (*Jullien*, p. 106.) Chambertin was the favourite wine of Louis XIV. and of Napoleon.

CHAMBERY, a city of Savoy, of which it is the cap., on the left bank of the Aysse, in an elevated and fertile valley, 110 m. W.N.W. Turin, and 43 m. S.S.W. Geneva; lat. 45° 34′ N., long. 5° 49′ E. Pop. 13,000. This city presents little worthy of notice; it has one good street, but most of the others are crooked, dark, and sombre. There are several squares adorned with fountains; and most of the houses are three stories in height. Chief public buildings, the cathedral, the Hôtel Dieu or principal hospital, the barracks constructed by the French, and the manufactory of silk-gauzes, for which Chambery has long been celebrated. The palace is an old castle, in no way remarkable. The churches exhibit gaudy decorations; in one, however, there is some good painted glass. The city was formerly fortified; but the walls have been removed, and the space they occupied is laid out as public walks.

Chambery is the seat of the superior judicial tribunal, and the military governor of the duchy, of an archbishopric, a royal Jesuits' college, the academy of Savoy &c. It has societies of agriculture and commerce, a public library, theatre, public baths, and many charitable institutions. Besides gauze, other silk fabrics, lace, hats, leather, soap, &c. are manufactured; and there is some trade in liqueurs, wines, lead, copper, and various other articles. The environs abound in vineyards, woods, and picturesque scenery. Near Chambery is the country house of Les Charmettes, once the residence of Mad. de Warens and Rousseau. This city is supposed to stand near, though not upon, the site of the ancient *Lemincum*. It was taken by the French in 1792, who made it the cap. of the dép. of Mont-Blanc, and retained it till the second treaty of Paris, in November, 1815. (*Dict. Géographique*; *Simond*; *Bakewell*, &c.)

CHAMBORD, a village and royal castle of France, dép. Loir-et-Cher, on the Cosson, 10 m. E. Blois. The village is inconsiderable, and the place derives its entire importance from its castle, one of the most magnificent and best preserved in France. This noble edifice was commenced by Francis I., after his return from Spain. He is said to have employed 1,800 workmen for 12 years upon it; and here, in 1540, he entertained his illustrious rival Charles V. The building was still further enlarged by Henry II., and finished by Louis XIV., who frequently inhabited it during the early part of his reign. The *Bourgeois Gentilhomme* of Molière was acted, for the first time, at a fête given here by Louis, in October, 1670. Stanislaus Leczinsky, king of Poland, occupied this castle for nine years previously to his being put in possession of the duchy of Lorraine. In 1748 it was assigned by Louis XV. to Marshal Saxe, who spent in it the evening of his days in almost regal splendour. After many vicissitudes, it was given by Napoleon to Marshal Berthier; and having been sold by his widow, in 1820, it was bought by subscription for the Duc de Bordeaux, to whom its possession has since been confirmed by a decision of the courts.

The castle is buried in deep woods, and its situation is rather low and damp. It is of vast extent, in the Gothic style, and has a profusion of towers, turrets, and minarets. Being built of black stone, it has a heavy appearance. The interior is very magnificent. The grand staircase is so contrived that persons ascending and descending do not see each other; it has two fine chapels, and many spacious apartments and splendid ceilings. Its gorgeous furniture was sold by auction during the Revolution; and the beautiful tapestry that adorned the apartments of Francis I., Louis XIV., and Marshal Saxe, was burned, as the surest way of getting at the gold and silver with which it was embroidered; but, luckily, the castle itself was not injured. The park is of great extent, comprising above 12,000 arpents. (There is an excellent account of this castle in *Hugo*, art. *Loir-et-Cher*; see also *Inglis's Switzerland*, &c. p. 361.)

CHAMOND (ST.), a town of France, dép. Loire cap. cant., in a fine valley at the confluence of the Gier and the Ban, 8 m. N.E. St. Etienne. Pop. 9,000. It is a thriving, industrious town, is well built, has a handsome promenade, a departmental college, a fine parish church, and public baths. On a hill above the town are the ruins of the ancient castle, destroyed during the Revolution. The manufacture of ribbons, *lacets* (laces), &c., is very extensively carried on. In 1807 there were only, here and at St. Etienne, 3 frames for making laces; whereas there were, in 1832, 2,200 frames! It has, also considerable cast-iron and nail-works. (*Hugo*, art. *Loire*.)

CHAMOUNY, or CHAMOUNIX, a celebrated valley of Savoy, prov. Faucigny, immediately N.W. of Mont Blanc, by which, and others of the Pennine Alps, it is bounded on its S. and E. sides, and on the W. and N. by Mont Breven and the *Aiguilles Rouges*. Its length, N.E. to S.W., according to Mr. Bakewell, is about 12 m., and its breadth at the bottom in most parts exceeds a mile; but including the mountain slopes and sides, it is as much as 9 m. in breadth, and may be reckoned 22 m. in length, from its head at the Col-de-Balme to its outlet at the torrent of the Dioza, near Servoz. The average height of this valley above the sea is about 3,400 ft.; the Arve rises at is upper end, and intersects it in its entire length, escaping into the valley of Servoz through a ridge of granitic rock. "The pines and larches which clothe the lower parts of the mountains give a sombre appearance to the W. end of the valley; and this effect is increased by the unvaried snows of Mont Blanc, which hang over it. But after passing the priory of Chamounix, the scene changes, and to this dreary magnificence succeeds a series of majestic pyramids, called *Aiguilles*, or needles, of astonishing height, and too steep to admit of the snows resting on them at any season. The valley, which becomes nar-

rower, is richly ornamented with trees; and the Arve, rushing between finely-clothed rocks and precipices, adds life and beauty to the scene. The little village of Argentiere, with its church and glittering spire, and the two *Aiguilles* above it, together with the cheerful appearance of cultivation, form a landscape sublimely picturesque." (*Italy*, by *J. Conder*.) The average height of the mountain-range on the S. side of Chamounix is about 5,000 ft.; but the principal *Aiguilles* on this side, viz. those of Charmos; the A. Verte, de Dru, d'Argentiere, de la Tour, &c., rise from 11,000 to 13,000 ft. above the level of the sea. Between these *Aiguilles* are situated the numerous glaciers which constitute the chief interest of the valley, to the very bottom of which they descend. Nowhere else in the Alps are the glaciers of equal magnitude: those in the Bernese Oberland are not to be compared with them. "Could we," says Mr. Bakewell, "suppose a torrent, nearly a mile in breadth and several hundred feet in depth, to be descending down the side of a mountain, rolling waves over each other more than 50 ft. in height, and the whole to be instantly consolidated and split into angular fragments on the surface, we might have a tolerably correct notion of a glacier."

These mountains of ice are formed by the consolidation of the snow lodged in the high Alpine valleys. As the surface of the snow thaws and percolates through the mass, it is again frozen, and acts as a cement; and by a repetition of this process, the whole mass is converted into solid ice; not so compact, however, as that of rivers or lakes; for it is full of air-bubbles, owing to the mode of its formation. Entering the valley from the S.W., the first glaciers met with are those of Taconay and de Boissons, succeeding which are the more considerable ones of Montanvert, de Bois, d'Argentiere, de la Tour, &c. The glacier de Bois, at the foot of the Aiguille du Dru, and about a league E. of the village of Chamounix, is the largest of all: it is upwards of 7 m. in length, and in some places more than a mile broad; it is, in fact, the terminus of the Mer de Glace. (*See* MONT BLANC.) Near its foot, the Arveiron, a tributary of the Arve has its source in an ice cavern, which varies in size at different periods of the year; but is sometimes as much as 100 ft. in height. On the W. side of the valley, Mont Breven and the *Aiguilles Rouges* (so called from their reddish colour) form an unbroken ridge, but of a much less elevation than that on the opposite side of Chamouny. Mont Breven, however, 8,500 ft. above the level of the sea, "offers the finest view of the whole mass of Mont Blanc, of all the numerous sites whence it can be seen." (*Murray's Hand-book.*) The Col-de-Balme, at the N. E. end of the valley, and 3,000 ft. above it, affords also a full and magnificent view of the gigantic group. Across this mountain one of the roads from Chamouny into the Valais passes. The climate is rigorous: the winter in the valley of Chamounix lasts from October to May, during which season the snow usually lies to the depth of 3 ft., while at the village of Tour, the highest in the valley, it often attains the depth of 12 or 13 ft. In summer, the thermometer at noon commonly stands no higher than from 57° to 63°; it rarely reaches 68° Fahr. Barley and other kinds of corn, pulse, hemp, and some fruits, are grown, and a good many cattle are reared. The honey of Chamounix is of a very fine quality. The total pop. of the valley in 1825 was estimated at 2,700. There are several small villages: that of Prieuré, or Chamounix, *par excellence*, on the right bank of the Arve, towards the centre of the valley, has a pop. of about 1,700, several good inns, and "displays almost the bustle of an English watering-place in the most retired, heretofore, of the Alpine valleys." (*Murray.*) It originated in a Benedictine convent, founded here at the end of the 11th century by Count Aymon of Geneva. The other chief villages are Onches, Argentiere, Le Boissons, and Tour. (*Ebel., Manuel du Voyageur; Bakewell; Calendario Sardr.; Murray's Hand-book.*)

CHAMPAGNE, the name of an old prov. of France, in the E. part of the k adjacent to Franche Comté and Lorraine, now distributed among the depts. of the Ardennes, Marne, Haute Maine, Aube, Gonne, and Seine-et-Marne. Champagne is also the name of several small towns in different parts of France.

CHAMPLAIN (LAKE OF), a long and narrow lake, principally in the U. States of N. America, between New York and Vermont, and having its N. extremity in Lower Canada. This lake occupies a considerable part of what has been called the Great Glen of N. America; that is, the remarkable hollow or chasm, stretching N. from New York to the St. Laurence, a distance of about 390 m. The glen is occupied from New York to Glen's Falls, 190 m., by the Hudson; thence for 21 or 22 m. to Lake Champlain, by a table-land which, in its highest part, is only 140 ft. above the level of the tides in the Hudson. The lake extends N. and S. 110 m., with a breadth varying from ½ to 14 m; but it is, in general, very narrow: the distance, 67 or 70 m. from the lake to the St. Laurence, is traversed by the river Richelieu, or Chambly, the outlet of the lake, which is partly navigable by vessels of 150 tons, and throughout by river barges. A canal has been constructed uniting Lake Champlain and the navigable portion of the Hudson; so that there is now a direct inland navigation, which, by a little outlay on the Richelieu, might be made suitable for steamers, from New York to the St. Laurence, between Montreal and Quebec. (*Darby; Gordon's Gaz. of New York, &c.*)

CHAMPON, or CHOOMPHOON, an inl. town of Lower Siam, on the road between Ligor and Bangkok, on the E. bank of a river about 7 m. W. the Gulph of Siam; lat. 10° 51′ N., long. 99° 23′ E. Pop. 8,000? In 1826, it was stockaded, and considered by the Siamese an important military post. Tin, good timber for ship-building, and excellent rattans, are found in its vicinity. (*Crawfurd's Mission to Siam, &c.*, p. 443.)

CHANDA, an inl. town of Hindostan, prov. Gundwanah, cap. dist. of same name, between two small rivers, 62 m. S. Nagpoor; lat. 20° 4′ N., long. 79° 22′ E. Its walls are 6 m. in circuit, and from 15 to 20 ft. in height, built of freestone well cemented and flanked by round towers. Its interior consists of straggling streets, detached houses, gardens, and plantations. In 1803 it contained 5,000 houses; in 1822 only 2,800. In its centre there is a fort called Bala Killa. Chanda was taken by the British in 1818, when it was found to contain a good deal of treasure and valuable property, brought thither for security. (*Hamilton's E. I. Gaz.* i. 390, 391.)

CHANDERNAGORE, a marit. town of Hindostan, prov. Bengal, belonging to the French, built on the W. bank of the Hooghly river, 16 m. N.N.W. Calcutta, and in point of situation, in every respect superior to that city; lat. 22° 49′ N., long. 88° 26′ E. In 1814 it had a pop. of 41,000, and its revenue amounted to 32,150 rupees a year. Since that period, however, both have probably diminished considerably; for the author of "Sketches in India," speaking of this place, says, "large lofty houses and warehouses, discoloured, decaying, and half empty, speak of lofty speculations and disappointed hopes. A forsaken monastery completes the picture." The streets are straight and well-paved, but now present nothing but a scene of solitude and desertion; and the trade, formerly so flourishing, has been reduced to a mere nothing. "I saw," says Bishop Heber, "no boats loading or unloading at the quay, no porters with burdens in the streets, no carts, no market-people, and, in fact, only a small native bazaar, and a few dismal-looking European shops." There are some manufactures of cotton cloths; the commerce is chiefly in opium. The territory originally attached to this town extended to 2 m. along the river, and 1 m. inl.: about 2 m. below Chandernagore are the ruins of a superb house, the country residence of its former governors. The French, in 1676, obtained permission to establish this settlement, which they subsequently appropriated and fortified. In 1757, it was taken by the British, who destroyed the fortifications. It was restored to the French, in 1816. (*Hamilton's E. I. Gaz.*, i. 391-2.; *Mod. Trav.* ix.)

CHANDORE, a considerable inl. town of Hindostan, prov. Candeish, presid. Bombay, 68 m. W.N.W. Aurungabad, lat. 20° 19′ N., long. 74° 19′ E. It has a most formidable position on a rock, commanding one of the best passes on the range of hills on which it is situated, and is quite inaccessible every where but at the gateway where it is strongly fortified. It however surrendered without much resistance to the British arms, both in 1804 and 1818. (*Hamilton's E. I. Gaz.* i. 392.)

CHANTIBUN, a large inl. town of Siam, cap. of the rich distr. of the same name, at the foot of the mountain chain separating it from Camboja, on the S. bank of a river 18 m. E. the Gulph of Siam, and 150 m. S.E. Bangkok; lat. 12° 45′ N., long. 102° 18′ E. It is a place of considerable trade; its chief export is pepper, to the amount of 30,000 or 40,000 piculs yearly. Cardamoms, rosewood, dye-woods, ship timber, hides, horns, ivory, lac, and benzoin, are products of the Chantibun distr. Near the town are mines of precious stones. (*Crawfurd's Mission*, p. 4401.)

CHANTILLY, a neat town of France, dép. Oise, on the Nouette, and on the road from Paris to Amiens, 24 m. N. of the former. Pop. 2,416. It has a fine hospital, endowed by the last prince of Condé. This town is distinguished by its industry and manufactures of cotton and porcelain; but it owes all its celebrity to its having been, since 1632, the seat of the family of Condé, and to the vast sums they expended on the formation and embellishment of its castle, park, gardens, &c. The castle was one of the largest and finest structures of the kind in France; the "grand Condé" lived here in regal magnificence; and the entertainments given by him to Louis XIV. were so splendid as to excite the jealousy of the monarch. But the glories of Chantilly have disappeared, and cotton-mills occupy the sites where Racine, Molière, and Boileau, used to recite their *chefs d'œuvres* amid the applauses of all that was beautiful and chivalrous in France.

The *Grand Château*, rebuilt in 1779, was destroyed during the Revolution, and all that now remains is the

Petit Château, the *Château D'Enghien*, and the stables: the latter, constructed between 1719 and 1735, are unequalled in Europe. The remains of the Admiral de Coligni, butchered at the massacre of St. Bartholomew, are interred in the parish church of Chantilly.

The forest of Chantilly occupies a space of about 3,800 hectares. (*Hugo*, art. *Oise*, *&c.*)

CHAPEL-EN-LE-FRITH, a market town and par., England, co. Derby, hund. High Peak, on the declivity of a hill rising from an extensive and fertile vale, surrounded by lofty eminences, 11 m. N.W. by W. Derby, 167 m. N.W. by N. London. Pop. (1831) 3,220. The town is not lighted, and only partially paved. There is one cotton mill, employing about 120 hands, and many of the lower classes are employed in weaving for the Manchester houses. At White Hall Mill is a considerable manufactory of paper. There is a brewery in the town, and nails are also made. Here is an establishment for warehousing goods, the place being a medium of communication between Manchester and Sheffield, and having in consequence a large carrying trade. The town is one of the polling places for the election of mems. for the N. div. of the co. Besides the par. church, a neat edifice with a square tower, there is a chapel for Wesleyan Methodists. There is also an endowed school at Chapel-en-le-Frith, and another at Bowden's Edge. A library has been recently established. Lead and coal mines and quarries are worked in the vicinity. The Peak Forest lime-works lie 3 m. E. of this town, and communicate by railway with the Peak Forest canal. The par. includes the townships of Bowden's Edge, Bradshaw's Edge, and Combe's Edge. Market-day, Thurs. Fairs, Feb. 7., Mar. 24. and 29., April 19. and 30., May 31., July 7., Aug. 19., Oct. 13., Nov. 9.

CHARD, a town and bor. of England, co. Somerset, hund. Kingsbury East, in an elevated situation, near the S. border of the co., 11 m. N. Lyme Regis. The old municipal bor., which is a parish of itself, comprised an area of 52 acres, and had in 1831 a pop. of 2,511; but the area of the new municipal bor. has been increased so as to raise its pop. in 1831, to about 3,000, mostly dependent on the manufacture of lace; to the extension of which the increase of the pop. between 1821 and 1831 is ascribed. It has an old town-hall, an extensive market-place, a church with a tower and bells, a well-endowed hospital for the maintenance of old and infirm persons belonging to the parish, and is well supplied with water. Fairs, 1st Wednesday in May, August, and November. Market-day, Monday. Chard was made a bor. by Edward I., and elected mems. to 9 parliaments, when it lost the privilege.

CHARENTE, an inland dep. of France, distr. of the W., formed principally out of the ancient prov. of Angoumois; it takes its name from the Charente, by which it is traversed; and has N. the Deux Sèvres and Vienne, E. Haute Vienne, S. Dordogne, and W. the Charente Inférieure. Area 603,260 hectares. Pop. 365,126. Surface diversified by a great number of little hills. Soil various, being mostly thin, *sec, et brulant*, or clayey and encumbered with moisture; the latter prevails in the arrond. of Confolens, where there are no fewer than 62 shallow lakes, or *étangs*, some of them of considerable extent; there is also in the latter arrond., and in that of Barbezieux, a large extent of heath and waste land. Principal corn crops, wheat, maslin (a mixture of wheat and rye), maize and millet, rye, barley, and oats; but, owing to the inferiority of the soil, the returns are among the poorest in France, and the produce is insufficient for the consumption. The principal wealth of the dep. consists in its vineyards, which cover about 100,000 hectares. Their produce is mostly converted into *eau-de-vie*, the superiority of that made at Cognac being universally acknowledged. Hemp, flax, and potatoes, are extensively cultivated. The woods cover above 74,000 hectares; and the produce of chesnuts, in 1835, was reckoned at 158,000 hectolitres. Truffles are abundant, the value of those sold being estimated at about 300,000 fr. a year. There are, comparatively, few horses; but cattle, sheep, and hogs, are abundant: wolves, foxes, otters, &c., are pretty common, but wild boars have become rare. The minerals are antimony, lead, iron, gypsum, &c.; the last two being wrought to a considerable extent. Besides the iron-works, there are very extensive distilleries, with paper-works (*see* ANGOULEME), tanneries, and manufactures of linen, canvas, cordage, cloth, hats, earthenware, &c.; but, according to Hugo, *l'industrie y est complètement stationnaire*. The dep. returns 5 mem. to the Chamber of Deputies, and has about 2,600 electors. Public revenue, in 1831, 7,108,389 fr. Principal towns Angoulême, Cognac, Ruffec, Confolens, &c.

CHARENTE INFÉRIEURE, a maritime dep. of France, on the W. coast, deriving, like the foregoing, its name from the Charente, by which it is intersected; having N. Vendée, N.E. Deux Sèvres, E. Charente, S. the Gironde, and W. the Atlantic Ocean. Area, including that of the islands of Oleron, Ré, and Aix, 654,685 hectares. Pop. 449,649. Surface flat, and in part marshy; soil partly light, calcareous, and gravelly, and partly heavy and clayey. Principal crops, wheat, maslin, rye, barley, maize and millet, and oats. The rotation is, 1st year wheat; 2d rye, or some other grain; during the 3d year the ground remains untilled, serving as a kind of pasture for sheep; in the 4th year the old routine recommences. Rent of arable and pasture land varies from 8*s*. to 36*s*. an acre. About half the dep. is cultivated by proprietors, who possess from 50 to 100 and 150 acres; the other half is occupied by farmers, whose farms may vary from 300 to 700 acres, and who are said to be prosperous. About 112,000 hectares are occupied by vineyards, whose product, like those of the Charente, is mostly converted into *eau-de-vie*. The forests cover above 70,000 hectares. Pastures extensive and excellent, furnishing food for a great number of cattle, excellent horses, and sheep. Minerals not of much importance; but there are in the dep. very extensive salt marshes, particularly in the neighbourhood of Marennes, which furnish large quantities of salt. In summer, the marshes are unhealthy, but otherwise the climate is mild and salubrious. This dep. has great facilities for commerce. It has several deep bays and excellent ports, and, exclusive of the Charente, which has Rochefort near its mouth, it is watered by the navigable rivers Seudre and Sèvre, from the latter of which there is a canal to La Rochelle, and is skirted on the S. by the Gironde. The fishery of sardines, oysters, &c., is extensively carried on, and vessels are also fitted out for the cod fishery. La Rochelle, Rochefort, and the other ports, have also a considerable share of the colonial and coasting trade of France. With the exception of the salt manufacture and distillation, manufacturing industry is not prosecuted on a large scale; but coarse woollen stuffs, soap, fine earthenware, glass, &c., are produced; and there are also tanneries and sugar refineries. The dep. is divided into 6 arrond., returning 6 mems. to the Chamber of Dep.; and has 2,900 electors. Principal towns, La Rochelle, Rochefort, Saintes, and St. Jean d'Angely. (*Official Tables published by French government*; *Hugo*, arts. *Charente* and *Charente Inférieure*; *Parl. Paper*, No. 84., sess. 1836.)

CHARENTON-LE-PONT, a town of France, dép. Seine, cap. cant., agreeably situated on the Marne, near its confluence with the Seine, 4 m. S.E. Paris. Pop. 2,578. It has several country houses, among which is the one occupied by the famous Gabrielle d'Estrées. The Marne is here crossed by a bridge, the possession of which has always been regarded as of material importance to the defence or attack of Paris; and it has frequently been the scene of obstinate conflicts, the last of which took place in 1814, when it was forced by the allies. It unites the town with the village of Charenton-St.-Maurice. There is here an excellent lunatic asylum, founded in 1741, and capable of accommodating 400 patients. The Protestants had formerly a large church in this village, in which synods were held in 1623, 1631, and 1644; but it was demolished in 1655, after the revocation of the edict of Nantes. (*Hugo*, art. *Seine*, *&c.*)

CHARITÉ (LA), a town of France, dép. Nièvre, cap. cant., at the foot of a hill planted with vines, on the right bank of the Loire, over which it has a fine bridge. Pop. 4,947. It was formerly fortified, and much more considerable than at present; it is very indifferently built, but is celebrated for its manufactures of coarse jewellery, buttons, glass, earthenware, woollen stuffs, &c.

CHARKOFF. *See* KHARKOFF.

CHARLEROY, or CHARLEROI, a fortified and important manufacturing town of the prov. of Hainault, in Belgium, on the navigable river Sambre, 33 m. S. of Brussels, lat. 50° 23′ N., long. 4° 25′ E. It is built on the side of a steep hill, and contains a pop. of nearly 7,000, who are occupied chiefly in working the extensive coal mines of the district, and in numerous iron foundries and glass works. The town is in the centre of the great coal-basin of Charleroy, and in 1836 it had 72 mines in active operation, producing annually about 900,000 tons of coal, the half being of good quality, a third middling, and the remaining sixth part inferior, called *houille maigre*. At the same period there were 12 furnaces for smelting iron, and 29 new ones in the course of construction; from the whole of which it was estimated that 100,000 tons of iron would be annually produced, and employment be given to 3,000 workmen. During the winter about 4,000 men are employed in manufacturing nails; but these artisans are not all settled inhab. of the town. In summer the greater portion remove to Brussels and elsewhere to make bricks. Adjacent quarries of slate and marble are also important sources of industry and wealth; and the neighbourhood contains numerous mills for sawing marbles. The manufactures of glass comprise all kinds of vessels and sheet glass, of various qualities; and the iron works include the manufacture of fire-arms, cutlery, tools, and utensils. There are, besides these principal establishments, several fac-

tories for spinning wool and weaving woollen cloths; dye-houses, tanneries, snuff mills, rope walks, soap-houses, salt and sugar refineries, breweries, distilleries, brickyards, &c. The communication with Brussels by means of the Charleroy canal, affords great facilities for commerce. Between 200 and 300 capacious barges are constantly employed in exporting from Charleroy to Brussels coal, iron, slates, glass, soap, &c., and importing various native and foreign productions. This canal is further described in the article on BRUSSELS. The railroad from Charleroy to Brussels is not yet completed. A large fair for cattle and merchandise is held during 10 days, commencing on the 5th of Aug.

The fortress of Charleroy was built in 1666, by Rodrigo, Spanish gov. of the Netherlands, and named after Charles II. king of Spain. The lower and middle town were added by Louis XIV. in 1676. Charleroy has sustained several memorable sieges; and by various treaties has been transferred from Spain to France, from France to Spain, from Spain to Austria, and from Austria to France. The fortifications were materially improved under the direction of the Duke of Wellington, after the campaign of 1815. The traveller, when at Charleroy, should visit the ruins of the magnificent abbey of Aine, in a beautifully romantic solitude, about 9 m. from the town. The cloisters of this superb establishment were supported by 300 columns, of coloured marble, and its revenue amounted to 250,000*l*. (*Vander Maelen's Geog. de Hainault; Guide Books to Belgium, &c.*)

CHARLESTON, a city and sea-port of the U. States, one of the principal in the S. part of the Union, and the largest town of S. Carolina, on a low point of land at the confluence of the Cooper and Ashley rivers, 6 m. W. by N. the nearest point of the Atlantic, 118 m. N.E. Savannah, and 590 m. S.S.W. Baltimore: lat. 32° 46′ N., long. 79° 49′ W. Pop. in 1840, including the suburbs, 40,000. Charleston was, till 1787, the seat of the state government. This city was visited, on the 27th of April, 1838, by a most destructive fire, which raged with great fury in its most populous part, destroying several streets and an immense amount of property. Previously to this disaster, the streets, which were rather narrow, crossed each other at right angles, and were often planted with pride-of-India trees (*Melia azederacha*): the houses were mostly of brick, and generally furnished with verandahs. It has since, however, been rebuilt on a new and much improved plan. It has a college, town-hall, exchange, custom-house, guard-house, theatre, circus, orphan asylum, hospital, 2 markets, 2 arsenals, and numerous churches. The college, established in 1785, was reorganised in 1824: it possesses a commodious edifice, with a library and philosophical apparatus. There are two medical schools and various learned and charitable societies. The harbour is large and convenient, but rather difficult of access, in consequence of its entrance being obstructed by a range of sand-banks. Through these there are but two channels suitable for ships of large burden. In the principal or S. channel the depth of water in the shallowest part, 8 m. S. E. from the town, at ebb tide, is only about 12 ft., and at flood tide from 17 to 18 ft. A light-house, 80 ft. high, with a revolving light, has been erected on a small island bearing 2¼ m. N.W. from the bar, at the entrance to the S. channel. After crossing the bar, there is deep water up to the city, where vessels lie moored alongside wharfs or quays. Charleston is a place of very extensive trade; it being the port whence more than 3-4ths of the whole foreign trade of S. Carolina is carried on. Its exports consist chiefly of cotton and rice; the exports of the former in 1848-49 amounted to 462,951 bales, or 1-6th part of the entire crop of cotton raised in the Union that year, of which 298,782 bales were for foreign parts, principally Great Britain, and the rest coastwise. Naval stores, hams, bacon, &c., are also exported. Most of the imports are from the N. and middle states, and consist of wheat and flour, fish, shoes, all kinds of coarse manufactured goods, for the use of the slaves, &c. The foreign imports are mostly brought at second hand from New York, and consist of cottons, woollens, linens, hardware, iron, and steel, coffee, sugar, tea, wine, spices, &c. A railway has been already opened, connecting Charleston with Hamburg, opposite Augusta, on the Savannah; and one is in progress intended to form a communication with Cincinnati, which, if completed, will be above 500 m. in length. Several newspapers are published in the city; and it has numerous banks and insurance offices. On the 30th of June, 1848, there belonged to Charleston 24,237 tons of shipping, of which about a half were employed in the coasting trade. Like most other cities in the S. part of the U. States, Charleston has a large slave pop., and the slaves have been, and continue to be treated with a severity revolting to those who live in countries free from this moral contamination. The yellow fever occasionally commits great ravages here; but it is more fatal to foreigners than to the native pop. The fever is supposed to be owing, in a considerable degree, to the marshy nature of the soil on which a part of the town has been built; but the swampy ravines by which it was formerly intersected have been gradually filled up and drained, and the city has, in consequence, become much more healthy. The town is badly supplied with water, having mostly to depend on the rain-water collected in cisterns. Charleston was founded in 1680, and was the seat of government till the building of Columbia, in 1787. (*Mill's S. Carolina; American Encycl. and Official Returns.*)

CHARLESTON, a town of the isl. of Nevis, which see.

CHARLEVILLE, an inl. town of Ireland, prov. Munster, N. extremity co. Cork, 22 m. S. Limerick. Pop., in 1831, 4,766. Pop. of par. in 1834, 6,022, of whom 325 were of the estab. church, and 5,697 R. Cath. The town consists of four main streets crossing each other at right angles. In it are the par. church, a large R. Cath. chapel, a building for public meetings, a national school, and an endowed grammar school. The corporation, under a charter of Charles II., in 1671, consists of a sovereign, two bailiffs, twelve burgesses, and an indefinite commonalty. It returned 2 mems. to the Irish H. of C. till the Union, when it was disfranchised. A manor court has jurisdiction in pleas to the amount of 200*l*., and as a civil bill court. Petty sessions are held on alternate Mondays. The court and market-house are in the same building. Tanning and blanket making are carried on to some extent, and there are two large flour mills. Markets on Saturdays; fairs on 10th Jan., 16th March, 12th May, 15th Aug., 10th Oct., and 12th Nov. The town is a constabulary station. A branch of the National Bank was opened here in 1835. Post office revenue in 1830, 328*l*., and in 1836 449*l*. The mail coach from Cork to Limerick, and a car from Cork to Rathkeale, pass through the town, and a coach from Cork to it, conveying, at an average 12 passengers each trip, plies 6 days a week. (*Stat. Surv. Railway Rep.*)

CHARLEVILLE, a town of France, dép. Ardennes, on the Meuse, at a short distance from Meziers. Pop. 8,500. It is extremely well built; streets straight and broad, intersecting each other at right angles; houses nearly all of the same height, and slated, having a comfortable, gay appearance. In the centre of the town is a fine square, surrounded by arcades, and ornamented with a superb fountain. The river is crossed by a suspension bridge. It is the seat of a court of primary jurisdiction, and of a commercial tribunal; and has a departmental college, a primary normal school, a secondary ecclesiastical school, a course of geometry and mechanics applied to the arts, a public library, with 24,000 vols., a cabinet of natural history and antiquities, and a theatre. The royal manufactory of arms, formerly established here, has been transferred to Tulle and Chatellerault; but arms are still largely manufactured on account of individuals. The nail-works produce about 3,500,000 kilog. of nails a year; and there are, besides, copper foundries, where large quantities of copper-wire, plates, &c., are produced, with soap-works, tanneries, &c. It has a commodious port on the Meuse, and a considerable trade in wine, spirits, coal, iron, slates, marble, and manufactured goods. When the canal of Ardennes is finished, it will have an easy communication with Paris.

The foundations of Charleville were laid in 1605, by Charles of Gonzaga, duke of Mantua Nevers, who gave it his name. Having passed from his heirs to the house of Bourbon, the fortifications were rased, in 1686, by order of Louis XIV. (*Hugo*, art. *Ardennes*.)

CHARLOTTENBURG, a small town of the Prussian States, prov. Brandenburg, on the left bank of the Spree, 5 m. W. Berlin. It is chiefly made up of villas and taverns, the summer residence of the rich, and the resort of the humbler classes from Berlin; is well built, and has handsome straight streets, ornamented with rows of trees. There is here a magnificent palace, built by Frederick the Great, and furnished with a collection of antiquities. The gardens, which are finely laid out, are always open to the public, and are much visited by Sunday parties and strollers from the capital. Within these gardens is the mausoleum, erected by his present majesty, Frederick William III., over the remains of his late beautiful and unfortunate queen, Louisa of Mecklenburg. It contains the celebrated recumbent marble statue of Louisa, by Rauch, admitted to be not only the masterpiece of that eminent sculptor, but one of the finest modern works of art. (*Russell's Germany; Murray's Handbook.*)

CHAROLLES, a town of France, dép. Saône-et-Loire, cap. arrond., at the confluence of the Semence, and the Reconce, 28 m. W.N.W. Mâcon. Pop. 3,226. It is agreeably situated, neat, and well built; has a communal college, tribunals of primary jurisdiction and commerce, an agricultural society, iron forges, and fabrics of earthenware, and crucibles. A hill above the town is crowned with the picturesque ruins of the old castle of the counts of Charolais. One of these, a prince of the blood royal,

who lived during the reign of Louis XV., achieved an infamous notoriety. (*Hugo*, art. *Saône-et-Loire.*)

CHARTRES, a city of France, dép. Eure-et-Loire, of which it is the capital, on the Eure, 48 m. S.W. Paris; lat. 48° 26′ 54″ N., long. 1° 29′ 20″ E. Pop., ex com., 15,304. It is surrounded by walls and ditches, and is situated partly on a hill, and partly on low ground. The Eure, which here divides into two branches, runs through and encircles the lower town. Streets narrow and crooked; those forming the communication between the upper and lower towns being so very steep as to be inaccessible to carriages. The cathedral is reckoned one of the finest Gothic edifices in France. Here are, also, two fine steeples, a monument to General Marceau, barracks, a theatre, and some fine promenades. It is the seat of a bishopric; has a court of assizes, tribunals of primary jurisdiction and commerce, a departmental college, a public library, with 30,000 vols., a school of design, and a botanical garden. The manufactures consist principally of hosiery and hats, but there are also tanneries, dye-works, &c. Chartres is the centre of the corn trade of the dep., its corn-markets being among the most important in France, and providing in a great measure for the supply of Paris. It is the native country of Regnier the poet, of Brissot, and Petion, members of the convention, and of General Marceau.

This is a very ancient city, being reckoned before the Roman conquest, as the capital of Celtic Gaul. It was for a considerable time in the possession of the English. Henry IV. was crowned here in 1594.

CHARTREUSE (LA GRANDE), a famous monastery of France, dép. Isère, 14 m. N. Grenoble, among rugged mountains, at an elevation of 3,281 ft. (1,000 mètres) above the level of the sea. The access to it is very difficult. This monastery was founded in 1084; but having been several times pillaged and burnt down, the present building has been erected since 1676. It is of vast extent, and has cost an immense sum. During the Revolution, the monks were driven out, and their property, including their valuable library, confiscated and sold. But in 1826, the building, which had escaped the revolutionary tempest, was restored to its original destination. Some of the old monks, accompanied by several neophytes, returned to the building; and the Chartreuse existed once more, but shorn of its old lustre, importance, and wealth. (*Hugo*, art. *Isère.*)

CHARYBDIS. *See* SCYLLA and CHARYBDIS.

CHATEAUBRIANT, a town of France, dép. Loire Inférieure, cap. cant., on the Chere, near the pond or lake of Grand Lieu, 26 m. W.N.W. Ancenis. Pop. 3,634. It is old, and meanly built, round the ruins of the old castle, founded in 1015, whence it derives its name. Françoise de Foix, so celebrated for her beauty and gallantries with Francis I., died here in 1537, and was buried in the church of the Trinity, with an epitaph on her tomb, written by Clement Marot. It has a court of primary jurisdiction, an agricultural society, and manufactures of coarse woollen stuffs, and its pastry and *confitures* are held in high estimation. It has some trade in iron, coal, and wood, and a considerable corn-market. (*Hugo*, art. *Loire Inférieure.*)

CHATEAU-CHINON, a town of France, dép. Nièvre, cap. arrond., near the Yonne, in the middle of mountains, at an elevation of 1,968 ft. (600 mètres) above the level of the sea, 20 m. W.N.W. Autun. Pop. 2,775. It was formerly surrounded by fortifications, and was defended by a vast castle, of which there exist considerable ruins. It has a court of primary jurisdiction, an agricultural society, and some fabrics of coarse woollens and linens. Having been taken by the royalists in 1591, after an obstinate resistance, the garrison and the greater part of the inhabitants were put to the sword. (*Hugo*, art. *Nièvre.*)

CHATEAUDUN, a town of France, dép. Eure-et-Loir, cap. arrond., near the left bank of the Loire, 25 m. S.S.W. Chartres. Pop., ex com., 5,985. Having been almost wholly burnt down in 1723, it has been rebuilt on a regular plan, with broad straight streets, and uniform houses. The principal square, the Hôtel de Ville, and the buildings of the communal college, are worthy of notice. Besides the college, it has a court of primary jurisdiction, a public library, with 6,000 vols., and some manufactures of woollens, and tanneries. On a rock, commanding the town, are the remains of the old castle of the counts of Dunois, the chapel attached to which has the tomb of the famous general of Charles VII., and some other tombs of less distinguished members of the family.

CHATEAU-GONTIER, a town of France, dép. Mayenne, cap. arrond., on the Mayenne, 18 m. S. Laval. Pop. 6,226. It is badly laid out, but is pretty well built; has a stone bridge over the river, by which it is united to its principal suburb, a fine Gothic church, a communal college, 3 hospitals, public baths, an agricultural society, &c.; and is the seat of a court of original jurisdiction. It has considerable manufactures of fine linen and linen thread, serges, &c., with extensive bleachfields; is the entrepôt of a great proportion of the wines, slate, coal, and tufa of the dep.; and the centre of the trade in fine thread. The town was formerly surrounded by walls, and had a castle, whence it took its name. It suffered a good deal during the wars of Vendée.

CHATEAULIN, a town of France, dep. Finistère, cap. arrond., in an agreeable valley, on the Aulne, which there takes the name of Châteaulin, 22 m. S.E. Brest. Pop. 2,968. It is ill built; has a court of primary jurisdiction, and an agricultural society. Vessels of from 60 to 80 tons come up to the town, which has a good deal of trade in slates, procured from quarries in the neighbourhood, cattle, and butter.

CHATEAUNEUF-DE-RANDON, an inconsiderable town of France, dép. Lozère, cap. cant., on a mountain, 12 m. N.E. Mende. It was formerly fortified; and an English garrison was besieged in it, in 1380, by a French force under the famous constable Duguesclin; the constable having died during the course of the siege, the English governor laid on his coffin the keys of the town, which he had engaged to deliver up to him if not relieved within 15 days. A monument was erected here in 1820 to the memory of Duguesclin. (*Hugo*, art. *Lozère.*)

CHATEAUNEUF-SUR-CHARENTE, a town of France, dép. Charente, cap. cant., on the Charente, m. W. S. W. Angoulême. Pop. 2,166. It has a considerable trade in wine, brandy, and salt. It was anciently called Berdeville, and was defended by a castle burnt down in 1081. A new castle having been built to replace the former, the town took from it the name of Châteauneuf.

CHATEAUROUX, a town of France, dép. Indre, of which it is the cap., in an extensive plain on the left bank of the Indre; lat. 46° 48′ 45″ N., long. 1° 41′ 25″ E. Pop., ex com., 12,342. Though materially improved, Châteauroux continues to be one of the worst built, dirtiest towns in France. Streets narrow, crooked, and ill-paved; houses small, irregularly built, and gloomy. It has, however, some finely shaded agreeable promenades, and some good buildings. It is the seat of a court of assizes, of tribunals of primary jurisdiction and commerce; and has a theatre, a public library, a public garden, a society of agriculture, science, and arts, and an annual exhibition of the products of the industry of the dep. The cloth manufacture is very extensively carried on; cotton hosiery and hats are also produced, and there are establishments for the spinning of wool, with tanworks, tile-works, &c.

Châteauroux was founded in 950; was burned down in 1088, and rebuilt shortly after. Louis XIII. erected it into a duchy; and it was given by Louis XV. to one of his mistresses, Madame de Mailly, better known by the name of the Duchess de Châteauroux. Its manufactures have been much extended, and itself much improved, of late years. (*Hugo*, art. *Indre.*)

CHATEAU-THIERRY, a town of France, dep. Aisne, cap. arrond. on the Marne, 25 m. S. Soissons. Pop. 4,761. It is built on the declivity of a hill, the summit of which is surmounted by its ancient castle, a vast mass of thick walls, towers, and turrets. It has a considerable suburb on the left bank of the Marne, the communication between them being kept up by a handsome stone bridge of 3 arches. It has a court of primary jurisdiction, a communal college, an establishment for the spinning of cotton, and tanneries. The famous poet La Fontaine, not less original by his character and conduct than by his talent and genius, was born here on the 8th of July, 1661. The house which he inhabited is still preserved; and a marble statue was erected to his memory on the end of the bridge in 1824. Château Thierry suffered considerably during the campaign of 1814. (*Hugo*, art. *Aisne*; *Biographie Universelle.*)

CHATELLERAULT, a town of France, dép. Vienne, cap. arrond., on the the Vienne, 20 m. N.N.E. Poitiers. Pop., ex com., 8,390. It is situated in a fertile, agreeable country, but is ill built and dirty. It is joined to its suburb on the opposite side of the river by a stone bridge, built by the Duc de Sully. Besides several churches, it has a communal college, a theatre, an exchange, an hospital, and a royal manufacture of arms, the buildings of which are among the finest in the town; and some fine promenades. This town has been long famous for its cutlery; and has fabrics of clocks and watches, lace, &c. It serves as a kind of entrepôt for the towns of the S. and the N. of France; particularly for wines, spirits, salt, slates, iron, corn, hemp, timber, &c. The Scotch Earl of Arran, ancestor of the dukes of Hamilton, was created Duc de Châtellerault in 1548. (*Hugo*, art. *Vienne*; *Sharpe's Peerage.*)

CHATHAM, a par., town, parl. bor., naval arsenal, and sea-port of England, co. Kent, lathe Aylesford, on the Medway, 28 m. E. by S. London. Pop. 1821. 15,268; 1841, 21,431, incl. 6,528 ind. in barracks and hospitals. It is separated from the city of Rochester by a merely artificial line; and the latter being connected with Stroud by a bridge, the three towns form a continuous street, upwards of 2 m. long (of which Chatham occupies 1 m.), along the

Dover road from London. For about ½ m. below Rochester, the town extends along the bank of the river, which there bends N.N.E. and E. by N. till it falls into the æstuary of the Thames at Sheerness. Notwithstanding the shortness of its course, the Medway has very deep water. At Chatham, the tide rises 18 ft. at springs, and 12 ft. at neaps; and from Sheerness to Chatham there is water to float the largest ships; and the ground being soft, and the reaches short, it forms an admirable harbour for men-of-war; and it is to its facilities in this respect that Chatham and the contiguous towns are mainly indebted for their rise.

The principal church, a plain brick structure, was rebuilt in 1788; and a more modern one was erected in 1821, by the parliamentary commissioners. It has also four dissenting chapels, a national school, a proprietary classical school, a philosophical and literary institution, to which a museum is attached, and two public subscription libraries. Here is also a chapel, on the site of one attached to a monastery, founded in 1078, the endowment of which supports four brothers, two of them in orders. Sir J. Hawkins' hospital for decayed seamen and shipwrights, chartered in 1594, supports 10 individuals. There are three or four minor charities. Chatham chest, which originated with Sir F. Drake and Sir J. Hawkins, after the Spanish Armada, and at first consisted of voluntary contributions from seamen, soon became compulsory, and was ultimately removed, in 1803, to Greenwich. Down to the 4th Wm. IV. it was supported by deductions from the monthly wages of seamen, but an act of that session made it chargeable on the consolidated fund. The town was considerably improved under an act passed in 1772, but many parts of it still remain inconveniently narrow and irregular. It is in the jurisdiction of the co. magistrates, with the exception of a small part, comprised within the municipal limits of Rochester: the whole parish is in the jurisdiction of a court of requests, in that city, for debts under 5*l.* The Reform Act conferred on it, for the first time, the privilege of returning one member to the H. of C. The limits of the parliamentary borough include a considerable area S. and E. of the town; and contained in 1841 a pop. of 17,903. Registered electors in 1849-50, 1,192. Market-day, Saturday; annual fairs, May 15, September 19, each lasting three days: annual races in August.

The town is almost wholly dependent on the great naval and military establishments at Brompton, in its immediate neighbourhood, but separated from it by a line of fortifications. The dockyard, which lies along the E. side of the river, is, including the arsenal, above 1 m. in length; and is defended by Gillingham Fort, Upnor Castle, and several bastions. Fort Pitt, on the S. or land side of the town, was erected in 1803. The dockyard contains between 400 and 500 houses for the artificers employed in the different works, and is abundantly supplied with every means and accommodation required for the building and fitting out of the largest ships. It has five large tide docks, capable of receiving first rate men-of-war, and six building-slips for vessels of the largest dimensions; a mast-house, attached to which are saw-mills worked by steam, and two large floating basins, for the reception of the timber for the masts; a smithery, where anchors of the largest size (some upwards of five tons weight) are forged; a rope-house, where cables above 100 fathoms in length, and 25 inches diameter, are twisted by powerful machinery; a sail-house, and numerous warehouses, containing every article required for the building and equipment of ships of war. Here also is a spare set of Brunel's block machinery, in the event of that at Portsmouth getting out of order; dwellings for the civil officers of the establishment, and a handsome chapel. Near the entrance (which is a spacious gateway, flanked by two towers) is a general marine hospital, built in 1828, and capable of receiving 340 patients. Four hulks moored off the dock-yard, one for juvenile, two for adult offenders, and one as an hospital, form the convict establishment, usually containing from 900 to 1,000 individuals, employed in the common drudgery of the arsenal. The ordnance wharf, to the W. of the dock-yard (on the slip of land between the church and river, ½ m. from the high street of Chatham), contains the guns belonging to each vessel respectively, in separate tiers, piles of shot and shells, a well-arranged armoury, &c.; and a large building in which lead is rolled, paint ground, &c., by steam machinery. The military establishments, comprised within the lines, consist of large infantry, marine, engineer, and artillery barracks, with a park of artillery. There is also a school, established in 1812, where young engineering officers, and recruits, are trained to a practical acquaintance with their duties. The naval arsenal was first formed a short time previously to the Spanish Armada, on the site of the present ordnance wharf: Upnor Castle was also built about the same time. The dockyard was removed to its present site by James I., and was subsequently enlarged and improved, by the formation of floating docks, by Charles I., at which period Gillingham Fort was built; but the present establishments were principally formed subsequently to 1758, when an act was passed for their construction. Previously to this, the security of the arsenal depended mainly on the river forts, especially that of Sheerness; and on the guard ships stationed in the river. These, however, were not adequate for its protection. A memorable instance of their insufficiency occurred in 1667, when a powerful Dutch fleet, under De Ruyter, having suddenly appeared in the Thames, took Sheerness; broke a strong chain that had been drawn across the Medway; and, sailing up the river as far as Chatham, destroyed several sail of the line and a great quantity of stores. The Dutch accomplished this brilliant and daring achievement without incurring any material loss; but the fortifications were soon after very materially strengthened, and are now such as to render any *coup de main* of this sort quite out of the question.

To shorten the distance by water, and facilitate the communication between London and Chatham, an open canal and tunnel has been cut from the Thames, opposite Tilbury Fort, to Chatham, a distance of about 9 m., of which about 2 m. are tunnelled. But notwithstanding the obvious importance of this channel of communication as a means of saving distance, the too great height of the rates, or some other circumstance, has prevented it from being much used, and it has proved a very unprofitable undertaking. Cetcham, or the Village of Cottages, is the name of the town in Domesday, and many British and Roman remains have been found in its vicinity; but the greater part of the modern town has been built since the reign of Elizabeth. Chatham gives the title of earl to the Pitt family. (*Hasted's Kent; Boundary Report, &c.*)

CHATILLON-SUR-LOING, a town of France, dép. Loiret, cap. cant., on the Loing, 14 m. S.S.E. Montargis. Pop. 2,160. This town belonged to the family of Coligny; and in its old castle, on the 16th of February, 1517, was born the famous Admiral de Coligni, the most illustrious victim of the massacre of St. Bartholomew. The mangled remains of the admiral having been deposited, by the care of some of his servants, in the chapel of the castle of Chatillon, were transferred, in 1786, to Maupertuis, where a monument was erected to his memory. (*Hugo, art. Loiret; Biographie Universelle.*)

CHATILLON-SUR-SEINE, a town of France, dép. Côte d'Or, cap. arrond., on the Seine, 28 m. N.N.E. Semur-en-Auxois. Pop. 4,430. It is neat, well built, and well laid out; it has a fine castle, a communal college, a small public library, an hospital, a school of design, a society of agriculture, and a *haras royal.* It has also fabrics of coarse cloth, hats, jewellery, iron-plates, glass, beet-root sugar, casks, &c. There was formerly, within the park belonging to Marshal Marmont, a very perfect agricultural establishment, and an establishment for the preparation of iron and hardware articles; but since the disgrace of the marshal, the establishments in question have been dismantled, and the articles sold. Chatillon was, in 1814, the seat of the unsuccessful negociations between Napoleon and the allies. (*Hugo, art. Côte d'Or.*)

CHATRE (LA), a town of France, dép. Indre, cap. arrond., on the left bank of the Indre, 22 m. S.E. Chateauroux. Pop. 4,471. It is agreeably situated on the side of a hill, and was formerly defended by an immense castle, now in ruins, and of which one of the towers serves for a prison. It has a handsome church, and a fine promenade; with a court of primary jurisdiction, a communal college, very extensive tanneries and leather manufactures, and fabrics of serge and other coarse woollen stuffs. Chesnuts are very plentiful in its vicinity; and it has a considerable trade in them, and in cattle, wool, and hides. (*Hugo, art. Indre.*)

CHATSK, a town of Russia in Europe, gov. Tambof, cap. distr., on the Chatcha, 95 m. N. Tambof. Pop. 6,000. It was founded in 1553, and peopled with Strelitz, Pouchgars, Cossacs, &c.; and was formerly fortified; and has a good deal of trade in corn, cattle, tallow, honey, hemp, iron, &c. (*Schnitzler, La Russie, &c.*, p. 368.)

CHATSWORTH, a famous seat belonging to the Duke of Devonshire. See *Bakewell.*

CHATTERPOOR, a town of Hindostan, prov. Allahabad, about 140 m. W.S.W. that city, formerly a flourishing place, and still possessing extensive manufactures of coarse cotton wrapper, &c.

CHAUDES-AIGUES, a town of France, dép. Cantal, cap. cant., in a narrow, deep gorge, on one of the affluents of the Truyère, 14 m. S.S.W. St. Flour. Pop. 2,557. This town is indebted for whatever importance it may possess to its hot springs, which were known to the Romans, by whom they were called *Aquæ Calentes*, of which its modern name is a translation. Their temperature varies from 30° to 80° Reaumur. In winter, the houses are warmed with the hot water conveyed through the streets and into the houses in wooden pipes! It is also successfully employed in the incubation of

various species of eggs. It has some trade in isinglass, and carries on some branches of the woollen manufacture. (*Hugo*, art. *Cantal.*)

CHAUMONT (formerly *Chaumont-en-Bassigny*), a town of France, dép. Haute Marne, of which it is the cap., on a height between the Marne and the Suize, about 1½ m. from the confluence of these rivers, 18 m. N.N.W. Langres. Pop., ex com., 6,113. It is indifferently well built; streets straight and clean, but some of them are steep and of difficult access. It formerly laboured under a deficiency of water; but now it possesses several fine fountains, supplied by means of a hydraulic machine. It has several good public buildings; and in the upper part of the town are some fine promenades. Louis XII., Francis I., and Henry II., surrounded it with walls and ditches; but these are in a state of disrepair, and in most places, indeed, are thrown down and filled up. It has tribunals of primary jurisdiction and of commerce; a departmental college, a society of agriculture, commerce, and arts; a public library, with 35,000 volumes; a theatre, an hospital, and a house of correction; manufactures of coarse woollens and druggets, with important fabrics of hosiery and gloves; breweries, tanneries, &c.; and a considerable trade in iron and cutlery. The emperors of Austria and Russia, and the king of Prussia, signed here, in 1814, a treaty against Napoleon. (*Hugo*, art. *Haute Marne.*)

CHAUNY, a town of France, dép. Aisne, cap. cant., at the point where the Oise is joined by the canal of St. Quentin, half the town being built on an island in the river, 18 m. W. Laon. Pop. 4,483. A good deal of cider is made in the town, which has also a good deal of trade, being favourably situated for commerce.

CHAVES, a fortified frontier town of Portugal, prov. Tras os Montes, on the right bank of the Tamega, over which it has a Roman bridge of 18 arches, 40 m. W. Braganza. Pop. 5,224. It has mineral baths, which were anciently much frequented. It was taken by the French, under Marshal Soult, on his entry into Portugal in 1808, but was re-captured by the Spaniards in the following year.

CHAYENPOOR, a town and distr. of Nepaul, N. Hindostan; the former is fortified, and is 130 m. E. by S. Catmandoo. The distr. is altogether mountainous; it exports to Thibet rice, wheat, oil, butter, iron, copper, cotton and woollen cloth, planks, spices, indigo, tobacco, sugar, furs, and pearls; and imports thence, salt, gold, silver, musk, musk deer skins, chowries, blankets, Chinese silks, borax, and medicinal herbs. (*Buchanan*, *Hamilton*, &c.)

CHEADLE, a market town and par. of England, co. Stafford, S. div., hund. Totmonslow: area of par., 5,730 acres; pop. of ditto, in 1841, 4,399. The town is pleasantly seated in the most fertile part of the Moorland, in a vale surrounded by hills, planted with forest trees, and in a district abounding with coal; 12 m. E. Newcastle-under-Lyne, 15 m. N.N.E. Stafford. It consists of one principal, and four small streets, and is intersected by the roads from Newcastle to Ashbourn, and from Leek to Uttoxeter. The church is an ancient structure, in the decorated style of English church architecture. The chapel of ease, a neat building, was erected by subscription in 1832. The town is governed by a constable and headborough, nominated annually at the court-leet, held by the lord of the manor. It is also a station for receiving votes at the election of mems of the H. of C. for the N. div. of the co. The living is a rectory, in the archdeaconry of Stafford, and diocese of Lichfield and Coventry. Patron, master and fellows of Trinity college, Cambridge. The chapel is a curacy in the gift of the rector. There are various chapels for dissenters and R. Catholics. It has a free school, endowed in 1685; a national school, and sundry bequests for the poor of the par. In the vicinage are very extensive copper, tin, and brass works, and a considerable tape manufactory. There are also in the town numerous blacksmiths, braziers, and tin-plate workers; iron merchants, nail-makers, curriers, and tanners; rope-makers, flax-dressers, saddlers, and maltsters. Copper ore has been found in the neighbourhood, but not in sufficient abundance to make its working advantageous. In the vicinity there are also considerable limeworks and collieries, which employed, in 1831, 90 men. The Caldon branch of the Trent and Mersey canal passes within 4 m. of Cheadle. Market-day, Friday; and fairs are held in January, March, Holy Thursday, 16th August, and 4th October, for cattle and horses.

CHEDDER, a par. and village of England, co. Somerset, hund. Winterstoke. Area, 6,690 acres. Pop. (1831) 1,980. The village, 15 m. S. by W. Bristol, at the base of the Chedder cliff, a part of the Mendip hills, has 3 irregular streets branching from a centre. The church is a spacious structure, with a lofty pinnacled tower; there is a charity school for 35 boys and 13 girls, supported by a portion of a bequest left in 1751, and at present producing about 180*l.* a year, the remainder being appropriated to the apprenticing of poor children, and the relief of the poor generally. There are fairs for sheep and cattle, May 4. and Oct. 29. The inhab. are chiefly employed in agriculture; but a paper-mill in the immediate vicinity employs several hands; and many females are engaged in knitting stockings. The Chedder rocks, close to the town, form a huge chasm, or gorge, apparently torn apart by some convulsion of nature, presenting irregular precipices and extensive caverns, characteristic of calcareous strata. The extensive downs comprised within the par. are clothed with fine pasture; and the dairies of the district have long been famous for the production of an excellent species of cheese, known by the name of Chedder.

CHEDUBA, an island in the Bay of Bengal, about 10 m. S.W. Ramree, Aracan, to which prov. it belongs, constituting one of its 4 chief divisions. It lies between lat. 18° 36′ and 18° 46′ N., and long. 93° 28′ and 93° 44′ E.: shape, nearly round; length and breadth, about 20 m. each. Area, 400 sq. m. Pop. (1831) between 5,000 and 6,000. Nearly the whole of its surface consists of a rich productive soil; the interior is much more free from jungle than that of any other isl. upon this coast. The sugar cane, tobacco, hemp, cotton, and rice, grow most luxuriantly, and the cattle are the finest in the whole prov., in which there is not, observes Capt. Pemberton, "a spot more likely to reward the industry of a pop. at all adequate to its area." The amount of public revenue in 1831 was 12,722 rupees. (*Pemberton's Report on the E. Frontier*, 1835, pp. 93, 94.)

CHELMSFORD, a town and par. of England, co. Essex, hund. Chelmsford, at the confluence of the Widd or Cann and Chelmer, 28 m. N.E. by E. Lond. Area of par., 1,750 acres. Pop. of do. (1821), 4,994; (1841) 6,789. The town, which is almost in the centre of the co., consists of one principal street and three others branching from it: houses mostly well built, many of them having gardens extending to the rivers. It is lighted, and well supplied with water from a spring distant ½ m., conveyed to a handsome reservoir in the town. The church, a stately fabric of the early part of the 15th century, has been repaired within the last few years, but the original pointed style has been carefully preserved. It has a chapel of ease, 4 dissenting chapels, 4 sets of almshouses (the oldest founded in 1625); a public dispensary, and many minor charities and benevolent societies; a grammar-school, founded by Edw. VI., which participates alternately with those of Malton and Brentwood in an exhibition to Caius College, Cambridge; 2 charity schools (one founded in 1713, one in 1714), which respectively clothe and educate 50 boys and 20 girls; a national, a Lancastrian, and an infant school; a neat theatre; public baths, with a reading-room attached; and a handsome hall, in which the courts of assize and of quarter sessions for the county are held, and which also contains a spacious assembly-room. The present co. gaol, on a hill about 1 m. from Chelmsford, in the par. of Springfield, where it occupies an area of 8 or 9 acres, was built in 1828 on the radiating plan. The former gaol, in the same par., is now only used for prisoners previously to conviction, and debtors: attached to it is a house of correction for females. During the last war, two sets of barracks, capable of containing 4,000 men, were erected near the town; but they have since been taken down. A line of embankments defended by star batteries may still be traced, erected during the threatened invasion in 1805, to protect the approaches to the metropolis from the E. coast. Market, Friday: the supply is good, especially of poultry, much of which is usually purchased for the London markets. Fairs, May 12, Nov. 12. for horses and cattle. The Chelmer is crossed by a handsome iron bridge. Below the town, the river has been formed into a navigable canal, 12 m. in length, for barges, by means of locks and artificial cuts, to Maldon, at the head of the æstuary of the Blackwater. A handsome stone bridge of one arch has been thrown over the Cann, to replace an older bridge of three arches built in the reign of Henry I. Chelmsford is on the line of the Eastern Counties railway, and has long been the great thoroughfare to the E. parts of Essex, and to those of Norfolk and Suffolk. This and the general co. business of assizes, sessions, &c., are the chief support of the place, for there is no manufacture, and the principal part of the labouring pop. are employed in agriculture, or as carriers and drovers to the metropolis. There are well-frequented annual races in July, held on Galley Common, 2 m. from the town. Chelmsford is near the *Cæsaromagus* of the Roman period.

CHELSEA, a town and par., forming part of the W. suburbs of the metropolis of England, co. Middlesex, hund. Ossulston, Kensington div. Pop., in 1831, 32,371; 1841, 40,179. It is situated on the N. bank of the Thames, along the widest of its reaches above London bridge, and is connected with Battersea on the opposite bank by a wooden bridge: the lower, or old town, is irregularly built, and on the whole of mean appearance: its best houses are those of Cheyne Walk, along the side of the river above the hospital, anciently

a fashionable resort, where many distinguished individuals resided. The upper and more modern town, which extends towards Hyde Park, and comprises Sloane Street and Square, Cadogan Place, part of Knightsbridge, &c., consists of handsome and regularly built houses. The original parish church near the river (the oldest part of which is of the 14th century) contains many interesting monuments; amongst others, one to Sir Thomas More, and in its churchyard is one to Sir Hans Sloane, who resided here, and was lord of the manor. This original church has now become a chapel of ease to a splendid church, built in 1824, in the decorated and later Gothic style, of which it is a very fine specimen: it has 927 free sittings, in consequence of the parliamentary commissioners having contributed several thousand pounds towards its erection: it has also an episcopal chapel in Park Street, built in 1718; another in Sloane Street, in the later pointed style, in which there are 650 free sittings; 4 dissenting chapels, a charity school founded in 1694, in which 40 scholars are educated, and 30 of the number clothed; a national school behind the new church, and of corresponding structure, and others connected with the Park and Sloane Street chapels; besides several minor charities. The most important public estab., however, is that of the military hospital, finished in 1690, on a plan of Sir C. Wren, at an expense of 150,000*l.*: it is of brick, with stone quoins, columns, and cornices, and forms 3 quadrangles in the centre of extensive grounds; those at the back of the structure being planted with avenues, those in front, occupied by gardens which extend to the river, to which the central quadrangle opens, forming the S. front, with wings on either side, ornamented with porticos and piazzas. The estab. has a governor, lieutenant-governor, &c., and usually about 550 in-pensioners, consisting of veteran soldiers, who, besides food and clothing, receive weekly pay, varying, according to rank and service, from 8*d.* to 3*s.* 6*d.*; the out-pensioners connected with this hospital amounted, in 1849-50, to 67,908. Their pensions vary from 4½*d.* to 2*s.* a day, a few receiving from 2*s.* to 3*s.* 7*d.* a day. The total expenditure on account of the out-pensioners in the above mentioned year amounted to 1,198,073*l.* The affairs of the hospital are managed by a board of commissioners. Sir Stephen Fox, the chief promoter of this noble institution, contributed 13,000*l.* towards its formation. York Hospital is connected with the Royal Hospital, having been built for the reception of wounded soldiers from foreign stations, who are taken into the other as vacancies occur. A military asylum was established by the Duke of York in 1801, for soldiers' orphans, and the children of those on foreign stations. It is a handsome building, not far from the Royal Hospital: 700 boys and 300 girls being maintained, clothed, and educated in it on Bell's plan: the boys, on leaving, enter the army; the girls are apprenticed. Between Chelsea Hospital and Cheyne's Walk are the botanical gardens of the Apothecaries' Company, occupying 4 acres on the bank of the river, granted by Sir H. Sloane, whose statue by Rysbrach is placed there: a hot-house, green-houses, library, &c., are connected with them, and annual lectures are given. There are similar gardens near Sloane Street, estab. in 1807, comprising 6 acres, in which lectures are also given in May and June: the plants are arranged in compartments on the Linnæan system. There is an old established brewery, 2 soap manufactories, and a large one for floor-cloths in the parish; a considerable coal-trade is also carried on by means of barges. Annual value of real property in 1843, 167,898*l.*

Chelsea continued, through the 17th and 18th centuries, a favourite and fashionable resort, and was noted for its taverns and public gardens: Don Saltero's Coffee-house and Curiosities (*Tatler*, No. 34.) still remain; the Ranelagh Gardens, adjoining those of the Royal Hospital, were closed in 1805.

CHELTENHAM, a town, parl. bor., and fashionable watering-place of England, co. Gloucester, hund. Cheltenham, in a fertile vale opening to the S. and W., at the base of the Cotswold Hills, on the Chelt, a small stream, whence it derives its name; 9 m. N.E. Gloucester, 87 m. W.N.W. London. Area of par., 3,740 acres. The increase of the town since the commencement of the present century, occasioned by the great influx of wealthy invalids and others, attracted by the celebrity of its spas, the mild and equable temperature of the site, and the beauty of the surrounding neighbourhood, has been quite extraordinary. In 1801 the pop. of the par. amounted to only 3,076; in 1811 it had increased to 8,325; in 1821, to 13,396; in 1831, to 22,492; and in 1841, to 31,411. The High Street, running N.W. and S.E., is upwards of 1½ m. in length; several others branch from it, at right angles, on each side, leading to the various squares, terraces, detached villas, and spas; each of the latter being surrounded by extensive pleasure-grounds. On the N. side of the town, amongst other fine ranges, are Columbia Place, St. Margaret's Terrace, and Pittville Lawn; on the S. the Upper and Lower Promenades (on the plan of the Louvre), the Crescent &c.; and up the ascent in that direction, Lansdown Place, Crescent, and Terrace, commanding fine views of the Malvern Hills. The spas, to which the town is indebted for its rapid growth and celebrity in the fashionable world, originate in a considerable number of saline springs, rising in different parts of the vale, and having their source in the new red sandstone formation, which appears at the surface at the base of Coombe Hill, N.W. of the town, whence it dips gradually, and is about 700 ft. beneath the surface of the chief streets and squares. In all the springs, chloride of sodium is the predominating ingredient, and prevails the most where the red sandstone is approached the nearest. The other mineral components consist chiefly of the sulphates of soda, magnesia, and lime, oxide of iron, and chloride of manganese—the three last in smaller proportions. Iodine and bromine have also been detected in several of the springs. Though the ground has been bored to the depth of 260 ft., none of the present wells exceed 130 ft. in depth. The waters, not only of different springs, but those of the same spring, at different times, probably vary much in their analysis, as several eminent chemists have arrived at different results. The various ingredients, except chloride of sodium, are supposed to be derived from the lias incumbent on the red sand, the waters becoming impregnated in their ascent through the different marls, clays, &c. of that formation. They are chiefly efficacious in bilious and dyspeptic cases; and are taken as aperients, usually to the extent of 2 or 3 half-pint glasses before breakfast, at intervals of a quarter of an hour between each. The alkaline form the most numerous class; the magnesian occurs in 2 or 3 wells of recent origin; and at the old wells and Montpellier are sulphurous springs used in cases of scrofula, &c. The earliest of these saline springs first attracted attention in 1716, and was subsequently enclosed and resorted to by a few invalids. It was not, however, till the visit of Geo. III. in 1779, that the waters obtained any extensive repute; since which period, or a little later, Cheltenham has increased, as already seen, with singular rapidity, and with every prospect of its still continuing a favourite resort of the fashionable world, and of wealthy invalids from the E. Indies, and other hot climates. The Original Establishment, or Old Well, has of late years been greatly extended and improved; it is approached by a fine avenue, and has the crest of a pigeon on various parts of the structure, in allusion to the discovery of the first spring, from its being resorted to by flocks of those birds. The Montpellier Spa (about ½ m. S. of the town) was first opened in 1809; this has also, of late years, been greatly augmented, and is at present the most fashionable resort during the season, which, at all the spas, begins May 1. and ends Oct. 31. During this period they are opened at 6 in the morning; and at Montpellier there is a numerous band in attendance from 8 to 10 o'clock, the usual time for drinking the waters and promenading. The evening musical promenades at the same spa are also amongst the principal attractions of Cheltenham; and, during the season, the weekly assemblies (under a master of the ceremonies) take place in the rotunda of this spa. In winter they are held at a splendid suite of rooms in the High Street. The Montpellier baths comprise every variety of warm, cold, vapour air, shampooing, &c.; and adjoining them is an extensive laboratory for manufacturing the various kinds of "Cheltenham Salts." They form altogether an extensive range of buildings, and are supplied with the mineral water of 80 different wells, conducted by one main pipe to the establishment. The monthly exhibitions of the Horticultural and Floral Society are held at the Montpellier and Pittville Spas. The latter is in the Grecian style, and is a splendid structure, on an eminence N. of the town, commanding fine prospects, with extensive walks and drives round it. A few public breakfasts are given at this spa during the season, but hitherto the southern quarter of Cheltenham has always been the most frequented and fashionable. The Pittville establishment was opened in 1830, having cost in all about 60,000*l.* The Cambray Spa is a small Gothic structure, built over a chalybeate spring. The whole of these spas are more or less frequented throughout the year: there are also good public baths in the High Street. The parish church is an ancient Gothic building, with a lofty spire, in the midst of an extensive churchyard, planted with noble avenues. There are also 6 modern churches; built partly by private subscription, and partly by grant from the commissioners; a Catholic, and various dissenting chapels. A free grammar school was founded in 1586, for at least 50 boys; but grammar being held to mean Latin, though the scholars are instructed gratuitously in that language, they have to pay for instruction in English. Various efforts have been made to obviate this anomaly and get the school placed on an improved footing, but without success. It has 2 exhibitions at Pembroke College, Oxford, worth 60*l.* each; and 4 church livings are ex-

clusively open to the scholars of this school who have obtained exhibitions. A charity school was founded in 1682, for boys of this and several other pars., who, on leaving, have an apprentice fee allowed them; a national school, established in 1817, has between 500 and 600 children daily, and 200 on Sundays; a female orphan asylum, founded in 1806 by Queen Charlotte, maintains and educates about 27 children, from the age of 8 to 15; infant schools, &c.

But the principal educational establishment connected with the town is the Proprietary College. It was set on foot by a large body of subscribers, in the view of furnishing a complete course of classical instruction to the sons of the upper classes. The building, a magnificent fabric in the Tudor style, opened in 1843, has a front 240 ft. in length, with a tower rising to the height of about 80 ft. Inside it has a school-room 90 ft. by 45 do., a gymnasium of the same dimensions, lecture-rooms, &c. The establishment is said to be very well managed.

The principal charitable institutions are, the general hospital, accommodating 100 patients from all parts; the dispensary and casualty hospital, established 1813; the benevolent and anti-mendicity society, established in 1827, and affording relief in kind, by means of tickets; the Cobourg (for women in child-birth), Dorcas, and numerous others; alms-houses, founded 1574, for 6 old people; and several minor charities. There are public libraries and reading-rooms at each of the spas, and 5 or 6 others in the town; a literary and philosophical institution, established 1833, at which lectures are frequently given, with a good library, and museum; and zoological gardens. The General Association for Scientific and Literary Instruction has weekly meetings and courses of lectures — it is on the plan of a Mechanics' Institute. Five weekly newspapers are published in the town. There is a neat theatre, usually open in summer, but enjoying no great share of patronage. The assembly rooms in Regent Street, opened in 1816, cost 60,000*l*. The ball-room is 87 ft. by 40, and 40 ft. high. The establishment further comprises card, billiard, and club-rooms, &c. A cricket-ground, on the old Bath Road, belongs to a club which meets thrice a week during the summer; annual races take place in July, and are numerously attended: within a recent period, a spring meeting in April has also been established, and promises to succeed. A subscription pack of stag-hounds is supported by the town, and hunt 4 days a week from Sept. to April. Earl Fitzhardinge's fox-hounds also hunt during the season. The market-place is an extensive structure, built in 1823, with an entrance, through an arcade, from the High Street. Market, Thurs. and Sat.; there is usually an abundant supply, at moderate prices. Annual fairs for cattle and cheese are held the 2d Thursday in April, August 5., 2d Tuesday in Sept., and 3d Thursday in Dec.; there are also 2 statute fairs, on Thursday before and after Old Michaelmas Day. Malting is carried on to some extent, but the chief trade of the place is caused by the great influx of visiters to the spas, and by its being a considerable thoroughfare. The hotels and numerous lodging-houses are of a first-rate description: there is also a club-house, on the same plan as those of the metropolis (the members of any of which are admissible to it). Two joint-stock banking companies, the Cheltenham and Gloucestershire Bank, and the County of Gloucester Bank, have their head offices in the town, and it has also a branch of the Provincial Bank of England. The deposits in the savings' bank amounted, on the 20th of November, 1848, to 111,410*l*. Cheltenham is connected by railways with all parts of the country, and has profited much by the consequent facility of communication. Coals and other articles of general consumption are brought, by a railway, from the Gloucester and Berkeley Ship Canal to the W. side of the town (9 m.), where there are convenient wharfs and warehouses. Water, for domestic use, is conducted from sources in the Cotswold Hills to a large reservoir, and thence, by pipes, to the upper stories of most of the houses: this, and the gas (with which the whole of the town and suburbs are well lighted), are supplied by private companies. The paving, sewerage, &c., regulation of the hackney carriages, and the police force (on the metropolitan plan, and wearing a similar uniform), are all under the control of commissioners, appointed under an improvement in 2d Geo. IV., who meet regularly. Petty sessions for the hund. are held thrice a week. There is also a manorial court leet, the lands subject to which, by an ancient custom, confirmed by the legislature, descend to the eldest *female*, instead of the eldest heir male. A county court is established here, before which 1,170 plaints were entered in 1848. The Reform Act conferred on Cheltenham, for the first time, the privilege of returning 1 mem. to the H. of C. The limits of the parl. bor. coincide with those of the par. Registered electors, in 1849–50, 2,278. It is a polling town for the E. division of the co. In 1847 the sum expended (ex. charities) on the relief of the poor of Cheltenham amounted to 9,557*l*., assessed upon real property of the estimated annual value of 177,225*l*. The government of the town is vested in commissioners. The scenery in every direction is very beautiful, and nightingales abound in the vicinity. Bennal's Wood, about 1 m. from the town, has been named, from the numbers that frequent it, Nightingale Grove. From some of the neighbouring summits extensive prospects are commanded, especially from Cleeve Cloud, Birdlip, Charlton Deer Park, and "the Castles," so named from the remains of some ancient encampments. Sudeley Castle, a splendid old ruin; Southam, a curious specimen of domestic architecture of the Tudor period; Witcombe, where the remains of a Roman villa were discovered in 1818 (*Archæolog.* vol. ii.), and Toddington, a splendid modern seat, are in the vicinity. (*Cheltenham Guide; Cheltenham Annuaire*, 8vo. 1839; *Geological Trans.; Neale's Views; Parl. Papers, &c.*)

CHELVA, a town of Spain, prov. Valencia, on a river of the same name, 39 m. N.W. Valencia. Pop. 5,622. There are vestiges of an ancient Roman aqueduct, on the N. E. of this town, that served to convey water to Liria. The neighbourhood is planted with mulberries and vines, and produces wheat, barley, rye, oats, maize, wine, and oil.

CHEMNITZ, a town of the k. of Saxony, circ. Zwickau, cap. distr. of same name, on the Chemnitz river, 20 m. E.N.E. Zwickau, and 37 m. W.S.W. Dresden. Pop., with its suburbs (1837), 22,265. It was formerly walled, but its fortifications have been levelled, and their site is now laid out in public walks. It has some good streets and squares, a castle, 5 churches, 4 hospitals, a town hall, cloth hall, lyceum, school of design, &c.; and has handsome and thriving suburbs. Chemnitz is the principal manufacturing town of the kingdom. It has extensive cotton manufactures, and that of cotton hosiery, mitts, &c., to which it is mainly indebted for its rapid growth, is said to employ from 15,000 to 20,000 looms in Chemnitz and the neighbouring villages. The stockings, mitts, &c., manufactured here, are now very widely diffused over the states comprised within the German Customs League; and considerable quantities have also been shipped for the U. States.* The machinery employed, though a good deal improved, is still very imperfect; and the real advantage on the side of the Saxon manufacturers consists in the low rate of wages resulting from the depressed mode of living of the work-people, who subsist chiefly on rye-bread, with a very small supply of butchers' meat. We are not, however, of the number of those who think that we have much to fear from Saxon competition. We have indeed been, and most probably will be, undersold in those descriptions of fabrics principally produced by manual labour; but the advantages of our situation, and our superiority in all that respects the employment of machinery on a great scale, is so very decided, that it is most unlikely it should be shaken by the competition of any state so unfavourably situated as Saxony. There were, according to Cannabich, in and round the town, in 1833, 40 steam, water, and other spinning mills. The entire value of its cotton manufactures was estimated, at the same epoch, at 2,000,000 rix dollars a year, and they have increased materially in the interim. Chemnitz has also a manufacture of spinning machinery, with which it supplies a considerable part of the Continent; and it has besides manufactures of linens, &c.; and dyeing and bleaching establishments. The district of Chemnitz contains 14 villages, and had, in 1837, a pop. of 44,600, most of whom are employed in the above branches of industry. Chemnitz was for 400 years a free imperial city. It was the birthplace of Puffendorf. (*Berghaus; Allg. Lander und Volker; Cannabich; Lehrbuch.*)

CHENONCEAUX (CASTLE OF). *See* BLERE'.

CHEPSTOW, a sea-port town and par. of England, co. Monmouth, hund. Caldecot; on the Wye, 2½ m. from its embouchure in the Severn, 110 m. W. Lond., and 14 m. N.N.W. Bristol. Pop. (1821) 3,008; (1841) 3,366. It stands on a gradual slope betwixt bold cliffs rising from the W. bank of the river, and is surrounded by some of the finest scenery in England. Streets broad, well paved, and lighted with gas, but badly supplied with water. There are many good houses, and the town looks neat and cheerful. The church has a fine Norman entrance, and many curious specimens of the early pointed style. It has also a Cath., and 3 diss. chapels; an endowed charity school for 13 children; a national school; 2 ancient hospitals, in which 25 aged persons are supported; and several minor charities. Market, Wed. and Sat. Fairs, Frid. and Sat. in Whitsun-week; Sat. before June 20., Aug. 1., and Frid. before Oct. 29. It has no manufactures; but a considerable trade, being the chief port of most of the places on the Wye and Lug, including Herefordshire and the E. part of Mon-

* During the year ended the 30th of September, 1838, the total value of the hosiery imported into the U. States amounted to 767,876 dollars, of which articles of the value of 412,410 dollars were shipped from the Hanse towns; but we have no means of stating what proportion of these were supplied by Saxony, and what by Rhenish Prussia, though we believe that the former was much the greater.

mouth. Ship-building is carried on to some extent; and about 70 vessels, of the aggregate tonnage of 4,600 tons, belong to the port. The tide runs with great rapidity in the river, making its navigation a little dangerous; and it rises at ordinary springs between 40 and 50 ft., and at high springs it sometimes reaches between 50 and 60 ft.; hence very large ships may come up to the town, and barges of 30 tons burden ascend the river to Hereford. A handsome iron bridge was thrown over the river in 1816 at the joint expense of the two cos. separated by the Wye. The castle, on a steep cliff overhanging the Wye, dates from the 11th century, though most of the existing remains, which occupy a considerable space, appear to be of more recent origin: it was alternately in the hands of both parties during the last civil war; and after the restoration, Henry Martyn, the regicide, was imprisoned for life in one of its towers, where he died after 30 years' confinement. The co. magistrates hold petty sessions in the town, and a small theatre is occasionally opened.

CHER, an inl. dep. of France, reg. Centre, formed of part of Berri and Bourbonnais, having N. the dep. Loiret, E. Nièvre, S. Allier and Creuse, and W. Indre and Loir-et-Cher. Area, 720,880 hectares. Pop. 294,500. It derives its name from the Cher, by which it is intersected, and is included in the basin of the Loire, which, with the Allier, forms its E. boundary. Surface generally flat. Soil various: in the E., and along the Loire, it is very fertile; S. it is of a medium quality, while in the N. it is sandy, and covered in great part with heath. Agriculture backward. Principal crops, wheat, maslin, rye, barley, and oats. Hemp is largely cultivated, the crop being estimated at about 750,000 kilog. a year. The natural meadows, which are extensive and valuable, are principally depastured by sheep and cattle. The stock of sheep is estimated at about 500,000 head, producing annually 570,000 kilog. of wool; in 1833, the dep. furnished 16,749 sheep for the markets of Paris. The stock of black cattle is estimated at 85,000 head. In the reign of Henry IV., the horses of Berri enjoyed a high reputation; but the breed is now *complétement dégradée*. Hogs and goats numerous. The forests occupy about 120,000 hectares; and furnish timber for the navy, carpenters' work, &c. The vineyards cover nearly 13,000 hectares; those in the arrond. of Sancerre furnish the best wines. Iron is abundant, and is pretty extensively wrought. In 1829 the different works supplied 2,250,000 kilogs. pig, and 5,250,000 kilogs. bar and rod iron. The cloth manufacture, once the staple of the dep., has greatly fallen off; and the glass works that were formerly to be met with have ceased to exist. The cutlery of Bourges is much esteemed; and there are fabrics of coarse cloth, linen, &c., with earthenware manufactures, breweries, tanneries, &c.

The dep. was distributed, in 1835, into 80,200 separate properties. Public rev., in 1844, 7,389,753 fr. Principal towns, Bourges, St. Amand, Vierzon, and Sancerre. (*French Official Tables; Hugo*, art. *Cher*.)

CHERASCO, an inl. town of N. Italy, k. Sardinia, prov. Mondovi, cap. mand., advantageously situated on a point of land between the Stura and Tanaro, near their confluence, 31 m. S.S.E. Turin. Pop. 8,000.? It was formerly an important military post, and is still surrounded with walls; but its citadel was dismantled in 1796. It is well built and laid out, and supplied with water by a canal cut from the Stura, which also turns several silk mills. Trade chiefly in wine and silk. (*Ramvoldi, &c.*)

CHERBOURG, a principal sea-port and fortified town of France, dép. Manche, on its N. shore, nearly opposite the W. extremity of the Isle of Wight, at the bottom of a bay formed by Cape Levi on the E., and Cape La Hogue on its extreme W., at the mouth of the Divette, 41 m. N.W. St. Lo, and 185 m. W.N.W. Paris. Lat. 49° 38′ 31″ N., long. 1° 41′ 58″ W. Pop., 1846, 22,460. It is open, but defended by an entrenched camp. Streets narrow and dirty, notwithstanding there are many public fountains. Houses mostly of stone and slated. Chief public buildings: the military and marine arsenals, a spacious marine, and several other hospitals; the parish church, a singular edifice; the town hall and prison, both new and handsome buildings; a theatre; public baths and barracks. From its advanced position in the English Channel, it has long been a favourite object with the French government to render Cherbourg a great naval arsenal, and a secure asylum for ships of war; and to accomplish this, vast sums have been expended upon it. The harbours for merchantmen and ships of war are quite distinct from each other. The last, which was constructed by Napoleon, is a magnificent work. It is mostly excavated out of the solid rock, is 328 yds. long, by 250 wide, and is capable of accommodating 50 ships of the line, which may enter it at all times, there being 25 ft. water at low ebb. It has 4 fine covered granite docks, 85 ft. deep, for the building of ships, and a basin for those undergoing repair. Near the naval port is the dockyard of Chantereyne for the building of frigates, containing a large timber yard, a rope walk 546 yds. in length, &c. The commercial port, formed by the mouth of the Divette, and easy of access, consists of an outer harbour and a basin, the former, 262 yds. long, by 218 wide; the latter, 446 yds. long, by 138 wide. Between the two divisions is a sluice: the outer harbour communicates with the sea by a canal 656 yds. long and 54 wide, bordered in its whole length by a granite jetty, within which a depth of 19 ft. water is always retained. The roadstead of Cherbourg is one of the best in the Channel, and capable of containing 400 sail. It is defended on all sides by batteries, and is protected from the northerly winds, which would otherwise throw in a heavy sea, and in a great measure also from the Channel currents, by a vast artificial *digue*, or breakwater, similar to that in Plymouth Sound, constructed in the centre of the bay, opposite to, and about 2¼ m. from, the mouth of the river. This great work, formed for the most part of granite and sandstone, was commenced under Louis XVI., in 1784, and continued till 1791; it was re-commenced by Napoleon in 1802, again discontinued in 1813, and is not yet quite complete. Its foundation was laid by sinking many massive wooden frames which were afterwards filled with blocks of stone, 500,000 cubic fathoms of which have been already employed in its construction. The length of the *digue* is 3,768 metres (4,120 yards); breadth at its base, 262 ft., at its summit, 101 ft. On its central part, which is 9¼ ft. above the water at the highest spring tides, a battery has been erected. The E. channel between it and the shore is 1,060 yards in width, that on the W. side 2,550 yards.

Cherbourg is the seat of a tribunal of original jurisdiction, of a marit. tribunal and prefecture, and is the cap. of the 1st naval arrondissement. It has a departmental college, a royal academical society, a public library with 3,500 vols., a naval library, and several museums. Cherbourg, which is very ancient, was in the 10th century called *Carusbur*. It was long in the possession of the English, and was the last place they retained in Normandy. (*Hugo*, art. *Manche; Official Reports; Dict. Géographique, &c.*)

CHERIBON, a sea-port town of Java, cap. div. and prov., at the head of a wide bay on the N. coast of the isl., 128 m. S.E. by E. Batavia; lat. 6° 48′ S., long. 108° 37′ E. In the early part of the present century it suffered from a pestilence, which destroyed more than a third of its inhab.: and from this and other causes, it is said to have declined of late: but it still continues to be the residence of a Dutch governor, and enjoys considerable trade. The town and harbour are protected by a fort. The district of Cheribon is remarkable for its fertility, and the excellence of its coffee, indigo, teak timber, &c. (*Hamilton's E. I. Gaz.*, ii. 535.)

CHERSO and OSERO (an. *Crepsa* and *Absorus*, together called *Absyrtides*), two contiguous long and narrow isl. of the Adriatic, belonging to Illyria, gov. Trieste, between lat. 44° 30′ and 45° 20′ N., and long. 14° 15′ and 14° 30′ E., separated from Istria by the Gulph of Quarnero; united length nearly 50 m., breadth varying from 1 to 8 m. Area, 95 sq. m. Pop. 14,000. Surface generally mountainous, stony, and barren; but in some parts the olive, vine, fig, and various other fruits, and a little corn, are grown, and in several parts there are good pasture lands for sheep. Oil is the most valuable product of Cherso, wine of Osero. In the N. part of the former island there are some fine woods; and shrubs and plants for dyeing are very abundant. The breed of sheep is very indifferent, and the wool bad. Other domestic animals are few. Many of the pop. subsist by the tunny, anchovy, &c. fisheries. There are a few manufactures, chiefly of coarse woollen cloth and liqueurs; and vessels are built at the principal towns:—these are Cherso, Osero, Lossin Grande, and Lossin Piccolo. Cherso, the cap., on the W. side of the island of same name, has a good though small harbour, and 3,000 inhab. It contains a cathedral and numerous other churches; its streets are narrow and dirty; but its inhab. clean and industrious. Osero, also on the W. side of the island of Cherso, in an unhealthy situation, has only 1,500 inhab.; but it has a cathedral with a fine steeple, and was formerly the seat of a bishoprick. It was sacked by the Saracens in 840. Its inhab. have some trade in timber. Lossin Grande and Piccolo are two insignificant towns on the island of Osero. The two islands are connected by a bridge. (*Oesterr. Nat. Encycl.; Fortis; Trav. in Dalmatia.*)

CHERSON. *See* KHERSON.

CHERTSEY, a town and par. of England, co Surrey, hund. Godley. Area of par., 10,020 acres. Pop. of do. (1821), 4,279; (1841), 5,347. The town, situated on the S. bank of the Thames, is neatly built of brick, partially paved, and well supplied with spring water, but not lighted. It is connected with the Middlesex side of the river by a handsome stone bridge of 7 arches, built in 1785, at the joint expense of the two counties. The church, a handsome structure, erected in 1808, in the later pointed style, contains a tablet to the memory of the celebrated statesman C. J. Fox, who resided for a

lengthened period at St. Ann's Hill, near the town. There are also 3 dissenting chapels, almshouses, several minor charities, and a school, founded in 1725, for 50 children of this and three adjoining parishes; its present revenue is nearly 400*l*. a year, and it has been arranged on Bell's plan, and now educates 230 boys and 130 girls, of whom 30 of either sex belonging to Chertsey are clothed. Market-day, Wednesday. Fairs, First Monday and Tuesday in Lent, for cattle; May 14. for sheep; Aug. 6. and Sept. 25. for pleasure and pedlery. The stallage and tolls of these and the markets were granted to the poor of the town by Queen Elizabeth The chief business of Chertsey consists in the manufacture of malt, flour, iron hoops, and brooms: great quantities of bricks are also made in the neighbourhood; and vegetables are largely cultivated for the London markets: these are mostly conveyed by the Guildford and Petworth Canal, which approaches to within 2 m. of the town. It is governed by a bailiff, appointed for life by letters patent of the exchequer, and is exempted from the jurisdiction of the co. sheriff, but is within that of the co. magistrates, who hold a session for the division every fortnight. Cæsar is supposed to have crossed the Thames near this place to attack Cassibelaunus; the stakes then driven into the bed of the river by the Britons to obstruct the passage of the Romans are noticed by Bede as remaining in the 8th century; and vestiges of them are still traceable ½ m. below the bridge. During the Heptarchy, Chertsey was the residence of the S. Saxon kings: at Hardwick Court, in the par. (now a farm), Henry VI. resided when a child; and in an ancient monastery (founded by Edgar, and existing till Henry VIII.) he was privately interred, though his remains were subsequently removed to Windsor. Cowley the poet died in this town, where his study is still preserved.

CHESAPEAKE BAY, a noble bay on the Atlantic side of the U.S. of N. America, having its embouchure on the coast of Virginia, between Cape Charles, lat. 37° 7′ N., long. 76° 2′ W., and Cape Henry, lat. 36° 56′ N., long. 76° 4′ W., about 13 m. apart. It stretches nearly due N. from Cape Henry to the mouth of the Susquehannah river, in 39° 35′ N., a distance in a direct line of above 180 m. Its average breadth N. of the Potomac river, in lat. 38°, is about 10 m.; but S. of that point it is about 25 m Its coast line is very irregular, inasmuch as it branches out on both sides into an immense number of bays; but including these, and its numerous islands, its area is estimated at 3,600 sq. m. (*Darby*.) It is wholly within the states of Virginia and Maryland. Chesapeake Bay differs from the other sounds on the Atlantic slope of the U. States in having only one outlet, as well as in its greater depth of water, which is generally about nine fathoms, affording many commodious harbours, and a safe and easy navigation for ships of the largest burden. At its head it receives the Susquehannah; and on its W. site the Potomac, Rappahannock, York, and James rivers. On the same side are Baltimore, Annapolis, Norfolk, Hampton, &c.; and on its E. shore, Chester and Cambridge. Dismal Swamp canal connects Chesapeake Bay with Albemarle Sound; the Chesapeake and Ohio canal, from the tide water of the Potomac to Pittsburg, was commenced in 1828. (*See* MARYLAND, VIRGINIA, &c.; *Darby; American Encycl.; Mitchell's U. States*.)

CHESHAM, a town and par. of England, co. Bucks, hund. Burnham, in a fertile vale, through which a small brook flows to join the Coln. Area of par., 11,880 acres. Pop. of do. (1821) 5,032; (1841) 5,593. The town, 26 m. N.W. London, consists of 3 streets. The church, an ancient cruciform structure, has an embattled tower and spire; there are also 4 dissenting chapels, an almshouse for 4 old people, and a national school. Market on Wednesday, for corn, Saturday for general provisions. Fairs April 21. and July 22. for cattle; a statute fair Sept. 28. Chesham was formerly noted for the manufacture of wooden turneryware, which, though still carried on, has greatly declined. The lace manufacture is wholly discontinued. Shoemaking, for the supply of the metropolis, is the chief business; but the making of straw plait employs many females: there are also several paper-mills, and a small silk-mill in the vicinity.

CHESHIRE, a marit. co. of England, having N. the Irish Sea, the æstuary of the Mersey, Lancashire, and a small part of Yorkshire; E. the cos. Derby and Stafford; S. Salop, and a portion of Flint; and W Denbigh, Flint, and the æstuary of the Dee. Area, 673,280 acres, of which about 600,000 are supposed to be arable, meadow, and pasture. Surface generally low and flat, with some considerable hills along its E. border, and a broken ridge on its W. side extending from Malpas to Frodsham; in this ridge, near Tarporley, is the insulated rock of Buston. It is watered by the Dee, Weaver, and other streams, and the Mersey forms the line of demarcation between it and Lancashire: it is also intersected by several canals. It has mines of coal, copper, lead, and cobalt; but its most valuable mineral consists of an inexhaustible supply of rock-salt, vast quantities of which are annually dug up, and used partly for home consumption and partly for exportation; a great quantity of salt is also procured from the brine springs contiguous to Northwich, Middlewich, &c. The soil consists, for the most part, of a red rich sandy or clayey loam, much improved by marling, and generally very fertile. The climate is mild and humid; and the country being low and well sheltered, and divided by hedges and hedgerow trees, is remarkable for its verdure and the luxuriance of its pastures. Hence Cheshire is one of the finest grazing districts in England, and has been long celebrated for its dairies. Cheese is the principal product; and is not only highly esteemed throughout England, where it is consumed in immense quantities, but also in many parts of the Continent and of America. Arable husbandry is a secondary object, and is less suited to the climate; but potatoes are grown in large quantities. Estates for the most part large, and this is one of the cos. in which the least change has taken place, for a lengthened period, in the ownership of land: farms mostly small, a great many under 10 acres; but excluding these, the average is probably about 70 acres. Average rent of land in 1843, 28*s*. 7*d*. an acre. Though there are but few extensive woods, Cheshire has, owing to the prevalence of hedgerow trees, a very woody appearance, and a large supply of available timber. Manufactures of cotton, silk, &c. are carried on with great spirit and success at Macclesfield, Congleton, Stockport, and other places. Cheshire has 7 hund. and 90 par., exclusive of the city of Chester. It sends 10 mem. to the H. of C., viz. 4 for the co., and 2 each for the city of Chester, and the bors. of Macclesfield and Stockport. Regist. elect. for the co. in 1849–50, 15,711; viz. for the S. div. 8,216, N. div 7,495. In 1841 Cheshire had 73,444 inhab. houses, and 395,660 inhab., of whom 193,646 were males, and 202,014 females. Sum paid for the relief of the poor in 1847, 80,332*l*. Annual value of real property in 1815, 1,114,927*l*.; do. in 1843, 1,889,937*l*.

Cheshire is called a co. palatine, from the sovereign power in it being formerly exercised by the Earl of Chester as fully as by the king in his palace. But it has been long held by the crown. It had, however, separate courts and law officers till the passing of the Welsh Jurisdiction Act of Geo. IV., when they were abolished, and its courts assimilated to those of the rest of the kingdom.

CHESTER, a city, co., parl. bor., and sea-port of England, locally in the co. of Chester, hund. Broxton, on a rocky elevation on the N. bank of the Dee, by which it is half encircled, on the S. border of the co., about 6 m. above the confluence of the Dee with its æstuary, 27 m. S. by E. Liverpool, 164 m. N.W. London; lat. 53° 11′ N., long. 2° 52′ 30″ W. Pop. (1821) 19,949; (1841) 23,115. The city is enclosed within an oblong quadrangle by walls of great antiquity, and which are most probably built on the site of those constructed by the Romans. They make in all a circuit of 2670 yards, and are of great thickness, and kept in a complete state of repair. The ancient gateways having been removed and replaced by modern arches, a continuous walk on the top of the walls, 6 ft. wide, defended on one side by a parapet, and on the other by a railing, extends all round the city, and affords a great variety of fine prospects. "The form of the city," says Mr. Pennant, "evinces its Roman origin, being in the figure of their camps; with 4 gates, 4 principal streets, and a variety of lesser, crossing the other at right angles, so as to divide the whole into lesser squares. The structure of the 4 principal streets is without parallel; they run direct from E. to W. and N. to S.; and have been excavated out of the earth, and sunk several feet below the surface. The carriages drive far below the level of the kitchens, on a line with ranges of shops; over which, on each side of the streets, passengers walk from end to end, secure from wet or heat, in galleries (or *rows*, as they are called) purloined from the floor of each house, open in front, and balustraded. The back courts of all these houses are level with the rows; but to go into any one of these 4 streets it is necessary to descend a flight of several steps." (*Tour in Wales*, i. 147. 8vo. ed.) The city has of late years been much modernised and improved, and a handsome new street has been formed from near the centre of the town to Grosvenor Bridge,—a noble stone structure of a single arch, 200 ft. in span, with a roadway 33 ft. in width. Previously to the erection of this bridge, the communication across the river was by an old, narrow, and inconvenient bridge of 7 arches: the suburbs have also been considerably extended. The whole is paved, lighted by gas, and supplied with water, raised by a steam-engine, from the Dee, and conducted by pipes to a large reservoir. The cathedral is a large Gothic pile, with a low massive tower; the interior is fine, with several lateral chapels in the earlier, and a cleristory in the later pointed style: the bishop's throne, and several ancient monuments, are highly interesting. Contiguous to the cathedral are the remains of St. Werburgh's Abbey, which for nearly seven centuries was one of the wealthiest in the kingdom. The bishop's palace (rebuilt 1752), the prebendal, and other good modern houses (forming the

Abbey Square), occupy the rest of the precinct. At an average of the 3 years ending with 1831, the nett revenue of the bishopric of Chester amounted to 3,261*l.* a year. There are 9 par. churches, and 2 others not parochial. St. John's church is a magnificent specimen of Saxon architecture; in Trinity Church are monuments to Parnell, the poet, and Matthew Henry, the celebrated commentator, interred within its walls. It has also a Catholic, and several dissenting chapels; a grammar-school founded in 36 Hen. VIII. for 24 boys, from whom the cathedral choristers are selected: its annual revenue is 108*l.*, and it has one exhibition to either university; two charity schools founded in 1717, on the site of the ancient hospital of St. John, one for 38 boys, of whom 28 are also maintained; the other for a like number of girls; the Marquis of Westminster's school, established in 1811, and wholly supported by him, educating between 400 and 500 children; a diocesan school, on Bell's plan, for 150 boys; 3 infant schools; and several large dissenting and Sunday schools. The co. infirmary, and the co. lunatic asylum, each have accommodation for 100 patients; and it has a lying-in hospital, a house of industry, several sets of alms-houses, and various charitable bequests, — the chief of which (called Jones's) produces about 400*l.* a year, which is shared by the members of the ancient city guilds. The old Norman castle (with the exception of one tower) was removed in 1790, and a magnificent co. hall and gaol, together with government barracks, and an armoury, subsequently built on the site. These structures are in the Grecian style, and have great architectural merit; they form 3 sides of a large quadrangle, the entrance to the area being by a splendid Doric portico. The city courts of justice are held, and corporation business transacted in the Exchange, a plain brick edifice on pillars. There are 3 commercial halls; one built by the Irish Linen Company, in 1780, for their trade, but at present used for the cheese fairs, — that of linen, once so considerable, having wholly ceased; a second hall, built in 1809 by the Manchester manufacturers for their business; and a third, in 1815, for general purposes, as a private speculation: they are all on the same plan, forming a quadrangle, round which are pillared arcades and shops. There are also commercial rooms, comprising a good public library, news-room, &c.; a small theatre, and a good modern market-place. Market Wednesday and Saturday. Fairs, last Thursday in Feb. for horses and cattle; July 10. and Oct. 10. for general merchandise: these last are of great antiquity, and continue several days: there are also 8 annual cheese fairs of recent origin; and the city being situated in the principal cheese-making district of the empire, these fairs have become of considerable importance. Annual races are held in the first clear week of May on "the Rood-Dee," a level pasture tract of about 80 acres at the base of the city walls. Manufactures inconsiderable: skins and gloves once formed the staples; but these have greatly diminished: there are a few small fabrics of tobacco-pipes, large flour-mills by the old bridge, and a shot-tower beside the canal, on the N. side of the city, where also are several wharfs and warehouses, chiefly for the convenience of the traffic between the city and Liverpool; articles of general consumption being now chiefly supplied from the latter.

At the æra of the Conquest, and for long after, Chester was a place of very considerable importance as a commercial and shipping port: but the gradual filling up of the channel of the river, and latterly the superior facilities enjoyed by Liverpool, have proved destructive to its trade. In 1737, in order to obviate the difficulties of the river navigation, an artificial channel was excavated, on a plan suggested long previously by the celebrated Andrew Yarranton, from Chester to the sea. It has since been improved, and vessels of 300 tons may now ascend to the city; but it has not recovered any portion of its former importance as a maritime town. It has still, however, a considerable trade in the supply of many of the shopkeepers in N. Wales, with London, Manchester, and Birmingham goods.

Chester is a bor. by prescription; its three earliest charters are without date, but were probably granted in the early part of the 13th century. There are many others, the latest of which dates in 44 Geo. III.; the governing charter (previously to the Municipal Reform Act), in 21 Hen. VII., considerably extended the former privileges, and made Chester a distinct co.; under it were a mayor, deputy mayor, 24 aldermen, 40 common councillors, and (in 1835) about 1,500 freeholders. The governing body were self-elective, despite the provisions of the charter, and of much litigation, which, in the 20 years preceding 1832, cost upwards of 20,000*l.* Chester has returned 2 mem. to the H. of C. since 1541. Previously to the Reform Act, the elective franchise vested in the governing body and in the resident freemen; "the freedom of the city being inherited by all the sons of freemen, or acquired by servitude." (*Boundary Report.*) The limits of the parl. bor. include the greater part of the township of Broughton, and some other patches, the pop. of the whole being, in 1841, 22,961; and the registered electors, in 1849–50, 2,529. The limits of the municipal have since been made to coincide with those of the parl. bor.; and it is now divided into 5 wards, and governed by a mayor, 10 aldermen, and 30 councillors. Annual revenue of the corporation about 11,000*l.*, derived from rates, rents of lands and houses, tolls of markets, bridges, roads, &c. There are 24 ancient guilds or trades still subsisting, though at present possessing scarcely any property or importance, except that of the goldsmiths, who have an assay master and office, and claim the examination of all plate manufactured for sale in Cheshire, Chester, Lancashire, and N. Wales. The crown mote is the criminal court, with jurisdiction over the highest offences; the port-mote is the chief civil court where actions to any amount are tried; the pentice and passage courts are subordinate to the latter, the sheriff presiding in them. There are 3 general sessions a year, held in the superior courts, attended by barristers, and presided over by the recorder and mayor; petty sessions for the city are held twice a week. A county court is established here, before which 1590 plaints were entered in 1848. The execution of co. criminals, as well as those of the city, devolved on the sheriffs of the latter, till relieved from this odious duty by an act passed in 1835.

The society of Chester is particularly good; and it serves as a sort of provincial metropolis to many of the lesser gentry of the surrounding country. The city is most probably of Roman origin. Originally it had the name of Deva, from its situation on the Dee, and subsequently of Cestria, from its being a *castrum*, or camp. It was the head-quarters of the 20th legion, which came into Britain previously to A. D. 61; and not only does the figure and construction of the town attest its Roman origin, but fragments of Roman arches and other buildings existed down to a recent period, and probably some still remain; and pavements, many coins, an altar dedicated to Jupiter Tanarus by the *primipilus* (principal centurion) of the 20th legion, &c. &c., have been dug up. Wm. the Conq. bestowed the title of Earl of Chester, with sovereign power over the whole of Cheshire, on his nephew Hugh d'Avranches, or Lupus; and his successors to the reign of Henry III. continued in the exercise of like authority. In the last civil war Chester sustained a memorable siege under Lord Byron, by whom it was ultimately surrendered on honourable terms. In 1745 it was garrisoned against the Pretender, which is the last event of any importance in its history.

Eaton Hall, the magnificent seat of the Marquis of Westminster, is about 3 m. S. of Chester; its chief approach being by a triple avenue of limes extending from the end of the new Grosvenor Bridge (where there is a Gothic lodge) to the principal front, through a park abounding in fine forest trees. The structure is an adaptation of the pointed ecclesiastical style to modern domestic purposes; that of Edward III., as seen in York Minster, is chiefly followed, and emblazoned shields are profusely dispersed; in the compartments of some of the windows are several fine portraits executed from cartoons by Singleton: among others those of the six first earls of Chester, who held sovereign power previously to the title being bestowed by Hen. III. on his eldest son; since which period it has uniformly been conferred on the eldest sons of his successors. (*Pennant's Tour in Wales*, i. 147—269; *Chester Guide; Parl. Reports, &c.*)

CHESTER-LE-STREET, a vil. of England, co. Durham, near the Wear, 5 m. N. Durham. Pop. (1841) 2,529. It stands in a valley, on the line of the Roman way called Ermine-street, leading to Newcastle. The Saxons called it *Cunceastre*, or Cuneagester, and under that name it was the seat of the episcopal see of Durham for 113 years, till its removal to Durham in 995. The town is nearly 1 m. in length, and has a bridge over the Wear, opened in 1821. The church, formerly collegiate, and dedicated to St. Mary and St. Cuthbert, has a tower surmounted by a very fine spire 160 ft. high, and contains monuments with effigies of members of the Lumley family from the Conquest to the time of Elizabeth. The Independents and Primitive and Wesleyan Methodists have places of worship. An endowed school educates 12 children. A mechanics' institute, formed in 1825, is held in a handsome building erected for the purpose. Copyhold courts are held in April and Nov., in which debts under 40*s.* are recoverable; and petty sessions are held on alternate Thursdays. The place is a station for receiving votes at elections for the S. div. of the co. The manufacture of nails, ropes, and tiles, is carried on here; but the inhab. are mostly employed in the surrounding collieries and other works, and in furnishing provisions and groceries to the adjacent district.

CHESTERFIELD, a bor. and market town of England, co. Derby, hund. Scarsdale, 20 m. N. Derby, 130 m. N.W. by W. London. Pop. (1831) 5,775. The Municipal Reform Act extended the boundaries of the town, and the present bor. had, in 1841, a pop. of 6,212. The town, which is irregularly built, covers a considerable extent of ground, and is pleasantly situated between the

rivers Rother and Hyper, in the vale of Scarsdale. The church, a beautiful and spacious edifice of the 13th century, is remarkable for its crooked spire, 230 ft. high: an elegant assembly-room was built here a few years ago, and near the town is a race course, on which races are annually run in the autumn. "The town seems, however, to be in a depressed state, and the inhab. are supposed to be far from wealthy: there are nearly 100 uninhabited houses in it. There are two or three manufactories of silk and cotton, but they are not considerable. Just out of the bor. there are some large iron-works, but they are not at work at present; there is also a bleaching mill near the iron-works. The chief source of support for the town is the weekly market for agricultural produce, which is well attended." (*Municipal Report.*) It is governed by 4 aldermen and 12 councillors, but is not divided into wards. The lord of the manor holds a court leet in Oct., when a constable is chosen; and a court of record for the recovery of debts not exceeding 20*l*. The petty sessions for the division are held here in the town-hall, on the ground-floor of which there is a prison for debtors. Chesterfield is one of the polling places at the election of M.P. for the N. division of the co. The town is lighted under an act passed in 1825, and has a nightly watch, paid by subscription. There are various places of worship for dissenters, a free grammar-school, founded 2 Eliz., and formerly well attended, was closed in 1832. It has still, however, infant, Sunday, and national schools; several well-endowed alms-houses, a dispensary, a savings' bank, a mechanics' institute, and a literary and philosophical institution. The N. Midland railway between Derby and Leeds passes by Chesterfield. It gives the title of Earl to a branch of the Stanhope family. Market-day, Saturday. Fairs, Jan. 27., Feb. 28., first Sat. in April, May 4., July 4., Sept. 25., Nov. 28.. The par. of Chesterfield includes an area of 13,160 acres, and had, in 1841. a pop. of 11,231.

CHEVIOT HILLS, a ridge of hills in Great Britain, on the confines of England and Scotland, partly in Northumberland and partly in Roxburghshire. They extend from Kirknewton N. to Carter Fell on the S., where they unite with the hills that stretch across Dumfriesshire and Galloway. The hill to which the name Cheviot is especially given, is in Northumberland, on the borders of Roxburghshire, 8 m. S.S.W. Wooler, and is 2,658 ft. in height. The Cheviot hills are mostly pointed, the sides smooth and rapidly sloping, and their bases separated by deep narrow glens. They are mostly covered with a close green sward; but in a few instances, as in that of the Cheviot itself, there are considerable tracts of heath. These hills are depastured by the valuable and peculiar breed of sheep called the Cheviots, now widely diffused over England and Scotland.

CHIAPA DOS INDIOS, a considerable inl. town of Mexico, state of Chiapas, advantageously placed in a valley near the Tabasco, 30 m. W.N.W. Ciudad de Las Casas. It is chiefly inhabited by Indians, whence its name, of whom there are said to be as many as 4,000 families. It is the largest town in the state, the chief trade of which it engrosses. Its principal export is logwood, which is sent down the river to Tabasco, on the Gulph of Mexico; but a good deal of sugar is also grown in its neighbourhood. Its inhab. are said to be rich. Chiapa enjoys many privileges: it was founded in 1827. (*Humboldt; Thompson's Narrat., &c.*)

CHIARAMONTE, a town of Sicily, prov. Syracuse, cap. cant., on a hill, 11½ m. N.N.W. Modica. Pop. 8,112. It is regularly built, with broad and straight streets. From the Capuchin convent there is one of the finest and most extensive views in Sicily. The environs produce good wine, and the town is thriving.

CHIARI, a town of Austrian Italy, deleg. Brescia, cap. distr., near the left bank of the Oglio, 15 m. W. by S. Brescia. Pop. 8,000, chiefly occupied in spinning silk, and tanning leather. The town preserves some remains of its ancient fortifications; and has a handsome collegiate, and many other churches, an hospital, and a public library.

CHIAROMONTE, a town of Naples, prov. Basilicata, cap. cant., on a high mountain. Pop. 2,250. It has two parish churches, a convent, and a seminary. Its environs produce wine and silk, and there is a fine chartreuse about 3 m. off.

CHIAVARI, a marit. town of N. Italy, k. Sardinia, div. Genoa, cap. prov., at the head of the Bay of Rapallo, 22 m. E.S.E. Genoa. Pop. circa 8,000. It is "a handsome and flourishing place, surrounded by hills, the rich produce of which supplies a profitable commerce. The Genoese, from the earliest times, appreciating its natural advantages, surrounded it with a strong wall, and gave it many privileges to encourage the resort of merchants. The town, its handsome church, the bay, and the beautiful villas in the neighbourhood, deserve attention; and, as it is accustomed to the influx of strangers, the accommodations are good." (*Italy, in Mod. Trav.*) It has an hospital and many fine edifices, and several lace and silk twist factories. Marble and slate are quarried in its neighbourhood, and it has a productive anchovy fishery.

CHICAGO, *see* SUPPLEMENT.

CHICHESTER, a city, co., and parl. bor. of England, co. Sussex, 55 m. S.W. by S. London, 14 m. E. by N. Portsmouth, and about 1½ m. E. from the extreme N. E. angle of the bay or arm of the sea called Chichester Harbour. Pop. of city and suburbs in 1821, 7,362; 1841, 8,512. It is situated on a gentle eminence, sloping in every direction, amidst the widest part of the plain named from it. The Lavant (a small rivulet usually dry in summer) bounds it on the E. and S. Its walls, forming a circuit of about 1½ m., are still in tolerable preservation, within which a mound extends all round in the Roman fashion, planted in parts with fine elms. "Chichester is well built, lighted, watered, and drained. The principal streets are spacious, and contain many very large houses; and the whole seems happy and prosperous." (*Boundary Report.*) It consists chiefly of four principal streets, diverging at right angles from a common centre, occupied by an octagonal cross, erected towards the close of the 15th century, and said to be the most beautiful of this class of structures in the kingdom. The present cathedral was built in the 13th century, on the site of an older one founded in 1108. It is an inferior building of its class, partly in the Norman, and partly in the earlier pointed style; the tower and spire (300 ft. high) are of the 14th century, and finely proportioned. There is also a detached bell-tower, of very massive structure. It contains many ancient, and several well-executed modern monuments by Flaxman: among the latter is one to the memory of the poet Collins, a native of the town. The collegiate establishment was, from the first, for secular canons, and so left unaltered at the Reformation; it consists of a dean, 30 prebendaries, and other ecclesiastical officers. The see comprises the entire co. of Sussex, with the exception of 22 parishes, which are peculiars: the episcopal palace is within the city walls, and has fine gardens attached to it. The revenue of the see amounted, at an average of the three years ending with 1831, to 4,229*l*. a year. Except that of St. Paul, which is a handsome modern structure in the pointed style, the other churches are small mean buildings. There is a grammar school, founded in 1497; a blue-coat school, founded in 1702, in which 28 boys are boarded, clothed, and educated. The revenue in 1835 was 1,300*l*. a year, and said to be increasing; it is limited to children of members of the established church. There are also national and Lancastrian schools for boys and girls; and an infant school. There are several charitable institutions, the most ancient of which is that of St. Mary's Hospital, with a chapel attached to it. The infirmary, opened in 1827, is a handsome modern building, on the N. slope just without the city. The other public buildings are the guildhall, town-hall, market-house, and corn exchange; the buildings of the Mechanics' Institute, established in 1829, and of the Literary and Philosophical Society in 1831 (both of which are flourishing), and a small theatre

There are no manufactures, the town principally depending on the surrounding agricultural district. Market-days Wednesday and Saturday; the former for corn, the latter for general provisions: an important cattle-market is held every second Wednesday; and 4 large cattle and horse fairs, May 4., Whit-Monday, Oct. 10. and 20. The transit of corn through the town to the metropolis and to the W. of England is also considerable. The harbour is rather difficult of access; but at spring-tides vessels of 170 or 180 tons reach the quay, about 1½ m. below the town; but its communication with the sea is kept up by the Arundel and Portsmouth Canal, a branch from which is carried to the city. It is divided into two wards, and governed by a mayor, 6 aldermen, and 18 councillors. Chichester has returned 2 mem. to the H. of C. from the 23d of Edw. I. Previously to the Reform Act the franchise was vested in the corporation and freemen and scot and lot payers within the bor. The Boundary Act extended the limits of the parl. bor., which is identical with the municipal bor., so as to embrace the suburbs. Number of 10*l*. houses, in 1831, 680. Registered electors, in 1849-50, 746. Average expenditure on account of the poor, about 2,800*l*. a year. Annual value of real property, in 1847, 27,276*l*. Chichester is supposed to occupy the site of the *Regnum* of the Roman period. It was destroyed by Ella in the 5th century, and restored by his son Cissa, whence the name. Some additional importance was given to it by the removal of the see from Selsea thither, after the Conquest. It gives the title of earl to the Pelham family. There are annual races at Goodwood Park, the Duke of Richmond's seat, in the immediate vicinity. (*Past and Present State of Chichester, &c.* 8vo.; *Reports of Municipal and Boundary Commissioners, &c.*)

CHICACOLE or CICACOLE, an inl. town of Hindostan, formerly the cap. of the N. Circar of same name, on the high N. bank of the river Chicacole, 4 m. N.W. the bay of Bengal, and 50 m. N. E. Vizagapatam. It is of considerable size, but irregularly built, being a collection of all sorts of houses and huts. It contains some neat

European barracks, several large bazars, and numerous mosques and other Mohammedan buildings.

CHICLANA, a town of Spain, Andalusia, 12 m. S.E. Cadiz. Pop. 7,000. It is situated between two hills on one of which are the ruins of an ancient Moorish castle; has 2 churches, 2 convents, an hospital, a workhouse belonging to Cadiz, a theatre, and some good private houses. It is much resorted to by the wealthy classes of Cadiz, who have here country residences and pleasure grounds. The adjoining heights command a fine view of Cadiz and its bay, the isle of Leon, &c. on one side; and, on the other, the ancient city of Medina Sidonia, and the plains of Andalusia, towards Algesiras and Gibraltar. The battle of Barossa, in which, after an obstinate engagement, the Anglo-Spanish army under Sir Thomas Graham (Lord Lynedock) defeated a French force under Marshal Victor, was fought, a few m. S. from Chiclana, on the 5th of March, 1811.

CHIERI (an. *Carrea Potentia*), an inl. town of N. Italy, k. Sardinia, div. Turin, cap. mand., on the declivity of a vine-clad hill, 8 m. S.E. Turin. Pop. 10,000.? It is well built, has four handsome squares, and a collegiate church said to have been originally a temple of Minerva. its fortress, La Rochetta, was destroyed in the 16th century. It has some cotton and linen thread and woollen-cloth factories.

CHIETI, a city of Naples, prov. Abruzzo Citra, of which it is the cap., on the narrow crest of a range of hills, on the right bank of the Pescara, about 10 m. from the Adriatic, lat. 42° 19′ N., long. 14° 13′ E. Pop. 13,703. Streets generally narrow and crooked, and in many parts dark and dirty; but the houses and shops are good, and approach nearer to the standard of the metropolis than those of most provincial towns. It has a large cathedral, and 4 other churches; a lyceum, or college; a large seminary; numerous convents; a society of agriculture, arts, and commerce; an hospital; a workhouse; a *mont-de-piété*, and a handsome theatre. It is the seat of an archbishopric, of the civil and criminal tribunals of the prov.; and has manufactures of woollens, silks, &c. The surrounding country is well cultivated and fertile, and the population have an appearance of ease, cheerfulness, and activity. The Abbé Galiani was a native of Chieti, having been born here in 1728. Perhaps no foreigner ever obtained a more perfect mastery over the French language. Voltaire said of his famous *Dialogues sur le Commerce des Blés*, published in 1770,—"Il semble que Platon et Molière se soient réunis pour composer cet ouvrage."

Chieti is very ancient, being built on the site of *Teate*, the capital of the small but not unimportant tribe of the *Maruccini*. All accounts agree in describing Teate as large, populous, and worthy of being ranked among the distinguished cities of Italy. Silius Italicus calls it *Magnum et Clarum*. And the remains of a theatre of considerable dimensions, a large public edifice, two temples, a gateway and Mosaic pavement, with numerous coins and inscriptions, evince its ancient magnitude and importance. (*Del Re Due Sicilie*, ii. 333.; *Craven's Abruzzi*, ii. 5.; *Cramer's Ancient Italy*, ii. 340.)

CHIHUAHUA, a city of Mexico, state of Chihuahua, of which it is the cap.; 740 m. N.N.W. Mexico, 490 m. E. Guaymas, and 500 m. from the mouth of the Rio Grande del Norte: lat. 28° 47′ N., long. 107° 30′ W. It is situated in an arid plain, on a rivulet which falls into an affluent of the Rio Grande. Pop. at one period said to have been 70,000; in 1803, 11,600; in 1835, 12,000. Streets regular; houses well built and well supplied with water, conveyed to it by an aqueduct 3 m. long. The cathedral, a very large and highly ornamented structure, was erected at an expense of 1,500,000 doll., raised by a duty on the produce of the adjoining mines. (*Pike*.) The state congress meets here in a neat building. Each deputy receives an annual salary of 2,500 doll. The town is chiefly maintained by supplying necessaries to the surrounding mining districts; and latterly from being a depôt for goods to and from Guaymas. Charcoal is conveyed thither for the mines and domestic purposes from a distance of 30 leagues. There are several large monasteries in the town; but they are much diminished in their income and in the splendour of their buildings and establishments since the revolution. The country surrounding the city is occupied by extensive haciendas, or farms, in which large herds of mules, horned cattle, and sheep, are pastured. But, notwithstanding the great capabilities of the soil, agriculture is in a very depressed state, the mines being the great objects of attention. Of these the most celebrated for the quantity of the precious metals drawn from it, is El Parral, in the S.E. part of the state; but it is now in so dilapidated a condition, that the amount of capital required to re-establish it is too great to justify a well-grounded expectation of its returns being sufficient to repay the outlay. Batopilas, 80 leagues W. of Parras, once one of the most productive of the Mexican mines — a single mass of pure silver weighing 425 lbs. having been found in it — is but feebly worked. One of its veins was discovered by an Indian, who, on swimming across a branch of the Rio del Fuerte after a flood, perceived the crest of a rich lode laid bare by the force of the current, the greatest part pure silver, sparkling in the sun. Santa Eulalia in the E. has long been abandoned. The mine of Mordos, near Batopilas, was discovered in 1826 by two Indians, brothers, to one of whom a little maize to make tortillas had been refused on credit the evening before. In two months they extracted from it ore of the value of 270,000 doll. The mine of Jesus Maria was discovered in 1822, and nearly abandoned shortly after, on account of the difficulty of procuring provisions and other requisites. It is situated near the summit of a mountain, and is consequently extremely cold in winter, the surrounding ridges being covered with snow: the village is in a temperate valley, highly capable of agricultural improvement. All the lodes near the surface contain a considerable quantity of gold, which diminishes according to the depth, while that of silver increases proportionally. The immediate vicinity abounds with veins forming a circle, of which the village is the centre. The pop. of the plain country is almost wholly of European descent, the natives having retired before them into the mountainous recesses of the Bolson de Mapimi. Their principal tribes are the Apaches, Comanches, and Chichimeques. Major Pike says, that the corruption of morals is universal; which is only what might have been expected from the gambling nature of the pursuits in which most part of the people is engaged; the great fortunes suddenly made by some, and the poverty of the great mass of the population; the ignorance of all classes; and the debasing influence of the established religion. The other more remarkable towns in the state are San Bartolomeo, a great mart for the inland trade with the surrounding districts; El Parral, near the mine of the same name, formerly very populous, but now containing but 7,000 inhab.; and Parras, a small town surrounded with vineyards, near a lake of the same name. (*Humboldt; Ward's Mexico in* 1827; *Pike's Exploratory Travels; Hard's Travels in Mexico*.)

CHILI, or CHILE, an indep. state of S. America, in the S.W. part of that continent, consisting of a long and comparatively narrow strip of country between the Andes and the ocean, extending from lat. 25° 20′ to 42° S., and between long. 70° and 74° W.; having N. the southern extremity of Bolivia, E. the territ. of La Plata, S.E. and S. Patagonia and the Gulph of Ancud, and Strait of Chacao (which separate it from the Archipelago of Chiloë), and W. the Pacific. Length, N. to S., 1,150 m.; average breadth between 110 and 120 m. Area, with Chiloë, perhaps nearly 130,000 sq. m. Pop. has at different times been variously estimated from about 600,000, (*Miers, &c.*), to 1,500,000 (*American Almanac*, 1840), but 1,200,000 is probably not far from the mark. This extent of territory, however, includes the country of the Araucanians, extending between lat. 37° and 39° 50′ S., and inhabited by a race of people never subdued by Europeans, for which a deduction of 28,000 sq. m. from the above area must be made. The provs. under the Chilian government, their extent, pop., &c., may be thus estimated — in the absence of any recent official statements — on the authority of Poeppig, the Weimar and American Almanacks, the *Geog. Journ.*, &c.

Provinces.	Area in sq. m.	Pop.	Ch. Towns and Pop. (*Amer. Alm.*)
Coquimbo -	38,000	- -	Coquimbo 10,000 inhab.
Aconcagua -	8,900	- -	San Felipe 5,000 —
Santiago -	8,500	- -	Santiago 65,000 (1830); Valparaiso 26,000 —
Colchagua -	8,600	- -	Curico 2,000 —
Maule - -	8,700	*101,130	Canquenes 2,000 —
Concepcion -	10,000	*102,000	Concepcion 10,500 —
Valdivia - -	14,000	*6,780	Valdivia 7,000 —
Chiloë - -	5,000	44,000(1832)	San Carlos 2,000 —
Indep. Araucania - -	28,000	(uncertain)	
Total -	129,700	1,200,000	

Besides these territories, the islands of Juan-Fernandez, Mocha, and some others in the Pacific belong to Chile.

Topography. — The country rises successively from the coast to the Great Cordillera of the Andes; but not by a number of successive terraces running parallel to each other and to the sea, except in the N. "Elsewhere, the surface," as Mr. Miers says, "is not formed by a series of table heights, reaching from the sea to the foot of the Cordillera; but it is a broad expansion of the mountainous Andes, which spreads forth its ramifications from the central longitudinal ridge towards the sea, diminishing continually, but irregularly, till they reach the ocean. . . . These mountain branches are of considerable height, being seldom less than 1,000 ft., and more generally 2,000 ft. above the bottom of the valleys which intersect them: it may, therefore, be readily conceived that there is but little level country be-

* The amounts marked thus, are the pop. of the S. provs. in 1827, according to Poeppig.

tween the smaller branches of these chains; the more valuable portions were formed by the beds of the rivers now comparatively small, although there is evidence of their having been once the courses of greater streams. Some of those valleys present broad expansions of surface, such, by way of illustration, as that portion of the country called the Valley of Aconcagua. These are the patches which constitute the finest and boasted portions of the middle portion of Chile." (*Miers's Trav. in Chile, &c.*, i. 378, 379.)

The Great Cordillera of the Andes has in S. Chile a mean elevation of 13,000 or 14,000 ft. above the level of the ocean; but it presents many peaks which rise to a considerably greater height. These peaks, most of which are volcanic, begin to be numerous beyond lat. 30°, and increase in number as we proceed farther S. The principal one is that of Aconcagua, about lat. 32° 10′, which has been proved to be at least 23,200 ft. in height (*Capt. Fitzroy's Paper in Geog. Journ.*, vii. 143.), and therefore ranks first among the mountains of S. America. At intervals it is an active volcano. N. of 33° 30′ the Cordillera is divided into two separate ranges, enclosing the immense valley of Uspallata, so celebrated for its mineral riches, and other valleys. The principal road across the Andes — from Santiago and the Vale of Aconcagua to Mendoza — crosses Uspallata; several other passes from Chili into the La Plata territories exist farther S. (*See* ANDES.) Between the ramifications of the mountain chains and the sea some small plains line the coast. The shores are mostly high, steep, and rocky, as is general along the whole of the W. coast of S. America. They have almost everywhere, however, deep water near them, and there are many tolerable harbours, the best being those of Valdivia, Concepcion, Valparaiso, and Coquimbo, though some are safe only during certain seasons of the year. The rivers of the middle and S. provs. are sufficiently numerous, but they are all small. The N. part of the country is scarcely watered by any; and "from Maypo to Atacama, a distance of 1,000 geog. m., all the rivers and streams together would not form so considerable a body of water as that with which the Rhone enters the Lake of Geneva, or as that of the Thames at Staines." (*Schmidtmeyer's Trav.* p. 28.) The rivers retain pretty much the same quantity of water throughout the year: they are not augmented much at any particular season by the melting of the snows, since, while in the summer the snow on the upper mountain ranges melts, that on the lower heights liquefies even in the winter. They are generally unfit for the purposes of trade. In the N. there is no stream navigable for laden boats for more than 6 m. inland: in the middle provs. the Maule is the only one which brigs of 150 tons burden can enter at high tide, and these cannot ascend far; and in the S. the Callacalla, or river of Valdivia, is the only one capable of being entered with safety by ships carrying 60 guns. Some lakes, or rather lagunes, are scattered over the country; they are most numerous in the S., and in the prov. of Valdivia and in Araucania are of some size. A few are 60 or 70 m. in circumference.

Climate is equable and healthy: epidemic diseases are rare. The interior is hotter than the coast: in the former, during Jan. and Feb., the thermometer often rises to 90° and 95° Fahr. in the shade; on the latter, at the same season, it rises to about 85° in the day, and sinks to 70° or 75° in the night. At Santiago the mean summer heat from December to March at midday is about 84½°, and at night 58°. A cool and pleasant breeze arises at sunset. Winter begins in June. No snow falls on the coast, and frost is rare; on the Andes the snows remain from June to November. About April the rains set in, and fall at intervals till Aug.; but this is only in the S. provs. N. of Santiago the rainy season is limited to a few occasional showers, and in the arid prov. of Coquimbo no rain whatever falls, the want of it being occasionally supplied by heavy night dews. The N. provs. being at a distance from the volcanoes of the Cordillera, which apparently act as safety-valves, are especially subject to earthquakes. Shocks are felt in some parts almost daily; and the country is continually desolated by them. In 1819 the town of Copiapo was totally destroyed; and in 1835 Concepcion, and other towns on the coast in the middle provs., were nearly ruined by an earthquake. (*Miers*, i. 378—399; *Schmidtmeyer*, p. 25., &c.; *Campbell's Geog. Journ.* vol. vi.; *Molina*; *Voyage of the Adventure and Beagle, &c.*)

Geology, Minerals, Soil, &c. — According to Schmidtmeyer, the high chain of the Andes is chiefly composed of argillaceous schist, while the lower chains and mountain groups are principally granite. Sienitic, basaltic, and felspar porphyries, serpentines of various colours, quartz, hornblende and other slates, pudding-stone, gypsum, abound in the Cordillera, and fine statuary marble is said to abound in the department of Copiapo. Chili is extremely rich in metals: silver is found there at a greater elevation than any other metal; it is also met with in the valleys or bowls in the lower ranges, but, generally speaking, its quantity decreases in proportion to its distance from the Andes. Gold is most frequently situated at a much less elevation than silver; it is found chiefly in the "bowls," and perhaps few of the lower mountain ranges throughout Chili are without it. Most, or perhaps all the rivers, wash down gold. The copper mines are one of the chief sources of national wealth. Lead and iron are found in abundance, but neither is much sought after. Zinc, antimony, manganese, arsenic, tin, sulphur so pure as not to require refining, alum, salt, and nitre, are plentiful. Coal mines have been opened near Concepcion: the coal improves with the depth of the mine, and has already become a considerable article of trade and consumption at Valparaiso. The soil of the N. provs. is sandy and saline; and in the opinion of Mr. Miers, not 1-50th part of the N. half of Chili can ever be cultivated. Some of the valleys in the central provs., as that of Aconcagua, present broad and fertile expansions of surface, and others, being considerably inclined, admit of irrigation wherever water can be procured; but the hilly parts being dried and parched during the greater part of the year, are incapable of culture. S. of the river Maule, however, the proportion of cultivable land is larger, the soil becoming progressively more stiff and loamy. (*Miers*; *Schmidtmeyer*.)

Vegetable Products. — Fertility increases in proportion as we proceed S. Capt. Basil Hall observes: "At Concepcion, in the S. of Chili, the eye is delighted with the richest and most luxuriant foliage: at Valparaiso, which lies between 100 and 200 m. farther N., the hills are poorly clad with a stunted brushwood, and a faint attempt at grass, the ground looking everywhere starved and naked: at Coquimbo even this brushwood is gone, and nothing is left to supply its place but a wretched sort of prickly pear bush, and a scanty sprinkling of wiry grasses. At Guasco, there is not a trace of vegetation to be seen, all the hills and plains being covered with bare sand, excepting where the little solitary stream of water, caused by the melting of the snow amongst the Andes, gives animation to the channel which conducts it to the sea. The respective latitudes of these places are 37°, 33°, 30°, and 28½°." (*Hall's Extracts from a Journal, in Constable's Misc.* iii. 9, 10.) Extensive forests cover Araucania and the S. provs. The flanks of the Andes also exhibit a profuse vegetation. The *Mimosa farnesiana* flourishes over most of the country, and the algarob is nearly as common. The *quillai*, the bark of which produces a natural soap, is brought to the towns as an article of trade; laurels, myrtles, cypresses, and other evergreens, grow to such a size as to be highly useful for their timber. Most European fruits flourish, but tropical plants are few. Schmidtmeyer observes, that the numerous groves of palm and cinnamon trees, spoken of by Molina, have disappeared since his time. Chili produces many hard woods, which, in a great measure, supersede the use of iron in the country; and Mr. Miers says that "the herbaceous plants and flowers are so rich, various, beautiful, and novel, that to a botanist no treat can be greater than a journey through the Cordillera."

Animals. — The coguar or puma, the jaguar, llama, guanaco, numerous monkeys, and other wild animals common to this continent, inhabit Chili. A kind of beaver (*Castor huidibrius*) frequents the rivers, and the *chinchilla* abounds in the desert country of the N.; both are hunted for their fur, which is much prized. The great condor, several vultures, pelicans, and many other water fowl, flocks of parrots, parroquets, &c., are among the birds; whales, dolphins, cod, pilchards, &c., are caught around the coasts. The skunk, which, when pursued, emits an intolerable odour, is a native of Chili; but in other respects this country enjoys a singular freedom from annoying or venomous quadrupeds, noxious insects, reptiles, &c. (*Miers*, vol. i.; *Schmidtmeyer*; *Malte-Brun*; *Dict. Géog.*)

Agriculture and Cattle breeding. — The climate and soil of the S. and central parts of Chili are highly suitable for the culture of European grains. S. of lat. 30°, the limit at which they cease to attain perfection, varies from 3,700 to 5,200 ft. above the ocean (*Poeppig*); but at the height of 3,000 ft. the harvests are extremely good. Only the middle provs., however, produce sufficient corn for exportation, after supplying the wants of their inhab. Aconcagua is by far the best cultivated prov., and that which exports most corn. Its produce goes chiefly to the market of Valparaiso. Wheat is the staple, and in the N. almost the only grain cultivated. Barley is grown in the S.; maize, buckwheat, and oats are but little raised, and rye is unknown. Kidney beans are exported to Peru, and occasionally to Brazil; all kinds of pulse are common; and potatoes are extensively cultivated, though they fall in flavour. Culinary vegetables are raised, especially near the towns. Water melons are very fine, and gourds of a good flavour are produced in great abundance; the latter are appendages to every Chilian dish of boiled meat. Hemp of good quality is grown chiefly in Aconcagua. The sugar-cane has been tried, but does not succeed. Rice and

cacao are imported. At Quillota there are some good gardens: in Aconcagua prov. the vineyards and olive grounds yield an abundance of good fruit; and in that of Concepcion, which was once celebrated for its wine, the vineyards are still extensive, and the grapes fine-flavoured. Elsewhere, according to Poeppig (*Reise in Chili*, i. 125—127.), both orchard and garden cultivation is in the back-ground. The olive crops are good, but the oil is ruined by a bad mode of treatment, and rendered unfit for European markets. Little care is taken in the culture of corn. The art of agriculture is greatly in arrear. The plough, which is everywhere alike throughout the country, consists of only a part of the trunk of a tree, with a crooked branch which serves as a handle, the forepart of the trunk being wedge-shaped, and having nailed to it "a somewhat pointed flat plate of iron, which performs the necessary operation of coulter and share, neither of which were ever heard of by the natives." (*Miers.*) The yoke is fastened not to the shoulders, but to the horns, of the oxen, according to the approved ancient Spanish method. The substitute for a harrow is a heap of bushes weighed down with stones; the turning up of the soil by spade digging, and the use of the English hoe are unknown; and what little weeding is practised is performed by the hand or the *blade-bone of a sheep*. And these miserable expedients are resorted to while iron exists in profusion in the country, and furnaces are constantly at work! Lands are cultivated until worn out, with the interval of a fallow every 4 or 5 years: no manure is used. The productiveness of the soil in Chili appears to have been formerly much overrated. Mr. Miers observes, that a piece of ground recently cleared "may produce *to the extent of* 100 *or even* 200 *fold* during the first year; but such lands are now scarce in the cultivated parts of Chili;" and the average of the wheat fields may be from 8 to 12, or of the best crops, from 12 to 20 fold. (*Miers*, i. 371.) Reaping is performed by means of a rough sickle; and the corn, in quantities of about 100 or 150 quarters at a time, thrashed out in a hard dry spot of ground, by being galloped over by horses. It is then generally left in the open air for some months, not being housed till the rainy season begins.

Few farms are wholly arable, and such as are so are small and situated in narrow valleys. Cattle breeding is the most important branch of rural industry. In the middle provs. the *haciendas*, or farms, feed often from 10,000 to 15,000 head of cattle, in some cases as many as 20,000; and on the smallest grazing farms from 4,000 to 5,000 head are reared. The black cattle in some parts are strong and bony, but in the N. small: they are dull, and neither the beef nor milk they yield is very good. The horses of Santiago are said to be excellent, well broken, and more docile than those of Buenos Ayres. Those of the country generally are well made, and gallop, though they do not trot, well. Schmidtmeyer says (*Trav.* p. 93.) that they are "so strong and hardy as to be able to carry their riders above 80 m. a day at a gallop, with very little rest, and no other food than lucerne grass!" The mules and asses are of a good size, hardy and strong; the former are the general beasts of burden, and are especially used in travelling across the Cordillera. Goats are plentiful, being more fitted than sheep for the pastures of Chili. The sheep are said to be very inferior, and both the mutton and wool bad. Hogs are not very good, and very little of their flesh is consumed. In the dry season the cattle are often reduced to great straits for want of food. (*Poeppig*, i. 121—129.)

After its conquest by the Spaniards, Chili was divided into 360 portions, which were given to as many individuals; and though by the Spanish law of succession these portions have been, and continue to be, subdivided frequently, most estates still remain very large. The proprietors of these large grazing estates usually reside with their families in the towns, and keep on their farms a *major-domo* or steward, under whom are a head and a few subordinate herdsmen, and these are assisted sometimes by a few tenants who hold their dwellings under the proprietor by a kind of feudal tenure, being obliged to give their services in any kind of labour that is required of them, without pay, or for a very small remuneration. Land is never leased out to the agricultural tenants, but from year to year; the latter have neither oxen for ploughing, mares for thrashing, nor capital to get in their crops; and all these, and all other kinds of assistance, come from the proprietor, who is repaid out of the produce of the land, which he besides generally buys up at two-thirds or half what the former might sell it for, could he command the necessary funds to harvest it. The cultivator, in short, is rather worse off than the day-labourer, and is even in the habit of hiring himself out as such at times to recruit his means. He is destitute of most comforts, can seldom read or write, nor has any means within his reach of educating his children. The moment his harvest or the produce of his garden is reaped, the landlord greedily enforces his right to the stubble and pasture for the benefit of his cattle, and large droves are even frequently turned in before the produce is cut, either utterly destroying the crops, or obliging them to be gathered half ripe. The tenant is scarcely ever allowed to build his hut on cultivated grounds, to enclose his rented land with fences, or to possess any cattle; and a multitude of other arbitrary practices tend to keep the peon in that state of servitude in which it is the object of the proprietor to retain him. (See especially *Miers*, i. 341—376.)

Fisheries. — The coasts present good fishing ground, and with good boats, good nets, and good government regulations, the Chilians might be made tolerable fishermen; but, owing in part to some ill-advised measures adopted by the government, Mr. Miers affirms that in his time the fishers were the most abandoned, lazy, and worthless class in the country. They seldom fish more than a mile from shore, using only canoes of the rudest possible construction, or rafts supported on large seal-skin air-bags, both urged onward by means of a double-bladed paddle, used first on one side and then on the other.

Mines are mostly in the prov. of Coquimbo, dep. Copiapó, which, in 1830, contained 103 mines; of these, 75 were of copper, 24 of silver, and 3 of gold. The quantity of gold produced throughout Chili in that year was 410 marcs. The average annual produce of silver at the same period, in the dep. above named, is stated by Meyen (*Reise um die Erde*) to have been about 600 marcs, and that of copper 10,000 quintals, 6,000 of which came from the mines of Checo, which were worked by an English company. A great increase in the produce of the mines, within the short space of 4 years, is apparent from the following table: —

Account of the quantity of the precious metals derived from the mines of Chili in 1834 (*Cons. Return*): —

Metal.	Coined.		Exported.		Total.		
	marcs	oz.	marcs	oz.	marcs	oz.	doll.
Gold -	3,840	2	11	7	3,852	1	worth 525,231
Silver -	5,405	0	159,530	1	164,935	1	— 1,484,416
	quint.	lbs.	quint.	lbs.	quint.	lbs.	
Copper -	-	-	77,265	2	77,265	2	— 1,081,710
Copper ore	-	-	36,850	24	36,850	24	— 66,791
					Total value	-	3,158,149

It is a common saying in Chili, that "a diligent man who works a copper mine is sure to gain; that he who opens one of silver may either gain or lose; but that if the mine be of gold, he will certainly be ruined." This is probably owing in great part to the circumstance of many mines having been opened or wrought by persons without capital, who are very soon obliged to suspend their operations; land carriage being difficult and laborious, and fuel, water, and fodder very scarce in those districts, which are the richest in ore. The mines are mostly wrought by two parties, one the proprietor of the mine, who supplies the labour, the other the *habilitador*, who advances the capital. The proprietor, who usually resides on the spot and superintends the works, is seldom wealthy enough to conduct them on his own resources, and it is generally the *habilitador*, or moneyed individual, who resides at the port where the metal is shipped, who alone derives any ultimate benefit from the mine. (*Meyen; Hall; Schmidtmeyer; Geog. Journal; Miers, &c.*)

Manufactures, Trade, &c. — The Chilinos are good potters, and make light and strong earthenware jars, which ring like metal. Hempen cloths, indifferent hemp cordage, soap, copper wares made in a very rough manner, leather, brandy, tallow, and charcoal, are amongst the chief articles manufactured. The rest are mostly domestic, and conducted by women.

Chili is supposed to be the only American state, formerly subject to Spain, whose commerce has increased since the separation from the mother country. This increase has been very rapid of late years. According to an official report, in the year 1833 from 18,000 to 20,000 packages of foreign goods were deposited in the free bonding warehouses; the number in 1834 had augmented to from 70,000 to 80,000. The customs collected from 1825 to 1829, were, at an average, 888,670 dollars a year; and in 1834 they amounted to 1,241,080 dollars. Several new public warehouses have been built at Valparaiso. Most of the foreign trade is with Great Britain, the imports from which, consisting chiefly of cotton and woollen goods, hardware, iron, &c., amounted, in 1835, to 606,176*l.*; 1836, 861,903*l.*; 1837, 625,545*l.*; and 1838, 413,647*l.* A considerable share of the goods imported from Britain is subsequently sent to other parts of America. Linens, &c. are imported from Germany; silks, paper, perfumery, leather, wines, and brandy, from France, to the value of 1,000,000 dollars; silks, nankeens, tea, sugar, &c., from China and the E. Indies; tobacco, spermaceti candles, oil, sugar, and manufactured goods, from the U. States, to about 2,500,000 dollars; dyes, coffee, pearls, sugar, cacao, tobacco, cotton, rice, salt, and spirits, from

Peru and Central America; cotton, Paraguay tea, and European goods, from La Plata and Brazil, &c. The exports are chiefly bullion, copper, hides, tallow, pulse, wheat, fruits, drugs, and European goods re-exported to Peru, Bolivia, and Central America. Valparaiso is the chief port, and centre of the foreign trade; in 1835, 436 trading vessels, of the burden of 86,429 tons, entered its harbour; of these, 93 were British, 73 American (U. S.), 44 French, and 150 Chilian; the burden of the last amounted to 18,480 tons.

Few accommodation exists for internal commerce. The only towns of any importance, except the cap. Santiago, viz. Valparaiso, Coquimbo, Concepcion, and Valdivia, are near the sea, and at a great distance from each other; and, except between Valparaiso and Santiago, the latter city and Talca, there were no roads passable by carts in Miers's time. Poeppig says that there are but three or four bridges of any size in all Chili, and these have been mostly ruined during the war. The mountain torrents and ravines are crossed in some places by Indian hanging bridges made of osiers and thongs of raw hide, which sometimes sway from side to side, with the weight of the person crossing them, in a terrific manner. The attention of the government is, however, turned towards public works. Canals are projected in the S. provs., and new roads in the N., as well as new ports to facilitate the exportation of the produce of the interior districts.

The coins, weights, and measures in use, are similar to those of Spain. (*Poeppig; Miers; Parliam. Tables*, 1836; *Hall; Commerc. Dict.*, &c.)

Public Finances.—The public revenue, which, in 1831, amounted to 1,517,537 dollars, has since been progressively increasing in amount, and in 1836 amounted to 2,175,000 dollars. The state expenditure in the same year amounted to 1,840,204 dollars, leaving a surplus of upwards of 330,000 dollars. According to subsequent accounts, the produce of the revenue in 1838 was, in round numbers, 2,275,000 dollars, and the expenditure 1,150,000 dollars. Ever since 1835 there has been a surplus of the revenue over the expenditure.

Government, &c.— Chili is a republic under a president, elected for a term of years. It has a congress of 56 members elected by the different provs. The executive power is in the hands of the president, and a council of 4 ministers.

The national religion is the Roman Catholic. The clergy are not numerous; they are subordinate to the bishop of Santiago. Other religions are tolerated; but the exercise of their public worship is not allowed.

People—are mostly of Spanish and Indian descent, but there are some negroes and mulattoes. "The Chilians," says Mr. Miers, "though they may be said to possess in no degree a single virtue, have the credit of possessing fewer vices than other creoles; there is a passiveness, an evenness about them approaching to the Chinese, whom they strongly resemble in many respects: even in their physiognomy, they have the broad low forehead, and contracted eyes; they have the same cunning, the same egotism, and the same disposition to petty theft." (*Travels*, ii. 223, 224.) They are moderate in their food, but frequently very dissipated and profligate in their habits, and in the towns very fond of dress and display. Highway robbery is rare, and so are murders in the country, but not in the towns. Education, or any taste for the fine arts, have hitherto made but little progress. (*Miers; Schmidtmeyer, &c.*)

History.—Previously to the Spanish conquest, Chili belonged to the incas of Peru. In 1535 Pizarro sent Almagro to invade the country, and in 1540, Valdivia; the latter of whom conquered most of the country excepting Araucania. The revolution, which separated the colony from Spain, broke out in 1810; from 1814 to 1817 it was kept under by the royalist forces; but in the latter year the victory of Maypú, gained by San Martin, permanently secured the independence of Chili, and opened for it a career, which promises a high state of national prosperity, unless prevented by internal dissensions. (*American Encycl.; Dict. Géog. Univ.*, &c.)

CHILKEAH, an inl. town of Hindostan, prov. Delhi, on the borders of the Kumaon distr., 110 m. N.E. Delhi, lat. 29° 24′ N., long. 79° 5′ E. It is a chief mart of trade for the W. provinces, with Kumaon, Tibet, Tartary, &c., but is abandoned on the approach of the unhealthy season, when dangerous *malaria* prevails.

CHILLAMBARAM, a marit. town of S. Hindostan, prov. Carnatic, 34 m. S. Pondicherry, and a short distance N. the mouth of the Coleroon river, lat. 11° 28′ N., long. 79° 47′ E. In its vicinity there are some celebrated Hindoo temples, of considerable antiquity. Some years since an extensive indigo manufactory was carried on at Chillambaram. (*Hamilton's E. I. Gaz.*, i. 389.)

CHILMARRY (*Chalamari*), a town of Hindostan, prov. Bengal, distr. Rungpore, on the Brahmaputra, 35 m. S.E. Rungpore. A festival is annually held here, which is usually attended by 60,000, and sometimes by 100,000 Hindoo pilgrims and others.

CHILOE (ISLAND AND ARCHIPELAGO), a large island in the S. Pacific, near the S. coast of Chili and the N.W. coast of Patagonia, between lat. 40° 48′ and 43° 50′ S., and having on its E. side 63 small islands, 36 of which are inhabited; the whole, including the town of Maulin on the main land of the continent, forms the most S. prov. of Chili. Shape of Chiloe, oblong; length, N. to S., 120 m.; average breadth, 40 m. Area, 4,800 sq. m. Pop. (1832), with its accompanying islands, 43,830. It is mountainous, and covered with wood, chiefly a bastard cedar, very durable, and exported in great quantities to Peru and Chili. There are several good harbours, in all of which vessels of any size may anchor with the greatest safety; and in those of St. Carlos (the cap. in the N.E. part of the island), and Castro, ships ride quite land-locked close to the shore in good holding ground. Climate healthy, but damp; at an average, ten months of the year may be called rainy. Cold, however, is not severe; water seldom freezes, and a fall of snow is unknown. Little ground is cleared; the soil is rich, though never manured; it consists of dark mould and fine loam upon chalk, and produces good crops of wheat, potatoes, fruit trees, especially apples, which yield a large quantity of cider, &c. Wine is prohibited, and spirits are rarely seen. Tobacco, being a government monopoly, is very dear; and Captain Blanckley, in 1834, purchased for one pound of it, "12 fowls, 3 bags of potatoes, 4 dozen eggs, and half a boat-load of oysters." Domestic animals are largely reared. In 1832 there were 100,000 sheep and lambs, 5,000 goats, 8,800 black cattle, and 6,500 horses. The sheep are bred solely for their wool, and are never eaten. The island swarms with hogs, and the hams of Chiloe are celebrated in S. America. Poultry and fish are very abundant. Principal exports—planks about 260,900, and hams 7,800 annually; brooms, hides, woollen cloths, &c., to the value of about 25,000 dollars a year. Between 1827 and 1831, 93 Chilian trading vessels, burden 12,693 tons, and 49 foreign vessels, burden 7,751 tons, entered the port of San Carlos. The archipelago possesses about 1,500 coasting vessels. Money is here nearly unknown, and traffic is conducted by barter, or payment in indigo, tea, salt, or Cayenne pepper. All these articles are much valued, especially the first for dyeing woollens, for the weaving of which there is a loom in every house.

The archipelago sends 1 mem. to the Chilian congress. The whole cost of the government, including expenses of fortresses, &c., is no more than from 30,000 to 40,000 dollars a year. The public revenue is chiefly derived from a tithe on all produce, paid in kind. There are numerous churches and chapels, but few priests. In 1832, there were 31 government schools in the island, with 1,270 pupils. The chief towns are San Carlos, which is fortified and has about 2,000 inhab., Castro, and Maulin. A good road, 54 m. long, runs between the two former towns. According to Captain Blanckley, the golden age would seem to be revived in this part of the world. "Murders," says he, "robbery, or persons being in debt, are never heard of: drunkenness is only known or seen when European vessels are in port: not a private dwelling in the towns or country has a lock on the doors," and the prison is in disuse. The inhab. are passionately fond of music and dancing. Chiloe was the last possession held by Spain in the Pacific: it has belonged to Chili only recently. (*Blanckley, in Geogr. Journal*, iv. 344—361.; *Voyage of the Adventurer and Beagle; Poeppig, &c.*)

CHILTERN HILLS, a ridge of chalk hills in England, traversing the co. of Bucks, and reaching from Tring, in the co. of Hereford, to Goring, on the Thames in Oxford. Wendover Hill, in Bucks, the highest part of the range, is 905 ft. above the level of the sea. Camden says that these hills were once thickly covered with trees, which were a receptacle for thieves till they were cleared by the abbot of St. Alban's. (*Gibson's Camden*, i. 327.) An office, called the stewardship of the Chiltern-hundreds, was established at a remote period. Whatever were formerly its duties, they have long since ceased; and it is now nominal only, being kept up to afford mems. of the H. of C. an opportunity, by accepting it, of vacating their seats.

CHIMBORAZO, one of the highest summits of the Andes, which see.

CHINA (EMPIRE OF), a vast country of S.E. Asia, between lat. 20° and 56° N., and long. 70° and 144° E., in form nearly square, being bounded on the E. and S E. by those arms of the Pacific Ocean known as the Gulph of Tartary, the Sea of Japan, the Yellow Sea, the Strait of Formosa, the Chinese Sea, and the Gulph of Tonquin; on the land sides by Tonquin, Laos, and Birmah; S.W. and W. by Independent Tartary; and N. for the immense extent of 3,300 m. by Asiatic Russia. Its extent from the borders of Kokhan and Budukshan to the sea of Okhotsk is 3,350 m., and its greatest width from the frontiers of Daouria N. to Tonquin S., is 2,100 m.; inclosing altogether, a space of about 5,300,000 sq. m. Thus, the Chinese empire includes all the table land

of Eastern Asia — about a third part of the whole continent — or a little less than a tenth part of the habitable globe; and contains within its enormous area, the largest amount of population and of wealth united under one government in the world. The coast line has an extent of above 3,350 m., and the total circumference of the empire is about 12,550 m.; but more detailed particulars of the surrounding possessions of China must be sought in the articles ASIA, TIBET, MONGOLIA, MANCHOORIA, Islands of HAINAN, FORMOSA, TCHUSAN, &c.; our business in this place being entirely with China Proper.

CHINA.* — The area of China Proper does not exceed a fourth part of the whole empire. It is true that its dimensions have not been satisfactorily determined, and it will be seen that our estimate of the extent of the empire, as well as of China Proper, differs from the calculations of preceding geographers; which, indeed, widely disagree with each other, except where the mistakes of one writer have been copied by another. To determine its extent 17 linear measurements have been made; two upon native maps, which have been carefully compared with European maps, and the result in reference to China Proper stands thus: — for its length, from N. to S., 1,474 m.; breadth, from W. to E. 1,355 m. But these are not the longest straight lines that may be made to intersect its surface; since, from the N.E. corner to the frontiers of Birmah, the distance is 1,669 m., and from the N.W. extremity to the Isle of Amoy, it is 1,557 m. The entire area contains 1,348,870 sq. m.† The coast is upwards of 2,500 m. in length, while the land frontier occupies a space of 4,400 m. Thus, China Proper is about 8 times the size of France, and 11 times that of Great Britain (*Staunton*.) (*Tab. Geog. Chin. Native; Ogilby*, i. 7. and *Map; Du Halde's General and Particular Maps; Lord Macartney's Do.; Arrowsmith's Atlas*, pl. 27. 29. 32, 33.; *Gutzlaff's China Opened*, i. 21—57.)

General Aspect—Great Plain. — The first object that invites attention in the general aspect of China is its *Great Plain*, which, occupying the N.E. part of the country, is above 700 m. in length, and varies in width from 150 to near 500 m. The entire area incloses no less than 6 provinces, and a space of 210,000 sq. m., being 7 times greater than the plain of Lombardy. It is extremely populous; and if we might depend upon the census of 1813, no fewer than 170,000,000 "mouths" — the Chinese expression for souls — are fed upon its surface! The N. portion, bounded by the great wall, is dry and sandy, and its E. portion, bordering on the sea, and between the two great rivers the Hoang-ho and the Yang-tse-Kiang, by which it is intersected, is low, swampy, and studded with lakes. But notwithstanding these deductions, it may be said to be, on the whole, extremely fertile. It has few trees, but is every where well watered; is cultivated with the utmost care, and produces vast quantities of rice, with cotton, wheat, &c.

Mountains and Hills. — The mountainous and hilly districts of China comprise about half its area. A portion of the great mountain system of E. Asia entering this country at its N.W. and S.W. frontiers, subsides previously to its termination near the sea-coast into low hills; so that, tracing their course backwards from E. to W., they gradually ascend in terraces or slopes, and give to the S. and W. districts a mountainous, and to the E. divisions a hilly character. N.W., at about 34° N. lat., and 102° E. long., the great Pe-ling range, which has already traversed a portion of Tibet from W. to E., is joined by the Yun-ling chain, which entering China at about 31° N. lat., and 101° E. long., descends southward nearly to the prov. of Yun-nan. These mountains form the easternmost edge of the high table lands of E. Asia, are snow-capped, and inaccessible to the natives; being actually left *blank* in the Chinese maps. (*Davis*, i. 131.) Another ridge, joining the Pe-ling at the same point, takes an opposite or N.N.E. direction, and entering the empire in the prov. of Shen-se, reaches nearly to 110° of E. long. Another arm of the Pe-ling — the Ta-pa-ling chain — intersects the country from W. to E. to about 115° E. long.; the Pe-ling itself continuing in its former course, gives out various branches which traverse the central provinces. The other mountain chains join the stupendous Himalaya ridges, and enter the country at its S.W. extremity in the province of Yun-nan, from whose high table lands the most extensive Chinese ranges rise. The Yun-ling, the most southerly of these chains, runs nearly E. into the prov. of Quang-tung. But by far the most important mountain range is the Nan-ling, which branching off from the northern edge of the Yun-nan highlands, runs eastward to within 150 m. of Canton; it then inclines to the N.E. to its termination near the harbour of Ning po; having given out many branches, some of the mountains belonging to which rise above the snow-line. (*Macartney's Embassy*, pp. 207. 246. 259.; *Barrow*, ii. 241., iii. 29. 122.; *Malte-Brun*, ii. 554, 555.; *Davis*, p. 130, 131.) Most of the mountains here enumerated end in low hills in the eastern provinces, which consequently comprise the *hilly districts*. These are the most picturesque portions of China; and being covered with noble forests, crowned with pagodas, and with cities along their sides, give to the country a magnificent aspect, without interrupting its culture.

Rivers and Lakes. — It is to her mighty rivers that China is chiefly indebted for that fertility which is at once the source of her riches, and of her vast population. The *Hoang-ho*, or yellow river, and the *Yang-tse-Kiang*, or "son of the ocean," rank in the first class of rivers. "These two great streams, similar both in rise and destination, descend with rapidity from the great table lands of central Asia, and each of them meets a branch of mountains which forces it to describe an immense circuit, the Hoang-ho to the N., and the Yang-tse-Kiang to the S. Separated by an interval of 1,100 m., the one seems inclined to direct itself to the tropical seas, while the other wanders off among the icy deserts of Mongolia. Suddenly recalled as if by a recollection of their early brotherhood, they approach one another like the Euphrates and Tigris, in ancient Mesopotamia; where, being almost conjoined by lakes and canals, they terminate, within a mutual distance of 110 m., their majestic and immense course." (*Malte-Brun*, ii. 556.) The waters of the Hoang-ho bring down from its sources large quantities of yellow clay, which not only tinge them with that colour; but supply the banks with alluvial soil. Large deposits of this clay are constantly being made at the mouth of the Hoang-ho; so that the depth of the Yellow Sea has sensibly diminished. The Yang-tse-Kiang, is, however, the pride of China. It is the chief artery of the country, and undoubtedly one of the largest rivers of Asia. This stream is also heavily charged with alluvium, for at its exit into the sea — near which it is from 15 to 20 m. broad — continued deposits have formed the I. of Tsung-ming, besides numerous banks. The tributaries received into this river during its course, which is about 2,300 m., are innumerable: and, with the canals, connect it with the whole empire. Both the rivers, especially the Hoang-ho, which has a very rapid course, occasionally overflow their banks, and in spite of many strong artificial mounds, cause the most destructive inundations. The river next in importance is the Eu-ho, or Yun-liang river, which flows N.E. till it joins the Pei-ho, or Pekin river: the latter rises in the mountains N.W. of Pekin, near which city it becomes navigable for boats; and is, during the rest of its course, the most *populous* stream of a country where a large proportion of natives live upon the water in junks: their united waters flow into the sea in the most W. angle of the Pe-che-lee gulph. The Ta-si-Kiang, Choo-Kiang, or Canton river, rising in the prov. of Yun-nan, takes an E. course to the plains of Canton, and having received the Pe-ki-ang, the Ta-ho, and other smaller streams, forms an æstuary known as the Bocca Tigris, by which it is finally discharged into the China Sea, after a course of 600 m. There are a vast number of other rivers, some of which fall into the sea, and others into the great lakes. The Brahmaputra, Irawaddy, Thaluen, Menam, &c., have their sources in the S.W. parts of China. (*Journal Royal Geogr. Soc.*, iii. 305.; *Lindsay's Voyage in the Lord Amherst*, passim; *Gutzlaff's Voyage*, passim; *China Opened*, i. 29. and 61—168.; *Malte-Brun*, ii. 555—557.)

The principal lake in China is the Tunting-hoo, 220 m. in circ. It receives the waters of many considerable rivers, and furnishes an important affluent to the Yang-tse-Kiang, which passes near its N. extremity. After a further course of between 200 and 300 m., this great river receives the surplus waters of the Po-Yang-hoo lake, which also is of great dimensions, and is the recipient of many considerable streams. This lake is surrounded by picturesque and finely-wooded hills. Indeed, its scenery is so much admired, that its shores are the favourite spot where Chinese poets muse and write their versified prose. It is, however, subject to sudden tempests, which render its navigation dangerous. The environs of the Tai-hoo lake, near the E. coast, lat. 31° N., long. 120° E., are even more picturesque than those of the Po-yang, having gained the name of the "Chinese Arcadia." The

* We have borrowed this name from the Malays, who call China *Tchina*. Generally speaking, the Chinese call their empire after the name of the reigning dynasty, so that it has differed at different periods. Being at present governed by the Manchoo dynasty, who have adopted the name of *Thising*, the Chinese call themselves *Thising Jin*, that is, men of Thising. (See *Klaproth, Mémoires Relatifs à l'Asie*, iii. 257—270.)

† Though these are offered as the dimensions of China, with some confidence as to their correctness, it is right to quote the statements of former writers. Lord Macartney (1797) gives the area of China Proper at 1,297,999 sq. m., which has been copied by Pinkerton and Murray: Malte Brun (1811) gives 1,482,091 sq. m. The *Quarterly Review* (July 1836), states, at p. 490. that the surface "by the most correct maps may be taken at 1,080,000 sq. m. or 1,075,200,000 acres." Gutzlaff (1838), evidently misled by a misprint in the English translation of Malte-Brun, sets down the area at 537,000 sq. m. (*China Opened*, i. p. 21.), while at p. 57. of the same work the number of sq. m. allotted to each province, when added up, amount to 1,297,999, Lord Macartney's estimate.

Hong-tse-hoo, being situated near the junction of the Grand Canal with the Yellow River, is much frequented on account of its advantageous position. All the lakes, in fact, furnish intermedia of communication, and are abundantly stocked with fish. China contains several smaller lakes, but the whole do not occupy any great proportion of her vast surface. (*China Opened*, i. 31.; *Barrow*, ii. 387. 391., iii. 12.)

Coast. — The coast of China has yet to be described. If our statement be correct, that the sea-coast extends for 2,500 m., there is only one mile of coast to every 539 m. of territory; but internal navigation is carried on so extensively that this deficiency has no ill effect upon Chinese commerce. Commencing at the N.E., the coast opposite Corea is bold and rocky, but, on approaching the gulf of Pe-che-lee, presents a low and sandy shore, scarcely perceptible from the sea. The bar formed in this bay, at the mouth of the Pei-ho, makes its bed inconveniently narrow, and, when the S. winds blow, the whole adjacent country is overflowed to a great extent. The coast of the Shan-tung peninsula is bold and rocky, so indented as to afford excellent harbours; but, once rounded, the low swampy character of coast is again presented as far as the Tchusan islands. Meantime, the two great rivers have brought down their immense deposits from the interior, which give its name to the Yellow Sea. The mud is so thick as to retard the head way, and affect the steering of ships; and this great gulph will, in process of time, become a vast alluvial district, like Bengal and Egypt. "The present inclination of the bottom is about a foot in a geographical mile, or somewhat less than 1 in 6,000; and it is probable that the bottom of the Yellow Sea, as it rises, will likewise gradually approximate to a horizontal plain." (*Hall's Voyages*, i. 27.) This sea is nearly surrounded with islands. The coast down to the strait of Formosa continues low, and, except where it faces the Tchusan islands, and in the prov. of Fokien, is but little indented. The strait itself abounds with headlands, and is also so thickly studded with islands which are but imperfectly notified even in the best charts, that navigation is, by Captain Hall's account, "exceedingly trying to the nerves." The Quang-tong shore is bold and high, except in the recesses of the numerous bays and harbours. A narrow peninsula is thrust out far into the sea at the W. extremity of Quang-tong, and forms, with the island of Hainan, a narrow channel, which is shoal, full of sand banks and rocks, so that even the native flat-bottomed junks are exposed to great dangers. The rest of the shore is washed by the Tonquin gulph, which is studded with small islands. (*Hall's Voyages*, 12mo. edit. i. 29—46.; *Gutzlaff's Voyage*, passim; *Lindsay's Voyage*; *Journal Geog. Soc.* iii. 297—310.)

Public Works — Aspect of Cities and Towns. — An amount of human labour, probably unmatched by any other nation in the world, except ancient Egypt, has been expended on the *public works* of China, by which the natural aspect of the country has been materially varied. The first and most stupendous of these is the great wall, built several hundred years before the Christian æra, to protect China from Tartar incursions. It extends along the whole N. frontier, from the gulph of Leatong, in 120°, to the N.W. extremity of the empire, in about 99° E. long., and 40° N. lat., being, including its windings, about 1,250 m. in length: it is carried over the tops of the highest mountains, through the deepest valleys, and continued by bridges over rivers. Its height varies from 15 to 30 ft. It is 15 ft. across at the top; and, at short intervals, square towers are erected, some of them 37 ft. high. The wall is composed of earth faced with masonry, the top or platform being paved with square tiles. It is now in a state of decay, being no longer required, since the union of the Tartar with the Chinese territory, for its original purpose. (*Davis*, i. 136.; *Bell's Travels*, ii. 88.)

The *Great Canal* commences at Hang-tchou, near the mouth of the Tching-tang-chiang river, in about 30° 22' N. lat., and 119° 45' E. long., and, extending N., unites first with the Yang-tse-Kiang, and then with the Hoang-ho, terminating at Lin-tcing, on the Eu-ho river, in about 37° N. lat., and 116° E. long. The direct distance between the extreme limits of the canal is about 512 m., but, including its bends, it is above 650 m. in length; and as the Eu-ho, which is a navigable river, unites with the Pei-ho, also navigable, an internal water communication is thus established between Hang-tchou and Pekin, across 10° of lat. And by the junction of smaller canals and numerous rivers, the Great Canal not only assists in the irrigation of immense tracts of land, but affords a ready means for conveying its produce to all parts of the empire. But, apart from its utility, the Great Canal does not rank high as a work of art. A vast amount of labour has, however, been expended upon it: for though it mostly passes through a flat country, and winds about to preserve its level, its bed is in parts cut down to a considerable depth, while in other parts it is carried over extensive hollows, lakes, &c., on vast mounds of earth and stone. (*Barrow*, 511.) The sluices, which keep its waters at the necessary level, are all of very simple construction. In the *public roads*, and where rugged steeps are only accessible by means of laboriously formed *passes*, Chinese industry is fully apparent. Three mountain paths traverse the Nan-ling; one, N. of Canton, is estimated by Sir G. Staunton to rise 8,000 ft. above the sea; yet vast quantities of goods are conveyed over this pass from Canton to the interior by *coolies* or porters. The obstacles to communication presented by the Pe-ling and Ta-pa-ling ranges are greatly diminished by an artificial road sometimes conducted over yawning clefts by arches, in other places deeply cut through high mountains, and extending altogether for 150 m. In short, wherever intercourse is expedient between any two parts of China, no natural impediments are too gigantic, no labour or expense too great, to overcome them.

The following summary of the general appearance of the cities and towns of China is supplied by Gutzlaff: — "The districts on the sea-coast are generally the best inhabited and the richest; the tracts along the Yang-tse-Kiang the most fertile. Large and flourishing cities are found only where a ready water communication with other parts of the empire can be carried on. The greatest sameness exists in all the cities. In the larger ones are a few well paved streets, lined with shops; but the greater part of the streets are very narrow, extremely filthy, and planted with mere hovels. The suburbs of many cities are much larger than the cities themselves; and it is by no means extraordinary to see an immense walled space without any houses, where formerly a city stood. Villages and hamlets have a beautiful appearance at a distance; but on entering them one sees nothing but a heap of houses irregularly thrown together, the outside fair to behold, but the inside without furniture or comforts, and more filthy even than a stable. This does not apply to one district only, but it is common to most. Although the fields and gardens are beautifully laid out, there yet appears in them little attention either to elegance or pleasure. The gardens are very few; and a Chinese grandee delights more in artificial landscapes laid out in a small compass, than in an extensive park or a flower-garden. Utility is studied in preference to pleasure. The grandeur of natural scenery is in many parts of China as striking as in many parts of the world. Mountains, crags, rivulets, and valleys, both picturesque and romantic, are found in most provinces. Commanding situations are chosen for temples, the haunts of superstition and idolatry. These serve likewise for taverns, stages, public halls, and gambling-houses. The building of houses is regulated by law; none is allowed to exceed a certain dimension. Public halls have little to recommend them; the Chinese were never great architects; they understood the building of dwelling-houses, but not of palaces." (*China Opened*, i. 57, 58.)

Climate. — Connected with this subject there are some singular circumstances. Situated between the 20th and 42nd degrees of N. lat., and the most E. long. of any part of the Old World, the temperature of China is very low for its geographical position. Its climate may also be said to be one of *extremes*; and while at Pekin, which is nearly 1° farther S. than Naples, the mean temperature is that of Britany, the scorching heats of summer are greater than at Cairo, and the winters as rigorous as at Upsal! But in so extensive a territory there are necessarily many variations. The W. districts are much influenced by the colds diffused by the mountains, while the climate of the maritime provinces is modified by the sea. At Canton, which is under the tropic, the heat during July, August, and September, is excessive, — then occur those frightful tornadoes, called typhoons, spreading devastation in their course, which, however, do not extend far beyond Canton. At the breaking up of these hurricanes, the transitions from the heat of day to cold and foggy nights are more violent and sudden than in any other part of the globe. The N. winds set in about November, and bring with them cold as intense as the preceding heats. The mean temperature of Canton is 76° Fahr. The climate of the interior is not however, with few exceptions, so extreme, particularly towards the N. frontier, where the summers are genial; and though the winter be cold, it is dry, and does not check the growth of fruit; but the N. winds bring clouds of white sand, which afflict the natives with ophthalmia. The W. frontier districts of *Yun-nan* and *Sze-chuen* are said to be unhealthy, and are selected as places of banishment for Chinese convicts. The central provinces present a striking contrast to those already named. There the climate exhibits a happy medium between the rigour of the N. regions and the enervating heats and sudden colds of the S. The Kiang-se the most favoured in this respect. The fall of rain in China varies considerably in different years. Humboldt states — without naming on what authority—that the average quantity per an. is 70 in.; though it has been known to exceed

90. Many violent earthquakes have been felt in China. (*Malte-Brun*, art. *China*; *China Opened*, i. 31. 60. 90. 162, 163. 185.; *The Fan-qui in China, by C. T. Downing, Esq.* i. 191, 192.; *Lyell's Geology*, ii. 50. &c.)

Population.—China has long been very generally believed to be the most densely peopled country, of any considerable extent, in the world. The Jesuit Semedo, writing in 1645, remarks, that, after living in the country 22 years, he was no less surprised on leaving than on his first arrival, at the immense number of persons he met with, not only in the towns and cities, but on the highways, "where," says he, "there is at all times as large a crowd as is usually to be met with on some great festival or public occasion." The Jesuit Amiot, founding on official documents, estimated the pop. in 1743 at about 143,000,000, which, adding for some classes that he had omitted, may be carried to about 150,000,000; and in 1792, Lord Macartney was informed, by a mandarin, "a plain, unaffected, honest man," whose statement is said to have been made on the authority of official documents, that the pop. was 333,000,000, and later accounts carry it up to above 360,000,000!

We confess, however, that, with the exception of that of Amiot, these statements appear to us to be altogether incredible, and that, in point of fact, we have no certain information as to the pop. of China. According to the statements in Chinese official works, the pop. of the empire amounted, in 1393, to 60,545,000; and in 1578 to 60,692,000. It is supposed to have continued at or about this amount till the Tartar conquest in 1644, a year before the publication of Semedo's work.* But it appears from an imperial proclamation quoted in the *Chinese Repository*, issued in 1792, and said to be founded on official data, that the pop. had been reduced in 1711 to 28,605,716! (vol. i. p. 356.; *Canton*, 1833.) This extraordinary diminution is attempted to be explained in the work now referred to, by the mortality occasioned by the long and bloody wars that accompanied the establishment of the Manchoo dynasty, by the fact of some of the provs. in the S. not having been fully subdued when this census was taken; and by the circumstance of a poll-tax being then imposed, which made it for the interest of individuals to escape being enrolled in the census. Now, admitting the force of some of these statements, though we believe them to be greatly overstated, and allowing that but for the wars occasioned by the Tartar conquest, and the imperfectly subdued state of parts of the country, a correct census taken in 1711 would have given a pop. of 60 or 70 millions; still, we ask, can it be credited that the pop. should have increased from even that amount, in 1711, to above 300,000,000 in 1792? Had China been a new country, or had the Tartars, by whom she was overrun in the 17th century, been distinguished by their superior intelligence and industry, an increase of this sort might have been possible. But the reverse of all this is the fact. China has been settled and civilised for many centuries; the great works undertaken and completed by her inhabit. at a very remote period, show that she had then been pretty thickly peopled; and it is admitted, on all hands, that in China the arts have been for ages in a nearly stationary state. The Tartars imparted to her little that was new. They were, in truth, mere roving herdsmen; and though they might have given the Chinese some instruction in predatory warfare, they could communicate to them no useful art, science, or invention. Under these circumstances, we contend either that the former official accounts of the pop. must have been grossly underrated, or that the later ones must be grossly exaggerated. But supposing that the pop. really amounted to 150,000,000 about 1750, is it credible that it should have exceeded 330,000,000 in 1792, and 362,447,000 in 1812? It would require the best possible evidence to make any reasonable person believe what is so directly at variance with all the best established principles; and no such evidence has been, or, we believe, can be, given with respect to the alleged increase of pop. in China. Whether the empire could support the pop. that has been ascribed to it, is a question on which it is needless now to enter. We believe, however, with M. De Guignes, that the fertility of the country has been greatly overrated; but whether that be so or not, we submit that the rate of increase exhibited by the censuses is such as could have been realised only in an unoccupied and very fertile country, colonised by a people far advanced in the arts; and that it is all but absurd to suppose that it should be realised in an old settled country, with stationary arts like China. (For a further discussion of this subject, see the excellent work of De Guignes, *Voyages à Peking*, &c. iii. 56—86.)

We subjoin an account of the area of the different provs. as given by Lord Macartney, and their pop. as given by Amiot in 1743, by Lord Macartney in 1792, and by the official returns in 1813.

	Provinces.	Area in sq. m.	Pop. 1743 (Amiot.)	Pop. 1792 (Macartney.)	Pop. 1813 Official.
Northern.	Pe-che lee	58,949	16,702,765	38,000,000	27,990,871
	Shan-se (W. of mnts.)	55,268	9,768,189	27,000,000	14,004,210
	Shen-se (W. of Pass.) } Kan-suh }	154,008	14,804,035	18,000,000	10,207,256
				12,000,000	15,193,125
Central.	Ho-nan	65,104	12,637,280	25,000,000	23,037,171
	Kiang-se	72,176	6,681,350	19,000,000	23,046,999
	Hoo-pih } Hoo-nan }	144,770	4,264,850	14,000,000	27,370,098
				13,000,000	18,652,507
	Kwi-chou	64,554	3,402,722	9,000,000	5,288,219
Southern, and Maritime	Shan-tung	65,104	12,159,680	24,000,000	28,958,764
	Kiangnoo } Gan-hway }	92,961	26,766,365	32,000,000	72,011,560
	Che-Kiang	39,150	15,623,990	21,000,000	26,256,784
	Fo-Kien	53,480	7,643,035	15,000,000	14,777,410
	Quan-tong	79,456	6,006,600	21,000,000	19,174,030
	Kwang-se	78,250	1,143,450	10,000,000	7,313,895
	Yun-nan	107,969	1,189,825	8,000,000	5,561,320
Western.	Sze-chuen	166,800	15,181,710	27,000,000	21,435,678
	Leaotong		235,620		
	Total	1,297,999	150,265,475	333,000,000	360,279,897

But the census for 1813 adds an additional sum of 1,413,982 mouths for the pop. of Shing-king, Keih-lin, Turfan, Lobnor, and Formosa; and 188,326 families for those engaged in the service of the emperor; and supposing the latter to consist of 4 mouths each, the total pop., according to the census of that year, will be 362,447,183.

A glance at the above table must satisfy every body that the account of the pop. furnished to Lord Macartney, in 1792, and the census of 1813, cannot both be accurate. The last shows an excess over the former of 29¼ millions in the aggregate; but it would appear that in the majority of the provinces there has been no increase; but, on the contrary, a diminution, in some instances, of nearly *a half!* It may, however, be confidently affirmed, that no such diminution has taken place; and consequently that the statement of Lord Macartney's "honest" informant is completely erroneous; or, which is most probable, that both it and the census are in this predicament.

Local Divisions. — Though the geography of the world be not much studied in the "Celestial Empire," the more minute details of local topography are no where better understood. The survey of the Jesuits, made by order of the emperor Kang-he, is said to be very correct; and every district of any importance has since found a geographer, who describes it, if not so scientifically as the Catholic missionaries, with the utmost minuteness, so that, with little difficulty, a library of 3,000 vols. might be collected treating exclusively of Chinese geography. Nothing can be more systematic than the manner in which the whole empire is divided. Each prov. is portioned off into provincial districts; while the towns and cities are divided into the 1st class (*foo*), 2d class (*tchoo*), and 3d class (*heën*). Formerly China Proper consisted of 15 provs.; but in Keën-Lung's time the largest were bisected, and there are now 18.

Northern Provinces. — 1. Pe-che-le (the independent) is subdivided into 16 districts, the most W. of which are very flat; the central ones somewhat hilly; while those on the sea-coast along the Pe-che-lee gulph, are low and marshy. Pekin, the metropolis of Northern China and residence of the court, is situated in this prov., about 60 m. from the great wall, and 100 m. from the sea. The Pei-ho flows through Pe-che-lee, disemboguing at the small sea port of Takoo. The chief ports are Tong-choo and Tein-sing. It is a curious fact, and one which does not square well with the popular notions of absenteeism, that despite the residence of the court, the bulk of the population are probably more depressed in this than in any other prov. (*Barrow*, 495.) 2. Shan-se, or Chan-se (west of the mountains) is divided from Mongolia by the great wall, a branch of which (the inner great wall) separates its E. limit from Pe-che-lee. It is said to have been the most early occupied part of China. Its mountainous portions are not, however, habitable, and many other localities afford but a scanty subsistence. Hence it has no large or remarkable cities. 3. Shen-se, or Chen-se (west of the pass) is also separated from the Mongolian borders by the great wall, which in this place is kept in good repair. The mountains in this prov., which are more rugged than high, contain gold mines, but these are not allowed to be worked, lest the attention of the people should be withdrawn from agriculture. The valleys through which the Hei-ho and the Han-Kiang run are fertile in millet, wheat, and pulse, but are too dry to produce much rice. Swarms of locusts frequently appear in Shen-se, destroying the harvest, and converting smiling valleys into wastes. The chief town is Se-gan-foo, one of the largest in the empire. 4. Kan-suh (voluntary awe) and Shen-se, formerly united, made one large prov., extending over a space of 154,008 sq. m. Kan-suh

* Semedo himself gives some statements whence it is inferred that the pop., about 1640, amounted to about 290,000,000! But this is contradicted by all the official returns, and is, obviously, unworthy of notice.

consists principally of a narrow neck of land thrust out upon the edge of the great Gobi desert; hence the soil is cold and barren. Kan-suh forms the N.W. limit of China, the great wall ending at Shwang-lan.

Central Provinces. — 5. Ho-nan (south of the river) is one of the most fertile provinces of the great plain, and is called the garden of China. Shen-se, Pe-che-le, and a part of Shan-tung join its N. boundary, while branches of the Pe-ling enclose it to the W. The Hoang-ho, or Yellow River, runs nearly parallel with the N. boundary, and intersects the finest parts of the prov. 6. Kiang-se (west of the river) has its boundaries well defined by the Nan-ling range and its branches, which surround it on three sides, the W., S., and E. Its N. part contains the great Poo-Yang lake, and its contiguous marshes, said by Mr. Barrow to be the sink of China. It has, however, many well cultivated valleys, in which rice, cotton, indigo, and sugar, are produced. It has also extensive manufactures, amongst which must not be forgotten the China-ware, so highly esteemed all over the world, till European imitators exceeded the original manufacture in beauty and cheapness. Still, however, no fewer than a million persons are said to be exclusively employed in this manufacture, which is chiefly carried on at the capital King-le-chin. Here 500 furnaces are constantly burning. 7. Hoo-pih (north of the river), and, 8. Hoo-nan (south of the river), form the ancient prov. of Hoo-Kwang, divided into two parts by the Yang-tse-Kiang. The former is divided into 11 and the latter into 13 districts; the whole covering an area of 144,770 sq. m. Both provs. are extremely fertile, and the capital of Hoo-pih yields to few cities of the empire in extent and prosperity. The tea grown in its neighbourhood is of superior quality, and the bamboo-paper manufactured within its walls is extensively exported. This city is called Woo-chang-foo. Hoo-nan bears a great resemblance to the Ho-nan prov., but is richer in minerals. A very active trade is carried on, on both banks of the Yang-tse-Kiang. Hoo-pih and Hoo-nan are both within the great plain. 9. Kwi-chow has been designated the Switzerland of China, being traversed by the highest portion of the Nan-ling range. To the S. it is peopled by wild and intractable highlanders, (*Meaou-tze*), who, though in the centre of the empire, preserve their independence, and frequently make predatory descents on the adjoining provinces. Kwi-chow has no large towns, but several fortresses.

Maritime and Southern Provinces. — 10. Shan-tung (east of the mountains) is partly in the great plain and partly consists of a promontory jutting into the Yellow Sea; S. of Pe-che-le, and N.E. of Ho-nan. Its W. part is traversed by the Great Canal, but the country is poor, and the climate, though bracing, bleak. There are, however, some valuable coal mines, which supply the whole empire with that article. The coast is bold, and affords good shelter. The principal port is Tong-cheou-foo. 11 & 12. The Kiang-soo (river Soo) and Gan-hway (fixed excellence) prov. were once united under the name of Kiang-nang. The two great rivers, the Hoang-ho and Yang-tse-Kiang, cross both districts, and fall into the sea 2° apart, forming the Chinese delta. Gan-hway has 13 districts, and the Kiang-soo 11; their united extent being 92,961 sq. m. "If we consider," remarks Gutzlaff, "their agricultural resources, their great manufactures, their various productions, their excellent situation on the banks of the two largest rivers in China, their many canals, and amongst them the Great Canal, and tributary rivers, they are doubtless the best territory of China." Enjoying these blessings, chiefly conferred by their two great rivers, these provinces are also the most liable to the evils they produce, namely, frequent and destructive inundations. The staple products are grain, cotton, green teas, and silk. Rice suits admirably with the black marshy loam of which most of the soil consists. Nanking (capital of the S.) is situated on the S. bank of the Yang-tse-Kiang, but at the distance of a league from the stream (Nankin). The Kiang-soo prov. only faces the ocean. The scene which appeared at the junction of the Yang-tse-Kiang and Great Canal, is thus described by Barrow: — "The multitude of ships of war, of burden, and of pleasure; some gliding down the stream, others sailing against it; some moving by oars, and others lying at anchor; the banks on either side covered with towns and houses as far as the eye could reach; presented a prospect more varied and cheerful than any that had hitherto occurred. Nor was the canal on the opposite side less lively. For two whole days we were continually passing among fleets of ships of different construction and dimensions. Cities, towns, and villages were continued along the banks without intermission. The face of the country was beautifully diversified with hill and dale, and every part in a high state of cultivation." (516.) 13. The Che-Kiang (river Che), or Tche-Kiang, is the smallest Chinese prov. It occupies the S.E. corner of the great plain. The Yun-ling chain ends here in innumerable low hills, the most barren of which produce abundance of tea. In fact the whole district is most assiduously laid under contribution by the inhab.; every inch of ground being tenanted. At the port of Cha-poo, a large trade is carried on with Japan. 14. Fo-Kien (happy establishment), which forms the W. shore of the Formosa channel, is mountainous. Barren hills and sandy plains are, in truth, the natural characteristics of Fo-Kien, but Chinese industry has made the land fruitful. The tea-plant thrives in perfection, and the "China orange" is chiefly derived from this prov. The maritime commerce of Fo-Kien is extensive, its merchants monopolising most of the Chinese shipping trade. Emigration, though discouraged by the government, is here very prevalent. 15. Quan-tong (eastern breadth) joins Fo-Kien to the E., its shores stretch along the whole S. coast of China, to the borders of Cochin China, the N. boundary being formed by the Nan-ling mountains. Quan-tong has 13 districts, and an equal number of trading emporiums, and to this prov. alone are Europeans allowed to trade. It has many wide valleys, particularly the plain around Canton, which is of great extent, and many valuable products; but, though it be the great entrepôt for tea, that article is not of the number. The capital, Kwang-choo-foo (Canton), is the greatest emporium of the E. 16. Kwang-se (western breadth) joins the W. limits of Quang-tong, the Nan-ling range divides it from Hoo-nan on the N., while its S. border unites it with the Cochin Chinese prov. of Tonkin. The mountainous portions of the prov. — by far the greatest part of it — are said to contain gold and other metals: the lowlands and valleys produce rice, silk, and timber. Both the language and manners of the inhab. differ from those of their countrymen. 17. Yun-nan (south of the clouds), the most W. of the S. provs.; is conterminous on the S. with Cochin China and the Birman empire; and towards the W. with Tibet. Its mountains, which are remarkably high and bold, furnish the copper that supplies the currency of China. It is in Yun-nan that the Yang-tse-Kiang enters China; and by the aid of a high road, which has been made parallel to its banks for a great distance, communication between it and the rest of the empire is rendered constant and easy. The same road branching off to the S., extends into the heart of the Birman empire.

The western province, Sze-chuen (five rivers), is the largest in China. Plains, mountains (the Yun-ling), and extensive deserts are its principal components. The Yang-tse-Kiang having taken a N. bend at the Yun-nan frontier, traverses its whole extent; and, during this part of its course, receives several tributaries. The capital, *Ching-too*, was once the metropolis of an independent state, which then surrounded it; and its inhab. still boast of greater independence of character than their neighbours; which they evince by frequent rebellions. (*China Opened*, i. 155–168.)

Natural Productions of China.—The climate of China, exhibiting occasionally such severe cold, forbids the presence of some members of the *animal kingdom* met with in the similar latitudes of India. The universal cultivation of China Proper, and the thickness of its population, have long expelled most of the wild animals which still abound in the surrounding regions. There are also fewer domestic ones than inhabit most European countries. Beasts of burden are in a great degree superseded by the means of transit so copiously afforded by canals and water-courses, and by that fine race of men the *Coolies* or porters; while the canal boats are dragged along by trackers. Add to this, that animal food is considerably less in use among the Chinese than vegetable diet. There are no meadows for feeding cattle; and even if there were, the natives have a singular aversion to butter and milk. Tigers, though they have been seen in the forests of Yun-nan, are scarcely known; and the lion is almost deemed fabulous in China. There are wild cats, which are caught, confined, and fed in cages, and considered a dainty for the table. Monkeys are found in the southern districts. The Chinese horse and ass are small and spiritless, and so is the buffalo, which is sometimes employed in ploughing. Dromedaries are much used between Pekin and Tartary. Pigs are reared with great care; sheep are smaller than those of England, and goats, of various colours, have uniformly straight horns. The dog of China is about the size of a spaniel, and is uniformly met with of the same variety. Rats emigrate occasionally from one place to another in large troops, when they devour crops and harvests: they are very large, and are used by the common people as an article of food. There is a genus of rat peculiar to China, which bears some resemblance to the Bamboo Rat of Sumatra. The *ornithology* of China presents, in the first place, the eagle, which frequents the mountainous districts; the *haetsin*, a kind of falcon, abounding in the province of Che-keang, is considered imperial property, while the magpie, which is so numerous as to be the farmer's worst nuisance, is considered sacred by the reigning family. Crows and sparrows are also abundant in China. Among others of their manifold stratagems for catching fish, the Chinese have trained the fishing cor-

morant; but that the bird may not help itself too bountifully, the owner puts an iron ring round its neck, which obliges it to deliver up a portion of its prey. Curlews and quails are found in great quantities in the N.: the latter are esteemed chiefly for their fighting qualities, as cocks used to be in England; and, when tamed, good fighting quails sell at enormous prices. Larks are numerous, and sing admirably. But the greatest boast of Chinese ornithology is its splendid varieties of pheasants. One, the *medallion* pheasant, takes its name from a membrane of brilliantly coloured feathers, which are displayed or contracted at the will of the bird. The gold and silver pheasants have also a most brilliant appearance, and are so plentiful as, in some districts, to furnish the tables of the poor with an excellent dish. Pigeons of different sorts are not rare, but the natives seldom domesticate them. Aquatic birds are naturally invited to a country which has so many lakes and rivers. The most celebrated of these is the mandarin duck, a species of teal, so celebrated for the strong mutual affection between the male and female that it is used by the Chinese as an emblem of conjugal fidelity: their plumage is beautiful. The snow-white *rice-bird* of Siam is of great use in China in extirpating vermin from the marshy rice-fields; which it is enabled to accomplish by means of its long legs and long beak.

From the *fishes* peculiar to China, we derive the gold and silver fish, which are kept there, as in Europe, for ornament in glass globes. The edible fish peculiar to China are, first, one of a yellowish colour, caught in the Yang-tse-Kiang, which, while fresh, is insipid; but is considered a great delicacy after having been kept for a time in ice. The *shang-tung*, sea-eel, and a sort of rock cod, called *tsang-yu*, are also much esteemed, and so are sturgeon, mullet, carp, perch, sea-bream, &c. Crab fish of various kinds are plentiful. On parts of the rocky coast, oysters are successfully preserved and fattened in oyster-beds.

Though the larger species of *reptiles* are unknown in China, the smaller lizard tribes are numerous in the hot months; several fresh-water tortoises have been discovered, and also two new species of frogs. Venomous serpents are but little known. The *insect* tribes of China furnish its greatest plague and its greatest blessing. The plague of locust-swarms is terribly inflicted upon the N. and W. prov. Nothing can exceed their voracity; and it is not uncommon for them to occasion so much destruction, as to reduce thousands of human beings to starvation; while another insect, the silk-worm, furnishes employment and riches to an immense part of the pop. In rearing these profitable worms, the Chinese excel all other nations. Scorpions and centipedes are plentiful. A spider, peculiar to China, which inhabits trees, devours small birds, after entangling them in its enormous web. Butterflies of gigantic size, and brilliant colours, abound E. of Canton. Multitudes of white ants are very destructive in the S.; and the musquito is found in most parts of the country during the summer months. There is a singular sort of bee, called the white-wax insect, which furnishes the whole nation with that article, which it deposits upon a particular sort of tree, furnished by the natives with nests to attract the insects.

The *vegetable kingdom* of China is remarkable for not containing any very large trees, and timber is consequently scarce. The oak is seldom seen, fir trees chiefly supplying its place, every ridge of mountain where it is likely to grow being planted with the fir. Palms, laurel, cassia, and caper trees are often met with, especially in the S. provinces, and the cultivator grows together the banana, guava, orange, papaw, cocoa, litchi, peach, apricot, vine, pomegranate, and chestnut. There is also a singular production called the tallow-tree, which resembles the birch, but the bark is white, and the branches slender: the fruit, growing in bunches, is enclosed in a brown capsule, which encloses three kernels, all coated with tallow, themselves containing an oil much used for the lamp, while the tallow is converted into candles. There is also the *tse*, or varnish tree, resembling the ash, which exudes a valuable essential oil, but produces a cutaneous disease if dropped upon the skin. It is the white blossoms of the *le-pih* which attract the wax-fly. The camphor-laurel is extremely productive of that drug in China. The *kwan-lan* contains a pith which, when ground to powder, answers all the purposes of flour. A species of sycamore, the *koo-shoo*, supplies paper to the Chinese from the rind; thin, riband-like strips are peeled and made into paper. Mulberry trees, as food for silk-worms, have much pains bestowed on their culture.

We come now to the shrub which has brought China into nearer contact with foreigners than her sages ever desired, or her government seem willing to render closer. The tea-plant, called by the natives *cha*, rises from four to five feet in height, and bears a strong resemblance to the myrtle, but the flower is not unlike small white hedge roses. Although European botanists have only discovered two varieties, black tea and green tea, native writers enumerate as many hundreds; an obvious exaggeration. Though this plant will grow in the most sterile ground, the quality of the leaves depends upon the soil which nourishes them, and the age of the tree. The best are taken from three-year-old shrubs. There are three in-gatherings of the leaves; the first in early spring, the second at the commencement, and the third at the end of the summer. They are carefully manipulated, dried in various ways, and then packed. The coarsest leaves are beaten into cakes and exported, principally into Tartary, under the name of *kaiel-cha*, or brick tea. But the finer descriptions of tea require a vast deal of labour in their preparation; and could only be produced in a country where the inhabitants are universally industrious, and wages low. That giant of the grass tribe, the bamboo, is most extensively used; besides being an important instrument for enforcing the laws, the Chinese build cottages and fashion all sorts of furniture with it. The tender shoots make an excellent food, and supply the material for a coarse sort of of paper. Tobacco, the cotton plant, and sugar-canes, are also profitably cultivated. The growth of garden flowers is not much encouraged, every available inch of ground being used for the production of edible plants. Even the more opulent natives are content with a few flower-pots, with some pretty flower for the sake of ornament. The water-lily not only produces a beautiful flower, but its fruit provides an excellent meal, not unlike gruel, in much request among the Chinese. They have almost unlimited varieties of the camellia. A plant, the name of which has not yet reached this country, furnishes that delicate material for drawing upon, and making into artificial flowers, falsely called rice-paper.

The great pop. of China, and the fondness of the people for vegetables, cause a great number of table-plants to be reared. Turnips, carrots, sweet potatoes, and pot-herbs of every kind, are produced in abundance. A white cabbage, called *pih-tsae*, and not unlike the Roman lettuce, constitutes the principal food of every class, and is really delicious. Of *grain*, the plenitude of water in China causes rice to be so successfully cultivated, that it is brought to greater perfection there than in any other part of the globe. Indeed, there is scarcely any sort of grain but may be found in some part of the country or other. No medical root is in such high favour as the *gin-seng*, which is administered as a sort of universal panacea, and is a good tonic. It was formerly found only in Shan-tung, Leao-tung, and Tartary; and brought a very high price. But it has been discovered in different parts of America; and is now extensively imported into Canton by the American traders. The *ti-wang*, a plant very similar to liquorice, is also much used as a restorative. The other roots are *Radix Chinæ* (a sort of truffle), galangal, rhubarb, ginger (often exported as a sweetmeat), and poppy, whose juice is made a substitute for opium, and is extensively cultivated in spite of the strictest government regulations to the contrary.

But scanty information is to be obtained of the *mineral kingdom* of China; but the portion of the mountain districts that has been explored is found to possess great mineral riches. The gold mines are worked exclusively by government, but their situation is kept a secret, though that metal is supposed to be derived from the Kwei-choo and Yun-nan mountains. Gold-dust is found in the Yang-tse-Kiang during its course through Sze-chuen. Iron is produced throughout the empire. Several sorts of copper are found in abundance, the most famous of which is the *pe-king*, or white copper, dug up in Yun-nan. Mercury is also very common, as are arsenic, cobalt, and orpiment. There are coal mines in various parts of China. The beautiful *lapis lazuli* is met with in the W. provinces. Salt, produced from the earth, and by the evaporation of sea-water, is an article of great traffic: it is collected in immense mounds, chiefly on the banks of the Pei-ho. China also furnishes the crystal, ruby, amethyst, sapphire, topaz; but diamonds are little valued. There are stones resembling basalt, which, when struck, give out a sound. Marble, porphyry, and jasper, are produced from the quarries of S. China, beside excellent granite and quartz. (*Dr. Abel's Narrative of a Journey into the Interior of China*, passim; *Downing's Fan-Qui in China*, ii. 140—152; *China Opened*, i. 33—54; *Malte-Brun*, art. *China*, *&c. &c.*)

Productive Industry and Trade.—The Chinese are famous for their industry. Of the immense territory they inhabit, there is scarcely a rood of arable ground that is not assiduously cultivated; and such importance do they attach to agriculture, that once a year the sovereign of the Celestial Empire—so seldom seen in public—exhibits himself holding a plough. But it is the misfortune of the Chinese that their patient enduring industry is allowed to usurp the place of ingenuity and science. Their farming instruments are of the most primitive kind, their ploughs being inferior to the very worst of ours. Owing to the smallness of the farms, there is no

room for the subdivision of employments; and agriculture, as a science, is but little advanced in China. But they accomplish all that can be effected by the most persevering industry. They spare no pains in the collection and preparation of manure; and they are superior to every other people in the irrigating of land. By the aid of chain-pumps, they draw water from the numerous canals and rivers, while the highest mountains are cut into terraces so constructed as to retain the requisite quantity of water, and to allow what is superfluous to pass off: by these means, and a good system of manuring, they are able, in many parts, to produce two crops a year, without intermission.

But notwithstanding their remarkable industry and economy, the bulk of the population have usually so little to spare, and are so completely without the ability to retrench in periods of distress, or to resort to a less expensive species of food, that the failure of a crop never fails to involve them in the extremity of want; and, despite the supplies brought from other parts of the country, it frequently occasions the death of vast numbers, and the committal of all sorts of outrages. There can, in fact, be no real security for a country at all approaching to the condition of China, unless the food of the people in ordinary circumstances be such as to permit of their retrenching in adverse seasons, and countervailing the deficiency of the crops by increased economy.

As a *manufacturing* people, the Chinese are highly distinguished: the fabric of porcelain originated entirely with them; and though the forms of their articles will not bear a comparison with those of the classic ages of antiquity again brought into use in modern Europe, the fabric is excellent, and the colours inimitable. The art of spinning silk was also given to the W. world by the Chinese; and that light cotton stuff we call nankeen derives its name from the ancient capital of China. The lacquered ware, though eclipsed by that of Japan, is very beautiful; but it is in the minute arts of carving and inlaying that the Chinese excel. The articles brought here in mother-of-pearl and ivory are too well known to need description. Gunpowder, though a Chinese invention, is manufactured only on a small scale, and is exceedingly bad; which, indeed, could hardly be otherwise, as it is a part of the soldier's employment to make his own gunpowder. (*Barrow*, 300.) Paper is also a Chinese invention, and seems to have been first manufactured A. D. 95. The materials used in making it are very various. It is thin, silky, and very absorbent of ink. Chinese books are printed only on one side the leaf. The government is jealous of every thing new; but the people discover no lack of genius to conceive, or of dexterity to execute. Their talent for imitation is well known. During the course of the present century, a Chinese sailor, who came to England in an Indiaman, frequented a manufactory in Southwark where Prussian blue was prepared; and having made himself master of the process, without exciting the suspicion, or attracting the notice of any one, he established, on his return home, a similar work; and so well has it succeeded, that the whole empire is now supplied with native Prussian blue, whereas it was formerly wholly imported!

Money in China consists of the *cash*, about the size of an English farthing, made of copper; from 720 to 1,100 of them being, according to their quality, equal to a dollar. Silver is employed rather as an article of traffic than as a circulating medium; that used as money is cast into the shape of a horse's hoof, and called *tael*, being equal to a little over 6*s*. of English money. Gold is also seldom used as currency; but when it is, comes into the market beaten into thin leaves. Credit is little known, except at Canton; consequently paper money has not a very extensive circulation. There are, however, banks in the large commercial towns, which issue paper. The Chinese trade has the peculiarity of being for the most part internal, the country supplying most articles necessary for the subsistence or luxury of its inhabitants, and is carried on by means of canal and river boats. The primitive expedient of barter is still resorted to on account, perhaps, of the inconvenience of the circulating medium. Salt may be almost designated the standard commodity, as being an article of the most extensive commerce. The British embassy found at Tiensing piles of it, which were estimated to contain 600,000,000 lbs. The foreign trade of China is chiefly in the hands of the English and Americans. (*See* CANTON.) The great articles of export are tea and silk, with the former of which China supplies the whole world. The average annual quantities of tea exported directly and indirectly to various parts of the globe, may (1850) be estimated as follows:—

Great Britain	50,000,000 lbs.
America	18,000,000
France	350,000
Holland	2,000,000
Russia, by way of Kiachta	6,500,000
Cape of Good Hope	300,000
British colonies in N. America	3,200,000
Australia	3,000,000 lbs.
Indian Presidencies	2,000,000
Total	85,350,000

The silks of China, though unequalled for richness, are considered too heavy. In 1847-48, 21,377, and in 1848-49, 17,228 bales of raw silk were shipped from China for England. The other articles of export are treasure (estimated to amount at present to about 10,000,000 doll. a year!) Sugar and sugar-candy, stuffs, nankeens (now almost exclusively sent to India), lacquered and China ware, articles of ivory, mother-of-pearl, and tortoise-shell, &c. The total value of the exports (ex. treasure) from China in British ships, in 1847, amounted to 22,483,494 doll., and in 1848 to 13,800,442 doll.

The chief articles of import used to consist of cotton from Bombay, woollen cloths, calicoes and chintzes, with birds' nests, lignum vitæ, ivory, pepper, sharks' fins, copper, iron, &c. But the imports of opium have of late years become far more important and valuable than those of all the other foreign articles imported into China. Perhaps we shall not be far from the mark if we estimate its annual import at from 35,000 to 40,000 chests, worth from 20,000,000 to 26,000,000 doll.! It is contraband; and an attempt of the Chinese government to effect the suppression of the trade led to the collision with this country. But the taste for the drug is too firmly rooted to admit of its importation being prevented, or even materially checked. On the contrary, the demand for it appears to be rapidly increasing, and is the cause of the heavy drain for bullion now operating upon China. Shanghai is, next to Canton, the principal seat of the foreign trade of the empire. (See *Commercial Dictionary*, art. CANTON.)

History, Government, and Laws.—It may be almost said that China has no history, for she has so few revolutions or political changes to record, that her annals rise, but in a small degree above the limits of chronology. The antiquity which the Chinese have claimed for their origin, is now, even by the enlightened among themselves, considered fabulous. Almost the first names mentioned in their annals are Shing noong, "the divine husbandman," who taught their ancestors the arts of agriculture; and Hoang-ty, who partitioned their lands, and contrived a cycle of 60 years, to enable them to register events, and to mark the progress of the seasons. Then comes the period of the "five kings," the last two of whom, Yaou and Shun, are held up as patterns for future sovereigns, being the examplars of royalty down to the present reign. Yu, the successor of Shun, made himself conspicuous by his transcendent merit in draining the country that had suffered from a great deluge. The Chinese have no existing records older than the compilations of Confucius (born 550 B. C.), which must have been made from tradition. From that period the annals of the empire have been carefully noted and preserved, and descend in an unbroken line down to the present day. These, "the successive labours of 21 historians," consist of 500 vols. Formed into a prosperous and comparatively civilised community, under the Tsin dynasty, the Chinese became objects of envy to their neighbours, of whom the Tartars were the most troublesome; and to guard against their incursions, the great wall was built. A. D. 184 was the æra of the "three states," into which the empire was divided; but in 585 it was again united under one ruler. The 9th and 10th centuries were much occupied in civil wars, caused by the contending claims of several aspirants to the throne; but these were finally adjusted A. D. 950, by the consolidation of the Soong dynasty, under Tae-tsoo. This was the first great literary age of Chinese history; and printing having been invented 500 years before it was known to Europeans, authors and books were much multiplied. Under this dynasty the Chinese, unable to resist the Tartars, called in the aid of the Monguls; and they, by a policy of which history affords numerous examples, soon exchanged the character of allies for that of conquerors; and, under the famous Kublai-Khan, founded the Mongul dynasty. This able sovereign established the seat of his government at Pekin, or Kambalu, as it is called by Marco Polo, and constructed the great canal. But his successors rapidly degenerated; and the ninth Mongul monarch surrendered the throne to a Chinese, A. D. 1366. Twelve emperors of this native dynasty of Ming reigned in comparative peace till, in 1618, during the sway of Wan-lie, the 13th in succession, the Manchoos, a race sprung from the expelled Monguls and the Kin or E. Tartars, after a war of 27 years, established themselves firmly in the empire. The seventh in descent from Shunchy, the first of the Ta-thsing dynasty of Tartars, occupies the throne of China at this day. (*Davis*, i. 157-188.)

The most conflicting statements have been made with respect to the *government* of China: while some writers have represented the whole empire as trembling under the yoke of a capricious despot, others have represented the government as administered according to the inflexible rules of justice, and with the greatest moderation and humanity! Both these representations seem to be

alike inconsistent with the facts. According to the theory of the constitution, if we may so speak, the emperor is absolute; his will is law; and he is not responsible to any earthly tribunal for any of his actions. In China, as in ancient Rome, fathers have full power over their families, and, on the same principle, the emperor is held to be the father of the entire Chinese people; and to have the same unlimited power over them that each individual has over his own children. Practically, however, his power is comparatively circumscribed. In China every thing is determined by custom, or by immemorial practice, from which it would be highly dangerous for even the emperor to depart. The Chinese is emphatically a government of precedent; and his celestial majesty is, in reality, the creature of custom and etiquette. All employments are bestowed, according to fixed rules, on those who have obtained certificates of proficiency after passing their examinations. The penal laws of the empire are printed in a cheap form, and widely diffused; and one of the 16 discourses annually read to the public, inculcates the propriety of every man making himself acquainted with them, and with the penalties consequent on their infraction. Although, therefore, the government of China be despotical in its form, and every device be employed to give to the emperor not merely a paternal, but a sacred character, he in fact governs according to long established rules; and with probably as little admixture of despotism as is to be found in most governments.

The great defect of the Chinese, as of all similarly constituted governments, is the want of any effectual control over the inferior agents. The emperor is not omniscient; and notwithstanding the various devices put in motion to learn the real conduct of the subordinate authorities, and their liability to punishment if they abuse their power, it would seem that these checks are, in many instances, of comparatively little avail; and that much injustice and oppression on the part of persons in power, escape detection and punishment.

M. De Guignes says, "J'ai vecu longtemps à la Chine; j'ai traversé ce vaste empire dans toute sa longuer; j'ai vu partout le fort opprimer le foible; et tout homme ayant en partage une portion d'autorité, s'en servir pour vexer, molester, et écraser le peuple." (ii. 438.)

But notwithstanding the deference due to M. De Guignes, it is evident that this must be an exceedingly exaggerated statement. If the people were oppressed and maltreated in the way here stated, would they be so industrious? All experience affirms that they would not; and it is quite certain that "the most cheerfully industrious and orderly, and the most wealthy nation of Asia" (*Davis*, i. 194.) cannot be greatly misgoverned. Oppression may, and no doubt does, exist; but it is clear it cannot be very widely diffused. The taxation to which the Chinese are subject is trifling compared with that which we impose on the Hindoos; and the unceasing industry of the Chinese, and their desire to save and accumulate, prove beyond dispute, that, generally speaking, property is secure.

The emperor is called "the son of heaven" (Teën-tsye), and the mandarins and other natives not only prostrate themselves when in his presence, but also before a tablet with the inscription "the lord of a myriad years" (Wan-suy-yay). In his character of patriarch, his imperial majesty is not only looked upon as the father of that multitudinous family, the pop. of his empire, but is also considered the sole dispenser of the blessings of heaven; for the prime canon of belief is, that "the duty of affording to the people sustenance and instruction is imposed on *The One Man*;" while, on occasions of national calamity, he publicly confesses his errors, and acknowledges his misconduct to be the cause of the divine displeasure. (*Quarterly Review*, xxv. 416.) The parallel between the relations in which every person stands to his own parents and to the emperor is carried out from the most important functions of the legislature, down to the minutest observances of ceremony, all of which are regularly prescribed by law. (*Davis*, i. 201.) The union of the avenger with the father, in the emperor, is well illustrated by Davis. A man and his wife had severely ill used the mother of the former, which circumstance was reported to the emperor. The very place where the crime was committed was made accursed. The principal offenders were put to death; the mother of the wife was bambooed, branded, and exiled, for the daughter's crime; the scholars of the district were not permitted to attend the public examinations for 3 years; and their promotion was thereby stopped. The magistrates were deprived of their office, and banished. "For," says the edict published on the occasion, "*I intend to render the empire filial.*" Every device is employed to create the impression of awe. Dressed in a robe of yellow, the colour worn, say the Chinese, by the sun, the emperor is surrounded by all the pageantry of the highest dignity in the world. All ranks must bow the head to a yellow screen of silk; in the great man's presence no one dares speak but in a whisper, though his person is too sacred to be often exhibited in public, and an imperial dispatch is received by the burning of incense and prostration. But with all this he is not allowed to lean back in public; to smoke, to change his dress, or, in fact, to indulge in the least relaxation from the fatiguing support of his dignity. (*Chinese Hist.*; *Davis*; *Quarterly Review*, lvi. 499.; *Ellis's Account of Lord Amherst's Embassy*, p. 307.)

Next, after the emperor, the court is composed of four principal ministers, two Tartars and two Chinese, who form the great council of state, assisted by certain assessors from the Han-lin or Great College, who have studied the sacred books of Confucius, which form the basis of Chinese law. These may be considered as the cabinet; but the real business of the empire is executed by the Le-poo, or Six Boards. No. 1. Le-poo is the Board of Official Appointments, which has cognisance of the conduct of all civil officers; 2. Hoo-poo, the Board of Revenue, which regulates all fiscal matters; 3. Le-poo, Board of Rites and Ceremonies, which enforces the customs to be observed by the people; 4. Ping-poo, Military Board; 5. Hing-poo, or Supreme Court of Criminal Jurisdiction; 6. Kung-poo, Board of Public Works. There is also a colonial office, composed of Manchoos and Monguls, so that the respective tributary princes may have confidence in referring whatever concerns their interests to their own countrymen. To each of the provs. a viceroy is appointed by the chief, or Le-poo Board; and every town is presided over by a magistrate, who takes rank according as he is at the head of a *foo*, *tchoo*, or *heën*. Subordinate officers superintend the lesser divisions. All these functionaries are removed every three years; and that no ties of kindred may interfere with the strict discharge of their duties, the viceroys and magistrates are forbidden to form any matrimonial connection with a family within the limits of their rule. It is honourable to the Chinese that, for these and other state offices, merit alone is the qualification; the son of the poorest peasant or artificer may offer himself as a candidate, and, by talent and application, rise to the highest employments. A singular expedient is adopted to ascertain with what fidelity the viceroys and magistrates perform their duties. There is a board, headed by a Tartar and a Chinese, on whom it formerly devolved to watch over the words and actions of the emperor, and freely censure him for any misdemeanour! The duties for which this office was originally established have, for reasons easily understood, long fallen into disuse; and the members are now employed as censors *for* the emperor, being sent as inspectors into the provs. to see how the viceroys and magistrates do their duty, and to report their delinquencies. But these functionaries are less formidable than might be supposed. If they did their duty honestly, they would, no doubt, be of singular advantage; but in China, as elsewhere, it is usually found that inspectors look with an indulgent eye on the faults of those in authority; and it has been doubted whether their visits be not as often the means of stifling the complaints of the public, and of preventing and delaying justice, as of facilitating its course. Nothing can be more lucid and methodical than the code of laws promulgated for the guidance of the boards and their subordinate officers. Each district has a separate code, adapted to the habits and disposition of those for whom it is framed; and offences, with their punishments, are classed under six different heads, corresponding with the six boards, so that each case is referred to the tribunal against whose authority the offence may have been committed, unless it be one admitting of summary punishment.

The Tsing Leu Lee, being the fundamental laws, and a selection from the supplemental statutes of the Penal Code of China, has been ably translated by Sir George Staunton. "The most remarkable thing in this code is its great reasonableness, clearness, and consistency; the business-like brevity and directness of the various provisions, and the plainness and moderation of the language in which they are expressed. There is nothing here of the monstrous *verbiage* of most other Asiatic productions; none of the superstitious deliration, the miserable incoherence, the tremendous *non-sequiturs*, and eternal repetitions of those oracular performances: nothing even of the turgid adulation, the accumulated epithets, and fatiguing self-praise of other eastern despotisms; but a clear, concise, and distinct series of enactments, savouring throughout of practical judgment and European good sense; and if not always conformable to our improved notions of expediency in this country, in general approaching to them more nearly than the codes of most other nations. (*Edin. Rev.*, xvi.)

This is high, but not undeserved praise. At the same time, however, the Chinese code is not without very serious defects. There is an elaborate attention to trifles; and a perpetual interference on the part of the legislator to enforce duties and observances of no importance, or that had better be left to the discretion of individuals. But its greatest defect is the vagueness of some of its clauses:

so that a person may be punished if his conduct be "*contrary to the* SPIRIT *of the law!*" The frequency of corporal punishment seems extraordinary to Europeans. It is, in fact, the universal penalty: offences the most trivial and the gravest, whether committed by persons in the highest or the lowest walks of life, being visited by so many strokes of the bamboo! These, however, are not always inflicted. Persons under 15 or above 70, or maimed, may redeem themselves from all but capital punishments, by a small fine; in other instances the punishment may be commuted by paying a sum of money proportioned to the number of blows. But there are crimes for which even those who are rich enough to escape whipping for ordinary offences are not suffered to make a pecuniary compromise. Indeed the bamboo seems in universal requisition, from the emperor down to the meanest of his subjects; and not only the number of blows, but the length and thickness of the instrument to be used for each offence, are minutely prescribed. The prerogative of mercy is not unfrequently extended, with, however, one exception. In a country which has preserved its institutions unchanged, and its laws unaltered, for 2,000 years, it is not surprising that seditious offences should be severely dealt with. The crime of treason is visited with remorseless severity. In 1803, Mr. Davis states, a single assassin attempted the life of the emperor. He was condemned to a lingering death; and the criminal's sons, being of tender age, were "mercifully" strangled; for it seems to be the peculiar barbarity of the Chinese criminal code, that it involves the innocent family of an offender in the retribution for his crime. There is much in use a sort of pillory, called the *cangue*; and torture is employed to extort confession. The police of China is said to be vigilant and efficient; but, as a safeguard against oppression, the name of every person in any way connected with the government is published in a sort of Red Book, of which a corrected edition appears four times a year.

Another type of the patriarchal form of the Chinese government is to be found in the mode in which the state *revenue* is produced; it consists principally of tithes; not paid in the nature of taxation, but as rent, the emperor uniting the character of universal landlord with that of king and father: but though the whole pop. be tenants-at-will, ejectment is seldom resorted to; and it is his own fault if a Chinese be ever deprived of his lands. There are here no great estates; but if any one happen to hold more land than he can conveniently cultivate, he lets it to another, on the *métayer* principle, or on condition of his receiving half the produce, out of which he pays the whole taxes. A great part of the poorer peasantry hold lands in this way. (*Barrow*, 398.; *De Guignes*, iii. 341.) The revenue is paid partly in money and partly in kind. The greatest possible discrepancy exists amongst the estimates that have been given of its amount. It is believed, however, that the entire revenue remitted to the Imperial treasury may amount to about 12,000,000*l.* sterling, that is 10,000,000*l.* in money, and 2,000,000*l.* in produce. But it is essential to bear in mind that this is not the whole amount of Chinese taxation, inasmuch as the expenses of a collection, and many local and provincial charges, are deducted before any remittance be made to the Imperial treasury.

The Military service of China is nominally composed of 1,000,000 soldiers, besides the militia and numerous standards of Mongul cavalry; but from this vast number many names must be deducted which are merely entered in the books, and perhaps the whole force does not exceed 700,000. The soldiers are enrolled in the corps quartered in the provinces in which they are born, and which are never quartered any where else; the Chinese government being impressed with the plausible, but most erroneous opinion, that soldiers living with their families, and being, in fact, more than half citizens, will exhibit greater bravery in the defence of their country, should any occasion arise for their services, than if they were cooped up in barracks or fortresses, and subjected at all times to strict discipline and martial law. The troops are only embodied at certain seasons, being at other periods their own masters. The Tartar troops, inasmuch as they belong to a standing army at a distance from home, receive higher pay, and are more efficient soldiers than the native Chinese; though they also seem to be enervated by their long residence in this tranquil region. The whole army is divided into standards, distinguished by their different borders and colours. These corps — not unlike our brigades — are subdivided into camps and wings; the right, left, and middle. The officers are all raised from the ranks, and are looked upon by the civilians as little better than police agents; but, like the latter, are obliged to take their regular degrees to obtain promotion, which is rapid. Their grades are precisely similar to ours, from the Le-tuh, commander-in-chief of the forces, down to the Wae-wei, or serjeant. The principal weapons are bows and arrows; but they also use clumsy match-locks and iron guns, without carriages. The theory of tactics is well understood; but the practice is very deficient. In so peaceful a country there is but little occasion for military skill; and without intelligent officers, or improved weapons, it is not to be supposed that they should make any effectual opposition to European troops.

The Chinese *Navy* is extensive, but inefficient; it includes, perhaps, 1,000 sail; but the men-of-war are mere junks, which mount a few guns; and there are few large vessels. This imperial navy is commanded by three high admirals and their inferior officers, all of whom are so profoundly ignorant of their business, that the merchant junks are better managed than the imperial cruisers. Gutzlaff draws a deplorable picture of the condition and discipline of the mercantile navy. Few sailors are regularly bred to the service, but are chiefly wretches who have been obliged to flee from their homes. Though there be a nominal commander in every junk, his authority is uniformly disregarded. Every one having the liberty of putting a certain quantity of goods on board, is a sort of shareholder, and does nearly what he pleases. The Chinese make use of a compass, invented by themselves, divided into 24 parts, beginning at the S., the needle moving freely in a box placed upon a bed of sand. Their pilots having been accustomed to the sea from their youth, and always performing the same voyage, have a perfect knowledge of the various localities. In the construction of river craft, the Chinese are more skilful: many of these vessels are indeed floating habitations, and thousands of families live in them during their whole lives. (*Sketch of Chinese Hist. by Gutzlaff*, i. Introd. 1—40.; *Sir G. Staunton's Trans. of the Leu-lee, or Criminal Code*; *Davis's Chinese*, i. 204. et seq.; *Quarterly Review*, No. vi. *&c. &c.*)

The Chinese their Social Condition, &c.—The Chinese are said by Mr. Davis to be a nation of "*incurable conservatives.*" Their rule is to adhere to all that is established, and to reject all that is new. They are the very transcript of the ancient world living in the present day; they wear the same costume, are subject to the same laws, which are administered precisely in the same way, and they exist to all intents and purposes in the same social and intellectual condition as their forefathers did 2,000 years ago. This uniformity may be almost said to have been ordained by nature, for it is a remarkable fact that the Chinese are so much like each other in personal appearance, that it is difficult for a European to distinguish between them. We find no diversity in the colour of their hair, no variety of eye, no prominent and striking feature which indicates the place of their birth. (*China Opened*, i. 290.) They have black stiff and strong hair, shaved so as to leave a much cherished tail depending from the crown; a depressed face, wherein the distinguishing features are not strongly marked, a flat nose, small angular eyes, round and prominent cheeks, a pointed chin, thin eyelids, small beards, middle stature, and strong bones. Long ears and plumpness form their *beau-idéal* of beauty; consequently, to attain the latter, they exercise but little agility. (*Id.* p. 293.) The aristocracy of rank and wealth are unknown in China. *Distinction is solely to be obtained by learning*; and dignity is only conferred by office. Even the sons of the emperor and their families merge into the common mass, should they not study, so as to become qualified for some official employment. The mandarins, or literary aristocrats, do not obtain their rank except by passing repeated examinations, as to the fairness of which no doubt has ever been surmised, and establishing their superiority over their competitors to the satisfaction of the Board of Examination. There are nine degrees of mandarins, the highest being viceroys, or governors, and the lowest, collectors of the revenue, &c.: promotion can only be obtained by superior proficiency in the study of the law. The different functionaries are distinguished by the number of buttons in their caps, and other variations of costume. As the pay of all persons in office is unreasonably small, they often resort to extortion to make up this deficiency, and there is scarcely a number of the *Pekin Gazette*, that does not record some instance of a public officer being degraded for that crime. The natural characteristics of the Chinese are summed up by Davis in these words:—"The advantageous features of their characters, as mildness, docility, industry, peaceableness, subordination, and respect for the aged, are accompanied by the vices of specious insincerity, falsehood, mutual distrust and jealousy." The lower orders are passionately addicted to gambling, for which they have their peculiar cards and dice. That honesty is more valued than practised has been inferred from the notification to be frequently seen in shop windows, that "there is no cheating here," and from a caution placarded in most public conveyances for travellers, to "take care of their purses;" but we doubt whether such notices really go for much. The insincerity and falsehood laid to their charge, in so far as they really exist, are the natural consequences of the restraints, under which they are laid from infancy, of the interference of the law with all their actions, and of their being obliged to suppress and conceal those feelings

and emotions to which, in other countries, full vent would be given. Their attention to etiquette is a consequence of the same principle. Even when peasants visit each other, complimentary cards — the size of which determines the rank of the sender — and polite answers are exchanged. "On the arrival of the guest, considerable difficulty is found in arranging who shall make the lowest bow, or first enter the door, or take the highest seat, or assume precedency at table, though the host contrives to place his guest in the most elevated position. When conversation commences, the mutual assent to every proposition, the scrupulous avoidance of all contradiction, and the entire absence of every offensive expression or melancholy allusion, show what a sense these people entertain of politeness." (*Medhurst's China, its State, Prospects, &c.*, 1838.) The condition of the poor is wretched in the extreme; they are frequently destitute of food, and many are said to perish in the winter season from cold, for want of fuel. (*Gutzlaff's Voyages*, p. 67.) Begging is common in the large cities, but not more so than in Europe. It is a curious fact, that though the Chinese be remarkable for assisting each other, particularly their own relations, with money or food, they will on no account step out of their way, in case of accident, to save a fellow-creature's life; but this arises from their laws making the person last seen near a corpse answerable for the death. Robbery is not uncommon, but is very seldom accompanied with murder. The people, generally so quiet and submissive, when once roused by the oppression of an intolerant magistrate, will rise *en masse* against him, and subject him to Lynch law: in such cases the government of Pekin generally concludes that the magistrate has been in fault; and the outrage is allowed quietly to fall into oblivion! The drowning of infants, particularly of females, has been said to be *customary* in China; but this is a most unfounded statement. That an enormity of this sort is sometimes committed is certainly true; but we believe that it is of exceedingly rare occurrence. Mr. Davis says, that "the Chinese in general are exceedingly fond of their children, and the attachment seems to be mutual." (i. 246.) M. de Guignes concludes a very able discussion of this question as follows: — "*Je ne nierai pas absolument que l'exposition ait lieu à la Chine; mais je conclurai qu'elle n'y est pas plus commune que dans les autres parties du globe, où l'on n'en a des exemples que dans des cas particuliers et heureusement rares.*" (ii. 293.)

The whole of the Chinese nation is divided into families, each of which bear the same surname, and consider each other cousins. These clans are bound to assist each other in any way that may be required; and the most powerful of them act as a salutary check upon local despotism. The *women* of China occupy a lower scale in the estimation of their countrymen than those of other nations. A broad face, diminutive waist, pale features, and feet small to deformity, constitute female beauty in the eyes of a Chinese. To insure this last, their feet are confined from tender age in shoes calculated to stop their growth, so that the feet of some ladies only measure 3 in. from toe to heel. Females are universally objects of traffic. When young they are purchased by dealers for the harems of the great, where they remain in splendid seclusion. Marriages depend entirely upon the will of the parents, who *sell* their daughters at from 5,000 to 6,000 dollars a piece, according to the beauty or rank of the female. Early marriages are universal; no man who can afford the expenses of the ceremony deferring it after the age of 20, and parents get rid of their daughters as soon as they can; even at the early age of 14. The Chinese may be said to be an *omnivorous* people. The principal part of their food consists of rice, which is generally eaten dry; but in the S. provinces it is mixed with the sweet potato in a sort of soup. Vegetables are the chief provision of all ranks, who do not consume a fifth part of the animal food that Europeans do. Pork is the favourite dish, and the head of the ass is esteemed a great delicacy. To eat every thing which can possibly give nourishment is the comprehensive principle upon which Chinese diet is regulated; so that dogs, cats, and even rats and mice, are not rejected by them. They are the most expert fishermen in the world; no aquatic creature escapes their vigilance, whether it inhabit the sea, lake, canal, or river; even pools and the ridges of fields are searched for fish. Every kind of meat is minced into small pieces, and is eaten with chop-sticks. The Chinese epicure delights in soups made of edible birds nests of the swallow species (*Hirundo esculenta*), and imported in great quantities from the E. islands. It appears that the birds make use of great quantities of a peculiar sea-weed (*Sphæro-coccus cartilagineus*), and when it is sufficiently softened in their stomachs, it is returned and used as a plaister to cement the dirt and feathers of the nest. These nests, after having been purified in immense manufactories, are eaten with great *goût* by the Chinese. The favourite beverage is tea, drunk out of small cups, which are seldom washed, for that process is thought to diminish the flavour. In this article the Chinese are as great connoisseurs as Europeans are in wines. Distilled liquors are chiefly made from rice: rum is much used, but grape wine has not been met with. Drunkenness prevails, especially in the N. provinces; but the worst species of debauchery is opium smoking, which, when carried to excess, deprives the victim of strength; he becomes a walking shadow; his eyes are vacant and staring; his whole frame is deranged, and he soon sinks into a premature grave. But it should be observed that these are the consequences of the *abuse* of the practice: when used in moderation, it is said to be comparatively innoxious. The fumes of the drug are inhaled through a peculiar pipe, in a recumbent position, and the smoker soon sleeps. When he awakes, he drinks a cup of tea, and smokes again. The Chinese delight in the drama: they will attend a play for a whole night without being wearied, and recount with ecstacy what they have seen. In their pastimes the women are never associated. (*Davis's Chinese; Gutzlaff; Medhurst's China, its State, Prospects, &c.; Ellis's Account of Lord Amherst's Embassy, &c. &c.*)

The accounts of Chinese architecture are not very satisfactory, a consequence of its being necessary to employ terms in its description that convey to foreigners impressions very different from the reality. According to Mr. Barrow, it is: "as unsightly as unsolid; without elegance or convenience of design, and without any settled proportion; mean in its appearance, and clumsy in the workmanship." (p. 330.) Perhaps, however, this opinion is founded too much on preconceived notions of the absolute superiority of the European standard. But without entering on this, it is sufficient to observe that the walls of the houses are of brick, stone, or wood, but principally of the first. The roofs are always supported on columns, that is, on upright pieces of timber, without either capital or base. In the country they are rarely more than one story in height, but in the great towns they are frequently two. Their roofs, which are curved, are usually covered with tiles. Their pagodas are polygonal buildings, of 5, 7, or 9 stories or roofs. Mr. Barrow says, that the pagoda erected by George III. in Kew gardens is "not inferior to the very best" he met with in China — a statement which certainly does not tend to exalt our opinions of this species of buildings.

Religion. — There is no religion in China actually supported by the state, and *Yu*, the doctrine of Confucius, is the only one countenanced by it. But there are two other sects; *Fo*, or Buddhism, and *Taou*, or that of the "rationalists." The first acknowledges a Supreme Being, and believes the emperor his sole vicegerent on earth. Heaven, earth, the elements, Confucius, gods of various attributes, saints, the emperor, &c., are objects of worship; the rites in performing which are watched over with the most jealous care by the *Le-poo*, or Board of Rites. The doctrine of Confucius fills the world with genii, demons, and the spirits of deceased worthies, who are supposed to have each their separate duties and influences assigned to them. No worship is so strictly observed as that of ancestry, so that filial piety is carried to an excess, even beyond the grave. The religious edifices of the *Yu* sect are said to be very splendid. They chiefly consist of one large hall approached by steps, with the idol placed upon an altar, or table; the walls are adorned with pictures, and the ceiling with gilded griffins and dragons. An apparatus for sacrificing various animals is also provided. There is no congregational worship. Buddhism is a despised creed in China, and is entirely supported by the mendicancy of its priests. The latter practise celibacy, dress in a similar manner to monks, and the devotees use holy water, and a rosary to keep account of their prayers. Mr. Malcom, the missionary, has given a very favourable view of Buddhism. "It has no mythology of obscene and ferocious deities; no sanguinary or impure observances; no self-inflicted tortures; no tyrannising priesthood; no confounding of right and wrong, by making certain iniquities laudable in worship. In its moral code, its descriptions of the purity and peace of the first ages, of the shortness of man's life because of his sins, &c., it seems to have followed genuine traditions. In almost every respect it seems to be the best religion man ever invented." (*Travels*, i. 322.) The professors of *Taouism* pretend to magic, alchemy, and to be possessed of the elixir of long life; practise glaring impositions, and inculcate the most puerile superstitions. They encourage a belief in ghosts and evil spirits; make use of spells and talismans, lucky and unlucky birds, and a system of tricks called *fung-shuey*, by which they pretend to choose lucky situations for building houses and tombs, and a hundred other fallacies, by which these impostors contrive to fill their purses. Religion, of whatever kind, has always, we believe, been reckoned a matter of secondary importance in China. But this is a subject as to which our information is comparatively little to be relied on. The ancient and modern missionaries, how much soever they may have admired many parts of the Chinese character and institutions, have generally represented

their morals and religion in the most unfavourable point of view. That there is much about them that is objectionable is certainly true; but it is so obviously the interest of the missionaries, by depreciating the moral and religious character of those they are labouring amongst, to exalt their own utility and importance, and to justify their claims to the patronage and support of the Christian public, that their statements can hardly be supposed to be free from bias. Many endeavours have been made to introduce *Christianity* into China, but with less success than has attended similar efforts in other nations. It was first introduced by the Nestorians in the 17th century. These were followed by the Jesuits, whose missionaries were more successful than those of any other sect; for at the Tartar invasion there were no fewer than thirty Catholic churches in the province of *Keang-nan* alone; the first of the Tartar princes openly espoused the cause of the missionaries, by taking a German Jesuit, Adam Schaal, for his instructor. The abolition of that order, and the continual wars in Europe, reducing their funds, the Catholic missions declined; and but few native converts at present remain. The late Dr. Morrison was the first Protestant missionary who landed in China; he compiled a dictionary (having been preceded in that arduous task by De Guignes) and grammar; translated the Scriptures into the Chinese language, and established printing-presses at Canton, from which a judicious selection of tracts has issued. These pious efforts have been ably seconded by Mr. Milne and the Rev. Charles Gutzlaff, the latter of whom has published several valuable works on China, of which we have made considerable use. The Mohammedan, Jewish, and many other religions are to be found in China, but in a very languishing condition. (*Chinese Repository*, vol. iii.; *China Opened*, ii. 183—247.; *Davis's Chinese*, i. 301., &c.; *Essay on the Religion, &c. of China, by Rev. W. Ellis*, prefixed to *Gutzlaff's Voyages*, lxxi.—xcii.; *Quarterly Review*, lvi. 503, 504. &c. &c.)

Language, Education, and Literature. — Distinct as the Chinese are from the rest of mankind in habits, manners, and religion, their total dissimilarity is rendered complete by their language; which, arrested between the hieroglyphic and alphabetic systems, presents a singular phenomenon. The most obvious expedient for expressing substantive ideas otherwise than by speech, would be to figure a representation of the object intended to be expressed; and this was unquestionably the plan first adopted by man to communicate and record what he thought through the medium of the eye instead of the ear. As civilisation and knowledge advanced, and the necessity for communicating it increased, more concise forms or conventional letters were substituted; but in the case of the Chinese, the primitive mode is still the principle upon which their characters are constructed; so that their system may be called the perfection of the hieroglyphic method of written language. Having pictorial representations of natural objects for their basis, the elementary signs of the Chinese language are few and simple.* A horizontal, a perpendicular, two oblique lines drawn in different directions, and an acute angle and dot, are the elements of which the Chinese characters consist. These marks are so combined in the first instance as to form 214 keys or generic characters. Thus, the symbol for "man" is always present in a word which has direct or indirect reference to him; this character, for example, combined with the symbol for field, signifies a farmer. The Chinese notion of government is well expressed in another example: the verb "to govern" is represented by the two characters that stand for "bamboo" and "stroke." The keys are divided into 17 classes, and the number of words thus formed, upon a system more complete than that of any of the W. languages, to be found in the most copious Chinese dictionaries, amounts to 40,000, each of which stands as arbitrarily for the thing or idea intended to be conveyed as a figure does in a painting for the object it is meant to represent. Thus the character presents an object to the eye which enters the mind with a striking and vivid certainty; it forms a feature which really is, or by early associations is considered, beautiful and impressive. Chinese writing is also more permanent than the alphabetic system, which is ever varying its spelling with the continually changing pronunciation of the living voice. Perhaps the Chinese written language has contributed in some degree to the unity of the Chinese nation. (*Dr. Marsham's Clavis Sinica; Elements of Chinese Grammar*, Introduction, p. xi.; *De Guignes, Dictionnaire Chinois*, Introduction; *Quarterly Review*, lvi. 506.; *China Opened*, i. 391.) The causes, however, which operate to make the written language in China the most complete and beautiful in the world; render oral communication the most difficult and confined. That systematic regularity which so continually requires the presence of the keys, as parts of words bearing different meanings, and thus precludes a necessary variety of *sounds*, leaves the spoken language as meagre and defective as, when written, it is rich and complete. The sound corresponding with our *e* has at least 2,000 significations, and "one might write a perfectly intelligible treatise in which only the sound of *e* was employed." (*China Opened*, i. 383.) Thus, in conversation between even two of the best educated Chinese, constant misapprehensions occur. "They understand each other," says Mr Davis, "perfectly on paper, but are mutually unintelligible in speech." And in the most common-place colloquy it is not unfrequent for the speakers to resort to pen, or rather *brush*, ink, and paper, to make themselves understood; in the absence of these materials, they draw the figure of the root or key in the air with their fingers. So that oratory is entirely unknown in China; and all affairs of importance, such as lawsuits, civil or criminal, are carried on in writing. The deficiencies of the oral language are in a small degree supplied by the different tones in which the same words and their various significations are uttered. But these inflections are so nice as to be only distinguishable by a native ear. The difficulty of free intellectual intercourse must have had a very considerable effect in preventing the Chinese from advancing a step further in civilisation than they had attained so many hundred years ago.

Education in China is more encouraged and favoured even than in Prussia; and such is the estimation in which it is held, that all state employments are given by competition, as school and college prizes to the best scholars. Schools for youth are abundant in every part of the empire; and education is so general, and its cost so reasonable, that reading and writing may be almost said to be universal. Language is taught to very young pupils by means of rude pictures which represent the names of the chief objects in nature and art. Then follows the *San-tse-king*, or summary of infant erudition, conveyed in chiming lines of three words or feet. They soon after proceed to the "Four Books," which contain the doctrines of Confucius, and which, with the "Five Classics," subsequently added, are, in fact, the Chinese Scriptures. Writing is taught by tracing the characters with a hair-pencil, on transparent paper placed over the copy. This is a most important article in Chinese education, for no man who does not write a good hand can lay claim to literary distinction. The emperor himself, when bestowing a great reward, writes a few characters on a piece of paper and sends it to his favourite, and this is more valuable than conferring an order. (*Davis*, i. 290.; *China Opened*, i. 390.) Females of the higher class are allowed to acquire a little reading and writing, and have been known to write poetry; but the great object of their education is to inculcate obedience. The schools established all over the empire are superintended by various officers appointed by government. In every district there is a sort of literary chancellor; but early aspirants are examined by superintendants, who make the circuit of their district twice a year for that purpose. The pupils they approve of repair to the chief, and should they pass that ordeal, and thus obtain the approbation of the officers of their native district, they are eligible for the lowest literary honour of the state. This is called *Tew-tsae* (flowery talent). For this degree the examinations take place twice in every three years in *foos* of every province; the scholars having each a theme given them from the "Five Classics," in a large hall, are confined in separate boxes to prevent their receiving assistance from others; and every avenue is strictly guarded by soldiers. The *Tew-tsae* degree having been obtained, the aspirant has to acquire two other honours in the metropolis of his province, and he is placed on the books as eligible for employment corresponding with his advancement. To procure the highest state offices, an examination before the national college, or *Han-lin*, is necessary: but the very pinnacle of fame is only arrived at by being examined by the emperor himself. Every literary honour confers the title of mandarin, and each degree is distinguished by a difference of the dress, which is, in some instances, very splendid. Genius and originality amongst a people so blindly enthusiastic in their admiration of the ancients, are considered rather a blot upon, than as an ornament to, the character of a student. Memory is the chief object of admiration — memory to repeat the greatest number of the wise sayings of the ancient sages.

From what has been already stated, it will be readily conceived that the *literature* of the Chinese is most extensive. "Books," says Mr. Medhurst, "are multiplied at a cheap rate, and to almost an indefinite extent, and every peasant and pedlar has the common depositories of knowledge within his reach. It would not be hazarding too much to say, that in China there are more books and more people to read them than in any other country in the world. Amongst the 360 millions of Chinamen, at

* M. De Guignes entertained the singular opinion that the Chinese characters were monograms of the alphabetical letters of the Phœnicians! The fallacy of this notion has been forcibly pointed out by Klaproth. (*Mémoires Relatifs à l'Asie*, ii. 99.)

least 2 millions are literati." (*China Opened*, i. 417.) Yet it may appear strange that there is hardly one *original* writer among them: it is generally believed in China, that whatever is to be known has already been discovered and communicated by the ancient sages; and should an author be bold enough to start any thing new, if that should happen to vary in the smallest particular from the orthodox writers, he would be severely punished. It is this which keeps the knowledge and civilisation of China at a stand-still. The historical writings are nothing more than elaborate chronologies; and, where real dates have been wanting, the writers are suspected of having supplied them from their own imaginations. The scientific and philosophical works of the Chinese are by the "ten philosophers," or Confucius and his disciples and commentators. Chinese literature, has, however, been in several respects unjustly depreciated. It has been said, for example, that they are so ignorant and ostentatious as to suppose that China occupies the centre of the world, and that it is surrounded with a few insignificant and petty territories, all its tributaries. But the accounts that have been translated from Chinese writers of several foreign countries, how defective soever in many respects, are sufficient to show that this is a most unfounded statement. "Je n'ai pas besoin de réfuter ici l'idée absurde de ceux qui prétendent que les Chinois croient que leur pays est situé au milieu du monde. Un matelot, ou un couli du Canton peut, à la vérité, donner une pareille explication, mais c'est à l'intelligence de celui qui questionne de l'adopter ou de la rejetter." (*Klaproth, Mémoires*, iii. 267.) "L'histoire littéraire, la critique des textes, et la biographie, sont le sujet d'une foule d'ouvrages remarquables par l'ordre et la régularité qui y sont observés. On possède beaucoup des traductions des livres Sanscrits sur la religion et la métaphysique. Les lettrés cultivent la poésie, qui est assujetie chez eux au double joug de la mesure et de la rime; ils ont des poëmes lyriques et narratifs, et surtout des poëmes descriptifs, des pièces de théâtre, des romans des mœurs, des romans où le merveilleux est mis en usage. On a composé en outre un très-grand nombre des recueils spéciaux et généraux, des bibliothèques et des encyclopédies, et dans le dernier siècle on avoit commencé l'impression d'une collection des ouvrages choisis en 180,000 volumes! Les Chinois ont d'excellens dictionnaires où tous les signes de leur écriture et tous les mots de leur langue sont expliqué avec le plus grand soin et dans un ordre très-régulier. Enfin il n'y a pas, même en Europe, de nation chez laquelle on trouve tant des livres, ni des livres si bien faits, si commodes à consulter, et à si bas prix." (*Abel Remusat*, quoted by Balbi.) Mathematical science is at a low ebb; as is evinced by an imperial edict published in the Pekin Gazette, May, 1800: it announced the intended marriage of a princess, and ordered the *Tribunal of Mathematics* to select a fortunate day for the celebration of the nuptials. (*Quarterly Review*, xiii. 61.)

CHINACHIN, a large town of Nepaul, N. Hindostan, 250 m. W.N.W. Catamandoo. Its houses are of brick and stone, with flat roofs: it has 2 Hindoo temples, and an export trade in horses, cow tails, sheep, salt, musk, drugs, and woollen cloth; and imports metals, spices, cloth, &c., from other parts of Hindostan.

CHINAUB (an. *Acesines*), the largest river of the Punjab, rising in the Himalaya, in lat. about 32° 10′ N., long. 37° 50′ E.; running at first with a N.W. but afterwards with a S.W. course between the Ravee (*Hydraotes*), and Ihylum (*Hydaspes*). It unites with the latter river below Ihung with considerable noise and violence, as remarked by the historians both of Alexander and Timour, and with the Sutlege (*Hyphasis*) near Ooch; after which it joins the Indus, in lat. 29°, long. 70° 30′. About 50 m. N. Lahore, it has been found to measure 1¼ m. across in the month of July; but in the dry season, is there only 300 yards wide. It is no where fordable S. of the hills, though in many places easily crossed. Kishtawar, Vizierabad, and Ihung are on its banks. (*Hamilton's E. I. Gaz.*, i. 309.)

CHINCHILLA, a city of Spain, prov. Murcia, cap. dist., in an elevated situation, on the high road from Valencia to Madrid, 146 m. S.E. Madrid, 72 m. N.N.W. Murcia. Pop. 10,533. (*Miñano.*) It has a church, convent, an hospital, barracks, and an ancient ruined castle, which was partly restored during the war of independence. There are mines of silver in the neighbourhood; and it produces earthenware and some coarse linen and woollen cloths.

CHINCHOOR, an inl. town of Hindostan; prov. Aurungabad, pres. Bombay, on the road between that city and Poonah, 10 m. N.N.W. the latter. Pop. 5,000, including 300 Brahmin families. It is chiefly remarkable as the residence of the Chintamun or Narrain Deo, an individual whose honours are hereditary, and who is believed by a large proportion of the Mahratta nation to be an incarnation of their favourite deity Goonputty. (*Hamilton's E. I. Gaz.*, i. 399.)

CHINGLEPUT, or "*the Jaghire*," a distr. of Hindostan; prov. Carnatic; pres. Madras; between 12° and 14° N., and intersected by long. 80° E.; having N. the distr. Nellore; W. S. Arcot; and E. the Bay of Bengal. Area, 2,253 sq. m. Pop. (1837) 336,220, or 109 to the sq. m. Surface generally low, but with hills interspersed; there are several rivers, the principal of which is the Palaur, which rises among the Nundydroog hills in Mysore, and after a winding course of 210 m., chiefly E., past Vellore, Arcot, Conjeveram, and Chingleput, falls into the sea, near Sadras. There are some lakes and lagoons, or inlets of the sea, the chief of which is that of Pulicat. Granite is the most abundant of the primitive formations, and often projects in detached masses from the surface. Soil sandy and indifferent, and the country often barren, or overrun with low prickly bushes. Owing partly to the scarcity of water, but quite as much to the oppressiveness of the assessment, a large portion of the land does not repay the cost of cultivation; but the rest supplies the Madras market with grain, betel, fruit, oil, vegetables, &c.: the palmyra (*borassus flabelliformis*) thrives without trouble, and is both cheap and abundant. The land-tax is raised under a modified ryotwar, or rather a metayer system; government taking *half the actual crops*, and selling them to the best advantage. In 1835-36, the land revenue amounted to 875,352 rup., and the total revenue to 1,592,582 rup. There are no manufactures, excepting some of cloth. The great mass of the people are Hindoos. Chief towns, Chingleput and Conjeveram. This distr. was obtained by the E. I. Comp. in 1763, from the Nabob of the Carnatic, who rented it till 1780, when the Madras pres. assumed the entire control over it. It was twice invaded by Hyder Ali, and was afterwards nearly depopulated by famine and emigration. During the present century it has been gradually recovering. (*Madras Almanac*, 1838; *Reports on E. I. Affairs.*)

CHINGLEPUT (*Singhalapetta*), an inl. town of Hindostan; presid. Madras, cap. of the above distr.; in a small valley, in great part covered by a beautiful artificial lake; 20 m. W. the Bay of Bengal, and 38 m. S.S.W. Madras; lat. 24° 46′ N., long. 80° E. Though much reduced in extent, it has a fort of great strength, and in a respectable state of defence: the latter incloses an inner fort, in which the public functionaries hold their several courts and offices. (*Hamilton*, i. 401.; *Mod. Trav.*, x. 325.).

CHINON, a town of France, dép. Indre-et-Loire, cap. arrond., on the Vienne, 26 m. S.W. Tours. Pop. 6,911. It was formerly fortified; and the ruins of its walls, and those of its castle (the latter of vast extent, and in parts pretty entire), are its most important and interesting objects. It has a court of primary jurisdiction, a commercial college, and some manufactures of linen and woollen stuffs. The celebrated and enigmatical Rabelais was born within a short distance of Chinon, in 1483. (*Hugo*, art. *Indre-et-Loire.*)

CHINSURAH, an inl. town of Hindostan, prov. Bengal, formerly a Dutch settlement, but latterly transferred to the British government, on the W. side of the Hooghly river, 18 m. N. Calcutta, and about 2 m. N.N.E. Chandernagore; lat. 22° 52′ N., long. 88° 28′ E. In appearance it has quite a Dutch character: "Many small neat houses, with green doors and windows; a pretty little square, with grass-plot and promenades, shaded by trees; a fortified factory; and a gloomy old-fashioned government-house, are the more remarkable features." In 1814, some elementary native schools were established here; and in 1818, their number amounted to 30, with 3,000 scholars. From 1816 to 1824, the Bengal government had disbursed 84,000 rupees in aid of these schools; in 1829, there were 1,540 scholars on the books. (*Hamilton's E. I. Gaz.*, i. 401.; *Mod. Trav.*, ix.; *Reports, &c.*)

CHIO. *See* Scio.

CHIOGGIA or CHIOZZA (perhaps the *Portus Edro* of the ancients), a sea-port town of Austrian Italy, deleg. of Venice, cap. distr., on an island of the same name, at the S. extremity of the lagoon of Venice, 14 m. S. that city; lat. 45° 12′ 56″ N., long. 12° 16′ 57″ E. Pop. 20,600. It is about 2 m. in circuit; well built; contains a wide and handsome street lined with porticos, a cathedral, hospital, orphan asylum, workhouse, theatre, &c.; and is connected with the mainland by a stone bridge of 43 arches. It has a harbour with 17 ft. water, protected by two forts: there are other batteries, and Chioggia is deemed one of the most strongly defended points of the Venetian lagoon. It is a bishopric, and has an episcopal palace, a gymnasium, a high seminary, conventual female school, and an evening rudimental school attended by nearly 300 poor children. In its vicinity are some important salt-works, which, together with the manufacture of cordage, the building of vessels, for which there are 36 slips, navigation, and fishing, occupy many of the inhab. Trade active in Italian and German produce, and facilitated by canals communicating with the Brenta, Adige, and Po. (*Rampoldi, Corog.*; *Oesterr. Nat. Encyc.*)

CHIPPENHAM, a parl., bor., town, and par. of England, co. Wilts, hund. Chippenham, 87 m. W. London,

20 m. E. Bristol. Area of par., 9,100 acres. Pop. of do. (1821), 3,506; (1841), 5,438. Pop. of old bor., 1,875; but according to the provisions of the Boundary Act, the limits of the parl. bor. were extended so as to include the entire par. of Chippenham, with the adjoining parishes of Langley Burrel, Harden Huish, and a small extra-parochial tract, the whole having, in 1841, a pop. of 6,606. The town is situated on the Avon, which is here crossed by a bridge of 22 arches. It is well built, paved, lighted with gas, and amply supplied with water. "It is of considerable extent, contains many good houses, and may be said to be in a prosperous condition and increasing." (*Boundary Report.*) From its situation at the intersection of two great roads (the Malmesbury and the London and Bath lines), many daily coaches used to pass it, and it had a bustling appearance. It is also on the line of the Great Western Railway, and a branch of the Berks and Wilts Canal terminates in the town. The church is a spacious structure of various dates, some portion being as old as the 12th century: there are also several dissenting chapels, a free school for 12 children, and other charitable and benevolent institutions. At the commencement of this century there were several large woollen manufactories in the town: at present, notwithstanding its increase, the only factories in work are 1 for cloth, 1 for silk, with a large flour-mill. The market, which was formerly very extensive, was, until within these few years, held on Saturday, but it is now held on Friday, in a commodious building erected for the purpose by Joseph Neeld, Esq., at present (1850) one of the mems. for the bor.: there are large cattle-fairs, May 17, June 22, Oct. 29, and Dec. 11.

Though one of the oldest towns in the kingdom, Chippenham received no charter till 1554. Under the Municipal Reform Act, it is governed by 4 aldermen and 12 counsellors, and the limits of the bor. have been extended for municipal purposes, so as to include the whole town and a pop. of about 4,000. The corporation revenue amounts to about 350*l.* a year, derived principally from an estate left for the maintenance of the bridge and of a road to Derryhill in the vicinity. A court of requests for debts under 40*s.* sits successively here and at Calne and Corsham.

Chippenham has sent 2 mems. to the H. of C. from the reign of Edw. I. Previously to the Reform Act, the right of voting was restricted to the occupiers of 129 burgage tenements within the ancient bor. The extension of the limits of the parl. bor. by the Boundary Act has been noticed above. Registered electors (1849-50), 314. (*See Parl and Municipal Boundary Reports, &c.*)

CHIPPING NORTON, a town and par. of England, co. Oxford, hund. Chadlington. Area of par. 4,780 acres. Pop. of do. in 1841, 2,629. The town, 17 m. N.W. Oxford, is built partly on low, and partly on high grounds. It has a large Gothic church, with a low tower; a free school, founded by Edward VI.; a subscription school for educating and clothing 40 girls; and almshouses founded in 1640. It returned 2 mems. to the H. of C. in the 30th of Edward I., and the 32d and 33d of Edward III. Its bailiffs were empowered by a charter of James I. to decide actions under 40*s.*

About 3 m. from Chipping Norton is the Rowldrich monument, formed of upright stones, arranged in a nearly circular form. This monument is ascribed by Dr. Stukeley, though probably without any good foundation, to the Druids. (*See* AVEBURY.)

CHISWICK, a par. and village of England, co. Middlesex, Kensington div. of Ossulston hund., on the N. bank of the Thames, 4½ m. from Hyde Park Corner. Area of par., 1,120 acres. Pop. (1831) 4,994. The church, which has been frequently repaired and altered, has several interesting monuments; and in the church-yard is the tomb of Hogarth. There are here many fine villas; but the great ornament of the place is Chiswick House, belonging to the Duke of Devonshire. It was built after the model of a villa by Palladio, by the famous Earl of Burlington; and has a choice collection of paintings. The illustrious statesmen, C. J. Fox and George Canning, breathed their last in this villa.

CHITORE, a city and strong fortress of Hinoostan, prov. Rajpootana, and formerly the cap. of the rajahship of Odeypoor, 64 m. E.N.E. that city. The fortress, situated upon a rock scarped by nature and art to the height of from 80 to 120 ft., is surrounded by a rude wall with semicircular bastions, the circuit of which is said to be 12 m.; but which encloses only a narrow, irregular, and disproportionately small area. Its outworks are massive and striking, and its appearance picturesque: its interior contains numerous temples, several palaces, some minarets, one of which is a square tower of white marble, 9 stories high, and surmounted by a cupola; and many wells, fountains, cisterns, &c. All the public buildings are of Hindoo origin, excepting one erected by a son of Aurungzebe. The town, seated below the fortress, is chiefly inhabited by weavers and dealers in grain. Chitore has been several times captured by the Mohammedans and others. (*Hamilton's E. I. Gaz.*, vol. ii.; *Heber's Mod. Trav.* vol. x.)

CHITTAGONG (*Chaturgrama*), a distr. of India beyond the Ganges and Brahmaputra, but included in the prov. of Bengal, of which it forms the S.E. extremity, lying chiefly between lat. 21° and 23° N., and long. 91° 30′ and 93° E., having N. Tipperah, E. the country of the indep. Khyens, S. Arracan, and W. the Bay of Bengal. Length N. to S. about 165 m.; breadth uncertain. Pop. estimated at 790,000. The islands of Hattia, Sundeep, and Bameeny, with Mascal and others contiguous to its shores, are under its jurisdiction. Its coast, S. of the mouth of the Karnaphuli or Chittagong river, abounds with openings and harbours; but unfortunately none of them are available for ships of any size, their mouths being choked up with sandbanks and shoals. Surface along the coast, low and flat; the interior is hilly; and the E. frontier is formed by the same extensive mountain chain which bounds Sylhet, Tipperah, and Arracan, to the E., and which in this portion of its extent varies from 2,000 to 5,600 ft. in height. In this region many streams arise which disembogue on the Chittagong coast. Climate in many respects similar to that of Bengal; but the rains set in earlier, and last longer: in the hill region the crops often suffer from the inundations of the mountain torrents, as they do on the coast from invasions of the sea. Chittagong is in many parts particularly healthy, and is, therefore, often frequented by Europeans from Bengal. Many of the valleys and plains possess so fertile a soil that very little labour insures redundant crops. Much of the country is overgrown with jungle, and the whole of the mountain chain is covered with lofty forests. The hilly region, when cleared, is believed to be well adapted for the culture of coffee, pepper, spices, &c.: the low hills are interspersed with many hamlets inhabited by Mughs, who emigrated thither after the conquest of Arracan by the Birmese in 1783, in the neighbourhood of which, on small plots of cleared land, they raise plantains, ginger, betel-leaf, the sugar-cane, cotton, indigo, tobacco, and capsicum. The hills in the N. are inhabited by Tripurah, Joomca, and other tribes, apparently without any dependence on particular chiefs; who cultivate cotton and rice, and rear hogs, goats, and poultry, which they exchange with the Bengalese for salt, iron, earthenware, and fish.

Notwithstanding the fertility of its soil, Chittagong is, upon the whole, but thinly inhabited: towards the end of last century it was estimated that there was twice as much unproductive hilly country as cultivated arable land. Landed property is mostly divided into very small portions, among numerous proprietors. The waste lands, when cleared, become liable to assessment under the decennial land-settlement. Except on the sea coast, towns and villages are very scarce. The Mughs or Arracanese inhabit either temporary hamlets, which they change together with the spots they cultivate, or else permanent dwellings about 40 ft. long by 20 broad, elevated on posts several feet from the ground, after the fashion of some Ultra-Gangetic nations, ascended by a ladder or notched stick, and much more comfortable in their interior than the huts of the Bengalese peasantry. The male Mugh pop. have adopted the dress and habits of Bengal, while the females retain those of Arracan and Ava: all are Buddhists. The Mohammedans in this distr. are to the Hindoos as 3 to 2; but are extremely tolerant, and have adopted many Hindoo habits and customs. The chief exports of Chittagong are, timber, planks, canvass, coarse cloths, stockings, umbrellas, &c.; on the sea coast salt, which is a government monopoly, is extensively manufactured. Coal is believed to exist, but no mines have yet been worked. The elephants of Chittagong have been celebrated both for size and excellence. They are admirably adapted for the camp and the chase, and hunting them still forms a chief occupation of some of the forest inhab. Many were formerly caught and exported, yielding a considerable profit to the sovereign; the trade in them is now farmed by the government to a contractor.

Chittagong probably once formed part of the extensive kingdom of Tripurah; in the 16th century it was successively possessed by the Affghan kings of Bengal and the Arracan rajah; in 1760 it was finally ceded by its nabob to the British. (*Hamilton's E. I. Gaz.* i. 402—406.; *Pemberton's Rep. on the E. Frontier; Parl. Rep. on the Affairs of the E. I. Company.*)

CHITTELDROOG (*Sitala durga*, the spotted castle), an inl. town and fortress of Hindostan, prov. and dom. of Mysore, but occupied by a British garrison; cap. of a distr., on a cluster of rocks at the extremity of a ridge of hills, 110 m. N.N.E. Seringapatam, 280 m. W.N.W. Madras; lat. 14° 4′ N., long. 76° 30′ E. The town, which stretches along the base of the droog or fortress at the N.E., is surrounded by dilapidated ramparts of granite with round towers at intervals, a spacious ditch excavated from the rock, and a wide spread glacis: it is neither very large nor populous, but its principal street is remarkably spacious. The fort, enclosed by the town, is probably the most elaborate specimen of a de-

fended rock to be found in S. India; an endless labyrinth of walls of solid masonry winds irregularly up to the summit, guarding every accessible point, and forming enclosure within enclosure; the more exposed points are crowned with batteries, and the ascent is partly by steps, and partly by superficial notches cut in the rock, and scaled with great difficulty. Such is the intricacy of the works, that an enemy might be master of the outer walls and yet not materially advanced towards the reduction of the fort: the lower enclosure contains the former poligar's palace, now occupied by the British commandant, other ancient structures, the officers' bungalows, and a reservoir of good water which supplies all the town; in the other enclosures there are two other tanks, various Hindoo temples, &c., a deep magazine sunk in the rock, and a depôt for ghee. At a short distance W. of Chitteldroog is a curious suite of subterraneous chambers, apparently the former habitations of devotee worshippers of Siva. This station is noted above all others in India for the great variety and excellence of its fruits. (*Hamilton's E. I. Gaz.*, i. 407.)

CHIUSA, an inl. town of N. Italy, k. Sardinia, prov. Coni, cap. mand., on the Pesio, 7 m. S.E. Coni. Pop. nearly 5,000; chiefly occupied in the manufacture of silk goods and mirrors, and vine cultivation. The town is well built. A continuation of the ancient Emilian way passes through its vicinity.

CHIVASSO, an inl. town of N. Italy, k. Sardinia, div. Turin, cap. mand., on the Po, in a fertile plain, 13 m. N.E. Turin. Pop. 4,000.? It was formerly one of the strongest places in Piedmont, but is now surrounded by only a simple wall with two gates leading to two suburbs. It has a square, a church, and several convents, and some trade in corn and cattle.

CHOLET, or CHOLLET, a town of France, dép. Maine-et-Loire, cap. cant., on the Maine, 12 m. S.S.E. Beaupreau. Pop. 8,897. It is finely situated; and had formerly several religious houses, and a superb castle, destroyed during the Revolution. Extensive manufactures of cottons, flannels, &c., were established here and in the neighbouring communes during the last century; but the town having been the theatre of a battle, in 1793, between the Vendéans and the republicans, the manufactures were all but destroyed, and the workmen either put to death or dispersed. In 1795, however, after the first pacification of Vendée, the expatriated manufacturers returned to Cholet; and, instead of being dispirited by their disasters, entered with fresh vigour on a new career of industry, and have succeeded in carrying the manufactures of the town and its vicinity to a higher pitch of prosperity than ever. From 60,000 to 70,000 individuals of both sexes were employed, in 1834, in the fabrics, of which Cholet is the centre. At present, it has establishments for the spinning of cotton and wool, with extensive bleach-fields and dye-works. A great variety of cotton, linen, and other goods are produced in the town, the total annual value of its different fabrics being estimated at 20,000,000 fr. (800,000*l.*) (*Hugo*, ii. 208.)

CHOLULA, an inl. town of Mexico, state of La Puebla, in a fertile plain S. of the Cordillera of the Malinche, 8 m. W.N.W. Puebla, and 64 m. S.E. Mexico; lat. 19° 2′ 6″ N., long. 98° 13′ 15″ W. Pop., when visited by Humboldt, 16,000; but it has fallen off in the interval. It was compared by Cortez, in the early part of the 16th century, with the most populous cities of Spain; but it declined with the rise of Puebla. It still, however, covers a large space of ground, and the size of its great square indicates its past importance. It contains many churches, and regular and broad streets; the houses are mostly of one story, and flat roofed. There are some manufactures of cotton cloth. The principal extant relic of its ancient grandeur, is a huge pyramid, or *teocalli*, to the E. of the town, now covered with prickly-pear, cypress, and other evergreen shrubs, and looking at a distance like a natural conical-shaped hill. As it is approached, however, it is seen to consist of four distinct pyramidical stories, the whole built with alternate layers of clay and sun-dried bricks, and crowned with a small church. According to Humboldt, each side of its base measures 439 metres (1,440 ft.), being almost double the base of the great pyramid of Cheops (which stands on an area equal to that of Lincoln's Inn Fields); its height, however, is only 50 metres (164 ft.). It appears to have been constructed exactly in the direction of the four cardinal points. The ascent to the platform on the summit is by a flight of 120 steps. This elevated area comprises 4,200 sq. metres (5,023 sq. yds.). The chapel erected on it is in the shape of a cross, about 90 ft. in length, with two towers and a dome. It was dedicated to the Virgin by the Spaniards, and has succeeded to a temple of Quetzalcoatl, the god of the air. This pyramidal pile is, however, conjectured to have served for a cemetery, as well as for the purposes of religion; and Humboldt and other authorities regard it as bearing a remarkable analogy to the temple of Belus, and other ancient structures of the Oriental world. The Indians believe it to be hollow, and have a tradition that during the abode of Cortez at Cholula a number of armed warriors were concealed within it, who were to have fallen suddenly upon the Spanish army. At all events, it is certain that Cortez, having some suspicion or information of such a plot, unexpectedly assaulted the citizens of Cholula, 6,000 of whom were killed. In making the present road from Puebla to Mexico, the first story of this pyramid was cut through, and a square stone chamber discovered, destitute of an outlet, supported by beams of cypress, and built in a remarkable way, every succeeding course of bricks passing beyond the lower, in a manner similar to some rude substitutes for the arch met with in certain Egyptian edifices. In this chamber, two skeletons, some idols in basalt, and some curiously varnished and painted vases, were found. There are some other detached masses of clay and unburnt brick in the immediate vicinity, in one of which, apparently an ancient fortress, many human bones, earthenware, and weapons of the ancient Mexicans, have been found. The view from the great pyramid, embracing the Cordillera, the volcanoes of La Puebla, and the cultivated plain beneath, is both extensive and magnificent. Cholula is surrounded by corn fields, aloe plantations, and neatly cultivated gardens. (*Humboldt, Researches*, i. 88.; *Eng. Trans.*; *Bullock*; *Six Months in Mexico*, pp. 114—116.; *Ward, Antiq. of Mexico.*)

CHOOROO, an inl. town of Hindostan, prov. Rajpootana, the second town in the dom. of the Bicanere rajah, and his frontier place towards the Shehawuttee territory, in a naked tract of sand hills, 100 m. E.N.E. Bicanere; lat. 28° 12′ N., long. 74° 35′ E. It is 1½ m. in circ., exclusive of its suburbs, and has a very handsome external appearance. The houses are all terraced, and, as well as the walls of the town, are built of a kind of limestone found in vast quantities in this part of the prov., of a very pure white, but soft, and apt to crumble. In 1817 Chooroo was plundered by one of Meer Khan's sirdars; in 1818 it was visited by a British detachment, and afterwards transferred to the rajah of Bicanere; its chief, however, is rather a dependent than a subject of that prince. (*Elphinstone's Journey, &c.* i. 6.; *Hamilton's E. I. Gaz.*, i. 409.)

CHORLEY, a par. and market to. of England, co. Lancashire, hund. Leyland, on the Chor, 20 m. N.W. Manchester, and 8 m. N. Wigan. Area of par., 3,110 acres. Pop. in 1801, 4,516; 1811, 5,182; 1821, 7,315; 1841, 13,139. This thriving town, which takes its name from the stream near the source of which it is situated, stands on a rising ground, about a mile above the confluence of the Chor and Yarrow. It is well built; streets broad, lighted with gas, and abundantly supplied with water from a reservoir, into which the stream is thrown up by steam machinery. The par. church of St. Laurence is an ancient structure in the Norman style; that of St. George, a handsome edifice, was built by the parl. commissioners in 1835, at an expense of 13,700*l.* The Independents, Unitarians, Methodists, and R. Catholics, have places of worship, to some of which Sunday-schools are attached. A free grammar-school was founded in 1634, and a national school in 1824. The town is governed by a constable chosen annually at a court leet. Petty sessions are held in the town-hall, erected in 1802, by the late John Hollinshed, Esq.: and adjoining it is a lock-up house for the temporary confinement of prisoners prior to their removal to the co. gaol. The increase of population is a consequence of the still more rapid increase of the cotton trade. In 1790, spinning-mills began to be erected in the town; and in 1838, it had 11 of these establishments, employing 1,800 hands, besides power-looms, factories, &c. Exclusive of yarn, the fabrics principally produced are muslins, jaconets, and fancy goods. Bleach-greens and print-works are established on the banks of the neighbouring streams. The coal mines in the neighbourhood have contributed greatly to the improvement of the town; there are also valuable quarries of slate, and gritstone for mills, with lead and iron mines, &c. The Liverpool and Leeds Canal, which passes within ½ m. of the town, and is joined by that from Lancaster and Preston at a short distance from it, affords great facilities for conveying the produce of the factories and mines throughout all the N. counties. Markets are held on Tuesday; fairs on 26th March and 5th May for horned cattle; 21st October for horses; and 4th, 5th, and 6th Sept. for woollens and general purposes. (*Baines's Lancashire; Returns as to Factories*, &c.)

CHOWBENT, or ATHERTON, a village of England, co. Lancashire, hund. W. Derby, par. Leigh, 10 m. W.N.W. Manchester, and 6 m. E.S.E. Wigan. Pop. in 1821, 4,145; in 1841, 4,475. It has an Episcopal chapel and a Unitarian place of worship. Previously to the American war, the making of nails was extensively carried on here; and, though the manufacture has declined, considerable quantities are still made for exportation. It is also remarkable for several inventions and improvements in cotton machinery; and it is said that the value of the application of heat in the production of some kinds of cotton fabrics was discovered here. The Bolton and

Leigh railway passes within a short distance of the village. Fairs, at which premiums for the best cattle are given, take place on the first Saturday in May, and the last Saturday in October.

CHRISTCHURCH, a parl. bor., and par. of England, co. Hants, New Forest, W. div., hund. Christchurch. Area of par., 24,640 acres. Pop. of do. (1821), 4,644; (1841) 5,994; of which the bor. had 1,922. The latter is situated at the confluence of the Avon and Stour, about 1 m. from where their united streams fall into Christchurch Bay, 90 m. S.W. London. "The town presents no symptoms of activity or industry. No trade nor manufacture is carried on. The houses are of a middling description. The appearance of the inhab., who are thinly scattered, give no indications of prosperity." (*Boundary Report.*) The church was the collegiate one of the ancient priory, and is a large, fine structure; the older part in the Norman, the rest in the earlier and later pointed styles: the fine tower is of the 15th century. It has a very ancient and curiously carved altar, and many beautiful chapels. There are also 2 episcopal chapels (one of them built by parliamentary grant, in 1823, with 462 free sittings), a Rom. Catholic chapel, a dissenting ditto, a free-school of uncertain foundation, educating 10 boys, a national, and a Lancastrian school, and several small charities. Market on Mondays: fairs, Trinity Thursday, and Oct. 17., for horses and cattle. It returned 2 mem. to the H. of C. in 35 Edw. I., and in the 2d Edw. II. No other return appears till the 13th of Eliz.; since which period it regularly returned 2 mem., till the Reform Act deprived it of one of them. The franchise, previously to this act, was vested in the corporation, which consisted of a mayor and an unlimited number of burgesses. The Boundary Act very materially extended the limits of the parl. bor., which had in 1841 a pop. of 6,634. Registered electors in 1849-50, 305. The harbour has a shifting bar, with not more than 5 or 6 ft. water over it, so that it is accessible only at spring tides for the smaller class of coasters. There are 2 breweries in the town; and the manufacture of watch springs employs a few hands. The name is derived from its ancient priory, of very remote origin. There are traces of many ancient camps and barrows, &c., in its vicinity.

CHRISTIANIA, a sea-port town of Norway, of which it is the cap., on the Agger, at the bottom of a very deep gulph or fiord, to which it gives name; 162 m. E.S.E. Bergen, 249 m. S. by E. Drontheim, and 255 m W. by N. Stockholm: lat. 59° 55′ 20″ N., long. 10° 48′ 45″ E. Pop. (1845) 26,141. It is surrounded by an amphitheatre of hills, and its situation is extremely picturesque. It is well laid out; streets spacious and regular, and some of them even handsome. Houses in the town, all brick or stone; those of wood having been prohibited, on account of the former frequency of fires. They are airy and well-built, though seldom more than 2 stories high. In the best quarters, they are built round an open square court, and are generally occupied by several families. It is the residence of the viceroy, and the seat of the diet; has a cathedral, and 3 other churches; a military and a lunatic hospital; 2 orphan asylums, a house of correction, a new town hall and exchange, 2 theatres, a bank, &c.; but none of the public buildings is in any wise remarkable. Four suburbs part from the town as a centre, one of which is the old town of Opslo, from which Christiania originated. In these, wooden houses are not prohibited; and, as the suburbs are mostly inhabited by the lower classes, the dwellings are chiefly of wood. A short distance beyond the walls a royal palace, a plain brick building, has been recently erected. The whole vicinity of the town is sprinkled with the country houses of citizens. The gulph of Christiania unites with the farthest N. point of the Skagerac: though in parts narrow, and difficult of navigation, it has deep water throughout, there being 6 or 7 fathoms close to the quay. Mr. Inglis says that, as a town, Christiania is inferior to Drontheim; that it is dull, not particularly clean, nor, to judge from the looks of its inhabitants, very healthy. It is the seat of the higher courts of law, and a university. The latter, founded in 1811, has yet no separate edifice, and the professors lecture in detached rooms. It is attended by about 600 students, and has attached to it a public library, with 115,000 volumes, collections of natural history and mineralogy, a museum of northern antiquities, an observatory, and a botanic garden. Here is a military school, with schools of commerce and design, elementary schools, and several learned and philanthropic societies. Manufactures not very extensive; the chief are those of woollens, tobacco, glass, hardware, soap, leather, cordage, &c. Principal exports, timber, deals, glass, iron and nails, smalts, bones, oak-bark, and salted and pickled fish, a staple mostly sent to Bergen. The deals of Christiania have always been held in the highest estimation, in consequence of the sap being carefully cut away. The trade with Great Britain has been materially injured by the high discriminating duty imposed in this country on timber from the N. of Europe; and is not now nearly so great as formerly. Christiania was built by Christian IV. King of Denmark, in 1624. (*Laing's Tours in Norway and Sweden; Inglis's Journey through Norway.*)

CHRISTIANSAND, a sea-port and fortified town of Norway, near its S. extremity, cap. diocese of same name, distr. Mandahl, on the Skagerac, at the head of a deep fiord, 160 m. S.W. Christiania, lat. 58° 8′ 4″ N., long. 8° 4′ 9″ E. Pop. (1845) 8,548. It is regularly laid out; streets long and wide, houses generally built of wood, and separated by gardens. Chief public building the cathedral, a Gothic structure, and, next to that of Drontheim, the finest ecclesiastical edifice in Norway. Here is an asylum for the poor, a sail-cloth manufactory, and docks for the construction of vessels; ship-building being the principal branch of industry. The harbour is very secure, and sheltered on nearly every side by lofty and rocky heights. It is well supplied with fish; and lobsters are taken in great numbers, and exported to the London markets. Timber is another principal article of export. Christiansand ranks as the fourth town in Norway; it is a bishopric, and the residence of a governor. It was founded in 1641 by Christian IV. King of Denmark, who intended to make it the principal naval port of his dominions. (*Dict. Géographique, &c.*)

CHRISTOPHER'S (ST.), or ST. KITT'S, one of the W. India islands belonging to Great Britain, lying about lat. 17° 20′ N., and long. 62° 40′ W., and about 50 m. W. by N. Antigua, of the government of which island it constitutes a part. Length, N.W. to S.E., about 15 m., breadth in general about 4 m., but no more than 3 m. towards its S.E. extremity, where it is divided by only a narrow channel from the island of Nevis. Pop. (1842) 23,177. It contains many rugged precipices and barren mountains, the principal of which, Mount Misery, an extinct volcano, rises to 3,711 ft. above the sea. The climate is healthy, but violent hurricanes sometimes occur. Of 43,720 acres of land, the extent of the surface of this island, it is estimated that nearly half is unfit for culture. The soil of the plains, however, which is of a volcanic origin, intermixed with a fine loam, makes amends by its fertility for the barrenness of the mountains. Sugar is the great article of cultivation, the only articles raised in addition to it being a little cotton, coffee, arrow-root, &c. The quantities of the principal articles of produce imported into the U. Kingdom from St. Christopher's, in 1848 and 1849 were as follows:—

Years.	Sugar (unrefined).	Rum.	Molasses.	Coffee.	Cocoa.
	Cwt.	*Gal.*	*Cwt.*	*Lbs.*	*Lbs.*
1848	79,971	82,950	6,558		
1849	93,183	88,558	28,583		

The total value of the exports from the island in 1836 amounted to 145,703*l.*, and that of the imports into it during the same year to 98,344*l.* According to the last slave registration, the number of slaves amounted to 20,660, for whose manumission a sum of 331,630*l.* was awarded as compensation to their proprietors. This island is divided into 9 parishes, and contains 4 towns, Basseterre, Sandy Point, Old Road, and Deep Bay. The first two are ports of entry established by law. Basseterre, in the S.W., is the cap. It contains about 800 houses, and, as well as Sandy Point and some other parts of the island, is defended by several batteries. St. Christopher's was discovered, in 1493, by Columbus, who gave it the name it bears; but it was not settled till 1623, when a party of English took possession of it. After many disputes for its occupation with the French, Spaniards, &c., it was finally ceded to Great Britain at the peace of Utrecht in 1713. (*Parl. Papers; Edwards's W. Indies, &c.*)

CHUDLEIGH, a town and par. of England, co. Devon, hund. Exminster. Area of par., 6,230 acres. Pop. of ditto, in 1821, 2,053; 1841, 2,415. The town, on an acclivity near the Teign, 8 m. S. by W. Exeter, consists chiefly of one wide street of well-built houses, being part of the main line of road from Exeter to Plymouth. The church is an old structure amidst fine trees; the vicarage in the patronage of such of the parishioners as have freeholds to the amount of 5*l.* a year and upwards. There are 2 dissenting chapels, a grammar-school, founded 1668, with a residence for the master and 3 exhibitions to the university of Cambridge, a national school, and several charities. Market on Saturdays. Fairs, Easter Tuesday, third Tuesday and Wednesday in June, and Oct. 2., for cattle and sheep. The serge manufacture was formerly carried on to some extent, but at present (1850) there is no manufacture of any kind, and the labouring part of the pop. are chiefly engaged in agriculture. Ugbrook Park, in the immediate neighbourhood (the seat of Lord de Clifford), is considered one of the finest in the kingdom.

CHUMBUL (supposed to be the *Sambus* of Arrian), a river of Hindostan, which rises in Malwah prov., and falls into the Jumna river, about 25 m. below Etaweh, after a course of about 500 miles, generally in a N.E. direction.

CHUMPANEER, a town and large district of Hindostan, prov. Gujrat; the former, called also Powanghur, stands on a scarped rock 25 m. N.E. Baroda, and is supposed to have been the cap. of a Hindoo principality, before the Mohammedan rule in India. The remains of an ancient city stretch for several miles on either side of it. This town was taken by Humayoon in 1534, and by the British in 1803. (*Hamilton's E. I. Gaz.*, i. 412.)

CHUPRAH, a town of Hindostan, prov. Bahar, distr. Sarun, of which it is the cap., on the N. side of the Ganges, along which it extends for nearly a mile; 33 m. W. by N. Patna. Pop. about 30,000. It has some trade in cotton, sugar, &c. (*Hamilton, Bacon, &c.*)

CHUQUISACA (formerly *La Plata*, or *Charcas*), an inland city of S. America, cap. Bolivia, in a small plain surrounded by heights, on the N. bank of the Cachimayo, and on the high-road between Potosi and Santa Cruz de la Sierra, 55 m. E.N.E. the former, and 220 m. S.W. the latter; lat. 19° 29′ S., long. 66° 40′ W. Pop. 12,000. ? pretty equally divided amongst Spaniards, Indians, and mixed races. It contains a large and handsome cathedral, with some good paintings and decorations, several monastic establishments with splendid churches, a conventual hospital, three nunneries, and a university. The best houses are but one story in height, but roomy, and have pleasant gardens: it is supplied with water from several public fountains. The climate is mild; but the rains are of long continuance, and during the winter violent tempests are not unfrequent. Chuquisaca was founded in 1539, made a bishopric in 1551, the seat of a royal *audiencia* in 1559, and an archbishopric in 1608.

CIEZA, or ZIEZA (an. *Catina*, or *Cartela*), a town of Spain, prov. Murcia, on the Segura, in a rich well-cultivated plain, 24 m. N.W. cap. Pop. 6,856. It has convents for both sexes, a workhouse, public granary, &c.; with manufactures of coarse linens. On the opposite side of the river are ruins supposed by some to be those of the ancient *Carteja*.

CINCINNATI, a city of the U. S. of America, Ohio, cap. co. Hamilton, and, next to New Orleans, the largest and most flourishing commercial town in the W. part of the Union, on the N. bank of the Ohio, about 410 m. W. by N. Washington. Pop. in 1830, 24,831; in 1840, 46,338, and in 1848 it has been estimated at above 90,000. It is built on two inclined plateaux rising from the river, one about 50 ft. higher than the other, and both running parallel to the Ohio. It is regularly laid out; streets wide and clean, and intersecting each other mostly at right angles. They are generally lined with trees on either side, and most of the houses have a small inclosure in front filled with flowering shrubs. Houses mostly of red and party-coloured brick; but many are stuccoed, and a few are of stone. A square in the centre of the city is appropriated to public buildings. Here, and in other parts of the town, are numerous churches: the city has also the Cincinnati college, 2 theatres, 4 market-houses, one 500 ft. in length, a court-house, medical college, mechanics' institute, Catholic athenæum, 2 museums, a lunatic asylum, with hospitals, numerous schools, &c. At an average, 450 substantial buildings were added to the town during each of the three years ending with 1835. Manufactures extensive and increasing: the principal are those of iron; next in importance are cabinet-work, steam-boat building, and hat-making: the manufacture of cotton and woollen stuffs has been established, and there are very extensive distilleries and flour-mills. A great deal of the machinery is propelled by steam. Cincinnati is the largest pork-market in the Union. Two-thirds of all the hogs fed in the forests of Ohio, Kentucky, and W. Virginia, are driven here for slaughter and exportation. In the winter of 1833-34, 123,000 hogs were slaughtered; in 1834-35, about 160,000; in 1836-37, 105,000; but including those slaughtered elsewhere, and brought to Cincinnati, the total number exported in the last-mentioned year was estimated at 180,000. The buildings for this branch of trade are very extensive, and occupy several acres. The average value of this and other articles exported from Cincinnati has been estimated at, — Pork, 3,000,000 doll.; flour, 600,000 doll.; whisky, 750,000 doll.; manufactures of iron, 2,000,000 doll.; other articles, chiefly hats, clothing, books, beer, furniture, ship-carpentry, &c., 1,350,000 doll.; miscellaneous articles, 400,000 doll.: making a total of 8,100,000 dollars.

The Ohio is 600 yards wide at Cincinnati, and navigable for small steam-vessels as far as Pittsburgh, 464 m. higher. The total burden of the vessels belonging to the district in the year ending June 30, 1846, was 15,313 tons. The medical college, founded in 1818, and re-organised in 1824-25, had, in 1838, 178 students. The medical department of Cincinnati college had in the same year 85 students. Lane seminary, founded in 1829, chiefly for theology, and situated about 2 m. from the city, has 2 commodious edifices, and contains 100 rooms for students. It possesses a library of 10,000 volumes, and in 1838 had 42 students. A law school was established in 1833; in 1838 it had 25 students. One of the museums contains a number of enormous organic remains, antique vases, &c., excavated from some of the ancient mounds in Ohio. There are a great many religious and benevolent associations, several academies, a public library, and some excellent hotels. The building erected for a bazaar by Mrs. Trollope is now used for a dancing academy and assembly-room. The pop. is composed of emigrants from all the states of America and most of the countries in Europe. There are said to be 10,000 Dutch and German settlers.

The advance made by Cincinnati has been wonderfully rapid. It was founded in 1789, and in 1800 the population was only 500; in 1810, it was 2,500; in 1815, about 6,500; in 1820, 9,600; and in 1848 it amounted, as already seen, to above 90,000. Its picturesque situation, and the beauty of its environs and of the surrounding scenery, have gained for it the title of "Queen of the West;" while its central position and rapid increase in population and commerce, make it probable that it will speedily rival in wealth and importance the principal cities of the N.E. states. (*Capt. Marryatt's Diary*, 1839, ii. 147—151.; *A Winter in the Far West, by C. F. Hoffman*, ii. 125—136.; *Stuart's Three Years in America*, ii. 439. &c.; *American Almanack*, 1834-39.)

CINTRA (*Mons Cynthiæ*), a town of Portugal, 12 m. W. N. W. Lisbon. Pop. 4,500. This Richmond of the Portuguese capital is situated at the head of the rich and beautiful valley of the Collaris, and at the foot of a rugged rock or mountain: the latter "is in part covered with scanty herbage; in parts it rises into conical hills, formed of such immense stones, and piled so strangely that all the machinery of deluges and volcanos must fail to satisfy the inquirer for their origin. On one of the mountain eminences stands the Penha convent, visible from the hills near Lisbon; on another are the ruins of a Moorish castle. From this elevation the eye stretches over a bare and melancholy country, to Lisbon on the one side, and on the other to the distant convent of Mafra, the Atlantic bounding the greater part of the prospect." (*Southey's Letters*, ii. 202.) In summer, the citizens of Lisbon resort on the Saturday nights to Cintra, where they spend the Sundays, returning home on Monday. Many of the nobility, the *corps diplomatique*, the wealthier merchants, especially the English, &c., have villas in the vicinity of the town, which is as much celebrated for its fine air as for the beauty of its situation. It has also a palace, occasionally occupied by the court: in one of its apartments are painted the armorial bearings of all the noble families of Portugal.

The convention agreed to in 1808, after the battle of Vimeira, a memorable incident in the war with Napoleon, by which the French forces under Junot, with their arms, artillery, &c., were conveyed to France, is usually described as the Convention of Cintra. This, however, is a most improper designation; for, in point of fact, the convention was not concluded at Cintra, but at Lisbon. (*Napier's Peninsular War*, i. 228.)

CIOTAT (LA), a sea-port town of France, dép. Bouches du Rhone, cap. cant., on the W. side of the Bay of Leques, 15 m. S.E. Marseilles. Pop. 5,382. It is surrounded by an ancient rampart of considerable extent, and in a tolerably perfect condition. Streets regular, and well paved; houses well built. It possesses some good quays, a large par. church built in the 16th century, and a fine public promenade, but is ill supplied with water. Its port, sheltered by a mole and defended by a fort, is commodious, secure, and accessible to vessels of 300 tons burden. A lighthouse, in the fort, has the lantern elevated 82 ft. above the level of the sea. Ships are built, and oil is manufactured here; and it has a considerable trade in wines and dried fruits, the vicinity being interspersed with vineyards, olive grounds, and plantations of oranges, figs, &c. La Ciotat is said to occupy the site of the ancient *Citharista*; the modern town was, however, founded in the 13th century, and did not acquire municipal rights till 1429. (*Hugo, art. B. du Rhone.*)

CIRCARS (NORTHERN), a large marit. prov. of Hindostan, extending along its E. coast for 470 m., between lat. 16° and 20° N., and long. 79° and 85° E.; having N. and W. Orissa, Gundwanah, and Hyderabad, and S. and E. the Carnatic, and the Bay of Bengal. It comprises portions of the ancient territories of Orissa and Telingana, and, previously to the British rule, consisted of five divisions or "circars," viz. Guntoor, Condapilly, Ellore, Rajamundry, and Cicacole. At present it is wholly included within the territories of the Madras presidency. Its divisions, with their area, pop., &c. being as follows:

Districts.	Area, sq. m. (Eng.)	Pop. (1836-7.)	Land revenue.	Total rev. (1836-7.)
			Rupees.	Rupees.
Ganjam	3,760	686,079	958,967	[illegible]
Vizagapatam	5,600	1,047,414	1,206,008	[illegible]
Rajamundry	4,690	578,529	1,769,187	[illegible]
Masulipatam	4,810	332,039	944,977	[illegible]
Guntoor	4,960	19,318	1,378,036	1,7[illegible]
Total	23,760	2,566,879	6,2[illegible],145	8,305,057

It is bounded W. by a chain of mountains continuous with the E. Ghauts, but no where of any great height. Vizagapatam, between lat. 17° and 19° N., is the most mountainous district, and contains a considerable range of hills, running parallel to the former and to the coast, often closely approaching the latter, and enclosing an extensive and fertile valley, together with the principal range. From Ganjam to Coringa, the coast generally appears mountainous, but thence is low, flat, and sandy, with numerous small coast streams. Chief rivers, the Godavery and Krishna; the first has an extensive and fertile delta at its mouth below Rajamundry. The Chilka lake constitutes the N. limit of the prov.; the only other lake of note is that of Colair in the Masulipatam distr.; but several lagunes of some size are met with on the shores. A black soil prevails in the S. parts of the prov. highly suitable to the cultivation of cotton. S. of the Godavery the climate is extremely hot, and for a month preceding the rains, the thermometer in the country round the mouth of the Krishna sometimes stands for a whole week at 110° Fahr.; in other parts it has been known to stand at 112° at 8 o'clock in the evening, and at midnight as high as 108°. At such times, wood of all kinds readily warps, and glass cracks and flies in pieces; in all the hilly regions and round Masulipatam, a very noxious state of the air prevails throughout the different seasons of vegetation.

The circars are extremely productive of grain, and have long been the granary of Madras during the N.E. monsoon, though at present the distr. of Masulipatam annually imports large quantities of rice from Calcutta and Aracan for home consumption. Large crops of paddy and dry grains, cotton, and tobacco of excellent quality, the sugar-cane, and esculent vegetables are produced in the S.; the same articles, with ginger, yams, turmeric, chilies, &c., in the central parts; a great deal of sugar in the delta of the Godavery; and wheat, maize, the sugar-cane, and an abundance of rice and other grains in the N.

Agriculture is least advanced in Vizagapatam, owing chiefly to an oppressive revenue assessment: many of its hills are wild, and destitute of vegetation. In Masulipatam distr. there are extensive tracts of grass. The total number of black cattle in the circars is about 1,380,000, of sheep 509,000. The Ganjam distr. is interspersed with numerous bamboo jungles. The forests of Rajamundry abound with teak, which tree is found no where else on the E. side of Hindostan. The chief manufactures are chintzes, carpets, and cotton stuffs, in the central; and indigo, punjum cloths, muslins and silks, in the N. distr.: the piece goods of the circars, which were formerly their staple, are now rather objects of curiosity than made in any considerable quantity. Rum was formerly distilled in the N.; the sugar of Ganjam is in much request, and exported in large quantities: the other exports are wax, salt, pepper, horns, ivory, indigo, tobacco, and other agricultural produce. The external trade is chiefly with Madras, Calcutta, Hyderabad, and the central Deccan. The exports to Europe are chiefly fine cotton goods: all the raw silk used is imported. The natives are mostly Hindoos; Mohammedans are few. The Orissa and Telinga races have become much intermixed, though they still retain distinct dialects, and have distinct traits and customs. The villages consist of mud huts and houses; but the peasantry are not on the whole incommodiously lodged. The roads are amongst the worst in India, and unfit for wheeled carriages; there are but few tanks, bridges, or ferry-boats. The lands appear for a long period past to have belonged either to the government or to zemindars; for no instance has occurred since the British have come into possession of the prov. of any ryot claiming those cultivated by him. The chief towns of the circars are, — Chicacole, Ellore, Coringa, &c., besides those which bear the names of the several districts. Religious temples are not numerous; but in Ganjam, where Juggernaut is the favourite object of worship, their architecture is peculiar; they consist of groups of low buildings, each with a graduated pyramidical roof, terminating in an ornamented conical cupola. In 1571, the rajah of Hyderabad conquered this prov., which, together with Hyderabad, fell under the dom. of Aurungzebe, in 1687: it however became again independent of the Mogul empire in 1724. The English obtained the four most N. circars in 1765; the French had become possessed of Guntoor in 1752; but it also came into our possession in 1788. (*Hamilton's E. I. Gaz.*; *Madras Almanack*.)

CIRCASSIA, more properly TCHERKESSIA or TCHERKESKAIA, the largest and most important country in the Caucasus, of which mountain-range it occupies nearly the whole N. slope; extending from 42° 30′ to 45° 40′ N. lat., and from 37° to 45° 48′ E. long. At its N.W. corner it reaches the Black Sea, but, with this exception, it is bounded on the S. and W. by the main ridge of the mountains which divide it from Georgia, Mingrelia, Imeritia, and Great Abchasia. The N. limit is formed by the rivers Kuban and Terek, which separate it from the lowlands of the Cossacks, Turkmans, Nogay Tartars, and the Russian colonies in the Caucasian steppe; towards the E. it terminates at the junction of the little river Sunsha with the Terek, at which point a host of small streams divide it from the country of the Tchetchentzes. In extreme length, from N.W. to S.E., Circassia is about 470 m.; in its greatest width, about 100 m.; in its least, about 40 m., and, at an average, about 70 m. Its area may therefore be calculated at about 33,000 sq. m. (*Guldenstadt, Reise durch Russland*, i. 466—469.; *Pallas's Trav. in S. Russia*, i. 298. 390—392. 395. 422. &c.; *Klaproth's Trav. in Caucasus and Georgia*, pp. 252. 311., &c.; *Lapié, Annales des Voy.*, xii. 36.)

Political Divisions.—The Circassians are divided into a great number of tribes, who lead a partially wandering life, so that no very precise arrangement can be made with regard to the districts of their country. The E. portion, or that enclosed by the Terek, is divided by Russian geographers into two provinces — *Great Kabardah*, to the S.W., and *Little Kabardah*, to the N.E. These divisions are not, however, recognised by the Circassians, who know but of one Kabardah, and that in the S.W. portion, called by the Russians *Great*. (*Klaproth*, 354.) Between the sources of the Kuban and Terek, and along the courses of those rivers, as far as they run N., the land is wholly occupied by a tribe called the *Abbasines* or *Absne*; and forms the *Little Abasa* of Pallas, the *Altikesek Abchasia* of Guldenstadt. The *Great Abasa* of Pallas, *Basiana* of Guldenstadt, occupies likewise a very considerable part of the Kubanian Circassia; among the rest, the Nottakhaitzi district, mentioned by Spencer. It appears, indeed, that the Absne are the lawful proprietors of all Kubanian Circassia, and that the Circassians have only the right of conquest to the W. portion of their country; that right is, however, very fully established, not only on the N. slopes of the mountains, but even to a very great degree on the W. side, along the shores of the Black Sea (the *Great Abchasia* of Guldenstadt). Spencer makes but little distinction between the Absne and Circassians, and frequently speaks of them as one people; this must, however, be an error, since the former display a very peculiar physical conformation, and their language, with the exception of a few Circassian words, is totally unlike that of their conquerors, and of every other known people, European or Asiatic. The Circassian princes are cruel and oppressive tyrants to their Abassian subjects, so much so, that the latter have in many instances sought the protection of the Russian government; but it does not appear that they are in any moral attribute superior to their taskmasters, since in every age they have been infamous for their robberies by land, their piracies by sea, and their reckless cruelties every where. (*Guldenstadt*, i. 460. 463. 466. 469.; *Pallas*, i. 383—391.; *Klaproth*, pp. 247—263. 283. 311. *Spencer's Circassia*, ii. 412. &c.; *W. Caucasus*, i. 20. 200. 212. 247. &c.)

Physical Features. — These have been generally described in the article CAUCASUS (which see), and what is peculiar to Circassia is only the consequence of that country's occupying the N. slope of the mountains. With the exception of the lowlands on the banks of the Kuban and Terek, the whole territory is broken into precipitous mountains, small table-lands, and valleys of the most picturesque and romantic description. Its hydrography belongs to two systems, the waters of Kabardah being all conveyed by the Terek to the Caspian, and those of W. Circassia by the Kuban to the Black Sea. The former river rises near the Kazibeck, and, forcing its way through the pass of Dariel (an. Caucasian Gate), receives, directly or indirectly, 35 streams before it quits the Circassian country. Of these, the Malk, which joins it at its E. bend, is scarcely inferior in size to the principal river. It rises near the E. bases of the Elbours (Osha Makhua), and is itself the recipient of a considerable number of tributaries. The Kuban rises on the N. base of the Elbours, not far from the sources of the Malk, and receives the water of more than 50 rivers, 30 of which fall directly into its bed. It has every reason to be considered, exclusively, a Circassian river; for though no part of its N. bank be inhabited by Circassians, it does not receive a single drop of water, in its whole course, that does not rise within their territory. A similar remark will apply, in a modified sense, to the Terek, which, like the Kuban, does not receive a single stream from the N., and only one of consequence after entering the Tartar country E. of Little Kabardah. The country between the sources of the Malk and Kuban is watered by various streams; and when it is recollected that, in addition to these, innumerable torrents pour from the upper ranges of the mountains, it will be evident that no land can be better irrigated. The water is in general clear and good, but occasionally impregnated with mineral and other extraneous matters. The tributary streams become flooded in winter, and extremely shallow during the heats of summer; the currents of all are extremely rapid, as are those also of the Terek and Kuban, except where the

latter forms morasses, which it does in some parts of the flat country, when its course becomes sluggish, and its water thick and muddy. (*Guldenstadt*, i. 469. and Map; *Klaproth*, 242—247. 255. 259. 261. 351. &c.; *Pallas*, i. 385—389. 413—417.; *Spencer's W. Caucasus*, i. 106.; *Circassia*, ii. 412. *et passim.*)

Climate, Soil, and Natural Productions. — These are also the same with those of the Caucasus generally (*see* CAUCASUS), but the temperature is rather lower than on the S. slopes, except on the banks of the Kuban, where the greater depression more than compensates for the difference of aspect, and where the extensive marshes and the exuberant vegetation create miasma, which render it more pestilential than any other district in the whole region. (*Spencer's W. Cauc.*, i. 106.; *Circassia*, ii. 304.) There is a greater proportion of bare rock in Circassia than in Georgia and the other countries S. of the main ridge, but on every shelf and in every rift, trees, grain, vegetables, and fruit of almost every kind, are produced from most fertile soil. The animals, also, are on the same scale of abundance and variety, whether the wild or domesticated tribes be considered; the quadrupeds, birds, fishes, insects, or reptiles. (*See* CAUCASUS.) The Circassian horses are nearly as famous and quite as good, as those of Arabia. Cattle of all kinds are abundant in the extreme, and in addition to the herds forming the numerous stocks of the pastoral population, the aurochs and argali (wild ox and sheep) still wander among the mountains, with the ibex, and another beautiful variety of the goat. Game of all kinds, winged, hoofed, or clawed, are found in equal abundance, but differing in kind, in the mountains and plains; nor are beasts of prey, as jackals, wolves, bears, lynxes, and tiger cats, &c., much less numerous, though they do not seem to be much regarded by the natives. Wild boars are found, especially among the swamps of the Kuban, and it is affirmed that the tiger is not wholly unknown. The reptile and insect tribes are equally numerous. In one of the late campaigns of the Russians, besides the thousands who fell victims to the bad air, numbers died *from mortified bites of mosquitoes*. (*Spencer's Circassia*, ii. 317.) Both natives and Russians believe that the mountains abound in gold and silver, but apparently on no good grounds. (*See* CAUCASUS.) Iron, however, lead, and copper, are found; and saltpetre is very abundant. Salt is nowhere found within the limits of Circassia; and since Russia has excluded the natives from the brine-pits in the Caucasian steppe, and sealed their ports against the trade of Turkey and Persia, they have been almost totally deprived of that necessary. (*Guldenstadt*, i. 188. 441. &c.; *Pallas*, i. 339–380. &c.; *Klaproth*, pp. 309. 324. 356. *et passim; Spencer's Circassia*, ii. 220. 233. 242. 250. 305. 317. &c.; *W. Cauc.*, i. 330—341. &c.)

Inhabitants. — The Circassians have long been proverbial for their beauty of form and figure, especially the women, and though it seems they have in this respect been confounded with the Georgians, who are a totally distinct nation, yet all the statements of the modern, and most accurate travellers, concur in describing them as an extremely handsome people, tall, finely formed, slender in the loins, small in the foot and hand, elegantly featured, with fresh complexions, and extremely intelligent countenances. (*Pallas*, i. 398.; *Spencer*, *passim*, *&c.*) It would be well did their moral and intellectual attainments correspond with their physical appearance; but it is obvious, even from the statements of their eulogists, that they are mere semi-barbarians, whose darling occupation is robbery and plunder, and who seem to be radically deficient in most of the requisites necessary to form a civilised and flourishing community. They have many points in common with the Arabs; and, like the sons of Ishmael, are quite as barbarous at the present day as in antiquity.

The Circassians are divided into five classes. 1. *Pschi*, or *pschech* (princes); 2. *Uork* (ancient nobles); 3. the freedmen of these princes and ancient nobles, who, by their manumission, become themselves noble, and are called *uork* of *uork*; 4. the freedmen of these new nobles, called *begualia*; and 5. the vassals or *tcho'kotl*. Between the ancient and recent nobility there is no real distinction, except, that in military service, the latter are still under the command of their former masters; nor is there any great practical difference between the begualia, and the tcho'kotl or vassals. The latter are, of course, the labourers; and are subdivided into such as are engaged in agriculture, and such as serve the superior classes in the capacity of menial servants. Of the former, many are wealthy, nor is the state of any, one of great degradation, since there are very few, if any offices of labour, which prince or noble would consider as derogatory to himself. To every princely house belongs a certain number of uork, or *usden*, as they are called by the Russians; and the latter are the direct proprietors of the vassals. Of these last, though all are unquestionably slaves, those engaged in agriculture cannot be sold singly; and the sale of any is so rare as almost to be prohibited by custom. On the other hand, it appears the vassal may transfer his duty to another usden; which is, of course, a great protection from ill usage. The vassals pay no money tax, and though they are compelled to supply their lord with all he wants, yet this, from the check upon the noble's power just alluded to, extends no farther, usually, than to bare necessaries; since, should the latter carry his demands too far, he runs the risk of losing his vassal altogether. The relation between prince and usden is precisely the same as that between usden and vassal; the noble must supply the necessities of his sovereign; but should the exactions of the latter become excessive, the former may transfer his allegiance to another prince. The usden must pay the debts of their prince, and the vassals those of their usden; and in each case, the inferior must make good all losses sustained by his superior, whether from robbery or accident; by which arrangement it is evident that all losses or expenses are defrayed, ultimately, by the vassal. The head of the princely house is the leader in war; and his usden are bound to attend him with all their retainers, or as many as may be required. There is no people, not even the Arabs, among whom pride of birth is carried to a greater height than among the Circassians, especially those of Kabardah. In this district, if an usden were to marry or seduce a princess, he would forfeit his life without mercy; and the same result would attend the attempt of a begualia or vassal to ally himself to a noble house; an Abassian prince is, in this respect, considered equal only to a Circassian usden, and can obtain a Circassian wife only from that class. The rigorous enforcement of this custom has preserved the different ranks very distinct, though Pallas has observed, even in the Kabardahs, some traces which indicate a descent from Tartar mothers (i. 398.). It must be observed, however, that there does not appear to be any restriction upon a man's taking a wife or concubine from an inferior class; and the issue of such connexions take rank from the father, but are not accounted equal to the descendants of a pure stock from both parents. Thus, there are princes of the 1st, 2d, and 3d class, &c., according to the greater or less degree of inferior blood which they inherit from their maternal ancestors. This state of society, closely resembling the feudal institutions of the Gothic ages, seems to imply the division of the Circassians into two distinct people, a conquering and a conquered race; but when or how the present relations were established is involved in the most impenetrable obscurity. (*Klaproth*, p. 314. *et seq.*; *Pallas*, i. 395. 402. &c.; *Spencer*, *passim.*)

Customs, Habits, and Manners of the Circassians. — The whole of the Circassian and Abchasian tribes live in small villages scattered here and there, without the slightest approach to any thing resembling a city or walled town; indeed, the prince or noble has an unconquerable aversion to any castle or place of artificial strength, which he regards as only fitted to restrain his state of wild freedom. He lives, therefore, in the centre of his village, which usually consists of 40 or 50 houses, or rather huts, formed of plaited osiers, plastered within and without, covered with straw or grass, and arranged in a circle, within the area of which the cattle are secured at night. These primitive dwellings, which strongly resemble, in form and appearance, the humbler residences in Arabian towns, have, however, the peculiar recommendation of being unexceptionably clean, which is also the case with the persons, dress, and cookery, of the inmates. From the slender nature of the buildings, they are evidently not formed for long endurance, and a Circassian village is, in fact, by no means a fixture. The accumulation of dirt in their neighbourhood, the insecurity of the position, and frequently even the caprice of the inhabitants, cause them to be from time to time abandoned. On such occasions the dwellings are destroyed, the household utensils packed up, and the whole colony migrate in search of a new abode. While stationary, however, there is much comfort in a Circassian's hovel, for those who can dispense with superfluities; but, as may be supposed, their domestic arrangements are of the most simple kind. The usual occupations of the higher classes are the chase and war, on which expeditions, or on those of a predatory kind, they depart with no other provision than a little millet or wheat, and that without the slightest fear of suffering from want, since every man who possesses and can use a rifle is sure of finding provisions on every hedge. In these expeditions the Circassians carry with them tent covers of felt, but chiefly for the purpose of protecting themselves from sudden storms (*see* CAUCASUS), as, in fine weather, the hardy mountaineer throws himself on the ground, and sleeps with no other covering than the heavens. While in his hut, the Circassian of whatever rank is his own carpenter, weaver, carver, and shepherd. It does not appear, however, that the higher classes often take part in agricultural pursuits, not so much because it is considered derogatory, as from that

species of indolence (quite consistent with great occasional exertion) which recoils from regular and continuous labour. The occupations of the women consist in spinning and needle-work. They make the clothes of their household, down to the very shoes, and also saddle-cushions, housings, and horse trappings, and sheaths for the warriors' swords and poniards. They frequently excel in embroidery, are skilful dairy women, and sometimes even noblewomen may be seen taking a part in field labour. As in other half-barbarous societies, the greater portion of labour falls upon the females; but their condition is far superior in Circassia to what it is in most other Eastern countries. As Mohammedanism is little more than a profession among these people, their habits, with the exception of some formal observances with regard to food, have undergone but little change by its introduction. The sexes mix freely together while unmarried, and, under the restriction of caste, love matches are probably as numerous here as in other parts of the world. The husband has, however, to purchase his bride of her father, and neither husband nor wife, from the moment of their union, is permitted to appear in the presence of the parents for a year, or till the birth of the first child. It is a still more remarkable custom, that the husband must never be seen in company with his wife; and though the latter is permitted to receive without restraint the visits of strangers, yet the former is never present on such occasions, and the matrimonial correspondence is always carried on by stealth, and in the utmost secrecy.

The greatest insult that can be offered to a prince, or usden, is to inquire after the health of his wife or family. The son of a prince is committed, at the age of three days, to the care of an usden, by whom he is brought up, and never again seen by his father till he is married; the son of an usden remains in the paternal household till he is three or four years old, when he, in like manner, is consigned to the care of a stranger. The foster father stands in every respect in the place of the natural parent. He receives no payment for his trouble, but claims all the duty and service of his ward. The cause of this very remarkable custom is said to be the wish to prevent the effect of indulgence consequent on a home education, in enervating the character; but though it destroys the usual affection subsisting between father and son, it establishes another not less strong between the guardian and his ward, which is usually as intense as any exhibited in the social connections of other countries. The daughters are brought up at home, and at the age of ten or twelve years have their waists enclosed by tight-fitting stays, or a broad band of untanned leather, *which is never removed nor loosened* till they are married. On the wedding night the bridegroom cuts this boddice open with his dagger, an operation which is frequently attended with danger. As a fine waist is considered the great beauty of a Circassian, men are also subjected to a very heavy compression on that part, but nothing to that which the females endure. The girdle remains on the latter for a period varying from two to six years, (a girl unmarried at seventeen rarely obtains a husband,) during which the victim is growing, and, in addition to this, they are still farther to *improve* the form, so sparingly fed, that the young unmarried females have generally a look of ill health. The finest looking women are the young wives.

The dress of both sexes is rather long, that of the men consisting of shirt, tunic, and cloak, much resembling those of the Kalmuck Tartars, but formed of better materials, and in general richer; the female costume is not very different, except in being longer. According to the plate (18. p. 398.) in Pallas's first vol., the outer robe reaches to the instep, and is furnished with hanging sleeves. The men shave or crop the head, leaving only a single lock of hair hanging from the crown; they wear thick mustachios; and the *learned* classes (priests and physicians) suffer the whole beard to grow. The women's heads have luxuriant tresses, but both sexes eradicate every appearance of hair on all other parts of their bodies, by means of a caustic ointment of unslaked lime and orpiment. The princes and usden rarely go out unarmed, and in his coat of mail, helmet, musket, pistols, bow, quiver, and shield, the Circassian chief forms a most imposing and picturesque object. In this dress they pay their visits of state, and in this also they ride out on their warlike or predatory expeditions. The Circassian, like the Arab, is a strange mixture of ferocity and hospitality; the unfortunate traveller who approaches his country without securing the protection of some chief, is seized as a slave by the first native who meets him; but, on the other hand, should this protection be extended, the whole power of the host, or *konak*, as he is called, is strained to procure not only the safety, but accommodation of the guest. The form of granting protection is remarkable. The wife of the konak gives the stranger her breast to suck, after which ceremony, he is regarded as her son, and the whole tribe as his adopted brethren. Robbery and plunder are honourable occupations; but the charge of thieving is accounted an insult, because it implies detection. The custom of blood revenge is precisely similar, in all its details, to the same custom in Arabia (*see* ARABIA), and is known by a name *thlil-uasa*, which is said to be similar in etymology to the *thar* of that country. The ransom by fine is, according to Pallas (i. 405.), never taken; but Spencer (*Circass.*, ii. 382.), on the contrary, affirms, that it is almost always preferred. The exclusive nature of Circassian marriages has been already noticed. It is, however, a little inconsistent, that while a Circassian prince would unhesitatingly slaughter an usden of his own tribe, or Abchasian, who should presume to wed his daughter, he *will unhesitatingly sell her* to Turk, Persian, Turcoman, Nogay Tartar, or Kalmuck! Spencer, who professes to admire every institution of these people, has ingeniously discovered (*Circass.*, ii. 373.) that this practice has tended to *refine* and *civilise* the inhabitants of the Caucasus! He admits, indeed, that it has occasioned wars and feuds innumerable among the petty tribes, from the rapacity with which they have overrun each other's territory in search of beauty for the foreign market. The greater portion of the females thus sold have, however, always been Imeritians, Georgians, and Mingrelians; the Circassian slave trade having been chiefly confined to the male sex, from which they supplied the Mamelukes and other slave troops of Egypt and Turkey. The fact is, that the suppression of this infamous traffic by the Russians has been one of the main causes of the resistance made to their government by the Circassian chiefs. (*Pallas*, i. 396—409.; *Interiano, la Vita de Zichi, &c.*; pp. 1—10.; *Klaproth*, pp. 315—320. 322—325. &c.; *Spencer's Circass.*, ii. 223. 233. 242. 246. 325. 375. 384. &c.)

Laws.—These might have been included in the last article, since they rest only on long-established custom. They are administered in a council of elders, but not always by the reigning prince of the tribe, if any other of his rank possess the requisite qualities in a higher degree. The council consists not of princes and usden only, but also of the wealthier and more aged vassals, who, in the judgment-seat, are regarded as on an equality with the higher classes. The laws themselves are based upon the principle of retaliation, and the business of the court seems to consist of little else than the assessment of damages. Robbery of a prince is punished by the restitution of nine times the property stolen; of an usden by simple restitution, and a fine of 30 oxen. The prince or usden can scarcely commit a robbery on a vassal, since his abstract right to all the property of the latter is tacitly acknowledged, and the punishment of robbery by one vassal of another appears to vary with the circumstances of the case. Fine, as among the Arabs, seems almost the universal punishment, except in cases of murder and adultery; in both which cases the punishment is left in the hands of the injured party. The offending wife has her head shaved, her ears slit, the sleeves of her garment cut off, and in this trim is sent back, on horseback, to her father; who, if he cannot sell, generally kills her. The paramour is certain of death, being a marked man by all the husband's tribe Polygamy is allowed, but very rarely practised. The Circassians are very attentive to their breeds of horses, and have distinct marks to show the noble races from which they have descended. The stamping a false mark upon a filly is a forgery, for which nothing but life can atone. (*Klaproth*, p. 319.; *Pallas*, i. 411.; *Spencer's Circassia*, ii. 382, &c.)

Learning is a complete blank. The people, from whom Blumenbach took it into his head to suppose that the Europeans are mostly all descended, have not even an alphabet, and consequently neither book nor manuscript, in their own language. The few who read, and they are very few, use the Tartar or Arabic tongues, both of which, the former especially, are very generally understood. The Circassian language is itself totally different from any other at present known, and what is singular, considering the total absence of letters, there is a secret dialect, apparently an old barbarous gibberish, peculiar to the princes and usden, and used by them chiefly on their predatory excursions. (*Klaproth*, p. 321.; *Pallas*, i. 408. &c.)

Arts, Manufactures, Commerce.—These also are at the lowest ebb; the doctors are simply conjurors or saints, who profess to cure diseases by charms and the roughest applications of actual cautery. Their success may be surmised from the fact, that notwithstanding the length and inveteracy of the war with the Russians, scarcely a single instance of a maimed Circassian warrior is to be met with: to be wounded among these people is to die. Of artificers and skilled mechanics, there are only cutlers, armourers, and goldsmiths; who, however, exhibit great ingenuity in the construction and decoration of the warriors' arms. The art of preparing gunpowder has been known for ages in the Caucasus, and the abundance of saltpetre renders the inhabitants inde-

pendent of other countries for this important element of warfare; their mode of manufacture is, however, very primitive. It has already been stated that the women are the great manufacturers of clothes, which may be said to be the only manufacture which these people possess. They formerly traded with Persia and Turkey for their chain and other armour, and with Tartar tribes northward for salt; the equivalents on their parts being their children and cattle. The Russians have annihilated both trades: and this, as already stated, is one great cause of the hatred entertained against them by the Circassians. (*Klaproth*, p. 323.; *Pallas*, i. 400. &c.; *Spencer*, ii. 246. &c.)

Name, History.—The word *Tcherkessia* is Tartar, and literally means *cut the road;* that is, highwayman or robber, one who makes communication unsafe. The general name for these people, in the Caucasus, is *Kasack*, whence it has been inferred that they are of the same race with the Cossacks of the Don and the Wolga; but etymology has indeed run mad upon this point; for this term, like the former, has a general, not a national, signification, and means a man who leads a wandering and martial life. The Circassians themselves recognise neither term; they style themselves *Adigé*, which has been derived by some authorities from the Turco-Tartar *adah* (island), whence it has been inferred that these people came originally from the Crimea. This *may* be the case, but it acquires no strength from the etymological proof, since the Circassians have no word for island (how should they, being necessarily ignorant of the thing?) and their language, as before observed, has no connection with either Turkish or Tartar. From a resemblance in sound between the Tartar name (*Tchelkess*), they have been pretty generally supposed to be identical with the Zyges (*Ζυγοί*) of Strabo (ii. 129., xi. 492.). Stephen of Byzantium (art. *Ζυγοί*), and Procopius (*De Bel. Got.* iv. 4.). This, again, is not improbable, but the premises are far too weak and uncertain to found a conclusion upon. The Kabardines have a tradition that they are Arab (*Pallas*, i. 392.); but in the W. mountains they say that before their ancestors arrived here, the land was inhabited by men so small, that they rode hares instead of horses (*Spencer's Circass.* ii.); and, as to the time when this settlement took place, they are profoundly ignorant. Among all this confusion, naturally to be expected in speaking of a barbarous and but little known people, all that can be inferred with certainty is, that the Circassians have inhabited their mountains for many centuries, and that they have always been the same hardy, reckless, daring robber warriors, that we find them at this hour. Christianity is supposed to have found its way among them in the very early part of the Christian era; but, in the palmy days of Turkish power, they nominally embraced Mahommedanism, preserving, however, many Christian ceremonies, and acknowledged a kind of doubtful dependence on the Porte. Their first connection with Russia took place in 1555, when the princes of the Besch Tag submitted to the Czar Iwan Vassilievitch. From that time the Russian power has been constantly increasing in the Caucasus; and by the treaty of Adrianople (1830), Turkey made over to it the whole Circassian country. Denying the right to be thus disposed of, and knowing that, under the vigorous government of Russia, their robberies would be repressed, as well as their traffic in slaves, they flew to arms, and, for some years past, have maintained a brave but unequal struggle. Sympathy is naturally excited by the spectacle of a handful of mountaineers contending against one of the most powerful empires in the world; but no one who calmly considers the subject in its different bearings can doubt that their complete subjugation by a civilised government will be a material service to the cause of humanity, and, eventually, even to themselves.

The population of Circassia is estimated at between 3,000,000 and 4,000,000. (*Klaproth*, pp. 173—223. 310—314.; *Pallas*, i. 390—395. 403. 407. &c.: *Spencer's Circass. and W. Cauc. pass.*)

CIRENCESTER (usually called *Ciceter*), a parl. bor. and par. of England, co. Gloucester, hund. Crowthorne, on the Churn, 82 m. W. by N. London. Area of par., 5,900 acres. Pop., 1821, 4,987; 1841, 6,014; but the limits of the parl. bor. are not identical with those of the par., and it had, in 1841, a pop. of 5,840. The town is on the line of road from Oxford to Bath, and consists of 4 principal, and several smaller streets, paved and lighted: houses mostly of stone, and well built; many of the more respectable are detached, and have shrubberies round them. "It is not a place of any trade; but it is a very respectable country town in good condition, rather increasing in buildings, and has the appearance of being inhabited by persons in easy circumstances." (*Boundary Report.*) Portions of its ancient walls (2 m. in circuit) are still traceable, showing that the modern town occupies only a portion of the ancient site, a large part of the enclosed area, on the S. E., being occupied by gardens and meadows. The church is in the decorated style of the 15th century, with a lofty tower, and several lateral chapels and ancient monuments of great interest; both within and without, it is elaborately ornamented, and is one of the finest par. churches in England. There are 4 dissenting chapels; a free grammar-school, founded in the reign of Hen. VII., which had Dr. Jenner for a pupil; blue-coat and yellow-coat schools with small endowments, clothing and educating about 40 children; 3 ancient hospitals, or alms houses, and several other charitable institutions. There is here a large woollen-cloth and a carpet manufactory; curriers' knives, of a superior quality, are also made in the town, and there are two breweries; a branch of the Thames and Severn Canal extends to it, and races are annually held in its vicinity. It is not incorporated, and is governed by 2 high constables and 14 wardsmen, chosen annually at the court leet and baron of the manor. Petty sessions for the 7 hundreds of Cirencester (comprising nearly one fourth part of the co.) are held here. It is a polling place for the E. div. of the co.; and has itself returned 2 mem. to the H. of C. from the 13th of Eliz., the franchise previously to the Reform Act having been vested in the inhab. householders being parishioners. Registered electors, in 1849-50, 467.

Cirencester was the *Corinium* of the Romans; and was a place of considerable importance from its being situated at the intersection of three military roads. Numerous Roman remains have been discovered; and near it is an amphitheatre (now called the Bull-ring), being an ellipse of 63 by 43 yards, enclosed by a mound 20 ft. high, on the inner slope of which were turf seats, which are still partially traceable. A magnificent abbey of Black Canons was founded here by Henry I., whose abbot was mitred, and had a seat in parl. Its revenue at the general dissolution was 1,051*l.*; some slight remains of it still exist. Oakley Park, the seat of Earl Bathurst, is in the immediate vicinity. The ancient annalist, Richard of Cirencester, was a native of the town

Agricultural College. — Within the last few years an agricultural college has been founded in the vicinity of Cirencester. The building, about 1½ m. from the town, is in the Elizabethan style, the principal front being 190 ft. in length, and commanding an extensive view. It includes a private chapel, dining hall, library, museum, lecture rooms, laboratories, dormitories, private apartments, &c. An experimental farm of about 450 acres is attached to the college, and it has extensive kitchen and botanical gardens. The course of instruction comprises the science and practice of agriculture, chemistry, natural history, veterinary practice, surveying and practical engineering, &c. Fee for in-students 80*l.* a year, and for out-students 40*l.*, ex. a fee to the library, and other small items. The business of education is carried on by a principal and professors, under the superintendence of a council of noblemen and gentlemen. The establishment is said to be extremely well conducted, and it can hardly fail to be of great service.

CIUDAD DE LAS CASAS (formerly *Ciudad Real*), an inl. city of Mexico, cap. of the state of Chiapas, in a fertile plain near the border of Guatimala, 450 m. S.E. Mexico. Pop. about 4,000, one eighth of whom are Indians. It has a cathedral, another church, several chapels. It was the see of the celebrated bishop Las Casas, the protector of the Indians, to whose memory a monument is here erected.

CIUDAD REAL, a city of Spain, prov. La Mancha, of which it is the cap., in a plain about 5 m. S. and E. from the Guadiana, 102 m. S. Madrid, 162 m. N.E. Seville. Pop. 10,758. It was built after the expulsion of the Moors from La Mancha, to serve as a check upon those who still maintained themselves in the Sierra Morena. Extensive remains of its ancient walls and towers still exist. Streets long and straight, but narrow. The grand square is surrounded by two rows of boxes for viewing the bull-fights and public festivals. It has 5 churches, 8 convents, 3 hospitals, barracks for troops, a magnificent workhouse, including a school for the instruction of poor children in useful occupations. It was the head-quarters of the famous *Santa Hermandad*, or Holy Brotherhood, an order founded in 1249, for the extirpation of highway robbers. (*Miñano*, iii. 190.; *Bourgoing*, &c.)

CIUDAD RODRIGO, a city of Spain, prov. Salamanca, on an eminence on the right bank of the Aqueda, which is here crossed by a bridge of 7 arches, 55 m. S.W. Salamanca, 146 m. W. Madrid, and 16 m. from the frontiers of Portugal. Pop. 6,097. It has a castle, and is strongly fortified. It is tolerably well built, and has some good public buildings, including a cathedral, founded in 1170, with numerous churches and convents, an episcopal seminary, and an hospital. In the great square are 3 Roman columns, with inscriptions. The town has two suburbs, and its environs are fertile. Ciudad Rodrigo was taken by the French, under Marshal Massena, in 1810. The Duke of (then Lord) Wellington, having come upon it by surprise, with the allied English and Portuguese forces, on Jan. 8, 1812, after a vigorous siege, took it by assault on the 20th of the same month. A large battering train, and immense quantities of am-

munition, were found in the town. The allies lost about 1,200 men, and 90 officers, in the siege and assault. This important achievement procured for the successful general the title of Duke of Ciudad Rodrigo from the Spanish gov., and of Marquis Torres Vedras from the Portuguese. (*Napier's Penin. War*, iv. 387.; *Miñano, &c.*)

CIUDADELA, a city of the island of Minorca, of which it was formerly the cap., at the head of a deep and narrow bay on the W. coast of the island; lat. 39° 59′ N., long. 3° 54′ E. Pop. 7,800. It has walls, partly of Moorish construction and partly modern, with stone bastions. In the centre of the town is a large fine Gothic church. The streets are narrow, but it has a considerable number of good houses, inhabited by many of the nobles of the adjacent country.

CIVITA VECCHIA (an. *Centum Cellæ*), a fortified sea-port town of the Papal States, cap. deleg. of same name, on the Mediterranean, 36 m. W. N. W. Rome, of which it is the port; lat. 42° 4′ 38″ N., long. 11° 44′ 52″ E. Pop. about 7,000, exclusive of prisoners, that is, of felons employed in the public works, a *bagne* being established here. Though the streets are narrow, the town is tolerably well-built and laid out; it contains several convents, a lazaretto, a theatre, an arsenal, building-docks, warehouses, &c., and engrosses almost the whole of the import and export trade of the W. side of the Papal dominions. Its harbour, which was constructed by the emperor Trajan, is formed of three large moles — two projecting from the mainland, and inclined the one a little to the N., and the other to the S.; and a third constructed opposite to the gap between the others, and serving to protect the shipping from the heavy sea that would otherwise be thrown in during W. gales. The latter mole clearly appears from a passage in Pliny's letters (lib. 6. epist. 31.) to have been formed in a precisely similar manner to the breakwater at Plymouth, by sinking immense blocks of stone, which became fixed and consolidated by their own weight, till the structure was raised above the waves. Its extremities are about 90 fathoms distant from those of the lateral moles, and at its S. end there is a lighthouse, with a lantern elevated 74 ft. above the level of the sea. The S. entrance to the harbour is the deepest, having from 8 to 4 fathoms water. Ships may anchor within the port, in from 16 to 18 ft. water, or between it and the outer mole, where the depth is greater. Civita Vecchia is a free port, — that is, a port into which produce may be imported, and either made use of or re-exported free of duty; but quarantine regulations are very strictly enforced. Its imports consist chiefly of cotton, woollen, silk, and linen stuffs; coffee, sugar, cocoa, and other colonial products; salt and salted fish, wines, jewellery, glass, earthenware, &c. to the total value of about 650,000*l*. or 700,000*l*. annually; the exports are principally staves and timber, corn, wood, cheese, potash, pumice-stone, alum, &c., probably to an amount not much less. Marseilles and Genoa have the largest share of the foreign trade; and next to them, England. Fully 3-4ths of the ships entering the Papal ports arrive at that of Civita Vecchia.

This city was originally called *Trajanus Portus*, and it is to be regretted that it did not continue to bear the name of its illustrious founder. (*Rampoldi; Com. Dict.*)

CLACKMANNAN, a co. of Scotland, and the smallest in that kingdom, on the N. side of the Forth, being, except for a short distance on the E., where it adjoins Fife, every where surrounded by the cos. of Perth and Stirling. Area, 30,720 acres. It is traversed by the Devon, an affluent of the Forth. The range of the Ochill hills crosses and mostly occupies the part of the co. to the N. of the Devon; but the other and far largest portion consists, for the most part, of clay and carse land, and is remarkably fertile and well cultivated, producing excellent crops of wheat and beans. Estates middle-sized; farms large; farm buildings excellent; average rent of land, in 1843, 1*l*. 2*s*. 11½*d*. an acre. There are valuable mines of coal, large quantities of which are shipped at Alloa; ironstone is also abundant. There are some large distilleries and breweries; but little other manufacture is carried on. Alloa is the largest, but Clackmannan is the co. town. Clackmannan is divided into 5 parishes, and had, in 1841, 3,406 inhab. houses, and 19,155 inhab., of whom 9,386 were males, and 9,769 females. It is united with Kinross in returning 1 mem. to the H. of C. Registered electors in 1849-50, 891. Valued rent, 26,482*l*. Scotch; annual value of real property in 1843, 52,924*l*.

CLACKMANNAN, a town of Scotland, cap. of the above co., on an eminence 190 ft. high, on the left bank of the Frith of Forth. Pop. about 2,000. It consists principally of one long unpaved street, and is a very unimportant place. On the W. of the town is Clackmannan Tower, the palace of King Robert Bruce, long the residence of a branch of the Bruce family, and now the property of the earl of Zetland. The par. church is a modern Gothic building. Debtors and criminals are sent to Stirling, the jail of which is partly maintained by the co. of Clackmannan.

CLAGENFURTH (Germ. *Klagenfurt*), a town of Illyria, gov. Laybach, cap. duchy of Carinthia, on the Glan, an affluent of the Drave, in an extensive plain, 21 m. E. Villach, and 40 m. N. N. W. Laybach. Pop. 12,480. It was formerly fortified; but its works were destroyed by the French in 1809. It has 4 suburbs, is well-built, with broad and regular streets. There are 5 squares, one of which has a leaden statue of the Empress Maria Theresa, and a group (indifferently executed) representing Hercules destroying the hydra. Another square contains the residence of the Prince-Bishop of Gurk, with its galleries of paintings, statuary, &c., a rich cabinet of minerals, and an obelisk erected in honour of Francis I. There are 7 churches, 2 hospitals, several infirmaries, a lying-in hospital, workhouse, house of correction, lyceum with a public library, college, normal high school, Ursuline school for girls, an agricultural society, and a theatre. This town is the seat of the court of appeal for the gov. of Laybach, and of municipal, provincial, and other courts of justice. It has a few manufactures of fine woollen and silk fabrics, and white lead. Clagenfurth is supposed by some to derive its name from the Emperor Claudius, and in its vicinity there are some ruins believed to be those of the ancient *Tiburnia*. It has several times been partially destroyed by fire. (*Oesterr. Nat. Encycl. &c.*)

CLAMECY, a town of France, dép. Nièvre, in which it holds the second rank, at the foot and on the declivity of a hill on the left bank of the Yonne, where it is joined by the Beauvron, by both of which it is intersected, 36 m. N. E. Nevers. Pop. (*ex. com.*) 5,000. Little remains of its ancient castle, and the massive walls by which it was formerly surrounded. It, however, contains several old Gothic churches, and a handsome modern castle surrounded by fine gardens, which stands in the *Place de Vauvert*. Clamecy has manufactures of common woollen cloths, fulling mills, dyeing houses, tanneries, &c., and a considerable trade in wood and charcoal, most of which are sent down the Yonne to Paris. (*Hugo*, art. *Nièvre, &c.*)

CLARE, a marit. co. of Ireland, prov. Munster. It is in a great measure insulated, having Galway Bay on the N.; the Atlantic on the W.; the Shannon, by which it is separated from Kerry, Limerick, and Tipperary, on the S. and S. E.; and Galway on the N. E. Area, 802,352 acres, of which 259,584 are unimproved mountain and bog, and 18,665 water. Surface in parts almost mountainous; but it has a large extent of low level land. The low grounds, known by the name of the *Corcasses*, on the banks of the Shannon and Fergus, are almost equal to the very best grazing lands in Lincolnshire. The arable lands are mostly light, but fertile. Estates large; tillage farms very small, many being below 5, and very few above 60 or 70 acres. Agriculture extremely bad, but improving; it is still common in many parts to take a succession of corn crops till the land be completely exhausted. Principal crops, oats and potatoes; but wheat and barley are now rather extensively cultivated. Sea-weed and sea-sand are a good deal used as manure; and in the hilly parts the *loy*, or spade, is much employed in cultivation. Cottages mostly of stone, but without lime or other cement. Condition of the occupiers of small tillage farms and cottiers quite as bad as in most other parts of Ireland. Lime is the most important mineral. Manufactures have hardly any footing. Average rent of land, 9*s*. 3*d*. an acre. Exclusive of the Shannon, the Fergus is the principal river. Clare has 9 baronies and 79 parishes, and sends 3 mem. to the H. of C., viz. 2 for the co., and 1 for the bor. of Ennis, the principal town in the co. Registered electors for the co., in 1849-50, 1,012. In 1841 Clare had 44,870 inhab. houses, and 286,394 individuals, of whom 144,109 were males, and 142,285 females.

CLAUSTHAL or KLAUSTHAL, a town of the k. of Hanover, cap. of the mining captaincy (*Berghauptmannschaft*) of the same name, and the principal mining town of the Hartz; in a bare and bleak region on the top and slopes of a hill 1,740 ft. above the sea, 26 m. N.E. Göttingen, and 56 m. S. W. by S. Hanover. Pop. 9,070, or together with the adjacent town of Zellerfeld, about 13,250, mostly miners or persons connected with the mines and smelting-houses. It has a desolate appearance; its houses are chiefly of wood, and even its principal church is of the same material. It contains a mining-school, supported by the king, and possessing an extensive collection of models of mines, mining buildings, machinery, &c., and a cabinet of the Hartz minerals. There is also a mint, at which about 14,000 silver dollars are coined weekly, and from 600 to 800 gold ducats yearly; a gymnasium, &c. The chief lead and silver mines in the Hartz are in the neighbourhood, next to which are the Silbersegen. The shaft of one of these mines reaches to 2,000 ft. below the level of the Baltic. The mines are drained by a tunnel, cut through the mountain to the small town of Grund, a distance of 6 m. The total length of this tunnel, however, with its branches, is nearly double this distance: it was commenced in 1777, and finished in 1799. All the machinery used in the mines being set in motion by water-power,

every little stream around Clausthal is carefully made use of to form a reservoir; and the canals conducting the water thence to the different mills, machines, &c., are said to have an aggregate length of 125 m. There are numerous forges; besides which, camlets, and a few other articles are manufactured. (*Reden, Das Konigr. von Hannover*, i. 208. &c.; *Cannabich; Murray's Handbook*.)

CLERMONT-DE-LODEVE (*see* LODEVE). There are many other small towns in France named Clermont; but none of any importance.

CLERMONT-FERRAND (an. *Augustonemetum*), a city of France, dép. Puy-de-Dôme, of which it is the cap., on an affluent of the Allier, 82 m. W. Lyons, and 208 m. S. by E. Paris. Lat. 45° 46′ 44″ N., long. 3° 5′ 17″ E. Pop. (1836), suburbs included, 32,427. It is finely situated on an eminence, surrounded on the S. and W. by an amphitheatre of mountains, of which the Puy-de-Dôme is the culminating point, and overlooking on the N. and E. the picturesque and rich plain of the Limagne. The city itself is about 1¼ m. in circuit, being separated by a boulevard, partially planted with trees, from several considerable suburbs. Though it has some fine structures, it is in general badly laid out; streets crooked, narrow, and dirty; houses lofty, mostly old, and gloomy looking from being built of the lava found in the neighbourhood, with which also the streets are paved. The more modern buildings, however, which are rapidly increasing in Clermont and its suburbs, have a more cheerful and agreeable aspect. It has several squares ornamented with handsome fountains, and is exceedingly well supplied with good water, conveyed to it by subterranean conduits from Royat, a league distant. The principal edifice is the cathedral, a work of the 13th century, and the third, according to Hugo, which has been constructed in this city. Externally it has nothing to recommend it, being unfinished, and crowded amongst a number of mean buildings; but its interior is considered one of the finest existing specimens of Gothic architecture. It is built of Volvic lava, a material well in keeping with its style, and has a choir, chapels, &c. of great beauty, a number of handsome columns supporting a lofty nave and aisles, and much elegant carving and stained glass. Of the five towers it possessed before the Revolution, only one remains. Of the other churches, that of Notre Dame du Port, built in 853, is the most ancient, and is elaborately ornamented externally with mosaic work, bas-reliefs, &c. The corn and linen halls, the ancient college, town-hall, cavalry barracks, *Hôtel-Dieu*, and another hospital, the Prefecture, a public library with 16,000 vols., founded by Massillon, and the theatre, are the other principal public buildings. It has also a botanic garden, museums of natural history and antiquities, and a cabinet of mineralogy, particularly rich in specimens of the volcanic products of the neighbourhood. It is the seat of a bishopric which has to boast of Massillon for one of its incumbents, and of tribunals of original jurisdiction and commerce; and has a royal college of the third class with about 350 pupils, a primary school, an academy of sciences and belles lettres, &c. Trade considerable; it being the *entrepôt* for the produce of the surrounding deps., consisting of hemp, flax, corn, wines, cheese, leather, and linen fabrics, and for a part of the merchandise of Provence and Languedoc intended for Paris, besides being on the great line of communication between Bordeaux and Lyons. Four large fairs are held annually. Manufactures not very important; the chief are those of silk stockings, druggets, tinted paper, coarse woollens, linen, cutlery, porcelain, cotton yarn, twine, sweetmeats, preserved fruits, and chemical products. There is also a saltpetre refinery. In and round Clermont there are numerous warm chalybeate springs, holding in solution carbonates of lime, magnesia, &c., and which, on cooling, deposit very extensive sediments. The most remarkable of these is in the suburb of St. Allyre, where a streamlet having raised its bed to a considerable height by means of successive deposits, and subsequently formed a cascade over another streamlet into which it had previously run, has effected the formation of a natural bridge over the latter, 21 ft. in length, by 16 ft. high. The little town of Mont-ferrand, formerly containing the stronghold of the counts of Auvergne, is now one of the suburbs of Clermont, with which it is connected by a fine avenue of willow and walnut trees.

Anterior to the Roman conquest, this city was named *Nemosus*, and was the cap. of the Arverini: Augustus embellished it, and gave it his name. In the 3d century it was erected into a bishopric. It was several times demolished in the succeeding ages, and especially by Pepin-le-Bref. The counts of Clermont and Auvergne afterwards possessed it. It was here that the celebrated council, which bears its name, was held in 1095, when the first crusade was resolved on. Philip Augustus united this city to his dominions in 1212. Clermont has been the birth-place of many illustrious men, among whom may be specified Gregory of Tours; Pascal, born here on the 19th June, 1623; Thomas, Chamfort, Delille the poet, and General Dessaix, in honour of whom an obelisk has been erected in one of the squares. (*Hugo*, art. *Puy de Dôme; French Official Tables; Dict. Géographique, &c.*)

CLEVELAND, a town of the U. States, Ohio, on the S. shore of Lake Erie, at the mouth of the Cuyahoga river, and at the point where the Grand Canal, connecting the Ohio river (and consequently the Mississippi) with Lake Erie, unites with the latter. The opening of the canal has made Cleveland, which was previously quite unknown, a place of great commercial importance, and it is now rapidly rising in wealth and population. Pop. in 1840, 6,071; but now (1850) prob. 12,000. Shipping belonging to the place on the 30th June 1848, 16,821 tons, of which about a half were steamers.

Subjoined is a statement of the quantities and values of the principal articles exported from Cleveland in 1848: —

Articles.	Quantity.	Value.
Flour - - -	493,876 bbls.	$2,311,339 68
Wheat - - -	1,232,627 bush.	1,195,648 19
Corn - - -	662,162 —	171,486 42
Pork - - -	28,807 bbls.	259,263 00
Whiskey - - -	2,095 —	16,760 00
Lard - - -	8,332 kegs	66,414 00
Butter - - -	22,406 —	211,119 00
Seeds - - -	1,497 bbls.	11,900 00
Ashes - - -	749 casks	14,980 00
Beef - - -	6,886 —	68,860 00
Cheese - - -	148,625 lbs.	7,431 25
Tobacco - - -	19,139 —	956 95
Bacon - - -	190,265 —	9,513 25
Staves - - -	773 M.	30,920 00
Wool - - -	528,380 lbs.	132,095 00
Iron, nails - -	4,287 tons	428,000 00
Coal - - -	131,800 —	360,800 00
Hi'hw'ns and Wh'sy -	28,565	228,635 00
Wool - - -	5,130 sacks	128,250 00

CLEVES, an ancient town of the Prussian states, Rhine prov., formerly the cap. duchy of Cleves, and now of a circ. It stands on the declivity (whence its name) of some hills, nearly at the N.W. extremity of the prov., about 2¼ m. from the Rhine, with which it is united by a canal. Pop. 7,700. It is neatly built in the Dutch style, and surrounded by walls, but is not a place of any strength. It has a gymnasium or college, a handsome town-house, with iron foundries, and manufactures of flannel, cotton, &c.

CLITHEROE, a town and parl. bor. of England, co. Lancaster, hund. Blackburn, on the Ribble, 188 m. N.W. by N. London, and 20 m. S.E. by E. Lancaster. The parl. bor. embraces the following chapelries and townships, which, at the undermentioned periods, had a pop. of

	1811.	1821.	1831.	1841.
Clitheroe bor. -	1,767	3,213	5,213	6,765
Downham - -	537	620	552	567
Whalley - -	1,004	1,058	1,151	1,010
Wiswall - -	488	683	724	775
Pendleton - -	930	1,319	1,205	1,469
Little Mitton with Hewthorn and Culcoats	76	99	70	74
Parl. bor. -	4,802	6,992	8,915	10,660

The town stands at the foot of Pendil-hill, which rises 1,800 ft. above the level of the sea. The houses are of stone; the streets paved, well kept, but not lighted, and plentifully supplied with water from springs. The church, rebuilt in 1828 at an expense of 8,500*l*., is a plain building; the other places of worship belong to the Methodists, Independents, and R. Catholics. In the churchyard is the free grammar-school endowed by Queen Mary in 1554. The salary of the head master is 200*l*. a year, and that of the second master 100*l*. The grammar-school is also used as a Sunday-school, when from 800 to 1,000 children are instructed on the Madras system. Clitheroe is a bor. by prescription, and has returned 2 mem. to the H. of Com. since 1 Elizabeth. Under an order of the H. of Com., in 1694, the right of election was vested in the burgesses and freemen, who held in right of freehold in houses or land within the bor.: out-burgesses, holding free burgage tenures in the bor., had also the right of voting. Previously to the Reform Act, the number of burgage tenures was 192, of which not more than a half were occupied by burgesses, and in fact it was a mere nomination bor. The Reform Act deprived it of one of its members; and the electoral limits were at the same time extended so as to comprise the various chapelries and townships mentioned above. Registered electors in 1849-50, 471. Under the new municipal corporation act, the bor. consists of one ward, and is governed by 4 aldermen and 12 counsellors. All the municipal affairs are transacted in the Moot-hall, to which is attached a prison kept by the town sergeant. Several branches of the cotton manufacture are extensively carried on: they consist principally of the weaving of calicoes by

hand and power looms, cotton spinning, and calico printing. There are many steam-engines in the bor. In the neighbourhood are extensive beds of limestone, of which large quantities are burnt for manure and building. A mineral spa near the town is much resorted to. In 1669, the town and neighbourhood suffered severely from an extraordinary outbreak of water from the higher part of Pendil-hill. Markets are held on Tuesday; cattle shows on alternate Tuesdays; fairs on 24th and 25th March; 1st and 2d Aug.; Thursday and Friday before the fourth Saturday after 29th Sept.; and 7th and 8th Dec. A communication by water has been opened with the principal canals and navigable rivers. Races take place on Salthill moor on 21st and 22d June. (*Baines's Lancashire.*)

CLOGHNAKILTY, a marit. town of Ireland, co. Cork, prov. Munster, at the bottom of the bay of the same name; 19 m. S. W. Cork. Pop. in 1831, 3,087; pop. of parish in 1834, 6,377; of whom 1,098 were of the estab. church, 2 Prot. dis., and 5,277 Rom. Catholics. The town is formed of 4 streets, that meet in the centre, and of a square. It has a par. church, a R. Catholic chapel, a Methodist meeting-house, an endowed grammar-school, a dispensary, a public library, 3 reading-rooms, a court-house, bridewell, linen-hall, and market-house. The corporation, under the charter of James I. in 1613, consists of a sovereign, 24 burgesses, and a commonalty. It returned 2 mems. to the Irish H. of C. till the Union, when it was disfranchised. A manor court, held every third Wednesday, has cognisance of pleas to the amount of 2*l.* Markets, Fridays: fairs on 5th April, 1st June, 1st Aug., 10th Oct., and 12th Nov. A party of the constabulary is stationed here. The trade is much limited by the badness of the harbour, which is nearly impracticable for vessels of any size, in consequence of its shallow and shifting bar. Sea-sand is raised here in large quantities, and carried to the adjoining country for manure. Corn is exported to Cork, and coal received in return. Post-office revenue, in 1830, 249*l.*; in 1836, 351*l.*: a coach, carrying at an average nine passengers each trip, plies six days in the week between Cork and Cloghnakilty. (*Stat. Surv.; Railway Rep., &c.*)

CLONES, an inl. town of Ireland, co. Monaghan, prov. Ulster; 66 m. N. W. by N. Dublin. Pop., in 1831, 2,381; pop. of par. in 1834, 21,870; of whom 7,027 were of the estab. church, 1,054 Prot. dis., and 13,789 R. Cath. The town consists of a triangular market-place, in which is an ancient stone cross, and a few streets with mean thatched houses. It has a par. church, a R. Cath. chapel, two Presbyterians and two Methodist meeting-houses, and two dispensaries; and is a constabulary station. A manorial court is held monthly, and petty sessions on alternate Fridays. There is a brewery in the town, and near it a manufactory of agricultural implements. A yarn-market is held on Thursdays, in which about 5,000 pieces of linen cloth are annually sold. Fairs are held on the last Thursday of every month. It has a considerable inland traffic, as it appears that on an average of the three years ending with 1835, 5,000 tons of grain, 130 tons of flax, 140 tons of butter and eggs, and 34,100 sheep, lambs, and pigs, of the estimated weight of 1,705 tons, were annually sent thence chiefly to Belfast, Newry, and Dundalk. The Ulster canal passes near the town. A branch of the Agricultural Bank was opened here in 1836. The Post-office revenue in 1830 was 379*l.*, and in 1836, 581*l.* The mail-coach from Belfast to Enniskillen passes through the town, and a coach to Dublin, which goes three times in the week, carries at an average eight passengers each trip. (*Stat. Surv.; Railway Rep.*)

CLONMEL, an inl. to. and parl. bor. of Ireland, prov. Munster, partly in Tipperary and partly in Waterford on the Suir, 90 m. S. W. by W. Dublin, and 26 m. N. W. by W. Waterford. Pop. in 1821, 13,012; in 1841, 13,503; in 1834, the number of inhab. was 17,835, of whom 6,737 were of the estab. church, 250 Prot. dissenters, and 15,848 Rom. Cath. The town chiefly lies on the N. side of the river in Tipperary; the communication with the other portion in Waterford being maintained by three stone bridges. The streets, which consist of a main thoroughfare upwards of a mile in length, intersected by several smaller, are well paved and lighted with gas. "The town has the appearance of much comfort and prosperity, and is generally considered to be in a thriving state; but the outskirts contain a mass of very poor inhabitants." (*Boundary Reports.*) The co. club-house is at the E. end of the town, and near it are extensive barracks for cavalry, infantry, and artillery. Two newspapers are published here, each twice a week. It has a parish church, a modern building, with some good monuments, two Rom. Catholic par. chapels, a Franciscan and a Presentation chapel, and meeting-houses for Presbyterian Calvinists, Unitarians, Baptists, Primitive and Wesleyan Methodists, and Quakers. An endowed school has been lately rebuilt at an expense of 5,000*l.*; besides which there are parochial schools for boys and girls, and others are maintained by voluntary contributions. There are in all about 600 pupils in the public schools, and 700 in private seminaries. The co. infirmary and dispensary, the fever hospital and the house of industry for the reception of well-conducted paupers and the confinement of vagrants, are in the town, as are two orphan establishments, a mendicity association, and a savings' bank. Here also is the district lunatic asylum for the co., built to accommodate 120 patients maintained at an annual cost of about 17*l.* each.

The bor. was incorporated at a very early period, but its ruling charter was granted by James I. in 1608. The governing body consists of a mayor, two bailiffs, 20 other burgesses, and an unlimited number of freemen: the right of freedom is enjoyed by the eldest son, by apprenticeship or by marriage with a freeman's daughter. Previously to the Union, the bor. sent 2 mem. to the Irish H. of C., and it now sends 1 m. to the imperial H. of C. The elective franchise is vested in the burgesses and freemen resident within 7 m., and in the 10*l.* house-holders. No. of registered electors in 1849-50, 271.

The electoral boundary comprises 331 acres, but the municipal jurisdiction for other purposes extends over 4,800 Irish acres, of which 1,000 are on the Tipperary side, and the remainder on the Waterford side of the river. The mayor and bailiffs hold a Wednesday court of record at the Tholsel for pleas to any amount; they also hold an annual court leet. The mayor's court, for the recovery of debts under 10*s.*, sits also on Wednesdays. Petty sessions are held every alternate Friday. The assizes and general sessions of the peace for the co. are held in the court-house, a handsome building. The old co. gaol is now appropriated to untried cases, the new to prisoners of every description. In each the inmates are divided into six classes, but the accommodations are insufficient for the numbers committed.

The woollen manufacture was introduced into the town in 1667, when a number of German manufacturers were induced to remove thither: it declined at the Revolution, and has never revived. The cotton manufacture has been introduced, and there are extensive flour-mills in the town and its vicinity. The town is well situated for inland trade, being on the main lines of road from Dublin to Cork, and from Waterford to Limerick, and having the advantage of river navigation for barges of 50 tons burdens to Waterford, a distance of 23 m. There is an extensive salmon fishery on the Suir, and the influence of the tide is perceptible beyond Clonmel. The principal trade is in grain, provisions, cattle, and butter, with all which it supplies the Liverpool, London, and Bristol markets. There are two breweries and a distillery. A considerable portion of the produce goes to Waterford, and numerous carriers conduct the inland trade with all the surrounding country. An establishment of light cars for the conveyance of travellers, of which Clonmel is the centre, has considerably promoted its improvement. The butter market is a spacious building, with suitable offices for inspecting and marking the article before it is exposed for sale. Market-days, Tuesdays and Saturdays: fairs are held on 5th May and 5th Nov., and on the first Wednesday of every other month; they are chiefly for cattle. The Bank of Ireland, and the Provincial, and National banks have branches here. The excise duties for the distr. in 1845, amounted to 51,698*l.*: Post-office rev. in 1842, 1,050*l.*, in 1848, 1,463*l.* Deposits in savings' bank in November 1848, 22,339*l.*

The town is beautifully situated in the vale of the Shannon, but its internal appearance is not very attractive. The houses appear to have been built more for comfort than show. Many families of the Society of Friends reside here, the simplicity of whose domestic arrangements has in some degree pervaded those of the rest of the pop. The manners, habitations, dress, and food of the working classes, many of whom are agricultural labourers, differ little from those of the same description in the neighbouring districts.

CLOSTER-SEVEN, a small village of Hanover, duchy of Bremen, on the Aue, 26 m. N.E. Bremen. It deserves notice only from its being the place where the famous convention, which bears its name, was agreed to on Sept. 10. 1757, by which an army of 38,000 Hanoverians, Hessians, &c., commanded by William Duke of Cumberland, was dispersed and sent into cantonments. This convention was alike unpopular in England and in France: in the first it was looked upon as the result of imbecility and misconduct; and in the latter it was believed, and probably on good grounds, that had Marshal Richelieu not assented to the convention, the Duke of Cumberland must have surrendered at discretion. (The convention is given in *Smollett's Hist. of Eng.*, iii. 413.)

CLOYNE, an inl. town, or rather city, of Ireland, co. Cork, prov Munster, in a fertile valley, 3 m. E. Cork harb. Pop. in 1831, 1,227; pop. of par. in 1834, 6,496, of whom 348 were of the estab. church, and 6,148 R. Cath. The town, which is small, irregularly built, and far from prosperous, has a large old cruciform cathedral, in which are some good monuments; among others one to Dr. Wood-

ward, bishop of Cloyne, who died in 1794, and was one of the earliest advocates for the introduction of poor laws into Ireland. A little distance from the cathedral is one of those extraordinary round towers, the origin and object of which have given rise to so much learned and fanciful conjecture. It is 102 ft. in height. The old Episcopal palace at the E. end of the town is now a private residence; the bishopric of Cloyne having, on the death of Dr. Brinkley, the last bishop, in 1835, been merged in that of Cork. The famous Dr. Berkeley, one of the subtlest of metaphysicians, and most amiable of men, was bishop of Cloyne from 1733 to 1753. The R. Cath. cathedral is a plain building, without any pretensions to architectural beauty. Crowes charity-school, founded in 1719, gives instruction to 85 pupils in reading, writing, arithmetic, &c. There is here a constabulary station. Market-day, Thursday. A court leet is held annually; a manor court every week; and petty sessions on alternate Wednesdays. The Post-office revenue in 1830 was 254*l*., and in 1836, 295*l*. At Carrigaeramp, near the town, is a quarry of dove-marble, of which from 2,000 to 6,000 tons are raised annually. (*Stat. Surv.; Windeles's Guide to Cork, &c.*)

CLYDE, a river of Scotland, and the only important one on the W. coast of that part of the U. Kingdom. It has its source near the S. extremity of Lanarkshire, on the borders of Dumfries-shire and Peebles-shire, in the highest part of the S. mountainland of Scotland, contiguous to the sources of the Tweed and Annan. Its course is at first N., with a little inclination to the E., till near Biggar it turns N.W.; it then makes a sweep round by the S.E., till, being joined at Harperfield by the Douglass-water, it re-assumes its N.W. course, and, passing by Lanark, Hamilton, and Glasgow, unites with the Frith of Clyde, a little below Dumbarton. The distance in a direct line, from its source to Dumbarton, is only about 52 m., but including its windings, the course of the river is near 75 m. Soon after its junction with the Douglas, it is precipitated over a series of falls celebrated for their picturesque beauty: of these the principal are the falls of Bonington, Corehouse, Dundaff, and Stonebyres. The distance from the highest to the lowest fall is about 6 m.; during the whole of which the river dashes along with great impetuosity. Corehouse Fall is about 70 ft. in height. The Clyde has been rendered navigable at high water as far as Glasgow for vessels of 350 and 400 tons. (*See* GLASGOW.)

COAST CASTLE (CAPE), or CABO CORSO, the cap. of the British settlements on the Gold Coast of Africa, empire of Ashantee; lat. 5° 6′ N., long. 1° 51′ W. The first colonial establishment formed here was by the Portuguese in 1610, but the Dutch dislodged them after a short period. Finally the British obtained possession of the settlement, in whose hands it has remained since 1661. (*Bowditch's Discoveries of the Portuguese.*)

The castle is built upon a rock about 50 ft. high, projecting into the sea, its walls being washed by the surf that rolls impetuously along the coast. It is of a quadrangular shape, with bastions at each angle; has barracks, with accommodations for 16 officers and 200 men; but is of little strength, the walls being out of repair, and commanded in every direction by the adjacent heights (but on some of these forts have been erected). The water for the garrison is obtained from tanks, in which the rain from the buildings is collected. (*Captain Tulloch's Report on W. Africa.*)

The town is situated behind the castle, and presents a dirty and irregular appearance. The native houses have a few small rooms scantily furnished with mats and stools; the fires are made in a corner, with no other escape for smoke than a hole in the roof. There are, however, some superior residences belonging to Europeans, and the merchants have built themselves a neat club-house. The scenery of the neighbourhood has been described by a late distinguished female poet.* "The land view, with its cocoa and palm trees, is very striking — it is like a scene in the Arabian Nights. The native huts I first took for ricks of hay, but those of the better sort are pretty white houses with green blinds. The English gentlemen resident here have very large houses, quite mansions with galleries running round. Generally speaking, the vegetation is so thick that the growth of the shrubs rather resembles a wall. The hills are covered to the top with what we should call calf-weed, but here it is called bush."

The climate of this settlement is characterised by excessive humidity. The heat is, however, not so great as might be supposed. In the hottest weather, owing to the tempering influence of the sea breeze, the thermometer seldom rises above 86° Fahr., and rarely, in the coldest, falls below 76°. It has generally been described as exceedingly unhealthy, and the official statements show that such is the fact. During the four years ending with 1826, *two thirds* of the white troops in garrison died annually; and in 1824 the mortality was in the enormous ratio of 982·2 in 1,000! It is true that these were singularly unhealthy seasons, and that the vice and intemperance prevalent among the troops added considerably to their sickness and mortality. But still, to use Captain Tulloch's words, "there is unquestionable evidence that in every year, and to all classes of Europeans, the climate proves *extremely fatal*."

The imports consist of cottons, hardware, gunpowder, &c. from Great Britain; sugar, rum, and tobacco from the colonies; and of foreign produce, beads, silks, tobacco, &c. The exports are gold dust, ivory, palm-oil, pepper, cam or dye-wood, tortoise-shell, maize, &c. But the value of the trade is inconsiderable; and is but a miserable compensation for the waste of life occasioned by the keeping up of this and the other settlements on this coast. (*Tulloch, ubi suprà; Alexander's Colonies of W. Africa*, i. 146—175.)

* Mrs. Maclean, better known as L. E. L., whose melancholy death at this place, in 1837, has given an interest to it which it did not previously possess.

COBLENTZ (the *Confluentes* of the Romans), a town of the Prussian states, prov. Rhine, cap. reg. and circ., in a beautiful situation on the point of land at the confluence of the Rhine and Moselle. It has a freestone bridge across the latter, and one of boats across the Rhine. Pop. (ex. garr.) 13,700. The streets are mostly regular, and many of the public buildings are handsome; but, being a fortress, Coblentz has derived but little advantage from its fine situation for commerce: many of its thoroughfares are mean and filthy, and the pop. are poor and depressed. (*Chambers's Holland, &c.*, p. 55.) The principal public building is the magnificent castle erected in 1779 for the elector of Treves. It was converted into barracks by the French; but has since been repaired, and is now used for the holding of the civil and criminal courts. Coblentz has a court of appeal for the regency, a theatre, a gymnasium or college for Catholics, and some other literary establishments. Commerce pretty extensive. Prince Metternich, prime minister of Austria, is a native of Coblentz.

Within these few years Coblentz has been rendered one of the strongest places in the Prussian monarchy, and is deemed one of the principal bulwarks of Germany on the side of France. The fortifications by which it is surrounded are constructed partly on the system of Vauban, and partly on that of Montalembert. They enclose a large extent of ground, and are capable of accommodating 100,000 men. Ehrenbreitstein, on the opposite side of the river, the fortifications of which had been blown up by the French, has been rendered stronger than ever, and is one of the principal outworks of Coblentz.

COBURG, or more properly SAXE-COBURG-GOTHA, a duchy of Central Germany, and the most S. of the indep. Saxon principalities, consisting of several small detached portions of territory, between lat. 50° 7′ 30″ and 51° 22′ N., and long. 10° 15′ and 12° 40′ E., surrounded mostly by the territories of Bavaria, Prussia, Saxony, Meiningen, Hildburghausen, Weimar, &c. The area and pop. of its two great divisions are:—

	Area in sq. m.	Pop. 1837.	Chief Towns.
Saxe-Coburg -	201	41,000	Coburg.
Gotha - -	596	96,600	Gotha; Waltershausen.
Total -	797	137,600	

Coburg Proper is on the S. side of the Thüringer Wald (Thuringian Forest), and is included within the basin of the Rhine, having a general slope to the S.; Gotha, Altenburg, &c. are situated wholly on the N. side of the Thüringer Wald, and belong to the basins of the Elbe and Weser. The most mountainous parts of the country are the N. of Coburg and the S. of Gotha; through these the Thuringian forest-range passes, the highest summits of which, — the Beerburg, 3,266 ft., and the Schneekopf (snow-cap), 3,243 ft. in elevation, — are in the latter principality. Both divisions are, however, interspersed with fine valleys and fertile plains: Gotha is watered by the Unstrut, Gera, Hörsel, Saale, &c., and Coburg by the Itz, a tributary of the Mayn, and other rivers. Climate healthy and mild, especially S. of the mountains. The principal occupations of the people are tillage and cattle breeding; but the mountains, which are covered with pine forests, contain little cultivable land, and the forest economy there forms the chief branch of industry. In the valley of the Its, the vine is cultivated, and hops, flax, and hemp, are also grown in the S.: the other agricultural products are corn, pulse, culinary vegetables, fruits, aniseed, coriander, cummin, safflower, and other medicinal plants: potatoes are a principal article of nourishment. Many hogs are fattened in the woods and sent down the Mayn to Frankfurt and elsewhere: considerable quantities of timber, pitch, tar, charcoal, and potash are obtained from the forests. Iron, coal, excellent millstones, marble, alabaster, gypsum, potters' clay, and salt are mined or quarried. Agriculture flourishes most in Coburg, manufacturing industry in Gotha. The principal manufactures are those of linen cloth, tick, linen thread,

woollen and cotton fabrics, leather, steel, iron, and copper wares, glass, earthenware, buttons, paper, &c. There are also numerous sawing-mills, linen-bleaching factories, breweries, and distilleries; and great numbers of toys are made at Neustadt in Coburg. A good deal of advantage accrues from the transit trade, the duchy being on the road between Leipzig and Frankfurt. Gotha is the principal trading town, and has several considerable mercantile establishments. The government is a constitutional monarchy; each of the principalities has its own elective assembly, and the two unite into one chamber, composed of 17 members, 6 of whom are deputies of the nobility, 5 sent by the 3 superior towns, and the remainder represent the inferior towns and country districts. No new tax can be imposed without their consent, and they interfere to regulate the judicial and civil administration of the duchy, to fix the number of the standing army, which, at present, consists of 1,366 men, &c. The qualification to vote for a deputy of the nobles is constituted by the possession of a seigneurial estate; for deputies of towns, every citizen who has not been a public offender, or a bankrupt, has a right to vote: in the country districts, the householders form the constituency. The deputies must be 30 years of age, and those for the towns and villages must have either an estate, free from incumbrance, worth 5,000 florins, or an annual income of 400 florins. The ministry is composed of one minister of state and three privy-councillors. In the year ending July 1837, the public revenue amounted to 215,678 doll., the expenditure to 206,311 doll., and the public debt to 850,000 doll.; the interest on which was 43,000 doll. Next to the superior court of appeal, the principal tribunals are a college of justice in each of the chief towns, and police, military, financial, &c. courts at Coburg and Gotha. There are 3 gymnasiums and classical schools, 1 academical gymnasium, 2 seminaries for schoolmasters, 35 town schools, and 300 village schools in the duchy. The ducal house, and nearly all the pop., profess the Lutheran religion, there being only about 2,000 Roman Catholics and 1,000 Jews. Difference of religion, however, does not affect the equal enjoyment of political rights. The duke of Saxe-Coburg-Gotha holds the 12th place in the German diet; and the duchy is bound to furnish a contingent of 800 men for the service of the confederation. Coburg belonged successively to the counts of Henneberg, the house of Saxony, and that of Saalfield. In 1816, its territories were enlarged by the cession of the principality of Lichtenberg, on the left bank of the Rhine; but the reigning duke has, within these few years, disposed of that possession to Prussia. In consequence of the extinction of the line of Gotha in 1826, the duke of Saxe-Coburg became possessed of the territories of Gotha and Altenburg; for which, by a family compact, Saalfield was exchanged. The present duke, Ernest, born in 1784, succeeded his father in the sovereignty of Coburg-Saalfield in 1806. He married the daughter of the duke of Gotha-Altenburg, who died in 1832; by whom he had two sons, Ernest, the present heir-apparent to the duchy; and Albert, consort of Victoria, queen of Great Britain. The house of Saxe-Coburg is indisputably the most fortunate of all the existing great families of Europe in respect to marriages: one brother of the reigning duke, Leopold, married, first the heiress to the British throne, next a daughter of the king of the French, and is now seated on the throne of Belgium, after having refused that of Greece! Another brother, Ferdinand, married one of the richest heiresses of the Austrian empire; and his son is now king consort of Portugal. One sister married the grand duke Constantine, heir presumptive to all the Russias: another sister is the duchess of Kent; and, as already seen, the duke's second son, Albert, has become the husband of the sovereign of these realms! (*Almanac de Gotha; Berghaus; Cannabich; Ritter; Hawkins's Germany.*)

Coburg, a town of Central Germany, cap. of the above duchy, on the left bank of the Itz, 106 m. E. by N. Frankfort-on-the-Mayn, and 130 m. S.W. Dresden; lat. 50° 15′ 18″ N., long. 10° 58′ E. Pop. (1846) 10,092. Its streets are mostly narrow and uneven; but it is surrounded by some agreeable public walks, which separate it from its suburbs, and has several handsome public buildings. The Ehrenberg palace, built in 1549, contains a collection of pictures, a library of 26,000 vols., and some apartments adorned with figures in *alto-relievo*, the finest of which is a state banqueting-room, called the *Salle-de-Géans*, from some colossal *caryatides* which surround it. On an eminence commanding the town stands an ancient castle of the dukes of Coburg, now in part converted into a prison and house of correction; but containing also a collection of armour, and some rooms once occupied by Luther, with the bedstead on which he slept, his pulpit, &c. This castle was unsuccessfully besieged during the 30 years' war by Wallenstein, who had for some time his head quarters here. Coburg contains five churches, a government house, a gymnasium, with an observatory, and two libraries, a superior ladies' school, a teachers' seminary, a large workhouse, and other charitable institutions, and a riding-school. The principal places of amusement are the theatre, casino, redoute, and musical club. It is the seat of gov., and of the high board of taxation for the duchy, and of the superior judicial courts and church consistory for the princip. of Coburg. It has manufactures of woollen, linen, and cotton fabrics, porcelain, earthenware, and gold and silver articles; with bleaching and dye-works, breweries, &c. "The court, and the whole of the duke's establishment, are maintained very handsomely," and the duke himself has been long noted for his hospitality towards the English. His fine seat, Rosenau, is in the immediate neighbourhood. (*Murray's Handbook; Berghaus; Cannabich, &c.*)

COCHIN, a small rajahship of Hindostan, near its S. extremity, extending along the Malabar coast, chiefly between lat. 9° 30′ and 10° 30′ N., and long. 76° and 77° E.; having N. and E. the territory of the Madras presidency, S. Travancore, and W. the ocean: average length and breadth about 45 m. each; area, 1,988 sq. m. Its E. boundary is formed by the W. Ghauts, which are here covered with forests of teak and *viti* (a black wood), of large dimensions, which obliges both to be cut into short logs, in order to reach the coast; with poon, jack, and iron woods, &c. Towards Cacadu the hills are covered with grass instead of trees; but though their soil appears good, they are but little cultivated: in the N. there are narrow and well-watered valleys, in which rice is raised, and sometimes two crops a year are reaped. The houses of the cultivators are often embosomed in groves of palms, mangoes, jacks, and plantains. A considerable portion of the rajah's revenue is derived from the teak forests; the timber of Cochin being in great demand in Bengal, and since 1814, having been sent to the dockyards of Bombay, from which, previously to that period, it was excluded. There are many villages inhabited by Christians and Jews; the latter are settled mostly in the interior, but have a synagogue at Cochin town. This country was for a long period badly governed, and its inhab. much oppressed. The rajah was tributary to Tippoo Saib, and since his fall has been tributary to the British; the subsidy now paid amounts to 27,600*l.* per an. (*Hamilton's E. I. Gaz.*, i. 422-24.; *Reports on E. I. Affairs, &c.; Journal of Asiat. Soc.*, ii. 332.)

Cochin (*Cach'hi, a morass*), a marit. town of Hindostan, prov. Malabar, on a small island near the S. extremity of India; formerly cap. of the above rajahship, but since 1796 it has belonged to the British. Next to Bombay, it is the most eligible port on the Malabar coast; it is 150 m. N.W. Cape Comorin, 80 m. S.S.E. Calicut: lat. 9° 51′ N., long. 76° 17′ E.; and is built on the N. extremity of the island, along the entrance from the sea to the "Backwater;" an inl. harbour or lagoon, which extends nearly 120 m., being separated from the sea by a narrow peninsulated tract. Under the Portuguese and Dutch, by whom it was successively possessed, Cochin was a flourishing town; but since it has belonged to the English, who in 1806 demolished the fortifications and many of the buildings, it has progressively declined, and the inhab. are now very much impoverished; it still, however, trades with the rest of the Malabar coast, China, the E. Archipelago, and the Arabian and Persian gulphs. Large supplies of teak floated by the rivers from the forests into the Backwater, are shipped for the ports of the two last-named countries; the other exports are sandal wood, pepper, cardamoms, cocoa-nuts, coir, cordage, cassia, and fish-maws. It is the only place on the coast S. of Bombay where ships of any size can be built; but here some ships of 1,000 tons, many of from 500 to 800 tons for the E. I. C. service, and 3 frigates for the British navy, have been built. Under the walls of the old fort there is always from 25 to 30 ft. water, and ships obtain supplies of fresh water without difficulty. Provisions are extremely cheap, and as a port, as well as a place of trade, it is said to be much superior to Calicut. Jews of both the black and white *castes* are numerous, and have a synagogue in Cochin, almost the only one in India. Cochin is also the see of a Roman Catholic bishop, whose diocese includes Ceylon, and comprises more than 100 churches. Here in 1503 Albuquerque erected the first fortress possessed by the Portuguese in India. (*Hamilton's E. I. Gaz.*, i. 424, 425.; *Journ. of the Asiat. Soc.*, ii. pp. 124. &c.)

COCHIN-CHINA, a prov. of the empire of Anam, which see.

COCKERMOUTH, a market-town and parl. bor. of England, co. Cumberland, at the confluence of the Cocker and Derwent, 24 m. S.W. Carlisle, and 12 m. N.E. Whitehaven. The town had, in 1841, 4,940 inhab.; but four entire townships and part of another have been added to the parl. bor., which had, in 1841, a pop. of 6,420. "Cockermouth has but few houses of a better sort, and little seems to have been done towards its improvement. The streets are narrow in many places, with a want of foot-pavement every where; and though the lower orders of people seem to be better off than in many other towns which we have

visited, yet there appears, generally, to be very little about the place tending to improvement." (*Boundary Report.*) There are bridges over both rivers; that over the Derwent being 270 ft. long. Though unpaved, the streets are clean, and well supplied with water. A castle on a hill over the town, built shortly after the Conquest, was taken and razed by the parl. forces in the war of 1641. The church of All Saints, erected in the time of Edward III., was rebuilt in 1711, and enlarged in 1825. The Independents, Methodists, and Society of Friends, have places of worship. It has a free grammar-school, and some almshouses. The moot-hall, where the municipal business is transacted, was lately rebuilt in the market-place; there is also a small house of correction. The borough returned 2 mem. to the H. of C. in 23 Edward I., after which the privilege was not exercised till 16 Charles I., since which it has been uninterruptedly enjoyed. Previously to the Reform Act, the franchise was exclusively vested in the holders of burgage tenures in the town of Cockermouth. The boundaries of the parl. bor. were then extended as noticed above. Registered electors in 1849-50, 332. It is also a polling-place at elections for mem. for the W. div. of the co. In 1839, it had 5 flax and 3 woollen mills, employing together 222 hands; with tanneries, and some trade in hat-making, cotton weaving, &c. There are several corn-mills in the neighbourhood, and collieries at Greysouthern and Broughton, about 3 m. distant. Markets are held on Monday; and for butcher's meat and vegetables on Saturday.

CODOGNO, a town of Austrian Italy, deleg. Lodi, cap. distr., in a fertile territory, between the Po and Adda, 15 m. S. E. Lodi. Pop. 8,000. It has broad streets and good private buildings, some handsome churches, several colleges and schools, with an hospital, theatre, barracks, &c. It is a place of considerable trade, especially in Parmesan cheese, and has some silk manufactures. Near this town the Austrian troops were defeated, in 1746, by the Spaniards, and in 1796 by the French. (*Rampoldi; Oesterr. Nat. Encyc.*)

COGGESHALL, a town and par. of England, co. Essex, hund. Lexden, the town being on a hill on the N.E. bank of the Blackwater, 10 m. W. Colchester. Area of par., 2,770 acres. Pop. of do. (1841), 3,408. The town is ill-built; and the clothing trade, particularly the manufacture of baize, formerly carried on, has almost wholly disappeared; but some branches of the silk manufacture have been introduced; and a few of the inhab. are engaged in the making of toys. The church, a spacious structure, in the perpendicular style, has a large square tower. The river is here crossed by an ancient bridge of three arches. It has an endowed school, three unendowed almshouses; and an annuity of 150*l.* a year, payable by Pembroke Hall, Cambridge, goes to the support and education of the poor. The Cistertian monks had an abbey here, a portion of the nuns of which still remains.

COGNAC, a town and river port of France, dép. Charente, cap. arrond., on the navigable river Charente, 22 m. W. by N. Angoulême. Pop. 3,830. It is ill-built, and contains no edifice worthy of notice, except an ancient castle, now converted into warehouses. The brandy, for the shipment of which this town is so celebrated, and which is everywhere known by its name, is made from a very secondary white wine, *dénué d'agrément, mais très-spiriteux.* (*Jullien*, 165.) The brandy made from red wine is very inferior. In good years wine yields about 1-5th part of its volume of *eau-de-vie*, whereas in bad years it does not yield more than from 1-9th to 1-11th part. All the brandy of Charente is sold under the name of Cognac; but the best qualities are produced in the canton of that name, and in those of Blanzac, Jarnac, Rouillac, Aigre, and Ruffec. The park belonging to the castle is an agreeable public promenade, and in it is a bronze statue of Francis I., erected on the spot where he was born, in 1494. Three councils have been held in Cognac.

COIMBATOOR, a British prov. of S. Hindostan, presid. Madras, between lat. 10° 8′ and 12° 48′ N., and long. 76° 50′ and 78° 10′ E., having N. the Mysore dom., E. the provs. Salem and Carnatic, S. the latter, and W. Cochin and Malabar: area, 8,392 sq. m. Pop. (1836-37) 807,964. Generally it is a flat open country, with a medium height of 900 ft. above the sea; its surface gradually ascending from the Cavery on the E. to the Ghauts and Neilgherry hills on its W. borders. The W. Ghauts rise from 1,500 to 2,000 ft. above the Coimbatoor plain, and have in one place a remarkable opening about 31 m. in length called the Palighautcherry Pass, presenting a clear level way from the Malabar to the Coromandel coast. Next to the Cavery, the principal rivers are the Bowany, Noyel, and Amberawatty, all which run more or less E., and join the Cavery before it leaves the distr. Climate on the whole healthy and pleasant; and except in that part facing the Palighautcherry Pass, this prov. is protected by the Ghauts from the violence of the S.W. monsoon. There are some marshes in the S. and in the vicinity of the hills; but the soil in general is dry, and well adapted for the *dry* grain culture, to which nearly ten times as much land is appropriated as is occupied by *wet*, and twenty times as much as is occupied by *well*, cultivation. In 1836-37, there were 3,289,327 acres of land fit for cultivation, about two-thirds of which were under the plough. In the N. rice is the chief crop; cotton of several kinds is grown in considerable quantities both above and below the Ghauts, and almost all the tobacco that supplies Malabar comes from this distr. There are altogether about 579,700 acres of pasture land; cattle and sheep numerous. The land rev., collected under the ryotwarry system, amounted in 1836-37 to 2,084,913 rupees. Chief mineral products salt and nitre, which are occasionally obtained from certain earths impregnated with muriates and nitrates abundantly scattered throughout the distr. In 1818, an aqua-marine mine was opened and worked. Weaving is the only art that has attained any perfection. Some of the towns are large and well built; but, excepting in these, mud cottages with red tiled or thatched roofs are almost the only houses. The peasantry, however, are contented, and enjoy comparative comfort. Pagodas or temples are not numerous; and excepting that of Peowra, a little W. of the cap., which contains some well-carved granite figures, they have little notoriety. The areas in front of most of them are ornamented with gigantic groups in pottery covered with chunam of caparisoned horses, elephants, and grotesque figures. Near the Ghauts the ox is adored, and every village possesses one or two bulls, to which weekly or monthly worship is paid. (*Hamilton.*) This prov. became subject to the Mysore rajahs nearly 200 years ago, and to the British in 1799. It was greatly depopulated by an epidemic fever, which prevailed from 1809 to 1811. (*Hamilton's E. I. Gaz.*, i. 431, 432.; *Madras Almanack*, 1838; *Parl. Reports, &c.*)

COIMBATOOR, an inl. town of S. Hindostan, cap. of the above distr. and seat of a collector of revenue under the Madras presid., in an elevated situation on the N. bank of one of the affluents of the Cavery, 90 m. S.S.E. Mysore, and 270 m. S.W. Madras; lat. 10° 52′ N., long. 77° 5′ E. It is tolerably well built, and has a mosque erected by Tippoo, who sometimes resided here. The water is brackish, and 2 m. off both salt and nitre are procured by lixiviating the soil. Five m. to the N. iron is smelted from black sand. Peowra, not far distant, has a temple dedicated to Siva, highly ornamented with Hindoo figures, but destitute of elegance, which was spared by Tippoo when he demolished most other idolatrous buildings. In 1783 and 1790 Coimbatoor was taken by the British, to whom it has permanently belonged since 1799. (*Hamilton's E. I. Gaz.*, i. 433.)

COIMBRA, a city of Portugal, prov. Beyra, cap. distr., and see of a bishop, partly on a steep rocky precipice, and partly on a plain contiguous to the Mondego, 115 m. N.N.E. Lisbon; lat. 40° 12′ 30″ N., long. 8° 26′ W. Pop. in 1820, according to Balbi, 15,210; but now supposed to be about 20,000. It was fortified at a very early period, and has undergone many sieges. The ancient walls and towers still remain, and form its only defence. It has an imposing appearance when seen at a distance, the summits of the adjoining heights being crowned with convents and public buildings; but the interior of the town by no means corresponds with the exterior view, the streets being narrow, steep, crooked, and dirty. The principal public building is the university, the only one in Portugal, transferred thither from Lisbon in 1308. It consists of 18 colleges, and is divided into 6 faculties; viz. those of theology, the canon law, civil law, medicine, natural philosophy, and mathematics. It has also attached to it grammar-schools, with schools of philosophy and rhetoric, ecclesiastical and civil colleges or seminaries, and a royal college of arts, at which those who intend entering at the university complete their preliminary studies. Different degrees are taken in the respective faculties, the student applying himself principally to the particular branch most connected with his intended profession, which, as Lord Caernarvon surmises, is probably an improvement upon the English system of college education, where the same degree is taken by all, without reference to the nature of their future occupations. (*Portugal and Galicia*, i. 42.) The collection of subjects of natural history is tolerably good, the observatory complete, and the instruments in perfect order, the greater part having been made in London and Paris. (*Ibid.*) The present system of education was introduced by the Marquis Pombal, in 1773; it is, however, indebted, for various improvements in the course of study, to Englishmen, who have been instructors; but, with all this, it is still very far behind; and many important branches of knowledge are either not taught at all, or are taught in the worst possible manner. The university is extremely well endowed; and the inferior class of nobles are sometimes competitors for the vacant chairs. The annual expenses of the students do not exceed 50*l.* each, any excess being defrayed from the revenues of the institution. The library consists of three large saloons, containing about 30,000 vols., but they are nearly all of ancient date. The

College of Arts, which formerly belonged to the Jesuits, is a remarkably handsome building. The monastery of Santa Cruz, an immense Gothic building in the worst taste, belongs to the order of Augustines, who, in addition to numerous important privileges, enjoy the right of appointing their prior to the office of chancellor of the university. The monks are, for the most part, of noble descent and polished manners, and are often seen mounted on fine horses splendidly caparisoned, being forbidden by the regulations of the monastery to appear on foot beyond its walls. (*Lord Caernarvon*, i. 43.) On a hill opposite to the town is the superb convent and church of the nuns of St. Clara. Besides these public buildings, there are the cathedral, and eight churches, five of which are collegiate, with several other convents, hospitals, &c. There is a fine stone bridge over the Mondego, whose bed, which is progressively rising, is nearly dry in the summer, while in the winter it becomes an impetuous torrent, and overflows the surrounding country. The town is well supplied with water, conveyed to it by an aqueduct. Near Coimbra, on the S. bank of the river, is the *Quinta das Lagrimas*, or Villa of Tears, the residence of the beautiful Inez de Castro, whose murder forms the subject of the fine episode in the third book of the *Lusiad*. Earthenware of good quality is produced here, with woollen and linen cloths, combs, &c.

Coimbra is said to occupy the site of *Conimbrica*, founded by the Romans 300 years B. C. It suffered severely by the earthquake of 1755, and was a scene of great distress in 1810, when the Duke of Wellington retreated on the lines of Torres Vedras. (*Miñano; Lord Caernarvon's Portugal and Galicia; Balbi, Essai Statistique sur le Portugal*, ii. 37. 201.)

COLABBA, an island on the Malabar or W. coast of Hindostan immediately S. the Island of Bombay, with which it is connected by a causeway, and on which a fine lighthouse and cantonments for the British troops have been erected. (*See* BOMBAY.)

COLAPOOR, a small rajahship of Hindostan, prov. Bejapoor, partly above and partly below the W. Ghauts, including the towns of Colapoor, Parnellab, Mulcapoor, and Culgong. The rajah is descended from the eldest branch of the family of Sevajee, the founder of the Mahratta empire. He formerly possessed Malwan, and some other ports on the Malabar coast; but his subjects being notorious for piracy, the British compelled him to cede these places in 1812; and in 1829 assumed the government of the country.

COLAPOOR, an inl. town of Hindostan, cap. of the preceding distr., in a valley surrounded on three sides by hills; 125 m. S.S.E. Poonah; lat. 16° 19′ N., long. 74° 25′ E. It has a citadel; but its chief protection is in two hill forts in the vicinity: the town is neatly built, and contains some lofty trees, gardens, and good tanks. (*Hamilton's E. I. Gaz.*, i. 434-36.)

COLBERG, a fortified sea-port town of the Prussian dominions, reg. Coslin in Pomerania, on the Persante, near where it falls into the Baltic, lat. 54° 7′ N., long. 15° 37′ 15″ E. Pop. 7,320. Principal public buildings, cathedral, town-house, and the aqueduct for supplying the town with water. There is in the ancient ducal castle a foundation for the daughters of nobles and burgesses. It has a gymnasium, a house of correction, &c., and some manufactures; but its salmon and lamprey fisheries, and its shipping, are the principal sources of its wealth. There are salt springs in the vicinity; but, owing to the want of coal and timber, they are of comparatively little use.

COLCHESTER, a parl. bor. and river port of England, co. Essex, div. Colchester, hund. Leyden, on the declivity of a hill rising from the Colne, which cuts off a small suburb, and on the line of the Eastern Counties Railway, 50 m. N. E. by E. London. Pop. of town and liberties, 1821, 14,016; 1841, 17,790. It is well built, has several good streets, is paved, lighted with gas, and adequately supplied with water. Great improvements in its interior have been effected, and are still going on; but the only important extension that has taken place of late years, is along the London-road, where many valuable detached residences have been built. There are 3 bridges over the river. A part of the remains of the ancient castle, said to have been founded by Edward the Elder, is occasionally used as a prison. There are 8 parish churches: St. Peter's, built previously to the Conquest, has been modernised and enlarged; St. James's dates previously to Edward II., and is a handsome structure; St. Leonard's is also large and convenient: besides these, there are a French and a Dutch Protestant church, and 7 dissenting chapels. The remains of the church of St. Botolph's priory, founded in the early part of the 12th century, are said to afford some of the finest specimens of Norman architecture in the kingdom.

Colchester has a free grammar school, founded in the 26th of Elizabeth, with one scholarship in St. John's college, Cambridge, annexed to it; 2 others, in the same college, revert to this school on failure of applicants of the surname of Gilbert (that of founder) or Torbington; and 4 founded in Pembroke college, Cambridge, on failure of any boys being sent from the Ipswich grammar school. It educates from 30 to 40 scholars; 2 charity schools, founded in 1708, have been joined to the National school, in which about 400 boys are educated, of whom 148 are clothed by the charity: a Lancastrian school, and an endowed school founded in 1816, for children of Quakers, with a library attached to it. The principal charitable institutions are, an hospital, founded by James I.; several almshouses; and the Essex and Colchester Hospital, built in 1820. A commodious theatre was erected in 1812; and there are literary and philosophical, medical, botanical, and musical socie ies, all in a flourishing state. Market-days, Wednesdays and Saturdays: the latter a large corn market; but general provisions are on sale daily in the large and commodious market-place. There are large annual cattle fairs on the 5th and 6th of July, 23d and 24th of the same month, and 20th Oct. and 3 following days.

Colchester is a bonding port, but the foreign imports are comparatively insignificant; they consist chiefly of wine, oil-cake from Holland, and timber from the Baltic. The trade coastwise is more extensive, the imports being chiefly colonial produce, and home manufactures, from London; with coals, &c. from the northern counties: the exports, corn and malt. The river is navigable for vessels of 150 tons to "The Hythe," a little below the town, where there is a custom-house and commodious quay, warehouses, and bonding, coal, and timber yards; larger vessels (chiefly colliers) discharge at Wivenhoe, still lower down, into lighters. In 1850, there belonged to the port, or rather river, 242 vessels; but of these no fewer than 191 were under 50 tons burden; and their aggregate tonnage and that of the 51 vessels of above 50 tons, amounted to only 9,710 tons. Gross customs' revenue in 1846, 14,220*l*. The oyster fishery of the river has been long celebrated, and was granted to the burgesses by Richard I.; it employs a considerable number of the inhab., and a large proportion of the small craft belonging to the town. There is a large distillery at Hythe. A silk manufactory in the town, established a few years since, employs between 300 and 400 hands, chiefly females. The weaving of baize (introduced by the Flemings in the reign of Elizabeth) used formerly to be carried on to some extent, but has wholly ceased. At present, the prosperity of the town mainly depends on its retail trade, by which an extensive agricultural district is supplied. During the last war a large military establishment was stationed here, the withdrawal of which caused some deterioration, but at present it is thriving. Under the Municipal Act its boundaries are contracted to an area of about 2,000 acres immediately round the town; and it is divided into 2 wards, and governed by a mayor, 6 aldermen, and 18 councillors. Bor. revenue in 1847, 3,727*l*.

Colchester has (with some interruption) returned 2 mem. to the H. of C. from the 23d of Edward I. Previously to the Reform Act the right of election was vested in the free burgesses not receiving alms. The parl. bor. (co-extensive with the ancient liberties) extends over a space of 11,770 acres, divided by the Colne into two nearly equal parts. Number of houses worth 10*l*. and upwards, in 1831, 1,200; registered electors, 1849-50, 1,250. The different parishes form a poor-law union, the expenditure of which in 1847 was 9,346*l*. Ann. val. of real prop. in 1843, 60,313*l*.

Colchester has claims to high antiquity, and is supposed by some to have been the *Camulodunum* of the Roman period, though this has been disputed; there is, however, no place in the kingdom where more numerous Roman remains have been discovered. It had many monastic institutions previously to the Reformation; of these, St. John's Abbey, of which the noble gateway is the sole relic, was the chief.

Colchester was made the seat of a suffragan bishop in the 26th Henry VIII. There were 2 consecrations only, the first in 1536, the other in 1592; on the death of the last diocesan, in 1607, no successor was nominated. In 1648 the town was held by insurrectionary royalists, and endured a siege, by Fairfax, of 11 weeks, when it was starved into surrender, and the leaders hung: half the fine subsequently levied appears to have been paid by Dutch refugees, who had escaped from the Duke of Alva's persecution. It gives the title of baron to the Abbot family. (*Hist. and Descrip. of Colchester*, 2 vols. 8vo. Colchester; *Wright's Hist. Essex*, i.; *Rep. of Municipal and Boundary Commissioners.*)

COLDSTREAM, one of the border towns of Scotland, co. Berwick, on the Tweed, 14 m. S.W. Berwick-upon-Tweed. Pop. 2,857. Formerly the communication between England and Scotland was here effected by a ford, by which Edw. I. entered the latter with a powerful army in 1296; and it continued to be the chief passage for the Scottish and English armies till the union of the crown in 1603. It was by this ford, also, that the Covenanters

entered England in 1640. A bridge of five arches now spans the river, forming one of the greatest thoroughfares between the two kingdoms. It is irregularly built, and quite Scotch in its appearance, and in every other respect, though in the immediate vicinity of England. It has a weekly corn-market, and a monthly sheep and cattle market, both of considerable importance. A considerable number of the inhab. are supposed to depend principally on the smuggling of Scotch whiskey into England; the difference of duty in favour of Scotland being 3*s*. 8*d*. per gallon. Poaching, both of game and salmon in the river, is very common. The Tweed fishery at Coldstream lets for 100*l*. a year. There is a par. church and 2 Presbyterian dissenting chapels, 3 subscription libraries, and four friendly societies. The means of education are good. General Monck resided at Coldstream in 1659-60, previously to his going to England and effecting the Restoration. During his stay here, he raised a horse regiment, to which he gave the name of the "Coldstream Guards," which name the regiment still retains. This town enjoys a share of that matrimonial trade for which Gretna Green has been so long famous.

COLERAINE, a marit. town and parl. bor. of Ireland, prov. Ulster, co. Londonderry, on the Lower Bann, 4 m. from its mouth, and 47 m. N.N.W. Belfast. Pop., 1821, 4,851; in 1841, 6,143. Pop. of par. in 1834, 6,143, of whom 1,441 were of the estab. church, 3,825 Prot. diss., and 877 Rom. Cath. It was built and fortified by the Irish Society of London, to whom the district was granted by James I., in 1613. The town consists of a square, called the Diamond, a main street, and several others, in which are many well-built houses. A wooden bridge, constructed in 1716, and renovated in 1743, connects it with the suburb of Killowen or Waterside, on the W. bank of the Bann. The par. church is a large plain building. The Rom. Cath. chapel, an elegant structure, is in Killowen. The other places of worship are, two for presbyterians, and one each for Methodists, Independents, and Seceders. "The town is improving and increasing; house rent is not high, but very steady. Vessels of 200 tons may come up close to the bridge, and discharge their cargoes at the quay. Trade is considerably improved, owing, it is said, to the improvement of the harbour at Port Rush. (*See below.*) The manufactures in the town and immediate neighbourhood are trifling; a few paper-mills and some small tanneries. The tenures of houses are leases of lives, renewable for ever, paying a septennial fine of one year's rent, but nothing at the fall of a life, and leases of 61 years. Originaly there were walls surrounding the town, but these are obliterated." (*Boundary Report.*)

It has an endowed school built by the Irish Society; a town-hall, in which the municipal business is transacted; and apartments are provided for a library, a news-room, and savings' bank, with a dispensary, loan fund, and a mendicity association. The corporation, consisting of a mayor, 12 aldermen, 24 burgesses, and an unlimited number of freemen, is become extinct; and its property is now vested in commissioners. Its jurisdiction extended over the town and liberties, the limits of which were fixed by the charter at 3 m. in every direction from the centre of the town. The town returned 2 mems. to the Irish H. of C. until the Union, since which it has sent 1 mem. to the Imperial H. of C.

The Boundary Act prescribed a new limit for the parl. bor., including the town land called Coleraine, and suburbs on the E. side of the river, and about an equal space on the W. side. Registered electors (1849 50) 994. The corporation held a court of record for pleas to any amount. General sessions for the co. are held in April and Oct.; petty sessions on alternate Thursdays.

There are numerous bleach-greens in the neighbourhood. The salmon and eel fisheries on the Bann, in the vicinity of the town, are very valuable. The former is let at 750*l*. a year, and its produce, which amounted in 1836, to 75 tons, is sent, packed in ice, to Liverpool. The eel-fishery lets for about 1,200*l*. a year. The principal trade is in the export of corn and meal, provisions, including pork, linens of a fine kind, called "Coleraines," &c. The total value of the exports, in 1836, was estimated at 105,685*l*. The gross customs' revenue, in 1846, amounted to 4,857*l*. The post-office revenue, in 1842, was 715*l*., and in 1848, 1,026*l*. Branches of the Provincial, Belfast, and Northern Banks, were opened in 1827, 1834, and 1836. The trade of the town was much impeded by the bar at the mouth of the river, which had but 9 ft. water over it at springs, and 5 at neaps; but this defect has been, in a great degree, obviated by the formation of a harbour, already alluded to, at Port Rush, 4 m. N.E. from the mouth of the Bann, in which vessels drawing 17 ft. water may anchor, being sheltered by a projecting rock from the swell of the ocean. The outlay on this harbour has amounted, in all, to about 13,000*l*.; and it now affords great facilities to the trade of Coleraine, and of the district. (See *Boundary Report, Railway Report, &c.*)

COLESHILL, a town and par. of England, co. Warwick, Birmingham div., hund. Hemlingham. Area of par, 6,200 acres. Pop. (1841) 2,172. The town derives its name from its being situated on a hill, near the Cole, 7 m. E. Birmingham. It has a handsome Gothic church with a lofty spire, several good houses, and a school supported out of lands purchased by the inhab. after the dissolution of the monasteries.

COLLUMPTON, a town and par. of England, co. Devon, hund. Hayridge, 12 m. N.E. Exeter. Area of par., 5,790 acres. Pop., 1821, 3,410; 1841, 3,909. The town is situated in an extensive vale beside the Culm, a tributary of the Exe, and consists of one large street, along the road from Exeter to Bath, and of several smaller streets diverging from it on either side; many of the houses are ancient, and some of them favourable specimens of their day. The church, originally collegiate, is a spacious structure, in the later pointed style, with a lofty and highly ornamented tower, and a beautiful chapel attached. There are 7 dissenting chapels; a national school, in which above 200 boys and girls are educated; with other schools, and several extensive charities. Market, Saturdays; fairs, first Wednesdays in May and Nov., for cattle and cloth. There is a woollen mill; and the manufacture of narrow woollen cloths and serges employs a considerable portion of the pop., though the business be much declined. There is also, in the immediate vicinity, a paper-mill, 2 large flour-mills, and 4 tan-yards. A monthly session for the district is held in the town.

COLMAR (an. *Columbaria* or *Colmaria*), a city of France, dép. Haute Rhin, of which it is the cap., in a fertile plain, on the banks of two tributaries of the Ill, 36 m. N.N.E. Strasbourg, and 234 m. E.S.E. Paris; lat. 48° 4′ 44″ N., long. 7° 22′ 26″ E. Pop. (*ex.com.*) 18,200. It was fortified previously to 1673, when Louis XIV. destroyed its defences, and united it to the dominions of the French crown; it is now surrounded only by *boulevards*, planted with trees and serving for public walks. It is tolerably well built, but contains few public edifices deserving of notice. The principal are the cathedral, built in 1363, the theatre, and prison. The other public buildings and establishments are, the hall of justice, city-hall, prefecture, college, with a public library containing (*Hugo*) 60,000 vols. and several paintings by Albert Durer and others; the deaf and dumb asylum, civil and military hospitals, church of the Dominican convent, now a corn-hall, Protestant church, and museum, containing, amongst other curiosities, a remarkable aërolite, which descended near Ensisheim in 1492, and originally weighed 260 French pounds.

Colmar is environed by pleasant walks, gardens, and country houses; and possesses an orangery and departmental nursery grounds. It is the seat of a royal court, and of tribunals of primary jurisdiction and commerce. It has numerous manufactures of cotton stuffs and printed goods, a large cotton and silk riband factory, besides others of cutlery, paper, brushes, combs, leather, &c.; and an extensive trade in iron, spices, drugs, and wine, which, with its manufactured goods, it exports largely to Switzerland. The *Columbaria* of the Romans is believed to have replaced the more ancient *Argentuaria*. This town was several times destroyed by the barbarians, and in after times suffered greatly during the wars between the houses of Hapsburg and Nassau. The Swedes took it in 1632. (*Hugo, Haut-Rhin, &c.; Dict. du Commerce.*)

COLMENAR DE OREJA, a town of Spain, prov. Toledo, 13 m. E.N.E. Aranjuez. Pop. 6,400. It contains a fine church, two convents, and two hospitals; and is finely situated in a plain productive of wine, oil, and fruit. It has manufactures of woollens, pottery, and Spanish rush: and mill-stones, and fine white stone for building, are found in the vicinity.

COLNE, a market town and chapelry of England, co. Lancaster, hund. Blackburn, par. Whalley, on the Colne, an affluent of the Calder, 26 m. N. Manchester, 15 m. N.E. Blackburn, and 9 m. E. Clitheroe. Area of chapelry, 8,050 acres. Pop. (1821) 7,274; (1841) 8,615. This is a place of great antiquity; but antiquaries are undecided whether it be the *Colunio* of the Romans, or the *Culme* of the Saxons. Many Roman coins have been found here; and Castor Cliff, about 1 m. distant, retains evident traces of a military station, having a regular quadrangular rampart, surrounded by a fosse. The town is situated on an eminence, on a tongue of land formed by the river and the Leeds and Liverpool canal, which passes through a tunnel about 1 m. from the place, and is surrounded by the fine grazing distr. of Craven. It is a brisk second-rate town, and has of late years been greatly improved. It is well supplied with water by pipes from Flass spring, 2 m. E. The parochial chapel of St. Bartholomew, supposed to be coeval with the reign of Hen. I., but repaired in that of Hen. VIII., and more recently in 1815, is equivocally said to be a "spacious and decent building." The Methodists, Baptists, Independents, and Inghamites, have places of worship. A gallery in the first named

of these gave way in 1777, from the pressure of the crowd assembled to hear John Wesley, the founder of the society, preach on its opening; but though many were injured by the accident, no lives were lost. A free grammar-school, rebuilt in 1812 by subscription, on the site of one more ancient, educates 6 boys: Archbishop Tillotson was a pupil in it. The co. magistrates hold sessions here, and a constable for the gov. of the place is chosen annually by the rate-payers. The lord of the manor holds a court baron, and courts leet or halmote are held in May and Oct. This is one of the most ancient seats of the woollen manufacture: a fulling-mill existed in 1311, and about the same period a coal-mine was worked in the vicinity. In addition to the woollen fabrics, shalloons, calamancoes, and tammies were made in considerable quantities; and a piece-hall, on the principle of those at Bradford and Halifax, was erected in 1775. It is a substantial stone building, containing 2 rooms, each 162 ft. by 42 ft. The upper room has been used for nearly 40 years for the sale of woollens during the fairs, and, owing to the decline of the worsted trade, the whole building is now thrown open for the sale of general merchandise on the same occasions. The cotton trade having been introduced towards the close of last century, has nearly superseded the woollen trade, and the pop. is now principally employed in manufacturing cotton goods for the Manchester market. The spinning power is chiefly water supplied in abundance from the streams, steam-engines being used to obviate their occasional failure. The first power-loom was introduced into the distr. in 1832. In 1835 there were 11 steam-engines in the distr., 7 for spinning cotton, 1 for power-looms, and 3 for collieries. The canal already noticed affords a ready mode of conveyance for the coal, slate, lime, and stone raised here. Markets on Wednesday: fairs, March 7., May 13. and 15., Oct. 11., Dec. 21.; also a fair on the last Wednesday of the month for cattle and cloth. (*Baine's Lancashire, &c.*)

COLOGNE, or CÖLN, an ancient and celebrated city of Prussia, formerly the cap. of the electorate of the same name, and now of the Rhine prov., and of a reg. and circ. of the same, on the left bank of the Rhine; lat. 50° 55′ 21″ N., long. 6° 55′ 15″ E. Pop. (1846) 95,202, having increased about a third in the course of the present century. It is connected by a bridge of boats with the town of Deutz, on the opposite side of the river; is built in the form of a crescent, close to the water; and is strongly fortified. The walls have a number of towers *à la Montalembert*, and form a circuit of nearly 7 m.; but a part of the included space is laid out in promenades, gardens, &c. But though finely situated on the banks of a noble river on a slightly elevated ground, Cologne has many wood houses, and is proverbially ill-built and filthy. The best of its streets are inferior to Tooley Street, in London, or to the Cowgate, of Edinburgh. Great antiquity, no improvement, and confinement within walls, have made it what it is. "Stagnating pools, sufficient to produce a direful pestilence, lie unheeded in every thoroughfare beneath the strong glare of the summer sun. The quay, instead of being disposed for wharfs and warehouses, is a strip of road outside the lofty walls, and destitute of any accommodation for traffic; the whole physical condition of the place is, in short, disgraceful." (*Chambers's Holland, &c.* p. 49.) We are surprised that the Prussian government does not interfere to introduce a better state of things; a little vigorous exertion on its part would serve to clean this Augean stable. But notwithstanding its filth, Cologne has in it much to interest the traveller. The cathedral or minster of St. Peter, a vast and imposing but incomplete Gothic edifice, was begun about the year 1248. It is about 400 ft. in length, and the choir rises to the height of 180 ft.: it is now being repaired and renovated at the expense of the king of Prussia. The church of St. Mary is remarkable for its antiquity, and that of St. Peter for the famous altar-piece painted by Rubens. Several of the other churches are also interesting, particularly that of St. Gereon. The town-house is a fine old building. The hall for the courts of justice was erected in 1824. In the arsenal are preserved many curious specimens of ancient armour. Cologne is the seat of an archbishopric, of the provincial authorities, and of the courts of appeal for the province. Its university, established in 1388, was suppressed during the occupation of the country by the French. But at present the city has two gymnasiums or colleges — one for Catholics, to which is attached a very valuable library, and one for Protestants; there is besides an archiepiscopal seminary for the education of clergymen, a normal school, a commercial school, &c.; a public library, with numerous literary institutions, a theatre, &c. Manufactures important; they consist principally of cotton yarn and stuffs, woollen stockings, bonnets, &c.; silks, velvets, tobacco, soap, hats, lace, thread, clocks, &c. There are tan-works and several distilleries, the most esteemed product of the latter being the well known *eau de Cologne*. This city has a very good port on the Rhine, and is the principal entrepôt of the extensive and increasing commerce between the Netherlands and the countries included within the German customs' union. Rubens was born in Cologne in 1577, and several of its churches are ornamented with some of his *chef-d'œuvres*.

Cologne was anciently called *Oppidum Ubiorum*, from its being the chief town of the Ubii, a German tribe. A Roman colony was planted in it by Agrippina, the daughter of Germanicus, who was born in it; hence it obtained the name of *Agrippina Colonia*, and latterly of *Colonia* and Cologne. (*Tacit. Annal.* lib. xii. § 27.; *Cellarii Notit. Orbis Antiqui*, i. p. 327.) In the middle ages, Cologne was much more populous and wealthy than at present. It was for a lengthened period one of the most important cities belonging to the Hanseatic league. It suffered much at different periods from the intolerance of its magistrates, by whom all Protestants were expelled from the city in 1618.

COLOMBIA, a vast country of S. America, of which it occupies the N. part, between lat. 12° 25′ N. and 5° S., and long. 60° and 83° W.; having N. the Caribbean Sea, E. British Guiana and Brazil, S. Brazil and Peru, and W. the Pacific Ocean and the repub. of central America; length, E. to W., 1,320 m.; breadth, N. to S., 1,080 m.; area 1,155,000 sq. m. Pop. (1845) 3,187,000. Since 1831, Colombia has been divided into the three independent republics of Ecuador or Æquator, New Granada, and Venezuela; the first occupying the S., the second the central and N.W., and the last the E. parts of the country. We are possessed of little authentic information respecting their statistics; but, according to the best information, they are at present (1839) divided as follows:—

	Sq. m.	Pop. (1827.)	Chief Towns.	Pop.
New Granada -	380,000			
1. Isthmus or Panama	-	80,000	Panama -	12,000
2. Magdalena -	-	337,000	Carthagena -	18,000
3. Cundinamarca	-	330,000	Bogota -	40,000
4. Cauca -	-	170,000	Popayan -	25,000
5. Boyaca -	-	440,000	Tunja - -	
		1,357,000		
But, according to the official statement, the pop. in 1834 was -	-	1,687,100		
Venezuela -	450,000			
1. Venezuela -	-	370,000	Caraccas -	23,000
2. Cumana or Maturia -	-	125,000	Cumana -	12,000
3. Orinoco -	-	180,000	Varinas -	5,000
4. Zulia -	-	154,000	Maracaybo -	20,000
		829,000		
But estimated in 1834 at -	-	900,000		
Ecuador -	325,000			
1. Quito -	-	600,000	Quito -	70,000
2. Guayaquil -	-		Guayaquil -	20,000
3. Assuay -	-		Cuenca -	20,000
Total pop. in 1827 -	-	2,786,000		
Ditto in 1845 -	-	3,187,000		

Bogota is the capital of New Granada, Caraccas of Venezuela, and Quito of Ecuador. (*Encyc. Americana; American Almanac*, 1839; *Weimar Almanac.*)

Colombia is naturally divided into 3 distinct zones, or tracts of country. The first comprises the country between the Pacific Ocean and the Caribbean Sea and the Andes; the second, the mountainous region; the third, the immense savannahs which stretch S. and E. from the Andes to the neighbourhood of the river Amazon, and the mountains which border on the Orinoco. Colombia has as much as 2,000 m. of coast on the Caribbean Sea and the Atlantic, and 1,200 m. on the Pacific. The former is a great deal more indented with bays and inlets than the latter; the principal are the gulphs of Paria, Maracaybo, and Darien, on the Caribbean Sea; with Panama, Choco, and the Gulph of Guayaquil, on the Pacific. Several islands belonging to Colombia surround its coast; as those of Margarita, Tortuga, &c. (Venezuela); I. Rey, Quito, &c. (N. Granada); and Puna (Ecuador). (*Hall's Colombia, &c.* pp. 26—28.; *Mod. Trav.* xxvii. 7. &c.)

Mountains.—The great Cordillera of the Andes enters the prov. of Loxa from the S., between lat. 4° and 5° S.: in 2° 23′ S., where it is nearly 15,000 ft. in height, it divides into two parallel ridges, in the elevated valley between which, 9,000 ft. above the level of the sea, Quito and other towns are situated. E. of this valley rise the summits of Copaurcu, 16,380, Tunguragua, 16,720, Cotopaxi, 17,950, and Guyambu, 18,180 ft.; and on its W. side, those of Chimborazo, 20,100, Henisa, 16,302, and Petchincha, 15,380 ft. high; all covered with perpetual snows, from amidst which torrents of flame and lava have frequently burst, and desolated the surrounding

country. These two ranges afterwards unite; but near 1° N., again separate, enclosing the lofty valley of Pastos, bounded by the still active volcanoes of Azufsal, Gambal, &c., and the extinct one of Chiles. Beyond Pastos, the Cordilleras consist of three ranges, the most W., the elevation of which is generally less than 5,000 ft., follows the coast of the Pacific, and terminates in the Isthmus of Panama; the central range is interposed between the valleys of the Cauca and Magdalena rivers, and terminates near Mompox, between lat. 9° and 10° N.; and the third, being the most E. and highest range, extends to the extremity of the Parian promontory, in long. 62° E. This last-named range divides the waters which flow into the Orinoco on its E., from the Magdalena, Zulia, Tocuyo, &c., and their affluents, on its W. side. Many of its summits reach above the limit of perpetual snow; and it has numerous lower summits, called *paramos*, which rise to 10,000 or 12,000 ft. above the level of the sea, and are constantly enveloped in damp and thick fogs. The city of Bogota, 8,100 ft. above the sea, is built on a table-land formed by this mountain range, as are the towns of Nirgua, San Felipe el Fuerte, Barquesimeto, and Tocuyo; but these are at a much lower elevation than Bogota, the mountains decreasing in height very considerably N. of Merida. The mean elevation of the Andes in Colombia is about 11,100 ft.; their altitude is greatest near the equator. In Venezuela, between the parallels of 3° and 7° S. lat., there is another mountain system, unconnected with the Andean, from which it is separated by the Orinoco, and the plains of Caraccas, Varinas, and those in the E. parts of New Granada. This system has been called the Cordillera, or Sierra of Parima. It is less a chain than a collection of granitic mountains, separated by small plains, and not uniformly disposed in lines; its mean height is not above 3,500 ft., although some summits rise to upwards of 8,000 ft. above the level of the sea. (*Humboldt's Personal Nar. and Researches; Hall's Colombia*, pp. 2–6.; *Mod. Trav.* vol. xxvii.)

Plains. — Colombia includes the most northerly of the three great basins of the S. American continent, the *Llanos* of Varinas and Caraccas; which, like the *Pampas* of Buenos Ayres, consists of savannahs or steppes devoid of large trees. These, in the rainy season, appear from the high lands as a boundless extent of verdure, but in time of drought they are a complete desert. Humboldt remarks, that "there is something awful, but sad and gloomy, in the uniform aspect of these steppes." "I know not," he says, "whether the first sight of the *Llanos* excites less astonishment than that of the Andes. The plains of the W. and N. of Europe present but a feeble image of these. All around us the plains seemed to ascend towards the sky; and that vast and profound solitude appeared like an ocean covered with sea-weeds." The chief characteristic of these steppes, like those of N. Asia, is the absolute want of hills and inequalities. An uninterrupted flat of 180 leagues extends from the mouths of the Orinoco to Araure and Ospinos; and from San Carlos to the savannahs of the Caqueta for 200 leagues. This resemblance to the surface of the sea strikes the imagination most powerfully where the plains are altogether destitute of palm-trees, and where the mountains of the shore and of the Orinoco are so distant that they cannot be seen. Occasionally, however, fractured strata of sandstone, or compact limestone, stand 4 or 5 ft. higher than the plain, and extend for 3 or 4 leagues along it; and convex eminences, of a very trifling height, separate the streams which flow to the coast from those that join the Orinoco. The phenomena of the *mirage*, and the apparitions of large lakes, with an undulating surface, may frequently be observed. These savannahs are watered by the numerous streams which form the Meta, the Apure, and finally the Orinoco; and the periodical overflowings of which convert the whole country, during four months of the year, into an inland sea. The equally well-watered plains of Ecuador are intersected by numerous large branches of the Amazon, and form a part of the great central basin of the continent. (*Humboldt's Pers. Narr., &c.; Hall*, p. 8.; *Mod. Trav.*, pp. 19—21. 226—230.)

Rivers. — The chief are the Amazon, which, in the earlier part of its course, runs almost entirely through Ecuador, near its S. border; and the Orinoco, which, together with all its branches, is wholly included within the territories of Venezuela and New Granada. Besides these, there are the Magdalena, Cauca, Atrato, Zulia, Tocuyo, and Guarapiche, whose waters go to the Caribbean Sea; the Patia, Mira, Esmeralda, and Guayaquil rivers falling into the Pacific; the Yapura, Putumayo, Napo, Piguena, Pastaga, Marona, Santiago, Huallaga, &c., affluents of the Amazon; the Guaviare, Meta, Arauca, Apure, with its numerous branches, Ventuari, Caura, Carony, &c., which discharge themselves into the Orinoco; and the Cayuni, which passes into the territory of British Guiana.

Lakes. — The most considerable is that of Maracaybo, which is rather a kind of inland fresh water sea, and communicates with the gulph of the same name by a channel about 2 leagues broad and 8 long. (*See* MARACAYBO.) The Lake of Valencia, which is the next in importance, is larger than that of Neufchatel in Switzerland: there are others, both in the plains and in the mountainous regions; the most celebrated of them is that of Guatavita, not far from Bogota, into which, it is affirmed, large sums were thrown by the natives during the period of the Spanish conquests. Some extensive salt marshes are to be met with in different parts of the N.W. coast. (*Mod. Trav.*, vol. xxvii.; *Account of Colombia*, pp. 19—26.)

Minerals. — The Cordilleras teem with metallic wealth; and though imperfectly explored, have already produced large quantities of gold, silver, platina, mercury, copper, lead, and iron: the gold is mostly obtained by washing the auriferous soil, and comes chiefly from the provs. of Choco, Antioquia, and Popayan; silver is found in the prov. of Pamplona, and the valley of the Cauca; platina, on the coast of the Pacific; mercury and cinnabar, in several parts, as well as lead; and iron and pit-coal in abundance near Bogota: copper, in great plenty, is found, especially at Aroa, in New Granada. There are mines of rock salt in the mountains N.E. of Bogota, and caves producing nitre near the lake Guavita. Hot sulphureous springs abound in several parts: those of Las Trincheras, about 10 m. from Valencia, are believed to be the hottest hitherto discovered, excepting those of Urijino in Japan. Colombia abounds in stupendous natural wonders: amongst the rest are the natural bridges of Icononzo, not far from Bogota; the fall of Tequendama, the loftiest cataract, and the *Silla de Caraccas*, the loftiest cliff yet discovered; the cavern of Caripe or Guacharo, &c. (*Humboldt's Pers. Narr. and Researches; Delabeche's Geolog. Manual*, pp. 410, 411.; *Present State of Colombia*, pp. 297—314.)

The *climate* of the country between the Cordillera and the Caribbean Sea is extremely hot, and generally unhealthy. In the valley of the Orinoco the heat is also intense; but this tract is not so insalubrious as the sea coast, and is often refreshed by strong breezes. The middle region possesses every gradation of temperature, according to elevation; when at the level of the sea, the thermometer has been found to stand at 118° Fah.; at the height of 4,800 ft., it has descended to 77°; at 8,000 ft. to 50°; at 9,000 ft. high, it becomes extremely cold; and at 15,760 ft., all vegetation ceases. At Caraccas, most rain falls in April, May, and June: Dec., Jan., Feb., are the months of greatest drought. Violent storms, accompanied with thunder and lightning, are frequent at Maracaybo. Earthquakes are very common; many took place at the end of the last century, and one in 1812 overthrew most of the principal towns on the N. coast, with great destruction of human life. Intermittent, putrid, and bilious fevers and dysenteries, are the most prevalent diseases on the coast; goitre is nearly universal in the mountainous regions. (*Hall's Colombia*, pp. 6—10., *Account of Colombia*, pp. 13—18.; *Mod. Trav.* vol. xxvii.)

Vegetable Products. — The vast forests that line the shores of the rivers, and cover the mountains, abound with fine timber, which would yield a large revenue, if the means of transit to the coast were better. Mahogany, cedars, and an infinite number of woods of great beauty and durability, a very hard species of oak (*Quercus cerus*, Linn.), iron-wood, ebony of various kinds; Nicaragua, Brazil, and numerous other dye-woods; the cocoa and other palms; bananas, plantains, gigantic mimosas, &c., are found in profusion. Humboldt observes, "It might be said that the earth, overloaded with plants, does not allow them space enough to unfold themselves. The trunks of the trees are every where concealed under a thick carpet of verdure; and if we carefully transplanted the *Orchidæ*, the *pipers*, and the pothos, which a single courbaril or American fig-tree nourishes, we should cover a vast extent of ground." Venezuela is, generally speaking, more fertile and richly wooded than New Granada. Mangroves and *Cacti* grow thick upon the coast; the tamarind, date, and various other tropical fruits, are nearly every where plentiful and the *Ficus gigantea* sometimes reaches the height of 100 feet. The cocoa-nut, indigo, cotton, tobacco, yam and potato, are indigenous to Colombia, as are vanilla, cassia-fistula, cochineal, &c.: the prov. of Loxa and Mariquito are famous for their cinchona bark; cusparia, sarsaparilla, sassafras, squills, storax, and a multitude of other medicinal plants, gums, resins, and balsams, are natives of this country. Arborescent ferns of an enormous size are met with; and the earth in some parts is covered with gramineous plants occasionally 30 ft. high. (*Humboldt's Pers. Nar. and Researches; Mod. Trav.; Hall's Colombia*, pp. 30, 31. &c.; *Account of Colombia*, pp. 144—153.)

Animals. — Nature has been equally prodigal of animal as of vegetable life. Jaguars, tapirs, wild horses, hogs, deer in immense numbers, wild dogs, and monkeys of different kinds, are amongst the most common quadrupeds; as vultures, parrots, and parroquets, in large flocks, macaws, scarlet cardinals, flamingoes, pelicans, and an abundance of water-fowl, are plentiful among birds. Immense alligators inhabit the larger rivers, and

llanos, where, together with large serpents of various kinds, they lie buried in the mud during the dry season, and revive at the first appearance of the rains. The rivers and lakes are well stocked with fish; and the stagnant pools in the llanos abound with the gymnotus, or electrical eel. (For a description of this remarkable animal, see *Humboldt's Pers. Narr.* 345—377.; or *Mod. Trav.*, xxvii. 233—237.) Scorpions, millipedes, scolopendras, termites, mosquitoes, and myriads of other insects abound: the pearl oyster inhabits several parts of the coast. (*Humbolt's Mod. Trav., &c.*)

The Races of People are said to have been distributed as follows in 1834: —

	N. Granada (Census).	Venezuela (official Statement).	Ecuador (Estimate).	Total.
Whites -	1,058,000	200,000	157,000	1,415,000
Indians -	376,050	207,000	393,000	976,050
Free coloured -	168,700	433,000	42,000	643,700
Slaves -	84,350	60,000	8,000	152,350
Total -	1,687,100	900,000	600,000	3,187,100

The Carribs are the ruling Indian tribe; they are tall, of a reddish copper colour, with dark intelligent eyes, and a grave expression of features. They raise the flesh of their legs and thighs in long stripes, and shave most of the hair from their heads; but do not flatten the forehead, as is customary with the other tribes along the Orinoco. Since the revolution, all the Indian tribes have been declared free; and the rest of the pop. become free in 1840. (*American Almanac*, 1839; *Encyc. Americana.*)

Agriculture.—Cocoa, coffee, cotton, indigo, sugar, tobacco, hides, cattle, and Brazil-wood, are the principal articles of culture and commerce: the grain, and the nutritious roots known in the West Indies by the name of ground provisions, are produced only in sufficient quantities for home consumption. Maize is grown every where, and, when ripe, is pounded in wooden mortars into a coarse meal; there being no more perfect machinery for grinding it. Wheat is grown on the higher lands, especially in New Granada, where it succeeds as well as in England, and often yields 40 bushels an acre: two crops may be produced in a year. A substitute for bread is found in *cassava*, which is procured, by a process similar to that for making starch, from the yuca root: the plantain is to the mass of the natives what the potato has become to the poor of Ireland; the rice of Colombia is indifferent. Cocoa (properly the *cacao* nut) is principally grown in Venezuela, on the low rich soil of the coast, in Varinas, and near Guayaquil. It does not come into full bearing till after eight or nine years' growth; but after that, continues in produce from 20 to 30 years, bearing two crops a year, with little trouble or expense. Previously to the revolution, Venezuela yielded nearly 200,000 fanegas*, of 110 lbs each, the value of which was nearly 5,000,000 dollars: this quantity at that time was two thirds of all the cacao then made use of. The cultivation of cacao has however diminished; that of coffee having been in part substituted for it. Coffee has been introduced into almost all the temperate valleys of Venezuela, and the prov. of Santa Martha and Mariquita in New Granada; but its culture is conducted with less care than in the W. Indian islands. Its produce and the trade in it have, however, increased rapidly since the revolutionary war, and it now forms by far the greatest article of export. Cotton is grown in all parts of the country; but principally in the valleys of Aragua, and the provs. Cartagena and Maracaybo. The produce is said to be inferior in quality to that from the uplands of N. America; which is in great measure owing to the defective mode generally followed of cleaning and depriving it of the seed. In the prov. Cartagena, the plant is grown upon newly cleared land, between successive crops of maize. Before the revolution, the quantity exported from Caraccas amounted to between 2,000,000 or 3,000,000 lbs.; and the export from the coast of New Granada was still greater; at present, its growth for export is insignificant. Indigo is cultivated principally in the valleys of Aragua and the prov. Varinas, and formerly was exported in large quantities; but the competition in this article, which British skill and capital has produced in Hindostan, materially affects this branch of agriculture. The tobacco of Caraccas is greatly superior to that of Virginia, yielding only to that of Cuba and the Rio Negro; in some places, as at Cumanacoa, it is even superior to the latter. Under the Spanish regime, the culture and sale of tobacco were monopolised by the government. All individuals authorised to raise it were registered, and the entire produce was brought to the government depôts (*estancos*), and sold to its agents at a certain fixed price, who again sold it to the consumer at a large advance. The Colombian congress originally abolished this among other monopolies; but finding that they could not spare the revenue, of which it was productive, it was again revived. The cultivation of the plant had, however, from some cause or other, so much declined, that the revenue derived from the monopoly ceased to be of any material importance; and a law passed the congress for its abolition, on the 1st of June, 1834. The works (*trapiches*) erected in different parts of the country for the fabrication of sugar were mostly destroyed during the revolutionary war, and very few of them have since been repaired. No sugar is now exported, and the half inspissated juice of the cane is only used for confectionery, or is eaten by the natives with their chocolate.

* A fanega of land is about 2½ acres English.

From what has been said, it will be evident that Colombia is a country of great natural riches, suffered to lie for the most part waste. Were its inhabitants of an active and industrious disposition, and its resources developed even in a moderate degree, it would be one of the richest and most important countries in the world. Previously to the arrival of Columbus, the horse and ox were unknown in the New World; but the llanos are now covered with herds of both. M. Depons, in the early part of the present century, estimated that there were, from the mouths of the Orinoco to the lake Maracaybo, 1,200,000 oxen, 180,000 horses, and 90,000 mules; an estimate which Humboldt thought too low. Sheep and goats are plentiful in the table-lands of Bogota, &c.; animal food is cheap and much consumed; and hides, wool, and cheese, form a principal portion of rural produce. Agriculture generally is in a very low state, and the government have been lately desirous to promote its improvement by encouraging foreign settlers, and disposing of the waste lands to them at a low rate, and exempting them for a period from taxes. Few people possess estates of 5,000*l.* a year; 5,000 dollars are reckoned a good income. Near Pamplona the grounds are surrounded with stone wall hedges, which give an air of proprietorship not often seen; and in the valley of Serinze (New Granada), a similar plan is adopted, and cultivation is in a tolerably advanced stage. Commonly, however, the natural indolence of the natives precludes this, and "the Colombian who can eat beef and plantains, and smoke cigars as he swings in his hammock, is possessed of almost every thing his habits qualify him to enjoy, or which his ambition prompts him to attain —the poor have little less, the rich scarcely covet more." In the llanos the indolence of the inhabitants is such that, after having suffered for half the year from inundations, they patiently expose themselves during the other half to the most distressing want of water, though they know that almost every where they may obtain a good supply at 10 feet below the surface of the earth. The fertility of the soil and the warmth of the climate have, in fact, indisposed and unfitted the people for any vigorous exertion. (*Humboldt; Mod. Trav.; Hall, &c.*)

Pearl Fisheries.—Along the coast many of the inhabitants subsist as fishermen; bartering the fish they catch for maize and other inland produce. There are three pearl fisheries; two on the shores of the Atlantic, and one on those of the Pacific. The first are situated on the coast of the islands Margarita, Cubagua, and Coche, and at the mouth of the Rio Hacha; in the 16th century they were much celebrated, and yielded pearls to the value of half a million dollars annually. The pearls of this coast are remarkable for their beautiful play of light, in which they are much superior to those of the East. The other fishery is at Panama: all of them are now much neglected, and do not yield more than 180,000 dollars a year. The Indians of Cariaco have a singular method of catching wild-fowl, which may here be noticed: they leave calabashes continually floating on the water, that the birds may be accustomed to the sight of them. "When they wish to catch any of these wild fowl, they go into the water with their heads covered each with a calabash, in which they make two holes for seeing through. They thus swim towards the birds, throwing a handful of maize on the water from time to time, the grains of which scatter on the surface. The birds approach to feed on the maize, and at that moment the swimmer seizes them by the feet, pulls them under water, and wrings their necks before they can make the least movement, or by their noise, spread an alarm among the flock. . . . . Many have no other trade in the neighbourhood of large towns, and daily take multitudes of these birds, which they sell at a low rate." (*Humboldt's Pers. Narr.* ii. 2*l*1. 276; *Present State of Colombia*, pp. 322, 323.; *Hall's Colombia*, pp. 28, 29 · *Mod. Trav.*, xxvii. 30. 54, 55, &c.)

Manufactures.—Such of these as are not merely domestic, are chiefly leather, hammocks, baizes, blankets, coarse cloths of various kinds, hats, and salt; but none of them is of any importance. The principal salt works are at Araya and Santa Martha. The whole process is left to nature, and consists simply in the washing of the muriatiferous soil by the rains, into shallow basins, where the salt is found incrusted, after evaporation, in a state of great purity. The common pottery is rude, and made by Indian women only. At Caripe, oil is manu-

factured by the Indians, from the fat of young guachero birds, and on the Magdalena, the negroes stuff their pillows with the wool obtained from the fruit of the mahagua (*bombax*). Such expedients often supply the place of better manufactures, all of which must be procured from abroad, and are comparatively scarce and dear. (*Mod. Trav.; Humboldt; Hall's Colombia, &c.*)

Trade.—The ports of La Guayra, Rio del Hacha, Santa Martha, Cartagena, Chagres, Puerto-Cabello, Panama, and Guyaquil, are those most frequented by foreign traders. The imports and exports of Venezuela, in which most of the foreign trade of Colombia is concentrated, were in 1833-34 as follows:—

Imports.	Value.	Exports.		Value.
	Dollars.		*lbs.*	*Dollars.*
Cotton goods	1,063,527	Coffee	11,602,634	1,293,655
Linen ditto	615,270	Cacao	5,384,916	706,248
Woollen ditto	75,437	Indigo	421,602	504,818
Silk	96,912	Dye-woods	17,667,853	72,925
Flour	140,770	Tobacco, cinchona bark, balze, hides, &c.		816,837
Pork	123,447			
Other imports	1,181,048			
Total	3,296,411	Total		3,394,485

Countries.	Imports.	Exports.
	Dollars.	*Dollars.*
Great Britain	897,742·76	520,542·08
United States	783,061·33	1,115,490·38
France	61,969·21	205,750·21
Germany	396,972·36	384,527·26
Spain	82,369·01	205,750·60
New Granada	121·90	18,764·33
Holland	90,597·29	155,459·46
Denmark	980,161·15	740,205·33
Mexico	5,030	
Sardinia	- -	28,658·19
Hayti	- -	1,018·90
Various	68,416·30	18,316·67
Total	3,296,411·31	3,394,483·41

More than half this trade is centred in the port of La Guayra. The imports and exports of Puerto Bello (N. Granada) in the same year amounted to 1,445,724 dollars. The following official return of the exports of coffee and cacao from Venezuela during the four years ending with 1837-38, shows a progressive increase in the exports of those staples.

	Coffee.	Cocoa
	Quintals.	*Quintals.*
Year ending 30th June, 1835	59,527	42,333
— — 1836	115,911	52,422
— — 1837	166,348	67,798
— — 1838	174,912	58,102

The port of Guayaquil, in Ecuador, has also an extensive trade in cacao, tobacco, salt, timber, &c. In 1837, the exports of cacao from this port amounted to 8,250,125 lbs.; and in 1838, to 7,196,075 lbs.

Roads, &c.—The want of internal communication is a considerable disadvantage; throughout the whole country there is not a road passable for wheel carriages; and every species of commodity is conveyed on mules. The ways generally are mere tracks, formed by the tread of successive travellers, and even in what were formerly termed royal roads, all that has been done is to cut down the trees. Bridges are few, and, except those of Valencia and Capitanejo, consist of only a few rough planks, with branches, &c. laid across; or of ropes, upon which a suspended basket is made to run from one end to the other. In the more precipitous and dangerous passes, where mules can scarcely be used, it is customary for travellers to be carried in chairs fastened to the backs of men, who obtain a miserable livelihood by continually exposing themselves to risks, such as those which beset the chamois-hunter. (*See* ANDES.)

Public Revenue and Expenditure. — The following has been given as an official account of the income of Venezuela for the five years ending the 30th June, 1839.

	1834-5.	1835-6.	1836-7.	1837-38.	1838-9.
	Dollars.	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*
Imp. Duties	667,220	688,366	967,945	739,077	1,002,490
Exp. Duties	120,969	142,222	167,596	158,605	178,659
Sundry Do.	15,895	11,633	14,952	21,886	44,639
Taxes (Rentas internas)	46,586	47,919	40,665	76,254	174,652
Salt Mines	16,610	28,949	62,393	52,192	73,333
Extraordinary Contribution *	- -	84,512	221,141	250,549	235,708
Post-office	7,893	6,657	- -	- -	12,453
Sundries	49,173	25,935	4,634		
Voluntary Subscription	-	- -	873		
	1,124,346	1,036,265	1,480,199	1,298,563	1,721,334

* Raised to defray expense of suppressing insurrection in 1835.

From this statement it is seen that, taking the average of the income for the four years from 1835 to 1838 inclusive, there has been an increase in the year 1839 over the average of the four preceding years of 39 per cent., and over the largest of these years of 16 per cent.

It will be observed that there is a nearly uniform annual increase in the produce of the export duties, arising necessarily from the increase in the products of the country.

The revenue and expenditure of New Granada in 1835 were: — revenue, 2,337,836 dollars; expenditure, 2,211,554 dollars; surplus, 126,282 dollars. The revenue and expenditure of Ecuador are supposed to be about 800,000 dollars a year each. The Colombian debt to England amounts to 6,650,000*l.*, for the payment of which the congress of New Granada has appropriated one eighth of the custom duties, as well as the surplus revenue, and national profits from tobacco and national lands.

Government is vested, in each of the different republics, in a senate, and a house of representatives, both consisting of members elected by the cantonal deputies of the provinces, in a provisional assembly, held once in four years. In Colombia, previous to its partition, the right of suffrage in the election of deputies required the parochial voter to be a Colombian, above the age of 21, the owner of property worth 100 dollars, or exercising some trade or profession, and able to read and write (this last qualification to be peremptory after 1840). To be a cantonal elector, it was requisite to be a native of the canton, possessed of property worth 500, or an income of 300 dollars: to be a senator, it was necessary to have an income of 500 dollars, or to be of a learned profession. The executive power was vested in a president and vice-president, the former of whom could not continue in office longer than eight years successively; and neither he, nor any of the ministers, could be members of the congress. With some variations, this government has been adopted by the existing republics. The political government of each department is, by law, vested in the hands of an *intendente*, appointed by the president, with the sanction of the congress, with authority over the administration of justice, police, finance, and defence; but without the command of an armed military force. The provinces are under the administration of governors, with powers similar to those of the intendente; the cantons and parishes have each their own officers. (*Present State of Colombia*, pp. 116—125. &c.)

Justice.—The civil and criminal codes are an ill-digested collection of the laws of Castile and of the Indies, royal ordinances and other Spanish decrees, and colonial regulations; and their administration is very unfavourably spoken of. The judges were elected by the congress, from lists given by the president. Trial by jury, and the liberty of the press, were amongst the first enactments of the Colombian congress. (*Hall's Colombia*, pp. 23, 24.)

Religion the Roman Catholic, the ceremonies and festivals of which are celebrated with great splendour. The inquisition was abolished in 1821; but the clergy still possess considerable power, and though general toleration is afforded to persons of other creeds, they are not at liberty to perform their rites in public. The clergy are paid by the state: convents are still numerous, but diminishing; and dissent from Catholicism is spreading. Many Indians have embraced Christianity. (*Hall, &c. Accounts.*)

Armed Force.—The ranks of the different armies are filled with Indians and mixed races, in a tolerable state of discipline. In addition to these, there is a militia, consisting of the whole male population between 16 and 40 years of age. Considerable pains have been taken by the Colombians to raise a navy; but their maritime force is inconsiderable. A marine school was some years since established at Carthagena. (*Present State, &c.* 206—214.)

Public Education.—During the Spanish régime elementary education was sadly neglected, and all the more important branches of useful knowledge professed at the universities of the Caraccas, Bogota, and Quito, were so taught as to be really worse than useless; and instead of expanding and enlightening the mind, served rather to imbue it with the grossest prejudices. South America has suffered much from this wretched system; the anarchy of which it has been so long the theatre being quite as much to be ascribed to the ignorance and prejudices of the people as to their want of acquaintance with the art of government. But some considerable progress has been made towards the establishment of a better order of things. Primary schools were ordered to be established in every parish, by the congress of 1821; Lancastrian schools exist in the principal towns, and the universities have been remodelled. The Colombian congress applied certain property formerly belonging to the clergy to the aid of public education; and the legislatures of the present republics have been anxious to carry into effect the system adopted by it. Several public journals are established in different parts of the country. (*Hall's Colombia*, pp. 52—56.)

Arts, Manners, Amusements, &c.—Architecture has made but little progress, and almost the only specimens worth notice are confined to Bogota. Painting is successfully cultivated in that city and Quito, and music in Caraccas; but, generally speaking, the fine arts are in a very backward state. The besetting vice of the Colombians is indolence, which retards all their social progress: they are courteous, hospitable, and, when intimately known, friendly and cordial; temperate in their habits, and grave in their deportment; but suspicious, reserved, slow, and imbued with much national pride. The manners, dress, habits, and amusements of those of European descent resemble those of their Spanish ancestors. (*Humboldt, Hall, Murray, &c.*)

History.—Ecuador, and especially the valley of Quito, contains many monuments of the sway of the Incas; Venezuela was the first part of the new continent discovered by Columbus in 1498. The Spaniards found more difficulty in conquering this than any other part of their American territories; but before the middle of the 16th century, both Venezuela and New Granada had been erected into captaincies, governed by viceroys from Spain. In 1808, after the invasion of Spain by Napoleon, a spirit of insubordination broke out in these colonies; in 1811, their independence was declared; and, in 1819, Venezuela and New Granada united into one republic, under the name of Colombia. In 1822, the royalists in Ecuador were defeated by Gen. Sucre; Bolivar headed the revolutionists elsewhere; and in 1823 the struggle ended with their complete independence. In 1829, Venezuela separated from the other states; rejoined them for a short period in 1830; but in Nov. 1831 separated anew: since which period Colombia has remained divided into the above three republics; though such is the state of insecurity in which all these governments exist, that, previously to the publication of this article, it may be again consolidated into one republic, or be divided into some half dozen. (*American Almanac*, 1839; *Mod. Trav.*, vol. xxvii. &c.)

COLUMB (ST. MAJOR), a town and par. of England, co. Cornwall, hund. Pyder. Area of par., 11,680 acres. Pop. of ditto (1831). 2,790. The town is situated on an eminence, at the foot of which is a small river, 4 m. from the sea, and 14 m. N.E. Truro. It had formerly a communication with the sea by means of a canal, now fallen into disuse. It has a large old church, and two methodist chapels. The living, which is a rectory in private patronage, yielded, at an average of the three years ending with 1831, a free nett income of 1,296*l*. Market-day, Thursday.

COLUMBIA, a distr. of the U. S. of America, lying between the states of Virginia and Maryland, on both sides the Potomac, about 120 m. from its mouth; length and breadth, 10 m. each; area, 100 sq. m. Pop. (1830) 39,834, of whom 6,119 were slaves. Surface gently undulating; soil naturally thin, sandy, and sterile. Climate healthy; mean temp. of the cap. about 55° Fahr. The Potomac traverses the distr. chiefly in a S.E. direction, receiving in its way through it a tributary from the E., by its junction with which a peninsula is formed, on which the city of Washington is built. At the confluence of the two rivers there is an excellent harbour and a navy-yard, to which ships of the largest tonnage may ascend. The yard covers a space of 37 acres, and in it are made all the anchors, cables, and blocks required for the service of the U. S. navy.

Washington is the cap. of the U. States, the seat of the general government, and the residence of the president and other principal officers of state. (*See* WASHINGTON.) The other chief towns are Georgetown and Alexandria; the former is separated from Washington by Rock Creek, another affluent of the Potomac. Alexandria is on the right bank of the river, 7 m. below Washington.

Considerable quantities of flour and other domestic produce are brought down the Potomac, but neither the commerce nor shipping of the distr. has increased so rapidly as might have been expected. In 1837-38 the total value of the domestic produce exported to foreign parts amounted to only 366,760 dollars, and the imports were not half as much. Alexandria and Georgetown have together about 19,000 tons shipping. There are three colleges in the distr., all in active operation:—the Columbia Institute at Washington; the R. Cath. university at Georgetown; and the theological seminary at Alexandria; connected with which is a medical department, and a preparatory school. This distr. is under the immediate government of congress. It was ceded to the U. States by Maryland and Virginia in 1790; and in 1801 it was enacted that the laws of these states should continue in force in the portions ceded by each. Congress first met here in 1800. (*Encyc. Americana*, p. [illegible]; *Darby's View*, p. 494, 495. &c.)

COLUMBIA, a town of the U. S. of America, cap. S. Carolina, and seat of the state government, in an elevated plain near the centre of the state, near the Congaree river, 100 m. N.N.W. Charleston, and 68 m. N.E. Augusta. Pop. (1830) 3,310. The streets, which are 100 ft. wide, intersect each other mostly at right angles, and it has many good houses. It has a state-house, court-house, gaol, and several places of worship. The S. Carolina college, founded in this town in 1804, has two large brick edifices, and possesses a philosophical apparatus, cabinet of minerals, and library of 10,000 vols. Students in 1839, 150. Here is also a theological seminary, founded in 1829. Columbia was founded in 1787. A steam-boat plies regularly between it and Charleston. (*American Almanac*, 1838-39.; *American Encycl.*)

COLUMBIA RIVER, a large river of N. America, the principal in the Oregon territory, in the joint occupation (1846) of Great Britain and the U. States, having an extremely tortuous course. It rises in the Rocky Mountains, in about the 51st deg. of N. lat., and the 116th deg. of W. long. Its course is first N.W. till about the 53d deg. lat.; and then nearly S. for about 245 m. till its junction with the Flathead, or Clarke's River. It then pursues a W.S.W. course, being precipitated over some very high falls, till it reaches Fort Okanegan, in about 48° N. lat. and 120° W. long., when it flows S. to Fort Neperces, a distance of 155 m., where it is joined by the Great Snake River from the S.E. After receiving the latter it turns to the W.; and pursuing that direction during the remainder of its course, it falls into the Pacific Ocean, between Cape Disappointment on the N. and Point Adams on the S., in 46° 18′ N. lat. and 124° W. long. Its embouchure is 5 or 6 m. in width. It has not, where deepest, more than from 4½ to 5 fathoms over its bar, on which the sea breaks with considerable violence, making its ingress and egress, to sailing vessels, a work always of considerable difficulty, and practicable only, it is said, at certain seasons. Vessels of 400 tons may ascend the river to Fort Vancouver, about 100 m. (dir. dist.) from its mouth; and sloops may ascend it for about 80 miles farther. At the Long Narrows, by which the navigation is first interrupted, the river is precipitated over an upper and a lower fall respectively 20 and 8 feet in height. (*Flint's Geog.*, p. 458.; *Nicolay's Oregon Territory*, p. 42.; *Darby, &c.*)

COLUMBO, a sea-port town of Ceylon, the modern cap. of the island, and seat of government, on the W. coast, towards its S. extremity; lat. 6° 57′ N., long. 79° 45′ E.: pop. (1831) 31,549. Its fort, defended by walls flanked with several bastions, is built upon a peninsula projecting into the sea, having on the land side a fresh water lake of some size. It contains the residences of the governor and most of the British inhab. The *pettah*, or inner town, a few hundred yards E. from the fort, has a mixed pop. (4,800) of Dutch, Portuguese, and their descendants. The native Ceylonese reside chiefly in the suburbs. The town within the walls is regularly laid out, and built very much in the European style; houses, chiefly of stone, clay, and lime, are seldom more than a story in height, but each has in front a large wooden verandah. The English have substituted Venetian blinds in their houses for the glass windows used by the Dutch. The fort contains the government house, a handsome building of 2 stories, the English church, court-house, library, museum, several hotels, and a lighthouse 97 ft. high. There are also in Columbo a Dutch and a Portuguese church, several Protestant dissenting chapels, missionary and other schools, &c. To the N. of the fort is a small semicircular bay, on which a wooden quay has been built, but the depth of water is not sufficient to admit of vessels above 100 tons burden coming alongside. The bay is sheltered and defended by a projecting rock, on which two batteries are erected; but from this rock a bar of shifting sand stretches across the mouth of the bay, within which the larger class of ships can venture only during the fine weather of the safe season. Besides its small bay, Columbo has an open roadstead, which, however, is safe only during the N.E. monsoon: were the town more favoured in this respect, it would be the most eligible port in the island, since it is placed in the centre of the cinnamon country, is the depôt for nearly all the foreign trade of the island, and has a somewhat extensive traffic by means of internal navigation. Columbo is ill supplied with water. Its climate is healthy, though damp and destructive of books, clothing, &c. The Portuguese erected a fort here in the early part of the 16th century, of which the Dutch dispossessed them in 1656; and the town was taken from the latter by the English in 1796, which change of masters was afterwards ratified by the peace of Amiens. (*Hamilton's E. I. Gaz.*; *Ceylon Almanac.*)

COMBOOCONUM, an inl. town of Hindostan, prov. Carnatic, distr. Tanjore, 20 m. N.E. that city. Pop. 40,000.? It was anciently the cap. of the Cholas, one of the most ancient Hindoo dynasties in the S. of India of which any traces have been discovered, and who gave their name to the whole coast of Cholamundul or Coromandel. Its ancient splendour is evinced by its pagodas, tanks, &c. It is chiefly inhab. by Brahmins. (*Malcom's Travels*, vol. ii.; *Hamilton's E. I. Gaz.*)

COMILLAH, an inl. town of Hindostan, prov. Bengal,

distr. Tipperah, of which it is the cap., on the S. bank of an affluent of the Brahmaputra river, 50 m. S.E. Dacca. The roads round it have been much improved by the labour of convicts. Six m. W. of Comillah are the remains of many brick buildings, and of a fort 200 ft. square, the residence of the former rajahs of Tipperah.

COMO (CITY OF) (an. *Comum*), a city of Austrian Italy, cap. deleg. of same name, at the S.W. extremity of the Lake of Como, 23 m. N.N.W. Milan, lat. 45° 48′ 20″ N., long. 9° 5′ 12″ E. Pop. 15,600. It is encircled by an amphitheatre of hills, one of which to the S. is surmounted by the old fort of Baradello. The town is defended by double walls, flanked with massive towers, and has four gates. Its interior is crowded with dark, narrow, and filthy streets, numerous old and tawdry churches, dreary palaces of the Comasque nobility, and dismantled dwellings of the *cittadini*. The suburbs, however, in which more than half the pop. resides, contain many good streets and buildings; Borgo de Vico, the chief, stretches along the shore of the lake for a considerable distance, and is adorned with the Odescalchi and Iovian palaces, besides numerous other handsome edifices. Como has 12 churches, the principal of which, the cathedral, commenced in 1396 and finished in 1513, is an imposing and, upon the whole, even a fine building, notwithstanding its incongruous character. "It is of white marble, the front is of light and not inelegant Gothic, the nave is supported by Gothic arches, the choir and transepts are adorned with composite pillars, and a dome rises over the centre." (*Eustace*.) But though it be well situated with respect to the lake, Lady Morgan says "It is surrounded with a small square of low mouldering arcades, and paltry little shops: and every where the elegant Gothic is mingled with the grotesque forms of ruder orders; and bas-reliefs of monsters and non-descripts disfigure a façade, where light Gothic pinnacles are ornamented with golden crosses; while the fine pointed arch and clustered columns, contrast with staring saints and grinning griffins." In front of the cathedral is a statue of Pliny the younger, a native of Como, with a bas-relief alluding to his writings; and an inscription to his honour on each side the grand entrance. In one of the squares a monument is erected in honour of Volta, also a native of this city. Como possesses a lyceum erected by the French, with some fine philosophical apparatus, and a library of 15,000 vols., an ecclesiastical college, 3 gymnasia, 2 female seminaries, an hospital, workhouse, orphan asylum, and many other charitable institutions, a cabinet of nat. history, and botanic garden, a new theatre, and an amphitheatre. A handsome Casino or club-house has been built within these few years. Como is a bishopric, and the seat of the provincial council (*Provinzial Congregation*), and of civil, criminal, and commercial tribunals. At one period it was the principal seat of the inquisition. It has manufactures of woollen cloths, silks, cotton yarn, and soap, for which latter article it is celebrated. Its trade, which is facilitated by a port on the lake, is chiefly with the Swiss canton of Ticino, and with Germany, to which it sends rice, and raw and manufactured silks. The artisans of Como have, in all ages, been noted for their disposition to emigrate as hawkers of goods, or in search of employment, and they may be met with all over Europe, as venders of telescopes, spectacles, barometers, &c. The fine climate and situation of Como attract many visiters. Como is said to have been founded by the Orobii, the earliest inhab. of this district. It was taken by the Romans 196 B.C.; and owed its principal importance under them to a colony of Greeks planted in it by Julius Cæsar, when it took the name of *Novumcomum*. Near it is the Villa d'Este, once the property and residence of Queen Caroline of England. In the middle ages it belonged to the Ghibelline party, and was the rival of Milan. Under the French it was the cap. of the dép. of the Lario. (*Oesterr. Nat. Encycl.*; *Eustace*; *Cellarius, Not. Orbis Antiqui*, i. 680., &c.)

COMO (LAKE OF), (It. *Lago di Como*, an. *Larius Lacus*), a famous lake of N. Italy, which, in modern times, has derived its name from the above city. This fine sheet of water is very irregularly shaped, being divided by the triangular district which has Bellagio at its apex, into three great arms, one of which stretches from Bellagio S.W. to Como, another N. to Riva and Novate, near the mouth of the Maria river, and a third S.E. to Lecco, and the outlet of the Adda. These divisions of the lake are sometimes called from the chief towns on their banks, the lakes of Como, Bellano, and Lecco. It greatest length, following its windings, may be about 45 m.; but it is no where above 4 m. in width. The depth is said to vary from 40 to 600 ft. It receives the waters of the Upper Adda, and several other rivers, but its only outlet is by the Lower Adda. Owing to the great height of the surrounding mountains, which expose it to sudden squalls, and the influence of currents, its navigation is rather dangerous to sailing vessels; but steamers traverse it in all directions with ease and expedition. The climate round the lake is mild and delightful; and, except in its more N. part, near the mouth of the Upper Adda, its banks are remarkable healthy. Throughout its whole extent its banks are formed of precipitous mountains from 2,000 to 3,000 ft. high; in some places overhanging the water, and in others partially clothed with wood, and studded with hamlets, cottages, villas, chapels, and convents. "The most beautiful point of view in the whole extent, is undoubtedly at Bellagio. "The upper waters are there seen winding up to the very foot of the higher chain of the Alps, and terminating within a short distance of the terrific pass of the Splugen; the loftier hills that border the lake of Lecco rise on one side, and on the other the wider expanse of the lower lake retires behind the beautiful foreground, rocks, and hanging woods that form the point of Bellagio; with numbers of trading boats gliding under the broad reflection of the gigantic mountains, their white sails occasionally gleaming in the sunshine, and several little villages scattered along the shores." (*Sketches of Italy*, iv. 212.)

The younger Pliny had several seats on the border of this lake. The principal of these stood, one upon a height commanding a view of the lake, and the other so close to its edge as to admit of fishing lines being thrown into the water from the bed-rooms. (*Epist.* lib. ix. § 7.) Many attempts, but very unsuccessful ones, have been made to identify the site of these villas. The *Villa Pliniana*, 5 m. N.E. from Como, is, from its having near it an intermittent fountain, usually supposed to occupy the site of one of these villas. But Pliny does not say that the intermitting fountain which he describes was on his estate, or near his seat (iv. s. 30.); and there is, in fact, no real ground for supposing that the *Villa Pliniana*, which was built near the middle of the 16th century, has any thing in common with either of the villas described by Pliny. (See *Eustace*; *Matthew's Diary of an Invalid*, *&c.*)

COMORIN (CAPE), a promontory forming the S. extremity of Hindostan, in Travancore, 188 m. N.W. Columbo, in Ceylon; lat. 8° 4′ N., long. 77° 44′ 30″ E. Its approaches are beset with rocks. Notwithstanding its remarkable position, it never attracted the least attention from the Hindoo geographers; and what is more singular, modern authorities differ considerably as to its lat. The above is that given by Heywood.

COMORN (Hungar. *Komarom*), a royal free town of Hungary, in the N.W. part of that king., cap. co. of the same name, on a point of land formed by the confluence of the Waag with the Danube, 46 m. W.N.W. Buda, lat. 47° 45′ 34″ N., long. 18° 7′ 50″ E. Pop. about 17,500, exclusive of the garrison. The citadel, built by Mathias Corvinus, in the 15th century, has never been taken; and its works have been so much strengthened during the present century, that it is now one of the strongest fortresses in Europe. The town is irregularly built, and the streets are said to be narrow and dark. It contains 4 Catholic, and 2 Protestant churches, a Greek church, and a synagogue, a county hall, town council house, many large magazines and barracks, a hospital, Cath. and Prot. high schools, and an assurance-office for vessels navigating the Danube, which river is here crossed by both a flying bridge and a bridge of boats. Mr. Gleig says of Comorn, that it appeared to be in a far more flourishing condition than Pesth. "Its shops are good, the streets full of bustle, and the river, where it washes the walls, is by no means bare of shipping. We found, also, upon inquiry, that it contained 2 theatres, a casino, or club-house, and an excellent market-place." It has manufactures of woollen cloths, tanneries, &c. &c., and considerable trade in corn, wine, honey, fish, and timber, by the Danube. There are numerous vineyards in its neighbourhood. (*Oesterr. Nat. Encyc.*; *Gleig's Bohemia*, *&c.* iii. 234.)

COMPIEGNE, a town of France, dép. Oise, cap. arrond., on the Oise, which is here crossed by a handsome bridge of three arches, 33 m. E. by S. Beauvais. Pop. 8,895. The town is ill laid out and ill built, but it contains many public and private edifices worthy of notice: amongst the former may be specified the town-hall, a curious Gothic building, and several churches. But the glory of Compiegne is its royal palace, one of the most remarkable in France for extent and magnificence. A palace was originally built here by the Merovingian kings; but the present edifice was commenced under Louis XV., finished by his successor, and renovated by Napoleon. It has a noble front towards the Forest of Compiegne, 623 ft. in length; all the apartments are on a single floor, communicating with each other. The peristyles, *salle des gardes*, ball-room, theatre, and a superb gallery, are especially deserving of admiration. The gardens surrounding this palace are much more extensive than those of the Tuileries, which they rival in beauty. Compiegne contains a public library with 28,000 vols., and a theatre. It was formerly fortified by walls flanked with towers, and entered by seven gates. Charles the Bald established an abbey here, and gave the town the name of *Carlopolis*, after which it rose considerably in importance, and became the seat of many national

councils and assemblies, as well as the burial-place of several of the French kings. But in proportion as the consequence of St. Denis increased under the kings of the third race, that of Compiegne declined. It was at the siege of this place, in 1430, that the famous heroine Joan of Arc fell, through the mean jealousy of the governor, into the power of the English. (*Hugo*, art. *Oise; Guide des Voyageurs, &c.*)

COMPOSTELLA, an inl. town of Mexico, state Guadalaxara, 36 m. from the Pacific Ocean, and 100 m. W. by S. Guadalaxara. In its vicinity there are some silver mines; and to the N.W. of it, tobacco of a superior quality was formerly grown.

CONCAN, a marit. subdiv. of Hindostan, provs. Aurungabad and Bejapoor, comprising a portion of the ancient Hindoo subdiv. of *Kankana*, whence its name, and at present forming two distrs. under the presid. of Bombay: it extends both N. and S. of that city, along the Malabar coast, between lat. 15° 50′ and 20° 15′ N., and long. 72° 40′ and 73° 54′ E., having N. the collectorate of Surat, and a detached portion of the Guicowar's dom.; E. the distr. Ahmednuggur and Poonah and the Sattarah dom., from which it is separated by the W. Ghauts; S. a portion of the Sattarah territory, and W. the ocean. Length N. to S. 310 m.; breadth varying to nearly 60 m. Area, pop., divisions, &c., as follows: —

Districts.	Area in sq. m.	Pop.	Land revenue (1829-30).
S. Concan	6,770	656,860	L. 105,550
N. Concan	5,500	387,260	106,590
Total	12,270	1,044,120	212,140

The general aspect, though there are many fertile tracts producing rice, &c., is that of a congeries of steep and rocky mountains, intermixed with a multitude of ravines and chasms, and interspersed with jungle: it formerly abounded in fortified heights, difficult of access, most of which have been dismantled by the British since their conquest of the country in 1819. The coast, though it has a very straight general outline, is broken by a great number of shallow harbours, which, previously to the British rule, were the resort of numerous pirates. The W. Ghauts, which bound the Concan to the E., rise to the elevation of from 2,000 to 4,000 ft., with an abrupt face towards the W. The passes over them are impracticable for wheeled carriages. They are mostly composed of primitive trap-rocks; but their summits are covered with a thick crust of laterite or ferruginous claystone, of which material much of the surface of the Concan is composed. In the S. shelly sandstone is met with. There are many mountain streams, but none deserving the name of a river. Concan produces all the grains of Malabar, but is chiefly celebrated for its hemp and cocoa-nuts. Oil grains, the sugar-cane, turmeric, ginger, &c., are grown in the S. The land in S. Concan is assessed on the ryotwar, and in the N. on the village system. In some instances ill-cultivated tracts of land are allotted for a term of years at a low rent to a speculator for the purpose of improvement. A large proportion of the inhab. are Hindoos, and *Suttees* (burnings of widows) are said to have been more frequent here than in any other part of India, Bengal excepted. Many Bheels, Coolies, &c. inhabit the Ghauts and N. Concan. A large portion of the Bombay native army is now recruited from these districts. In 1829 there were reported to be 419 native schools, attended by 9,399 scholars, or 1 in 144 of the pop. The Augria family once possessed nearly the whole of Concan: it subsequently belonged to the Peishwa, on whose fall it came into the possession of the British. (*Hamilton's E. I. Gaz.; Madras Journal of Literature and Science*, No. 16.; *Elphinstone, &c. in Parl. Reports.*)

CONCENTAYNA, a town of Spain, prov. Valencia, 30 m. N. Alicant. Pop. 7,100. It has 2 churches, 2 convents, an hospital, and a house of charity for poor travellers. Neither the streets nór the houses correspond with the number and wealth of the inhabitants, who, Miñano says, are more intent upon increasing their substance by agricultural and manufacturing industry, than on beautifying the town. They manufacture cloths, taffeties, handkerchiefs, and other articles. Their fields, which are well irrigated, produce wheat, maize, pulse, wine, oil, silk, &c.

CONCEPCION, a city of Chili, in the S. part of the Republic, cap. prov. of same name, on the right bank of the Biobio, 8 m. E. from its mouth, and about 270 m. S. S.W. Santiago; lat. 36° 43′ 25″ S., long. 73° 5′ 33″ W. Pop. 8,000. (*Amer. Almanac*, 1839.) It stands upon a low neck of land between the Biobio and the S.E. angle of the Bay of Concepçion, and occupies a surface of about a sq. mile. Streets intersect each other at right angles; houses mostly only one story in height in consequence of the great frequency of earthquakes, and many are built entirely of unbaked bricks. Concepçion was formerly a flourishing town, containing several good buildings, and as many as 20,000 inhab.: previously to 1835, it possessed a massive cathedral, but this and the greater part of the city were in that year totally destroyed by an earthquake. It is the residence of a bishop and the military governor of the prov. Manufactures and trade are said to be at present of little importance.

The Bay of Concepçion is "a large square inlet, open on the N., while the S. and W. sides are formed by a high promontory jutting out from the main land, and bending into the shape of an elbow, each side being 3 or 4 leagues long." (*Hall, Extr. from Journal*, ii. 273.) The diameter of the space thus enclosed is about 5 m. The mouth is divided by the island Quiriquina, which lies across it, into 2 channels; the N. entrance has 30 fathoms water, diminishing gradually to 12 fathoms in the middle of the bay; the S. entrance has 30 fathoms at its commencement, and 11 fathoms at its entrance into the Talcahuano anchorage. There are 3 harbours; that of Talcahuano, close to the small fortified town of the same name, under the promontory in the S.W. angle, is the most secure from winds, and that in which ships generally lie. Full 12 fathoms water are found in all parts of the bay within ½ m. of the beach; the holding ground is excellent, and the bottom free from rocks. (*Miers.*)

Concepçion was founded in 1763, after the destruction of the old city of Penco by inundation, during an earthquake. (*American Encyclopedia; Hall; Miers; Geographical Journal, &c.*)

CONCORD, a town of the U. S. of America, cap. New Hampshire, and seat of the state government, co. Rockingham, on the Merrimack, 63 m. N.N.W. Boston. Pop. (1830) 3,720. It consists chiefly of two streets, extending for nearly 2 m. along the W. side of the river, which is here crossed by two bridges. It contains the state-house, a handsome stone building, and the state prison. The courts were removed to Concord from Portsmouth in 1823. It is a town of considerable trade, and has a water communication with Boston by means of the Merrimack and Middlesex canal. (*American Encyclopedia, &c.*)

CONDÉ, a town of France, dép. du Nord, cap. cant., at the confluence of the Hague with the Escaut (Scheldt), 25 m. S.E. Lille. Pop. 5,297. It is strongly fortified by works constructed by Vauban; is well built, and contains a handsome town-hall and a fine arsenal. A canal, 15 m. in length, connects Condé with Mons, in the Netherlands. It was taken by Louis XI. in 1478.

CONDE' SUR NOIREAU, a town of France, dép. Calvados, cap. cant., on the road between Caen and Domfront, 23 m. S. S.W. the former. Pop. 6,450. Its buildings are generally heavy and *triste*; it contains, however, two old churches worthy of notice. It formerly possessed a castle with a large tower, but little now remains of that edifice. It has some commercial activity, and fabrics of woollen, cotton, and linen articles, cutlery, &c. (*Hugo*, art. *Calvados.*)

CONDOM, a town of France, dép. Gers, cap. arrond., on a height the foot of which is washed by the Baise, which is here crossed by two bridges, 23 m. N.W. by N. Auch. Pop. (*ex. com.*) 3,953. It is ill built, *laide et triste*, but improving; is surrounded by *boulevards* planted with trees, and has numerous villas in its environs. In its centre is a large open space, in which is the parish church, formerly the cathedral, which, despite the mutilations it has undergone, is still a magnificent Gothic edifice. Pens, corks, earthenware, brandy, woollen yarn, and leather are produced here; and there is a brisk trade in corn, flour, wines, &c. It has a tribunal of original jurisdiction and a communal college. It owes its origin to a monastery, which existed in the 9th century, but was of a much earlier date. It was formerly the seat of a bishopric, once filled by Bossuet. (*Hugo; Dict. Géog., &c.*)

CONDRIEU, a town of France, dép. Rhone, at the S. extremity of which it is situated, cap. cant. on the Rhone, 21 m. S. Lyons. Pop. 3,591. It has acquired some celebrity for excellent white wines, the original plants producing which were, it is said, brought thither from Dalmatia by order of the emperor Probus.

CONGLETON, a market town and bor. of England, co. Chester, hund. Northwich, in a remarkably healthy situation, on the Dane, in a deep valley bordering on Staffordsh.; 22 m. S. Manchester. Pop., 1821, 6,405; 1841, 9,222. But this refers only to the old bor., which extended over a space of 2,500 acres; a suburb, forming part of Buglawton township, has been added to the new municipal bor., which had, in 1841, a pop. of about 11,000. The principal street is upwards of a mile in length, paved, and lighted with gas: it contains many ancient houses of timber framing and plaster; at the W. end are many detached mansions, surrounded by gardens and shrubberies, and chiefly occupied by the more opulent manufacturers. "The town is increasing rapidly in every direction. The impulse given to its trade by the repeal of the duties on French (raw) silk caused an increase of 50 per cent. in the pop. between 1821 and 1831; and although in 1825 the trade received a shock from which it took some time to recover, it is

now in a flourishing state; new factories are building, and at present there is a demand for labour that cannot be supplied in the town." (*Municipal Boundary Report.*) It has an Episcopal chapel, in the patronage of the corporation; a Catholic and several large dissenting chapels; a grammar-school, nominally free for the sons of burgesses (there are about 70 boys receiving classic education, about 1-3d of whom are sons of freemen, but all pay for tuition); an infant school, established in 1835; several large Sunday-schools; and many charitable institutions and bequests, the latter chiefly held in trust by the corporation; a town-hall; new gaol, built in 1804; and public assembly-rooms, built in 1822, contiguous to which is a modern market-place. Market, Sat. Silk is the staple manufacture of the town; the silk-mills being mostly erected along the banks of the river. At present (1850) the trade consists chiefly in the throwing of raw silk, the spinning of waste ditto, the manufacture of thrown silk into plain ribands by power looms, of which there are about 254 in the town, and the weaving of a few ribands and broad cloths by hand-looms. There are also 2 cotton spinning factories, and a few tanneries and leather-manufactories: it was formerly noted for tagged leather thongs, called "Congleton points." Certain lands reserved under an enclosure act are held in trust for the benefit of the poor. The bor. is now divided into 3 wards, and governed by 6 aldermen and 18 counsellors. (*Ormerod's Cheshire; Lyson's Mag. Brit.; Parl. Reports and Papers.*)

CONGO, otherwise LOWER or S. GUINEA, a country in S.W. Africa, to which various boundaries have been assigned by the old and more recent travellers. The Portuguese, who discovered it in 1487, included in Congo all the coast of W. Africa from Cape Lopez Gonsalvo (Loango), in lat. 0° 37′ S., long. 8° 35′ E., to Cape Negro, in lat. 15° 50′ S., long. 11° 55′ E.; for they found the whole of that tract inhabited by negro tribes, resembling each other in every respect, and subject to one paramount chief, called Mani-Congo (Sovereign of Congo); but in process of time this empire became dismembered; inferior chiefs threw off their allegiance and erected separate kingdoms, which are at present known as Angola (a name now more frequently applied to the district over which all these kingdoms extend), Loango, Benguela, and lastly Congo Proper, the subject of this article.

The *boundaries* of Congo Proper are at present marked N. by the river Congo or Zaire, which at about lat. 6° 5′ separates it from Loango; S. by the river Dando, in lat. 8° 20′ S., dividing it from Angola; W. the Congoese coast is washed by the S. Atlantic ocean, while to the E. it has the unknown countries of Fugeno and Matamba, the Mountains of the Sun, &c. According to the investigations of Ritter, Congo consists of two distinct regions: that next to the sea, or the *littoral*, is low and flat, is traversed by many streams, and abounds in sandy deserts, but is elsewhere very fertile. The climate in this region is exceedingly unfavourable; and pestilential emanations, and swarms of noxious animals, expose the lives of the inhab. to perpetual danger. The other region consists of the terraces, or acclivities, ascending from the plain to the high table-land in the interior. This is by far the finest part of the country, and the richest, and most populous. The river Zaire, which descends from the interior to the coast, has its great cataracts in passing through this region.

This river is a most conspicuous object in the topography of Congo: it is a magnificent stream, particularly towards its embouchure: it overflows during the rainy season, and fertilises the surrounding country; but these risings take place also in the dry season, elevating the current 7 ft.,—increased to 12 ft. by the rains. It is exceedingly deep; Massey's sounding-machine having indicated 113 fathoms, and yet the lead had not touched the bottom. In the upper parts, the current varies in strength from 2½ to 5 m. an hour, but is sufficiently strong in the channel to prevent a transport entering the river without the aid of a powerful sea-breeze. At about 140 m. from its mouth, the Zaire narrows to from 300 to 500 yds. for about 40 m.; its banks bristling with precipitous masses of slate, which sometimes intercept the stream, and form rapids and cataracts, called by the natives *yellala*. Beyond these craggy regions, the Zaire expands in breadth to 2, 3, and even to 4 m.; and near the place where Captain Tuckey was compelled to abandon his journey, the width and majestic appearance of the river, the verdure of the land, which was here well peopled, combined to render the scene agreeable in the highest degree. (*Tuckey's Expedition*, pp. 337—348.; *Journ. Royal Geog. Soc.*, iii. 220.)

The banks of the Zaire, from its mouth to Embomma (about 60 m.) are clothed with a most exuberant vegetation, presenting to the eye a continued forest of tall and majestic trees, clothed with foliage of never-fading verdure.

The supposed identity of the Congo with the Niger was long a question agitated among geographers; and its decision was one of the objects of Tuckey's expedition. This question has been, as every one knows, set at rest by the Messrs. Lander. But it is sufficiently clear from the information collected by Tuckey, that the Zaire, at no great distance from the point to which he had ascended, divides into two great arms, the most N. of which has its source in a lake or marsh.

The *natural productions* of Congo have been admirably arranged by Professor Smith, a member of Tuckey's expedition (who unhappily lost his life in the course of it), and Mr. Brown. Large trees are only found in the valleys, or thinly sprinkled over the sides and summits of the hills, and consist for the most part of the *Adansonia*, *Bombax pentandrum*, *Anthocleista*, *Masanga* (native term, but allied to *Cecropia*), *Elæis guineensis*, *Raphia vinifera*, and *Pandanus candelabrum*. Intermixed with these, on the alluvial banks of the Quorra, large patches of the Egyptian papyrus form a grand feature in the vegetation. The edible productions are maize, cassava, sweet and bitter, two kinds of pulse, the *Cytisus cajan*, a species of *Phaseolus*, and ground nuts (*Arachis hypogæa*). The common yam, besides another species of *Dioscorea*, so bitter as to require four days' boiling before it be eatable, with the sugar-cane, capsicum, and tobacco, are alimentary plants of secondary importance. The most valuable fruits are plantains, papaws, limes, oranges, pine-apples, pumpkins, tamarinds, and a fruit about the size of a small plum, called safu. The plant, however, of most importance to the natives is the oil palm (*Elæis guineensis*), from which is extracted the best palm wine; this and two other species of palm (*Raphia vinifera* and a *Hyphæa*), are to the Congoese what the cocoa-tree is to many of the Asiatic islanders. The indigenous fruits are the *Anona senegalensis*, *Sarcocephalus*, a species of cream-fruit, *Chrysobalanus*, *Icaco*, a species of *Ximenia*, and another of *Antidesina*. (*Professor Smith's Journal* in Tuckey's work, with remarks thereon by Mr. Brown, *passim*; *Quarterly Review*, xviii. 350, 351.)

The *animals* appear to be those chiefly which are found in every part of this great continent; lions, leopards, elephants, buffaloes, antelopes, wild hogs, porcupines, hares, monkeys, &c. The river abounds with good fish, and also with those huge monsters the hippopotamus and crocodile. Domestic animals are few and scarce; those mostly met with are hogs, goats, fowls, Muscovy ducks, and pigeons, and a few sheep, generally spotted with hair instead of wool. The natives eat these animals in a manner quite characteristic of their rooted laziness. They remove neither skin, feathers, nor hair; and scarcely warming them by the fire, tear the meat in pieces with their teeth. (*Dr. Leach and Mr. Crouch*, in Appendix to Tuckey's work; *Quarterly Review*, xviii. 351.)

Government, Population, &c.—If we may depend on the traditions of the people, who have neither annals nor history, Congo was formerly a powerful empire under a single sovereign, or rather absolute despot. But it is evident, from the accounts of the early travellers, little as they are, in many respects, to be depended on, that, when first visited by Europeans, the government of Congo did not differ materially in its form from what we find it at the present day; and that it consisted of a sort of confederacy of small states under a principal sovereign. (*Prevost, Histoire Générale des Voyages*, v. 1—7.) It would appear, however, to be pretty certain that the power of the superior monarch has materially declined during the last 200 years. At all events, Congo is now split into an infinite number of petty states or *chenouships*, each governed by a *chenou* or chief. These chieftainships would, in Europe, be said to be fiefs, held under a principal sovereign, called *lindy* or *blindy N'Congo*, residing at Banza Congo (St. Salvador ?). But it would seem that most of these chiefs affect a nearly total independence; and being all despots in their own limited spheres, and frequently at war with each other, and with the principal sovereign, the country is uniformly almost in a state of the most frightful anarchy. At the death of a *chenou*, it is not his son, but his brother or maternal uncle that succeeds him.

The inhab. are said by Tuckey to be a mixed race; but the Portuguese never visited the country in such numbers as to produce any impression on the physical character of the people; and the Congoese are certainly one of the least favoured negro varieties. Speaking generally, they seem to be sunk in the lowest state of degradation. They are incorrigibly indolent; have little or no clothing; and though they raise Indian corn, agriculture is in the lowest state, and they frequently suffer the extremity of famine. Their religion is the grossest species of feticism. (See p. 29.) The Portuguese having established missions in different parts of the country: the natives sometimes exhibit in their religion an odious mixture of Christianity and idolatry. They are prone to all sorts of excesses and debauchery. The women are degraded to the condition of beasts of burden; and prostitution to strangers is considered as a necessary

part of hospitality. Still, however, they are not wholly destitute of good qualities; and are said to be sincere, hospitable, and compassionate. Having been long a principal seat of the slave trade, a considerable part of the disorders that prevail in the country are with much probability ascribed to the enormities growing out of that detestable traffic. This is said to isolate one petty state from another, and to occasion perpetual wars; the slaves being mostly prisoners taken in battle, or kidnapped on the public roads. But, admitting the influence of these causes, still we apprehend that the intellectual inferiority of the negro race is at bottom the real cause of the degraded condition of Congo, and of all the other negro states. The Congoese are said frequently to decapitate their prisoners, and burn their bodies; and if such barbarity be practised when the prisoners may be sold, the persumption would seem to be that it would become much more prevalent were the traffic put an end to. (See *Tuckey*, passim; and *Ritter's Geography of Africa*, French translation, i. 379—387.)

The country has been represented as very populous, and as studded with towns and villages swarming with inhab. Carli, one of the early missionaries, gravely reports that a king of Congo marched against the Portuguese at the head of an army of 900,000 men! (*Prevost, ubi suprà.*) But it is evident that a country in the state we have described cannot be thickly peopled; and, in point of fact, Tuckey states that the most considerable *banza*, or cap., of a petty state that he visited did not contain more than 100 huts and 600 persons. In Embomma he found 60 huts, with 500 inhab.; and at Inga 70 houses, in which not more than 300 persons resided. It is true that his observations in the interior were not very extended; and he admits that the upper banks of the Zaire (where his operations unhappily ended) were considerably more populous than those towards the coast; but still it is abundantly certain that the accounts of the extraordinary pop. of the country have no better foundation than the imagination of the writers. According to the statements of the missionaries, the cap. of the country, which they divided into six provinces, was built on a mountain about 150 m. from the sea, and was called by them St. Salvador. They speak in the most extravagant terms of the beauty and salubrity of the situation. According to Carli, of whose statements we have already given a specimen, it contained 40,000 inhab.; and it had several Christian churches, and a school under the direction of the Jesuits. But Merolla reports that in 1668 St. Salvador had suffered so much from the ravages of war, that the sovereign had transferred his residence to Lemba, and that the former had become a den of robbers. (*Histoire Générale des Voyages*, iv. 631.) There are no subsequent accounts of St. Salvador on which it would be safe to place any reliance.

CONGOON, a sea-port town of Persia, prov. Fars, on the Persian Gulph, 130 m. S. by E. Schiraz. Pop. from 6,000 to 7,000. It has an excellent roadstead, where a frigate may ride in safety in the most tempestuous weather; and good water and firewood may be procured in abundance. (*Kinneir's Persian Empire*, p. 81.)

CONI, or CUNEO, a town of N. Italy, king. Sardinia, cap. div. and prov., on a hill at the confluence of the Stura and Gesso, 45 m. S. by W. Turin. Pop. 10,000. This was formerly a strong fortress, and sustained without capture various sieges, till being delivered up to the French they dismantled it in 1801. It is still, however, surrounded by a wall, with 2 gates; it has a cathedral, 3 other churches, a royal college, hospital, workhouse, and some public baths. Its principal street is wide and handsome, and is lined throughout with porticoes: the other streets are, in fact, mere lanes. Coni is the seat of a court of primary jurisdiction, and a bishopric, and the residence of the intendente and military commandant of the div. It has some silk fabrics, and carries on a considerable trade, being a sort of *entrepôt* to Turin and Nice. (*Rampoldi; Mod. Trav.*, *&c.*)

CONJEVERAM (*Canchipura*, the golden city), a considerable town of Hindostan, prov. Carnatic, distr. Chingleput, in which it is the chief military station under the Madras presidency. It stands in a valley 36 m. W.S.W. Madras, and 25 m. E. Arcot; lat. 12° 49′ N., long. 79° 41′ E. It is tolerably populous, and covers a large space of ground, which is in great part occupied by extensive gardens and cocoa plantations. It has two remarkable pagodas; one, dedicated to Siva, contains many pillars handsomely sculptured, and some well-carved figures of elephants, &c.; the other, which is smaller, has a great deal of curious workmanship and sculpture, which, for truth of proportion and delicacy of execution, is scarcely surpassed by any other Hindoo edifice. There are numerous weavers amongst the pop.; who manufacture red handkerchiefs, turbans, and cloths for native dresses. Small pagodas, and *choultries*, or travellers' houses, abound both in the town and its vicinity: the valley of Conjeveram is fertile, contains many substantial tanks, and appears in a prosperous state. (*Hamilton's E. I. Gaz.*, i. 443, 444.)

CONNAUGHT, one of the four provs. into which Ireland is divided, on its W. coast, containing the cos. of Galway, Leitrim, Mayo, Roscommon, and Sligo. (*See* IRELAND.)

CONNECTICUT, one of the smallest of the U. States, in the N. part of the Union, between lat. 40° 58′ and 42° 2′ N., and long. 71° 53′ and 73° 50′ W., having N. Massachusetts, E. Rhode Island, W. New York, and S. Long Island Sound: length, E. to W., 90 m.; average breadth, about 52 m.; area, about 4,700 sq. m. Pop. (1830) 297,665, of whom 25 only were slaves. It ranks third in the Union as to density of pop., having 63 individuals to the sq. m. Surface generally undulating. A chain of mountains of inconsiderable height runs N. and S. through the W. part of the state. The principal river is the Connecticut: it rises in New Hampshire, and having passed through Massachusetts, intersects this state nearly in its centre; and then bending to the E., falls into Long Island Sound, a little below Newhaven, after a course of 410 m., 250 of which have been made navigable by means of locks and canals. Along the coast are several excellent harbours; the best are those of New London and Newhaven. Climate very variable: an extreme degree of heat and cold are experienced at different seasons; but the sky is usually serene, and the country healthy. There are some sterile districts; but the soil is for the most part fertile, and (for America) well cultivated. European grains, Indian corn, flax, hemp, and culinary vegetables, are raised in abundance; orchards are numerous, and apples so plentiful that cider is a considerable product. The pasture-lands are good; large herds of cattle are reared, and butter and cheese are made in large quantities. In 1836 there were 255,000 sheep, which produced 829,300 lbs. of wool, value 418,796 doll. Farms vary in size from 50 to 200 acres. There are mines of iron ore, lead, and copper; but excepting the first, none of them are wrought. Marble, black-lead, porcelain clay, and freestone, are found in many parts. The chalybeate waters of Stafford are celebrated. Manufactures occupy more attention than rural industry, and are more considerable, in proportion to the population, than in any other state of the Union, Rhode Island excepted. The principal are those of cotton and woollen stuffs, iron and tin ware, leather, fire-arms, carriages, powder, clocks, gin, snuff, &c. In 1837 it had 31 banks, with a united cap. of 8,665,607 doll. A considerable coasting trade and traffic with the W. Indies are maintained. The principal articles of export are cattle, horses, mules, grain, fish, candles, soap, butter, cheese, &c. The state is divided into 8 counties. Hartford is the chief city, and is, in conjunction with Newhaven, the seat of governm.; the other principal towns are Middletown, New London, and Norwich. These contain several colleges, learned societies, and public schools. The state school-fund, founded in 1821, is the most considerable of any in the Union; the capital, in 1832, was reported to have amounted to 1,902,957 doll., the number of persons deriving benefit from it 86,252, and the amount of interest distributed in the same year 81,930 doll. Yale College, founded at Saybrook in 1700, and removed in 1716 to Newhaven, contains the finest cabinet of minerals in the Union, and an extensive library. In 1838 it had 411 students, being a greater number than any other college in the U. States. The legislature consists of a senate of 12 mems., and a H. of Representatives; 80 towns sending 2, and the other towns 1 rep. each, their total number, in 1837, being 208. The senators, representatives, governor, and lieut.-governor are all elected annually by the white male inhab. of the age of 21 years complete. Senators receive 2, and representatives 1¼ doll. each during session, besides an allowance for travelling expenses. The judges of the supreme courts are appointed by the assembly, and hold their offices during good behaviour, or until they are 70 years of age, when they must retire. Connecticut sends 6 mems. to the National H. of Representatives, and 2 senators to the National Senate. The government was fixed on its present footing in 1818. This portion of the Union was first colonised in 1635 and 1638, by 2 colonies united in 1665. Its subsequent progress has been one of almost uninterrupted prosperity. (*Darby's View of the U. States*, pp. 491—493.; *Encyc. Americana; American Almanac.*)

CONSTANCE (an. *Constantia*, Germ. *Konstanz* or *Costnitz*), a city of the grand duchy of Baden, cap. circ. same name, or Seekreis (*Lake Circle*), finely situated on the Rhine, at the point where it emerges from the Lake of Constance, 100 m. S.S.E. Carlsruhe, 26 m. E. Schaffhausen; lat. 47° 36′ 10″ N., long. 9° 8′ E. Pop. (1838) 6,230 (*Berghaus*), mostly Catholics. Constance is a highly interesting city, from its historical associations. In the 15th century it is said to have contained from 30,000 to 40,000 inhab.; and its streets and many of its buildings remain unaltered since that period, though several of them are wholly, or almost wholly, deserted. It is fortified by a wall flanked with towers, and surrounded by a ditch; has three suburbs, one of which, Petershausen, is on the opposite bank of the Rhine, but com-

municates with the city by a long covered wooden bridge built upon stone piers. The cathedral or *minster*, begun in 1052, is a handsome Gothic structure with a lofty steeple, commanding an extensive view of the lake and country, as far as the mountains of Voralberg and the Grisons. The doors of the main portal are curiously carved; and the choir is supported by 16 pillars, each of a single block. A fine high altar, and several interesting tombs and relics, attest the ancient wealth and grandeur of the see, which was formerly the most considerable in Germany, and had large possessions in, and jurisdiction over, Switzerland. A plate of metal let into the floor of this cathedral, near the entrance, marks the spot where John Huss stood when he was condemned in 1415. The Franciscan convent, the first prison of Huss, is now a ruin; and the Dominican convent, to which he was afterwards removed, has been converted into a cotton factory. The *kaufhaus* (market-hall), erected in 1388, is interesting, as being the place of meeting of the famous council of Constance, held from 1414 to 1418. The concourse of ecclesiastics and others, from all parts of Christendom, at this council was such that not only the houses in the town were crowded, but booths were erected in the streets, while thousands of pilgrims were encamped in the adjacent fields. Religious processions, dramatic representations, and entertainments of every description, hourly succeeded each other; and thousands of individuals were employed solely in transporting thither the choicest delicacies of Europe. The great object of this council was to vindicate the authority of general councils, to which the Roman pontiff was declared to be amenable. And having done this, the council proceeded to depose three popes or antipopes, John XXIII., Gregory XII., and Benedict XIII.; they next elected Martin V., and thus put an end to a schism which had lasted 40 years. But, notwithstanding its merit in these respects, the council of Constance is justly infamous, for the treacherous seizure and execution of John Huss and Jerome of Prague, notwithstanding the safe-conduct granted to the former by the emperor Sigismund, the president of the assembly, who wanted power or inclination effectually to vindicate his pledge. Huss suffered at the stake, on the 6th of July, 1415; and Jerome, who had attended him to the council, was burnt on the 30th of May, 1416! The opinions of Wycliffe were also condemned; and an order was issued to commit his works and bones to the flames. Various relics of this period, and a collection of Roman and German antiquities found in the neighbourhood, are preserved in the *kaufhaus*.

Constance contains an ancient palace, a lyceum, an hospital, a conventual school for females, several collections of art and science, and a theatre. The suburb of Peterhausen contains a grand ducal residence, formerly a Benedictine abbey; that of Kreuzlingen is fortified, and possesses a convent, in the church of which there is some elaborate carving. The suburb of Bruhl is the scene of the martyrdom of Huss and Jerome. On the bridge across the Rhine there are mills for various purposes.

Constance is the seat of the circle and district government. It was a place of considerable commercial importance till the period of the Reformation, since which it has, until very recently, progressively declined. The chief resources of its inhab. are derived from the culture of fruit and vegetables, some trade, the navigation of the lake, and a few manufactures, chiefly of cotton cloth and yarn, and silk fabrics, which have latterly been a good deal extended. This is one of the oldest towns in Germany. It was founded or enlarged by the Romans in the 4th century. It was a free imperial city till 1548, when Charles V. placed it under the ban of the empire; next year it was attached to the Austrian dominions, and in 1805 to those of Baden. (*Berghaus, Allg. Lander und Volkerkund; Schreiber, Guide du Rhin; Mosheim's Church History*, iii. 416.)

CONSTANCE (LAKE OF) (an. *Lacus Brigantinus* or *Suevicus*, Germ. *Bodensee*), a lake of Central Europe, the largest belonging to Germany, between lat. 47° 29′ and 47° 49′ N., and long. 9° 2′ 30″ and 9° 45′ E., surrounded by the territories of Baden, Wirtemberg, Bavaria, Austria (Vorarlberg), and Switzerland. Length, N.W. to S.E., about 34 m., greatest breadth about 8¼ m.; area, about 200 sq. m.; elevation above the level of the sea, 1,255 ft.; greatest depth, 964 ft. Its most N. portion consists of a narrow prolongation, called the Neberling Lake. The Rhine enters the Lake of Constance on the S.E., and issues from its N.W. extremity at the city of Constance, connecting it with the lake called the Unter or Zeller-see, which contains the fertile isl. of Reichenau, and is sometimes considered part of the Lake of Constance. The banks of the latter are mostly flat or gently undulating, and distinguished for their fertility. They abound with corn-fields and orchards, and some tolerable wine is grown on them. The S. shore especially is studded with a picturesque line of ruined castles and other remains of the middle ages; and both sides are crowded with numerous towns and villages, the principal of which are Landau, in Bavaria; Friederichshausen, a summer resort of the king of Wirtemberg, Miersburg, and Neberling, in Baden; Arbon, in Switzerland; and Bregenz, in the Austrian dominions. The waters of this lake are green, clear, and subject to sudden risings, the cause of which has not been satisfactorily explained. Numerous aquatic birds and *Crustacea* inhabit this lake; and it is abundantly stocked with fish. Its navigation is somewhat dangerous, owing to sudden squalls: considerable traffic, however, takes place upon it, and two or three steam-boats run several times a week from Constance to the different ports situated around it. (*Cannabich; Schreiber, Guide du Rhin; Schutz; Allg. Erdkunde, &c.*)

CONSTANTINA (vulg. *Kosantinah*), an inland city of N. Africa, Algeria, cap. of its E. prov., beyond the Lesser Atlas, on a peninsulated height, surrounded on three sides by the Rummel, or Wad-el-Kebir (*Ampsaga* of the ancients), which runs in part through a deep ravine, crossed by an ancient bridge, 114 yards above the water, and 113 yards in length; 190 m. E.S.E. Algiers; lat. 36° 24′ N., long. 6° 8′ E. The hill, on which the city stands, appears to have been separated from the opposite heights of Setah-el-Mansurah by an earthquake, or some other natural convulsion. On the S.W. side it gradually declines downwards to the plain, and on that side only the city is accessible. The present city is about 1¼ m. in circ. Pop. probably about 25,000, of whom, exclusive of the garrison, a half may be Kabyles, a fourth Moors, and the rest Turks and Jews. The ancient city was much larger, extending on the other side of the ravine, and down into the plain

Constantina is strong, as well by art as by nature: the walls on the land side are 5 ft. thick, and have, in many parts, casemates behind them. There are 4 gates, all of Arabic construction, built however, in great part, of the materials of Roman edifices: the superb gates, with columns of red marble, mentioned by former travellers, no longer exist. On its N. side, on the most elevated part of the plateau, is the Kasba, or citadel, occupying the site where was formerly the Numidian citadel, and more recently the Roman capital, parts of both which edifices still exist. The palace, built within these few years, is a large edifice, handsomely fitted up. There are said to be 13 mosques, exclusive of chapels, &c., but none of them deserve any especial notice. Streets narrow and dirty; houses generally two stories high, covered with tiled roofs, *à dos d'âne*; they are constructed of brick, raised on a foundation of stones, the remains of the ancient buildings. Many of them are large and well furnished, and there are no indications of extreme poverty in any class of the inhabitants. There are many remains of antiquity; but these have suffered much of late years, having been taken down, and employed as materials for the fortifications. The bridge over the ravine, already alluded to, was originally constructed by the Romans. There are also several Roman cisterns, a church, probably of the æra of Constantine, with arches, &c. The inhabitants are industrious: the principal manufactures are those of saddles, bridles, boots, slippers, and garters; a few coarse blankets are also made; and the late bey employed 25 men in the manufacture of gunpowder. A considerable trade is carried on with the S., the inhab. receiving gold-dust, ostrich feathers, slaves, and the finer sort of haiks, both silk and wool, in return for corn, saddlery, and articles of European manufacture. From 1,200 to 1,500 mule-loads of corn used to be annually sent to Tunis. The land round the town is fertile, and mostly belongs to the community. The actual cultivators pay four fifths of the produce as rent.

A French force of 8,000 were foiled in an attempt to take this city in 1836, and suffered much on their retreat. In the following year another French army, proceeding from Bona, sat down before it on the 6th of October, and took it by storm, after a desperate resistance, on the 13th of the same month. (*Tableau de la Situation, &c.* p. 80.; *Shaw*, p. 60—62.; *Journ. of Geog. Society*, viii. 48, 49, &c.)

CONSTANTINOPLE, so called from its founder, or rather restorer, Constantine the Great (Turk. *Stamboul*), a famous city of Turkey in Europe, cap. of the Turkish dominions, and the first city of the Mohammedan world, a distinction which it has held since 1453, when it ceased to be the cap. of the Eastern empire. Its situation, whether considered in a commercial or political point of view, is the finest imaginable; and it seems naturally fitted to be the metropolis of an extensive empire. It occupies a triangular promontory near the E. extremity of the prov. of Roumelia (an. *Thrace*), at the junction of the sea of Marmara, with the Thracian Bosphorus, or Channel of Constanti-

nople, being separated from its suburbs of Galata, Pera, and Cassim-Pasha by the noble harbour called the Golden Horn, lat. 41° 0′ 12″ N.; long. 28° 59′ 2″ E. Pop. uncertain, but supposed to amount, exclusive of its suburbs, to about 400,000, and, together with them (Scutari being excepted), to perhaps 500,000 or 550,000.

It is shaped somewhat like a harp; the longest side of the triangle being towards the sea of Marmara, and the shortest towards the "Golden Horn." Its length E. to W. is about 3¼ m.; breadth varies from 1 to 4 m. Its circ. has been variously estimated at from 10 to 23 m.; but measured upon the maps of Kauffer and Le Chevalier, it appears to be about 12¼ m. in circuit, and contains, according to Dallaway and Gibbon, an area of about 2,000 acres. Like Rome, Constantinople has been built on seven hills, six of which may be observed, distinctly enough, from the port, to rise progressively above each other from the level of the sea to 200 feet above it; the seventh hill, to the S.W. of the others, occupies more than one-third of the entire area of the city. Each of these hills affords a site to some conspicuous edifice. The first is occupied by the Seraglio; the second crowned with the Burnt Pillar, erected by Constantine, and the mosque of Othman; the mosques of the sultans Solyman, Mohammed, and Selim, stand on the summits of the third, fourth, and fifth; the W. walls of the city run along the top of the sixth; and the Pillar of Arcadius was erected upon the seventh.

This amphitheatre of peopled hills, with its innumerable cupolas and minarets interspersed with tall dark cypresses, and its almost unrivalled port, crowded with the vessels of all nations, has, externally, a most imposing aspect, to which its interior forms a lamentable contrast. The expectations of the stranger are, perhaps, no where more deceived. The streets are narrow, crooked, steep, dark, ill-paved, or not paved at all, and dirty; though, by reason of the slope of the ground on either side towards the sea and harbour, and the great number of public fountains, much of the filth is conveniently cleared away. Adrianople Street, running from the gate of the same name to the Seraglio, is the only one deserving the name of street; the rest are mere lanes. The houses are mostly small and low, being built of wood, earth, or, at the best, of rough or unhewn stone. It is the palaces, mosques, bagnios, bazaars, khans, &c. that make so splendid a show at a distance. Dallaway (*Constantinople*, p. 70.) and Sir J. Hobhouse believe that its streets were anciently not more regular than at present; and that from the frequent and sudden devastations by fire, mentioned by the Byzantine historians, its houses were formerly, as now, built mostly of wood or other fragile materials. About a century after its restoration, Constantinople is reported (*Gibbon*, ch. xvii.) to have contained "a capitol, or school of learning, a circus, 2 theatres, 8 public and 153 private baths, 52 porticos, 5 granaries, 8 aqueducts, or reservoirs of water, 4 spacious halls for the meetings of the senate or courts of justice, 14 churches, 14 squares, 344 streets, and 4,388 houses, which, for their size or beauty, deserved to be distinguished from the multitude of plebeian habitations." It contains, at present, 14 royal and 332 other mosques, or houses of Mohammedan worship, 40 colleges of Mohammedan priests, 183 hospitals, 36 Christian churches, several synagogues, 130 public baths, nearly 200 khans, and numerous coffee-houses, caravanserais, and public fountains; besides some extensive subterranean cisterns, the aqueduct of Valens, several remarkable pillars and obelisks erected by the Greek emperors, and other monuments which, together with the walls, the castle of "Seven Towers," &c. are interesting remains of antiquity, and for the most part in a tolerable state of preservation. (*Andréossy*, p. 124.; *Cours Méthodique de Géographie*, p. 625.; *Hobhouse*.)

Constantine surrounded the city with walls, chiefly of freestone, flanked at variable distances by towers. These have been in many parts demolished at different periods by the violence of the sea, and by frequent earthquakes, and on the side facing the port are especially in a very ruinous state. The city was increased towards the W. by Theodosius II., who built the walls on the land side which still bear his name. These consist of a triple range, rising one above another, about 18 ft. apart, and defended on the outside by a ditch 25 to 30 ft. broad, and 12 to 16 ft. deep. The outer wall is now very much dilapidated, and in many places is only a little above the level of the edge of the ditch; it seems never to have had any towers. The second wall is about 12 ft. in height, and furnished with towers, of various shapes, from 50 to 100 yards apart. The third wall is above 20 ft. high, and its towers, which answer to those of the second, are well proportioned. These walls are constructed of alternate courses of brick and stone; and the inner ones, notwithstanding the ravages of time, earthquakes, and numerous sieges, are still tolerably perfect. On both the other sides of the city the walls are only double, and, generally speaking, not so lofty. They are frequently adorned with crosses and other ornaments, which have not been removed by the Turks; and in many parts there are bas-reliefs, and inscriptions by the Greek emperors who have built or repaired the several portions. When Dr. Clarke visited the place, he says there were in all 478 mural towers, and probably about the same number still exist.

Constantinople originally possessed 43 gates, 18 of which opened on the land side, 12 towards the Golden Horn, and 13 towards the Propontis. Only 7 gates now exist, or are at present used, on the land side, the centre one of which, the *Top-Kapoussi*, or Cannon Gate, is the *Porta Sancti Romani*, through which Mohammed II. made his triumphal entry into the city. Near the S.W. angle of the city is the *Heptapyrgium*, or castle of "Seven Towers" (though it has now but 4 towers), an irregular fortress, supposed to have been built about the year 1000. It was enlarged in succeeding ages, and in great part rebuilt by Mohammed II., who made it a state prison, it being useless as a fortress. The Golden Gate, erected by Theodosius to commemorate his victory over Maximus, was originally profusely ornamented with beaten gold, and surmounted by a gilded bronze statue of Victory. Mohammed II. walled it up. When Wheler saw it, it was still adorned with bas-reliefs, in white marble, representing several scenes of classic mythology; but these must have disappeared, since more recent travellers speak of it as only an ordinary arch between two large marble pillars, and ornamented with Corinthian pilasters, "d'un style assez médiocre."

The ancient Byzantium, founded by Byzas the Megarean, B.C. 656, and ultimately destroyed by Severus, not long before the building of Constantinople, occupied the first hill or apex of the triangle, at present the site of the seraglio. Its walls, according to Herodian, were Cyclopean, and so skilfully adjusted that they seemed like one entire mass. Most authors say that there are no vestiges of Byzantium; but Dr. Walsh affirms that "part of the walls of this very ancient city are actually standing, and cut off the gardens from the adjoining streets." The seraglio, which is believed to be of about the same extent as the ancient Byzantium, is nearly triangular, about 3 m. in circuit, and entirely surrounded by walls; those of the city forming its boundary towards the port and sea of Marmara, while on the W. it is shut in by a lofty wall with gates and towers, built by Mohammed II., soon after the capture of Constantinople. Its whole surface is "irregularly covered with detached suites of apartments, baths, mosques, kiosks, gardens, and groves of cypress." The apartments are chiefly on the top of the hill, and the gardens below, stretching to the sea. Though externally picturesque, from the contrast of its light and elegant minarets, with its dark, solemn, and stately trees, the seraglio is unmarked by any thing to characterise it as the habitation of royalty. The greater part of its interior is not open to the public; but those acquainted with it say that it contains little worthy of admiration, and that that little has been imported from Europe. The palace consists of various parts built at different times, and according to the taste of successive sultans, without any regard to uniformity or architectural rule; and it is, therefore, a heap of houses clustered together without any kind of order. Outside are two courts, the first of which is free to all persons, and is entered by the Bab-a-hoomajún or *Sublime Porte*, the principal of the gates on the city side, — a ponderous, unsightly structure, covered with Arabic inscriptions, guarded by 50 porters, and having a niche on either side in front, in which the heads of state offenders are publicly exposed. The irregular but spacious area into which this gate leads, formerly the *Forum Augusti*, contains the mint, the vizier's divan, and other state offices, the infirmaries for the sick belonging to the seraglio, and the church of St. Irene, believed to have been built by Constantine, and in which the second general council was held by Theodosius. (*Andréossy*, 16.) This church resembles St. Sophia on a small scale, and contains much marble and mosaic-work: the Turks have converted it into an arsenal. The second quadrangle is smaller, being about 300 paces only in diameter, but is more regular and handsome than the former. It is laid out in turf, intersected by paved walks, and supplied with fountains. On the left hand are the treasury, the divan, or hall of justice, and the smaller stables (the larger stables containing, according to Tournefort, 1,000 horses, are in another place, facing the sea of Marmara). On the right are the offices of the attendants, 9 kitchens, and the entrance to the private apartments. All round the court runs a low gallery, covered with lead, and supported by columns of marble. At its farther end is the tall Corinthian column, erected by Theodosius the Great to commemorate his victory over the Goths; and near it are the Baba-Saadi, "Gates of health and happiness," which lead to the throne-hall, the royal library, the apartments of the sultan, the harem, and other suites of

rooms, embellished with a costly, but tasteless, magnificence. The throne-hall is isolated, lofty, built in great part of marble, and adorned with handsome marble columns and stained glass windows. The throne itself is a canopy of velvet fringed with jewels, supported by four columns covered with gold, pearls, and precious stones; but its effect is destroyed by horse-tails, and other paltry ornaments, suspended from the roof. The state apartments closely resemble each other; their chief furniture consists of sofas, carpets, and mirrors. The walls are wainscotted with jasper, mother-of-pearl, and veneered ivory inlaid with mosaic flowers, landscapes, and sentences in Arabic. The pavilions of the harem are built upon arches, and roofed by domes covered with lead or spires with gilded crescents. They have many balconies, galleries, cabinets, &c. Baths of marble and porcelain, rich pavilions overlooking the sea, marble basins, and spouting fountains, are sprinkled over the rest of the surface within the seraglio. The number of inmates, and others connected with the seraglio, have been estimated at upwards of 10,000; but this is, probably, much beyond the mark. All are provided for by the sultan. And Tournefort (*Lett.* v. vol. ii. p. 184.) states that, when he visited the place, besides 40,000 oxen yearly, the purveyors furnished for the use of the seraglio daily 200 sheep, 100 lambs or goats, 10 calves, 200 hens, 200 pairs of pullets, 100 pairs of pigeons, and 50 green geese. But notwithstanding the general accuracy of Tournefort, we have no doubt that in this instance he was misled, and that Mr. Elliott (i. 395.) has done right in rejecting this statement.

On the third hill is the *Eski Seraï*, or Old Palace, said to have been the residence of the later Greek emperors; a building surrounded by a lofty octangular wall about 1 m. in circuit, and to which, when a sultan dies, his harem is removed. It presents nothing remarkable.

The mosques of Constantinople have all an open space around them, generally planted with trees, and refreshed by fountains. The principal mosque, the celebrated St. Sophia, stands on the W. declivity of the first hill, near the *Sublime Porte* of the Seraglio. It was begun and finished under the emperor Justinian, between the years 531 and 537. It is in the form of a Greek cross, 269 feet in length, by 243 feet wide, or about 3-5ths the length of St. Paul's London, by nearly the same width; and surmounted in its centre by a dome, the middle of which is 180 feet above the floor. The dome is of an elliptical form, and much too flat to be externally beautiful, its height not exceeding 1-6th part of the diameter; which is 115 feet, or 15 feet more than that of the dome of St. Paul's, and 18 feet less than that of St. Peter's at Rome. It is lighted by 24 windows ranged round its circumference, and rests upon four strong arches, the weight of which is firmly supported by four massive piles, strengthened on the N. and S. sides by four columns of Egyptian granite. The present dome is not coeval with the building; the original one, which was less lofty, and more circular, having been thrown down by an earthquake 21 years after its erection. There are, besides, 2 large and 6 smaller semi-domes, the whole of which blending internally with the principal one, form altogether a magnificent expanse of roof. Four minarets, but each of a different shape, have been added to this mosque by the Mohammedans. The building has been outwardly so much patched and propped up in different ages, that it has lost whatever beauty it may have originally possessed, and is now a heavy, unwieldy, and confused-looking mass. It is entered on the W. side by a double vestibule about 38 ft. in breadth, which communicates with the interior by nine bronze doors, ornamented with bas reliefs in marble. The interior is spacious and imposing, not being broken by aisles or choirs; but the variegated marble floor is covered with mats and carpets; the mosaics of the dome, &c., have been whitewashed over by the Turks; the colossal seraphim and other sculptures have been in great part destroyed, and the general *coup d'œil* is spoiled by "a thousand little cords depending from the summit to within 4 ft. of the pavement, and having at the end of them lamps of coloured glass, large ostrich-eggs, artificial horse-tails, vases and globes of crystal, and other mean ornaments." (*Hobhouse.*) The building is said to contain 170 columns of marble, granite, porphyry, *verd antique*, &c., many of which were brought from the temple of the Sun, built by Aurelian, the temple of Diana at Ephesus, and other ancient structures. The cost of the building, owing to the ambiguity of the Byzantine historians, cannot be accurately determined; but Gibbon observes (*Decline and Fall*, ch. xl.), that "the sum of one million sterling is the result of the lowest computation."* Yet with all this, Justinian seems to have failed in making St. Sophia a really fine edifice. Sir J. Hobhouse says of it, — "My impression was, that the skill of the one hundred architects, and the labour of the ten thousand workmen, the wealth of an empire, and the ingenuity of presiding angels, had raised a stupendous monument of the heavy mediocrity which distinguished the productions of the sixth century from the perfect specimens of a happier age."

Most travellers agree in preferring the mosques of Solyman the Magnificent, and Achmet, to St. Sophia. The former of these, called the Solymania, was built in 1556, of the ruins of the church of St. Euphemia at Chalcedon. It is 216 ft. in length by 210 ft. broad, and has a handsome dome, supported on four columns of Thebaic granite 60 ft. high, pavements, galleries, &c. of marble, several minor cupolas, 4 fine minarets at the angles, a spacious court-yard leading to it, with galleries of green marble on either side, and 28 leaded cupolas, and a very handsome gate of entrance ascended to by a flight of at least 20 marble steps. The whole of this mosque is in very good taste. Behind it, in an enclosed court shaded with trees, is the mausoleum of Solyman, an octagonal building, and the handsomest of all the royal sepulchral monuments, which are very numerous in the city. The mosque of Achmet I., between St. Sophia and the Propontis, was constructed in 1610, and has a very beautiful marble pavement. It is the only mosque which possesses six minarets. These are of extraordinary height and beauty, and each has three Saracenic galleries surrounding it. The Osmanié, or mosque of Othman, completed in 1755, has a light and elegant dome, and is tastefully ornamented. The other principal mosques are those of Mohammed II., Bajazet, Selim II., Mustapha III., the Validea, &c. The last named, founded by the mother of Mohammed IV., contains a double row of fine marble pillars, chiefly brought from the ruins of Troy. Another mosque has become an object of curiosity, from its containing a sarcophagus, supposed to have been that of Constantine the Great. Many of the mosques have, like St. Sophia, been formerly Greek churches: the remainder have been erected mostly by the Turkish sovereigns, the viziers, or wealthy individuals. The royal foundations comprise a college, with a public library, an hospital, and an almshouse; and the mosques in general have attached to them some charitable institutions. They derive their revenues from villages and lands belonging to them, and held by a tenure not dissimilar to that of our church-lands. The incomes of some of the mosques are very large; that of St. Sophia has been said to amount to 800,000 livres annually (*Hobhouse*): Dallaway says 3,000*l.* (p. 58.)

The largest space in Constantinople is the *Al-Meidan*, or Horse-course, the ancient Hippodrome. It is at present 300 yards long, by 150 wide. (*Elliott.*) In it formerly stood the celebrated group of 4 horses, originally transported thither from Rome, and afterwards removed to the cathedral of St. Mark, at Venice. It still contains the granite obelisk from Thebes, set up by Theodosius the Great; the broken pyramid of Constantine Porphyrogenitus, shorn of its bronze plates; and, between the two, the hollow spiral brass column, which originally supported the golden tripod in the temple of Delphi. The last consists of 3 serpents, twisted together. Mr. Elliott describes it as being at present about 12 ft. high; mutilated at the top, and much injured in the centre. Close to the Hippodrome formerly stood the imperial palace, the senate-house, and the forum. No remains of these exist. The Hippodrome continues to be used by the Turks for feats of activity, both on horseback and on foot.

In the Adrianople Street is the "Burnt Pillar," so called from its having been blackened by repeated conflagrations. It was erected by Constantine the Great, and was originally 120 ft. in height, and composed of 10 blocks of porphyry, each upwards of 9 ft. high, and 35 ft. in circumference, resting on a marble pedestal 20 ft. in height. The joints of the column were concealed by embossed brass or iron hoops, and the whole supported a colossal bronze statue of Apollo, said to have been the work of Phidias. (*Gibbon*, ch. xvii.) The statue and 3 of the blocks were thrown down by lightning in 1150, and the whole height is now only 90 ft. In the centre of the city the pillar of Marcian may be seen, enclosed in a private garden. It is of granite, with a Corinthian capital of white marble, surmounted by an urn of the same material. The finest of all, the Arcadian or Historical column, erected early in the 5th century, and covered with a series of bas-reliefs, representing the victories of Theodosius the Great, was taken down at the end of the 17th century, and only 14 ft. of it are now above ground. (*Dallaway*, p. 113, 114.) Dallaway readily traced the vestiges of the *Boucoléon* palace, built by Theodosius II. opposite the Sea of Marmara.

The means for the supply of Constantinople with water are worthy of remark. The aqueduct of Valens, which communicates with another and more extensive, though similarly constructed aqueduct, beyond the walls, continues, as anciently, to convey water into the city.

* The total expense of building St. Paul's Cathedral was 736,752*l.* 2*s.* 3*d.* (*London Encyclopædia.*)

It was originally built by the emperor Hadrian; and rebuilt first by Valens, and again by Solyman the Magnificent. It runs from the summit of the third to that of the fourth hill, consisting of a double tier of 40 Gothic arches in alternate layers of stone and brick. It is in some parts considerably dilapidated, and its E. extremity especially is much injured. Andréossy estimates that it was originally nearly 1,280 yards in length; it is now, he says, 669 yards long, and about 74 ft. in height. (*Andréossy*, p. 432.) There are several other aqueducts on both sides the port, which, as well as the *bendts*, or reservoirs, without the walls, were chiefly the work of the Greek emperors, though they have been augmented and kept in repair by the Turkish sultans. All the water that supplies Constantinople comes from Belgrade, a village a little to the N.E. of the city. An American traveller (*Sketches in Turkey in* 1831-32) has estimated the quantity brought into the city at 15,000,000 gall. every 24 hours, and states that the various water-courses about Constantinople must exceed 50 m. in length. The whole of these important works are under the superintendence of an officer with great powers, and are annually inspected by the sultan.

The Greek emperors constructed many large cisterns within the walls, both open and subterranean: the former have been gradually filled with earth, and converted into gardens; but several of the subterranean ones still remain entire. The principal are contiguous to the Hippodrome. The largest, or *Cisterna Basilika*, is a vault of brick-work, covered with *terrace* composition, 336 ft. in length, by 182 ft. broad, and supported by 336 marble pillars, each 40 ft. 9 in. in height. (*Clarke*, pp. 170,171.) It still affords water to the inhabitants, being supplied by the city aqueduct, and many wells are sunk into it. Another vault, the *Cisterna Maxima*, called by the Turks "the thousand and one columns," is, according to Mr. Elliott, 240 ft. long by 200 wide, 5 fathoms deep, and sustained by 14 rows of 16 double columns of white marble, the capital of one pillar forming the base for another. This cistern is now dry, and half filled with earth: it is at present used as a rope-walk, or place for spinning silk. Not far from it is another cistern, also dry, but capable of holding 1,500,000 gallons water. (*Elliott.*)

The fountains are amongst the chief ornaments of the city. There are almost as many as there are streets; one is to be found in every piazza, market-place, and mosque. They are uniformly square, with a spout at each side and a leaden roof; and are generally gilded, painted, inscribed with sentences from the koran, or otherwise decorated. The public baths are built mostly of marble, on a uniform plan, and covered with little flat domes: their interior is generally handsome and spacious; and the price of a bath, the first of oriental luxuries, is so low that a poor man can enjoy a hot bath for a penny. In the better sort, coffee, sherbet, and pipes are furnished to the bathers. Few houses of consequence are unprovided with a commodious bath.

The greater number of the *khans* (bazaars), and *bezestins* (or changes), are built of stone or brick. The *khans* and *serais*, or inns, are for the most part royal or charitable endowments, each capable of accommodating from 100 to 1,000 persons. They consist of open squares, surrounded by rooms, in several stories, and possess recommendations far outweighing their want of architectural elegance. Most of them are intended for travelling merchants. Excepting a small present to the servant at departing, strangers are gratuitously lodged in them, and during their residence in the city, are masters of their rooms, of which they keep the keys. "They are for all men, of whatever quality, condition, country, or religion soever, and the construction of them has contributed to attract the merchandise of the furthest boundaries of Africa and Asia to the capital of Turkey. During fires or insurrections, their iron gates are closed, and they afford complete security to the persons as well as goods of the merchants." (*Hobhouse.*)

The covered *bazaars* have more the appearance of a row of booths in a fair, than a street of shops. Each is appropriated to a separate article of merchandise. The shops are all open in front, and under cover of a common roof; the sills of the windows, as in ancient Pompeii, forming the counters. (*Elliott.*)

The better sort of coffee houses are open on one side, and have a fountain playing in the midst of a range of marble seats, and recesses furnished with pillows, mats, and stuffed carpets. A row of them, near the Solymania, is frequented by opium eaters; but there are not nearly so many of these individuals in the Turkish capital as is generally imagined. All the public buildings of Constantinople are crowned by cupolas, in consequence of which, their number, at a distance, seems to be as great as that of the private houses. The domes, as well as the minarets of all the sacred structures, are terminated by a crescent.

The houses of opulent Turks, are built, like the *khans* and most other large houses in the E., round a court, which has always a fountain playing in its centre. Occasionally these residences are not ill-constructed: but the common dwellings are mere comfortless wooden boxes, with unglazed windows, and without fire-places. (*Dallaway.*) House-rent is said to be higher in Constantinople than in any other city in the world: this is ascribed to the frequency of fires, a house not being reckoned worth more than 5 years' purchase, if so much. The fact is, that these fires are very often intentional; and that they are resorted to for the same purpose that public meetings and petitions are got up in England—to make the sultan aware of the public discontent, and of the necessity of appeasing it! A striking instance of this sort is given by Porter (*Observations on the Turks*, p. 92.), and similar instances may be found in other travellers. We do not know that any thing could better evince the atrocious nature of the despotism under which Turkey has so long groaned, than the circumstance of its making fire-raising a sort of constitutional resource!

The Golden Horn (an. *Sinus Byzantinus*) has usurped the ancient name of the promontory on which Byzantium was built, and which was first called *Κέρας Χρύσεον*, *Chrysoceras*, or Golden Horn. (*Clarke's Trav.*, viii. 176. 182.) It is one of the finest and most secure harbours in the world, capable of containing upwards of 1,000 sail of the line, and of a depth sufficient to admit of goods being landed on the quays from the largest ships, in many places without the assistance of boats. It extends from the Seraglio Point inland, for about 4½ m. N.W., with a breadth varying from a furlong to half a mile. At its entrance it has a light-house on either side, and is defended by some batteries on the Seraglio Point. At its upper end, the ancient *Lycus*, now called the Sweet Waters, falls into it, and it is continually cleared by the stream of that river, in conjunction with a current setting into it from the Bosphorus. It exhibits a most picturesque and animated scene, covered, as it always is, with merchant vessels, steamers, ships of war, and *caïques* of all descriptions. Along the S.W. side of this harbour, the *Fanar*, or Greek quarter, extends nearly the whole way from the seraglio to the western walls of the city. Beyond the walls, on the same side, is the suburb of Azoob or Ejoop, in the mosque of which the new sultan is always installed in his office. The upper extremity of the harbour, anciently called the *Marcidum Mare*, is now, as formerly, a low, marshy, unwholesome tract; but about 1½ m. beyond, in the Valley of the Sweet Waters, the Sultan Achmet III. had some grounds laid out in the French style, with the addition of gaudy kiosques, coffee-houses, &c., to which the inhabitants of the city and suburbs frequently resort.

On the N.E. side of the harbour are the suburbs of Galata, Topkanah, Pera, and Cassim Pasha. The first two stand side by side on the shore opposite to the seraglio, and E. end of the city. Pera is on a hill to the N.E. behind both; and Cassim Pasha to the N.W. of all, opposite the Fanar. Galata was built by the Genoese in the 13th century, and walled in the 15th. It is about 4 m. in circuit, divided into 3 quarters, and inhabited chiefly by European and other merchants. It has 12 gates, and contains a citadel or tower, 140 ft. high, built by the emperor Anastasius, a very fine fish-market, several mosques, a handsome fountain, and a great number of shops. Tournefort remarks that "one tastes in Galata a snatch of liberty not to be found elsewhere in the Ottoman empire. Galata is, as it were, Christendom in Turkey; taverns are tolerated, and the Turks themselves freely resort thither to take a cheerful glass." Topkanah (*an arsenal*) contains an arsenal, artillery-barracks, and magazines, and a cannon-foundry. Pera is beautifully situated, but irregularly built and ill-paved. It is about 2 m. in length; its pop. is almost wholly Frank, and it contains the residences of most of the European ambassadors, besides 4 Catholic and 1 Greek church, a monastery of dervishes, and a Mohammedan college. In 1831, it suffered severely from a fire which destroyed 10,000 houses, amongst which were the palaces of nearly all the ambassadors, and property estimated to be worth 8,000,000 dollars. Cassim Pasha contains the great naval arsenal, dock-yards, barracks, quarters for slaves and workmen, the palace of the capitan-pasha, &c. There are no suburbs on the W. side of Constantinople, only a few cemeteries and scattered cottages beyond the walls. The immediate vicinity towards Thrace consists generally of an expanse of open downs; the solitude and desolation which prevail on this side are remarkable. On the Asiatic continent, about a mile across the Bosphorus from the Seraglio Point, stands the town of Scutari (an. *Chrysopolis*); and about 2 m. S. of it, the ancient Chalcedon.

Manufactures few: the principal are those of silk and cotton fabrics, arms, morocco leather, saddlery, horse-trappings, shoes, and other articles of ordinary use and consumption, together with those of tobacco bowls, tubes, and mouth-pieces. The latter branches of industry employ many hands, and one bazaar is devoted solely to those articles. The *keff-kil* earth is dug in

several parts of Asia, rudely fashioned into pipe-bowls in Constantinople, and exported in large quantities to Hungary, Germany, and France, where the bowls are re-manufactured, and receive the name of *meerschaums*. The best tubes are formed of the stems of the cherry or jessamine tree, both of which are largely cultivated in the neighbourhood for the purpose. The rank of a person in this city being determined *by his pipe*, it is often adorned in a very costly manner, and the price of a *tchibouque* may vary from 20 *paras* to 20,000 piastres. The fisheries of Constantinople are by no means unimportant: the sea and harbour abound with shoals of tunny, sword-fish, &c., and the "sweet waters" with a profusion of fresh-water fish.

The foreign trade is considerable. Imports, chiefly corn, iron, timber, tallow, and furs, from the Black Sea; cotton stuffs and yarn, tin, tin-plates, woollens, silks, cutlery, watches, jewellery, paper, glass, furniture, indigo, cochineal, orpiment, &c., from England and other parts of Europe; corn and coffee from Alexandria; a good deal of coffee from Brazil and the W. Indies, in American bottoms, which traffic has latterly much increased; sugar, partly from the E., but chiefly from the W. Indies; wax, copper, drugs, gums, porcelain, overland from China (a trade which existed in the time of the Romans); and slaves, chiefly from Georgia, Circassia, and Africa. Exports comparatively trifling: chiefly silk, carpets, hides, wool, goats' hair, potash, wax, galls, bullion, diamonds, &c. The trade, which, as a whole, is less than might have been expected in a city of such size, is for the most part in the hands of English, French, Armenian, and Greek merchants, and Jew-brokers. The more wealthy Armenians (a nation constituting a considerable proportion of the pop.) are money-changers, bankers, jewellers, physicians, apothecaries, &c.; the lower classes are employed in the most laborious occupations. As chintz-printers, and muslin-painters, the Armenians here surpass most European artisans. The Greeks are much less numerous than before the Greek revolution.

Constantinople is the residence of a Greek, an Armenian, and a Catholic-Armenian patriarch. The first has now no authority in the newly erected kingdom of Greece. Elementary schools are to be met with in every street; and in every quarter there are Turkish free-schools for the poor, the expenses of which, as well as the board and lodging of many of the pupils, are defrayed out of the revenues of the mosques. It is asserted that altogether there are upwards of 1,000 schools in the city. (*Sketches of Turkey*.) Some of the *medresses*, or colleges attached to the mosques, have between 400 and 500 students, who are lodged and educated on the foundation, and have each several professors, the salaries of the principal among which are equivalent to about 100*l.* a year. In these seminaries all the members of the *ulemáh* are educated, and no one can be admitted into the hierarchy or the law without having first graduated in one of them. The Mohammedan law had prohibited the Turks from learning European tongues; but the late sultan established a school for the instruction of native youths in French, outside the seraglio. The French and Austrian embassies have schools for the acquisition of Turkish by their members. (*Elliott*, i. 396, 397.) There are 13 public libraries, 9 or 10 of which are attached to the royal mosques, and contain about 2,000 manuscripts each, mostly copies of the koran and commentaries on it. The private library in the seraglio is said to be richer than any of the rest, and has been believed to contain some valuable Greek and Latin MSS. (*Dallaway*, p. 23.)

"Amid the novelties that strike the European on his arrival, nothing surprises him more than the silence that pervades so large a capital. He hears no noise of carts or carriages rattling through the streets; for there are no wheeled vehicles in the city, except a very few painted carts, called *arabahs*, drawn by buffaloes, in which women occasionally take the air in the suburbs, and which go only at a foot-pace. The contrast is still more strongly marked at night. By ten o'clock every human voice is hushed." Constantinople is not a healthy place of residence for strangers: it is subject to sudden changes of temperature; and the strong *etesian* or N. winds, which prevail in the summer, and do injury to trade, by preventing the access of ships from the Ægean and Mediterranean, are also detrimental to public health and comfort. Earthquakes, the plague, and devastating fires, often consuming 2,000 or 3,000 houses, cause great destruction of life and property. In other respects, too, it is a most unpleasant place of residence to a European or other stranger. In many cases property is not secure, justice is notoriously corrupt, the police is bad, the place is infested with cats, rats, and, as most travellers say, with herds of wild dogs, and birds of prey, which act as scavengers. Sir J. Hobhouse states, that "Constantinople is distinguished from every other capital in Europe, by having no names to its streets, no lamps, and no post-office."

The history of this renowned city for a lengthened period is given by Gibbon. It was originally founded by Byzas, from whom it derived the name of *Byzantium*, *anno* 656 B. C.; and having been destroyed by Severus, was rebuilt A. D. 328, by Constantine, who made it the cap. of the Roman empire. On the subjugation of the Western empire by the barbarians, Constantinople continued to be the cap. of the Eastern empire. Its wealth and magnificence were celebrated during the middle ages. It has sustained numerous sieges, but has only been twice taken; first in 1204, by the Crusaders, who retained it till 1261; and, lastly, by the Turks, under Mohammed II., May 29. 1453, when the last remnant of the Roman empire was finally suppressed. (*Gyllius; Wheler; Tournefort; Gibbon; Dallaway, &c.*, passim; *Clarke's Trav.* viii. 133—185.; *Andréossy, Constantinople, &c.; Elliott's Trav. in Austria, &c.* i. 344—406.; *Voyages du Maréchal Marmont*, vol. ii.; *Hobhouse's Albania, &c.* vol. ii.; *Modern Traveller; Commercial Dict., &c.*)

CONSUEGRA, a town of Spain, prov. La Mancha, on the Amarguillo, 38 m. S.E. Toledo. Pop. 8,000. It has 2 churches, 3 convents, a palace, and a variety of Roman inscriptions and antiquities. On a neighbouring hill are the remains of its ancient castle. Streets tolerably regular, but narrow and steep. The vicinity produces grain, wine, oil, barilla, and soda, and has quarries of azure-coloured marble, jasper, and other stones. It has fabrics of coarse stuffs, baize, and serge.

CONWAY, a town and parl. bor. of N. Wales, co. Caernarvon, hund. Isaf, on the æstuary of the Conway river, 15 m. N.W. by W. from the Menai bridge. Pop. 1,245. The town, which is of a triangular shape, stands on a steep slope, and is surrounded by lofty walls, fenced with 24 round towers. The lower face of the triangle borders on the river; and at its farthest angle, on the verge of a slate rock, its magnificent castle

"Frowns o'er old Conway's foaming flood."

This noble structure was built by Edward I. in 1284. "A more beautiful fortress never arose. Its form is oblong, placed in all parts on the verge of the precipitous rock. One side is bounded by the river; another by a creek full of water at every tide, and most beautifully shaded by hanging woods. The other two sides face the town. Within are two courts; and on the outside project eight vast towers, each with a slender one of amazing elegance issuing from its top, within which had been a winding staircase. In one of the great towers is a fine window, in form of an arched recess, or bow, ornamented with pillars. The great hall suited the magnificence of the founder. It extended 130 ft. in length, was 32 broad and of a fine height. The roof was supported by eight noble arches, six of which still remain. There were two entrances into the fortress, one from the river, and one from the town." (*Pennant's Tour in Wales*, iii. 123. 8vo. ed.) The town is poor and inconsiderable, without trade or manufacture of any sort. Much of the ground within the walls is used for gardens. The bor. is one of the contributary bors. to Caernarvon in returning a mem. to the H. of C. The limits of the bor. extend to a considerable distance beyond the walls of the town. The port dries at low water.

The old and dangerous ferry over the river has been superseded by a magnificent suspension bridge, completed in 1826. The length of the bridge between the centre of the supporting towers is 327 ft.; and it is elevated 18 ft. above high-water mark. The construction of this and the Menai bridge, and the excavations and improvements that have been made at Penmanmawr and other places, have made the road, formerly so dangerous, from St. Asaph and Conway to Bangor and Anglesea, one of the best and safest in the empire. (*Boundary Report, Guide to N. Wales, &c.*)

COOCH-BAHAR, or VIHAR, a rajahship of Hindostan, prov. Bengal, between lat. 26° and 27° N., long. 89° and 90° E.; having N. Bootan, and on all other sides the distr. of Rungpore, with which it is incorporated; length about 90 m.; greatest breadth 60 m. Its rajah also possesses some tracts beyond the Mogul limits of Bengal, not subject to tribute, and on which opium is extensively cultivated. The S. part of this country is fine and fertile, but N. of the cap. it is low, marshy, and interspersed with jungle, and coarse rank vegetation. The Cooch or Rajbangsi tribes eat various kinds of flesh, and are considered by the Bengalese and other Hindoos as very low and impure. Notwithstanding provisions are cheap as compared with other districts, and rents low, many of the natives, especially in the N., are so indigent as to be frequently obliged to sell their children for slaves. Hoe-cultivation is common. In 1582, Abul Fazel relates that the chief was a powerful sovereign, having Assam and Camroop under his government, and able to bring into the field 1,000 horse and 100,000 foot; in 1661 this territory was conquered by the Moguls, and devolved, with the rest of Bengal, to the British in 1765. In 1814, the tribute paid by its rajah amounted to 6,280*l.*; but great difficulty has always been experienced in collecting it. (*Hamilton's E. I. Gaz.* vol. i.)

COOKSTOWN, an inl. town of Ireland, prov. Ulster, co. Tyrone, on the Ballinderry river, 9 m. W. from Lough Neagh. Pop. in 1831, 2,883: pop. of par. in 1834, 8,693; of whom 2,228 were of the estab. church, 3,419 Prot. diss., and 3,046 Rom. Cath. It consists of one long street, planted on each side, with a transverse street crossing it. The par. church is a large Gothic structure: there are three meeting-houses for Presbyterians, two for Methodists, and near the town is a Rom. Cath. chapel. There is also a dispensary and a constabulary station. A manor court holds pleas to the amount of 5*l.*: petty sessions are held on alternate Fridays. Linens are manufactured here, and bleached in the vicinity. Markets for grain are held on Tuesdays, and for general sales on Saturdays; fairs on the first Saturday of every month. Post-office rev. in 1830, 442*l.*; in 1836, 407*l.* A branch of the Belfast Bank was opened here in 1835. (*Stat. Survey; Railway Rep.*)

COORG (*Hodoogoo*), an anc. rajahship of Hindostan, prov. Mysore, formerly independent, but now under the control of a British resident; for the most part between lat. 12° and 13° N., and intersected by the 76th parallel of E. long.; having N. and E. the Mysore territories, and on all other sides those of the Madras presidency; length N. to S. about 70 m., breadth very irregular: area, 2,340 sq. m. Pop. (1836) 59,000. To the W. it is bounded by the W. Ghauts, parallel to which there is a succession of lofty narrow ridges, enclosing valleys of various extent. The chief elevations are, Tadiandamole 5,781 ft., and Soobramany 5,682 ft. above the sea: the principal valley is that between Markara and Naknaad, 18 m. long. by 15 m. broad, with an extremely uneven surface, in the lowest part of which runs the Cavery. The geology of Coorg strongly resembles that of the Neelgherries; the principal rocks being sienite, granite, and greenstone, and the subordinate ranges uniformly capped with the detritus of these, cemented by argillaceous earth, and coloured by oxide of iron: porcelain clay frequently occurs. The whole country, with few exceptions, is covered with forests, but not overloaded with jungle, excepting in the vicinity of the Mysore dominion; where elephants, game, and other wild animals are found. Sandal, and other valuable woods, abound. Both the botany and zoology of this region offer a rich field to observers, but have hitherto been but little studied. From the greater elevation, the temperature is much below that of either Malabar or Mysore, and remarkable for its equality. The climate is, in general, highly suitable to European constitutions; though the monsoon rains, from June to Sept., often fall with great violence. The Coorgas are a Nair tribe of martial habits; they have few towns, or even villages, of any size, preferring to live in jungles and wilds. They cultivate rice in the valleys, which are very productive, though the quantity of land under culture be very trifling. The pastures are excellent, and cattle are abundant. Manufactures limited to the blankets worn by the pop. Cotton cloths are imported. Contrary to the custom in Malabar on the other side of the Ghauts, hereditary rights and possessions in Coorg descend in the male line, and some family disputes arose in 1808, in consequence of Beer Rajendra (who had expelled the troops of Tippoo from Coorg) having left, at his death, the government of his dom. to his daughter, to the prejudice of his brother, who was ultimately established in possession by the British government. (*Madras Journal*, No. 13. pp. 338—343.; *Hamilton's E. I. Gaz.* i. 451. 2d ed.)

COOTEHILL, an inl. town of Ireland, prov. Ulster, co. Cavan, on a small river of the same name, 26 m. W. by N. Dundalk. Pop. in 1821, 2,152; in 1831, 2,178: pop. of par. in 1834, 12,091; of whom 1,493 are of the estab. church, 1,074 Prot. diss., and 9,524 Rom. Cath. The town consists of four broad streets, neatly laid out and well kept. It has a par. church, a Rom. Cath. chapel, two Presbyterian meeting-houses, places of worship for Moravians, Quakers, and Methodists; a market-house, a court-house, and a bridewell. General sessions are held here at Easter and in October; petty sessions every Wednesday. There is an extensive trade in grain and coarse linens. The corn markets are held on Saturdays, the general markets on Fridays; and fairs on the second Friday in every month. Post-office rev. in 1830, 395*l.*; in 1836, 433*l.* Branches of the Provincial and Ulster banks were opened here in 1836 and 1837. (*Stat. Survey; Railway Rep.*)

COPENHAGEN (*Kiobenhavn*, merchants' haven), the cap. of Denmark, a well-built city, principally on the E. coast of the island of Zealand, but partly also on the contiguous small island of Amak, the channel between them forming the port. Lat. 55° 41′ 4″ N., long. 12° 35′ 46″ E. Pop. (1847) 129,292. It is well fortified. The ramparts, which extend for about 5 m., are flanked with bastions, and surrounded by a deep ditch filled with water. It is also defended by a very strong citadel, and by the *Three Crowns* battery, constructed at the entrance of the port on a bank of sand, about 1,500 fathoms from shore. The city is usually divided into the old town, the new town, and Christianshavn. The first is the largest and most populous, and having at different periods suffered much from fire, most part of it has been rebuilt on an improved plan, though some of the streets are still narrow, crooked, and inconvenient. In the new town the streets are straight and broad, though generally ill-paved, the squares regular and spacious, and the private houses and public buildings the finest in the city. The part called Christianshavn, from its being built by Christian IV., stands on the island of Amak. It is intersected by various canals, and communicates with the other parts of the town by bridges. Public buildings numerous, and many of them superb. Among others may be specified the castle of Christiansborg, destroyed by fire in 1795, and since rebuilt. It has a picture-gallery, comprising a complete collection of Danish pictures, with a fine collection of the Dutch school, &c.; a chapel ornamented by bas-reliefs from the chisel of Thorwaldsen; and the royal library, one of the best in Europe, containing, exclusive of manuscripts, above 450,000 volumes. The part of the new town called Amalienborg was entirely rebuilt by Frederick V. between 1745 and 1765. It consists chiefly of an octagon, divided by four broad rectangular streets, in which is the palace of the king, the crown prince, &c. In the centre is a bronze equestrian statue of Frederick V., erected by the East India Company. There are also the royal palaces of Rosenburg and Charlottenborg, appropriated to public purposes; the university, the town-house, the theatre, the exchange, and the barracks. The cathedral church of Notre Dame, nearly destroyed during the bombardment in 1807, has been rebuilt; and is enriched by statues of Christ and the apostles, by Thorwaldsen. The tower of the church of the Trinity, 115 ft. in height, is used as an observatory: it also contains the library of the university, and the great globe of Tycho Brahe. The church of Our Saviour is reckoned the finest in the town: its spire, nearly 300 ft. in height, is a masterpiece of art. The educational, literary, and scientific establishments of Copenhagen, rank with the first of their class, and reflect infinite credit on the government and the people. Besides the university, to which we have elsewhere alluded, there is a polytechnic school, a metropolitan school, a royal school of marine, a royal school for the higher military sciences, a normal school, &c. There is, also, a royal society similar to that of London, a Scandinavian society, and a society of northern antiquities. The academy of arts is and has long been in a flourishing condition. Besides the royal library in the palace of Christiansborg, the university library has above 100,000 volumes, and a large collection of manuscripts. The *Classen* library, bequeathed to the public by the general of that name, is mainly devoted to science and natural history; and, exclusive of these, there are several other minor but still valuable collections.

The hospitals are numerous and well conducted. The most splendid is that of Frederick V. The lying-in hospital has attached to it a school of midwifery and a foundling hospital. The royal institution for deaf and dumb admits patients, from whatever part of the kingdom they may come. Soup, made of horse flesh, is said to be supplied as an article of diet to prisoners in the house of correction. (*Bremner*, i. 153.)

If distillation be excepted, the manufactures of Copenhagen are neither very extensive nor important. There are about 258 distilleries, mostly, of course, on a small scale, and about 50 breweries, with sugar refineries, tobacco manufactories, soap-works, &c.: cotton and woollen goods, linens, silks, gloves, hats, &c., are also produced, but in limited quantities: there are several tanneries.

The trade of the port is said to have declined, but it is still pretty considerable. There is annually imported about 11,000,000 lbs. sugar, the half of which is supplied by St. Croix; 3,000,000 lbs. coffee, with other colonial products. Anchors, pitch, and tar, are brought from Sweden and Norway; flax and hemp, masts, sail cloth, and cordage from Russia; tobacco and rice, from the United States; wines and brandy from France; coal, earthenware, and salt, are the principal articles of direct import from England; train oil, herrings, &c. from the fisheries. In 1837 there entered the port 1,493 ships (excluding steamers), of which 164 were Swedish, 463 Prussian, 154 Norwegian, and 95 of the burden of 17,762 tons British.

The harbour is formed, as already stated, by the channel or arm of the sea running between Zealand and the opposite island of Amak. The entrance to it is narrow; but the water is sufficiently deep to admit the largest men-of-war. There are dry docks, and every facility for the building and repairing of ships. Copenhagen is the station of the Danish navy. The bank of Copenhagen, founded in 1736, was remodelled in 1818: it is now a private institution. There is also an insurance company. The charge of the public health is entrusted to a commission. The police is under a special establishment; and

besides the garrison, the citizens are formed into a national guard.

Copenhagen is not a very ancient city, having been founded in 1168. It has at different periods suffered severely from fires, particularly in 1728, 1794, and 1795: but how disastrous soever at the time, these visitations were in the end advantageous, the narrow streets and wooden houses of which the town formerly consisted having been replaced by broad streets and handsome stone buildings. Besides the loss of her fleet, Copenhagen suffered severely from the bombardment by the English in 1807, and by an inundation in 1824. But she has fortunately recovered from both these disasters, and by her literary and other establishments has placed herself at the head of civilisation in the north of Europe.

The environs of Copenhagen are celebrated for their beauty. Fredericksberg, a magnificent castle, the summer residence of the king, stands on a rising ground within a moderate distance of the city. Its gardens are open to the public, and are a favourite resort. Fredericksborg, another royal residence, is situated about 21 m. N. Copenhagen. It is a vast, but incongruous pile, partly brick and partly stone, and partly of Greek and partly of Gothic architecture. It has some fine pictures and a series of portraits (partly imaginary) of the sovereigns of Denmark.

COPIAPO, the most N. town of Chili, formerly the cap. of the prov. of same name, now incorporated with that of Coquimbo. It stands on the right bank of the rivulet of Copiapo, 30 m. from the Pacific, and 178 m. N.N.E. Coquimbo, lat. 27° 10′ S., long. 71° 5′ 15″ W. Pop. (1830) about 4,000. (*Meyen.*) Most of the houses are built of sun-dried bricks whitewashed; and, the better to resist earthquakes, used to be constructed with great solidity; but in 1819 it was almost utterly destroyed by the great earthquake that caused such devastation throughout a great part of Chili. In 1822 it suffered severely from another earthquake, which phenomena are so common in this prov., that, during Dr. Meyen's stay in it, six or seven shocks commonly occurred in the twenty-four hours! though the greater number were, of course, very slight. The harbour of Copiapo on the Pacific is good; and at a small village on the shore most of the ore from the mines of the prov. is smelted, and the metal exported. (*Mier's Travels, &c.* i. 402—404.; *Meyen's Reise um die Erde; Geog. Journal*, vi. 368.; *Hall's S America*, ii. 25—27.)

COQUIMBO (or LA SERENA), a sea-port town of Chili, in the N. part of the republic, cap. of the prov. of same name, on the Chuapa, near its mouth, 270 m. N.N.W. Santiago, lat. 29° 53′ 48″ S., long. 71° 18′ 40″ W. Pop. (perhaps) 10,000. (*Amer. Almanac*, 1839.) Town clean, and tolerably well laid out; streets intersect each other at right angles; houses mostly of sun-dried bricks, and only one story in height, but interspersed with numerous gardens of fruit-trees, evergreens, &c. It has several churches and convents, a public school, and an hospital. It is the seat of the intendent of the prov., and is the residence of many families, and in some sort the cap. of N. Chili, as well as the chief mercantile port. In 1834 83,979 marcs of silver and nearly 42,860 quintals of copper and copper ore, were exported from it: it also exports chinchilla skins, &c. The harbour or bay of Coquimbo is large, well-sheltered, and secure at all seasons. There is sufficient depth of water for ships of large burden, 9 fathoms being found 300 yards off shore, and nearly 3 fathoms close in shore. Coquimbo was founded by Valdivia in 1544. About 25 m. up the valley of Coquimbo are some singular parallel roads, of which Captain Hall has given an account. (*Hall's S. America*, ii. 6.; *Mier's American Encyc.*)

CORDOVA (an. *Corduba* and *Colonia Patricia*), a famous city of Spain, cap. prov. and kingdom of the same name in Andalusia, on the Guadalquivir, 73 m. N.E. Seville, and 185 m. S.S.W. Madrid; lat. 37° 52′ 13″ N., long. 4° 45′ 53″ W. Pop. (1826) 46,750 (*Miñano*), not a tenth part of what it is said to have amounted to in its most flourishing period, in the 11th century. It occupies a large oblong space of sloping ground, enclosed by walls flanked with towers originally erected by the Romans, and afterwards repaired, strengthened, and extended by the Moors. But a great part of this space is now covered with gardens and ruined buildings, and but little remains of its ancient grandeur. Streets narrow, crooked, and dirty; and few either of the public or private buildings are conspicuous for their architecture; the latter seldom exceed two stories in height. The great square, *Plaza Real*, or *de la Constitucion*, is, however, large and regular; the houses surrounding it are lofty, and furnished with porticoes and balconies. There is a suburb of some extent on the S. bank of the river, with which the city communicates by means of a stone bridge of 16 irregular arches, 860 ft. in length, and 23 ft. in width, constructed by the Moors towards the close of the 8th century, and the approach to which is guarded by an old Saracenic castle, still maintained in a state of defence. The city contains a cathedral, 13 parish churches, about 40 convents, 7 hospitals, a foundling and another asylum, city-hall, bishop's palace, 3 colleges, besides other schools, &c. By far the most remarkable public edifice is the cathedral or *mezquita*, formerly a mosque, built by the Moors at the latter end of the 8th century upon the ruins of a Gothic church, which is itself believed to have replaced a Roman temple. Both of those edifices have apparently furnished many pillars and other materials for the present building. The mezquita externally is unprepossessing, and little calculated to attract notice; but the singularity of its interior strikes every one with astonishment. It is a gloomy labyrinth of pillars, 356 ft. in length N. to S., by 394 ft. broad E. to W., and lighted only by the few doors that remain open, and some small cupolas in different parts of the roof, which latter is flat, and only 35 ft. above the pavement; being supported in most places by a kind of double arcade of horse-shoe arches. The columns supporting these arches, and which amount to several hundreds, are of jasper, marble, porphyry, granite, *vert antique*, and various other materials, and differ as much in their architectural as in their geological character. They are all, however, of the same height; "for the Arabs, having taken them from Roman buildings, served them in the same manner that Procrustes did his guests: to the short ones they clapped on monstrous capitals and thick bases; those that were too long for their purpose had their base chopped off and a diminutive shallow bonnet placed on their head." (*Swinburne*, ii. 89.) The number of aisles or naves is lengthwise 19, and transversely from 32 to 35. A considerable space at the S. end was parted off for the use of the *Imans*, and now serves for the chapter-house, sacristy, and treasury of the cathedral. In the front of this space is what is called the *zancarron*, an octagon Moorish sanctuary, 15 ft. in diameter, richly ornamented without and within, and domed over by *a single block of white marble*, carved into the form of a scallop-shell. Adjoining this, in 1815, another small apartment was brought to light, preserving, in a remarkable degree, its pristine decorations. The gorgeousness of this little chamber will perhaps give an idea of that of the building generally in the time of the Moors; for the splendour of almost all the rest of the *mezquita* has entirely disappeared; the gilding and ornaments of the roof, the arabesques and inscriptions on the walls, and the mosaics of the pavement, have nearly all vanished; and of the 24 gates, formerly plated with brass, and curiously embossed, only 5 remain open. The sacristy contains some tolerable paintings, and the church is very rich in jewels, plate, and silks. The *mezquita* stands within a court planted with orange-trees, palms, and cypresses, and surrounded with a cloister, on the N. side of which a square belfry has been built.

The bishop's palace is a large and rather handsome building, containing a suite of state apartments, in one of which there is a large collection of portraits of the bishops of Cordova. Previously to the late civil war, 2,000 poor persons were daily supplied with food from the bishop's kitchen, which mistaken bounty accounts sufficiently, as observed by Mr. Townsend, for the swarms of beggars with which the town is infested. (ii. 300.) The famous palace of the Moorish sovereigns is now unoccupied; it had been converted into a royal stud-house, where the best horses in Spain were reared: the stables are now empty. (*Scott.*) The manufactures have participated in the general decay of the place; there are at present only some trifling fabrics of ribands, lace, hats, baize, and leather after the Moorish fashion: the latter article was formerly very extensively manufactured; and was known in commerce by the name of *cordovan*, and from it the term cordwainer has been derived. In 1833, a handsome quay was in the course of being erected above the bridge, but as there is now but little trade, and the river is for 9 months in the year navigable only for boats, the quay would seem, like many other public works in Spain, to be more for show than for use.

Cordova is said by Strabo to have been founded by the Romans under Marcellus; but as there were several distinguished persons of that name, this leaves the epoch of its foundation uncertain. No mention is made of it before the age of Cæsar and Pompey, but it soon after attained to great distinction as a rich and populous city, and a seat of learning. (*Cellarii, Not. Orbis Antiqui*, i. 86.) In 572 it was taken by the Goths, and in 692 by the Moors, under whom it became the splendid cap. of the "Caliphate of the West," and subsequently of the kingdom of Cordova. In 1236, however, it was taken and almost wholly destroyed by the impolitic zeal of Ferdinand III. of Castile, and has never since recovered its previous prosperity. Cordova has given birth to some illustrious men, among whom may be specified the two Senecas, Lucan the poet, and the famous Arabic physicians, Avicenna and Averroes. (*Miñano; Townsend's, Swinburne's, &c. Travels; Scott's Excursions in Ronda, &c.*)

CORDOVA, an inl. town of Mexico, state Vera Cruz,

at the E. foot of the volcano of Orizaba, and on one of the roads between Vera Cruz and La Puebla, 50 m. S.W. the former, and 72 m. E.S.E. the latter city. Pop., before the revolution, about 5,000. Streets wide, regular, and well paved; houses built mostly of stone. In the centre of the town there is a large square, three sides of which are ornamented with Gothic arcades; the fourth is occupied by the principal church, an elegant structure, richly decorated within. Cordova contains two convents, each with an hospital attached; many of its edifices have domes, towers, or steeples. Cotton and woollen fabrics and leather are made here; and there are besides numerous distilleries, sugar-mills, and bee-hive farms; but the principal employment of the inhab. is the culture of tobacco and coffee; and Humboldt states that the whole of these products raised in Mexico comes from Cordova and Orizaba. The climate is moist and sultry. The vicinity is extremely fertile, and abounds in fruits, timber, game, and fish. (*Humboldt, Essai sur la Nouv. Esp.; Ward's Mexico.*)

COREA (called by the natives, *Chaou-Seen*, by the Chinese, *Keaou-le*, and by the Manchoo Tartars *Sol-ho*), a marit. country of N.E. Asia, tributary to China, consisting of a large oblong-shaped peninsula, with an adjoining portion of the continent, and a vast number of islands, which are especially numerous on the W. coast. The whole of the dominions lie between lat. 33° and 43° N., and long. 123° 50′ and 129° 30′ E.; having E. the Sea of Japan; S. the Straits of Corea; W. the Yellow Sea, and Gulph of Leao-tong; N.W. the prov. Leao-tong; and N. Manchoo Tartary. From the latter it is separated by a mountain chain, and the Thu-men-Kiang river, and from Leao-tong mostly by a wooden wall or palisade. Length, N.W. to S.E., 550 m.; average breadth of the peninsula, about 130 m. Total area, inclusive of islands, probably about 80,000 sq. m. Corea is generally mountainous. A mountain range runs through it longitudinally, much nearer its E. than its W. coast. The E. declivity of this range is steep and rugged; its W. one declines gradually into a fertile and well-watered country. All the principal rivers run W., and discharge themselves into the Yellow Sea; the chief is the Ya-lu-kiang in the N.W., which is navigable for large ships to about 22 m., and for small vesels for a distance of nearly 120 m. above its mouth. The coasts, as well of the islands as of the continent, are generally rocky and difficult of access; though there are some spacious and secure harbours. The climate of the N. is very rigorous; the Thu-men-kiang, for six months in the year, is thickly frozen over, and barley is the only kind of corn capable of being cultivated in that region; even the S., though in the same lat. with Sicily and Malta, is said to experience sometimes very heavy falls of snow. The climate of this part of Corea, however, must be on the whole mild, since cotton, rice, and hemp are staple products; and Gutzlaff conjectures (*Voyages, &c.* p. 319.), that many other plants, common to the S. of Europe, flourish. Gutzlaff observes, "In point of vegetation, the coast of Corea is far superior to that of China, where barren rocks often preclude any attempt at cultivation; but here, where the land is fertile, the inhab. do not plough the ground." (p. 337.) Agriculture may be better farther inland, but on the coast it is much neglected: wheat, millet, and ginseng are amongst the chief articles cultivated. Tobacco was introduced by the Japanese about the beginning of the 17th century, and potatoes, by Gutzlaff and Lindsay, in 1832. The orange, citron, hazel-nut, pear, chestnut, peach, mulberry, *Morus papyrifera, Fucus saccharinus*, and the wild grape, are common; but the art of making wine from the latter seems to be unknown. An ardent liquor is, however, made from rice. The mountainous parts of the N. are covered with extensive forests: pines are very abundant on the coasts; and in the interior there is a species of palm producing a valuable gum, from which a varnish, giving an appearance little inferior to gilding, is made. Oxen, hogs, and other domestic animals common to Europe are reared: there is a spirited breed of dwarf horses not exceeding 3 ft. in height; panthers, bears, wild boars, cats, and dogs, sables (whose skins form an important article of tribute), deer, and an abundance of game, storks, and water-fowl of many sorts, are found; caymans of 30 or 40 ft. in length are said to be met with in the rivers, and venomous serpents are not rare. In the winter, whales, seals, &c. visit the shores. The mineral kingdom produces gold, silver, iron, rock salt, and coal.

People, &c.—The pop. has been estimated at 15,000,000, but there are no real grounds for this estimate, which, we have little doubt, is greatly beyond the mark. Gutzlaff represents the coasts as thinly inhabited. We have elsewhere stated that the Coreans are superior in strength and stature to the Chinese and Japanese, but that they are inferior to either in mental energy and capacity. (*Antè*, p. 191.) They are gross in their habits, eat voraciously, and drink to excess. The dress of both men and women is very similar to that of the Chinese, though the Coreans do not, like that people, cut off their hair. Their houses are also like those of China, being built of bricks in the towns, and in the country are mere mud hovels; each house is surrounded by a wooden stockade. Their language or languages are peculiar, differing from those of their immediate neighbours. In writing they use alphabetic characters, though the symbolic characters of the Chinese are also understood and sometimes resorted to. They have a copious literature, and are very fond of reading, as well as of music, dancing, and festivities. Polygamy is permitted; but the women do not appear to be under such restraint as in China. (*M'Leod.*) The religion of the upper orders is that of Confucius, while the mass of the people are attached to Buddhism; but neither appears to have much influence. Christianity, which was introduced by the Japanese, appeared to be extinct when Gutzlaff visited Corea in 1832.

Manufactures, Trade, &c.—The manufactures are few: the principal are a kind of grass-cloth, straw-plait, horse-hair caps, and other articles for domestic use; a very fine and transparent fabric woven from filaments of the *Urtica japonica*, cotton cloth, and a very strong kind of paper made of cotton, rice-paper, &c.: which articles, together with ginseng, skins, some metals, horses, and silk, constitute the chief exports. What trade there is, is principally with Japan, from which they import pepper, aromatic woods, alum, buffaloes', goats', and bucks' horns, and Dutch and Japanese manufactured goods. There is, however, some trade with China carried on at Fungwang-ching (the *Phœnix-town*), beyond the Leao-tong border; but this trade is conducted with great secrecy, in consequence of the jealousy of the government of any intercourse with foreigners. This jealousy is so great, that no Chinese is allowed to settle in Corea, nor any Corean to leave his own country; Europeans are scarcely ever suffered to land, or remain any length of time on the coast; and the N. frontier is abandoned for many miles, in order that no communication should take place with the Manchoo Tartars. Little skill in ship-building is displayed by the Coreans; their junks do not carry more than 200 tons, and are quite unmanageable in a heavy sea. In the construction of their fishing-boats, not a nail is used. Metallic articles and money are rare. The only coin in circulation is of copper; but payment is often made in silver ingots.

Corea is divided into 8 provs. King-hi-tao, the cap., is placed on the Kiang river, in about 37° 40′ N. lat., and 127° 20′ E. long., or about the centre of the kingd. The gov. is said to be despotical: most of the landed property in the country belongs to the king, of whom it is held in different portions as fiefs, which revert to the sovereign at the decease of the occupier. Besides the revenues from these domains, a 10th part of all kind of produce belongs to the king. Justice is in many respects very rigid. Rebellion, as in China, is punished by the destruction of the rebel, with his entire family, and the confiscation of their property. None but the king may order the death of an official person: the master has always power over the life of his slave. For minor crimes the general punishment is the bastinado, which is pretty constantly at work. The Chinese interfere but little with the internal administration of Corea; but the king can neither assume the government, nor choose his successor or colleague, without the authority of the court of Pekin, to which he sends tribute four times a year: the tribute consists of ginseng-root, sable-skins, white cotton paper, silk, horses, silver ingots, &c. The Corean ambassador is treated at Pekin with but little consideration. There seems reason to believe, that, like some other states in Asia, Corea is tributary to the more powerful nations on either side, and that it also sends a yearly tribute to Japan, consisting of ginseng, leopards, &c., skins, silks, white cotton fabrics, horses, &c.; but for which an acknowledgment is made in gold articles, fans, tea, presents of silver to the ambassadors, &c.

History.—Corea was known to the Chinese from a very early period, and is reported to have been civilised by the Chinese sovereign Khil-su, about 1,120 years before our æra. After experiencing several revolutions, it was invaded and conquered by the Japanese in 1692, who, however, abandoned their conquest in 1698. The Coreans having called in the aid of China during that struggle, Corea has since formed a subordinate part of the Chinese empire. (*Ritter's Asien Erdkunde*, iii. 573—647.; *Du Halde; Klaproth; Timkowski; Gutzlaff's Three Voyages, &c.; Lindsay; M'Leod, &c.; Malte-Brun.*)

CORELLA, a city of Spain, prov. Navarre, in a fertile plain on the Alama, 13 m. W. Tudela, 12 m. S.E. Calahorra. Pop. 5,850. It has 2 churches, 4 convents, an hospital, and some remains of an ancient castle. The inhabitants are employed in the extraction of liquorice and madder juice, and in the manufacture of brandy, oil, and flour.

CORFE-CASTLE, a market town and bor. of Eng-

land, co. Dorset, Blandford div., hund. Haislor, in the Isle of Purbeck, 32 m. S.S.W. Salisbury. Pop. (1831) 960. This town is most probably indebted for its origin to its castle, on a steep rocky hill, a little to the N., formerly a place of considerable strength. But its entire importance, in more modern times, was owing to its having enjoyed the privilege of returning 2 mems. to the H. of C. from the 14th of Elizabeth down to the passing of the Reform Act, by which it was disfranchised. Sunday-schools were early established in this town and the surrounding district. The inhab. are mostly employed in the neighbouring clay-works and quarries. Market-day, Thursday.

CORFU (an. *Corcyra*), an island in the Mediterranean, the seat of government, and most important, though not the largest, of the Ionian Islands. It lies between lat. 39° 20′ and 39° 50′ N., and long. 19° 35′ and 20° 6′ E.; off the S. part of the coast of Albania, from which it is separated by a channel only 3-5ths of a m. wide at its N. extremity, 6 m. at its S. extremity, and 15 m. in the centre. The shape of Corfu is elongated; the island describes a curve, the convexity of which is towards the W.; length N.W. to S.E. 41 m.; breadth greatest in the N., where it is 20 m.; but it gradually tapers towards its S. extremity. Area, 227 sq. m. Pop. (1833) 60,890. Surface hilly, particularly in the N.W., where the peak of St. Salvador rises 2,979 ft. above the level of the sea. The streams watering it are few and small, and mostly dried up in summer. Climate mild; the mean maximum temp. in the open air for the 5 years ending December, 1838, was about 88° Fahr.; and the average minimum 31° Fahr.: but Corfu is subject to sudden transitions from heat to cold, owing, amongst other causes, to the proximity of the snowy mountains of Epirus. Earthquakes also are frequent. The more elevated lands are rugged and barren, but the plains and valleys are fertile, and productive of wheat, maize, oats, olive-oil, wine, cotton, flax, and pulse. Corfu yields no currants. Oil is the great staple of this isl., which has, in fact, the appearance of a continuous olive wood, a consequence partly of the extraordinary encouragement formerly given to the culture of the plant by the Venetians. There is an oil harvest every year, but the great crop is properly biennial, the trees being suffered to repose for a year. Next to oil, salt, obtained from saltpans along the shores, oranges, citrons, and other fruits, besides honey and wax, are the other chief articles produced. Corfu is divided into 7 cantons; it sends 7 mems. to the legislative assembly, and 1 to the senate; Corfu, the cap., is the only town worthy of mention; the rest are mere villages.

The city and port of Corfu, the chief in the Ionian Islands, lie on the E. side of the island, on the channel between it and the opposite coast, which is here about 5 m. wide; lat. 39° 37′ 39″ N.; long. 19° 56′ 34″ E. Pop. about 17,000, exclusive of the military. It consists of the town and citadel, both fortified; and has several suburbs, one of which is supposed to occupy the site of the ancient city of *Corcyra*, founded by the Corinthians about the same time with Syracuse. The citadel, separated from the town by wet ditches and outworks, and an esplanade, is built upon a rocky cape projecting into the sea, and contains the barracks, arsenal, military hospital, the residence of the lord high commissioner, many private houses, and a lighthouse erected upon a point 233 ft. above the level of the sea. The town has three gates towards the sea, and one on the land side: it is not well built; streets narrow and irregular, and houses mostly small and ill-contrived; but great improvements are anticipated on the extension of the town, after the works surrounding it are demolished, a measure which has been recently sanctioned by the government. Corfu is strengthened by two other fortresses besides its citadel—Fort Neuf and Vido. The latter is built on a small island of the same name (an. *Ptycha*), nearly 1 m. N. from the city, and has had much pains and expense bestowed on its improvement for many years past. When the works are completed, the island of Vido, though requiring only a small garrison to defend it, will, it is supposed, be next to impregnable. (*Private MS. Report.*) Corfu contains a cathedral, and several Greek and Roman Catholic churches and chapels, a university, gymnasium, ecclesiastical seminary, and several primary schools. Around it there are some pleasant walks, interesting from classical associations; the esplanade is well planted with trees, and forms an agreeable promenade. The town is now well supplied with water, which is conveyed by means of iron pipes from Benizza, a distance of 7 m. Roads have been made from Corfu to most of the principal towns and villages in the island. The harbour between the island of Vido and the city is safe and commodious, and vessels anchor in from 12 to 17 fathoms water. The *canal*, or channel of Corfu, is a little difficult of navigation, but has deep water throughout; there is a lighthouse on the rock of Tignoso at its N. entrance, and a floating light is moored off the point of Leschimo near its S. extremity. The city of Corfu is the seat of the parliament, and senate of the Ionian Islands, of the supreme court of justice of the republic, the chief special courts for the island, and of a Greek archbishop. In 1716 it was unsuccessfully besieged by the Turks, and did not fall into their hands until the end of last century.

Corfu is the chief seat of the external trade of the Ionian Islands. The roads in it are good, having been greatly improved since it has been under British protection. Most of the inhab. belong to the Greek church. It is believed to be the country of Phæacia, or Scheria, mentioned by Homer, on which Ulysses was wrecked, and afterwards hospitably entertained by King Alcinous. It became afterwards a celebrated colony and naval station of the Corinthians, and a quarrel between it and the mother country led to the Peloponnesian war. It was also an important naval station under the Romans. It belonged successively to the Eastern Empire, the Normans, and Venetians, and shared the fate of the Venetian republic in 1799. (*Private MS. Report; Parl. Papers*, 1834; *Commerc. Dict. &c.*)

CORINGA (*Caranga*), a considerable sea-port town of Hindostan, prov. N. Circars, distr. Rajahmundry, and 33 m. S.E. that town; lat. 16° 40′ N., long. 82° 44′ E. Excepting Blackwood's Harbour, Coringa Bay contains the only smooth water to be found on the W. side of the Bay of Bengal, during the S.W. monsoon. A wet dock has been formed, and many small vessels are annually built here. In 1784, a remarkable inundation of the sea took place, destroying much property and many inhabitants. (*Hamilton*, i. 453.)

CORINTH (Κόρινθος), a famous city of Greece within the Morea (an. *Peloponnesus*), near the isthmus of the same name, between the gulphs of Lepanto (*Corinthiacus Sinus*) on the W., and of Egina (*Saronicus Sinus*) on the E., 7 m. from the nearest point of the latter, and 2 m. from the nearest point of the former; lat. 37° 53′ 37″ N., long. 22° 52′ 5″ E. The town is situated at the N. foot of a steep rock, 1,336 ft. in height, the *Acrocorinthus* or *Acropolis* of Corinth, the summit of which is now, as in antiquity, occupied by a fortress. The present town, though thinly peopled, is of considerable extent, the houses being placed wide apart, and much space occupied with gardens. The only Grecian ruin at present to be found in Corinth, is a Doric temple, which had 11 columns standing when it was visited by Wheeler, but only 7 when it was visited by Mr. Dodwell. There are some shapeless and uninteresting Roman remains, supposed to have been baths; but there is nothing approaching to a well-defined building, and we may exclaim with the poet,—

"Where is thy grandeur, Corinth? shrunk from sight,
Thy ancient treasures, and thy rampart's height;
Thy god-like fanes and palaces!—Oh, where
Thy mighty myriads and majestic fair!
Relentless war has pour'd around thy wall,
And hardly spared the traces of thy fall!"

The situation of Corinth is extremely advantageous: being placed on a narrow isthmus between the seas that wash the E. and W. shores of Greece, she could hardly fail to become an important emporium; while the Acrocorinthus, if properly fortified, would be all but impregnable, and the possession of the isthmus would enable her to command all access by land between the two great divisions of Greece. No wonder, therefore, that Corinth was early distinguished by the wealth, commerce, luxury, and refinement of her citizens. In the earlier ages of antiquity, the attempt to sail round the Peloponnesus, or to double Cape Malea, was regarded as an undertaking of the greatest hazard; and to obviate this danger, the usual practice was to land goods, coming from the W. shores of Greece, Italy, and Sicily, destined for the E., at the harbour of *Lechæum* (the nearest point to Corinth), on the Corinthian Gulph, and to convey them across the isthmus to *Cenchreæ*, on the Saronic Gulph, where they were again shipped for their final destination. The products of the E. coasts of Greece, Asia Minor, the Black Sea, &c., destined for the W. parts of Greece, Italy, &c., were conveyed through the Corinthian territory in an opposite direction; so that the city early became the seat of perhaps the most important transit trade carried on in antiquity. In addition to this, Corinth at an early period founded Corcyra, Syracuse, and other important colonies; established within her walls various manufactures, particularly of brass and earthenware; had numerous fleets, both of ships of war and merchantmen; and was the centre of an active commerce that extended to the Black Sea, Asia Minor, Phœnicia, Egypt, Sicily, and Italy. In the magnificence of her public buildings, and the splendour of the *chefs-d'œuvre* of statuary and painting by which they were adorned, she was second only to Athens. The opulence, of which she was the centre, made her a favourite seat of pleasure and dissipation, as well as of trade and industry. Venus was her principal deity; and the temple and statue of the goddess were prominent objects in the Acropolis. Lais, the most famous of the priestesses of Venus, though of Sicilian origin, selected

Corinth as her favourite residence; and so highly was she esteemed, that a magnificent tomb (described by Pausanias) was erected over her remains, and medals struck in commemoration of her beauty! In consequence, Corinth became not only one of the most luxurious, but also one of the most expensive places of antiquity, which gave rise to the proverb—

"Non cuivis homini contingit adire Corinthum."
Hor. Epist. l. 17–36.

The Acropolis is one of the most striking objects in Greece. It has some famous springs, and is in most parts precipitous. Livy calls it, *Arx inter omnia in immanem altitudinem edita, scatens fontibus* (lib. 45. § 28.); and Statius says, that it throws its shadow over both seas—

——— "qua summas caput Acrocorinthos in auras
Tollit, et alterna geminum mare protegit umbra."
Theb. lib. 7. lin. 106.

If properly fortified, it would render all access to the Morea by land impracticable; and as a fortress, it might be rendered not less secure than Gibraltar. (*Clarke*, vi. 568. 8vo. ed.) It is, in fact, one of the keys of Greece; and was, therefore, aptly said by the oracle to be one of the *horns* which a conqueror should lay hold of to secure that valuable *heifer* the Peloponnesus. The view from its summit is one of the most extensive, and at the same time richest in classical associations, of any in Greece. Athens is seen in the distance; and the eye wanders over six of the most celebrated of the Grecian states,—Attica, Achaia, Bœotia, Locris, Phocis, and Argolis.

The government of Corinth, like that of the other Grecian states, was originally monarchical. It then became subject to the oligarchy of the Bacchidæ, and was again, after a period of ninety years, subjected to kings or tyrants. Periander, the early part of whose reign was that of a Titus, and the latter of a Tiberius, was the last of its sovereigns. At his death the Corinthians established a republican form of government, inclining, however, more to aristocracy or oligarchy than democracy. It seems to have been judiciously devised; and the public tranquillity was less disturbed in Corinth than in most Grecian states.

When the Achæans became involved in a war with Rome, Corinth was one of their principal strongholds. Though the Roman senate had resolved upon the destruction of the city, Metellus was anxious to avert the catastrophe; but his offers to bring about a reconciliation, which might have saved Corinth, were contemptuously rejected, and his deputies thrown into prison. The Corinthians suffered severely for this inconsiderate conduct. The consul Mummius, having superseded Metellus, appeared before Corinth with a powerful army; and after defeating the Achæans, entered the city, which had been left without any garrison, and was deserted by the greater number of its inhab. It was first sacked, and then set on fire; and it is said that the accidental mixture of the gold, silver, and copper, melted on this occasion, furnished the first specimens of the *Corinthian brass*, so much esteemed in subsequent ages! Not satisfied with the total destruction of the city, the natives of Corinth who had escaped were carefully hunted out and sold as slaves, their lands being at the same time disposed of to strangers, mostly to the Sicyonians. The destruction of Corinth took place anno 146 B.C.; and it is worthy of remark that this also was the epoch of the destruction of Carthage; both these great cities having been sacrificed nearly at the same moment to the insatiable rapacity and ambition of Rome. According to Strabo, the finest works of art which adorned Rome in his time had been brought from Corinth; but it seems pretty clear that many, if not the greater number, of these masterpieces had been destroyed. Polybius, who was present at the destruction of the city, had the mortification to see the Roman soldiers playing at dice on a picture of Aristides, a contemporary of Apelles, for which Attalus king of Pergamus subsequently offered 600,000 sesterces, or about 5,000*l.* of our money. (*Strabo*, lib. viii.; *Plin. Hist. Nat.*, lib. 35. cap. 4. *&c.*) We need not, indeed, be much surprised that the soldiers should have made use of such a dice-board, when we find the consul himself assuring the masters of the vessels selected to convey the pictures and statues to Rome, that if any of them were lost or injured, he should compel them to supply others in their stead at their own cost! (*Velleius Paterculus*, lib. i. cap. 13.)

Corinth remained in the ruinous state to which it had been reduced by Mummius, till a colony was sent thither by Julius Cæsar. Under its new masters it once more became a considerable city, as is evident from the account given of it by Pausanias (lib. ii.), and is much distinguished in the gospel history. After being sacked by Alaric, it came, on the fall of the Eastern empire, into the possession of the Venetians. The Turks took it from the latter in 1458; the Venetians, however, retook it in 1687, but lost it again to the Turks in 1715. It is now a principal place in the nomarchy of Argolis and Corinth. (Besides the authorities previously referred to, see *Ancient Universal History*, vii. 319. 8vo. ed.; *Voyage d'Anacharsis*, cap. 37.)

CORINTH (ISTHMUS OF). Where narrowest, about 6 m. E. from Corinth, this celebrated isthmus is about 5 m. across. The advantages that would result to Corinth, and to the commerce of Greece, by cutting a canal or navigable channel through this isthmus, were perceived at a very early period; and attempts to accomplish so beneficial a work were made by Periander, Demetrius Poliorcetes, Julius Cæsar, and other Roman emperors: all of them, however, proved abortive, though parts of the excavations are still visible. This want of success has been variously accounted for; but we incline to think that it was wholly owing to the difficulty of the ground. The isthmus is high and rocky; and at a period when the construction of locks was unknown, the canal must either have been excavated to the required level, or been partly excavated and partly tunnelled, either of which operations would have been all but impracticable. As the next best resource, ships were drawn by means of machinery from one sea to another; but it is clear that none but the smaller class of vessels could be so conveyed.

The isthmus has been repeatedly fortified. The first instance of this of which we have any certain accounts took place on the invasion of Greece by Xerxes. It was afterwards fortified by the Spartans and Athenians in the time of Epaminondas. During the decline of the Eastern empire, the defence of the Peloponnesus principally depended on this bulwark, which was strengthened and renovated under Justinian. It was restored for the last time by the Venetians in 1696. (See *Dodwell's Greece*, ii. 185., and the authorities there quoted.)

The Isthmus of Corinth was also famous in antiquity for the games celebrated there, every fifth year, in honour of Neptune and of Palæmon or Melicertes, with the utmost splendour and magnificence. They continued in vogue after the Olympian and other public games had fallen into disuse. After the destruction of Corinth the Romans committed the superintendence of the Isthmian games to the Sicyonians; but on its restoration by Julius Cæsar, Corinth recovered its ancient presidency. Dr. Clarke discovered at the port of Schœnus, on the E. side of the isthmus, the remains of the temple of Neptune, the theatre, stadium, and other public buildings, described by Pausanias as connected with the Isthmian solemnities. (*Travels*, vi. 573. 8vo. ed.; *Cramer's Greece*, iii. 30.)

CORK, a marit. co. of Ireland, prov. Munster, in the S.W. part of the island, having S. St. George's channel, E. Waterford and Tipperary, N. Limerick, and W. Kerry and the Atlantic Ocean. It is the most extensive of all the Irish cos., containing 1,769,563 imp. acres, of which 700,760 are unimproved mountain and bog. It has every variety of surface and soil; in the W. it is rugged and mountainous, but the N. and E. districts are distinguished by their richness and fertility. There is a great deficiency of timber, otherwise the country would be eminently beautiful. Climate extremely mild, but moist. Property principally in very large estates. Tillage farms for the most part small; those of larger size are frequently held in partnership, or have been divided amongst the family of the occupant. Where such practices prevail, agriculture cannot be otherwise than in a very backward state. Potatoes engross a great part of the attention and labour of the smaller class of occupiers; and after them the ground used to be subjected to a series of corn crops, as long as it was capable of bearing any thing. But an improved system has been introduced of late years on several large estates; and better implements and breeds of cattle are now generally met with. Oats is the principal corn crop, but wheat is also extensively produced. There are extensive dairies in the vicinity of Cork and in other districts; and the exports of corn, flour, provisions, and other articles of agricultural produce from Cork, are very extensive (see next article). Average rent of land, 13*s.* 1*d.* an acre. The copper mine of Allihies, near Castletown, employs from 1,200 to 1,500 men (*Railway Report*); but, with this exception, limestone is the most valuable mineral. Different branches of the linen manufacture have been established at Cork and other towns, and there are some large distilleries. The coast of Cork is deeply indented by the sea, and has some of the finest bays and harbours in the world, among which Bantry Bay and Cork Harbour are pre-eminent. Principal rivers, Lee, Bandon, Blackwater, Ilen, Funcheon, Bride, and Awbeg. Principal towns, Cork city, Youghal, Bandon, Kinsale, Mallow, Fermoy. Cork contains, exclusive of the city of the co., 23 baronies and 269 parishes, and returns 8 mems. to the H. of C., viz. 2 for the co., 2 for the city of Cork, and 1 each for the bors. of Youghall, Bandon, Mallow, and Kinsale. Registered electors for co. in 1849–50, 1,812. In 1811, Cork had 180,283 inhab. houses, and 854,118 indi-

viduals, of whom 420,551 were males, and 433,567 females.

Cork, a city and river-port of Ireland, prov. Munster, on the Lee, 11 m. above where it discharges itself into Cork harbour; lat 51° 53′ 39″ N., long. 8° 20′ W.; 136 m. S. W. Dublin. This is the second city of Ireland in respect of pop. and commercial importance, and forms a co. in itself, having a local jurisdiction separate from that of the co. of Cork, by which it is surrounded. The co. of the city extends over 48,006 acres, of which 2,683 are comprised within its municipal boundaries. The city lies in the vale of the river Lee, and is surrounded by hills of considerable elevation, which render the climate moist, though not unhealthy. It owes its origin to a religious establishment founded at a remote period. Previously to the arrival of the English, it was inhabited by a colony of Danes, and then, and for a long time after, consisted of a single street in an island formed by the river. Even so lately as the reign of Elizabeth, it is described as "a little trading town of much resort," but consisting of a single street. After the Revolution it began to improve, and at length, chiefly in consequence of its vicinity to Cork harbour, a principal place of rendezvous for the channel fleet during wars with France, and its being a great mart for the supply of the fleets and colonies with provisions, it rose rapidly to its present state of wealth and importance.

The pop. in 1821 amounted to 100,658 souls, and in 1831 to 107,016; of the inhab., at the latter of these two periods, excluding a few small parts of parishes, the greater portion of which are in the rural district, there were 15,731 Protestants of the estab. church, 1,160 Protestant dissenters, and 76,783 R. Cath. Pop. of co. of city, in 1841, 106,055. No. of dwelling-houses in 1833, 7,928, besides 1,684 warehouses and buildings, making a total of 9,612; of these, 8,584 were slated, 1,028 thatched, and 5,602 had seven windows and upwards.

The city is intersected by two great, and some smaller branches of the Lee, the latter having been arched over and built upon: the river is crossed by nine bridges, all of modern construction, and mostly of elegant architecture. The main streets are broad, well paved, with flagged footways, and lighted with gas; the cost of their cleansing, lighting, &c., being defrayed by an assessment. The houses in the more ancient part of the city are of limestone, raised in the neighbourhood, and sometimes faced with roofing slate or cement; those in the modern part are mostly of brick. "St. Patrick Street, the Grand Parade, the S. Mall, Great George Street, St. Patrick's Hill, and perhaps one or two other streets; the quays, the Glanmire road, South Terrace, Warren Place, and Lapps Island, are inhabited by persons of wealth and respectability, or occupied by warehouses; but many of the streets, and nearly all the lanes branching off from the main streets and places, are occupied by numerous families of the lower classes, and many, apparently, in the lowest state of destitution. The suburbs towards the S., and parts of those towards the N. and N.W., are occupied by persons in a condition bordering on pauperism. The principal streets and quarters of the city and suburbs are well paved and lighted, but the lanes and narrow brick streets are generally neglected." (*Municipal Boundary Report.*) The part of the county within the city and suburbs is divided into six parishes; the rural part into four; besides eight parts of parishes, the remainders of which are in the co. at large. The parishes within the city and suburbs are St. Finbarr's, the church of which is the cathedral; the Holy Trinity or Christ Church; St. Peter's; St. Mary's, Shandon; St. Anne's, Shandon; and St. Paul's, and St. Nicholas. There is also a free church; and a chapel for seamen has been opened in a hulk in the river. These parishes are combined in the R. Catholic arrangement into three unions or parishes, each having a large chapel, one of which is considered the cathedral: there are also several chapels of ease. The monastic establishments of the Augustines, Franciscans, Dominicans, Capuchins (a splendid structure), and two of Nuns of the Presentation, have their respective chapels; to the latter are attached schools, in which hundreds of female children receive a religious and useful education. There are two places of worship for Presbyterians, three for Methodists, and one each for Quakers, Independents, and Baptists.

One of the new Queen's Colleges, established in this city, was opened in 1849. It is a fine building, at Gill-Abbey, W. of the Bishop's palace, on the S. branch of the Lee. Classes, terms of admission, exhibitions, &c., same as at Queen's College, Belfast, which see. Here, also, are schools of medicine, anatomy, and surgery. The diocesan schools for the Sees of Cork, Ross, and Cloyne; and a great many other schools, some superior and some rudimentary, partly supported by endowments, and partly by voluntary subscriptions, are established in the city, and afford instruction to from 10,000 to 12,000 pupils.

The Cork Royal Institution, founded in 1803, was for a series of years the principal literary and scientific foundation in the city. It was supported partly by subscriptions, but chiefly by a grant of public money, which, being withdrawn in 1830, the institution has since declined; and its fine botanic garden has been converted into a cemetery, on the plan of the *Père la Chaise* at Paris; but its museums, and library of about 5,000 volumes, are still kept up. The voluntary societies of a similar character are, the Scientific and Literary Society, Cuvierian, Agricultural, Horticultural, and Library Societies, Society of Arts, and the Mechanics' Institute, with about 200 members. Four newspapers are published in the city.

The charitable and benevolent institutions are numerous. The Foundling Hospital, incorporated in 1747, is supported by a local tax on the import of coals; it is conducted in a manner similar to that in Dublin: in 1833 it maintained 446 children within, and 872 without the establishment. The N. and S. infirmaries and dispensaries are supported partly by grand jury presentments, and partly by subscriptions. The Fever Hospital, in a healthy situation in the immediate vicinity of the city, is supported in a similar manner: it has accommodation for 300 patients. The Cork General Dispensary, to which is attached the Humane Society and Vaccine Institution, is also partially supported by grants of public money. Two Lying-in Hospitals, maintained by voluntary contributions. The Lunatic Asylum admits 446 patients. Expense, in 1845, 5,572*l.*, being at the rate of 12*l.* 14*s.* each patient. The workhouse, fitted for the accommodation of 4,550 residents, was opened for the admission of paupers in 1840. Expended on the poor, during the year ended 30 September, 1848, 33,057*l.* The other charitable institutions are, the Magdalen Asylum, the Refuge, chiefly for destitute females discharged from prison, and several almshouses, founded by bequests, or supported by voluntary contributions. A loan fund, commenced in 1774, still continues to grant loans of from 2*l.* to 5*l.*, repayable by weekly instalments.

There are two theatres and a circus; but the theatres are seldom open, and theatrical entertainments do not appear to be much in fashion in Cork. There are three club-houses. The Mardyke is a very fine walk, a mile in length, between two branches of the Lee. A park containing about 240 acres has been lately opened. On a height above the town are cavalry and infantry barracks, suited to accommodate 2,000 men.

The corporation derived its privileges from a series of charters, commencing with one from King John, when Earl of Morton and viceroy of Ireland. It consists of the mayor, 16 aldermen, and 48 councillors, chosen by the 8 wards into which the city is divided. Bor. revenue in 1847, 9,438*l.* Grand Jury presentments for 1848, 32,626*l.* The mayor, recorder, and aldermen, are justices for the city. The corporate business is transacted by the court of common council, composed of the mayor, recorder, sheriffs, and aldermen; and by the court d'oyer hundred, formed of the freemen at large. The mayor resides in the mansion-house, a large and elegant building on the Mardyke. The city sends 2 mem. to the H. of C., who are elected by the freemen resident within 7 m., the 40*s.* freeholders, the 10*l.* householders, and the 10*l.* 20*l.*, and 50*l.* leaseholders: No. of registered electors, in 1849–50, 3,244. The courts are those of the mayor and sheriffs, which have jurisdiction in pleas to any amount above 40*s.*; those of a lower rate are adjudicated in the court of conscience. The former of these courts sits weekly, as does the city sessions court, for criminal cases. The mayor, sheriffs, recorder, and aldermen are the recognised judges of these courts; but virtually the recorder presides. A police-office, or magistrates' court, is also held: the constabulary force for the city consists of 105 men. The city court-house is a splendid building erected at an expense of 20,000*l.* The prison is divided into 32 wards, besides day and work-rooms.

There is also a bridewell for the temporary confinement of persons under examination. The assizes for the

co., and one of the general sessions for its E. riding, are held here. The county gaol and house of correction are situated a short distance from the city. A female convict depôt, for the reception of prisoners from all parts of the country, till the arrival of the transport ship to convey them to their destination, is in the S. suburb.

Manufactures are few; those of woollen and cotton, which had been carried on to some extent, are now nearly extinct. The tanning of leather is, however, extensively carried on, there being upwards of 40 tanyards in the city and suburbs. There are several large distilleries and breweries, with iron-foundries and glass-houses. The glove trade is also very extensive, the gloves made here having long since superseded those of Limerick, by which name, however, they continue to be sold.

The butter trade was at one time the staple of Cork, and it still forms an important item in its exports. All the butter sold here is previously subjected to an inspection, under the direction of a select body, chosen from among the chief merchants, and called "the Committee of Merchants," which also performs all the functions exercised by the Chamber of Commerce in other mercantile towns. After inspection, the firkins are branded with the quality, weight, and private mark of the inspector. These arrangements have, it is said, obtained for the Cork butter a decided preference in the British and foreign markets. The provision trade was carried on to a very great extent during the late war with France, this port being the principal mart for the supply of the navy, army, and colonies; and though it has declined considerably since the peace of 1815, partly in consequence of the competition of some of the N. continental ports and of the U. States, it is still carried on to a very considerable extent. Bacon and hams are cured in large quantities for exportation.

The corn trade, arising out of the increase of tillage, and the consequent diminution of pasture land, has risen on the decline of that of provisions, and now forms the chief branch of commerce. A corn-market, built in 1833, consists of a large quadrangular enclosed area, with covered passages and offices for weighing the grain, and transacting other business connected with the trade. The exportation of grain and flour to Great Britain has been considerably increased by steam navigation, as has that of live stock and provisions. Upwards of 1,200 pigs, and half a million eggs, are sent away weekly during the season. Salmon, both fresh and cured, is also exported in large quantities.

Subjoined is a statement of the quantity and value of the principal articles of native produce exported from Cork in 1835:—

Articles.		Quantity.			Estimated Value.
		No.	Tons.	Cwt.	L.
Corn, Meal, and Flour	cwts.	729,372	36,468	12	372,851
Provisions - -	—	581,530	29,076	10	2,019,846
Feathers - -	—	2,381	119	1	10,958
Spirits - - -	galls.	104,680	467	6	38,085
Beer - - -	—	234,000	1,011	12	7,795
Eggs - - -	boxes.	10,686	1,068	12	31,000
Linen - - -	yards.	501,600	83	12	50,160
Oxen and Cows -	head.	4,236	1,412	0	42,360
Horses - - -	—	123	61	10	2,160
Sheep - - -	—	7,539	228	9	11,310
Swine - - -	—	75,189	5,012	12	263,162
Hides and Calf skins untanned - -	No.	7,143	178	11	3,924
Other articles - -	-	- -	-	-	55,932
Total value - -					2,909,846

The principal articles of import are cotton and woollen manufactures, haberdashery and apparel, sugar, and other colonial products, wine, timber, hardware, glass and earthenware, hides, coals, &c.

The principal market-days are Wednesdays and Saturdays. The meat and vegetable market is well laid out, and plentifully provided. In the cattle market about 10,000 head of cattle, and 100,000 live pigs (besides carcasses), are annually sold. The Bank of Ireland, and the Provincial, and National banks have branches here. The savings' bank, held in a handsome building erected from the profits, was established in 1817. Amount of deposits, on the 20th November, 1848, 266,333*l*., derived from 7,985 depositors.

The foreign trade is carried on with Portugal, whence wines and salt are brought; with the Mediterranean, for wine and fruit; and with the Baltic, for timber and articles for naval equipment; timber is also imported from Halifax and Canada. The West India trade has declined in consequence of the great facilities for supply from those colonies through the English ports.

The excellence of its harbour, situated about 11 m. below the city, where the Lee discharges itself into a spacious land-locked basin, capable of containing the whole British navy, has been the main cause of the commercial prosperity of Cork. During war, Cork harbour is a great naval station, and the place of rendezvous for most of the outward-bound convoys. Naval arsenals and stores, which have now become nearly useless, having been abandoned by the government, though in the best state of preservation, were fitted up on its smaller islands. The communication by water between the port and the city has been much improved by the Board of Harbour Commissioners, established under an act of parliament. About 30 or 35 years ago, a vessel of 140 tons could not come up to the quays at Cork without leaving half her cargo at Blackrock, nearly 4 m. below the city. But it was stated in evidence given before the Commissioners on Tidal Harbours (2nd Report, p. 108.), that, by means of the successful employment of dredging machines, vessels of 600 tons were now able to come up to the quays without being lightened; and that the voyage from Passage to the city, which formerly could not be made in less than two or three tides, was now made in one. The buildings connected with commercial transactions are, the Custom-house, the Commercial Buildings, the Chamber of Commerce, and the Post-office; all neat and convenient edifices.

Post-office revenue, in 1847, 6,643*l*., in 1848, 6,549*l*. There belonged to the port, on the 1st Jany. 1850, 143 small sailing vessels of less than 50 tons, and 245 of more than 50 tons each; the aggregate burden of the latter being 39,308 tons: there also belonged to it at the same time 20 steamers, some of them of very considerable, burden, and handsomely fitted up. Gross customs rev. in 1843, 275,981*l*., in 1848, 286,113*l*. The cross-channel trade is principally carried on with Bristol, Liverpool, and London: the foreign trade with Portugal, the Mediterranean, the Baltic, Canada, and the W. Indies. Harbour revenue, in 1845, 9,987*l*. The Great Southern Railway from Dublin to Cork was opened in 1849 to Blackpool, near the latter.

The appearance and habits of the citizens of Cork are exclusively mercantile. The attempts that have been made to elevate the city in the scale of literature and science have not had that success which their more sanguine promoters anticipated; though they have probably succeeded better than a careless observer might suppose. Some rather distinguished persons have been natives of Cork, among whom may be specified Arthur O'Leary, O'Keefe, Barry the artist, Maclise the artist, and Sheridan Knowles. The newer part of the city indicates an increasing state of prosperity; in it are the town residences of the wealthy merchants; while the adjoining country, for several miles round, is studded with their villas and country seats. But, on the other hand, several extensive districts of the suburbs evince the existence of comparative destitution; lines of cabins being built and peopled like those in the surrounding rural villages. But improvement is notwithstanding said to be advancing, even in those quarters in which there is the greatest poverty, and where old habits and prejudices are sure to linger longest. The food of the working classes consists chiefly of potatoes, which is all but equivalent to saying that their wages are low, and their condition alike degrading and precarious. Several remains of antiquities, chiefly monastic, are to be traced, as are considerable remains of the ancient walls, some parts of which are in a perfect state. Coins struck at a royal mint in the time of Edward I. have been occasionally found. (*Railway Report: Thoms' Almanac;* and *private Information*.)

CORLEONE, an inl. town of Sicily, prov. Palermo, cap. distr., near the source of the Belini, on the declivity of a hill rising from a fruitful well cultivated plain, 22 m. S. by W. Palermo. Pop. (1831) 13,788. It is pretty well built, and has several churches and convents, a royal college, a prison, and some other public buildings.

CORNWALL, a marit. co. of England, forming the extremity of the S.W. peninsula, being every where surrounded by the sea, except on the E., where it adjoins Devonshire, from which it is separated nearly in its whole length by the Tamar. Area, 851,200 acres; of which about 650,000 are arable, meadow, and pasture. In many parts Cornwall is rugged and moorish; but though its general aspect be bleak and dreary, it has numerous valleys of great beauty and fertility. The temperature is particularly equal, being so far embosomed in the Atlantic that it is neither so cold in winter, nor so warm in summer, as the cos. more to the E. The winds, however, are very variable, and often violent; and the air being surcharged with moisture, harvests are late, and fruit is inferior in flavour to that raised in the E. and midland cos. The raising of corn and potatoes are the principal objects of Cornish agriculture, which has been much improved of late years. Property much divided and "vexatiously intermixed." Farms for the most part small, and held under lease for 14 or 21 years. Average rent of land in 1843, 18*s*. 2¼*d*. an acre. The principal wealth of Cornwall is derived from its mines of tin and copper. It is believed that the Phœnicians traded thither for tin, and that the mines have been wrought ever since. The total quantity of tin at present (1850) produced in Cornwall amounts to about 4,000 tons a year, worth from 65*l*. to 80*l*. a ton. The

Cornish copper mines, though they were not wrought with spirit or success till the beginning of last century, are now become of great value and importance. Their produce, which a century ago did not exceed 700 tons pure metal, amounts at present to about 12,000 tons, worth from 90*l*. to 100*l*. a ton. The capital vested in the Cornish mines, and the employments connected with them, is estimated at about 2,450,000*l*., and the persons employed at 71,000. Ores of lead, antimony, manganese, &c., are also met with. Gold is sometimes found in the *stream-works*, or places where the alluvial deposits are washed in order to procure grain tin. Silver is also found intermixed with the lead ores, and is now extracted to a considerable extent. About 5,000 tons of soapstone, and about 7,000 tons of China clay, are annually shipped for the Potteries and other seats of the porcelain manufacture. The miners and others engaged in the Cornish mines are under the especial jurisdiction of the stannary courts: these were much improved by a late act, and are said to transact the business brought before them expeditiously, cheaply, and well. The oppressive duties formerly imposed on the coinage of tin were repealed in 1837. The pilchard fishery is extensively carried on along the Cornish coasts, particularly at St. Ives, Mounts-bay, and Megavissey; and is a considerable source of employment and of wealth to the co. Principal towns, Truro, Helston, Penzance, St. Ives, Falmouth. Previously to the Reform Act, Cornwall sent 42 mems. to the H. of C., but now it sends only 14; viz. 4 for the co., 2 each for the bors. of Bodmin, Falmouth and Truro, and 1 each for the bors. of Launceston, Helston, St. Ives, and Liskeard. Registered electors for the co. (1849-50), 10,617; but those for the divisions are not specified. In 1841, Cornwall was divided into 9 hunds. and 203 pars.; and had, in 1841, 65,574 inhab. houses, and 41,279 inhabs., of whom 161,757 were males, and 176,522 females. Sum contributed to the relief of the poor in 1847, 86,914*l*. Annual value of real property in 1815, 922,259*l*., do. in 1843, 1,353,261*l*.

CORO, a marit. city of Venezuela, cap. prov. of the same name, in a sandy and arid plain, near the head of El Golfete, an arm of the Gulph of Maracaybo, 3 m. S W. the Caribbean Sea, and 210 m. W.N.W. Caracas; lat. 11° 23′ N., long. 69° 48′ W. Pop. 10,000.? It is well situated for commerce, and has had a considerable trade with the West India islands, especially Curacoa, in mules, goats, hides, skins, cheese, and pottery; but this has now very much dwindled, and the inhab. are poor and parsimonious. The streets of Coro are regular, but unpaved, and the houses mean; the only public buildings are, 2 churches, a convent, several chapels, and an hospital. The climate is dry and hot, but not unhealthy; so great, however, is the scarcity of water, that it has to be brought thither daily on the backs of mules, &c. a distance of 2 m. Coro was the second European settlement formed on this coast, and was considered the capital of Venezuela, till the transference of the seat of government to Caracas, in 1576. (*Geographical Account of Columbia, &c.*)

COROMANDEL (*Cholomandala*) COAST OF, forming the E. shore of Hindostan, from Point Calymere, lat. 11° 20′, to the mouth of the Krishna river, 15° 50′ N., probably deriving its name from the Chola dynasty, who formerly ruled in Tanjore. It is destitute of any good harbours, and, from the great surf, it is usually difficult any where to effect a landing. The monsoons on this coast are always in a contrary direction to those on that of Malabar. From the middle of October to the middle of April, winds from the N.E. prevail, during which period the storms are so violent and dangerous that all British ships of war are ordered to quit the coast by the 15th of October. In the middle of April the S.W. winds set in, and a period of great drought commences. (*Hamilton*, i. 453.)

CORREZE, a dep. of France, reg. South, formerly part of the Limousin, having N. the déps. Haute Vienne and Creuse, E. Puy-de-Dôme and Cantal, S. Lot, and W. Dordogne. Area, 582,083 hectares. Pop. (1846) 317,569. Surface mostly hilly and mountainous. Its N. part is intersected by a mountain-chain dividing the basin of the Loire from that of the Dordogne. The latter, which runs through the S.E. part of the dep., is the only navigable stream, the Corrèze, from which the dep. derives its name, being available only for rafts and boats. Climate comparatively cold; soil stony and inferior, except in some of the larger valleys. Heaths and wastes occupy more of the surface than the arable lands; sufficient corn, however, chiefly rye and buckwheat, is grown for home consumption. Agriculture is in an exceedingly backward state, partly owing to the obstinate attachment of the cultivators to ancient routine practices, and partly, as Hugo alleges, to overtaxation, and the want of capital; but more than all, we believe, to the minute division of the land, and the poverty it is sure to occasion. The plough in use in many districts is identical with that described by Virgil! Chestnuts, buckwheat, and potatoes, constitute the principal dependence of a large proportion of the pop.; and when these fail, the inhab. suffer severely. Vineyards occupy about 15,200 hectares. Some of the wines are tolerably good, and though no great quantity of wine be produced, still, as few of the labouring classes can afford to drink it, some is exported. The meadows are extensive, and considerable numbers of oxen are reared for the Paris market and the plough. In 1830, there were upwards of 400,000 sheep, chiefly an indigenous breed, yielding annually about 450,000 kilogr. of wool. Property much subdivided, there not being in the whole dep. above 7 properties which pay a government tax of 1,000 fr. Correze has mines of copper, iron, argentiferous lead, antimony, and coal; but with the exception perhaps of coal at Lapleau, none of them are wrought to any considerable extent. Manufacturing industry is even in a less prosperous state than agriculture. There is, however, a large gun manufactory at Tulle, which employs about 1,000 hands. Though a speculation of private individuals, it is conducted under the superintendence of government officers, and the muskets are sold at the fixed price of 34 fr. 80 cents each. There is a large cotton mill at Brives. Tulle is very generally supposed to be the grand seat of the manufacture of the species of point lace, called *point de Tulle*; in point of fact, however, there is not a single lace-worker in the dep., nor has there been, time immemorial, a lace-frame in Tulle! (*Hugo*.) Trade chiefly in cattle, wine, poultry, agricultural produce, and truffles. The dep. is divided into 3 arronds. Chief towns, Tulle, the cap., Brives, and Ussel. No. of properties in 1835, 67,043. Total public revenue (1844), 4,801,028 fr. A general usage (for it is inconsistent with the law of France) in this dep., whereby the eldest son becomes entitled to a clear fourth of the paternal property, over and above an equal share with each of the other children, tends, according to Hugo, to produce much disunion in families. The peasantry exhibit a remarkable dislike to enter the military service, but prove afterwards very good soldiers. Marmontel, Cabanis, and Latreille were natives of this dep. (*Hugo*, art. *Corrèze; French Official Tables, &c.*)

CORSHAM, a par. and village of England, co. Wilts, hund. Chippenham. Area of par., 6,710 acres. Pop. (1841) 3,842. The village in an open pleasant district, 8 m. N. E. Bath, consists chiefly of one long street of neatly-built houses, with a market-house near the centre, erected in 1784. The church is a cruciform Gothic structure, with a tower: there are also 2 dissenting chapels; and an almshouse founded in 1668, at present supporting 6 old women. A free school for boys and girls was built by the Methuen family, to which the manor belongs; and who have a fine mansion, with a good collection of pictures, near the village. The manufacture of woollens, formerly carried on to a considerable extent, has long been discontinued; agriculture being now the chief employment of the inhab. Sir R. Blackmore, the author of various epic poems, now known only by the satirical allusions made to them by Pope and other wits of the time, was a native of Corsham.

CORSICA (Fr. *Corse*), a large island of the Mediterranean, belonging to France, of which it forms a dep., between lat. 41° 27′ and 43° 1′ N., and long. 8° 37′ and 9° 30′ E. Its S. extremity is 10 m. N. Sardinia, from which it is separated by the Strait of Bonifacio. Plombino, about 55 m. distant, is the nearest town in Italy, and Antibes, 120 m. N.W., the nearest point in France. Shape somewhat oval, with a projecting appendage at the N. E. extremity; length, N. to S., 100 m.; greatest breadth, 44 m.; area, divisions, &c. as follow:—

Arrondissements.	Area in hectares.	Pop. 1836.	Chief Towns.	Pop. 1836.
Ajaccio - -	205,402	46,383	Ajaccio - -	9,003
Sartene - -	184,334	25,739	Sartene - -	2,682
Bastia - -	136,209	63,764	Bastia - -	13,061
Calvi - -	100,293	21,469	Calvi - -	1,457
Corte - -	248,597	50,534	Corte - -	3,587
Total -	874,745	207,889		29,790

In 1846, the aggregate pop. had increased to 230,271.

The E. shores of Corsica are generally low and sandy, and in many parts marshy; the W. shores are more lofty, and indented with several extensive harbours or bays, the principal of which are those of Valinco, Ajaccio, Sagone, Porto, Calvi, and St. Florent. Corsica has several small islets, especially at its S. extremity. It is, generally speaking, hilly. A chain of mountains traverses it from its N. to its S. extremity, for the most part nearer to its W. than to its E. coast; the highest summits of this chain are Monte Rotondo, 8,766 ft., and Monte d'Oro (the *Mons Aureus* of Ptolemy), 8,700 ft. above the level of the sea. The declivities of the central chain are steep: it abounds in clefts and gorges; valleys are few, excepting in the lower hill ranges, and even there they are narrow. The plains along the E. coast amounting to about 1-24th part of the whole surface, though rich and densely

peopled in the time of the Romans, are now mostly abandoned. Were they drained and cultivated, they would be again, as of old, the best part of the island. The majority of the rivers run W., but the two largest, the Golo and Savignano, have an E. course; most of them are mere torrents, and none of them are navigable or adapted even for rafts, by reason of their rapidity. There are a few insignificant lakes in the centre of the island; but the largest collections of waters are some lagunes on the E. coast, a topographical feature which this part of Corsica shares with the opposite coast of the Tuscan Maremme and the Campagna di Roma. These stagnant waters render the adjacent parts unhealthy, giving rise to intermittent fevers, &c., similar to those of the corresponding Italian shores; but elsewhere the climate is sufficiently salubrious. The temperature of course varies with the elevation; in the low lands the maximum is 99¼° Fahr., in the mountains the minimum is 25½° Fahr. The most prevalent winds are, — the *scirocco*, or S.E., which brings rain; the N., which often brings snow; and the S.W., which is commonly very violent. The aspect of the country is, in the words of Hugo, "a vast elevated region, the culminating points of which are covered with snow, surrounded by lower ranges of mountains, their summits bare, but their sides covered with thick forests of fir and oak: narrow and dark glens, through which roll impetuous torrents; and here and there an isolated human habitation, perched on some solitary crag, like the inaccessible eyrie of an eagle. As we approach nearer the sea, the valleys enlarge, and show traces of culture, and villages begin to enliven the banks of the rivulets; the hill-sides are covered with olive, orange, and laurel trees; while their tops are crowned with woods of chestnut, whose time-honoured trunks, notwithstanding the little depth of soil they grow in, have attained an enormous size. On the sea-shores, obscured by an unhealthy fog, ruined habitations, corn-lands, *makis* (close copses), and marshes alternate with each other; and the traveller hastens to quit this pestiferous tract for a brighter sky and a purer air upon the uplands." Granite, mica, porphyry, alabaster, and marble of various colours, serpentine, jasper, asbestos of remarkably long fibre, &c., are plentiful in Corsica. The island probably contains neither gold, silver, nor copper; but there is a vein of lead at Barbaggio, and iron mines are worked in several places: the produce of the last occupies 10 forges at Catalane. Quarries of statuary marble are worked; pipe-clay, emeralds, and globular masses of granite and porphyry are found; the last, which are prized as gems, have been hitherto met with no where but in the bed of one of the torrents. There are an abundance of warm, mineral, and saline springs. The upper soils consist chiefly of decomposed granite, silex, &c., with a small proportion of chalk and other calcareous matters, and the remains of animal and vegetable substances. In many parts the land is very fertile; agriculture is, however, in a very backward state, and artificial irrigation unknown. The surface of Corsica was, in 1834, supposed to be distributed as follows: —

Arable lands -	371,014 hect.	Orchards, gardens, &c. - -	6,976 hect.
Meadow ditto -	449	Variously cultivated	31,561
Vineyards - -	16,113	Heaths, wastes, &c.	342,516
Woods, forests, &c. - -	94,828	Lands built on -	380
		Rivers, lakes, &c. -	5,888

Landed property in Corsica is extremely subdivided, and is almost all occupied by owners. "For centuries the laws have promoted an equal succession among children; the Genoese, when rulers, abetted this system, and the French law of succession, which found Corsica in an extravagantly parcelled state, has confirmed and aggravated it. These ancient and modern agrarianisms, unaccompanied by the remedies of capital and of various roads to industry, have made a proprietor of almost every Corsican, and have, it is true, averted bare mendicity, but also generally created a narrow situation, without resources, pregnant of family intrigues, and not unbloody dissensions, litigious propensities, and various checks on population; and, combining with these incidents, they have fostered maxims which again serve to the same end of disconnecting all landed property. It is a distinctive trait, that *the Corsican rather starves than sells land*; that inheritances which lose in value by division still must submit to it; and advantageous offers are the more readily refused the more such land would aggrandise and connect the purchaser's estate." (*Consular Report.*) The inhab. do not live in cottages dispersed over the country, but in villages, many of which are built on the summits and declivities of the mountains.

The forests are remarkably fine, and abound with timber of the best quality, and which supplies the best masts for the dockyards at Toulon; but such is the indolence of the inhab., that this source of wealth is comparatively neglected. The *makis*, previously mentioned, are dense thickets of cystus, bay, myrtle, thorn, &c., which rapidly grow up on rich untilled lands, into inextricable masses of 3 to 12 ft. in height, and which when burnt—the usual mode of getting rid of them — form admirable manure. The orange, citron, pomegranate, &c. grow in the open air, and yield excellent fruit. The olive is badly managed; but much more oil is produced than is required in the island, and is therefore exported. The vine is tolerably well cultivated in most of the cantons; and, notwithstanding that but little art is displayed in the manufacture of wines, the red wines of Sari, and the white of Cape Corsica, are very good, and exported to the Continent. The corn grown is not adequate to the demand, but its deficiency is made up by the abundant supply of chestnuts. Vast quantities of honey are produced in the island; and, when subject to the Romans, it paid an annual tribute of 200,000 lbs. of wax (*Liv.* lib. xliii. cap. 7.); the honey has a bitterish taste, supposed to be imparted by the abundance of boxwood and yew. Tobacco, though little cultivated, is said to be preferable to that of France, and the mulberry and flax are grown with advantage. Cattle constitute the principal wealth of the farmers and peasantry. Most kinds are small, but the ox, horse, mule and ass are all strong and active; the cows afford good milk, from which much cheese is made. The sheep are black, with four or even six horns: in 1830, there were nearly 300,000 in the entire island: hogs very plentiful. Goats are large and strong; the *moufflon*, considered by Buffon to have been the original of the sheep, is found in this island. Game is extremely abundant, as are wild boars and foxes; turtles are obtained in great number, and are important articles of trade. There is a great profusion of the most excellent fish in the surrounding seas, and the Corsican mullet was among the delicacies supplied to the Roman tables. (*Juv. Sat.* v. l. 92.) Red coral of a fine deep colour is found in many places round the coast. But, owing to the indolence and apathy occasioned by the dependence of the people on small patches of land, and the want of capital and manufactures, every thing is conducted according to a system of routine, and very few improvements are either attempted or even so much as thought of. Agricultural implements are all of the most wretched description, and they hardly know any thing even of the advantages of manure. All the more laborious employments are devolved upon the females, who are the slaves rather than the companions of their husbands, or upon emigrants from Lucca, Tuscany, and other parts of Italy, by whom the island is annually visited. The fisheries are wholly abandoned to the Genoese and Neapolitans. Their manufactures are limited to the fabrication of some coarse woollens used by themselves, a few forges and tanneries, a glass factory, a pottery (in which asbestos is used), a manufactory of tobacco-pipes, and one of soap. The exports are nearly confined to timber, firewood, wines, dried fruits, oil, silk, leather, and fish, in comparatively trifling quantities. The imports from France amount annually to about 3,000,000 fr. The public expenditure and receipts in 1831 were —

Expenditure - - -	4,941,170 fr.	
Receipts - - -	1,144,642	
Surplus expenditure of dep. -	3,796,528	= £151,861

The roads are wretched; those called *royal* being in parts almost impracticable even for mules. In 1793 Corsica was divided into two departments—those of Golo and Liamone; but since 1811 these have been again united: the seat of the prefecture is Ajaccio. The island sends 2 m. to the Ch. of Dep. No. of electors in 1837-38, 310. A royal court is established in the capital; there are 5 courts of original jurisdiction, one in each arrond., and 3 tribunals of commerce, viz. at Ajaccio, Bastia, and Ile-Rousse: from 1814 to Nov. 1830, Corsica was deprived of the privilege of trial by jury. There are no churches but those of the Catholic establishment in Corsica; the dep. is a bishopric suffragan to Aix. There are 3 colleges, 4 model primary schools, and 286 other schools; the number of children receiving instruction amounts to 10,361. Corsica forms the 17th military division of France; it contains 10 fortresses: since the revolution of 1830 it has had no national guard.

In person, habits, and disposition, the Corsicans bear a considerable similarity to the natives of Italy. They are brave, sober, and hospitable; but subject to violent gusts of passion, and in the last degree revengeful and implacable. This, in fact, is the distinguishing trait of their character, and has been supposed to indicate a peculiar ferocity of disposition. It appears, however, rather to have originated in the long-continued misgovernment of the Genoese, when the grossest corruption prevailed, and money or interest could procure impunity for the most atrocious crimes. Under such circumstances, the avenging of injuries became, as it were, a private duty; and the Corsican would have considered himself degraded who had not obtained that redress for himself that was denied by law. It is needless to point out the sanguinary practices, crimes, and enormities to which such a state of things must necessarily lead. The improved and more vigorous government introduced by the French has,

however, done a good deal to lessen the temptations to vengeance; though it will be long before the passion be wholly subdued among a people in the situation of the Corsicans. They use an Italian dialect, with a large number of Arabic words, and Spanish idioms intermixed. The dress of both sexes bears a similarity to that of the Italians: the men wear a kind of Phrygian bonnet, and commonly go armed with a long knife, pistol, musket, bayonet, &c. At Cargese, on the W. coast, there is a Greek colony of Mainot origin, consisting of about 700 individuals, the descendants of some Greeks who settled in Corsica in 1676, who preserve their dress, religion, &c., but have adopted Catholic rites of worship. The tract they inhabit is the best cultivated in the isl. The Phocians, who afterwards founded Marseilles, and the Phœnicians, have both been considered the first inhab. of Corsica; and by them the island was called *Cyrnos*. It was afterwards conquered by the Carthaginians, from whom it was taken by the Romans about B. C. 231. In the middle ages, the Goths, the emperors of the East, Saracens, Franks, House of Colonna, Pisans, and Genoese, successively possessed it. Insurrections against the latter continued at intervals for several centuries, till the Genoese finally ceded it to France in 1768. The pop. under the gallant Paoli made a determined resistance; but ultimately they were forced to submit, and the island has since belonged to France, with the exception of two short periods, in 1796 and 1814, when it was occupied by British troops. The names of Pascal Paoli and of NAPOLEON, both natives of Corsica, are sufficient to confer on it an enduring celebrity. (*Hugo*, art. *Corse; Tableaux de Statistique; Boswell's Corsica, &c.*)

CORTONA (an. *Crotona*), a city and sea-port of the kingdom of Naples, prov. Calabria Ultra, cap. district and cant., near the mouth of the Esaro (an. *Æsarus*), on the Ionian Sea; lat. 39° 7′ 30″ N., long. 17° 8′ 55″ E. Pop. *circa* 5,000. It is surrounded by walls and defended by a strong citadel. The latter fronts the sea, and is separated from the town by a ditch and drawbridge. "Its private buildings are poor and sordid; the streets dismal and narrow.* Ill-humour, misery, and despondency were strongly depicted on the countenance of every inhabitant I met. There is very little bustle: little commercial hurry; cheese and corn are the principal commodities: for the stowage of corn there are ranges of granaries in the suburbs." (*Swinburne*, i. 315. 4to. ed.) It has a cathedral and several other churches, 2 convents, a seminary, 2 hospitals, &c. The harbour is protected on the S. by the projecting tongue of land on the side of which the town is built, and on the N. by a mole; but it is too shallow to admit of vessels of considerable size, and is not very safe. Mr. Craven says, that 3 altars or pedestals, with Latin inscriptions, are the only remains of antiquity he could find in Cortona.

Such is the present abject and degraded state of what was once one of the richest, most populous and powerful cities of Magna Græcia! Various accounts have been given of its origin, but it is sufficient to say that it was founded by emigrants from Greece at a very remote period. It speedily rose to eminence. Pythagoras resided here for a considerable period after leaving Samos; founded a very extensive school; and is said, by his example and his precepts, to have effected a very considerable change in the manners and conduct of the inhab. It had also a celebrated school of medicine. Ancient writers have praised its invigorating air, which was said to give superior strength to the men, and beauty to the women. Milo, famous alike for his success as a wrestler at the Olympian and Pythian games, and for his tragical end, was a native of Crotona. It produced many other celebrated wrestlers, so that it became a proverbial saying, that the last wrestler of Crotona was the first of the other Greeks. (*Strabo*, ii. 262.) The mode which Zeuxis took to paint his famous picture of Helen is a sufficient compliment to the beauty of the fair Crotoneans. (The curious reader will find this subject thoroughly discussed in Bayle, art. *Zeuxis*.) In the third year of the 67th Olympiad, some exiles from Sybaris, having taken refuge in Crotona, the latter, on refusing to give them up, was attacked by 30,000 Sybarites; and though the Crotoniats are said to have been able only to bring 10,000 men into the field, they gained a complete victory over the Sybarites, and took and sacked their city. (*Ancient Universal History*, vi. 424. 8vo. edit.) But their success in this conflict is said to have been followed by a renewal of that corruption of morals which Pythagoras had done so much to correct, and by a decline of the martial virtues. At all events, the Crotoniats were not long after signally defeated by the Locrians, and do not appear to have again recovered their former power or influence. Still, however, Crotona was a large city at the epoch of the invasion of Italy by Pyrrhus, though it appears to have suffered severely in the contests to which it led. Livy says, *Urbs Croto murum in circuitu patentem* 12,000 *passuum habuit, ante Pyrrhi in Italiam adventum. Post vastitatem eo bello factam, vix pars dimidia habitabatur: flumen (Æsarus) quod medio oppido fluxerat, extra frequentia tectis loca præterfluebat.*" (*Liv.* 24. § 3.) It was afterwards taken by the Carthaginians, and the inhabitants removed to Locri. Subsequently, however, it received a colony from Rome. In the war between Charles of Anjou and Frederick of Arragon, it was taken by surprise, and sacked; and it has since continued in the depressed state in which we now find it.

About 6 m. S.E. from Crotona, at the extremity of the narrow projecting tongue of land, now called Capo Nau or Delle Colonne (the *Lacinium Promontorium* of the ancients), stood a famous temple of Juno, hence frequently called *Diva Lacinia*. It is said by Livy to be *nobile templum, ipsa urbe nobilius*. It was of great antiquity, was surrounded by magnificent groves, and was held in such veneration that it was annually resorted to by crowds of pilgrims from all parts of Italy and Greece. The Helen of Zeuxis was placed, with many other articles of great rarity and value, in this sacred edifice, whose sanctity was respected both by Pyrrhus and Hannibal. But succeeding conquerors have had less forbearance; and a solitary Doric column is now all that remains of this once venerated and splendid edifice! (*Craven's Tour*, 238.; *Cramer's Ancient Italy*, ii. 395.)

CORTONA, a town of Italy, G. D. of Tuscany, prov. Firenze, on the declivity of a steep hill, which commands a magnificent prospect of the Thrasimene lake, the mountains of Radicofani, and the wide and variegated vale of Chiana, 52 m. S.E. Florence, and 22 m. N.W. Perugia. Pop. *circa* 5,000. This, which was one of the 12 principal cities of Etruria, is supposed to have been founded by the Pelasgi, and is probably among the most ancient towns in Italy. "Its original walls still appear round the city, as foundations to the modern, which were built in the 13th century. Those Etruscan works are most entire towards the N. Their huge, uncemented blocks have resisted on that side, the storms of near 3,000 winters; while on the S. they have yielded to the silent erosion of the *scirocco*. None of the stones run parallel; most of them are faced in the form of *trapezia*; some are indented and inserted in each other like dovetail. This construction is peculiar to the ruins of Tuscany: it is far more irregular, and, therefore, I presume, more ancient than the Etruscan work of Rome. No part of these walls is fortified." (*Forsyth's Italy*, p. 99.) The town is commanded by a castle built by the Medici, on the summit of the hill on which it stands. It has a cathedral, which possesses some fine works of art, several other churches, and a theatre. According to some authorities, there is a temple of Bacchus, and the remains of some baths ornamented with mosaic work. Next to the city walls, however, the most interesting relic of antiquity is a small sepulchral chamber a little below the town, formed of large blocks of sandstone, the construction of which proves that the architects of the Etruscan period were acquainted with the principle of the arch. Cortona is the residence of a bishop; it has an ecclesiastical and some other seminaries, and was the seat of the Etruscan academy, founded in 1726, which had here a library, a cabinet of natural history, a museum of antiquities, engravings, gems, &c., but these collections have been dispersed. In the middle ages, Cortona was attached to the Ghibelline party; since the early part of the 15th century it has always been subject to Florence, except during the short interval it belonged to the French under Napoleon. (*Cramer's Anc. Italy; Forsyth; Rampoldi, &c.*)

CORUNNA (Span. *Coruña*), a city and sea-port of Spain, prov. Galicia, N.W. extremity of the kingdom, on the E. side of a small peninsula, forming the S. extremity of the Betanzos Bay, 13 m. S.W. Ferrol, 315 m. N.W. Madrid; lat. 43° 23′ 36″ N., long. 8° 20′ 13″ W. Pop. 22,500. (*Miñano*.) It is divided into the Upper and Lower Towns. The former, situated on more elevated ground, is surrounded by walls and bastions, and defended by a citadel: the other is situated lower down, on the isthmus joining the peninsula to the mainland, from which it is separated by ramparts and a ditch. The streets in the Upper Town are comparatively steep and narrow. Southey says that "its filth is astonishing." "Other towns," says he, "attract the eye of a traveller, but Corunna takes his attention by the nose!" Among the public buildings are 4 churches, 5 convents, a palace for the captain-general, and the supreme court of justice of the prov.; 2 barracks, an arsenal, 2 hospitals, and a school of design, mathematics and navigation, supported by the commercial consulate.

There is a fine commodious quay, and a good building yard. The harbour, which is safe and well-sheltered, is commanded by Port St. Anthony, on an insulated rock at its mouth, and by Fort St. Diego on the mainland. It is the station for packets between Spain and the Havannah, and between Spain and Falmouth. At the bottom of the harbour is the suburb of St. Lucia. On the N. shore of the peninsula is the famous lighthouse, called

* Mr. Craven, on the contrary, says that "the town has some straight and wide streets, with spacious houses." (*Tour*, 235. 4to. ed.) *Non nobis est, &c.*; but, on the whole, we prefer Swinburne.

the Tower of Hercules, or the Iron Tower, 92 ft. in height, and which, being built on high land, is visible at sea in clear weather 60 m. off. The tower is said by Humboldt to be of Roman construction, and is believed to be of the æra of Trajan. It was repaired in 1791. (*Pers. Narrative*, i. 25.) The principal manufacture carried on in the town is that of fine table and other linen, with which the royal palaces used to be supplied, and of coarse linen. It has also fabrics of hats, canvass, and cordage, and a royal manufactory of cigars, in which 500 women are employed. (*Miñano.*) Corunna is famous, in the history of the struggle between Spain and Napoleon, for being the point to which Sir John Moore directed his disastrous retreat in 1808; and for his death in the engagement which took place under its walls, on the 16th of January 1809, previously to the embarkation of the British, when a superior French force under Marshal Soult was repulsed with great loss.

COSALA, a town of Mexico, state of Sonora, in a mountainous district, 200 m. S.E. El Fuerte, and 60 m. from the Pacific Ocean. Pop. (1835) 6,000. This town is the third in the state in point of size. It derives importance partly from being a depôt for goods passing to and from the port of Guaymas, on the Gulph of California, but chiefly on account of its mines, one of which, called Guadalupe, contains an extremely rich vein of gold; and being at a considerable elevation, is free from water. The present proprietor, however, a man of very eccentric habits, refuses to work this mine. (See *Ward's Mexico*, ii. 324, 325.)

COSLIN, or KOSLIN, a Prussian town, prov. Pomerania, cap. reg. and circ. of same name, on the Niesenbecke, about 4 m. from where it falls into the lagoon Jamund, which communicates with the Baltic; lat. 54° 12′ 7″ N., long. 16° 10′ E. Pop. 6,900. Having been nearly destroyed by fire in 1718, it was rebuilt on a regular plan by Frederick William I., whose statue has been erected in the market-place by the citizens to commemorate the beneficence of the monarch and their gratitude. It is the residence of the governor of the regency, and has a court of appeal, and a society for the promotion of agriculture, and various schools. Mount Gollen, a little to the E. of the town, is one of the highest elevations on the Pomeranian coast.

COSSEIR, KOSSAIR, or KOSIR, a sea-port town of Upper Egypt, on the W. shore of the Red Sea, 93 m. E. by S. Ghenneh, or Kenné, and 102 m. E.N.E. Thebes; lat. 26° 6′ 59″, long. 34° 23′ E. Pop. estimated at from 1,500 to 2,000. It is situated near the centre of a semicircular bay, about 5 m. across, sheltered on the N. by a sandy point of land, where vessels may lie in 5 fathoms water within 60 yards of the shore. The town is meanly built; the houses being low, and built of sun-dried bricks made of a white calcareous earth: only a few have two stories. Immediately on the N.W. is a small citadel defended by round towers, on which a few small guns are mounted. This fortress is the residence of the governor and garrison. A caravan road leads from Ghenneh to Cosseir, which is the centre for all the traffic between the upper valley of the Nile and the Arabian ports; and to this circumstance it owes its existence, as it has neither trade nor manufactures of its own, and the surrounding country is perfectly bare of all vegetation. Old Cosseir is about 10 m. N.W. of the modern town, on the N. bank of a small inlet, from which the sea has now mostly retired. Of the latter town only a few ruins exist. Berenice, the great port for the eastern traffic of Egypt under the Ptolemies, was situated a good deal further S. (*Geographical Journal*, iv. 202, 203.; v. 287.; *Private Information; Wellsted's Trav.*)

COSSENZA (an. *Consentia*), a city of Naples, cap. prov. Calabria Citra, on the margin of a valley surrounded by hills, at the confluence of the Crati and Busento, 12 m. E. from the Mediterranean; lat. 39° 18′ N., long. 16° 15′ E. Pop. about 9,000. It is intersected by the Busento, which is here crossed by two bridges, and the lower parts of the town are said to be unhealthy. It has only one good street, the others being narrow, crooked, and dirty. The *tribunale*, or palace of justice, is one of the finest edifices in the kingdom; an old castle, now converted into barracks, crowns the summit of an eminence on the opposite side of the river. It has also a cathedral, several churches and convents, a grand seminary, a royal college, an hospital, a foundling hospital, 2 academies of science and *belles-lettres*, and a theatre. It is the seat of the provincial courts and authorities, and of an archbishop. Earthenware and cutlery are made here; and it has a considerable trade in silk, rice, wine, fruits, manna, flax, &c. In the 16th century there was here a famous academy, founded or improved by Bernardino Telesio. Rampoldi says, that Cossenza was the country of Campanella; but this is an error, Stilo, in Calabria Ultra, being his native place.

In antiquity Cossenza was the cap. of the Brettii. Alaric, by whom it was besieged anno 410, died before its walls, and was buried in the bed of the Busento. It was taken and sacked by the Saracens, who were expelled from it by the Normans, and has suffered much from earthquakes, particularly from those of 1658 and 1783. The extensive forest of Sila lies a little to the W. of Cosenza. (*Craven's Tour*, 342.; *Rampoldi.*)

COSSIMBAZAR, an inl. town of Hindostan, prov. Bengal, distr. Moorshedabad, and about 1 m. S. of that city, of which it is the port; on the left bank of the Bhajirathi, or Hooghly river; lat. 24° 10′ N., long. 88° 15′ E. It is one of the most considerable trading towns in Bengal, and during the rainy season has an unequalled variety and extent of water carriage. A vast quantity of raw silk is thence exported to Europe, and to almost every part of India; and a great deal consumed annually by the natives in the manufacture of carpets, satins, and other stuffs. Cossimbazar is also noted for its stockings, which are wire-knitted, and esteemed the best in Bengal. Its vicinity is flat and sandy, and abounds with a great variety of wild animals. (*Hamilton's E. I. Gaz.*, i. 455.)

COSTAMBOUL, or COSTAMANI, a town of Asiatic Turkey, Natolia, cap. pachalic, 235 m. E. Constantinople, and 50 m. S. from the nearest point of the Black Sea, in a dreary and unfertile country, intersected by deep ravines and numerous water courses. Pop. 12,500. It stands in a hollow, in the centre of which rises a lofty and perpendicular rock crowned with a ruined fortress, formerly possessed by the Comneni. The houses are built of wood and stone; and the palace of the pacha, a poor edifice, opens into the *maydan* or square. There are 30 mosques, with minarets, 25 public baths, 6 khans, and a Greek church. When it was visited by Mr. Kinneir, the bazaars were well supplied; but the inhab. are frequently reduced to extremities, particularly after a severe winter, when the snow remains so long upon the ground as to impede the operations of agriculture. The trade of the town is but inconsiderable, and there are no manufactures. In the later ages of the Greek empire, Costamboul was the cap. of an independent prince, who was first expelled by Bajazet, reinstated in his possessions by Timour, and finally subdued by Mahomet I. (*Kinneir's Journey through Asia Minor, &c.*, p. 281.)

COTE-D'OR, a dep. of France, in the E. part of the king., between lat. 46° 56′ and 48° 2′ N., and long. 4° 7′ and 5° 3′ W., formerly part of the prov. of Burgundy, having N. the déps. Aube and Haute Marne, E. Haute Saône and Jura, S. Saône-et-Loire, and W. Yonne and Nièvre. Area, 856,445 hectares. Pop. (1836) 385,624. Surface mostly hilly and mountainous. The principal chain connecting the Faucilles with the Cevennes runs nearly through its centre, separating the streams which flow into the Seine from the affluents of the Saône. A part of this range gives its name to the dep., having been appropriately termed the Côte-d'Or, from the number and excellence of the vineyards on its declivities. Both the Seine and Armançon have their sources in this dep.; and the Saône winds along its S.E. border. Climate temperate; but said to have become colder within the last 30 years (though probably without any good foundation), from the woods having been extensively cut down. Soil for the most part gravelly or calcareous; and in the E. and S. very fertile. The arable land is estimated at 457,000 hect., forests 198,000, meadows 63,000, and vineyards 26,450 do. The vine culture is by far the most important branch of industry carried on in this dép. It is almost superfluous to say any thing as to the quality of the wines of Burgundy. Their excellence is universally admitted — "*Ils réunissent dans des justes proportions toutes les qualités qui constituent des vins parfaits; ils n'ont besoin d'aucune mélange, d'aucune préparation, pour atteindre leur plus haut dégré de perfection. Les vins rouges joignent à une belle couleur beaucoup de parfum, et un goût délicieux: ils sont à la fois corsés, fins, délicats et spiritueux, sans être trop fumeux.*" (*Jullien*, p. 104.) It has been said that the wines of the Côte d'Or have degenerated within the last forty years; but this is not really the case, though, from the extension of vineyards in less favourable situations, the quantity of secondary and inferior growths bears a larger proportion to the superior growths, the supply of which is limited, and apparently unsusceptible of increase. The best wines are produced in two contiguous tracts to the S.E. of the Côte-d'Or range. One tract, called the Côte-de-Nuits, extends between Dijon and Nuits; the other, the Côte Beaunoise, is comprised between Nuits and the Dheune. To the Côte-de-Nuits belong the first class wines of the *Clos Vougeot*, *Romanée*, *Chambertin*, *Corton*, *Richebourg*, &c.; to the Côte Beaunoise the celebrated but secondary growths of *Volnay*, *Pomard*, *Beaune*, and others, and some fine white wines, as *Montrachet*, and *Meursault*. Burgundy wines are not often found in the best order in England, a circumstance ascribed (and we believe truly) to their liability to be injured by a sea voyage. *Corton* and *Chambertin* are said to stand the sea better than the others. The total annual produce of wine is estimated at 700,000 hectolitres, or 18,500,000 gallons. (*Hugo.*) Agriculture is in a medium state of advancement. More than sufficient corn is grown

for home consumption, principally wheat, oats, barley, and rye. Hemp, flax, and some leguminous and oleaginous plants are also cultivated. Dijon is famous for its mustard. Cattle abundant: both the ox and horse are used for the plough, except in the mountainous districts, where the spade is employed. The first attempts to improve the breeds of sheep in France were made in this dep., and here they have been eminently successful. The annual produce of wool is estimated at 245,600 kilogs. There are some fine natural pastures on the banks of the Saône, but the system of irrigation pursued in the Vosges and elsewhere is not adopted. Hogs are numerous; and bees are extensively reared. Property in this is less subdivided than in most other deps. in France. Mineral products numerous and valuable, especially iron and coal. There are above 100 furnaces for smelting iron, and its production and manufacture into different articles constitute a very considerable branch of industry. There are also numerous breweries and distilleries, with establishments for the manufacture of beet-root sugar, mustard, and vinegar; tanneries, potteries, cloth fabrics, &c. Wine forms, of course, the principal article of export. The trade of the dep. is much promoted by the canal of Burgundy, by which it is intersected. It is divided into 5 arronds., and sends 5 mems. to the Ch. of Dep. Number of electors (1838-39) 2,694. Chief towns, Dijon, Beaune, and Chatillon-sur-Seine. Total public revenue (1831) 12,480,859 francs. Number of children attending 760 primary schools about 43,000. There are several Roman antiquities in this dep., especially a sculptured column near Cussy, supposed to have been erected in the time of Diocletian. (*Hugo, France Pittoresque*, art. *Côte-d'Or; French Official Tables*, &c.)

COTES-DU-NORD, a marit. dep. of France, region of the N.W., formerly part of the prov. of Brittany, having E. Ille-et-Vilaine, S. Morbihan, W. Finistère, and N. the British Channel. Area, 672,096 hectares. Pop. (1836) 605,563. Coast generally steep, rocky, much indented with the mouths of small rivers, the chief of which is the Rance, and surrounded, particularly towards its W. end, by many small islands. A chain of heights, called the "Black Mountains," runs through the centre of the dep. E. and W., sending off numerous branches on either side: the highest point of these is the Menez-Haut, about 1,115 ft. above the level of the sea. Soil mostly stony, primitive formations being every where found near the surface: the plains on both sides the mountain-chain are often sandy and sterile. Arable lands occupy 411,000 hectares, meadows 54,500 do., heathy wastes and forests about 170,000 do. Agriculture is in a very backward state: in some cantons asses only are employed in farm labour: more corn is however grown than is required for home consumption; it is mostly oats, wheat, and rye. In 1835, 1,011,600 hectolitres of potatoes were raised. This dep. is beyond the limits of the vine culture, but the annual produce of cider is estimated at 500,000 hectolitres. The sheep are generally small and weak, but the rearing of black-cattle and horses engrosses a considerable share of attention; and the latter especially are strong and much esteemed. The fisheries of cod, mackerel, pilchards, &c. yield an annual sum of about 600,000 fr., and while they constitute one of the most important resources of the dep., are useful as preparatory schools for seamen. The forests are extensive, and abound with wild animals. Iron and lead mines are wrought: but the dep. is not rich in other minerals. The culture of flax, and its manufacture into linen, are pursued to a great extent. In 1834, in the arrond. of Loudeac only, there were 4,000 looms, producing annually 2,600,000 yds. of linen cloth, worth 4,000,000 fr. The linens of Brittany are mostly exported to S. America. Sailcloth, woollens, parchment, leather, shoes, and beet-root sugar are amongst the other principal articles of manufacture. Two canals, that of the Ille and Rance, and that between Nantes and Brest, pass through different parts of this dep. It is divided into 5 arronds., and sends 6 mems. to the Ch. of Dep. Number of electors (1838-39), 1,615. Chief towns St. Brieuc, the cap., Dinan, Guingamp, Lannion, and Loudeac. Total public revenue (1831), 10,259,670 fr. The Bas-Breton is the language commonly spoken, but most of the upper classes understand French. Many Celtic and Roman antiquities are scattered over this dep., of which the temple of Lanleff is the principal. (*Hugo, France Pittoresque*, art. *Côtes-du-Nord; French Official Tables.*)

COTHEN (Germ. *Köthen*), a town of central Germany, cap. of the duchy of Anhalt-Cothen, residence of the sovereign, and seat of the government, on the Ziethe, 78 m. S.W. Berlin, and 33 m. N.W. Leipzic. Pop. 6,200. It is divided into the old and new town, and is well built. Among the public buildings are the old ducal palace, in which the states (*landeskollegien*) of the duchy hold their sittings; with a gallery of paintings, cabinet of natural curiosities, and a good library; the new ducal residence, three churches, a synagogue, orphan and female asylums, a teachers' seminary, and a school for the indigent. Gold and silver lace, woollen cloth, linens, tobacco, and leather, are manufactured here; and there is some trade in corn, butter, cheese, and wool. (*Berghaus, Allgem. Lander*, &c.; *Cannabich.*)

COTOPAXI, a celebrated volcano of S. America, in the republic of Ecuador (Colombia), belonging to the E. or more inland chain of the great Cordillera of the Andes, in lat. 0° 40′ S., and long. 78° 39′ W., 34 m. S.S.E. Quito. Its shape is a perfect cone; it consists chiefly of mica, but in part of obsidian; its absolute height is 18,878 ft. above the level of the ocean, the upper 4,400 of which are covered with perpetual snow. Its summit is not more than about 9,800 ft. above the great longitudinal valley between the two chains of the Cordillera; but such is its steepness that Humboldt was unable to ascend it above the point at which the perpetual snows commence. The crater appears to be surrounded by a kind of circular wall, which, especially on the S. side, has the aspect of a parapet; and, probably owing for the most part to the heat, this summit of the cone is never covered with snow, and looks at a distance like a dark stripe. On the S.E. side of the mountain, near the snow-limit, there is a comparatively small projecting mass of rock, studded with points, and called the "Head of the Inca" by the Indians, who have a popular tradition that it formed originally a part of the summit of Cotopaxi. Humboldt himself inclines to the belief that the cone supporting the present crater, like the somma on Vesuvius, is composed of a great number of strata of lava heaped upon each other. "Cotopaxi is the most dreadful volcano of the kingdom of Quito, and its explosions are the most frequent and disastrous. The mass of scoriæ, and the huge pieces of rock thrown out of this volcano which are spread over the neighbouring valleys, covering a surface of several square leagues, would form, were they heaped together, a colossal mountain. In 1738, the flames of Cotopaxi rose *nine hundred metres* (4½ furlongs) above the brink of the crater. In 1744, the roarings of the volcano were heard as far as Honda, a town on the borders of the Magdalena, and at the distance of 200 common leagues. On the 4th of April, 1768, the quantity of ashes ejected was so great that in the towns of Hambato and Tacunga day broke only at three in the afternoon. The explosion that took place in the month of January, 1803, was preceded by a dreadful phenomenon, the sudden melting of the snows that covered the mountain. At the port of Guayaquil, 52 leagues distant in a straight line from the crater, we heard day and night the noises of the volcano, like continued discharges of a battery; we distinguished these tremendous sounds even on the Pacific Ocean, to the S.W. of the island of Puna." (*Humboldt's Researches*, English. trans. i. 115—125.)

COTTBUS, a town of the Prussian states, prov. Brandenburg, cap. circ. same name, on the Spree, 42 m. S. by W. Frankfort-on-the-Oder, and 67 m. S.E. Berlin. Pop. (1837) 8,216. It is walled, and has four churches, two hospitals, a gymnasium and library, an orphan asylum, and a girls' school. It has three suburbs, and is commanded by a castle built on a height to the E. Cottbus is the seat of the council for the circ., a municipal court, a board of taxation, &c. There are here considerable fabrics of woollen and linen stuffs, stockings, &c., with breweries and distilleries. This town was made over to Prussia by the congress of Vienna, previously to which it belonged to Saxony. (*Berghaus, Allg. Lander*, &c. iv. 631.; *Zedlitz Preussische Staat.*)

COVE, a marit. town of Ireland, prov. Munster, co. Cork, on the S. side of Great Cove Island, and opposite to the entrance into, and grand basin of, Cork Harbour, 133 m. S.W. by S. Dublin, 9 m. S.W. by W. Cork. Pop. in 1821, 6,508; in 1831, 6,966. The town, which in 1786 was a poor fishing village, is now large, well built, and populous; a change effected during the late French war, when Cork Harbour was a station for a large naval force, and a rendezvous for the W. India fleets waiting for convoy. It is built on the slope of a hill rising abruptly from the sea, so that most of the streets range in terraces one above the other, and are connected by cross streets which ascend the hill in a slanting direction, so that the ascent and descent is attended with but little inconvenience. The higher parts of the town command magnificent views of the harbour and of the hills that enclose it on all sides, studded with mansions, villas, and plantations. The entrance to the harbour, between Forts Camden and Carlisle, is about 3 m. from the town. Within the basin are the small islands of Hawlbowling (which, during the war, was a victualling depôt for the navy, and an arsenal); Rocky Island, with a powder magazine hewn out of the solid rock, and capable of storing 25,000 barrels; Spike Island, opposite to Cove, serves as a breakwater for vessels anchoring between it and the town, and has extensive bomb-proof artillery barracks; and Ringskiddy Island, fortified by a martello tower.

Cove itself is protected by a formidable battery.

The par. church is a plain building, on an elevated site; near it is a large Rom. Cath. chapel; and there is also a Methodist chapel. It has a national school, a fever hospital, a dispensary, a club-room, and two reading-rooms. At one end of the town is a large pier and extensive landing-quays, with a station-house for the pilots and officers connected with the custom-house in Cork.

Cove is not a place of manufacture or trade: its pop. consists either of visiters, attracted by the extreme beauty of the place, and the mildness and salubrity of the climate, or of those connected with the military and naval establishments in its vicinity. Petty sessions are held weekly: there is a small bridewell, and it is a constabulary and coast-guard station. Market on Saturday; but a sale of provisions for domestic consumption is carried on daily in the market-house, a spacious modern building, arranged in compartments for butchers' meat, potatoes, and fish and vegetables. Fish of every kind is abundant; but the supply of salt fish is, notwithstanding, so deficient, that much is imported from Scotland! Oysters are abundant, and of large size.

Cove, being regarded as the outport of Cork, no separate returns are kept of its trade, tonnage, and port dues. Its post-office revenue in 1830 was 977*l*., and in 1836, 1,036*l*. A constant communication is kept up with the city of Cork by land (for the most part) by carriages of every description, and by water by steamers. The island on which Cove is built contains about 13,000 acres, is very fertile, and is in great part occupied with villas and plantations. It communicates with the main-land on each side by ferries. An annual regatta is attended by pleasure yachts not only from several ports of Ireland, but from England and Scotland. Roches Point, at the E. entrance of Cork Harbour, lat. 51° 48′ N., long. 8° 14′ W., is surmounted by a lighthouse, with a fixed light, having the lantern elevated 92 ft. above high-water mark. (*Windele's Cork, &c.; Railway Rep., &c.*)

COVENTRY, a co. and city of England, within the co. of Warwick, 10 m. N.N.E. Warwick, 18 m. E.S.E. Birmingham, 85 m. N.N.W. London. Pop. (1841) 30,743. It stands on a gentle declivity on the great N. Western railway, and is watered by the Radford and Sherborne brooks. Streets of the old town, (with the exception of Cross Cheaping, where the splendid cross formerly stood, and which is now used as a corn market,) generally narrow and ill paved, and the upper parts of a few of the houses, which are high, project and present a sombre appearance. Within the last few years, however, the suburbs have been considerably extended, several new lines of streets having been laid out, and many new houses erected. The principal buildings are, St. Michael's church, one of the finest specimens of the lighter Gothic in England, with a beautiful steeple, 303 feet in height; St. John's and Trinity churches, Christ Church, attached to the old and beautiful spire of the Greyfriars' monastery; a catholic chapel; several dissenters' meeting-houses; the county hall, erected in 1785; St. Mary's hall, erected (Henry VI.) for the Trinity guild, now used for meetings of the town council, public concerts, &c.; a neat and commodious theatre; the drapers-hall; the canal-office; the free school; the gaol, and the barracks. Coventry was, conjointly with Lichfield, the see of a bishop, but on the recommendation of the ecclesiastical commissioners, it is now joined to the diocese of Worcester.

Under the Municipal Corporation Act the city is divided into 6 wards; and is governed by a mayor, 12 aldermen, and 36 counsellors. The jurisdiction of the corporate authorities extends over the city and the co. of the city, including, in all, an area of 15,070 acres. The jurisdiction of the magistrates extends to capital punishment, but this power is always referred to the judge of assize, the assizes being regularly held in the city. The recorder holds a court of quarter sessions, and a court of record for the recovery of debts to any amount. The sheriff holds a county court monthly. A county court is established in the city, before which 1,524 plaints were entered in 1848. Coventry has regularly sent 2 mems. to the H. of C. since 1453. Previously to the Reform Act the right of voting was exclusively in the freemen of the city who had served a seven years' apprenticeship in the city or suburbs. Registered electors in 1849-50, 4,139. The limits of the parl. bor. correspond with the ancient limits of the pars. of St. Michael and the Holy Trinity, except that it does not include the hamlet of Kerestey. It embraces an area of 4,920 acres. The municipal boundary is co-extensive with the co.

Coventry has been the seat of 2 parliaments: one (Henry IV.) in 1404, called, from lawyers being excluded, *parliamentum indoctum*; the other (Henry VI.) in 1459, called *parliamentum diabolicum*, from its numerous acts of attainder. The city was incorporated by Edward III., and the first mayor chosen in 1345. It was erected into a co. by Henry VI., with the hamlets belonging thereto, and lying within the vill or township.

This city has many extensive and well-endowed charities; of these, one of the most celebrated is the free school, founded by John Hales in the reign of Henry VIII., in which the celebrated antiquary, Dugdale, received the early part of his education; it has a revenue of 800*l*. a year, and exhibitions to both universities. Here are also various charity, national, and infant schools, as Bonds' hospital, at Bablake, for 45 old men, with a revenue of 1,050*l*. a year; and Wheatley's school and hospital, at the same place, for 40 poor boys, with nearly 600*l*. a year; Ford's hospital, in Grey-friars-lane, for 35 old women; Fairfax's school, in St. John's par., for 40 boys; Mrs. Catharine Bailey's school, in St. Michael's par., for 35 boys; the Blue Coat school, in Trinity par., for 50 girls; White's charity, amounting to about 2,500*l*. per annum; and the House of Industry, formerly the White-friars' monastery. A library was established here in 1791; it is regulated by a committee. A mechanics' institute was founded in 1828. Here is also a society for the diffusion of religious and useful knowledge; general and self-supporting dispensaries, and a public hospital.

Previously to 1436, woollen cloth caps and bonnets were an important article of manufacture. In the early part of the 16th century, Coventry became famous for the production of a blue thread, called "Coventry true blue." But this was given up before 1581, after which woollen and broad cloths continued the staple until the destruction of the Turkey trade in 1694. The manufacture of striped and mixed tammies, camlets, shalloons, and calimancoes, flourished during a part of the last century, but is now almost discontinued. This was succeeded by silk throwing and riband weaving, now the staple business of the place, and watch making. When first introduced, about a century and a half ago, the riband trade was for some time confined to a few hands, but it afterwards increased so as to exceed that of every other town in England. The alteration of the law as to the silk trade, in 1826, though productive of considerable loss and injury at the time, has, by introducing a spirit of competition, and stimulating the manufacturers to call all the resources of science and ingenuity to their aid, been productive of the greatest improvement. Lute-strings may now be purchased more cheaply in Coventry than in France. Plain goods of English manufacture are fully equal to those of the French; but the latter have the advantage in style and fashion, and in the brilliancy, though not in the permanency, of their colours. With the exception of steam engines for throwing silk, no powerful machinery is used in the riband manufacture. An attempt was made in 1831 to introduce power looms; but after the buildings and machinery were erected and ready to be put in operation, the weavers attacked the manufactory and destroyed the looms. Fortunately, however, an effort has since been made to introduce them, and with success, a large factory having been erected a few years since, in which all descriptions of ribands are made by steam power. It is the general practice for the work to be given out to be executed in the houses of the workmen. The manufacturers employ girls and young women, who work together on the premises of the manufacturers, in winding and warping the silk for the outdoor weavers. In 1808 there were 2,819 silk and riband looms at work in Coventry only, exclusive of a great many in the adjacent villages. In 1839 it appeared, from the report of Mr. Fletcher to the commissioners of inquiry into the condition of the hand-loom weavers, that the operative loom owners in the city and suburban villages held 3,967 looms, of which 3,145 were worked by members of their own families, and the remaining 822 by journeymen and half-pay apprentices. It further appears from the same report, that 27 master manufacturers employed in loom shops or factories 1,862 looms. The wages of the hands employed as weavers vary from 12*s*. to 30*s*. per week. Throwsters, chiefly children, get from 2*s*. 6*d*. to 7*s*.; silk winders, from 1*d*. to 2*d*. an oz., or from 6*s*. to 8*s*. a week; shute fillers, from 3*s*. to 8*s*.; warpers, from 7*s*. to 9*s*. The winders, shute fillers, and warpers, are principally females. Large quantities of ribands are exported; but the principal demand is for the London and country markets. There are several large dyehouses, for dying the silk, employing from 300 to 500 hands.

The manufacture of watches was introduced about a century ago, and has continued progressively to increase. Large quantities are prepared for the home and foreign markets; some manufacturers employing, when the trade is in a state of activity, great numbers of hands. The wages of the workmen vary from 15*s*. to 70*s*. per week, the larger amounts being paid to those only who are proficients in working at the *patent lever* and other superior watches, which are now produced here equal in quality to those made in London. Of the entire population of Coventry in 1841, 722 males were employed in watchmaking; 1232 males and 575 females in the riband trade; and 303 males and 1552 females in the silk manufacture. Coventry is advantageously situated for commercial operations, lying nearly in the centre between the four greatest ports of the country — London, Bristol, Liverpool, and Hull, and having direct communication

by railroads and canals with the metropolis and principal towns in the kingdom. Corp. revenue in 1847-48, 9,345*l*. Sum expended on the poor in 1847, 6,434*l*. assessed upon property of the estimated annual value of 75,045*l*. Coventry has two joint stock banking companies, both of which issue notes; and it has, also, a savings bank which had, on the 20th of November 1848, 68,509*l*. of deposits. Two weekly newspapers are published in the town. The Lammas grounds, on which the freemen have a right to keep three head of cattle from 13th Aug. to Candlemas, come up close to the city, and are very suitable for building villas, factories, &c.

During the monastic ages, Coventry had a splendid monastery, and a large and beautiful cathedral, similar to that at Lichfield. The latter was destroyed by a barbarous order of Henry VIII., and only a few fragments of it now remain. The city was formerly surrounded with walls of great strength and grandeur, with 32 towers and 12 gates. It has been always renowned for its pageants and processions, and particularly, in the monastic ages, for the performance of *Mysteries*. The legend of Peeping Tom, and the Lady Godiva, is too well known to require any special notice. An effigy of the over-inquisitive tailor may be seen in the upper part of a house at the corner of Hertford Street. The tradesmen of Coventry were formerly famed for their affluence. In 1448, they equipped 600 men armed for the public service. Many eminent persons have either been born or bred at Coventry, among whom were, Nehemiah Grew, curator, in 1672, to the Royal Society for the anatomy of plants, and in 1677, sec. to the Royal Society. Coventry gives the title of earl to the descendants of John Coventry, Mayor of London, in 1425. Market-days, Wednesdays and Fridays. The principal fair, held first Friday after Trinity Sunday, is called Show Fair, and continues 8 days, on the first of which the representation of the Countess Godiva's procession is enacted. The other chartered fairs are in March, May, Aug., and Nov., for cattle and commodities generally; monthly fairs for cattle have been recently established, and cheese fairs, holden in May and September. Races take place in the spring; and though established only about 6 years, they already rank high. (See *Dugdale's Antiq. Warwick; Beauties of England and Wales; Hist. and Antiq. Coventry; Boundary Commissioners' Reports; Private Inform.*)

COVILHA, a town of Portugal, prov. Beyra, on the E. slope of the Sierra de la Estrella, 20 m. S. W. Guarda. Pop. 6350. It rises amphitheatrewise between two streams. In the upper part there is an antique castle and tower, and in the lower part, on the margin of one of the streams, is a manufactory of fine cloths, druggets, and baizes, carried on by a company in Lisbon, containing above 120 looms. There are nine churches, with an hospital, and a workhouse. (*Miñano.*)

COURLAND, a government of Russia in Europe, on its W. frontier, having N. the Gulph of Riga and Livonia; E. the gov. of Witepsk; S. that of Wilna, and a small portion of Prussia; and W. the Baltic. Area about 10,000 sq. m. Pop. (1846) 553,000. Near Mittau, and along the shores, the surface is flat, and is overspread with marshes and sandy heaths; but the interior is mostly undulating, there being a chain of hills along the bank of the Duna, which sends ramifications over the whole country. The Duna forms the E. and a part of the N. boundary: the other principal rivers are the Aa and Vindau. There are many lakes. Speaking generally, the atmosphere is damp, the sky cloudy, and the temperature low and variable. Soil generally light and sandy, requiring much manure; it is most fertile towards the E.: two-fifths of the surface is occupied by forests, chiefly of pine, fir, birch, alder, with a considerable intermixture of oaks. Agriculture is the principal occupation of the people, and notwithstanding the badness of the soil, has advanced more than in any of the neighbouring provs. More corn is grown than is necessary for home consumption; it is chiefly rye, barley, and oats. Flax and hemp, and a few fruits and pulse, besides a little tobacco, are also cultivated. Pasturage is scarce, and but few cattle are reared; the oxen and horses are both of a bad quality, and the sheep yield only a coarse species of wool. Bees are kept only to a trifling extent. Iron, lime, and turf, and occasionally amber, are found. Manufactures quite insignificant, and mostly domestic: in respect to them, Courland ranks nearly last amongst the Russian govs. There are a few of paper, copper articles, and earthenware; and some brandy distilleries, and tile factories. Mittau, the cap., is the only town of any size: the principal sea-ports are Liebau and Vindau, both on the W. coast. The exports, which are principally corn, flax, hemp and hemp-seed, skins, and salted meat, are said to amount to about 2,500,000 roubles a year, and the imports about 600,000. The inland trade is almost entirely in the hands of the Jews, of whom there are about 20,000 in the gov. Most of the pop. are Lutherans, and of *Letton* origin. Courland was anciently a part of Livonia, and was conquered in the 13th century by the Teutonic Knights; in 1561 it became a fief of Poland. After the fall of that power, it remained for a short time independent under its own dukes; but in 1795 it was united to Russia. (*Schnitzler, La Russie*, pp. 576—585.)

COURTRAY, or COURTRAI (Flem. *Kortryk*, Lat. *Cortoriacum*), a fortified and manufacturing town of W. Flanders, 17 m. E. Ypres, 25 m. S. Bruges, on the navigable river Lys, by which it communicates with the principal towns of Flanders; lat. 50° 50′ N., long. 3° 16′ E. Pop. (1836) 19,124. Houses about 2,000, and well built; streets spacious and remarkably clean. The principal public buildings are the town house and the cathedral of Nôtre Dame, which are fine old Gothic edifices beautifully ornamented. The church of St. Martin is also a handsome structure. There is a nunnery, a collegiate school, an excellent academy of design, two orphan asylums, a savings' bank, a *mont-de-piété*, and, for mercantile business, an exchange and a chamber of commerce. The spinning of linen thread, and the weaving of plain and damask linens, employ a large portion of the inhabitants. The fine linens of Courtray are known throughout Europe. All the weaving is performed on the handloom at home, and much of it by cottage farmers. The annual quantity of unbleached linen brought to the Courtray market is about 30,000 pieces, two-thirds of which are bought by the merchants of the town, and the rest by those of Belgium, France, and England. The spinning of cotton yarn, and the manufacture and dyeing of various cotton fabrics, constitute an important branch of industry. Courtray has also establishments for the manufacture of soap, candles, salt, tobacco, chicory, chocolate, oil, wax, paper, and pottery; besides numerous breweries, tanneries, &c.

The surrounding plain is abundantly productive of all kinds of field and garden crops, especially flax, of which immense quantities are grown of the finest description, and the vicinities of the town are picturesquely varied by numerous bleaching-fields. Courtray was first built in the 6th century. It was anciently known under the name of Cortoriacum, and in the 7th century it was a municipal city. Like the other towns of Flanders, it has been subject to many vicissitudes, has sustained several memorable sieges, and been burnt and plundered in war. Under its walls was fought, in 1302, the famous battle of the Spurs, between 20,000 Flemings, consisting chiefly of weavers of Ghent and Bruges, and a French army composed of 7,000 knights and noblemen, and 40,000 infantry. In this conflict the flower of the French chivalry was slain, and the victorious Flemings collected from the battle-field about 6,000 pairs of gold spurs worn by their proud and defeated foes. Among the antiquities that have been found, are numerous medals of the Cæsars. Fairs for all kinds of merchandise are numerously attended on Easter Monday and Aug. 24. (*Dict. Géog. de Flandres; Guide Books of Belgium.*)

COUTANCES (an. *Constantia*), a town of France, dép. La Manche, cap. arrond., on a hill on the N. bank of the Soulle, 6 m. E. from the sea, and 16 m. W. S. W. St. Lô. Pop. 7,663. Streets narrow, steep, and ill-paved; houses mostly of stone, roofed with slate. It contains several old churches worthy of notice, especially a Gothic cathedral, having two spires in front, and a large square tower surmounting the centre of the cross; it is a conspicuous object, and a landmark for ships in the Channel. The town has a bishop's palace, with gardens, &c., a communal college, a public library with 5,000 volumes, and a small theatre. Druggets, cutlery, parchments, &c. are produced here; it has also marble-works, and a brisk trade in corn, butter, poultry, flax, hemp, and horses. In its immediate vicinity are the remains of an ancient aqueduct, with many of the arches still very perfect. Coutances was the birthplace of the Abbé de St. Pierre.

COWES (WEST), a town and sea-port of England, co. Hants, Isle of Wight, liberty West Medina, par. Northwood, 75 m. S.W. London, 10 m. W. Portsmouth, on the acclivity and summit of a hill rising immediately from the W. bank of the Medina, at its embouchure in the channel between the Isle of Wight and the opposite coast of Hampshire. Area of par., 4,270 acres: pop. of do, 5,147. Streets narrow and very irregular; but, as the houses rise above each other from the water's edge to the summit, they have a striking effect, many of the upper and more modern ones being handsome structures commanding splendid and extensive views. In the immediate neighbourhood are numerous elegant villas. The town, which is much resorted to as a fashionable sea-bathing place, possesses ample accommodations for visiters, in hotels, lodging-houses, assembly-rooms, reading-rooms, &c. A crescent-shaped battery, defending the entrance to the harbour, has 11 heavy pieces of ordnance and accommodation for a company of artillery. E. Cowes, on the opposite side of the river, ½ m. from W. Cowes, is a small irregular built hamlet, of the par. of Whippenham, at the foot of a hill. Here is the custom-house of the port. The harbour and roadstead of Cowes are amongst the best and most convenient in the English Channel, and form the rendezvous of the Royal Yacht

Club, and the station where their annual regatta is held. Many merchant vessels, yachts, &c. are built in the harbour, and several ships of the line were launched from it during last war. It had then also an extensive trade in the supply of provisions and stores to merchant vessels waiting convoy, &c.; and from its position it still retains a portion of this trade, though much less extensive than during the war. Most large ships outward or homeward bound from or to London are accustomed to touch at Cowes before proceeding on their voyage. It has also a considerable coasting trade. The exports consist chiefly of agricultural produce and malt; the imports of coals, manufactured goods, colonial produce and other articles of general consumption. There are daily steamers to Portsmouth and Southampton, and passage boats to Newport, up to which the tide flows.

CRACOW, a small and lately a nominally independ. state of Central Europe, formerly part of the k. of Poland, chiefly between lat. 50° and 50° 15′ N., and long. 19° 8′ and 20° 12′ E.; having N. and E. Poland, W. Prussian Silesia, and S. Galicia. Length, E. to W., 46 m.; breadth varying from 5 to 15 m. Area, 488 sq. m. Pop. (1846) 145,787, of whom about 42,000 belong to the city of Cracow. Surface generally undulating, consisting of the last ramifications of the Carpathian mountains. The Vistula, which bounds it on the S. in its whole extent, receives several small streams from the N. in this part of its course, one of which, the Brinica, forms the W. boundary of the Cracow territory. Climate healthy, and temperate; mean annual temp. 47½° Fahr. Soil very fertile, producing sufficient corn for home consumption, and an abundance of pulse, culinary vegetables, and fruit. In 1834 there were upwards of 50,000 head of cattle, and 100,000 hogs. There are no serfs; and the land is becoming more and more subdivided among independent proprietors. The territory contains rich mines of coal, zinc, and alum; some iron is also found; and there are quarries of marble, building stone, freestone, &c. The mines of Jaworzno furnished in 1831 upwards of 128,660 korzec of coal, 1,794 quintals of alum, and 8,744 quintals of zinc. If we except breweries and distilleries, which flourish here, as in all other parts of Poland, manufactures are of no importance. In 1831 there were produced 1,660,000 litres of beer, 529,000 litres of brandy, 1,914 quintals of tobacco; 920 pieces of woollen cloth, 12,800 reams of paper, 13,032 yds. of linen cloth, with some minor articles. Commerce has until lately been chiefly carried on with Poland, but there is now a considerable trade with Prussia, the Silesias, and Galicia. Average annual amount of exports, 1,340,000 fl. (33,500*l.*); imports, 2,200,000 fl. (54,400*l.*) Next to Cracow, the principal towns are Chrzanow, inhab. chiefly by Jews; and Krzeszowice, famous for its mineral baths. Besides the university (see next article), there are 51 parish schools, 3 superior and 2 inferior schools, 6 seminaries for boys, and 13 for girls. A foundation for defraying the expenses of poor students was established in the 15th century. The budget voted for the three years from 1838 to 1841 fixed the annual revenue and expenditure at 1,812,224 fl. (45,300*l.*) The state coined its own money. The armed force consisted of 410 infantry and 40 mounted *gens-d'armes*. By the third partition of Poland, in 1795, Cracow passed under the dominion of Austria; but it was reconquered by the Poles in 1809, and incorporated with the grand duchy of Warsaw. At the Congress of Vienna, in 1815, the territory was erected into an independent neutral republic, under the protection of Russia, Austria, and Prussia. Agreeably to the amended constitution of 1833, the government was vested in a senate composed of a president and eight senators, two of whom were elected for life, and the other six, as well as the president, for six years. One of the latter was elected by the clergy (*chapter*) of Cracow. There was a legislative chamber composed of 2 senators, (one of whom, chosen by the chamber, presided at its deliberations), 4 justices of the peace, 2 delegates of the clergy, 2 of the university, and 20 representatives, chosen by the electoral colleges of the city and territory. This assembly was convoked every three years to vote the budget, to inquire into the administration of the public funds, to elect the members of the senate and the different tribunals, and to discuss the laws presented for its sanction by the senate. But from 1826 to 1846 the territory was garrisoned by Austrian troops; and at the latter date it was incorporated into the Austrian empire. And this, in truth, is the only result that could have been anticipated. No doubt it would be desirable to have small independent states like this scattered up and down the continent, to serve as *foci* for the diffusion of political information, as asylums to which persecuted individuals might resort, and as depôts for foreign produce. But the circumstances that make the formation of such states desirable are quite sufficient to hinder them from ever having any real existence. Is it to be imagined that the governments of Russia, Prussia, and Austria, should be so inattentive to their own interests as to permit a state like Cracow, on the very borders of their territories, to become an asylum for individuals obnoxious to them, and where the latter might prosecute their projects in safety? To suppose that such a thing should be tolerated is absurd. How long should we permit a similar state to exist on the confines of our Indian empire? And have the Russians, Prussians, and Austrians, less cause for jealousy?

CRACOW (an. *Carrodunum*), a city of central Europe, cap. of the above territory, and previously to the 17th century, the metropolis of the k. of Poland; on the N. bank of the Vistula, where it is joined by the Rudawa, 160 m. S.S.W. Warsaw, and 200 m. N.E. Vienna; lat. 50° 3′ 32″ N., long. 9° 51′ 50″ E. Pop. (1847) 42,000, of whom 12,000 were Jews. The city is divided into three portions, one of which, the Jews' quarter, is built on an isl in the Vistula. The quarter of Podgorze, on the Austrian side of the river, is now politically disconnected with the city, but has since 1815 enjoyed the advantages of a free town. The city has, besides, several suburbs. Cracow has near it Mount Wawel, a rock of moderate elevation, but considerable extent, on which are the castle and cathedral; and two barrows, said to be the burial-places of the founder of the city and of his daughter Venda. The city itself is old, and irregularly built; but its streets are broad, and its churches and other public buildings, having many of them interesting monuments, and being associated with some of the most important events in Polish history, invest it with much interest. It was formerly fortified, but the ramparts have been recently converted into public walks. The royal castle of Cracow, built in the 14th century, and formerly the residence of the kings of Poland, though not in ruins, is greatly decayed. It has been partly destroyed by fire at different times, and imperfectly restored; but it has suffered more from the effects of war, having been in great part demolished by Charles XII. in 1702; and still more from its change of masters: at one time it was used by the Austrians for barracks, and now serves for a workhouse. Of the 76 churches formerly in Cracow, 40 are in ruins; the cathedral alone has retained its splendour and costly decorations, for which, and for its monuments, it is justly celebrated. Around its interior are 20 small chapels, crowned with domes in the Byzantine style. Most of the Polish kings, and many illustrious men are buried in it; among others, it contains the tombs of Casimir the Great, of John Sobieski, the deliverer of Vienna, and of the "last of the Poles," Kosciusko and Poniatowski. The other churches and palaces have fine paintings, statues, and ancient monuments. The episcopal palace is the most striking of the modern edifices, its walls being adorned with paintings in fresco, representing the most remarkable events of Polish history.

The university, founded and endowed by Casimir the Great, and improved by Ladislaus Jaghellon, has lost most of its ancient importance; but though the subjects of the neighbouring powers be prohibited from studying in it, at an average of the five years ending with 1837, it had 271 students. Cracow contains a college, a school of arts, an academy of painting, a public library with 30,000 vols. and 4,500 MSS., an observatory, a botanical garden, theatre, &c. There are five printing presses, from which seven periodical publications are issued, one daily, the rest monthly and quarterly. The articles of export and import consist principally of skins, linen, wax, corn, wood, Hungarian wines, and manufactured articles from England and Germany; but commerce has greatly declined since Russia, in 1833, prohibited the introduction of foreign wares into Poland through Cracow. Since 1831, the city has possessed a national bank. Its environs are remarkable for their picturesque scenery.

About a league W. of the city is an artificial tumulus erected to the memory of Kosciusko. "On the 16th of Oct. 1820, the senate of Cracow, accompanied by vast numbers of the nobles and the people from all the adjacent provinces, proceeded to deposit the first load of earth upon an eminence not far from the walls of the city, which had been selected to bear a mountain tumulus in honour of the patriotic general. For four years this great work was eagerly pursued; citizens of every rank toiled at the wheelbarrow; parcels of the sacred soil were sent to join the mass from all the great battle-fields which had been sprinkled with Polish blood; and the mound gradually rose to an altitude of about 150 ft. This monument of clay, planted on the soil which has been most frequently and grievously convulsed by political revolutions, will probably maintain its place as long as the world is habitable by men. Of all the structures of our age, if structure it can be called, this alone seems raised for all time—a thing lasting in itself, lasting by the name it bears, and lasting by the spirit which made it, when those who raised it shall all be scattered in uncollected dust." (*Reeve's Sketches of Bohemia, &c.*)

This city is said to have been built about the year 700, by Krak, a Polish duke, from whom it derived its name. It successively belonged to the Moravians and Bohe-

mians; and was taken from the latter at the end of the 10th century by Boleslaus the Great, who made it the cap. of Poland. In the 16th century it contained three times its present number of inhab.; but it has, notwithstanding, materially improved of late years. In 1784, the pop. did not exceed 16,000: the pop. of the city and territory increased 5,000 during the five years ending with 1837. (*Coxe's Travels in the N. of Europe*, i. 125; *Official Returns*.)

CRAIL, a royal and parl. bor of Scotland, co. Fife, 2 m. from the *East Neuk* of Fife, or Fife Ness. Pop. 1200. It is a decayed place, destitute of trade or manufactures. Many of the houses, however, are of that massive description that indicates former greatness. David I. had a palace here, which is now entirely demolished. The par. church was once collegiate, with a provost, sacrist, and ten prebendaries. (*Keith's Scottish Bishops*, edit. 1824, p. 467.) The famous James Sharp, afterwards archbishop of St. Andrews, murdered by the Covenanters on Magus Muir in 1679, was once minister of Crail. Coal is abundant in the neighbourhood. It unites with six small neighbouring burghs in sending a m. to the H. of C. Parl. constit., 1849-50, 47.

CRANBOURNE, a town and par. of England, co. Dorset, div. Shaston. Area of par., 13,730 acres. Pop. of do. (1841), 2,551. The town is situated in an open pleasant district, 12 m. S.S.W. Salisbury. The church is a fine old structure, partly in the Norman, and partly in the earliest Gothic, with a noble tower in the later Gothic style. There is an almshouse for 3 old people, and a few smaller charities. Market, Thursday; fairs, chiefly for cheese and sheep, Aug. 24. and Dec. 6. The riband manufacture, formerly carried on here, has declined, and the inhab. are now chiefly employed in agriculture. This par. is the supposed arena of the battle between the British, under Boadicea, and the Romans. Numerous barrows are dispersed over it, in which bones, urns, &c. have been found. On the Castle-hill, S. of the town, are the remains of a circular fortification, enclosing an area of 6 acres. Cranbourne Chase, a tract extending nearly to Salisbury, was celebrated during both the Saxon and the Norman periods. An old embattled manor house, called the Castle, still exists, which was occasionally the royal residence; in its hall courts were held; and there is a dungeon for the confinement of those who infringed on the game laws. Bishop Stillingfleet was a native of Cranbourne.

CRANBROOKE, a town and par. of England, co. Kent, lathe of Scray, hund. Cranbrooke. Area of par., 10,460 acres. Pop. (1841), 3,996. The town, on the Crane (a small stream traversing the Weald district), 38 m. S.S.E. London, consists of a main street, nearly 1 m. in length, and a smaller one diverging from it: many of the houses are well built, and it is partially paved and lighted, and amply supplied with water. The church, rebuilt about 1730, in the later Gothic style, has a lofty embattled tower. There are also 6 dissenting chapels; a grammar-school, endowed by Queen Elizabeth and others, with lands, &c., producing 300*l.* a year; a writing-school, founded in the same reign, with a small endowment; and a national subscription school. Market, Wednesday, a considerable one for corn and hops: there is also a cattle-market every alternate Wednesday; and fairs for horses and cattle, May 30. and Sept. 29.; the latter being likewise a large hop fair. The woollen trade, introduced here by Edward III., and long considerable, has disappeared; and the trade in hops is now the staple business of the place. Sir R. Baker, the antiquary, and Huntington, the founder of a religious sect, were natives of this place.

CRAYFORD, a town and par. of England, co. Kent, lathe Sutton-at-Hone, 11 m. E. by S. London. Area of par., 2,380 acres. Pop. of do., in 1841, 2,403. The town, situated on the Cray, about 4 m. above its confluence with the Darent, and on the great road from London to Dartford, consists of a long irregular street. The church is a good modern structure, on an acclivity at the higher end of the town. Its market has been long discontinued, but an annual fair is held Sept. 8. Until a recent period, extensive print-works were carried on a little below the town; and a mill for flattening iron and splitting iron into hoops, one of the first of its sort constructed in England, is still in operation. In the parish are numerous artificial caves upwards of 100 ft. in depth, increasing in magnitude as they recede from the earth's surface. Some of them contain several distinct apartments, excavated in the chalk, supported by pillars left at intervals for the purpose. Their origin is a matter of dispute; some having supposed them to be mere chalk quarries, while by others they are supposed to be places of security excavated by the ancient Britons or Saxons as receptacles for their families and goods during periods of danger. The Roman station, *Noviomagus*, is supposed to have been near Crayford, contiguous to which, A. D. 457., was fought the great battle between Hengist and Vortigern, which ended in the total defeat of the Britons.

CRECY, an inconsiderable village of France, dép. Somme, 11 m. N. Abbeville, famous in history for the victory gained here on the 25th of August, 1340, by the English forces under Edward III. over the French under their king Philip of Valois. The French army is believed to have amounted to about 120,000 men, while that of the English was under 40,000: but the superior discipline and good order of the latter more than counterbalanced their inferiority in point of numbers, and enabled them to achieve one of the greatest victories of which we have any account. The loss of the French in the battle and pursuit has been estimated at 1,200 knights, 1,400 gentlemen, 4,000 men at arms, and about 30,000 inferior troops. Besides the king of France, there were in the defeated army the kings of Bohemia and Majorca, both of whom were killed. The crest of the former, consisting of three ostrich feathers, with the motto *Ich dien* (*I serve*), was adopted by the Black Prince, the eldest son of Edward, whose bravery was most conspicuous on this occasion; and has been continued as the crest and motto of all subsequent princes of Wales down to the present times. The loss on the part of the English was comparatively trifling. It has been said that cannon were first employed by the English in this battle, and that they contributed not a little to their success. (*Rapin's Hist. of England*, iii. 458. 8vo edit.; *Hume's do.*, cap. 15.)

CREDITON, a town and par. of England, co. Devon, hund. Crediton, 7 m. N.W. Exeter. Area of par., 11,440 acres. Pop. 1821, 5,515; 1841, 5,947; of which the town may have about 2,000. The latter is situated in a narrow vale between two steep ridges, through which the Creedy flows and joins the Exe, a little lower down. It is divided into 2 distinct parts, the E. or ancient town, and the W. more modern and larger part, consisting chiefly of a broad street along the principal line of road from Exeter to N. Devon; there are many respectable houses, and extensive improvements are now in progress, to facilitate which the ancient market-place, in the centre of the High-street, has been removed, and a modern structure, more conveniently situated, been substituted in its stead. The church, a noble building in the later pointed style, with a fine tower springing from the centre, was rebuilt in 2 Henry VII. There are 4 dissenting chapels; a free grammar school, founded by Edward VI., for boys of Crediton and Sandford par., it has 3 exhib. to either university; a blue coat school, founded 1730, and incorporated with a national school established 1814, in which 150 boys are instructed, 80 of whom are clothed; a mathematical school, founded 1794, for 12 boys; 2 sets of ancient almshouses, and several minor charities. Market on Saturday; a great cattle market, last Saturday in April; fairs, for cattle, May 11., Aug. 21., Sept. 21.: all these markets and fairs are large, and numerously attended; the town being in a fertile district, with some of the best grazing land in the co. near it. The majority of the labouring pop. are now employed in agriculture; formerly there were several large woollen and serge manufactories: at present, however, there are no resident manufacturers, though many females weave long ells at their own dwellings, for manufacturers resident in N. Towton. A flax manufactory at Fordton, near the town, employs 50 hands; and there are some large flour mills. The petty sessions of the div. are held at Crediton; and it is the centre of a poor union of 29 par., with a large district workhouse, recently built; its own rates average 3,300*l.* This town sent mem. to the parl. at Carlisle, in Edward I. (*Willis's Not. Parl.*) It was several times the head quarters of each party during the last civil war. In 1743 it was nearly destroyed by fire, and was also seriously injured by fire in 1769.

CREETOWN, a neat marit. village of Scotland, co. or stewartry of Kirkcudbright, par. Kirkmabreck at the head of Wigtown Bay, where it receives the Cree, and on the road between Dumfries and Portpatrick. A small packet-boat plies once a day between this place and the town of Wigtown, on the opposite side of the bay, a distance of about 4 m.; and there is a regular ferry about 1 m. above the town. The hills in the neighbourhood of Creetown seem to be almost entirely composed of granite; and an extensive granite quarry, within 2 miles of the village, held on lease by the Liverpool Dock commissioners, affords employment to about 300 persons. The commissioners have erected a temporary harbour in the vicinity of the quarry, and export the stone to Liverpool in their own vessels. There used formerly to be large beds of sea shells in the vicinity, the shipment of which for manure to other places was a considerable source of employment; but these are now nearly exhausted. The late Dr. Thomas Brown, the celebrated ethical philosopher, was born here in 1780, his father being minister of the parish.

CREFELD, a thriving town of Rhenish Prussia, cap. circ. same name, in a fertile plain, 6 m. W. from the Rhine, and 13 m. N.W. Dusseldorf. Pop. (1846) 23,420. It is the principal town in the Prussian dom. for the manufacture of silks, silk velvets, silk thread, &c.

These fabrics are said by Zedlitz and Cannabich to employ, in Crefeld and its vicinity, about 2,500 looms, and 6,000 individuals, producing goods of the value of 4,000,000 thalers a year. A large proportion of the silks introduced into England as French, are really made in Crefeld. It has also fabrics of woollen, cotton, and linen stuffs, lace, oil-cloth, camlets, and earthenware; with tanneries, distilleries, &c. The town is well built, with wide streets and neat houses. It has four churches, an orphan and a deaf and dumb asylum, an hospital, a high school, police and commercial courts, &c.; and is the seat of the court of justice for its circle. In its vicinity is an old castle now used for a silk-dyeing establishment. In the latter half of the 17th and beginning of the 18th centuries, its pop. was greatly augmented by many reformists, Mennonites, &c. expelled from the neighbouring duchy of Juliers, and who, in return for their hospitable reception, introduced those manufactures to which the town owes all its prosperity. (*Zedlitz, Der Preussische Staat*, p. 419.; *Cannabich*.)

CREMA, a town of Austrian Italy, deleg. Lodi and Crema, cap. 2 distrs., on the Serio, 25 m. E.S.E. Milan. Pop. near 9,000. It is surrounded by a brick wall, a ditch, and some other old fortifications, and has a castle, which, before the use of artillery, was considered one of the four strongest fortresses in Italy. It is well built; streets spacious; palaces and public edifices numerous, including a cathedral and many other churches, an hospital, three separate charitable asylums, a *monte-di-pietà*, and two theatres. It has manufactures of lace, hats, linen thread, silks, &c., and is celebrated for the excellence of its flax. Very good wine, fruit, and fish, are obtained in its vicinity.

Crema was founded about 570 A.D., during the reign of Alboin, the first Lombard king of Italy. In 1159 it was sacked by Fred. Barbarossa; it was taken by the French in 1797, the day after the capture of Lodi. (*Rampoldi; Oesterr. Nat. Encyc.*)

CREMONA, a city of Austrian Italy, cap. deleg. same name, on the left bank of the Po, 46 m. S.E. by E. Milan, and 26 m. N.W. Parma; lat. 45° 7′ 43″ N., long. 10° 2′ 12″ E. Pop. 28,500. It is of an oval shape, about 6 m. in circ.; is surrounded by walls, bastions, and wet-ditches, and defended by a citadel. It is well laid out, but, "like most of the cities of Lombardy, it has a melancholy appearance, from the evident signs of decay, and large tracts of grass being seen in many of the broad and regular streets. Among its 44 churches, the *Duomo* alone has any particular attractions. This is an ancient edifice in the style of architecture approaching to Saxon, mixed with a sort of mongrel Italian. If not beautiful, it is at least picturesque; and its lofty tower, 372 ft. in height, is singularly so, being adorned with a sort of rich open work: it is one of the highest in Italy. The interior is composed of a nave with two aisles, divided by eight immense pillars, above which are a series of paintings by Bordenone. Near the cathedral is an octagon baptistery, said to have been once a temple of Minerva. In the town-hall, among others, there is a fine picture by Paul Veronese. The convents are upwards of 40 in number, and there is an obscure university." (*Italy, in Mod. Trav.*, &c.)

Cremona is the residence of the delegate of the prov. and seat of a bishopric; it has civil, criminal, and commercial tribunals, a lyceum, gymnasium, superior and female schools, several well-attended infant schools, which were the first institutions of the kind opened in Italy, a public library, numerous collections of works of art, two theatres, barracks, a *monte-di-pietà*, and several hospitals, asylums, and other charitable institutions. The manufactures of silk and cotton fabrics are considerable, and there are others of porcelain and earthenware, dyes, and chemical products. During the 17th, and the earlier part of last century, Cremona was highly celebrated for its musical instruments, especially its violins made by the Amati and Straduarius. Instruments by these makers are now very scarce, and fetch an extraordinary price; and the manufacture of violins and strings has greatly declined. Cremona has a brisk trade in corn, flax, cheese, silk, oil, honey, wax, &c.: the flax grown in its vicinity is much esteemed. This city is very ancient: it was probably founded originally by the Gauls, and, together with Placentia, was the seat of the first colony established by the Romans in Cisalpine Gaul; but its antiquities have been swept away by the successive revolutions it has undergone. Having espoused the cause of Brutus, Augustus divided its territory among his veterans; and this being insufficient for the purpose, he added to it the territory of Mantua, as is well known from the line of Virgil:—

Mantua væ miseræ nimium vicina Cremonæ!—*Eclog.* ix. 28.

But it speedily recovered from this disaster, and rose to great wealth and eminence. Certainly, however, it was, as Tacitus says, "bellis civilibus infelix." In the struggle between Vitellius and Vespasian it was occupied by the troops of the former, and, being taken by those of the latter, it was sacked and burnt by the infuriated soldiery. (*Tacit. Hist.* lib. iii. §§ 26—33.) It was again, in as far as practicable, restored by Vespasian. From the 12th century, downwards, its history is identified with that of Milan. In 1796 it opened its gates to the French; and from 1800 to 1814 was the cap. of the dép. Alto-Po. Vida, bishop of Alba, one of the best modern Latin poets, was born at Cremona in 1490. (*Oesterr. Nat. Encyc.; Rampoldi*, &c.)

CRETE (vulg. CANDIA), a large and celebrated isl. of the Mediterranean, belonging to the Grecian Archipelago, of which it forms the S. boundary. It lies between 34° 57′ and 35° 41′ N. lat., and 23° 29′ and 26° 20′ E. long., its N.W. extremity being 80 m. S.E. Cape Matapan, in Greece, and its N.W. termination 110 m. S.W. the nearest point of Asia Minor. It is long and narrow, its length from E. to W. being about 160 m., with a breadth varying from 6 to nearly 50 m. but averaging about 20 m. Area, 3,200 sq. m. Pop., according to Pashley, in 1834, 129,000; and according to a return by the British consul, in 1839, 158,000; of whom 100,000 are native Greeks, 44,000 Turks, and the remainder Hellenes, Jews, and other foreigners, Arab and Albanian troops, and about 2,000 black slaves. Previously to the breaking out of the late Revolution, the pop. was estimated at about 270,000. At the period when it was acquired by the Venetians, Crete had probably a pop. of 500,000 or 600,000, but it fell off greatly under their oppressive and rapacious sway. Its fertility, and the number and magnitude of its ancient cities, warrant the supposition that the pop. in antiquity may have amounted to 1,000,000 or 1,200,000. (*Pashley*, ii. 326.) The isl. at present belongs to the viceroy or sovereign of Egypt, and is divided into the three prov. of Candia, Retimo, and Canea, so named from their respective capitals. These prov. are subdivided into 20 eparchies, or districts, of which Candia comprises 11, Retimo 4, and Canea 5.

Topography.—Crete is almost wholly covered with mountains. A serrated range stretches through its whole extent E. to W.: in the E., although rugged and barren it attains no great elevation; but as it proceeds westward, its peaks increase in height, and are covered with snow even in June. At the W. extremity of the island, the range of the White, or Sphakian mountains, rises to perhaps 5,000 ft., and Ida (now Psiloriti) the loftiest as well as the most famous of the Cretan mountains, nearly in the centre of the island, is, according to Sieber 7,674 ft. high. Ida, however, would seem to have little besides its height and classical celebrity to recommend it. Tournefort says, "*Ce celèbre Mont Ida ne montre qu'un gros vilain dos d'âne tout pelé: on n'y voit ni paysage, ni solitude agréable, ni fontaine, ni ruisseau.*" (i. 53.) The different mountain ranges abound with grottos and caverns, some of which are alike extensive and celebrated. Every classical reader is, of course, acquainted with the history of the famous labyrinth in which Minos kept the Minotaur killed by Theseus. A cavern of great extent and intricacy, and which answers in all the most essential particulars to the accounts given of the labyrinth, in a hill at the S. foot of Mount Ida, about 3 m. from the ruins of Gortyna, has been visited and described by Tournefort, (i. 65.) Cockerell, (*Walpole's Memoirs*, i. 405.), and others. It has been supposed by some that this cavern, which consists principally of many long winding and narrow passages, which can only be safely explored by means of a clue, was a quarry whence the stones used in the building of Cnossus and Gortyna had been derived; but any such supposition seems wholly out of the question: it is not possible to imagine, had it been a quarry, that it should have been excavated in narrow winding passages, as that would have added immeasurably to the difficulty and cost of procuring the stones. Tournefort has supposed it to have been originally a natural cavern, and that it had been improved and perfected by art, to make it a place of concealment, or refuge, in periods of distress. This learned and excellent traveller does not, however, suppose that this cavern can be identified with the famous labyrinth; but though the question be not free from difficulty, its substantial coincidence with the distinguishing traits ascribed to the labyrinth, seems to leave little room for doubt as to their identity.*

On every side of the island, but especially on the S., the mountain region extends quite to the coast, which is generally lofty and inaccessible. The N. shores present several remarkable headlands, as capes Busa

* Mr. Pashley dismisses this question in a very brief, if not very satisfactory manner, by denying that the Cretan labyrinth ever existed any more than its fabled occupant, the Minotaur! (i. 208.) But it is needless to say, that the fact of the stories connected with the Minotaur being fabulous, affords no room or ground for denying the existence of the labyrinth; the more so when "the traveller, who has been bewildered in the mazes of the existing Gortynian cavern, and who has experienced the *absolute necessity of a clue to guide him through its windings*, must admit that it is admirably adapted to the Athenian tale of Theseus." (Cockerell in Walpole, *loc. cit.*)

(Corycum), Spada (Psacon), Melek (Cyamon Pr.), St. John, Salmone, &c., and are indented by many extensive bays, the chief of which are those of Kisamos, Khania, Sudha, Armyro (*Amphimalle*) and Mirabel. There are some tolerable harbours on this shore: but of these the S. coast is entirely destitute, and presents only one point worthy of notice, Cape Matala, the most southerly of all belonging to Europe. Several small islands surround Crete, as Grabusa, Dhia, Gozo, &c., and in the Bay of Sudha, are the Leucæ, supposed to be the isles of the Syrens celebrated by Homer. The plains are few; the chief are those in the N. of Crete, surrounding the towns of Canea, Candia, &c., and the larger one of Gortyna or Messara, in the S., through which the Messara, the largest stream, flows. There are no rivers of any importance, but every little ravine in the furrowed sides of the mountains bears its tribute of melted snow to the rich alluvial valleys lying at their feet, rendering them abundantly fertile. At the E. and W. extremities of Crete there are a few unimportant lakes.

Climate, and Natural Products. — In the lower parts of the country it never freezes, and in summer the heat would be intolerable if not tempered by N. winds, which are then prevalent. Rains occur mostly in the spring and autumn. The country is generally healthy, and subject to few endemic diseases. Granite, schist, slate, &c. are amongst the primary rocks of the mountains, but calcareous formations, as in Greece, are the most common. Crete is not rich in metals; there are no mines, though Diodorus Siculus, and other ancient writers preserve the tradition that iron was first discovered here. The mountains are clothed with woods of oak, chestnut, walnut, and pine trees, and the plane, cypress, myrtle, wild olive, vine, carob, aloe, arbutus, *ficus indicus*, and a multitude of fine fruits and vegetables grow spontaneously, while the ground is fragrant with aromatic herbs. For luxuriant vegetation it presents a wide and favourable contrast with some of the arid regions of continental Greece. The wild boar, wild goat, wolf, &c., are met with in the forests, and game of various kinds is plentiful. Birds of prey are numerous, but reptiles are few. (*Pashley, Scott, &c.*)

Agriculture, &c. — From 1821 to 1830, Crete suffered the worst evils of a sanguinary and devastating war, and though its agriculture be now somewhat revived, it is still in a most deplorable state. Its male pop. has been more than decimated, its olive plantations and vineyards uprooted, its villages burned down, and much of its most productive land been overgrown with rank vegetation The soil is for the most part light, and but little adapted for the culture of grain. Wheat, barley, oats, &c. are, however, grown, and, previously to the late revolution, wheat was annually exported: but sufficient corn is not produced for home consumption, and Crete is obliged to depend for supplies on Egypt and Barca. The chief products are oil, silk, wine, raisins, carobs, valonea, wool, oranges, lemons, wax, honey, linseed, and almonds. Cotton and flax are also cultivated, and in the mountains many of the fruits and vegetables of colder climates. The oil is good. Cretan wine is frequently eulogised by ancient authors. In the middle ages it held the first place amongst the exports, and under the names of malmsey and muscadine, considerable quantities were sent to England. The pastures are fine, and cattle of all kinds are reared, but their exportation is prohibited. Poultry are everywhere plentiful. Almost every peasant has his own farm; those who have not, cultivate the lands of the aga, or district governor, on a kind of metayer system, the lessor furnishing the seed and all the necessaries of husbandry, and dividing the crops in equal proportions with the cultivator, after deducting the seventh, to be paid to the government, and the seed previously advanced. The Mussulman rural population has been diminishing ever since the island fell under the Egyptian rule. Finding they are no longer able to obtain the forced labour of the Greeks, they are continually selling their lands, which are as eagerly purchased by the Greeks, who often borrow money for the purpose at an interest of 20 to 30 per cent. per ann. Landed property gives at an average a nett profit of 8 to 10 per cent. per ann. Labourers are paid 6*d.* to 7½*d.* a day, with food, or 10*d.* to 14*d.*, without. They can always gain considerably more than their expenses. (*Consular Report, &c.*)

Manufactures inconsiderable. The chief are those of soap, leather, and spirits: the rest consist only of domestic manufactures, as coverlids, sacking, and coarse cloths, woven by women and children. There are 24 soap manufactories at work, capable of producing 6,000 tons a year, though little more than half that quantity is made. The article is of good quality, highly esteemed in the Levant, and fetches the highest price in the market at Trieste. (*Consular Report, &c.*)

Trade. — In 14 months of 1817 and 1818, before the ravages of the revolution had destroyed the olive trees, 119,779 Venetian barrels of oil, worth 131,300*l.* were exported. The exportation of raisins also used to amount to 60,000, 80,000, or even 100,000 quintals annually. A considerable trade in carobs and wine was carried on, and 45 soap factories existed, which supplied Smyrna, Constantinople, and various parts of Turkey. The average quantities of the principal articles exported and imported have been estimated as follows: —

Exports.	Quantities.	Value in Turkish piastres.
Oil - - -	3,500,000 okes	8,750,000
Soap - - -	50,000 quintals	6,500,000
Almonds - -	- -	195,000
Cheese - - -	50,000 okes	137,500
Silk - - -	11,000	1,320,000
Carobs - - -	40,000 quint.	320,000
Wax - - -	15,000 okes	202,500
Chestnuts - -	200,000	100,000
Raisins - - -	6,000 quint.	168,000
Wool - - -	130,000 okes	390,000
Oranges and lemons -	2,500,000 No.	200,000
Vallonea - -	2,500 quint.	80,000
Apples and pears -	150,000 okes	75,000
Honey - -	14,000	42,000
Linseed - -	25,000	15,620
Maize - - -	30,000	30,000
Snails - - -	20,000	15,000
Total - -	- -	18,540,620

Imports.	Quantities.	Value in Turkish piastres.
Manufactured goods -	- -	3,630,000
Hides, leather, &c. -	- -	2,800,000
Wheat - - -	70,000 quilots	980,000
Barley - -	360,000	2,160,000
Legumes, &c. - -	90,000	1,080,000
Rice - - -	280,000 okes	560,000
Soda (for soap) - -	35,000 quintals	1,575,000
Cod and salt-fish - -	6,000	775,000
Tobacco - - -	160,000 okes	640,000
Coffee - - -	50,000	400,000
Sugar - - -	80,000	400,000
Wine and spirits -	- -	382,500
Wood - - -	- -	690,000
Butter - - -	50,000	350,000
Cutlery - -	- -	300,000
Oxen and sheep -	5,400 head	150,000
Other imports - -	- -	935,500
Total - -	- -	17,818,000

In two recent years, the total exports and imports amount to —

Years.	Exports.	Imports.
	L.	*L.*
1836	161,703	151,654
1837	64,440	119,204
Decrease (1837)	97,263	32,450

The falling off in the latter year was caused by the failure of the oil crop of 1836. That of 1837 was nearly as bad, and the circumstance caused a great depression of trade and prosperity.

The average consumption of British manufactures and metals amounts to about 2,000*l.* annually: these goods come chiefly through Syra and Trieste. The calicoes and cottons imported come chiefly from England, the woollens from Belgium, rum from Leghorn and Smyrna, and butter from Barbary and Russia.

Canea is the chief commercial port, next to it Candia and Retimo, and generally no goods are allowed to be exported or imported but at one of these towns.

The roads are so bad as to be nearly impassable even for mules. Most of the bridges have been destroyed, and all communication is often cut off by the inundations during rains. Government is endeavouring to remedy these defects, and has already spent 37,000*l.* in repairing roads, &c.: an aqueduct for supplying water is amongst the public works it has recently undertaken. (*Consular Report; Pashley*, Append.)

Government, Taxation, &c. — Crete is governed by a pasha, and each province by a president with a large salary, who is either a European or Asiatic Turk. In each province there is a council consisting of the cadi, treasurer, and other functionaries, and of a Turkish and a Greek representative from each of its districts, chosen however not by the district they represent, but by the pasha himself, from whom they receive a salary. These councils decide on all judicial questions within

their respective provinces, and professedly according to the code Napoleon. Questions are all put to the vote, but it cannot be expected that such assemblies should be very independent. The will of the president determines the council. The public revenues and expenditure are estimated as follows:—

Receipts.		Expenses.	
	Piastres.		Piastres.
Seventh of all produce	6,400,000	Salary of pasha - -	800,000
Duty on sheep and goats	200,000	Expenses of councils -	535,510
Ditto on exports - -	2,091,725	Treasury - -	120,000
Ditto on imports -	375,015	Customs and printing-office - -	77,079
Octrois and other revenue - -	718,951	Army, &c. - -	7,885,540
	9,785,691		9,418,159

A recent Consular Report enumerates, among the sources of revenue, a capitation tax of about 6*s.* per head on all males above the age of 13, and assumes the average yearly revenue at about 87,700*l.*, and the expenditure at 100,000*l.*

Mehemet Ali, on entering on possession of Crete, was tied down by the allied powers to impose no fresh taxes, and for a short period he endeavoured to amuse and pacify the Cretans with the hopes of good government. But he soon commenced breaking his promises. He began by levying a duty on all wine, of one eighth its value; next he increased the export duties on oil and many other articles, and laid taxes on articles which had never been taxed before. The *octroi* was introduced; the capitation tax was raised from 4, 8, or 12, to 15, 30, and 60 piastres per head; and from these and various other sources 6,000*l.* a year additional was raised. The seventh of the corn due to government is now obliged to be thrashed out and delivered by the farmer before he may attend to the rest of his crop; and all private oil-mills that may have fallen into disuse are not suffered to be repaired, that government may secure to itself the monopoly of the olive pressure. (*Consular Rep.; Pashley*, i. 28.)

The armed force amounts to about 4,500 men, chiefly Arabs and Albanians. There are 8 fortresses, mounting altogether 468 pieces of cannon. The fortifications of the principal towns are kept in good order; but those of the others are in quite the contrary predicament.

Religion, &c.—Before the revolution, the Christians and Mohammedans were nearly equal as to numbers; the balance is now greatly in favour of the former. The island is divided into 8 bishoprics, the metropolitan bishop residing at Candia. There are 30 large monasteries and many small ones in the island; and, like the mosques, they are all endowed, and possess extensive lands. The patriarch of Constantinople receives annually from Crete about 250,000 piastres (2,500*l.*). The priesthood are generally very ignorant. There are 2 schools at Candia, and the same number at Retimo; and an American missionary school has been recently established. The total number of scholars is about 400. (*Consular Report, &c.*)

People, &c.—The Cretans are stronger built than the inhab. of the other Greek islands; but it is said that generally they have not the same intelligence or vivacity. They are frugal, inoffensive, and superstitious in the extreme. Both ancients and moderns have accused them of being excessively addicted to lying and thieving; but Pashley (i. 36.) thinks that in the interior, at least, they hardly deserve this character. They are polite and ceremonious, and dress like other Greeks, except that the men all wear high boots, and the women, when abroad, cover the face. Their dwellings are mean and comfortless; the food of the peasantry consists mostly of barley bread, cheese, olives, pulse, and vegetables, cooked with an abundance of oil. The language is modern Greek.

Antiquities and History.—Crete is highly interesting from its classical associations. Its history leads us back to the earliest mythological ages. It was the birthplace of Jupiter, "king of gods and men." Adventurers from Phœnicia and Egypt introduced arts and sciences into Crete, while Greece and the rest of Europe were involved in the darkest barbarism. The laws of Minos served as a model to those of Lycurgus; so that Crete became, as it were, a channel by which the civilisation of the East was transferred to Europe. Its wealth, and the number 100) and flourishing condition of its cities, particularly those of Cnossus, Gortyna, Cydonia, &c., are repeatedly referred to by Homer. Unluckily, however, the most violent animosities usually subsisted among the principal cities of the island, which formed so many independent republics; and Crete was thus prevented from playing any conspicuous part in the affairs of Greece, or from making that figure in history it could hardly have failed to make had it been a single state. It was conquered by the Romans, after an obstinate resistance, anno 67 B.C. After being possessed for a while by the Byzantine emperors, the Saracens took it in the 9th century; but being expelled in 952, it was again restored to the eastern empire. The Genoese, and the Marquis of Montserrat, afterwards successively possessed it. The Venetians bought it of the latter in 1204; and in 1669, after a 24 years' war, it was conquered by the Turks. The revolution in Greece was followed by one in Crete, which deserved, and would doubtless have obtained, a happier issue had not the allies confirmed the gift of the island, in 1830, by the sultan, to Mehemet Ali, for his services during the war. Before the outbreak of the Greek revolution, Crete was the worst governed and most oppressed province of the Turkish empire. Since it has belonged to Egypt, notwithstanding the tyrannical rule of the viceroy, some amelioration has been experienced; but the Cretans "still sigh to be united to Greece, or to be taken under the protection of some European power," a protection to which their ancient fame, and their sacrifices in the cause of freedom, give them a well-founded claim. For further information as to the ancient laws and institutions of the Cretans, see the learned and excellent treatise of St. Croix, *De la Législation de Crète*, annexed to his treatise *Des Anciens Gouvernements Fédératifs.* Tournefort gives the best description of the island, and the best account of its antiquities.

CREUSE, a dep. of France, reg. centre, having N. the deps. Indre and Cher, E. Allier and Puy-de-Dôme, S. Corrèze, and W. Haute Vienne. Area, 558,341 hect. Pop. (1836) 276,234. Surface mostly mountainous, with a general slope towards the N. Some of its mountains are so environed with volcanic products as to leave little doubt that they were formerly active volcanoes. Plains of any extent few. Rivers numerous, including the Creuse (whence the dep. has its name), Cher, Tardes, &c., but none navigable. Climate rather severe; the summer being comparatively short, and the winter long and rigorous. Soil, except in the valleys, sandy and little productive. Arable lands occupy about 240,000 hect., pastures 132,000 do., and heaths, wastes, &c., 122,000 do. Agriculture is in general very backward, and is no where pursued on a large scale. Corn, the chief part of which is rye, is not grown in sufficient quantity for home consumption. Fruits of various kinds are cultivated, but wine is furnished from the neighbouring deps. Cattle-breeding is rather an important branch of industry. In 1830 there were 110,300 head of black cattle, and 498,000 sheep. The oxen, which are of a middle size, fatten readily, and from a portion of the supply for the Paris market. The sheep supply annually about 350,000 kilog. of wool, but it is mostly of inferior quality. Hogs are reared both for home consumption and for exportation. The management of bees is well understood, and the honey and wax are excellent. Property is here very much subdivided; more than three-fourths of the estates in the dep. being assessed below 20 fr. a year, and there are but 5 that pay an annual tax of 1,000 fr. Some coal mines, and quarries of granite, building-stone, and plastic clay, are worked. Manufactures very few: the chief are those of carpets, at Aubusson and Felletin, of the value of from 1,000,000 fr. to 1,200,000 fr. a year; a porcelain factory at Bourganeuf, and some fabrics of paper, coarse woollen and linen cloths, glass, earthenware, leather, &c. The exports are limited to some thousand head of cattle, timber, coarse woollens, carpets, and pottery, with hair, which the females of this dep. supply in exchange for articles of dress, &c., to the extent of many cwt. a year, sent to the *coiffeurs* of Paris. The imports include most articles of prime necessity, including all the wine and nearly all the wheat consumed, with iron, salt, colonial produce, horses, silks, drugs, &c. The depressed state of agriculture and manufactures, and the consequent want of employment, occasion the annual emigration of from 22,000 to 28,000 labourers, who resort to other parts of the kingdom in search of work and wages. They leave home in small parties of from 4 to 12, which sometimes augment on the road to 300. Each of these parties travels under the conduct of a master, who undertakes work, and engages and pays those who travel with him. The period of emigration is from March to December. Creuse is divided into 4 arrond.: it sends 4 mem. to the Ch. of Dep. Number of electors, 770. Chief towns—Gueret, the cap., Aubusson, Bourganeuf, and Felletin. Public revenue (1831), 3,733,688 fr. Generally speaking, this dep. is remarkably free from crime. The whole are poor, economical, and excessively litigious. The women share in the most laborious occupations. According to Hugo, "Ce ne sont ni les grâces, ni la beauté, qui font le mérite des filles de campagne; elles sont recherchées des jeunes gens sur leur réputation de bonnes travailleuses, fortes ouvrières, et soigneuses dans l'intérieur de la maison." (*Hugo*, art. *Creuse; French Official Tables.*)

CREWKERNE, a town and par. of England, near the S. border of the co. of Somerset; in a vale watered by the Parret and Axe. Area of par., 5,810 acres. Pop.

(1831) 3,789. The town, 16 m. S.E. Taunton, consists chiefly of 5 streets, diverging from a central market-place, and is paved, lighted with gas, and amply supplied with water. The church, a cruciform structure in the later Gothic style, has a fine elaborately-ornamented tower, and the windows and interior also present rich specimens of tracery, &c.; a free grammar-school, founded in 1449, has an annual revenue of 300*l*., and there are 4 exhib. from it to any college in Oxford. There is also a national subscription school, and 2 sets of almshouses, founded in 1707; the one for 6 old men, the other for 6 old women. Market-day, Saturday. It is an extensive one for corn, and there is a commodious modern market-house. A fair is held Sept. 4. for horses, cattle, cheese, and linen goods. There are manufactures of sail-cloth, dowlas, and stockings, each of which employs a considerable number of hands.

CRICKLADE, a parl. bor. of England, co. Wilts, hunds. Highworth, Cricklade, and Staple, in an open level tract, at the junction of the Churn and Key with the Isis, 75 m. W. N.W. London. Pop. (1831) 1,642. It consists chiefly of one long street of meanly built houses, paved, but not lighted, and very inadequately supplied with water. It comprises two par., St. Mary and St. Sampson, and a township, including in all an area of 5,840 acres. The church of the former par. is small and antique, while that of St. Sampson is a spacious cruciform building, with a lofty and highly ornamented tower. It has numerous escutcheons, bearing the cognizances of the earl of Warwick, and other eminent individuals, and is a fine specimen of the Gothic. In the churchyard is a well-preserved cross, with canopied niches, which was removed from the High Street, and placed here when the old town-hall was demolished. The remains of a priory, founded in the 1st of Henry III., are now used as tenements for paupers. There are 2 national schools, supported by subscription; formerly an ancient free school existed, but the endowment has been lost; a charity, producing 125*l*. a year from land, is appropriated to the apprenticing of poor children. Market, Saturday; it was formerly a large one for corn, but is now inconsiderable; fairs, April 1. for cattle, Sept. 21. a pleasure fair. The Thames and Severn canal passes through the N. end of the town; and a branch, joining the Wilts and Berks canal at Swindon, crosses within 1 m. of it. The inhab. are chiefly engaged in agriculture.

Cricklade returned 2 mem. to the H. of C. from the 21st of Edward I. to the 1st of Henry VI., with some interruptions; and from the latter reign, continuously to 1780: the right being exclusively vested in freeholders and copyholders of the bor. lands, and leaseholders of the same for not less than 3 years. In 1780 (after a contested election) the bor., in consequence of its notorious corruption, was thrown open, and the freeholders of the 5 adjoining divisions of Highworth, Cricklade, Staple, Kingsbridge, and Malmesbury, admitted to a participation in the elective franchise. Registered electors, 1849-50, 1,665. The bailiff of Cricklade is returning officer. This town has considerable claims to antiquity; but the story of the University of Oxford being founded by the professors and students of an ancient school established here, appears to be wholly destitute of foundation.

CRIEFF, a burgh of barony of Scotland, co. Perth, on a gentle acclivity on the N. bank of the Earn (a tributary of the Tay), 17 m. W. Perth. Pop. in 1835, 3,835. It lies near the foot of the Grampian Hills, at the mouth of one of the important passes to the Highlands, and is the second town in the co. It formed, more than once, the head-quarters of the Duke of Montrose, during the civil wars in the reign of Charles I.; and was burnt by the Highlanders in 1715. It was formerly the scene of the greatest cattle-market in Scotland, but that was transferred to Falkirk in 1770. Its chief distinction now consists in its manufacturing industry. There are in Crieff 480 hand-loom weavers, chiefly employed in the cotton trade. The average annual number of webs (of about 180 yards each) woven by them is 5,200. (*New Statist. Acc. of Scotland, § Crieff.*) Some hands are engaged in weaving linen and worsted stuffs; but cotton forms the staple employment. A woollen manufactory has recently been erected on the banks of the Turret, a small stream in the neighbourhood, which employs between 40 and 50 persons, and produces blankets, plaidings, and shawls. No machinery is employed in weaving, dyeing, or in almost any of the processes. There are three tan-works, with corn, flour, and barley mills, an oil mill, and two distilleries. There is, also, a considerable trade in tambouring and flowering webs for the Glasgow manufacturers, carried on by females. About 300 acres of land in the immediate vicinity of the town are let to the inhab. in small patches, technically called *acres;* or in still smaller portions, called *pecks*. There are three branch banks in the town, several friendly societies, a savings bank, and a subscription library; two places of worship connected with the established church, three chapels belonging to Presbyterian dissenters, and an Episcopal chapel. The post-office revenue, at an average of the three years ending with 1837, is about 740*l*. a year.

CRIMEA, the *Chersonesus Taurica* of the ancients, a peninsula of Russia in Europe, government of Taurida, between 44° 28′ and 46° N. lat., and 32° 33′ and 36° 22′ E. long. It is united on the N. to the mainland by the isth. of Perekop, 5 m. in width, and has on its E. the *Sivache*, or Putrid Sea (which see), the Sea of Azoff, and the Straits of Yenicalé, by which it is separated from the Isle of Taman, being every where else surrounded by the Black Sea. It is estimated to contain about 15,000 sq. m. Pop. unknown. The Crimea is divided into two distinct parts, one lying N. and the other S. of the river Salghir, which flows from W. to E., and is the only stream of any importance in the peninsula. The former consists almost entirely of vast plains, or steppes, destitute of trees, but covered with luxuriant pasture, except where they are interspersed with heaths, salt-lakes, and marshes. The climate of this region is far from good; being cold and damp in winter, and oppressively hot, and very unhealthy, in summer, particularly along the Putrid Sea. The aspect and climate of the other, or S. portion of the peninsula, are entirely different. It presents a succession of lofty mountains, picturesque ravines, chasms, and the most beautiful slopes and valleys. The mountains, formed of strata of calcareous rocks, stretch along the S. coast from Caffa, on the E., to Balaclava on the W. The Tchadyadag, or Tent mountain, the highest in the chain, rises to the height of about 5,110 ft. above the level of the sea, and several of the other summits attain to a considerable elevation. The climate of the valleys, and of the slopes between the mountains and the sea, is said to be the most delicious that can be imagined; and, besides the common products, such as corn, flax, hemp, and tobacco, vines, olives, fig-trees, mulberry-trees, pomegranates, oranges, &c., flourish in the greatest profusion. Pallas, Dr. Clarke, and others, have given the most glowing descriptions of this interesting region. According to Clarke, "If there exist a terrestrial paradise, it is to be found in the district intervening between Kutchukoy and Sudak, on the S. coast of the Crimea. Protected by encircling alps from every cold and blighting wind, and only open to those breezes which are wafted from the S., the inhabitants enjoy every advantage of climate and of situation. Continual streams of crystal water pour down from the mountains upon their gardens, where every species of fruit known in the rest of Europe, and many that are not, attain the highest perfection. Neither unwholesome exhalations, nor chilling winds, nor venomous insects, nor poisonous reptiles, nor hostile neighbours, infest their blessed territory. The life of its inhabitants resembles that of the golden age. The soil, like a hot-bed, rapidly puts forth such variety of spontaneous produce, that labour becomes merely an amusing exercise. Peace and plenty crown their board; while the repose they so much admire is only interrupted by harmless thunder, reverberating on rocks above them, or by the murmur of the waves on the beach below." (*Clarke*, ii. p. 252. 8vo. ed.) But if this description be as faithful as it is eloquent, it will not certainly apply to any other portion of the Crimea, not even to the famous valley of Baidar. At certain seasons of the year the finest parts of the peninsula are infested with swarms of locusts, which frequently commit the most dreadful devastations, nothing escaping them, from the leaves of the forest to the herbs of the plain. Tarantulas, centipedes, scorpions, and other venomous insects, are also met with in most parts; and even to the S. of the mountains the air in autumn is not every where salubrious; and malignant fevers are not uncommon.

Owing to the thinness of the population, and their want of industry, the Crimea, which in antiquity was the granary of Athens, and whose natural fertility is nowise diminished, does not produce a tenth part of what it might do. The steppe, or N. portion, is in general more suitable for grazing than for tillage, and is depastured by immense numbers of sheep, horses, and black cattle. Some of the rich Nogaï Tartars are said to have as many as 50,000 sheep, and 1,000 horses; and the poorer classes have 100 of the former and 10 of the latter! Thousands of cattle often belong to a single individual: camels also are abundant. Breed of horses improved by crossing with Arabs. Sheep mostly of the large-tailed species peculiar to the Kirghises. The buffalo is domesticated, and yields a rich milk; and the culture of bees is a good deal attended to. Though they have renounced their migratory habits, the Tartars, who constitute the bulk of the population, have little liking to, or skill in, husbandry. Exclusive of milk and other animal food, they subsist chiefly on millet, producing, however, in some years, as much as 150,000 chetwerts of wheat for exportation. The mountainous, or S. portion of the peninsula, furnishes large quantities of indifferent wine, with flax, fruits, timber, honey, and wax, &c.; but the cultivation of corn is so

little attended to, that even in the best years its inhabitants have to import a large proportion of their supplies. The most important and valuable product of the Crimea is the salt derived from the salt-lakes in the vicinity of Perekop, Caffa, Koslow, and Kertsch. It is monopolised by the gov., and yields a considerable revenue. The quantity exported from the lakes near Kertsch amounts to from 1,500,000 to 2,000,000 poods a year: the lakes of Perekop are even more productive. At Koslow there is only a single lake. In 1833 the different lakes of the Crimea produced the immense quantity of 15,065,000 poods (242,000 tons); of which 8,514,885 poods were sold in the course of the year. About 13,000 men are employed in the works; each pood cost the treasury 4 copecks, or thereabouts, the expense of production being seldom greater than from 6 to 10 copecks. Government sells this salt at 80 copecks per pood, except the portion destined for the consumption of the peninsula, which only pays 15 copecks. Salt exported is charged with a duty of 5 copecks. (*Hagemeister on the Trade of the Black Sea*, p. 130., Eng. trans.) Exclusive of salt and corn, the other principal articles of export are wine, honey (of an excellent quality), wax, Morocco leather, hides, a considerable quantity of inferior wool, with lamb-skins, which are highly esteemed, &c. Silks and cottons, in the style of the Asiatics, form the basis of the import trade; and there are also imported woollen stuffs, wine, oil, dried fruits, tobacco, jewellery, drugs, and spices. The only manufacture worth notice is that of Morocco leather. Principal towns — Kertsch, Caffa, Balaclava, and Koslow, or Eupatoria. Sevastopol, the finest harbour in the peninsula, is one of the stations of the Russian fleet. Baktchiseral was the capital under the Khans; Simpheropol is, however, the modern capital, not of the Crimea only, but of the entire gov. of Taurida.

The population consists of Tartars, Russians, Greeks, Germans, Jews, Armenians, and gipsies. The variety of different nations found in the Crimea, and the fact that each lives as in its own country, practising its peculiar customs, and preserving its religious rites, is one of the remarkable circumstances that render the peninsula so curious to a stranger. The number of Tartars has declined considerably, by emigration and otherwise, since the occupation of the country by the Russians; but they still form the nucleus and main body of the population. They consist 1st, of Nogaï Tartars, living in villages, who pique themselves on their pure Mongolian blood; 2d, of Tartars of the steppe, of less pure descent; and 3d, of those inhabiting the S. coast, a mixed breed, largely alloyed with Greek and Turkish blood, and despised by the others, who bestow on them the contemptuous designation of *Tut*, or renegade. They are all attached to the Mohammedan faith, and Simpheropol is the seat of one of the two muftis of the Russian empire. The Tartars are divided into the classes of nobles (*moorzas*), of whom there are about 250, priests (*mullahs*), and peasants. A mullah is at the head of every parish, and nothing is undertaken without his consent. The peasants plough his land, sow and reap his corn, and carry it home; and it is seldom that the proprietor takes tithe of the priest. In summer the feet and legs of the peasantry are bare; but in winter they are clothed after the Russian fashion. They are simple in their manners and dress; and their sobriety, chastity, cleanliness, and hospitality, have been highly eulogised, and probably exaggerated; they live principally on the produce of their flocks and herds; are wedded to routine practices; and if they be not, as Pallas seems to have supposed, decidedly averse from labour, they, at all events, are but little disposed to be industrious. The emigration that took place after the occupation of the country by the Russians was owing quite as much to the efforts of the latter to convert the Tartars into husbandmen, as to the excesses they committed. (*Reuilly*, p. 176.) In their diet they make great use of honey, and are much addicted to smoking. Every family has two or more copies of the Koran, which the children are taught to read; but in despite of this, and of the schools established in their villages, they are, for the most part, exceedingly ignorant.

The Greeks established themselves in the Crimea, and founded several colonies upon its coasts, nearly six centuries before the Christian æra. The country fell successively into the possession of Mithridates, and of the Romans, Goths, Huns, &c. In 1237 it was taken possession of by the Tartars. About the same time its ports were much resorted to by the Venetians and Genoese; the latter of whom rebuilt Caffa, the ancient Theodosia, and made it the centre of their power and of the extensive commerce they carried on in the Euxine. In 1475 the Turkish sovereign Mahomet II. expelled the Genoese, and reduced the peninsula to the state of a dependency of the Ottoman empire, leaving it to be governed by a khan or native prince. This state of things continued for about three centuries, or till Catherine II. stipulated for the independence of the Crimea. In 1783, the khan having abdicated, the armies of Russia took forcible possession of the country, which was secured to her by the peace of 1791. It is to be regretted that the conquest was attended by great excesses on the part of the Russian troops; the destruction of not a few towns and villages; and the emigration of large numbers of the Tartar inhabitants. But, during the present century, government has exerted itself to improve the condition and to enlighten the minds, of the inhabitants, and also to increase their numbers, and improve their habits, by planting among them industrious colonists from Germany and elsewhere. The unhealthiness of the climate is the great obstacle to the progress of the latter. (*Pallas, Tableau Physique et Topographique de la Tauride*, passim; *Clarke's Travels*, ii. 97—321. 8vo. ed.; *Lyell's Travels*, i. 224—381.; *Reuilly, Voyage en Crimée*, passim; *Castelnau, Histoire de la Nouvelle Russie*; *Schnitzler, La Russie, &c.* p. 727. &c.)

CROATIA (AUSTRIAN), called by the inhab. *Horvàth Orszag*, a prov. of the Austrian empire, regarded as forming the marit. portion of Hungary, between lat. 44° 7′ and 46° 23′ N., and long. 14° 23′ and 17° 31′ E., having N.W. Carniola and Styria, N.E. Hungary-Proper, E. and S.E. Slavonia, Turkish Croatia, and Dalmatia, and S.W. the Adriatic. Shape very irregular; length N.E. to S.W. 150 m., breadth varying from 30 to 125 m. Area, 9,900 sq. m. Pop. (1828) 1,047,400. The S. portion of Croatia is mountainous, being intersected by the Julian Alps, and their ramifications. N. of the Save the surface is rather hilly than mountainous, but a continuation of the Carnic Alps traverses the N. portion of the country, dividing the waters which flow into the Drave from those which flow into the Save and Unna. The valleys are numerous, and there are some considerable plains. The principal rivers are the Drave, separating Croatia from Hungary; the Unna, which for the most part forms its boundary on the side of Turkey; and the Save and Kulpa by which it is intersected. Climate varies very much in different parts. Along the Adriatic, it is similar to that of the opposite coast of Italy: and the olive and other fruits of S. climates grow in perfection, in the N. also it is warmer than in Hungary; but in the elevated mountain region of the S., snow frequently falls in Aug. or Sept., and lies till the following April or May. The mountain ranges are composed chiefly of limestone; they however afford not only fine marble, alabaster, and gypsum, but porphyry, gneiss, clay-slate, quartz, &c. The upper soil is frequently gravelly or sandy; it is less fertile in the S. than in the N., where maize, barley, buckwheat, millet, and oats are grown in considerable quantities. But little wheat and rye are cultivated, and the flax and hemp produced are sufficient only for home consumption. The most abundant fruit is the Damascene plum, of which the favourite beverage of the Croats and Illyrians is made. The vine is, however, cultivated to some extent in the N., and a strong and full-flavoured wine is made, most part of which is consumed in the prov. There are large forests, and timber is an important product. The pastures are limited, and but little fodder is grown, so that the rearing of cattle is but little attended to. Hogs, which feed in the woods, are the most plentiful domestic animals. Iron, copper, lead, and a little silver are found in various parts; and small quantities of gold are obtained by washing the sands of the Drave. Coal, sulphur, and salt are the other chief mineral products. Manufactures very few, and of the rudest kind. Croatia is divided into 6 cos.; its principal cities, Agram, the cap., Warasdin, Carlstadt, Bellovar, Kreutz, and Fiume, the principal sea-port. In all that belongs to the right of sending representatives to the diet, Croatia is an integral portion of the Hungarian monarchy, but it retains many political rights and privileges peculiar to itself, and its *ban* or executive magistracy is completely beyond the control of the palatine of Hungary. The inhab. are either Roman Catholics, or of the united Greek church; the former are under the bishop of Agram, the latter have their own bishop, who resides at Kreutz. "The arm of the reformer, which in Hungary swept away so many convents, has here accomplished nothing. Religious houses for both sexes abound. Religious toleration, which elsewhere in Hungary is unlimited, exists not at all within the limits of Croatia. Neither Lutheran nor Calvinist is permitted to make a confession of his belief, and the attempt to open a Protestant place of worship would subject him who made it to condign punishment.* Of course, such a state of things cannot exist, except co-ordinately with universal ignorance and superstition; and these are accordingly the leading features in the Croatian character." (*Gleig, Germany, &c.*, iii. 342, 343.) The police of this prov. appears to be extremely bad; and many districts, especially in the S., are inhabited by a wild and lawless banditti, for an account of which, see Gleig's *Tour*, vol. iii. ch. 13. The Croats are of a Slavonian

* H. Ritter says, that since 1827, Protestants have been allowed the free exercise of their religion. (*Geographisch, &c. Lexicon*, 1836.)

stock, speaking a dialect which has a greater affinity with the Polish than any other language: they are the descendants of the Chrobaks, who settled here in 640, and established several extensive *zupanies*, or duchies. Towards the end of the 10th century, Croatia was erected into a kingdom, which acquired dominion over parts of Dalmatia and Bosnia: about 1180, it was incorporated with Hungary. (*Oesterr. Nat. Encycl.* i. 610—625.; *Cannabich; Gleig, Germany, Bohemia, Hungary, &c.*)

Croatia (Turkish). *See* Bosnia.

CROMARTY, a small co. of Scotland, consisting of various detached portions, about 14 in number, almost wholly included in Ross-shire, with which it is connected in the return of a mem. to the H. of C. It is estimated to comprise about 170,000 acres, and had, in 1831, 2,255 inhab. houses, 2,541 families, and 11,299 inhab. Valued rent, 12,897*l*. Scotch. Registered electors in 1850, 46. (For further details, *see* Ross-shire.)

Cromarty, a sea-port town and parl. bor. of Scotland, cap. of the above co., on a low alluvial promontory at the S. entrance to the Cromarty Frith. Pop. 2,200. Though irregularly built, it is neat and clean. Owing to its situation, its communication with different parts of the country is interrupted by friths and arms of the sea. The Cromarty Frith, the mouth of which is formed by two richly wooded hills, nearly alike, and about 2 m. apart, extends about 10 m. inland, forming a most spacious bay, with deep water, and sufficient to afford safe anchorage for every navy in the world. Cromarty, though in former times a royal burgh, was disfranchised by the Scottish parliament in the 17th century, and is now only a burgh of barony. It has an excellent pier and harbour, vessels of 400 tons coming close up to the quay. The inhab. have long engaged extensively in the herring fishery. In some instances, not fewer than 20,000 barrels are stated as having been cured in the town in a single year. But such is the capricious nature of the herring, that that fish has of late almost disappeared from the Cromarty coast. (*New Statist. Acc. of Scotland*, part xii.) Hence the numerous coopers, fish-curers, sailors, and others, to whom the herring fishery gave regular employment, have suffered much from its suspension. Cromarty has long carried on a considerable trade in the hempen manufacture, including sacking and sailcloth, which affords work to about 400 persons. (*Ib.*) It also enjoys an extensive trade in pork for the English market, the value of the quantity exported varying from 15,000*l*. to 20,000*l*. annually. There is a flourishing brewery in the town. Ship-building is carried on to a trifling extent. A steam-boat plies between Cromarty and Leith once a week; and there is now a regular steam communication with London. There are two places of worship, in one of which the Gaelic language is exclusively used: they both belong to the established church, there not being more than half a dozen dissenters in the parish. Cromarty unites with Dingwall, Dornoch, Kirkwall, and Tain in sending a m. to the H. of C. Registered electors, in 1849-50, 36. Sir Thomas Urquhart, the eccentric but learned author of the "Jewel," "Logopandecteision," and numerous other works, was proprietor of the whole co. of Cromarty.

CROMER, a sea-port town and par. of England, co. Norfolk, hund. N. Erpingham, on a high cliff on the N.E. coast, 21 m. N. Norwich; lat. 52° 55′ 20″ N., long. 1° 19′ E. Area of par., 800 acres; pop. of do., in 1831, 1,232. Cromer was formerly nothing better than a small fishing station; but of late years it has been much resorted to by sea-bathers, attracted by the fine beach and picturesque scenery of the vicinity. The older part consists of mean, badly arranged tenements, but the more modern houses, near the sea, are much superior, and pleasantly situated. There are several good inns, a library, news-room, and an annual regatta. The church, in the later Gothic style, has a pinnacled tower 160 feet in height. There is also a dissenting chapel, and a national subscription school. Some remains of an ancient abbey, and of the old walls which surrounded the town, are still traceable. A fort and two half-moon batteries were erected during the late war on an adjoining eminence. About ¾ m. E. of the town is Foulness light-house, furnished with a revolving light, and having the lantern elevated 274 feet above the level of the sea. In consequence of the dangerous character of the coast, there are three other light-houses betwixt this place and Yarmouth. The parish was formerly of much greater extent, and at the period of Domesday Book included the town of Shipden; which subsequently with its church, and also a considerable number of houses in an adjoining parish, were swept off by an inroad of the ocean. The sea is here, in fact, constantly gaining on the land. In the winter of 1825, some cliffs contiguous to the light-house, 250 ft. in height, were precipitated into the sea, their fragments covering 12 acres! (*Lyell's Geology*, i. 396.) The inhab. are mostly engaged in the fishery; the coasting trade is also carried on, though under considerable difficulties, from the want of a proper landing-place, which makes it necessary to employ carts to load and unload the vessels lying on the beach at low water. Cromer Bay is exceedingly dangerous, and has thence obtained from the sailors the expressive name of the "Devil's Throat." Exports chiefly corn; imports, coals, tiles, oil-cake, &c. Many attempts have been made to construct a pier, but it has always been swept off. Life-boats are kept in constant readiness on the beach, and have been the means of rescuing many from destruction.

CROMFORD, a chapelry and town of England, co. Derby, hund. and par. of Wirksworth, on the Derwent, near the S. end of Matlock Dale, 13 m. N. by W. Derby. Pop. 1821, 1,242; 1831, 1,291. It is mostly on the N. side of the stream, and is surrounded on the N. S. and W. by lofty calcareous rocks: the houses are mostly small neat buildings, occupied by work-people employed in the adjoining cotton factories. There is a neat Episcopal chapel, founded by Sir R. Arkwright; a Wesleyan chapel; two good school-rooms, built in 1833; and almshouses for 6 poor widows. Market, Saturday. This town owes its rise to Sir R. Arkwright, the great founder of the British cotton-manufacture, who built here 2 large cotton-mills — (the first in 1771, the other a few years subsequently),—where his great improvements were brought into successful operation: these, and another factory, still in the possession of his family, employ between 800 and 900 hands. There is also a paper-mill, and a small hat-factory. Lead and lime mines are worked in the immediate vicinity. The S. terminus of the Cromford and Peak Forest railway is at this town; and from it a canal extends to the Erewash canal near Langley Bridge.

CRONSTADT (Germ. *Kronstadt*; Hung. *Brasso*), a town of Transylvania, near its S.E. extremity, being the largest and most populous, as well as the principal manufacturing and commercial town in that country; cap. co. of the same name in the "Saxon-land," in a narrow valley, 120 m. S.E. Klausenburg. Pop., according to Berghaus, 22,476; but the Austrian *Encyc.* and Mr. Paget say, that, including the suburbs, the pop. is 36,000. "If the reader will understand the situation of Kronstadt, let him imagine an opening in the long line of mountains which separate Transylvania from Wallachia, in the form of a triangle, between the legs of which stands an isolated hill. Within this triangle lies the town of Kronstadt, and on the top of the isolated hill there is a modern fortress of some strength. The mountains come so close down on the little valley, that the walls are in many places built part of the way up their sides." (*Paget, Hungary, &c.* ii. 434.) Cronstadt Proper, or the "Inner Town," is small, rectangular, surrounded by walls, towers, and ditches, and entered by 5 gates. It is regularly and well built, with paved streets. The inhab. are mostly of Saxon descent. Blumenau, the E. suburb, is chiefly inhabited by Szeklers, as Bulgarey, the S. suburb, is by Wallacks; the latter is built on a height interspersed with gardens, and separated from the inner town by a large open esplanade, ornamented with avenues of trees and a Turkish kiosk. Altstadt, the other suburb, is on the N. side. The chief public edifices in Cronstadt are the great Lutheran church, a venerable Gothic building of the 14th century; the Lutheran college, Wallack and Rom. Cath. churches, the former rebuilt by Elizabeth, empress of Russia, in 1751, town-hall, barracks, 2 hospitals, the workhouse, several different schools, and the great market-house. In the latter, Saxons, Greeks, Armenians, Jews, Moldavians, Szeklers, Hungarians, Turks, Wallacks, and gipsies meet to make up the bustling and motley crew. Its proximity to Turkey has introduced a good deal of Turkish habits and manners. But Cronstadt is principally distinguished by its industry.

"A rapid stream rushes in various channels through the streets, and makes itself useful to a host of dyers, feltmongers, tanners, and millers, with which this little Manchester abounds. Kronstadt and its neighbourhood are, in fact, the only parts of Transylvania in which any manufactured produce is prepared for exportation, and here it is carried on to a considerable extent. The chief articles produced are woollen cloths of a coarse description, such as are used for the dresses of the peasants, linen and cotton goods, stockings, skins, leather, wooden bottles of a peculiar form and very much esteemed, and light wagons on wooden springs. The principal part of its exports are to Wallachia and Moldavia. A considerable transit commerce between Vienna and the principalities is likewise carried on through Kronstadt, which is chiefly in the hands of a privileged company of Greek merchants." (*Paget*, ii. 435, 436.) The first paper-mill and printing-press in Transylvania were established at Cronstadt. (*Oesterr. Nat. Encyc.; Berghaus; Paget's Hungary and Transylvania, &c.*)

Cronstadt, or Kronstadt, a strongly fortified marit. town of Russia in Europe, gov. Petersburg, of which city it is the port, besides being the principal station of the Russian navy. It stands on the S.E. extremity of the sandy island of Kotline in the Gulph of

Finland, about 20 m. W. Petersburg. Lat. 59° 59′ 26″ N., long. 29° 49′ 30″ E. Pop. variable, but inclusive of sailors, foreigners, &c. during the summer, generally between 40,000 and 50,000. Its shape is triangular, its base being towards the S. Being, as it were, the outwork of Petersburg, it is very strongly fortified. The narrow channel which bounds the island of Kotline S., and is the only practicable passage from the Gulph of Finland to the cap., is protected on the side of Cronstadt by a fortress erected on a detached islet; and on the opposite side by the batteries of the Riesbank, and the castle of Cronslot. The streets of Cronstadt are regular and generally paved; but the houses are mostly of wood, and only one story in height. There are about 160 stone buildings, most of which belong to the government. The town is divided into 2 grand sections, those of the commandant and the admiralty, and into 4 subdivisions; it is traversed by 2 navigable canals, those of Peter the Great, and of Catherine. The former, commenced in 1721 and finished in 1752, is 3½ furlongs in length, by about 30 yds. wide, and bordered with stonework. It is in the form of a cross, one of its arms communicating with a dock paved with granite, in which 10 ships of the line may be repaired at once. The Catherine canal, begun in 1782, is much more extensive, and bordered with granite: it communicates with the mercantile port, and is used chiefly for commercial purposes. Between these two canals is the Italian palace, built and formerly inhabited by Prince Menchikoff, now a school for Baltic pilots with 300 pupils. The other principal public buildings and establishments are, the naval hospital with 2,500 beds, the civil hospital, arsenal, cannon and ball foundry, admiralty, barracks, custom-house, Protestant college, several schools, nobility's club, 3 churches and 2 chapels appropriated to the Greek faith, and Lutheran, English, and Rom. Cath. chapels. Peter the Great had a residence and a garden here: the latter continues to be a public promenade; but of the trees planted by the creative hand of Peter, only a few remain: here is, however, a bust of the great emperor on a column, which bears an inscription stating that he founded Cronstadt in 1703. On the S. side of the town are the 3 ports: the E. or Imperial port will accommodate 35 ships of the line, besides small vessels: the second or middle port, used chiefly for the equipment or repair of ships, has been already noticed, and has attached to it some building docks and pitch-houses, and a powder-magazine: the W. or mercantile port is capable of accommodating 600 vessels of any size. All these ports are very strongly fortified, of a convenient depth, and safe; but the freshness of the water injures ships which remain long in them; and the bay of Cronstadt is liable to be blocked up with ice for several months of the year.

Two thirds of the whole external commerce of Russia is carried on through Cronstadt. Most ships load and unload here, and goods are conveyed to and from Petersburg by means of lighters, the channel higher up being generally available only for vessels drawing not more than 7 or 8 ft. water. For further particulars respecting the trade of Cronstadt, *see* PETERSBURG. (*Schnitzler, La Russie*, pp. 294—300; *Com. Dic. &c.*)

CROWLAND, a town and par. of England, co. Lincoln, parts of Holland, wapent. Elloe. Area of par., inc. Deeping Fen, 29,070 acres: pop. of ditto, in 1821, 2,531; 1831, 2,716. The town is situated in a low flat district, 8 m. N.E. Peterborough, on the rivers Welland and Nene, and the Catwater drain, the communication between its different parts being kept up by a bridge of singular construction, but impassable for carriages, built in the reign of Edw. II. It is accessible only by artificially embanked roads. Here was formerly one of the most celebrated of the English abbeys. The present church forms but a small portion of that originally attached to the abbey, but it is, notwithstanding, a very fine specimen of the later Gothic style; its W. front is elaborately ornamented, and has statues of several kings and abbots. The windows and interior tracery are also very splendid. The remains of the abbey are highly interesting. It was built on piers, of which many remain. The ruins are partly in the Norman and partly in the different periods of the Gothic style. It was originally founded by Ethelbald, in 716: though several times destroyed, it was as often rebuilt with augmented splendour: its endowments were most ample; and its revenue at the dissolution in the reign of Henry VIII. amounted to 1,217*l*. 5*s*. 11*d*. a year. From this period it fell into decay; and during the last civil war (after being for some time occupied as a garrison) was [illegible] wholly demolished. A market [illegible] town has long been removed to Thorney; but there is still an annual fair, on Sept. 5., for cattle and [illegible]. The inhab. are chiefly employed in agriculture. The [illegible] formerly for the most part an unprofitable [illegible] by dint of draining, been converted into [illegible] and pasture land: to assist in this are several powerful windmills, which pump up the superfluous water into channels, which conduct it off. An extensive fishery (formerly belonging to the abbey, and now to the crown) includes many decoys for wildfowl of which this parish furnishes a large supply to various markets. Geese are also largely reared. (*Stukeley's Itinerarium Curiosum*, p. 33, &c.)

CROYDON, a town and par. of England, co. Surrey, hund. Wallington, 9 m. S. London. Area of par., 9,840 acres. Pop of do., 1821, 9,254; 1841, 16,712. The town, situated on the borders of Banstead Downs, near the source of the Wandle, consists chiefly of a wide street, about 1 m. in length, with substantially built, good houses; it is well lighted, but scantily supplied with water. The church, the finest in the co., in the later pointed style, has a lofty tower with pinnacles, and contains many fine old monuments, chiefly of Archbishops of Canterbury. This originated in the circumstance of the archbishops of the metropolitan see having formerly resided in a palace here, the remains and grounds of which were sold in 1780. There are 2 other churches, built by parliamentary grant, within a recent period: one near Croydon Common, with 400 free sittings, the other at Norwood, with 632; 4 dissenting chapels; a free school, founded 1710, for 20 children; a school of industry for girls; a school for educating 150 children of Quakers, removed from Islington, 1825; a Lancastrian school; a national school: this last occupies the schoolroom of the Trinity hospital, founded by Archbishop Whitgift in 1596, for a warden, schoolmaster, chaplain, and not less than 30 or more than 40 poor brothers and sisters; the income, which originally amounted to about 200*l*. a year, is now nearly 2,000*l*.; the archbishop of Canterbury is visiter. The building (with a chapel annexed) forms 3 sides of a quadrangle, in the domestic style of that period: there are also 2 sets of almshouses, and several minor charities; a small theatre, seldom opened A handsome town-hall, surmounted by a dome, was built in 1807, in which the summer assizes of the co. are held, alternately with Guildford; when not thus used, it is occupied as a corn-market: on the site of the old town-hall is a structure used as a prison during the assizes, and at other times, as a poultry and butter market; the co. magistrates hold petty sessions weekly for the district: and there is a court of requests for debts under 5*l*., whose jurisdiction extends over the hundred. Market, Saturday. Fairs, July 6. for cattle; Oct. 2. horses, cattle, sheep, pigs; the latter is also a crowded pleasure fair and noted for the large quantity of walnuts brought to it. It has a good deal of trade in corn, and a large brewery. The principal line of road from London to Brighton passes through Croydon, and it also communicates with the metropolis, by a railway recently opened, and by a canal, finished in 1809. The members for the E. division co. Surrey, are elected here. Croydon is the centre of a poor union of 10 parishes; its own rates average 6,486*l*. The great increase of pop. in the par., from 1821 to 1831, is ascribed in the pop. returns,—with what justice, we shall not undertake to say,—to abuses in the management of the poor laws; but under the new system these, if they did exist, will probably have been obviated. There are barracks at the end of the town, at present occupied as a dépôt of the royal waggon train. At Addiscombe, 1¼ m. distant, is a military college, established in 1809, for cadets in the E. I. Company's service; it has 14 professors and masters in the various departments, and usually from 120 to 150 students; 2 public examinations take place annually, and the education is believed to be exceedingly good. Croydon is the supposed site of the *Noviomagus* of Antonine's Itinerary. On Broad Green, near it, are traces of the Roman road from London to Arundel, and many Roman coins have been found; there are also many remains of an older period; amongst others, a cluster of 25 tumuli, on a hill, between the town and Addington Park (the archbishop of Canterbury's seat), and a circular encampment with a double moat. (*Ducarel's Croydon; Bibliotheca Topographica Britanica*, ii. &c.)

CRUZ (SANTA), the most S. of the Virgin Islands in the W. Indies, belonging to the Danes, and situated in the Caribbean Sea, about lat. 17° 45′ N., and long. 64° 40′ W.; 60 m. E.S.E. Porto Rico. Length, E. to W., 20 m.; average breadth, 5 m. Area about 100 sq. m. Pop. 32,000, of whom 27,000 are slaves. There is a chain of hills in the N.: but the island is generally level. The coasts are much indented, and present numerous harbours, the best of which are those of Christianstadt and Friederichstadt. The rivulets are dried up during a part of the year, and water is then scarce and bad. The climate is unhealthy at certain seasons. Soil fertile, producing the sugar-cane, cotton, coffee, indigo, &c. The average value of the produce of sugar amounts to about 1,200,000 rixdollars, and that of rum to 500,000 rixdoll. a year. (*B. Ritter.*) Timber is scarce. The principal town, Christianstadt, the cap. of all the Danish possessions in the W. Indies, is situated on the declivity of a hill on the N.E. shore of the island; it is well built, and has 5,000 inhab. Its port is secure, and defended by a battery. Friederichstadt, on the W. coast, has 1,200 inhab. This island was discovered by Columbus in his second

voyage. The Dutch, English, French, Spaniards, and Danes, alternately possessed it till 1814, when it was finally ceded to Denmark. (*American Encyclopedia; Cannabich; Ritter.*)

CSABA, a large market town of Hungary, in the Great Hungarian plain beyond the Theiss, 63 m. S.S.W. Debreczin. The latest census gives it 2,063 houses, and 22,143 inhab. Its pop. is mostly Protestant. It has an extensive trade in corn, wine, cattle, fruit, hemp, and flax. (*Oesterr. Nat. Encyc., &c.*)

CSANAD, a town of Hungary beyond the Theiss, cap. co. of same name, on the Maros, 7 m. S.E. Mako. Pop. about 7,000, of whom above a half are of the Greek church. It was formerly a populous and flourishing place; but its castle is now in ruins, its bishop non-resident, and the county meetings have been transferred to Mako.

CSONGRAD, a market town of Hungary, between the Danube and Theiss, on the right bank of the latter, immediately after the influx of the Körös, 31 m. N. Segedin. Pop. 10,613. It is well built, and contains the ruins of an ancient castle. It was the original cap. of the co. of same name; but the county meetings are now held at Szegedin. (*Oesterr. Nat. Encyc.; Berghaus.*)

CUBA, an isl. belonging to Spain, being the largest, most flourishing, and important of the Antilles, or W. Indian isls. It was discovered by Columbus, Oct. 28. 1492; and was first called Juana, in honour of Prince John, son of Ferdinand and Isabella; afterwards Fernandina, in memory of the Catholic king; then successively Santiago and Ave Maria, in deference to the patron saint of Spain and the Virgin; and by Spanish geographers *La lengua de pájaro*, as being descriptive of its form. The name *Cuba* is that in use among the aborigines at the time of its discovery.

Form, Position, and Extent. — Its figure is long and narrow, approaching to that of a crescent, with its convex side looking towards the Arctic Pole; its W. portion, lying between Florida and the peninsula of Yucatan in Mexico, leaves two entrances into the Gulph of Mexico; the distance from Cape St. Antonio, the most W. point of the island, in lat. 21° 54′ N., long. 84° 57′ 15″ W., to the nearest point in Yucatan, is 125 m. across; and that from Point Icacos, the most N. point in the island, in lat. 23° 10′ N., long. 81° 11′ 45″ W., to Cape Tancha, the S. extremity of Florida, being 130 m. across. Point Maysi, the E. extremity of Cuba, lat. 20° 16′ 40″ N., long 74° 7′ 53″ W., is 49 m. N.E. by E. from Cape San Nicolas Mole, in Hayti; and Cape Cruz in Cuba, is about 95 m. N. from the nearest point of Jamaica. The greatest length of the island, following its curve, is about 800 m.; its breadth, which is very irregular, varies from 130 to 25 m. Its coasts are very much indented, and it is surrounded by many islands, islets, reefs, &c. The estimates of its area have, in consequence, differed considerably; but, including its principal dependencies, it was calculated by Don Felipe Bauza at 3,615 sq. leagues of 20 to the deg., equal to about 43,380 sq. Eng. m. (*Humboldt, Essai sur l'Isle de Cuba*, i. 42.) But excluding the keys and dependencies, the area may be taken at about 32,000 sq. m., or very near the size of Ireland. Notwithstanding the general difficulty of approaching its shores, it has several excellent harbours, that of the Havannah being one of the best in the world. The land along the sea shore, almost all round the island, is so low and flat as to be scarcely raised above the level of the sea, which greatly increases the difficulty, especially in the rainy season, of communicating with the interior. In the lagoons, near the shore, especially on the N. side of the island, which are filled with sea water during spring tides, sufficient salt is collected for the use of the inhab. A cordillera stretches from the one end of the isl. to the other, dividing it into two unequal sections, that on the N. side being for the most part the narrower of the two. Of the geology little is known beyond what may be found in Humboldt. The cordillera is one great calcareous mass, which is found to rest on a schistose formation. Its summit presents a naked ridge of barren rocks, occasionally interrupted by more gentle undulations. It attains, in some parts, to an elevation of about 7,000 ft.

Climate. — In the W. half of the isl. the climate is such as is to be expected along the N. limit of the torrid zone, presenting many inequalities of temp. from the near neighbourhood of the American continent. The seasons are spoken of as the rainy and the dry, but the line of demarcation is not very clearly defined. The warmest months are July and August, when the mean temp. is from 28° to 29° of the centigrade, or from 82° to 84° Fahr. The coldest months are Dec. and Jan., when the mean temp. is nearly 10° Fahr. less than under the equator. During the rainy season the heat would be insupportable but for the regular alternation of the land and sea breezes. The weather of the dry season is comparatively cool and agreeable. It never snows, but hail and hoar frost are not uncommon; and at an elevation of 300 or 400 ft. above the level of the sea, ice has been found several lines in thickness, when the N. wind has happened to prevail for several weeks in succession. Hurricanes are not so frequent as in Hayti, and the other W. Indian isls., and seldom do much damage on shore. In the E. part of the isl., particularly in the neighbourhood of Santiago, earthquakes are not unfrequent. The most severe on record are those which took place in 1675, 1682, 1766, and 1826.

Animal Kingdom. — The only indigenous quadruped known in the island is the *jutia* or *hutia*, shaped like a rat, but from 12 to 18 in. in length, exclusive of the tail; of a clear black colour, feeding on leaves and fruits, and inhabiting the hollows and clefts of trees. Its flesh, though insipid, is sometimes eaten. Amphibious oviparous animals, the crocodile, cayman, manati, tortoise, and *jicotea*; the first on the coast, and the others in the rivers and lagoons. The *perro jibaro* is the domestic dog restored to a state of nature. It becomes fierce and carnivorous, though not so much so as the wolf of Europe; never attacking man until pressed in the chase. Whatever be their original colour, they uniformly degenerate into a dirty black, with a very rough coat. In spite of the efforts made to extirpate them, they increase in numbers, and do great damage among the cattle. The domestic cat, called the *gato jibaro*, when it becomes wild, commits similar depredations on the poultry yard. The most valuable of the domestic animals are the cow and pig. The sheep, goat, and ass are not in such general use, although within these few years the great jackass of the peninsula has been introduced with some success, for the purpose of breeding mules. The feathered race are remarkable for the beauty of their plumage; but are far too numerous for separate notice. The rivers, though not large, are well supplied with excellent fish, as are the bays and inlets with the natives of the deep. Oysters and other shell-fish are also numerous; but of inferior quality, and adhere to the branches of the mangrove trees which surround the coast. Snakes of a large size are of rare occurrence, though some have been seen 10 or 12 ft. long, and 7 or 8 in. in diameter. Of insects the bee is turned to valuable account by the exportation of its wax, and the use made of its honey. The mosquito tribe are troublesome, and the phosphorescent family are remarkable for the brilliancy of the coloured lights they exhibit.

Vegetable Kingdom. — The forests are of vast extent. Mahogany and other hard woods are indigenous, and several sorts are well suited for ship-building. The palm tribe are as remarkable for beauty as utility; and of vines there is great variety, some of such strength as to destroy the largest of the forest trees in their parasitical embrace. The tropical fruits are plentiful and various; of these the pine-apple, orange, and its varieties, are the most highly valued. Of the alimentary plants, the *platano* or plantain is by far the most important. Next in order come the sweet and bitter *yuca*, the sweet root being eaten as a vegetable, and the bitter converted into bread after its poisonous juice has been extracted. The sweet potato, the yam, and other farinaceous roots are also known, although not in such general use as in the British West Indies. The maize or Indian corn is indigenous, and in extensive use, the green leaves for fodder, under the name of *malloja*; and the grain in various forms for man and beast. Rice is cultivated in considerable quantity; and a variety of beans, especially the *garbanzo*, so well known in the peninsula. Garden stuffs are scarcely known, except in the Havannah and other large towns, and there only in the dry season. The culture of flowers is still less attended to.

Mineral Kingdom. — The pursuit of the precious metals was the great object of the first discoverers, but if gold was found at all, it was probably in washing the sands of some of the rivers, as no traces of the supposed mining operations are now to be found. The gold and silver sent to Spain from Cuba, Hayti, and Jamaica, soon after the discovery and conquest of these islands, consisted, most likely, of the accumulations of the aborigines. In the course of the 17th century, the copper mines near Santiago, in the E. part of the island, were wrought with some success, but were abandoned upwards of 100 years ago, from the imperfect knowledge which then existed, of the art of extracting the metal from the ore. When the mines were abandoned, a large quantity of the mineral, amounting to several hundred tons, was left on the spot as worthless, but having been subjected to analysis a few years ago, by one of the present English proprietors, it was found to be so rich in metal as amply to repay the expense of sending it to Swansea for smelting. In consequence of this discovery, the old workings were explored, and companies formed for the purpose of renewing the mining operations on a scale of considerable magnitude. One of these, called the English Company, has been highly successful, employing many miners and labourers, some of them slaves, some emigrants from the Canaries, and some articled servants from Cornwall. Powerful steam engines have been erected by this company to assist in preparing the ore for shipment at Santiago. In the

neighbourhood of Santa Clara, another copper-mine has been opened by an American company. At first, the mineral thence obtained was sent to be smelted at New York; but latterly, like that from Cobre, it has been shipped to the great smelting-houses in Wales. Of 51,307 tons of copper-ore imported into the U. Kingdom in 1848, no fewer than 30,679 tons were brought from Cuba. Coal of tolerable quality has been found in the neighbourhood of the Havannah, but though several pits have been opened, the English coal, carried out in the sugar ships as ballast, may still be sold at a cheaper rate. The coal of Cuba is highly bituminous, and in some places degenerates into a form resembling the asphaltum which is found in the pitch lake of Trinidad, and in various parts of Europe. The ships of the discoverers were careened with this bitumen, which is often found near the coast in a semi-liquid state, like petroleum or naphtha. Marbles and jaspers, of various colours, and susceptible of a high polish, are found in many parts of Cuba, and in its chief dependancy, the Isle of Pines. The mineral waters of San Diego, Madringa, and Guanabacao have obtained some celebrity, but with the exception of the last, which is within a few miles of the Havannah, they are difficult of access, and therefore not much resorted to.

Population. — There have been various censuses of the population: the first in 1775, when it amounted to 170,370; a second in 1791, when it was 272,140; a third in 1817, when it was 551,998, and with transient persons, 630,980; and a fourth in 1827, when the permanent population was 704,487, and with transient persons, 730,562. According to the census of 1827 the population was divided as follows: —

	Males.	Females.	Total.
Whites - - - -	168,653	142,398	311,051
Free people of colour -	28,058	29,456	57,514
Free Negroes - - -	23,904	25,076	48,980
Negro and coloured slaves	183,290	103,652	286,942
Total -	403,905	300,582	704,487

Another census was taken in 1842, according to which the population amounted to 1,007,620, viz.: whites, 418,291; free coloured, 152,838; and slaves, 436,491. But it is alleged that both the slave and white population, especially the former, was underrated in this census; and the population is now (1850) probably, if at all, little short of 1,400,000.

The rapid increase of the slave population is principally to be ascribed to the continued importation of slaves from Africa. In some years, since the peace of 1815, as many as 30,000 blacks are believed to have been imported into Cuba in a single year. Spain had indeed agreed by treaty in 1820 to abolish the trade; but this treaty was little better than a dead letter, and it is only since 1835, when a more efficient treaty with Spain was entered into, that the trade has sustained any considerable diminution. But though it be no longer continued under the Spanish flag, it is continued, though to a much less extent, under other flags. In 1844, 10,000 slaves are said to have been imported; but the imports in the interval have been materially reduced; and are not, at present (1850), supposed to exceed 2,000 or 3,000 a year.

But though it were to be wished, as well for the interests of the island as of humanity, that the further importation of slaves were put a stop to, we are not of the number of those who think that it would be good policy rashly to agitate the question of the emancipation of slaves in Cuba. Their treatment in that island, as in all the other colonies of Spain, was formerly remarkable for its humanity; and though a change for the worse took place subsequently to the great extension of the sugar culture, when the mortality on some estates became very heavy, the condition of the slaves has been again materially improved. The question of their emancipation is one of no common difficulty, and the results of the great experiment made in Hayti and in our islands in liberating the slaves, have not been such as to offer any very great inducement to the authorities in Cuba to follow a similar course. The emancipation of so many slaves in the immediate vicinity of Cuba has, however, materially increased the difficulty of maintaining slavery in that island; and, on the whole, sound policy suggests that timely provision should be made for the gradual bringing about of that emancipation which is, perhaps, inevitable, coupling it, if that be practicable, with some scheme for insuring the supply of some sort of compulsory labour.

Whatever opinion may be formed of slavery in the abstract, we believe it would not be difficult to show that it has contributed, in no ordinary degree, to the rapid advancement of Cuba. Industry will always be proportioned to the strength of the motives by which it is occasioned; and in countries like Cuba, of great natural fertility and under a tropical sun, where a half or more of the articles indispensable in Europe would be useless, it were absurd to imagine that the inhabitants, supposing them to be free, should exhibit the persevering industry of free labourers in the temperate zone. The *dolce far niente* is in such countries the *summum bonum*; and we believe it will be found that the extensive cultivation of sugar, and of most other commercial products within the tropics, depends on the maintenance of slavery, or of compulsory labour of one kind or other. The people of England may be but little affected, at least directly, by these considerations, and may, therefore, on the principle of *fiat justitia, ruat cœlum*, think themselves warranted in using their influence to enforce the abolition of slavery wherever it exists. But to the Cubans, Brazilians, the inhabitants of the Southern States of America, and a host of others, this question is of the last importance. Were the slaves emancipated, not in law merely, but practically and in fact, the probability is that neither Cuba nor Brazil would, in a dozen years, export a single cwt. of sugar. Why should they do so any more than Hayti? The blacks, were they really emancipated, would be able to support themselves in that state in which they wish to live, without engaging in any thing like the severe labour of sugar planting; and under such circumstances it would be a contradiction to suppose they should engage in it. But it might be difficult, perhaps, to show what good consequences would result from such a change. It is at all events clear that the commerce of the world and the comforts of all civilised nations would be seriously impaired; and it is by no means clear that the condition of the blacks would be sensibly, or at all, improved.

Agriculture. — The raising of sugar constitutes by far the most important branch of industry carried on in Cuba. Its culture has advanced with extraordinary rapidity, especially since 1809, when the ports of the island were freely opened to foreigners. It is principally shipped from the Havannah; and its export from that city, which in 1760 amounted to about 5,000,000 lbs., had increased in 1800 to above 40,000,000 lbs., in 1820 to above 100,000,000 lbs., and in 1849 to 602,000 boxes, or 240,800,000 lbs.; though the crop in that year was below an average. But to the exports from the Havannah we have to add those from Matanzas, amounting in 1848 to 120,000,000 lbs., and those from Trinidad, St. Iago de Cuba, and other ports; so that the entire exports of sugar may now be safely estimated as amounting, in ordinary years, to from 250,000 to 300,000 tons, or from 560,000,000 to 672,000,000 lbs.

The culture of coffee advanced for a while with equal or even greater rapidity than that of sugar. In 1800 there were but 80 plantations in the island; in 1817 there were 779; and in 1827 there were no fewer than 2,067, of at least 40,000 trees each! But the low prices of coffee that have since generally prevailed have not merely checked this astonishing progress, but have occasioned the abandonment of a great many coffee plantations. So much has this been the case, that while, in 1837, the exports of coffee exceeded 53,000,000 lbs., they only amounted to 17,353,425 lbs. in 1848; and it is stated, in a return made to the government of Cuba, that no fewer than 38,000 slaves have been transferred within these few years, from coffee-growing estates to those growing sugar and other articles. It is likely, however, that the higher prices of coffee that have prevailed for some time past, will have checked this decline, and probably even occasioned a renewed extension of the coffee culture.

Tobacco is indigenous in Cuba, and its excellent quality is celebrated in all parts of the world. It is, however, said to be seldom profitable to the planter; but we doubt this, as its export, and, consequently, culture, have largely increased. The culture of cotton and indigo has greatly declined. Indian corn, rice, beans, plantains, and even wheat, are raised, but not in anything like sufficient quantities for the demand, flour and rice being, in particular, very largely imported. Cattle have become extremely numerous, being estimated at about 1,300,000 head; but it is not a little curious that, while hides form a large article of export, fresh and salted meat, jerked beef, &c., should occupy a prominent place among the imports. Horticulture is very little attended to.

Manufactures. — Of these the most important are the making of sugar, molasses, and rum, the preparation of coffee, the making of cigars, the bleaching of wax, and the manipulation of the minor staples of the island.

Internal Communication. — Down to a recent period the means of communication between the different parts of the island were very deficient. The common roads were in general badly constructed; and during the rainy season were, for the most part, impracticable for wheel carriages. The long narrow shape of the island, by lessening the distance from the interior to the sea-coast,

obviated in some degree these difficulties. But down to a very late period it was customary in most parts for the negroes to be employed in the severe drudgery, of carrying produce in baskets on their heads to and from the estates, to the sea-ports, or to the public roads. Within these few years, however, this system has been all but wholly abandoned. Waggons are now introduced on most estates; and a great number of railways have been constructed that have greatly facilitated the communication between different places. The first of these, from the Havannah to Guines, a distance of 51 m., was opened in 1838; and there are now (1850) about 850 m. of railway in full operation. The carriages on most of these railways are drawn by horses, so that they have been constructed at a comparatively small cost. They have, however, been of the greatest service to the island; and may, perhaps, be regarded as the principal cause of the late extraordinary extension of cultivation.

There can be no doubt, apart from the difficulties connected with the slave question, that the condition of Cuba is at present eminently prosperous. Various estimates have been given of the cost at which sugar may be produced in it. These, however, are usually very unsatisfactory, as the cost will obviously vary with the nature of the soil, its proximity to market, and a variety of other circumstances. Perhaps it may be taken, at a rough average, at about 10*l.* a ton, or about 1*d.* per lb. The following statement is extracted from a dispatch by an intelligent British agent, dated Havannah, Jan. 1848: —

"The present condition of sugar cultivation is highly flourishing. The proprietary body generally either reside on their estates, or visit them so often during the year as to be brought into more favourable relation with the slaves than if they were altogether absentees. There are persons certainly who entertain fears for public tranquillity and security of property, but I think the majority have none. I know many persons live on the estates with their families who are under no necessity of doing so, and would not if they had any such fears. If we consider the relative numbers of the white and coloured population, such fears must be pronounced unfounded; the only danger at all to be apprehended is from incendiarism, which has not however arisen, that I ever heard of, to any alarming extent.

"There is no internal tax beyond one of 2½ per cent. nominally for tithes; this has been of recent enactment, and is paid to the Government on their taking the properties of the church. The export duty is only about 7*s.* 6*d.* per ton.

"Resuming the question of cost to the producer, I have to conclude, as a deduction from the considerations above referred to, that the gross amount of cost, under favourable circumstances, including capital and expenditure, may be stated at about 9*l.* per ton, or 9*s.* per cwt. This, however, must depend on the situation, the management, and whether the produce be Muscovado or box sugar. I have heard the cost of the production of sugar estimated to be from 4*l.* to 8*l.* per ton, independently of the capital invested."

Currency. — Paper money is unknown. The coins in use are Spanish doubloons or ounces, which are a legal tender for 17 hard dollars, and at the exchange of 8½ per cent. are worth 3*l.* 10*s.* 10*d.*; also the subdivisions of these doubloons, the half being 8 4 dols.; the quarter, 4 2 dols.; the eighth, 2·1 doll.; and the sixteenth, 1⅛ doll. Mexican and Columbian doubloons, or ounces, are also in circulation, and are legal tender for 16 hard dollars, equal to 3*l.* 6*s.* 8*d.*; they are sometimes in demand for exportation, at a premium. Their aliquot parts are worth eight, four, two, and one dollar respectively. Of silver coins, the Spanish pillar dollar is worth 4*s.* 2*d.*; and is only legal tender at its nominal worth; but it is generally in demand for export, at a premium of from 2 to 5 per cent. Mexican, U. States, and S. American dollars, are also legal tender at their numerical value, and are occasionally in demand, at a trifling premium. For small payments, the coins in circulation are the four, two, one and half real pieces, which are equal to the half, quarter, eighth, and sixteenth of a dollar respectively.

Trade. — We subjoin some tabular statements respecting the trade of Cuba in 1848, derived from the *Balanza general de Comercio de la Isla de Cuba*, for that year, published in the Havannah.

Imports in 1848.

In Spanish vessels	$15,222,318 2
Foreign vessels	10,213,247 3
Total	25,435,565 5

Exports in 1848.

In Spanish vessels	$ 6,045,093 3½
Foreign vessels	20,031,974 5
Total	26,077,068 0½

Exports from the different Ports of the Island.

	In Spanish Vessels.	In Foreign Vessels.
Havannah	$ 4,540,392 4	$ 8,083,794 4½
Matanzas	656,950 0½	5,072,131 5½
Cardenas	1,492 0	671,103 3
Mariel	—	57,695 0
Trinidad	284,284 3½	1,055,494 2½
Cienfuegos	46,913 7	929,073 4
Nuevitas	35,297 0½	160,332 1½
Sagua	—	603,548 3
Remedios	—	114,278 7
Santa Cruz	2,996 5	71,972 5½
Santa Espiritu	—	15,578 0
St. Jago	294,391 4	2,714,594 4
Gibara	148,616 6½	184,820 6
Manzanilla	17,496 0½	258,012 7
Baracoa	1,323 2	24,074 7½
Guantanamo	14,939 2	15,539 0
Total	$ 6,045,093 3½	$ 20,031,974 5

Account of the Quantities of the principal Articles of Import.

Rice	arrobas of 25 lbs.	864,268
Fish	—	883,169
Flour	bbls.	231,120
Beef in barrels	—	819,200
Pork in barrels	lbs.	1,113,100
Hams	—	2,529,525
Lard	—	9,342,671
Butter	—	683,473
Cheese	—	1,667,271
Jerked Beef	arrobas	1,270,678
Pork (loose)	lbs.	658,680
Spanish wine	value	$1,248,192
Foreign wine	—	103,340

Account of the Quantities of the principal Articles of Export.

Aguardiente	pipes	16,339
Cotton	lbs.	28,598
Sugar	boxes	1,228,718
Coffee	arrobas	694,137
Wax	—	50,110
Wood	value	$350,305
Honey	—	56,523
Molasses	hhds.	228,726
Copper Ore	100 lbs.	656,491
Tobacco in bales	lbs.	6,275,630
in Cigars	thousands	101,480

Of 2,949 vessels cleared from the island in 1849, 747 were Spanish, 1611 American, 348 English, 63 French, 69 German, 21 Danish, 18 Hollanders, &c.

The duties levied by the Custom-house office of Cuba in 1844, on the merchandise imported, exported, &c., amounted to 7,160,631 doll., and in 1845 to 5,907,311 doll.

Account of the Values of the Exports and Imports of the Island of Cuba from 1828 to 1847 incl., in dollars.

Years.	Imports.	Exports.	Years.	Imports.	Exports.
1828	19,534,922	13,114,362	1838	24,729,878	20,471,102
1829	18,695,856	13,952,405	1839	25,315,803	21,481,862
1830	16,171,562	15,870,961	1840	24,700,189	25,941,783
1831	15,548,791	12,918,711	1841	24,630,620	26,774,614
1832	15,198,465	13,595,017	1842	24,637,527	26,684,701
1833	18,511,132	13,996,100	1843	23,422,096	25,029,792
1834	18,563,300	14,487,955	1844	25,056,231	25,426,591
1835	20,722,072	14,059,246	1845	28,007,590	18,792,812
1836	22,551,969	15,398,245	1846	22,625,399	22,900,588
1837	22,940,357	20,344,407	1847	32,389,119	27,998,770

NOTE. — In 1847 the imports of Spain are stated to have amounted only to 29,719,701 dollars, 6 rials, and the exports to 25,228,049 dollars, 12 rials, so that, according to official reports, the imports and exports of Cuba exceed those of Spain.

The value of the exports from the U. Kingdom to Cuba amounted in 1848 to 733,169*l.*, of which cottons,

linens, and wrought and unwrought iron, were by far the most important articles. The admission of slave-grown sugar to our markets has considerably promoted our trade with Cuba. The U. States, however, engross the largest share of the trade of the island, a consequence in part of their proximity, but more of their supplying her with large quantities of flour, provisions, lumber, &c., and of their being principally indebted to her for their imports of sugar. The value of the exports from the U. States to Cuba in 1847–48 amounted to 6,876,713 doll., and that of the imports to 12,853,472 doll.

Slaves, though an important article of import, are not noticed in the above tables. We have already made some remarks on the number supposed to be annually introduced into the island.

Account of the Values of the principal Articles of British and Irish Produce and Manufacture, exported from the U. Kingdom to Cuba in 1848.

Articles.	Declared Value.
	£
Apparel, Slops and Haberdashery	3,238
Brass and Copper Manufactures	19,452
Coals, Cinders, and Culm	14,469
Cotton Manufactures, including Cotton Yarn	228,986
Earthenware of all sorts	21,411
Glass	5,215
Hardwares and Cutlery	38,578
Iron and Steel, wrought and unwrought	83,250
Linen Manufactures, including Linen Yarn	220,566
Machinery and Mill-work	6,899
Silk Manufactures	15,288
Tin and Pewter wares, Tin unwrought and Tin Plates	4,858
Woollen Manufactures, including Yarn	41,207
Other Articles	26,722
Total	733,169

Account of the Quantities of the principal Articles imported into the U. Kingdom from Cuba, in 1848.

Articles.		Quantity.
Cedar Wood	tons	626
Cochineal, Granilla and Dust	lbs.	24,309
Coffee	—	586,250
Copper Ore	tons	30,679
Fustic	—	1,745
Honey	cwts.	2,815
Indigo	lbs.	1,420
Logwood	tons	84
Mahogany	—	2,895
Molasses	cwts.	42,511
Rum	galls.	158,817
Sugar, unrefined	cwts.	691,203
, refined	—	40,629
Tobacco, unmanufactured	lbs.	374,863
Tobacco, manufactured, and Cigars	—	138,118

The extraordinary increase of the pop. and of the staple articles of export from Cuba, is, no doubt, ascribable to a variety of causes. Of these, the most important unquestionably has been the breaking up of the old colonial monopoly that so long weighed down the industry of the island, and the establishment in its stead of a liberal commercial system. The fertility of great part of Cuba is unequalled, perhaps, except by the best parts of Hayti and Guiana. And taking these circumstances into account, and adverting to the fact that the portion of the surface at present under cultivation is not supposed to amount to 20 per cent. of its whole extent, it will at once be seen that Cuba, supposing always that the planters can command sufficient supplies of compulsory labour, might not only furnish vastly increased supplies of sugar and coffee, but that she might also, were her capabilities moderately developed, supply more than double her present pop. with all sorts of necessaries.

The usual commission charged by merchants on the sale of goods is 5 per cent. with a *del credere* of 2½ per cent. if the sales are on credit and guaranteed, and a further commission of 2½ per cent. for the returns, whether in bills or produce. On purchases the commission is 2½ per cent., and a further 2½ per cent. if drawn for in bills of exchange. For procuring freight 5 per cent. is charged, and 2½ for insuring the amount. For advances of money the rate is 5 per cent., when no other commission is chargeable. Bill business is done at various rates, from 1 to 2½ per cent. according to its magnitude. These are the rates of the foreign houses; those of the Spanish and Creole merchants are generally higher. There is no obstacle whatever to the establishment of foreigners as merchants in the island. The law says that those who are naturalised in Spain may freely carry on trade with the same rights and obligations as the natives of the kingdom, and that those who have not been naturalised, or have a legal domicile, may still carry on trade under the regulations stipulated in the treaties in force between the respective governments; and in default of such conventional relations, the same privileges are to be conceded as those enjoyed by Spaniards carrying on trade in the country of which such foreigners are natives. In practice this last condition is not much attended to, as foreigners are allowed to establish themselves as merchants without any inquiry as to the rights or privileges enjoyed by Spaniards in the country they come from. As to manufacturers and mechanics, the only difficulty that can arise regards their religion. On entering the island every stranger is required to find security in the following terms: — "I am responsible and become security in every case for the person and conduct of A.B., arrived from C. in the ship D.; binding myself to present him, if called on by the government, and to conduct him at my expense to any place that may be designated." This security is easily obtained, and, in fact, encouragement is given to mechanics and white people of all classes to settle in the island. After landing, it is only necessary to apply for a letter of domicile, and to present a certificate that the applicant is of a respectable character, and professes the Rom. Cath. religion. Free coloured people, however, by a royal order of 12th March, 1837, are prohibited from landing under any pretence whatever; and so rigorously is this order enforced, that such persons, though acting as seamen, are, on their arrival, taken out of the vessels in which they have come, and are kept in custody till her departure, when they are compelled to proceed again on board, and leave the island. The business of a broker is exercised under a royal license, and no foreigner is eligible to the office unless naturalised in the form prescribed by law. In every commercial town a certain number only is allowed, corresponding with pop. and trade of the place. In the great cities, the business of merchant is often combined with that of planter; and sometimes, also, the importing merchant keeps a shop or store where he sells his goods by retail. A large part of the mercantile capital, as well as of the proprietary wealth of the island, is in the hands of the Creoles. When emigrants from the peninsula or the U. States make fortunes in the island, they seldom think of returning to Europe or America. Of late years many Americans have settled in the island, partly as merchants and partly as planters; and it is needless to add that they form the most active and enterprising portion of her inhabs.

Revenue. — The tariff of Cuba, like that of Spain, is exceedingly complex, being divided into a great many classes, and embracing a vast number of articles, many of which are of very trifling importance. All, or almost all, the articles of import are valued in the tariff at certain fixed rates, upon which the duties are charged at so much per cent. Hence, when the fixed or tariff prices exceed the real prices of the goods, the duties are proportionally increased; and conversely when the tariff prices are under the real prices. The duties vary from

per cent.
33½ to 27½ on goods by foreign vessels from foreign ports.
23½ to 19½ on foreign goods by Spanish vessels.
17½ to 14½ on Spanish produce from Spain by foreign ships.
7½ on Spanish produce by Spanish vessels, and only
3½ if Rice. A balance duty of 1 per cent. is added to all but the 7½ and 3½ per cent. duties.

The principal exception to the above rule is in the case of flour, which pays a fixed duty of

2·00 Dolls. per brl. per Spanish ship } from Spain.
6·75 - - per Foreign ship }
8·58 - - per Spanish ship } from other parts.
9·59 - - per Foreign ship }

Had Spain been able to supply Cuba with flour as cheaply as other countries, this high discriminating duty in favour of Spanish flour would have been of comparatively little importance. But such is not the case. Cuba derives nine-tenths of her supply of flour from the U. States, principally from New Orleans; so that the discriminating duty is the most oppressive and impolitic that can be imagined. We are surprised it is submitted to. Ploughs, furnace-mouths, grate-bars, crown-wheels, shafts, rollers, sugar-bowls, skimmers, steam-engines, and other such articles for sugar estates; also mares, stallions, and asses, are exempted from duty.

Special concessions have also been made in favour of the Gas Company, &c., which pays only 7½ per cent. on imports.

We subjoin a note of the duties on the principal articles of export. (See table on next page.)

Tonnage Duties on foreign ships, 12 rs. per ton; on Spanish ships, 5 rs. per ton.

The crown revenues of the island are, the *rentas maritimas*, including duties on imports, exports, and tonnage, and some municipal duties; *impuestas interiores*, including a *diesmo* or tithe of 2½ per cent.; the sale of papal bulls and stamp paper, the profits derived from the lottery, and an impost on cock-fights; personal deductions from the pay of public functionaries, including the price of exemption from military service; miscellaneous receipts, including the produce of the sale of royal lands, the rents of vacant livings and un-

Articles.				Denomination.	Foreign Ships.	Spanish Ships.
					Cents.	Cents.
Cigars	-	-	per	Mille.	50	50
Cocoa	-	-	—	Arrob.	18	10 to 8
Coffee	-	-	—	Qtl.	20	12
Copper ore	-	-	—	—	9	9
Hides in the hair		-	—	One.	11	5 to 6
Honey	-	-	—	Hhd.	1·37	76 to 57
Molasses	-	-	—	do.	Free.	Free
Rum -	-	-	—	Pipe.	—	—
Sugar	-	-	—	Box.	37	27·5
Tobacco	-	-	—	Qtl.	1·50	·75
Wax, white	-	-	—	Arr.	33	18 to 14
—— yellow	-	-	—	—	22	12 to 9

claimed estates, and the produce of vendible offices; and casual receipts, including deposits, confiscations, donations, and arrears. In a financial point of view Cuba is by far the most valuable colony of which we have any account. It is seen from the subjoined official statement that her revenue exceeds 12,000,000 doll. a year. The expenditure amounts to about 7½ million doll., viz. civil service, 1¼ million doll., military, 4¼ mill. doll., and marine, 1¼ mill. doll. Hence there is a balance of about 4½ million doll., that is, of considerably more than 1,000,000*l.* stg, which is remitted to Spain.

Account of the total Produce of the various Duties and Taxes of the Island of Cuba, in the undermentioned Years, in Dollars.

Years.	Duties, Custom-house.	Other Taxes.	Total Revenue.
1830	5,027,095	3,945,452	8,972,547
1835	5,426,033	3,371,149	8,797,182
1840	7,387,498	4,281,904	11,669,402
1844	7,160,631	3,329,621	10,490,252
1845	5,370,748	3,629,252	9,000,000
1846	6,232,967	4,907,811	11,140,779
1847	7,494,330	5,314,383	12,808,713

Public Education is not so much attended to as it should be, but in that respect as well as others there has recently been a great improvement. Elementary schools have been extended; and an institution has recently been established for the instruction of engineers. There are two colleges in the Havannah, with numerous and eminent professors, literary societies, &c. Several daily newspapers, some of them conducted with considerable ability, are published in the capital and other large towns.

Morals and Religion are both at a low ebb, a consequence partly and principally of the inquisition and of the degrading superstition so long established in the island, and partly of the institution of slavery. But improvement is not less perceptible in the character and conduct of the people than in their industry and physical comforts.

Government. — As respects its civil jurisdiction, Cuba is divided into three provs., of which the Havannah, Santiago, and Trinidad are the caps. The captain-general, governor, or supreme military chief of the island, is, at the same time, civil governor of the W. prov.; but, except in military matters, the governors of the other prov. are perfectly independent of the captain-general, and are responsible only to the court of Madrid. The island is also divided into three military divisions — a western, central, and eastern; the chiefs of which are, of course, subordinate to the captain-general. The royal court (*Real Audiencia*) of Puerto Principe, of which the captain-general is the *ex officio* president, has the supreme jurisdiction in all civil and criminal affairs. In the principalities there are *Ayuntamientos*, and in the rural districts *Jueces Pedaneos*, who combine the exercise of judicial functions with those of police commissioners, &c.

Political Importance.—It is not easy to exaggerate the political importance of Cuba. Her size, geographical position, and the situation, great strength, and admirable harbour of the Havannah, render her, as it were, the mistress of the Gulph of Mexico. No wonder, therefore, that her possession, and the nature of the government to which she is subject, should be objects of intense interest to the U. States, and also to Great Britain and other commercial nations. On the whole, it would seem to be most for the common advantage of the commercial world, that Cuba should continue, as at present, dependent on Spain, or that she should become independent. So long as she remains under Spain, there is but little risk of her natural capabilities being turned to the prejudice either of commerce in general, or of that of any particular state. But there is good reason to fear that it would be very much the reverse, were Cuba to come into the possession of the U. States, or of any of the great European powers. Instead of ministering exclusively to the wants of a great and growing commerce, she might then be converted into an important military station, and be employed as a basis for warlike operations, that could not be carried on without great injury to the trade of the western world. Now that the ports of Cuba are open to the ships of all nations, and that emigrants from all countries may freely resort to her, she would gain comparatively little by becoming independent, and might lose a good deal. Fortunately, there is in Cuba a large white population; but in the event of the question of independence being agitated, it would, most probably, be split into factions, some of which might endeavour to strengthen themselves by resorting to the assistance of the slaves. The maintenance of the existing political arrangements would, therefore, seem to be for the advantage, as well of Cuba as of the commercial world. At the same time, it is clear that the suppression of the slave trade, by checking the increase of blacks, would materially contribute to the security of the island; and is probably, indeed, the best means that could be devised to guarantee Cuba against the greatest of all the evils by which it is possible she should be assailed — a successful, or even partially successful, slave insurrection. In the course of the present year (1850) an attempt was made to revolutionise the island by a marauding expedition of piratical adventurers from the U. States. But it was easily defeated. (*Cuadro estadistico de la Isla de Cuba, correspondiente al Año de* 1827; *Humboldt, Essai Statistique; Official Returns.*)

CUCKFIELD, a market-town and par. of England, co. Sussex, rape Lewes, the town being in a commanding situation, on the high road from London to Brighton, 34 m. S. from the former, and 13 m. N. from the latter. Area of par., 10,500 acres: pop. of do., 2,586. It is a neat little town. The church, a spacious structure, has a lofty spire, covered with wooden shingles, that have assumed the colour and appearance of blue slate. It has a free grammar school, founded in the reign of queen Elizabeth.

CUCUTA (formerly *Rosario* or *San Jose de Cucuta*), an inl. town of New Granada, prov. Pamplona, near the border of Venezuela, 28 m. N.N.E. Pamplona; lat. 7° 37′ N., long. 72° 14′ W. Its situation is extremely pleasant; it is well-built, neat, and clean; streets paved, with currents of water running through them. The par. church is celebrated as the place in which the first congress was held, and the constitution of Colombia formed, in 1820. It is of Moorish architecture, and contains a respectable copy of one of Raphael's Madonnas, by a Mexican artist. (*Mod. Trav.* xxvii. 266, 267.; *Dict. Geogr.*)

CUDDALORE, a marit. town of Hindostan, Carnatic, S. div. Arcot, and one of the most extensive and populous towns in the S. of India, 86 m. S.S.E. Madras; lat. 11° 43′ 24″ N., long. 79° 49′ E. It is naturally strong, being enclosed between two arms of the Pannaur. Streets broad, and it contains many houses of the better class. N. the Pannaur is a suburb called the New Town, with a large Portuguese church, and some handsome European dwelling-houses and other buildings; and beyond this is a large and beautifully situated edifice, formerly the residence of the chief-governor of the British settlements on this coast. Some English looms have been established in this town, and a paper manufactory. Cuddalore was taken by the British in 1760, but obliged to surrender to the French in 1782. It was restored to the British in 1795. (*Hamilton*, i. 460.)

CUDDAPAH (*Cripa*, mercy), an inl. town of Hindostan, presid. Madras, on the banks of the Cuddapah river, 507 ft. above the sea, 120 m. N.W. Madras. It has a mud fort, containing the palace of the former nabobs, now converted into a court of justice, and a prison for both debtors and felons. Cuddapah is not a place of much trade; it was the cap. of an indep. Patan state, which survived the destruction of the other Deccany kingdoms: a great deal of sugar and jaghery is made in its vicinity. (*Hamilton*, i. 459.)

CUENCA, a city of Spain, cap. prov. same name, on a high mountain, between two others higher still, and separated from them by the deep beds of the Jucar and the Huecar rivers, near their confluence; 86 m. E. S. E. Madrid, 136 m. S. W. Saragossa. Pop. 8,670. It is surrounded by uncommonly high walls, and its streets are extremely steep, crooked, and narrow. It has 7 gates; 6 bridges over the Huecar, and 2 over the Jucar, one of the latter being of very superior construction. Cuença is the see of a bishop, and the residence of the principal authorities of the prov., and contains a vast cathedral built by Alphonso IX. in the 12th century; a fine episcopal palace; 14 parish churches; 13 convents, some of them built on precipices overhanging the river, and containing paintings of great merit; 3 colleges, and an ecclesiastical seminary; 2 hospitals for the sick, and 1 for foundlings; a public granary, and several public fountains. It has some fabrics of paper and wool. The latter were formerly much more considerable than at present; and the town was also much more populous and important. It is the native country of the painter Salmeron, and of the famous Jesuit Molina. Cuença was given in dowry by the Moorish king of Seville,

Ben Abut, with his daughter Zaida, to Alphonzo VI. king of Castile, when he left the cloisters to succeed his brother in 1072. The Moors again retook it, but it was finally wrested from them in 1176. (*Miñano; Dict. Géogr. Univ.*)

CUENÇA, an inl. town of Ecuador, cap. prov. same name, in a spacious plain, nearly 9,000 ft. above the level of the sea, 186 m. S. Quito; lat. 2° 56′ S., long. 79° 12′ W. Pop. 20,000? of whom about 3,000 are Indians. Its streets are broad and straight; but the houses are low, and built of unburnt brick. It contains a cathedral, 2 par. churches, several monasteries, a college, and an hospital: has manufactures of confectionary, cheese, hats, &c.; and some trade in these, together with grain, cinchona, bark, and other productions of its vicinity. Its climate is temperate as to heat, but it is subject to violent storms. A little to the S. is the Mountain of Farqui, chosen by the French astronomers for their meridian in 1742. In its neighbourhood there are several remains of the works of the Peruvian incas.

CUEVAS, a town of Spain, Granada, 51 m. N.E. Almeria. Pop., including its dependencies, 9,500. It is almost surrounded by the river Almanzor, and there are between the town and the Mediterranean, about 8 m. distant, a number of very deep caverns in the mountains, supposed to have been opened by the Moors, in search of minerals or water: from these the town takes its name. It contains a church, a convent, and a public granary. There is a castle on the coast, and a small island belonging to the town.

CULIACAN (an. *Hueicolhuacan*, Mex.), an inland town of Mexico, state of Sonora, on the right bank of the river of the same name, 105 m. E.S.E. Cinaloa, and 170 S.E. El Fuerte. Pop. (1835) 11,000. It is a depôt for goods passing to and from the port of Guaymas, on the Gulph of California. During the Spanish rule it was the cap. of a prov. The country around is said, by Mr. Ward, to be well watered and highly productive.

CULLEN, a marit. royal, and parl. bor. of Scotland, co. Banff, on an eminence at the mouth of a little rivulet, 12 m. W. Banff. Pop. 1,200. Though an ancient burgh, the present town is comparatively new, the old town having been superseded, and the site on which it stood enclosed within the park of Cullen House, the splendid mansion of the Earl of Seafield. The linen manufacture, so common on all the E. coast of Scotland N. of Dundee, has found its way to Cullen, but is there carried on to an inconsiderable extent. The inhab. engage in the herring fishery, and in that of cod, skate, ling, and haddock, which abound on their shores; so that dried or cured fish form their chief export. The harbour is bad, and the town, on the whole, not flourishing.

Cullen unites with Banff, Inverury, Kintore, and Peterhead, in returning a mem. to the H. of C. Registered electors, in 1838-39, 37.

CULLERA, a sea-port town of Spain, Valencia. It lies on the Jucar, near its mouth, and to the S. of the mountain and cape of the same name, on the Mediterranean coast, 25 m. S. Valentia. Pop. 9,400. It has a church, a convent, an hospital, a handsomely-built elementary school, a public granary, and barracks for troops on their march, being on the shortest and most frequented road from the coast to the capital. It carries on a considerable coasting trade, as many as 40 or 50 vessels being sometimes seen at a time, principally about 30 tons burden, taking in fruit for France, rice for the Balearic islands, and the coasts of the Peninsula, &c. The neighbourhood produces rice, wheat, maize, muscatel raisins, wine, oil, and garden stuff. (*Miñano.*)

CULPEE, an inl. town of Hindostan, prov. Bengal, in a jungly and unhealthy situation, on the left bank of the Hooghly River, about 30 m. S.S.W. Calcutta; lat. 22° 6′ N., long. 88° 25′ E.

CULROSS, a royal and parl. bor. and marit. town of Scotland, in a detached corner, co. Perth, on a steep acclivity on the N. shore of the Frith of Forth, about 16 m. N.E. Edinburgh. Pop. 600. It was made a royal burgh by James VI. in 1588; and though it had once a considerable trade in salt and coal, the latter of which was wrought at a very remote period, trade of every kind has now entirely left it, except, perhaps, a little traffic in fish caught in the Forth, and a little damask weaving for manufacturers in Dunfermline. There are vestiges of an old harbour; but the smallest yawls can now approach the town only at high water. But though of no modern importance, Culross can boast of many remains of antiquity, which throw an air of interest over a place otherwise mean and decayed. At the E. end of the town once stood a chapel dedicated to St. Mungo or Kentigern, said to have been born here. A monastery, dedicated to the Virgin and St. Serf, was founded here in 1217 by Malcolm earl of Fife for Cistertian monks; of which considerable remains are extant, a part of it serving as the parish church. Culross Abbey, occupying a magnificent terrace overlooking the sea, and successively the seat of the Bruces and the noble family of Dundonald, is now the property of the heirs of the late Sir Robert Preston, Bart. The present parish church is collegiate, having two clergymen.

Culross unites with Queensferry, Inverkeithing, Dunfermline, and Stirling, in sending a m. to the H. of C. Registered electors, 1849-50, 24.

CUMANA, a city of Venezuela, cap. of the dep. and prov. Cumana, in an arid and sandy plain on the E. bank of the Manzanares, and near the mouth of the Gulph of Cariaco, about 1 m. from the sea-shore, and 180 m. E. Caracas; lat. 10° 28′ N., long. 64° 16′ W. Pop. 12,000.? It is commanded by Fort St. Antonio, built on the extremity of a hill immediately to the E.: the Manzanares encompasses the town on the S. and W., dividing it from its principal suburbs. It has 2 parish churches, 2 convents, and a theatre. Having suffered greatly at different times from earthquakes, its buildings are generally low; but in the early part of the present century great improvements were introduced into the buildings, and its prosperity was much augmented by the judicious conduct of its governor. It has a roadstead capable of receiving all the navies of Europe, with excellent anchorage for large ships. It is protected by a shoal and the battery of Boca at its entrance. Exports — mules, cattle, smoked meat, salted fish, cacao, and other provisions; fish, wild fowl, and other necessaries, are obtained here in great plenty, and very cheap. Climate intensely hot, from June to October the temperature being usually 90° or 95° F. during the day, and seldom so low even as 80° in the night. The inhab. are distinguished for their assiduity in business, and their polished manners. This is the oldest European city in the New Continent, having been built by Diego Castellon in 1523. It was totally destroyed by the earthquake of 1766. (*American Almanack*, 1839; *Mod. Trav.* xxvii. 24—48.; *Geog. &c. Account of Colombia.*)

CUMANACOA, an inl. town of Venezuela, prov. Cumana, in a valley surrounded by lofty heights, 21 m. S.E. Cumana, and noted for the prodigious difference between its climate and that of the latter city; lat. 10° 15′ N., long. 64° 5′ W. Pop. 2,800. It has 7 months of wintry weather, though only 730 ft. above the level of the sea. It is small, ill-built, with houses mostly of wood. (*Geog. &c. Account of Colombia*, i. 192—195.)

CUMBERLAND, a marit. co. of England, having N. Scotland and the Solway Frith, E. Northumberland and Durham, S. Westmoreland and Lancashire, and W. the Irish Sea. Area, 974,720 acres, of which about 600,000 are supposed to be arable, meadow, and pasture. This co. has some of the highest mountains in the kingdom: on its E. border, adjoining Northumberland and Durham, these consist of a portion of the Pennine or great central chain; while the W. group has received the name of the Cambrian range, from their being principally in this co.; the two ranges are divided by the plain of the Eden (*see* ENGLAND for an account of these mountains, and of the lakes interspersed among them). Principal rivers, Eden, Esk, Irthing, Derwent, Caldew, &c. Soil in the lower districts, and in parts of the W. mountains, light, and well adapted to the turnip husbandry; but there is also a good deal of wet loam on a clay bottom. The soil of the E. or central moors and mountains is mostly peat earth, and they are bleak, heathy, and extremely barren. Climate rather humid. Principal crops, wheat and oats. Agriculture is much improved; a judicious rotation is observed; and turnips are extensively cultivated according to the most approved principles of the drill-husbandry. Property is much divided. There are a few large estates, but by far the greatest portion of the co. is divided into small properties, worth from 10*l.* or 20*l.* to 200*l.* a year, belonging to "statesmen," or "lairds," formerly distinguished by their attachment to routine practices, their supplying themselves with all sorts of domestic manufactures, and their economy and independence. But their habits have materially changed during the present century: domestic manufactures have been wholly abandoned, and their habits approach much more nearly than before to the common level of cultivators. Average rent of land, in 1843, 12*s.* 4½*d.* an acre. There are valuable coal mines near Whitehaven, and in other places; plumbago, or black lead, is found in the greatest perfection in Borrowdale in this co.; and limestone and slate are abundant. The cotton manufacture is extensively carried on at Carlisle, Penrith, &c.; and cordage and canvass are made, and ships built, at Whitehaven and other places. Principal towns, Carlisle, Whitehaven, Workington, and Cockermouth.

Cumberland is divided into 5 wards and 104 pars. It returns 9 mem. to the H. of C.; viz. 4 for the co., 2 each for Carlisle and Cockermouth, and 1 for Whitehaven. Registered electors for the co. in 1849-50, 9,302; but those for the E. and W. divisions are not specified. It had, in 1841, 34,574 inhabited houses, 178,038 inhabitants, of whom 86,292 were males, and 91,746 females. Sum paid for relief of the poor in 1847, 39,022*l.* Ann. value of real property in 1815, 737,438*l.*, do. in 1843, 910,334*l.*

CUMBERNAULD, a manufacturing village of Scot-

land, co. Dumbarton, 13 m. E. Glasgow, on the highway leading from that city to Falkirk, Stirling, &c. Pop., 1821, 950; 1841, 2,227; and it is supposed to have increased nearly as fast since last census. The chief employment of the people is cotton weaving, there being above 560 looms in the parish, of which nearly 400 belong to the town. The average weekly earnings of the weavers is stated by the minister of the parish "not to exceed 5*s*. or 6*s*. clear." (*New Statist. Acc. of Scotland*, part xxii.) The Forth and Clyde canal runs within a ¼ m. of the town; and the Edinburgh and Glasgow railroad, now being made, will run still nearer it; so that its means of communication will be of the very best description. It was erected into a burgh of barony in 1649; and has for five centuries been the property of the eminent family of Fleming, whose seat is in its immediate vicinity. Poor rates in 1847, 323*l*. It has a parish church, two dissenting chapels, and a good subscription library.

CUMNOCK, or OLD CUMNOCK, a village of Scotland, co. Ayr, on the Lugar water, 12 m. E. Ayr. Pop. about 1,200. This place has been famous for above 30 years for the beautiful and ingenious manufacture of what are known by the name of Cumnock, or Lawrencekirk, snuff-boxes. This manufacture (to use the words of the *New Statist. Acc. of Scotland*, art. *Old Cumnock*) rose from a very small and rude beginning to its present state of perfection. An ingenious artist of the name of Crawford caught the first idea of them from a box made at Lawrencekirk (where they were first made), which had been sent him to repair. The distinguishing excellence of the Cumnock snuff-boxes lies in the hinge, which is both extremely ingenious in point of contrivance and delicate in point of execution; so that it is, with much propriety, styled the "invisible wooden hinge." The wood used in the manufacture is plane, by reason of its peculiarly close texture. One set of artists make the boxes; another set paint those beautiful designs that embellish the lids; while women and children are employed in varnishing and polishing. The process of varnishing a single box takes from three to six weeks. Spirit varnish takes three weeks, and requires about 30 coats; while copal varnish, which is now mostly used, takes six weeks, and requires about 15 coats to complete the process. When the process of varnishing is finished. the surface is polished with ground flint; and then the box is ready for the market. The principle on which the hinge is formed, as well as the instruments employed in making it, were for many years kept secret. Hence the price of a box, owing to want of competition, was exorbitantly high, being about 20 times its present price, now that the secret has been disclosed, and competition allowed freely to operate; in other words, a box may now be got for 15*d*. or 18*d*., which formerly cost 25*s*. or 30*s*.! These ingenious specimens of art have been brought to the highest degree of perfection, particularly so far as the variety and exquisite finish of the painting are concerned. The yearly value of the boxes made in Cumnock may, at wholesale price, average about 1,600*l*. sterling. (*Ib.*) The total number of persons employed in the manufacture is about 50; and the aggregate number of boxes annually produced is between 25,000 and 35,000. The manufacture prevails to a similar extent in the neighbouring village of Mauchline, as also, to a less degree, in Lawrencekirk, Montrose, and one or two other places. (*Vide ut suprà*, compared with the art. *Snuff-boxes*, in *Com. Dict.*)

CUPAR-ANGUS, a burgh of barony of Scotland, partly in co. Perth, and partly in Angus, on the Isla, a tributary of the Tay, on the high road between Perth and Aberdeen, about 12¼ m. from the former. Pop. 2,000. It is neatly built, well paved, and lighted; has a town-house and jail, an elegant parish church, two chapels belonging to Presbyterian dissenters, and an Episcopal chapel; a weekly cattle-market, and five annual fairs. The town enjoys its share of the weaving of the coarser kinds of linen fabrics, for the manufacture of which the various towns and villages of Angus are distinguished. The webs are generally obtained from Dundee. It has also extensive bleach-fields and tan-pits; but weaving is the staple employment of the place.

CUPAR-FIFE (so called to distinguish it from Cupar-Angus), a royal and parl. bor. of Scotland, co. Fife, of which it is the cap., 25 feet above the level of the sea, in the centre of the *Howe* of Fife, and on the l. bank of the Eden, 10 m. W. St. Andrew's. Pop. 5,137. Though ancient, Cupar has at present all the characteristic appearances of a modern town. The streets seem as if they had been recently built; and are wide, well built, lighted with gas, and partially paved. The county-hall is a handsome modern structure. Manufactures, too, for which the water of the Eden affords great facilities, have been introduced: there are three spinning-mills, of which two are employed in spinning flax, and one in spinning thread; the aggregate number of hands engaged in them is 236. But the manufacture of the coarser fabrics of linen form the staple trade of the town. There are 10 master linen manufacturers, and 600 weavers; and as every two weavers require one to wind for them, 900 persons are constantly employed, all of them living in their own houses, and labouring in their own workshops, either in the town or its vicinity. (*New Stat. Acc. of Scotland.*) There are corn, barley, and flour mills, reckoned the best in the co., a snuff-mill which manufactures 60,000 lbs. of snuff a year, a washing or fulling mill, a glue manufactory, three breweries, two tan-works, a tile and brick work, at which coarse earthenware is made, and a rope-work. Cupar has long had a flourishing joint-stock academy, with numerous other schools; and the bequest by Dr. Bell of 10,000*l*., for educational purposes according to the Madras system, has recently become available. As the seat of the co. courts, it has no fewer than 30 legal practitioners, exclusive of clerks. There are two reading-rooms and a subscription library, containing 4,000 volumes. The only newspapers (two in number) published in the co., belong to Cupar. It has long been eminent in the typographical art; the beautiful and accurate editions of Virgil, Horace, and other classics, superintended by Dr. Hunter of St. Andrews, having been printed here by the late Mr. Tullis. Besides the par. church, there are four Presbyterian dissenting chapels, one Episcopal, and one Glassite chapel. There is a savings bank, and poor-rates are unknown. Cupar is associated with St. Andrew's, the two Anstruthers, Crail, Kilrenny, and Pittenweem, in returning a mem. to the H. of C. Registered electors in 1850, 346. Municipal do., 246. Corporation revenue, 160*l*. 5*s*. It is governed by a provost, 3 bailies, and 23 counsellors. Cupar was a royal bor. so far back, at least, as the reign of David II. On a mound at the E. end of the town, called the Castle-hill, formerly stood a castellated fortress, the chief residence of the family of Macduff, the feudal thanes or earls of Fife. At the foot of this mound was a convent of dominican or black friars, founded by the Macduffs, and afterwards annexed to St. Monance in the same co. (*Keith's Scot. Bishops*, ed. 1824, p. 445.); but of these two buildings no traces are now extant. The patrimonial estate of the famous Scottish poet, Sir David Lindsay of the Mount, was within a short distance of Cupar; and on a verdant esplanade, still called the Play Field, in front of Macduff Castle, was acted, in 1555, his witty drama of the *Three Estates*, a popular satire on the priesthood, and which is thought to have had no mean effect in hastening the Reformation. (*Ib.*, *Boundary Returns*, and *Chambers's Gazeteer.*)

CURACOA or CURASSAO, an isl. in the Caribbean Sea, belonging to the Dutch, off the N. coast of Venezuela, between lat. 12° and 12° 13′ N., and long. 68° 44′ and 69° 13′ W. Length, N.W. to S.E., about 43 m.; average breadth about 14 m.; area, 600 sq. m. Pop. in 1815 nearly 13,000; of whom 6,000 were slaves, 4,000 free-coloured, and 2,780 whites. Its shores are bold, and its interior is in parts hilly. It has several harbours, the chief of which is that of Santa Anna, in the S.W., where its principal town is built. The soil is in general poor and rocky, and there is a great deficiency of water; but by the industry of the inhab., some tobacco, sugar in considerable quantities, indigo, &c., are grown; and a good deal of salt is obtained from the marshes. Maize, cassava, figs, oranges, citrons, and most European culinary vegetables are cultivated; but provisions are not produced on the island in sufficient quantity for its inhab. Curaçoa was formerly noted for its contraband trade; but since the independence of S. America, this has greatly diminished. The government is conducted by a *stadtholder*, assisted by a civil and military council. Wilhelmstadt, the cap. and seat of government, is one of the neatest cities in the W. Indies; its public buildings are magnificent, the private houses commodious, and the clean streets remind the traveller of those in the Dutch towns. The port of Curaçoa has a narrow entrance, but is large and safe. It is protected by the fort of Amsterdam and other batteries; but was taken by a squadron of four English frigates in 1807. Two smaller islands, one on either side, Buen Ayre and Oruba, also belong to the Dutch. Their inhab. are chiefly cattle-breeders.

CUSTRIN or KUSTRIN, a strongly fortified town of the Prussian states, prov. Brandenburg, on the Oder, where it is joined by the Warta, 52 m. E. Berlin. Pop. 5,840. The Oder is here crossed by a bridge nearly 900 ft. in length, uniting the citadel with the town; being surrounded by marshes, it is strong as well by nature as by art. The Russians burnt the town (without, however, taking the fort) in 1758. It was soon after rebuilt on a greatly improved plan. The fortifications have been much improved since the peace of 1815.

CUTCH-GUNDAVA, an inl. prov. of Beloochistan, differing in some important respects from all the others, being by far the most valuable portion of that country, and its only prov. E. the Brahooick Mountains. It lies between lat. 27° 40′ and 29° 15′ N., and long. 67° 20′ and 69° 30′ E. Length N. to S. about 120 m; breadth of its

habitable and fertile part a little more than 60 m.; having N. Sewestan (Caubul), E. and S. Sinde, and W. the prov. Thalawan. It is for the most part a plain, bounded by deserts on the N. S. and E.; and watered by several rivulets communicating by numerous aqueducts. Soil rich and loamy, and so exceedingly productive that it is said were it all cultivated, the crops would be more than sufficient to supply all Beloochistan; as it is, considerable quantities of grain, besides cotton, indigo, and oil, are exported. It is alleged, but probably without foundation, that rice will not grow in Cutch Gundava, notwithstanding the luxuriance of all other crops, and the plentiful supply of water. Climate oppressively hot throughout the summer, when the simoom is frequently experienced; during winter it is so mild that the chiefs and principal inhabitants of the adjoining W. provinces resort thither. The bulk of the pop. are Juts; there are a few Hindoos in the towns and villages, who live by barter, transporting grain, &c. Villages extremely numerous. The chief towns are Gundava, the cap., Dadur, Bhag, and Lheree. (*Pottinger's Travels in Beloochistan*, i. 308. 311—321. 325, 326. &c.)

CUTTACK, a large marit. distr. of Hindostan, prov. Orissa, presid. Bengal, between lat. 19° 30′ and 21° 40′ N., and long. 84° 30′ and 87° E.; having N. the distr. Midnapore and the Berar ceded districts, W. the latter, S. Ganjam, and E. the Bay of Bengal. Area 9,000 sq. m. Pop. 1,984,600. It consists of three different tracts of country, — the marshy coast, the dry central region, and the hilly country to the W. The latter abounds with trees, valuable either for cabinet-work, dyeing, or varnish-making. Rivers numerous; the chief are the Mahanuddy, Brahminy, Coyle, and Subunreeka; all these are of considerable size, and even the minor streams swell, during the rains, to an enormous magnitude, rendering the construction of extensive and solid embankments necessary in many parts of the distr. The periodical rains are not so early here as in Bengal; the summer heats are very oppressive, and the forests of Cuttack are generally highly insalubrious. They are also much infested with ferocious wild animals, especially leopards; and reptiles, many of which are venomous. Rice of different qualities, wheat and maize, in the hilly tracts, the sugar-cane, pulse, aromatic roots, spices, and dyeing-drugs, are the chief articles of culture. Several kinds of granite, slate, and iron ore are found, and gold dust in the beds of the mountain torrents. The land is not assessed under the permanent settlement, as is the case in the adjoining prov. of Bengal; but an agreement is usually made between the government and the landholders for a certain term, the amount of the land-tax being by no means fixed. A considerable proportion of the territory in the W. or mountainous region, is in the possession of a number of nearly independent zemindars, each of whom maintains a kind of sovereign state, and pays but a light tribute. A more valuable source of revenue to th government than the land-tax has been the monopoly of salt, much of which, remarkable for whiteness and purity, is made on the coast of this district. The chief towns are Cuttack the cap., Balasore, and Juggernaut, the seat of the celebrated temple of that name. (*See* JUGGERNAUT.) Cuttack was acquired by the British, on the expulsion of the Mahrattas, and the reduction of the Juggernaut rajah in 1803-4. In 1817, the too rapid introduction of the revenue, and judicial systems established in Bengal, amongst the rude and barbarous inhabitants of Cuttack, together with the evils of over-assessment and mismanagement, excited a rebellion in this distr., which was subdued in the ensuing year, but at the expense of much treasure, and the loss of many lives. (*Hamilton's E. I. Gaz.* i. 469—472.; *Parl. Reports, &c., Revenue Section.*)

CUTTACK (*Catak*, a royal residence), a town of Hindostan, cap. of the above distr., seat of its principal judicial court, &c., on the Mahanuddy, and in the rainy season insulated by two of its branches, 220 m. S.W. Calcutta; lat. 20° 27′ N., long. 86° 5′ E. Pop., a few years since, 40,000. Its principal street is well built, and it has many houses two and three stories high, a spacious market-place, some handsome Mohammedan structures, and some military cantonments. The dwellings of the civil establishment are dispersed over the environs. This town is secured from inundation by large and solid embankments along the river: the value of these was sufficiently proved in 1817, when during the heavy rains the waters of the river rose in one night 18 ft., or 6 ft. above the general level of the town, which was only preserved by their means. Cuttack is said to have been a capital as early as the 10th century. (*Hamilton*, i. 472.)

CUXHAVEN, a sea-port town of N. Germany, immediately within the æstuary of the Elbe, on its S.W. side, in a detached portion of territory belonging to Hamburgh, from which it is distant 55 m. W.N.W.; lat. 53° 52′ 21″ N., long. 8° 43′ E. It has about 100 houses, and 800 inhab., a good harbour, with deep water, a lighthouse, and is a quarantine station. It was formerly the rendezvous of most passengers to and from England and the Elbe; but since the establishment of steam-packets, they are conveyed direct to and from Hamburgh. Vessels entering the Elbe generally heave to opposite Cuxhaven for pilots, by whom it is mostly inhabited. In summer it is resorted to by sea-bathers.

CUZCO, an inland city of Peru, formerly the cap. of the empire of the incas, at the foot of some hills, having an extensive valley opening to the S.E., said by Mr. Pentland to be 11,380 ft. above the level of the sea, about 400 m. E.S.E. Lima; lat. 13° 30′ 55″ S., long. 72° 4′ 10″ W. Pop. unknown, but estimated in 1825 at 40,000, mostly Indians. The cathedral and convent of St. Augustine are said to rank amongst the finest religious edifices in the New World; and it had a few years ago 6 churches, 8 convents, besides that of St. Augustine, 4 well-endowed hospitals, 3 monasteries, a university, and 3 collegiate schools. But Cuzco derives most part of its interest from the historical associations connected with it, and from its remains of the architecture of the incas. In fact, great numbers of the private houses belong to that æra; and by the size of the stones, and the fineness and peculiarity of the buildings, give to the city a venerable imposing air. The Dominican convent, a magnificent structure, is raised on walls that formed part of the famous temple of the sun destroyed by the fanatical zeal of the Spaniards. Ulloa says that the high altar stands on the very spot formerly occupied by the golden image of the sun. Upon a hill to the N. of the city are the ruins of a very extensive fortress, the work of the incas, the walls of which are of the species named Cyclopean, and have a striking analogy to the so-called structures found in various parts of Greece, Italy, &c. Some of the stones, which are all of angular shapes, are of such an enormous size, that their weight is said to exceed 150 tons! and, though no cement be used in the building, they are so admirably jointed and fitted together that the interstices are hardly perceptible. It is very difficult to imagine how such vast blocks could have been conveyed from the quarries and placed on the walls without the aid of powerful machinery. In the plain to the S. of the city are extensive remains of ancient edifices in the same style; and it is said by Alcedo that a subterranean passage led from the palace of the incas to the fortress, and that a road was constructed from the city to Lima.

The inhab. have been described as industrious, and as excelling in embroidery, painting, and sculpture. There are manufactures of cotton, linen, and woollen stuffs, and of leather and parchment. A considerable trade is carried on in these and in the products of the adjacent district. But despite all this, the markets are said by General Miller to be "very ill supplied."

Cuzco is the most ancient of the Peruvian cities; its origin dating from the æra of Manco Capac, the founder of the empire of the incas, probably in the 12th century. Pizarro took possession of it in 1534; and was shortly after besieged in it by the whole Peruvian force. During this siege a great part of the town was destroyed. (*Modern Traveller*, xxviii. 289.; *Ulloa, Voyage de l'Amérique*, i. 507.; *Geogr. Journ.* viii. 427.)

CYPRUS, a famous and considerable island, in the N.E. angle of the Mediterranean, between Asia Minor and Syria, at present belonging to Egypt, 44 m. S. Cape Anamour in the former, 65 m. W. Latakia in the latter, and 330 m. E. Crete; between lat. 34° 34′ and 35° 42′ N., and long. 32° 18′ and 34° 37′ E. Shape somewhat oval, with a considerable promontory projecting E.N.E. from the main body of the island: greatest length, 132 m.; average breadth from 30 to 35 m. Pop. estimated at 70,000, of whom 40,000 are Greeks. It is intersected lengthways, or from E. to W., by a range of mountains, the highest point of which, St. Croce (an. *M. Olympus*), is about 15 m. S. Nicosia. The principal river Pedia (an. *Pedæus*) consists of two main branches; it flows E. through the centre of the island, having its embouchure near the ruins of Constantia, on the E. coast; but this, like most of the other rivers, is but of limited dimensions, and is nearly dried up in summer. Cyprus is also otherwise ill supplied with water, that obtained from most of the wells being brackish. The principal plains lie along the banks of the Pedia, and the S. coast of the island. The climate differs in different parts: along the N. shore it is comparatively temperate; the winds coming from the cold mountainous districts of Asia Minor, temper the heat in summer, and in winter produce piercing colds on the mountains, which are covered with snow for several months. But it is otherwise in the plains along the S. and E. coasts: these consist, for the most part, of a whitish soil which has an offensive glare, and being defended from the N. and N.W. winds by the mountains, at the same time that they are exposed to the full sweep of the E., S. E., and S. winds from the Syrian, Arabian, and Lybian deserts, they have a higher temperature than any other place in the Levant. During the summer heats *malaria* is frequently generated; and long droughts, combined with the want of industry, and the neglect of irrigation, not unfrequently destroy

the crops. The soil is naturally fruitful and, in antiquity, Cyprus was famous for its fertility, and the variety and excellence of its products. Even now, though only a very small portion of the land be cultivated, and that in the most wretched manner, the merchants of Larnica annually export several cargoes of excellent wheat to Spain and Portugal. The best, as well as the most agreeable parts of the island are in the vicinity of Cerina and Baffa, the ancient Paphos. (*See* Baffa.)

Cotton, of a superior quality, is produced in trifling quantities; but under the Venetians, the island annually exported about 30,000 bales. It then also exported considerable quantities of sugar, produced from plantations of canes in the vicinity of Limasol and Baffa. There are extensive forests of oak, beech, and pines; groves of olives and plantations of mulberries. It is remarkable for the fineness of its fruits, and its rich sweet wine, oil, and silk. The latter is of two kinds, yellow and white, but the former is preferred. The wheat is of a superior quality, affording excellent bread; and rice, madder, and an endless variety of other valuable products, might be cultivated in several parts of the island.

The wines of Cyprus, particularly those produced from the vineyard called the Commandery, from its having belonged to the knights of Malta, were formerly more highly prized for desserts than even those of Crete. In the earlier part of last century, the total produce of the vintage was supposed to amount to above 2,000,000 gallons, of which nearly half was exported; but now, the wine grown and exported does not amount to a tenth part of these quantities. "Perhaps," says Dr. Clarke, "there is no part of the world where the vine yields such redundant and luscious fruit: the juice of the Cyprian grape resembles a concentrated essence. The wine of the island is famous all over the Levant. Englishmen, however, do not consider it as a favourite beverage; it requires nearly a century of age to deprive it of that sickly sweetness which renders it repugnant to their palates. Its powerful aperient quality is also not likely to recommend it. When it has remained in bottles for 10 or 12 years, it acquires a slight degree of fermentation upon exposure to the air; and this, added to its sweetness and high colour, causes it to resemble Tokay more than any other wine. It will keep in casks, to which the air has access, for any number of years. If the inhabitants were industrious, and capable of turning their vintage to the best account, the red wine of the island might be rendered as famous as the white, and, perhaps, better suited for exportation." (*Travels*, iv. 19.)

But the brutal despotism under which it has groaned for centuries, has depopulated the island, and rendered the few inhabitants, it now contains, remarkable only for indigence, sloth, and apathy. In antiquity, the pop. probably fell little short of 1,000,000; and in 1571, when it was conquered by the Turks, it had a pop. of about 400,000, or nearly six times its present amount. No where, indeed, as Mr. Kinneir has truly stated, is the baleful influence of the Ottoman dominion more conspicuous than in Cyprus, where it has literally turned cities into miserable villages, and cultivated fields into arid deserts. In describing his journey from Larnica to Nicosia, Dr. Clarke observes: "The soil every where exhibited a white marly clay, said to be exceedingly rich in its nature, although neglected. The Greeks are so oppressed by their Turkish masters, that they dare not cultivate the land: the harvest would instantly be taken from them if they did. Their whole aim seems to be to scrape together sufficient, in the course of the year, to pay their tax to the governor. The omission of this is punished by torture or by death: and in cases of their inability to supply the impost, the inhab. fly from the island. So many emigrations of this sort happen during the year, that the pop. of all Cyprus scarcely exceeds 60,000 persons, a number formerly insufficient to have peopled one of its many cities. The governor resides at Nicosia. His appointment is annual, and as it is obtained by purchase, the highest bidder succeeds; each striving, after his arrival, to surpass his predecessor in the enormity of his exactions. From this terrible oppression, the consuls and a few other families are free, in consequence of a protection granted by their respective nations." (*Travels*, iv. 55.; see also to the same effect, *Walpole's Travels*, ii. 21.)

Mr. Kinneir states, that "the governor and the archbishop deal more largely in corn than all the other people of the island put together: they frequently sieze upon the whole yearly produce, at their own valuation, and either export or retail it at an advanced price; nay, it happened more than once, during the war in Spain, that the whole of the corn was purchased in this manner by the merchants of Malta, and exported without leaving the lower orders a morsel of bread." (pp. 182, 183.) We have seen no very recent accounts of the condition of Cyprus, under the rule of Mehemet Ali; but, unless the pacha have established a different government in it from what he has established in Egypt, the miserable inhabitants have gained little by the change.

Sheep and cattle are bred in considerable numbers. There is abundance of game, such as partridges, quails, woodcocks, and snipes; there are no wild quadrupeds, excepting foxes and hares, but many kinds of serpents, and the tarantula. Clouds of locusts sometimes devastate the country. The ancient mines of Cyprus, now wholly neglected, afforded large quantities of the finest copper (*Æs Cyprium*), whence, though that be very doubtful, the name of the island has been supposed to be derived: it is also said to contain ores of gold, silver, and other metals, and has a species of rock-crystal called Paphos diamond. Amianthus or asbestos of a very superior quality is found near Baffa; it is flexible as silk, white, and more delicately fibrous than that of any other country. Mariti states that a village, called Amianthus, existed in Cyprus in his time; and it was most probably the spot where the amianthus, or incombustible cloth, used by the ancients to wrap up the bodies of distinguished persons when laid on the funeral pile, was principally produced. (*Travels*, i. 177.) Salt is obtained by evaporation at various places on the S. coast. The inhab. manufacture small carpets, some silk and cotton fabrics, and excellent Turkey leather. Under the Turks this island was divided into three sanjiacks — those of Baffa, Cerina, and Nicosia. Nicosia, in the centre of the island, is the cap. The other principal towns are Larnica, on the site of the ancient Citium, Limasol, Famagusta on the E., Cerina (an. *Cerinia*) on the N., and Baffa (*Paphos*) on the W. coast. Even the ruins of most of the ancient cities mentioned by Strabo have disappeared; but at Constantia, near Famagusta, Kinneir traced the circ. of the ancient walls, and the foundations of some buildings; and at Larnica medals and other antiquities are frequently dug up. The remains of a monastery, built by a princess of the house of Lusignan, stand about 4 m. S.E. Cerina. Cyprus was originally peopled by the Phœnicians. It was colonised by the Greeks, and successively possessed by the Egyptians, Persians, Greeks, and Romans. In antiquity, it was as famous for the worship of Venus as Delos for that of Apollo and Diana. This, in fact, was the favourite seat of the goddess, "*diva potens Cypri*." Divine honours are supposed to have been first paid to her at Paphos (*see* Baffa), where she had a magnificent temple —

> "— ubi templum illi, centumque Sabæo
> Thure calent aræ, sertisque recentibus halant."
> *Æneid*, i. 415.

But the whole island was sacred to Venus; and besides Paphos, other three cities were celebrated for her worship.

> "Est Amathus, est celsa mihi Paphos, atque Cythera,
> Idaliæque domus." *Æneid*, x. 51.

Hence the epithets Cyprian, Paphian, Idalian, &c., applied to Venus. It is alleged that the ladies of the island are still devotedly attached to the worship of the goddess.

After the fall of the western empire, Cyprus formed part of the Byzantine empire, from which it was taken by the Saracens. Isaac, a prince of the Comneni family, having usurped the sovereignty, was dethroned, in 1191, by Richard I., king of England. The latter having conferred the island on Guy de Lusignan, to indemnify him for the loss of Jerusalem, it continued in possession of his family for three centuries, or till 1480, when, on default of heirs, it fell to the Venetians. The Turks took it from them in 1571. Bregadino, the gallant defender of Famagusta, after exhausting every resource, at last capitulated on honourable terms. No sooner, however, had the place been delivered up than the capitulation was disregarded; and Bregadino himself was skinned alive and impaled, — a dreadful augury of what the population was to suffer under the dominion of such barbarous ruffians. It is now in the possession of Mehemet Ali. (See *Mariti's Travels in Cyprus*, passim; *Clarke's Travels*, iv. 11—80.; *Kinneir's Journey through Asia Minor*, pp. 176—197 &c. &c.)

CZEGLED, a large market town of Hungary, between the Danube and Theiss, co. Pesth, on the high road between that city and Debreczin, 39 m. S.E. the former, and 84 m. W.S.W. the latter. Pop. 14,662 (*Berghaus*), chiefly Protestants. A great deal of ordinary red wine is made here, as well as beer. (*Oesterr. Nat. Ency.*, &c.)

D.

DACCA, or DHAKA, an inland city of Hindostan, prov. Bengal, formerly very extensive, populous, and rich, and still one of the principal cities of the Bengal presidency, and the seat of a court of circuit and appeal for the seven E. distr. of Bengal. It extends, with its

suburbs, for 6 m. along a river which, uniting with the Ganges on the one hand and the Brahmaputra on the other, affords the greatest facilities to commerce: lat. 23° 42′ N., long. 90° 17′ E., 127 m. N.E. Calcutta, and 116 E.S.E. Moorshedabad. Pop. probably above 200,000. Like other native towns, it is a mixture of brick, thatch, and mud houses, with narrow and crooked streets. The bulk of the houses are so very combustible, that they are usually burned down once or twice a year; but bamboos, mats, and thatch being extremely cheap, to rebuild them costs only a few rupees! According to Heber, Dacca is like the worst part of Calcutta, near Chitpoor, but with some really fine ruins intermingled with the huts, which cover three fourths of its area. There are few European houses, and these mostly small and mean, compared with those of Calcutta. Some Greek buildings, which were the favourite residence of the late nabob, were ruined a few years ago by the encroachments of the river. In the 17th century Islam Khan built a palace and fort here, the ruins of which form an imposing object; and toward the end of the same century a grandson of Aurungzebe commenced and finished a magnificent palace, now also in ruins. The pagodas are few and small, owing to the ascendancy of Mohammedanism, and almost every brick building has its Persian or Arabic inscription. There is a small but pretty Gothic English church; and a burial ground about a mile from the city, containing some handsome tombs, both Christian and Mussulman. There are several obelisks in and around the city; and about 4 m. off is a beautiful Gothic bridge, said to have been constructed by a Frenchman, but, like most of the other public edifices, in a state of ruin. All the buildings beyond the inhabited portion of the city are surrounded by ruins and rank vegetation; and the castle, factories, and churches, of the Dutch, French, and Portuguese, have all fallen into decay. English goods and manufactures, or imitations of them, are to be met with in the bazaars; but no vessels larger than small country-built brigs come up the river, and the trade is reduced to the fiftieth part of what it was. The striped and flowered muslins of Dacca were formerly regarded as inimitable, and were in great request at the Mogul court, and other native Indian courts, as well as at the old court of France. The manufacture was hereditary in several families, but has been annihilated by the destruction of the native courts and the wealthy native nobles. Its loss has been very generally ascribed to the importation of the cheaper muslins of England, but this is an entire mistake; it was wholly suppressed before a yard of British muslin or calico found its way to India. The manufacture, in fact, was never carried on upon a large scale; and being one of luxury only, it fell with the fail of the wealthy class, who alone purchased its products. (See *antè*, p. 357.) The cotton grown in the district is now mostly exported to England. There are some respectable Greek, Portuguese, and Armenian merchants, but Englishmen are not numerous at Dacca: the Serampore mission has, however, had a station here since 1816; schools have been established at different times, and in 1836 the government school was attended by 149 pupils. At the beginning of the present century, the proportion of Mohammedans to Hindoos was 145 to 130. The country round Dacca being always covered with verdure during the dry months, it is comparatively free from violent heats, and is reckoned one of the healthiest stations in Bengal.

Dacca is comparatively modern: it is not mentioned by Abul Fazel. From 1608 to 1639 it was the metropolis of Bengal, and again attained to that dignity in 1657, the commencement of the æra of its greatest splendour, when, judging from its ruins, it must have vied in extent and wealth with the largest cities of India. Its decline began with the disorders consequent to the invasions of Nadir Shah. In 1744 the establishment of a provincial council helped to revive it, but on the removal of this its decay recommenced. (*Hamilton's E.I. Gaz.*, i. 477, 478.; *Mod. Trav.*, ix. 134—145.; *Rennel's Memoir*, p. 61., &c.)

Dacca, and Dacca Jelalpore, two districts of Hindostan, prov. Bengal, chiefly between lat. 23° and 24° N., and long. 89° 30′ and 91° E.; having N. the distr. Mymunsing, E. Tipperah, S. Backergunge, and W. Jessore and Rajishaye. Subjoined is a statement of the area of these districts, with their pop. and revenue at the undermentioned periods:—

	Area.	Pop. (1822).	Land Rev. (1829-30).
			L.
Dacca - -	1,870 sq. m.	512,385	} 40,836
Dacca Jelapore	2,585	583,375	
Total -	4,455 sq. m.	1,095,760	40,836

The country is almost a dead flat, studded with lakes, and intersected by the two great rivers, Brahmaputra and Ganges. During the rainy season it exhibits the appearance of an inland sea, over which the villages, raised on artificial embankments, are scattered like so many islands. The land fertilised by such extensive inundations is extremely productive; but a large proportion of it is covered with jungle, and infested with elephants, tigers, and other wild animals, which do considerable damage to cultivation. These, however, are much less numerous now than formerly; and a great deal of the land that had been overspread with jungle has latterly been cleared, and brought into cultivation. The banks of the Comercolly river, one of the arms of the Ganges, are populous, and well cultivated, producing rice, sugar, cotton, and indigo; a species of cotton called banga, though not of a superior quality, very well adapted for the fine striped muslins, for which this prov. was long famous, used to be grown in large quantities. The land is subdivided into extremely small estates; and the constant shifting of the river-courses alters their extent and boundaries so much, that the assessment and collection of the revenue have always been matters of much difficulty. Dimities, cloths resembling diaper, and damask linen, are now the chief manufactures. About half the pop. are Hindoos, and half Mohammedans. Slavery is pretty prevalent. These districts had formerly an unenviable notoriety, from the number and enormity of the crimes committed in them, but in this respect they have lately very much improved. There are numerous Hindoo schools, for instruction in the Bengalee language, religion, and laws. Chief towns, Dacca, Narraingunge, Soonergong, and Rajanagur. (*Hamilton's Hindostan*, i. 180—183; *E.I. Gaz.*, i. 474—476; *Mod. Trav.*, ix. 133.; *Reports on Affairs of the E. I. Comp.*)

DAHOMEY, a country of Africa, on the Guinea coast, of which the boundaries are far from being well defined, but which is supposed to extend between about 6° and 8° or 9° N. lat., and from 1° to perhaps 3° E. long., having W. Ashantee, E. Yarriba and Benin, and S. the Atlantic Ocean. As far as has been hitherto discovered, this country is destitute of any hill whatever, and consists of an immense plain rising gradually from the sea to the Kong Mountains, which are here from 150 to 200 m. inland. The Volta and Loka rivers bound it on the W., but, excepting these, there seems to be no stream of any considerable importance. The country is, however, well watered, and interspersed with small marshes. The soil is wholly alluvial; not a stone is to be met with; the surface is covered with a vegetation of unbounded luxuriance; and the beauty and excellence of the country are spoken of in terms of the highest admiration. (See the statements of Bosman, Phillips, &c., in the *Histoire Générale des Voyages*, iv. 274, *&c.*) Oranges, limes, guavas, and other tropical fruits, melons, pine-apples, yams, &c., grow wild; and maize, millet, and other grains, potatoes, indigo, cotton, sugar, tobacco, and spices, are successfully cultivated. In some parts the country is covered with dense forests, the retreat of lions, hyenas, leopards, elephants, and overgrown serpents. Deer and domestic animals are plentiful. Previously to the early part of last century this country was divided into a number of petty states, and is represented as having been populous and well cultivated. The Dahomans, by whom it was overrun and laid waste, came from the interior of the Continent. They are said to be hospitable to strangers, brave and resolute; and these, if they exist, would appear to make up the whole amount of their good qualities. Their disposition seems, from their conduct, to be a compound of that of the tiger and the spaniel, exhibiting the utmost ferocity and thirst for blood with the most abject servility. All the most arbitrary forms of eastern despotism seem to be mild and free, when compared with that established in this wretched country. It is singular, too, that this despotism is not founded upon force and terror, nor is it connected with any thing timid or effeminate in the character of the people. It rests on a blind and idolatrous veneration for the person of the sovereign, as for that of a superior being. He is the absolute master of the lives and properties of his subjects, and disposes of them at pleasure. It is a crime in the latter to suppose that the king eats, drinks, sleeps, or performs any of the functions of an ordinary mortal. A sovereign of the name of Bossa having succeeded to the throne, caused all the persons of the same name in his dominions to be put to death, conceiving it to be an unpardonable presumption that any subject should bear the same name with his master. The greatest lords can only approach the king lying flat on their faces, and rolling their heads in the dust. The attempts thus made to inspire the people with reverence for their monarch, seem to have been completely successful. The Dahoman rushes to battle in obedience to the orders of his king with a blind, unthinking, brute confidence. Norris having asked a Dahoman before battle if he did not think the enemy too numerous; the latter replied, "I think of my king, and then I dare engage 5 of the enemy myself." He declared his indifference whether he survived or not; adding, "It is not material; my head belongs to the

king, not to myself; if he pleases to send for it, I am ready to resign it; or if it is shot through in battle, it is no difference to me, I am satisfied." After such statements, the reader will not be surprised to learn that human skulls form the favourite ornament in the construction of the palaces and temples. The king's sleeping chamber has the floor paved with the skulls, and the roof ornamented with the jawbones, of chiefs whom he has overcome in battle. Every year a grand festival is held, which lasts for several weeks, and during which the king waters the graves of his ancestors with the blood of hosts of human victims. The bodies of those unhappy men are not even interred, but are suspended by the feet to the walls, and left hanging till they putrefy.

Perhaps, however, the most extraordinary fact connected with this barbarous horde is, that all the women are monopolised by the sovereign; and that no individual can possess himself of either a wife or a concubine except by gift of, or purchase from, the king; and whether the lady be young or old, handsome or the reverse, she must be equally acceptable to the slave to whom she is given or sold! The king keeps, of course, a goodly seraglio for himself; and at his death his wives and concubines fall to murdering each other, till the carnage be stopped by the interference of the new king. After these statements, it will only appear consistent and natural that the *tiger* should be the principal *fetiche*, or object of worship, among the Dahomans!

We are glad to have to add that, despite their ferocity, this most detestable of barbarian hordes has been checked in its devastating course. A number of the petty states it had subdued have emancipated themselves; and it appears probable that the sovereign of Dahomey is now tributary to the sovereign of Yarriba.

Next to Abomey, the cap. and residence of the king, about 80 m. inland, Whydah, Ardrah, Aoona, Calmina, &c., are the chief towns or villages. (*Ritter's Africa; Dalzel's History of Dahomey; Bowdich, &c.; Norris.*)

DALECARLIA, a prov. of Sweden, which see.

DALKEITH, a bor. of barony and market-town of Scotland, co. Mid-Lothian, on the road from Edinburgh to Coldstream, 5½ m. S.E. Edinburgh, on a peninsular neck of land between the N. and S. Esks, which unite about a mile E. from the town, and fall into the Frith of Forth at Musselburgh. Pop. (1841) 4,831. It is a clean, well-built town; the principal street, which is wide and handsome, runs from E. to W., and there are several subordinate streets. Its public buildings are, — a parish church (an old Gothic edifice, used as a collegiate church before the Reformation), three chapels belonging to Presbyterian dissenters, and one belonging to the Independents. An elegant new parish church was erected here in 1839. Dalkeith has long been eminent for its educational institutions, particularly its classical school. A subscription library established in 1798, contains 2,300 vols. In 1835 a scientific association was formed for procuring the delivery of popular lectures on science, which has hitherto been eminently successful. This town, like other burghs of barony, was originally under the exclusive management of the baron or superior and his bailie; but, in 1759, an act of parliament was obtained, appointing certain trustees to superintend the paving, cleaning, and lighting the streets, to supply the burgh with water, and to provide a revenue for these purposes by imposing a small tax on the ale, porter, and beer consumed in the parish. The power of the baron or his bailie is now very limited both as to civil and criminal matters. Dalkeith is chiefly celebrated for its grain market, which is held every Thursday, and is reckoned the largest market of the kind in Scotland. The quantity of the different kinds of grain exposed for sale in the market for the year ending July 1. 1839, was as follows: — wheat, 10,220¼ quarters; barley, 15,803 do.; oats, 43,630½ do.; peas and beans, 1,821¼ do.: in all, 71,475¾ quarters. The sales this year, however, were greatly below the average, which is about 100,000 quarters. There is another market of considerable extent held here every Monday for the sale of meat, flour, and pot-barley. There are in the town or immediate vicinity, extensive flour and corn mills, both on the N. and S. Esks, a brewery, an iron-foundry, a tannery, and currying works. There are no fewer than five branch banks in the town. The burgh is distinguished by the number of its shops and the extent of business done in them; circumstances that result from the eminence of its grain and other markets. The Dalkeith and Edinburgh railroad, which connects these towns, was commenced in 1827, and opened for goods and passengers in 1831. Branch lines have since been formed, leading to Portobello and Leith on the one hand, and Fisher-row, near Musselburgh, on the other. The Duke of Buccleuch has, at his own expense, brought the Dalkeith line into the centre of the burgh, and is prolonging it, by a splendid viaduct over the N. Esk, that it may communicate with coal mines in that quarter. The average number of passengers carried annually on this railroad is 300,000. The average amount of coal so conveyed is 120,000 tons. Coal abounds throughout the whole neighbourhood of Dalkeith. Dalkeith Palace, the principal residence of the Duke of Buccleuch in Scotland, is within 300 yards of the E. termination of the town. This palace, which formerly belonged to the Douglasses Earls of Morton, was acquired, in 1642, by the noble family of Buccleuch, who still retain it, and are superiors of the burgh. Anne, heiress of Buccleuch, was married to the famous Duke of Monmouth, a natural son of Charles II., beheaded for rebellion in 1685. George IV., on his visit to Scotland in 1822, resided in Dalkeith House. The parliamentary electors of the burgh unite with the county constituency in returning a member to the H. of C. (*Obtained from local information.*)

DALMATIA (an. part of *Illyricum*), a marit. country of Europe, being the most S. prov. of the Austrian empire comprising a long and narrow territory lying along the N.E. shore of the Adriatic, and numerous islands in that sea, between lat. 42° 8′ and 44° 55′ N., and long. 14° 30′ and 19° E., having N. Hungarian Croatia; E. Turkish Croatia, Herzegovina, and Montenegro; and S. and W. the Adriatic: length of the continental portion, N.W. to S.E., 240 m.: breadth greatest towards the N., where it averages nearly 40 m.; but it tapers thence gradually to its S. extremity, and in its lower half is never more than 15 m. in width. Area about 5,800 sq. m. (273·7 Germ.). Pop. (1837) 382,285. Dalmatia is generally mountainous. The Dinaric Alps bound it on the E., and the whole country is intersected in a direction parallel to the coast by some of their subordinate ranges, the highest point of which, Mount Biocova, near lat. 43° 30′, is 4,856 ft. in elevation. Here, as elsewhere, the Dinaric Alps are chiefly of calcareous formation, and full of clefts and ravines; they are rugged, and often destitute of soil, in consequence of which the country has in most parts a sterile and desolate aspect. Narrow valleys are abundant, but plains of any extent few. There are numerous small lakes, and one of a tolerable size, near Zara; but, generally speaking, Dalmatia is ill watered. The principal river, the Narenta, in the S. has not a course of more than 15 m. in the Austrian territory; the other chief rivers are, the Zermagna, Kerka, and Cettina, but none is of any great size. The Cettina is remarkable for a fine cascade, 170 ft. in altitude. The coast is indented with numerous harbours, of which those of Cattaro, Sebenico, and Ragusa, are the best; it has also numerous headlands, and is fenced by a great number of elongated islands, lying in a direction parallel to the shore. The principal are, Arbe, Pago, Isola Grossa, Brazza, Lesina, Curzola, Lissa, Meleda, &c.; they are mountainous, and present the same general aspect as Continental Dalmatia. The climate is warmer than in any other part of the Austrian dominions. In the S. the date-palm flourishes in the open air, and the olive grows in the lowlands every where throughout the country. Frost and snow are almost unknown in the plains and valleys, and are of very short duration in the mountains: the mean temp. of the year at Ragusa is 57° 3′ Fahrenheit. The winter is limited to six weeks of pretty constant rain; yet, on the whole, less rain falls in Dalmatia than in any other prov. of the empire, and the country often suffers from excess of drought. Except in the marshy tracts along the shore, the air is pure and salubrious. In 1837, there were 225,719 acres of arable land, 140,702 acres in vineyards, and 40,060 acres in meadows and gardens. Agriculture is in every respect extremely backward. Maize and barley are the principal kinds of grain cultivated; but not two thirds of the corn necessary for home consumption is grown; the rest of the quantity required comes mostly from Turkey and Hungary. The Dalmatian wines are strong and deep-coloured, but are apt to acquire a taste from the leathern flasks in which they are kept. They, however, bear transport well, and considerable quantities are sent to Fiume, Trieste, and Venice. The total quantity produced annually, is officially estimated at 8,328,000 gallons. Fruits are abundant and excellent. Figs may be considered the chief staple of Dalmatia; they grow without culture all along the coast, but the best are those of Lesina. During their period of maturity, figs make a large part of the food of the village pop., and about 845,000 *libre* are annually exported. The climate is highly suitable for the olive, and the oil is better than that produced in most parts of Italy. Nearly 17,000 cwt. are annually obtained. Cattle-breeding is not pursued to any great extent, and the breeds are mostly inferior. The stock in 1837 has been estimated at 14,000 horses, 91,000 black cattle, 713,000 sheep, and 450,000 goats. The wolf, wild dog, fox, and lynx, are amongst the wild animals; game (excepting deer) abounds, as do waterfowl and birds of prey. The anchovy and tunny fisheries are important, though not so much so as during the last century: at present they furnish employment to about 8,000 inhab. Dried and salted fish form an important article of commerce. There are some coral fisheries, of which that

near Sebenico is the chief. The fish caught in the lakes, &c. form a chief part of the subsistence of many of the inhab. Excellent timber for ship-building and other purposes abounds in the interior; but is next to useless from the absolute want of roads, canals, or navigable rivers, to convey it to the sea. The large forests which formerly existed on the coast have been cut down, and that part of the country is now almost bare of wood. The attention of the Austrian government is now, however, directed to the forest economy of the prov., in the view of supplying the dock-yards at Fiume and Venice with Dalmatian timber. Coal is found in several parts, and considerable quantities are exported to Trieste. Ship-building, and the distillation of *maraschino* and *rosoglio*, are the chief branshes of manufacturing industry. Maraschino is extensively consumed at Vienna, and it is well known in this and most other countries. Besides these, a few articles of primary necessity only are manufactured; for all others, the inhab. are obliged to have recourse to the neighbouring countries. This prov. enjoys the important advantage of being placed without the Austrian customs line, the duty on foreign goods imported being only 3½ per cent. *ad valorem*. But the strictness with which quarantine regulations are enforced have gone far to nullify the important benefits that would otherwise have resulted from this valuable privilege. The Dalmatians are amongst the best sailors of the Adriatic. In 1837 they had 410 vessels, of the burden of 14,435 tons, of which about two thirds belonged to Ragusa. This country is divided into four circles, named after their respective capitals, *Zara*, Spalatro, Ragusa, and Cattaro: the last two circles are separated from the rest of Dalmatia, and from each other, by two narrow slips of land belonging to Turkey, which stretch down to the sea coast. The other chief towns are, Sebenico, Trau, and Macarsca. Zara is the cap., and seat of the governor and council of the prov.

In 1837, the pop., with the marriages, births, deaths, &c., in these circles, were: —

Circles.	Pop.	Pop. per Ger. sq. Mile.	Mar.	Births.	Deaths.
City of Zara - -	6,744	- -	62	318	283
Circle of Zara - -	126,649	935	1,167	4,656	3,490
Spalatro - - -	156,827	1,683	1,062	4,983	3,311
Ragusa - - -	49,458	1,960	349	1,650	848
Cattaro - - -	33,801	889	195	896	669
Military - - -	8,806	- -	10	18	109
Total - -	382,285	1,707	2,845	12,521	8,740

The inhab. of Dalmatia are Slavonians of the same race with the Croatians, Servians, and Bosnians. The names of their rivers, mountains, &c. are all Slavonic, and that of the country itself expresses *the most remotely situated tribe*.* The vicinity of, and constant intercourse with, the Italian harbours, has introduced the use of the Italian language amongst the commercial part of the inhab., as German is the principal tongue heard amongst the civil and military official circles. The number of Italians settled in the country is estimated by Blumenbach at 37,000. Some descendants of Hungarian families are found amongst the nobility of the N. circles, and the Jews, who are not very numerous, are said to descend from the exiles of that nation driven from Spain in 1502. Near Verlika and in other parts, *zinzari*, or gipsies, are found. Even amongst the Slavonic inhabitants different tribes are distinguishable. The most backward, in point of civilisation, are the Morlacchi, the mountaineers of the circles of Zara and Spalatro. They are addicted to a nomadic kind of life, and wander about as shepherds, sleeping in summer in the open air. The comforts of the agriculturist and fishermen are few, as is usually the case in warm climates: their houses are small and badly built, and furniture is mostly dispensed with. Fish and vegetables are the chief articles of nourishment, and both are abundant. The dress of the inhab. of the coast consists in blue tight pantaloons, a blue waistcoat, and in winter a spencer, with a coarse brown cloak shaped like that of the Italian boatmen. The mountaineers wear a linen dress in summer, and in winter throw their sheepskins about their shoulders, which are proof against all the vicissitudes of the weather. The inhab. are generally active, courageous, and of quick perception; but, until they came under the Austrian sceptre, were not only neglected, but living on terms of constant warfare with their Mussulman neighbours, from which state of things the recent border feuds are an inheritance. The large knife and pistols which the Morlacchi still wear in their girdles, and the gun which the shepherd slings over his shoulder from custom, remind the stranger no less strongly than the shaven heads of some of the mountaineers, of the affinity, in descent and in manners, existing between the Slavonic tribes that inhabit both sides of the mountains.

* See *Murray's Origin of Languages, &c.*

The inhab. are Rom. Cath., except about one fifth part who belong to the Greek church, and a few Jews, gipsies, &c.; there are no Protestants.

It would appear, judging from the returns, that this is the most priest-ridden country of Europe. It has, besides a whole army of regular clergy, no fewer than 6,251 monks, and 1,719 nuns! The consequences are precisely what might have been expected; education and morality being at a lower ebb here than in any other part of the Austrian empire! In 1837, the prov. had

	Scholars.
2 Colleges (1 theological, and 1 of arts) with	90
3 Grammar-schools - - -	338
1 Ladies' school - - -	12
1 Boarding-school for boys -	33
1 Ditto for priests - - -	14
51 Primary schools for both sexes -	3,624

Number of children who in that year were returned as able to go to school, 17,978; so that those at school do not amount to 1-4th part of those who should be there!

The criminal accusations in 1837, amounted to 623; making, with the remainder from the previous year, 999. Of these only 574 were decided during the year, of which 261 were acquittals. Of 2,575 persons convicted, the proportion of the principal crimes to 100 convictions was as follows: — Outrageous conduct, 10; abuse of authority, 1; thieving and swindling, 32; robbery, 6; rape, 1; breach of sanatory regulations, 3; murder, 7; cutting and maiming, 11; arson, 14; other crimes, 22.

Dalmatia differs from the other provs. of the Austrian empire, in having no provincial diet or representative assembly; but certain of its towns and some districts, especially that of Poglizza near Spalatro, retain their own jurisdiction, and the same privileges they possessed before their union with Austria. The highest authority in Dalmatia is the governor, who resides at Zara, the seat of the *Gubernium*. In this city the court of appeals, and the highest criminal court are established, with dependent courts in the four circle towns, Zara, Spalatro, Ragusa, and Cattaro. Each circle has several districts, the chief magistrate in which is named prætor, and takes cognizance of judicial and police affairs, besides directing the rural economy of the district. The districts divide into greater and lesser parishes or *communes*, under headboroughs (*Capi villa* and *Podesta*) who receive no salary, but are exempted from the *Robot* (public service work), as are also the *Sardari*, a description of *gens-d'armes*, formed by the government out of the armed peasantry which, during the war, had lived upon a very independent footing. The guarding of the frontiers towards Turkey is an important charge in Dalmatia, and a strict watch is also kept along the coast. For purposes of trade, 6 bazaars or markets are held on the frontier, and 7 rastells, or parlatoria, at intervening stations. Lazarets are established at Zara, Spalatro, Ragusa, and Castelmono.

Dalmatia formed, from the commencement of the 12th century down to 1419, a portion of the kingdom of Hungary: at the last-named epoch it passed under the sway of the Venetians, who had made themselves masters of Ragusa nearly 100 years previously. During the 16th and 17th centuries this country was the constant seat of wars between the Venetians and Turks, until it was finally conquered by the latter, who held it till 1797, when it was ceded to Austria. In 1805, Austria gave up Dalmatia to the French, who incorporated it into the kingdom of Italy. Napoleon made it a duchy, and conferred the title of duke of Dalmatia on Marshal Soult. On the downfall of Napoleon it reverted to Austria. (*Oesterr. Nat. Encyc.; Fortis's Travels; and private information from Vienna.*)

DAMASCUS (called by the natives *Es-Sham*, an. *Dimeshk*, Heb. *Damasck*, Greek *Δαμασκος*), a city of Syria, cap. of an important pachalic of the same name, and the virtual metropolis of Syria, in a plain at the E. foot of the Anti-Libanus, about 180 m. S. by W. Aleppo; lat. 33° 27′ N., long. 36° 25′ E. Pop. from 120,000 to 150,000, of whom 12,000 are Christians, and as many Jews. A splendid mosque of great antiquity, the construction of which is disputed by Christians and Mussulmans, is the chief architectural ornament. The form of the building (a cross), with a similarity in arrangement to the sacred edifices of Italy, seems to evince its Christian origin, while the abundance of Saracenic ornaments prove that the Arabs, if not its founders, have contributed extensively to its decoration. It is 650 ft. in length, by 150 in width; a fountain plays in the midst of a magnificent court, and the pillars and other ornaments are superb. A skull, said to be that of the Baptist, and his sepulchre, give such sanctity to this mosque, that it is death for even a Mohammedan to enter the room where the relics are kept. A Christian is liable to the bastinado for merely looking into the court; and the western world is indebted for its knowledge of the interior of the building to the works of Ali Bey and Buckingham, who, in their character of Mussulmans, were allowed to inspect what no *known* Christian is per-

mitted to approach. There are many other mosques. According to Ali Bey (ii. 266.) and Addison (ii. 151.), they are unworthy of notice; but Robinson (ii. 224.) says they are only less splendid than those of Constantinople. The bazaars are extremely numerous, and well supplied with merchandise: but the private residences of the gentry are, after all, the most striking objects to a stranger, not for their exterior appearance, which presents nothing but a gloomy wall of mud, or sun-dried bricks, but for the combination of convenience, magnificence, and taste, which mark the interior arrangements, and realise all that can be imagined of eastern splendour. 200,000 piastres (2,000*l.*) is sometimes expended on the fittings up of a single apartment. There are 31 khans, or establishments for the reception of merchandise, and that of Hussein Pacha, built of alternate layers of black and white marble, with its fountain, arcades, and corridors, is a very beautiful and imposing object. A mosque of dancing dervishes deserves notice, less as one of the principal edifices of the town, than from the singular contrast in the occupations of its inmates, who, every Friday (the Mohammedan Sunday), pirouette and twirl themselves about from morning till night, while, during the other six days, they are industrious silk weavers. There are also Greek, Maronite, Syrian, and Armenian churches, 3 convents of Franciscan monks, and 8 Jewish synagogues. Hospitals numerous; the principal, in which great numbers of sick and lame poor are lodged and fed gratuitously, is a fine building, with a mosque belonging to it. There are about 20 large schools for children, a great number of smaller ones, besides which public lectures are given daily in the great mosque, and in some others, but education is confined to the religion and laws of Mohammed.* The *serai*, or palace of the pacha, is a large fortified building in the centre of the city. The latter is surrounded by walls and towers, but they are in a half ruinous state, and pressed upon by extensive suburbs on every side.

Damascus is essentially a commercial town; 200 merchants are permanently settled in it, besides which there are 129 tanners, 47 painters, 22 printers, and 35 dyers of various stuffs; 120 silk dyers (all Jews), 34 silk-winders, 748 dealers in damask cloth, 211 grocers, 19 warehouses of cotton thread, 68 tobacco-manufactories, 72 saddlers, 11 tent-sellers, 47 coppersmiths, 50 ironmongers, 54 farriers, 70 furriers, 98 lacemen, 140 bakers, 58 millers, 24 corn-merchants, 122 coffee-houses, 32 confectioners, 129 butchers, 124 barbers, 71 tailors, 6 watch-makers, 6 bookbinders, 6 paper-merchants, 43 pipe-manufacturers, 200 dealers in handkerchiefs and fancy articles, 150 dealers in tobacco and coffee, 4 glass-houses, 4 soap-makers, 143 weavers, 500 public cooks, 59 public baths, and 19 armourers. In regard to the last, it may be remarked that the ancient celebrity of Damascus sabres has very much declined, but they still bear a good name. Saddlery, cabinet-work, jewellery, and silk, are now the staple manufactures. Foreign trade is carried on, by the great Mecca caravan, which, in peaceable times, departs once a year; the Bagdad caravan, which usually performs 2 or 3 journeys a year; the Aleppo caravan, 2 or 3 times a month; and by several small caravans to Beirout, Tripoli, Acre, &c., which arrive and depart daily. Beirout is reckoned the port of Damascus. This city is watered by 2 rivers, the Barrada and Fichee, which, after uniting, divide again into 7 branches, again re-unite, and finally deposit their waters in a lake (Lake of the Meadow), which has no outlet. This abundant supply and natural diffusion of water has rendered the neighbourhood of Damascus very fertile. The inhabitants do not remember a year of scarcity; wheat, barley, hemp, with every kind and variety of fruit, are produced in almost unlimited abundance, and the gardens, or enclosures, form a forest of trees, and a labyrinth of hedges, walls, and ditches, of more than 21 m. in circ. The natives speak with delight of the beauty of their home, especially as seen from the hills behind Salahieh, a large village on the N.; but according to Dr. Richardson (ii. 481.), the scenery is inferior to that seen from the summits of Highgate, Hampstead, and Richmond hills. The climate of Damascus is mild; the summits of the Anti-Libanus are covered with perpetual snow, which sometimes falls in the city. The people are said to enjoy good health, but blindness is frightfully prevalent, and leprosy, fever, and dropsy, are common. The plague, however, is almost unknown, and the ordinary duration of life is said to be from 70 to 80 years, but that, no doubt, is exaggerated.

Damascus is very ancient: it is mentioned in Gen. xiv. 15. as existing 1913 years B.C., and was then, as subsequently, probably the capital of an independent Syrian kingdom. It was subdued by David (2 Sam. viii. 6.), but recovered its independence, if not earlier, at least during the reign of Solomon. (1 Kings, xi. 24.) It then became the capital of the kingdom of Ben-hadad and his successors (1 Kings, xv. 18.), and remained so till its subjugation by Tigleth-Pileser, about 742 B.C., a little before the downfall of its rival Samaria. (2 Kings, xvi. 9.) From this time it followed the fortunes of the rest of Syria, falling successively under the power of the Persians, Greeks, and Romans. As a Roman city, it attained great eminence, and figures very conspicuously in the history of the apostle Paul. (Acts, ix.)

Damascus was taken by the Saracens in 632, after a siege of 7 months, and was for many years the cap. of the khalifate. It was unsuccessfully besieged by the crusaders in 1148, captured by Timour Bec or Tamerlane in 1400, and destroyed by an accidental fire in the following year. In 1516 it fell into the hands of the Turks, who retained it till 1832, when it was captured by Ibrahim Pacha, in whose hands it now remains.

Damascus is remarkable as being the only city of the East which has not dwindled from its former greatness. Its pop. seems to be as great now as ever; while Babylon, Nineveh, Palmyra, &c. have wholly vanished, and Antioch, Aleppo, &c. are, as it were, the shadows only of their ancient glory.

Damascus is one of the sacred cities of the Mohammedans, and its inhab. have the character of being the most intolerant and fanatical of all the prophet's followers. Till within these 6 years, the appearance of a Frank costume was the signal for a riot. Christians and Jews were alike prohibited from riding any beast but an ass (in 1807 even this was forbidden); and the appointment of an English consul in 1831 caused an insurrection, which lasted several months. The conquests of Ibrahim Pacha have produced a great change, if not in the feelings of the people, at least in their mode of exhibiting them. Christians of all sects and Jews walk in procession, openly rejoicing in the avowed protection of the present government, exposed only to the impotent threats of those who, retaining the will, have lost the power to annoy them. In spite, however, of their general intolerance, most travellers bear honourable testimony to the hospitality of the Damascenes. (*William of Tyre*, p. 303. *et seq.*; *Adrichomius, Ter. Sanc.*, pp. 81—84.; *Abul-Feda, Tab. Syr.*, pp. 100. 171.; *Maundrell*, pp. 164—179.; *Volney*, ii. 226—232.; *Ali Bey*, ii. 264—282.; *Richardson*, ii. 460—497.; *Michaud et Poujolat, Cor. d'Or*, vi. 148—235.; *Robinson*, ii. 217—230.; *Hogg*, ii. 1—80.; *Addison*, ii. 92—196.)

DAMAUN, a marit. town of Hindostan, prov. Gujrat, belonging to the Portuguese, 82 m. N. Bombay, and 45 m. S.S.W. Surat; lat. 20° 25′ N., long. 72° 58′ E. Pop. 6,000.? It stands on the banks of a small river, which in spring tides, during the S.W. monsoon, has from 18 to 20 ft. water. The buildings of the town are mostly whitened, and give it a handsome appearance from the sea: its walls are incapable of defence, and its streets narrow and dirty. It contains several churches and convents, and a Parsee temple, in which it is affirmed a sacred flame brought from Persia has been kept up for 1,200 years. It has a roadstead, where vessels lie 3 m. off shore in 8 fathoms water. Damaun is most celebrated for its docks and ship-building: its ships wear well, and sail well before the wind, but some time since they were too short for their breadth, so that they laboured in a head sea. Damaun was taken by the Portuguese in 1531, and has belonged to them ever since. (*Hamilton's E. I. Gaz.*, i. 479.; *Dict. Géographique.*)

DAMAUN, a large distr. of Affghanistan, now subordinate to the Maharajah of the Punjab, but formerly belonging to Caubul; between lat. 31° and 34° N., and long. 69° 30′ and 72° E., bounded S. by Sungur, in Sinde, W. by the Solimaun Mountains, N. by the salt range diverging from the latter, and E. by the Indus. Along the banks of the latter the country is a plain bare of grass, the soil apparently composed of the slime deposited by the river, by which it is regularly inundated; in the S. parts, especially, a good deal of this flat ground is overspread with low, thick tamarisk jungles, abounding in wild boars, hog deer, and game of all sorts. Round the villages large woods of date trees are often seen, but no other trees of any size: where there is cultivation the country is rich, but by far the greater part of it is waste. The central parts are composed of arid sandy plains, divided by hill-ranges, and depending entirely upon rain for cultivation: the more uneven country skirting the W. mountains is more fertile, and produces wheat, bajree, jowaree, and other Indian grains. The winter in Damaun is cooler than in Hindostan, but the heat of summer is extreme. This distr. is inhabited by various turbulent clans, principally Juts and Beloochees, living in perpetual contention with each other, and who, having been at a distance from the seat of government, had never rendered much more than a nominal obedience to the Caubul sovereign. Some of the Damaun tribes are nomadic, others fixed agriculturists, and many are shepherds, the country in many parts yielding good pasture land. (*Elphinstone's Caubul*, i. 53—72.)

DAMIETTA, a town of Lower Egypt, the third in

* Ahmet Bey, the son of a pacha, and a reputed philosopher among the Damascenes, gravely inquired of Lord Belmore his opinion as to the motion or stability of the earth. (*Richardson's Travels*, ii. 464.)

rank, pop., and importance in the country, on the E. bank of the branch of the Nile bearing its name, 6 m. S. from its mouth (the anc. *Phatniticum Ostium*), 80 m. E. Rosetta, and 97 m. N.N.E. Cairo. Lat. 31° 25′ 43″ N., long. 31° 49′ 30″ E. Pop. has been stated at 30,000; but this is probably much overrated. The inhab. are principally natives of Egypt, with a few Syrians and Levant Greeks. A bend in the river gives to the town a somewhat crescent shape. It is irregularly and ill built; though there are some good mosques, several bazaars, and some marble baths. Some of the better sort of houses, which are of brick, have terraces and pavilions; and such as are near the Nile, have little ports, whence to embark on the water; but there are no open spaces, nor buildings, worthy of much notice, and, generally speaking, it is but a collection of miserable mud hovels. The late Pacha established a school for infantry officers, with 400 pupils; as well as an extensive collection of buildings for drying, husking, and cleaning rice, some mills, and a cotton factory. The latter supplies a great deal of coarse cotton cloth, which forms the wear of the labouring classes. The bar at the mouth of this branch of the Nile prevents the access of any large vessels to the town; so that merchant ships have to lie outside the bar, and load and unload by means of small Greek craft, Egyptian *djerms*, and other vessels of from 30 to 60 tons burthen. But, despite these difficulties, Damietta, previously to the sway of Mehemet Ali, had a considerable trade: his commercial system has, however, transferred the greater part of it to Alexandria. Its chief article of export is the rice grown in its neighbourhood, which is the best in Egypt. Dried fish of the Lake Menzaleh, dates from the numerous plantations round the town, with coffee, beans, and linen, are the other principal articles of export. Most European nations still retain vice consuls here. It has a governor, and a municipal administration similar to that of Cairo and Alexandria.

DANTZIC (Germ. *Danzig*; Pol. *Gdansk*), an important commercial city, sea-port, and stronghold of the Prussian states, Prussia Proper, cap. reg. and circ. of same name, on the left bank of the Vistula, about 3 m. from its mouth; lat. 54° 20′ 48″ N., long. 18° 38′ E. Pop. (*ex. military*) in 1834, 55,400; in 1846, 66,827. It is traversed by the small rivers Motlau and Rodaune, and is very strongly fortified. It is ill built, and the streets are narrow, irregular, and gloomy. The cathedral church of St. Mary is the principal public building; it was finished in 1503, and has a fine brass font and a magnificent picture of the last judgment. The town-house, arsenal, and the *Arthushof* or exchange, also deserve notice. There are 15 Lutheran churches and chapels, 4 Catholic churches, and a chapel, 2 synagogues, an English church, &c, with several monasteries and convents. It has a gymnasium, two grammar-schools, and many inferior schools, with schools of navigation, midwifery, and commerce; a school of arts and trades, a good public library, an observatory, a museum, a society of natural philosophy, &c., an orphan and foundling hospital, a large workhouse, and various hospitals. Within the last few years a number of friendly and charitable societies have been established.

Dantzic is the seat of the provincial authorities, of a court of appeal for the circle, a council of admiralty, a tribunal of commerce, a provincial board of taxation, &c. It has a vast number of distilleries and breweries, the latter of which produce the black-beer in such general demand; it has also large establishments for grinding flour, with dye-works, sugar-refineries, and manufactures of fire-arms, tobacco, silks, vitriol, &c., and some jewellery business. The harbour, called *Neufahrwasser*, is at the mouth of the river; but vessels drawing 8 or 9 ft. come up to the city. Being the emporium of the extensive and fruitful countries traversed by the Vistula and its affluents, Dantzic has a very extensive commerce; and is, after Odessa, at the head of all the corn-shipping ports, not of Europe only, but of the world. Wheat forms the principal article of export; it is of the best quality, and very large quantities are exported, as many as 500,000 quarters having been shipped in a single year. There is also a large exportation of flour, rye, barley, pease, and oats, with timber inferior only to that of Memel, linseed and rapeseed, staves, pearl ashes, bones, zinc, flax and hemp, linens, feathers, beer and spirits, wool, &c. The principal articles of import consist of woollens, cottons, and other manufactured goods, colonial produce, dye-stuffs, wine, oil, spice, fruit, salt, furs, &c. The usual depth of water at the river's mouth is from 13 to 14 ft.; but in the roads, which are protected by the long, low, narrow tongue of land, called the Heel, there is good anchorage for ships of any burden. The greater part of the trade of Dantzic is in the hands of foreigners, particularly the English. In 1842, there belonged to the port 80 ships of the burden of 14,889 Prussian lasts. The granaries for storing the corn brought down the Vistula are generally seven stories high; and these, with the warehouses for linens, ashes, hemp, &c., are all situated on a small island surrounded by the Motlau. They are, or recently were, guarded by powerful dogs.

Account of the Articles exported from Dantzic by sea in 1847 and 1846, specifying the Quantities sent to each Country in 1847, with the total Quantity and Value of each Article.

Articles.	Exports in 1847 to					Total Exports in 1847.	Value of Exports in 1847.	Total Exports in 1846.
	United Kingdom.	Belgium.	Holland.	France.	All other Countries.			
							£	
Wheat - - imp. qrs.	295,224	14,752	48,804	33,132	777	392,989	1,085,412	260,064
Rye - - - —	- -	- -	2,100	- -	3,199	5,599	12,105	9,072
Barley - - - —	6,552	- -	94	- -	315	6,961	11,707½	91¼
Oats - - - —	- -	- -	- -	- -	- -	- -	- -	157½
Peas - - - —	8,022	- -	1,564	- -	84	9,670	21,643½	11,182
Linseed - - —	304	- -	1,932	- -	- -	2,236	4,260	1,722
Rapeseed - - —	8,242	2,866	1,365	- -	- -	12,473	30,888	1,323
Flour - - barrels of 196 lbs.	1,494	- -	- -	- -	24	1,518	2,656¼	14
Baltic fir - - pieces	121,982	147	4,519	7,748	4,303	138,699	208,048½	127,111
Masts and spars - —	15	- -	6	1,518	84	1,623	19,476	346
Deals - - - —	104,000	24,597	24,548	24,466	101,108	278,719	58,066	314,867
Sleepers - - —	514,120	8,103	2,395	- -	- -	524,618	49,183	546,453
Treenails - - shocks	4,996	- -	- -	96	1,156	6,254	1,251	4,528
Lathwood - - fathoms	2,859	- -	- -	7	7	2,873	14,365	2,709
Oak timber - - pieces	1,462	- -	- -	1,072	970	3,504	7,008	2,176
planks - - —	36,065	- -	- -	7,369	7,981	51,415	30,849	31,481
Wheel spokes and felloes shocks	- -	- -	- -	- -	883	883	397	458
Staves - mille of 1200 pieces	212½	1½	2¼	258¾	112	587¼	35,825	636
Sundry petty exports of wood -	- -	- -	- -	- -	- -	- -	57	
Linen - - pieces of 60 ells	60	- -	115	- -	100	275	165	1,200
Ashes, weed - bls. of 3 cwt.	- -	338	413	- -	27	778	1,362	713
Bones - - - cwt.	9,178	- -	- -	- -	- -	9,178	2,294	13,702
Spelter - - - —	15,515	- -	- -	- -	16,591	32,106	48,159	27,754
Black beer - - kegs	7,270	5	- -	5	26	7,306	3,288	6,255
Spirits, raw and distilled eimer	3	- -	- -	- -	- -	3	7	642
Mats - - - pieces	99,820	5,420	15,435	10,815	175	131,665	3,292	84,074
Other articles - - -	- -	- -	- -	- -	- -	- -	6,472	

Total value of exports in 1847, £1,658,237.

It will be seen from this statement that the average price of the wheat exported from Dantzic in 1847 amounted to very near 55*s*. a quarter! The total value of the exports in 1846 amounted to 1,298,969*l*.

The notions current in this country as to the extreme low price of wheat in Dantzic, have no good foundation. No considerable demand from abroad can be met without resorting for supplies to the markets in the S. parts of Poland and Galicia, from 500 to 700 m. inland. The corn is thence brought to the city by water in flat-bottomed boats suited to the navigation of the rivers; but, owing to the uncertain supply of water in the rivers, their usual shallowness, and the difficulty of their navigation, its conveyance is both very tedious and expensive.

Mr. Consul Gibson, who had the best means of acquiring accurate information, estimated the expense of conveying wheat and rye thither, including the duty at Thorn and the charges of turning on the river, till put into granary at Dantzic, according to the distance, as follows:—

	s.	d.	s.	d.
If from the upper provinces on the Bug, a distance of from 700 to 500 m., per quarter - -	9	2	to 7	10
From the provinces of Cracow, Sendomir, and Lublin, 550 to 350 m. - -	6	6	— 5	4
From Warsaw and its neighbourhood, about 240 m.	4	9	— 3	11
From Wlaclaweck and its neighbourhood, about 140 m. - - - -	4	2	— 3	5
From Graudentz, a distance of about 70 m., there being in this case no duty at Thorn, and when not turned on the river - - -	0	10	— 0	9

It is essential, however, to observe that these are the *ordinary* charges; and that they are very decidedly higher when there is any unusual demand for exportation, that is, when there is a demand for 200,000 quarters and upwards.

The Bug has many windings, and its navigation, which is slow and difficult, can only be attempted in the spring, when the water is high. It is the same, though in a less degree, with some of the rivers that fall into the Vistula before it reaches Warsaw; and towards Cracow the Vistula itself is frequently unnavigable, especially in dry seasons, except in spring and after the midsummer rains, when the snow melts on the Carpathian Mountains. In 1838, the navigation of the Polish rivers was more than usually bad. The corn from the upper provinces did not reach Dantzic till from two to four months later than usual, and was burdened with a very heavy additional expense. The fact is, that the supplies of grain at Dantzic depend quite as much on the abundance of water in the rivers, or on their easy navigation in summer, as on the goodness of the harvests.

"There are," says Mr. Jacob, "two modes of conveying wheat to Dantzic by the Vistula. That which grows near the lower parts of the river, comprising Polish Russia, and part of the prov. of Plock, and of Masovia, in the kingdom of Poland, which is generally of an inferior quality, is conveyed in covered boats, with shifting boards that protect the cargo from the rain, but not from pilfering. These vessels are long, and draw about 15 inches water, and bring about 150 quarters of wheat; they are not, however, so well calculated for the upper parts of the river. From Cracow, where the Vistula first becomes navigable, to below the junction of the Bug with that stream, the wheat is mostly conveyed to Dantzic in open flats. These are built on the banks, in seasons of leisure, on spots far from the ordinary reach of the water, but which, when the autumnal rains, or the melted snows in spring, fill and overflow the river, are easily floated. These flats, which are very rudely constructed, usually carry down from 180 to 200 quarters; but though they only draw from ten to twelve inches water, they are frequently grounded."

During the period from 1770 to 1819, the average price of wheat at Dantzic was 45*s*. 4*d*. a quarter. The demand was very limited from 1820 to 1829, and the price proportionally low. The same cause reduced the price from 1832 to 1837; but whenever there is any considerable demand for Dantzic wheat, or for 200,000 quarters and upwards, the price invariably amounts to from 40*s*. to 50*s*. or 55*s*. a quarter. We incline to think that from 38*s*. to 42*s*. a quarter may be expected to be about the average price of wheat in Dantzic in ordinary years, now that our ports are always open under a nominal duty of 1*s*. a quarter. It at all events seems pretty certain that its price will not be under 36*s*. a quarter. But taking it at only 35*s*., if we add to this 10*s*. or 12*s*. as the cost of conveying a quarter of wheat from Dantzic to London, and putting it into granary here, including insurance and profit and 1*s*. for duty, it is immediately seen that it is the greatest imaginable error to suppose that our agriculturists should be sensibly injured by the importation of Dantzic wheat. Under the circumstances supposed, it could not, in ordinary years, be offered for sale in this country for less than 45*s*. to 48*s*. a quarter, a price more than sufficient to insure the continued progress of British agriculture.

Dantzic was probably founded in the 10th century. It was occupied by the knights of the Teutonic order in 1310, and was held by them till 1454, when it emancipated itself from their yoke, and became a free independent state, under the protection of Poland. For a lengthened period Dantzic was a principal member of the Hanseatic Confederacy, and had under it several dependent cities. During its independence, the citizens were engaged in frequent contests with the Poles, Swedes, &c.; and notwithstanding the protection of England, Holland, and Prussia, Peter the Great exacted from them considerable contributions. The pretension of Dantzic to the exclusive navigation of the Vistula, or to demand a toll from such ships as passed in and out of the river, was at all times submitted to with reluctance. After the first partition of Poland in 1771, Frederick the Great, having acquired a large accession of territory on the Vistula, approaching almost to the gates of Dantzic, claimed for his subjects the right of free navigation on the river. This having been refused by the Dantzickers, gave rise to some acts of hostility, and to lengthened negociations. These, however, were cut short in 1793 by the second partition of Poland, when Dantzic was assigned to Prussia. During the late war, the city was occupied for several years by a French garrison and suffered much from the hostilities and exactions to which she was exposed; but since the peace of 1815 she has recovered much of her ancient prosperity. The fortifications have been also greatly strengthened and improved, and magnificent works have been constructed, by which the whole adjacent territory may be laid under water.

During the independence of Dantzic, there were attached to it the *Werder*, or alluvial island formed by the Vistula and the Motlau, and the *Frische Nahrung*, or long narrow tongue of land between the Frische Haff and the sea. The former is very fertile, but the latter consists principally of sand. (*Busching, Geog.* ii. 907. ed. 1786; *Zedlitz's Statistics of Prussia*, ii. 466. in Germ.; *Private Information.*)

DANUBE (an. *Danubius*, and in the lower part of its course *Ister*, Germ. *Donau*, Hung. *Duna*), a celebrated river of Central and S.E. Europe, being, though inferior in point of size to the Wolga, in every other respect the first among European rivers. Its general course is from W. to E.; it extends between long. 8° 10′ and 29° 40′ E., its extreme N. point of lat. being 49° 2′, and its extreme S. point 43° 38′ N. Its total course from its source to its mouths, on the W. shore of the Black Sea, is from 1,750 to 1,800 m.; during which it passes through the territories of Baden, Wirtemberg, Bavaria, and the Austrian empire, and divides Turkey from Wallachia, Moldavia, and Russia. It is said to receive 30 navigable and a vast number of inferior tributaries, the principal being the Isar, Inn, Drave, Save, Theiss, Morava, Sereth, and Pruth. The cities of Ulm, Ratisbon, Passau, Linz, Vienna, Presburg, Comorn, Gran, Waitzen, Buda, Pesth, Peterwardein, Neusatz, Semlin, Belgrade, Semendria, Widin, Nicopoli, Sistow, Rustchuk, Silistria, Brahilov, and Galacz, are situated upon its banks.

The basin of the Danube and its tributaries has been estimated to comprise about 1-13th part of the entire surface of Europe. (*Dict. Géog.*) It is bounded S. by the Alps and the Balkhan; and on the N. at first by the Black Forest and some minor alpine ranges, and afterwards by the Bohemian Forest and Carpathian mountains. It includes the plains of Bavaria, Hungary, and Turkey in Europe; and the course of the Danube has been generally considered under three grand divisions, each embracing one of these plains. As this division is not only natural but convenient, we shall adhere to it in the following statements.

The Danube originates in two streams, the Bregach and the Bregé, which have their sources on the E. declivity of the Black Forest, in the grand duchy of Baden, in about 48° 10′ N. lat., and 8° 15′ E. long. These streams having united at Donaueschingen, where they are augmented by a spring sometimes regarded as the head of the river, the united stream takes the name of the Danube. It thence proceeds at first S.E., but afterwards in a N.E. direction as far as Ratisbon, near which city it attains its extreme N. lat. It then runs again in a S.E. direction to about long. 15°, and from that point mostly E. to Vienna, where the first division of its course may be said to terminate. Within this division it receives on the right hand the streams of the Iller, Gunz, Mindel, Lech, Isar, Inn, Traun, Ens, &c.; many of which are navigable for a considerable distance. Its affluents on the opposite side are, on the contrary, generally small; and indeed, throughout the whole upper half of its course, the principal tributaries of the Danube (excepting the Theiss) are from the S. or right side, while in the lower division, those from the N. or left side are by far the most considerable. It receives, however, from the N. in the first division of its course, the Sulz, Altmühl, Naab, and Regen, all of which are navigable streams. At its source the Danube is 2,178 ft. above the level of the sea, and runs through an alpine country to Ulm, where its elevation is 1,532 ft. From Donauwörth to Passau it traverses the Bavarian plain; its height above the sea being at the former 1,125 ft., and at the latter 836 ft. At Passau it leaves the Bavarian dom., and thence to Vienna, intersects a second mountainous region. At Linz its elevation is 735 ft., and at Vienna 512 ft. At Ulm, the Danube first becomes navigable for flat-bottomed vessels of from 60 to 100 tons burden, though its depth there measures little more than 7 ft., and its breadth little more than 100 ft. Through the Bavarian plain its average depth is 10 ft. This increases considerably when it becomes again enclosed between the mountains at Passau; but above Vienna its navigation is rendered difficult, not only by its general shallowness, but by its rapidity and the frequent rocks, shoals, and whirlpools in its channel.

In the second division of its course, the Danube at first runs generally E. to Presburg, next through the lesser Hungarian plain S.E. to its confluence with the Raab, and then E. to Waitzen. At this point it turns S. through the great Hungarian plain, and runs parallel with the Theiss for nearly 2½° of lat. to its junction with the Drave, about lat. 45° 30′. Here it turns S.E., in which general direction it continues to Orsova, where it leaves the Austrian dom.; the second division of its course terminating at the cataract or pass called the "Iron Gate," about 4 m. lower down. It is within this division that the Danube receives its largest and most important tributaries, including the Raab, Drave, Save, and Morava on its right, and the March, Waag, and Theiss on its left side. At Presburg, its waters are 331 ft., at Buda, 230 ft., and at Belgrade, 203 ft. above the level of the sea. From Vienna to the mouth of the Drave, the Danube runs through an expanse of plain country broken

only in a few places, as at Presburg, Buda, and Waitzen. Near the latter it passes through a ravine formed in a chain of mountains, separating the two Hungarian plains. From its union with the Drave, its S. banks in Slavonia and Servia are usually mountainous, while its N. continue low and marshy as far as Moldova. Previously to its reaching Buda, it is about 700 yards wide; soon after passing that city it attains a width of upwards of 1,000 yards; and by the time it has arrived at Belgrade it is considerably more than ¾ of a mile across. (*Dict. Géog.*) From Vienna to Pesth, its bed is sprinkled with rocks, but they are not such impediments to navigation as in the upper portion of its course. Shifting sand-banks, which prevail all down the river as far as Moldova, are greater obstacles; but when the water is tolerably high, they may generally be avoided by good pilotage. (*Austria and the Austrians*, i. 327.) At Gönyö, 70 m. above Pesth, the Danube first becomes navigable for vessels drawing more than from 2 to 2½ ft. water. Near Moldova, a mountain range from the Balkhan, and another from the Carpathians, begin to confine the river on either side as far as Gladova in Servia. Throughout this distance, about 80 m., it is greatly contracted in width, abounds with rapids, and is beset with rocks. Near the termination of this defile, a short distance below Orsova, is the famous pass of the "Iron Gate" (Turk., *Demi-Kapi*), already alluded to. This is a gorge about 2,000 yards in length, enclosed on either side by a mountain of micaceous slate, a material very difficult to break or blast, through which the river rushes with great velocity, over an inclined plane, with a fall of about 15 ft. a mile. The rocks here divide it into three channels. The centre one is of considerable width, and vessels of 400 tons may pass down it, when the river is very full; the two others are but shallow; and that on the Wallachian or E. side is never used. According to Strabo (vii. 212.), it was here that the *Danubius* ended, and the *Ister* commenced; but there is a great discrepancy as to this point among the ancient authorities.

In the third division of its course, the Danube runs at first generally S. by E. to Widin; thence its direction is mostly E. by S. to near Sistow, where it attains its most S. lat.; and from this point E.N.E. to Rassova. It then turns N. to Galacz, and finally runs from this town generally E. to its efflux in the Black Sea, about lat. 45°. As far as Galacz, it forms the boundary between Turkey and Wallachia and Moldavia; and between Galacz and the sea it is the boundary between Russia and Turkey, its principal N. and central mouths being included within the Russian territory. While the Danube is running S. by E., its right bank is mountainous, but the elevated lands soon afterwards recede from its banks, and throughout the rest of its course the river flows through a low plain, which E. of Silistria becomes marshy. In this division it receives on its left side the Schyl, Aluta, Vode, Argis, Jalomnitza, Sereth, and Pruth. Its affluents on the opposite side are much less considerable; the principal are the Isker, Osma, Taban, &c. In its progress through Turkey, the Danube varies in breadth from 1,400 to 2,100 yards; and its average depth is upwards of 20 ft. Ships of large size ascend as far as Silistria. About 50 m. from the Black Sea, it divides into three principal arms, besides giving origin to a considerable lake (Rassein) on its S. side, from which several minor arms proceed. The delta of the Danube is a vast swampy flat, interspersed with lagoons covered with bulrushes, the resort of vast flocks of water fowl. The N. principal arm of the river (*Kilia*) and the S. (*Edrillis*), which forms the boundary between the Russian and Turkish dominions, are shallow and of little value; but the middle one (*Sulineh*) has from 10 to 12 ft. water over the bar at its mouth. This is said, however, to be gradually filling up from the deposit of mud brought down by the river, which the current has not sufficient strength to clear away, its fall and rapidity being very much diminished during the last 200 m. of its course.

Were it not for the rapids between Moldova and Gladova, the Danube would be at all times navigable from Ulm to its mouth. Great efforts have been made to overcome this interruption; and it is worthy of remark that the most illustrious of the Roman emperors, Trajan, alive to all the advantages to be derived from the free navigation of the Danube, constructed, with great labour and sagacity, a road along the edge of the Servian side of the river, to facilitate the towing of ships against the current. Some remains of this extraordinary work still exist, with part of an inscription in honour of Trajan. In more recent times, attempts have been made to deepen the channel of the river, and to cut lateral canals in the most dangerous places; but these, owing to the almost insuperable obstacles to be overcome, have had but little success. Looking at the map, the best way would appear to be to cut a navigable canal from opposite Moldova to Berza Palanka, below the "Iron Gate," which would not only avoid the rapids, but shorten the distance, by avoiding the great bend of the river by Orsova. But the nature of the ground is said to oppose insurmountable obstacles to such a project, though probably it would admit of the construction of a road. The Hungarian government has lately constructed an excellent and very expensive road from Moldova to Orsova, along the left bank of the river. Unfortunately, however, it terminates above the "Iron Gate;" and passengers going down the river, unless when it is sufficiently high to admit of flat-bottomed boats going through the "gate," have to be ferried over to the Servian side of the river, where, after a land journey of about 8 m., they re-embark. Those ascending the river have also to cross at Orsova.

The Danube abounds with islands. They are especially numerous and large in the middle part of its course. The Great Schütt isl. extends between two arms of the river, from Presburg to Comorn, a distance of 64 m. The Csepel and Marguta isl., below Buda, formed in a similar way, are also of considerable size. The Danube has been said to wind more than other European rivers; this is peculiarly the case in its progress S. through the great Hungarian plain. It is also one of the swiftest rivers in Europe; its rapidity is such as in some places to render any navigation against its current impossible, except by the agency of steam. According to Mr. Quin, it rushes through the "Iron Gate" at the rate of not less than 8 m. an hour (i. 210.); but it is clear that the velocity must vary materially with the volume of water. This rapidity has prevented the erection in modern times of any stone bridge on the Danube below Ratisbon; nor was there a permanent bridge of any other kind below Linz previously to the commencement of that now, we believe, in the course of construction at Buda. There are flying bridges at Presburg and Comorn, and bridges of boats at Pesth and Peterwardein: beyond the latter place no direct communication between the opposite banks exists. In antiquity, however, it was very different. About 3 m. below Gladova, Trajan constructed his famous bridge, the remains of which are still visible, and form one of the most interesting and remarkable monuments of the most brilliant æra of imperial Rome. This great structure consisted of 20 or 22 stone piers, with wooden arches. The greatest depth of the river is here 18 ft., and the length of the bridge between the pillars or buttresses that still remain on either bank was about 3,100 English feet. (*Paget*, ii. 136.) But the breadth of the river is less than this; and is said at present not to exceed 2,800 feet. (*Murray.*) This, in fact, is one of the widest parts of the river; and was no doubt selected for the site of the bridge partly on account of the ample channel that was thus afforded to carry off the sudden floods to which the river is subject: its bed is here also sound, and its depth less than in most other parts. When lowest, the heads of some of the piers are seen above the surface of the water. This noble work was destroyed by Adrian, the successor of Trajan, lest the barbarians should overpower the Roman troops in Dacia, and make use of the bridge to invade the empire. (*Eutrop. in Adrian.*) But it was not Adrian, but Aurelian, who abandoned Dacia.

The steam navigation of the Danube is of paramount importance. This undertaking was first actively commenced by Count Szechenyi, who, in 1830, established a joint stock company for the purpose, of which he was the managing director. The Austrian government soon afterwards took up the scheme, greatly enlarged the plans of the company, granted it a charter for the exclusive navigation of the river for 15 years (which has been since extended to 25), and accorded it the privilege of drawing, gratuitously, the necessary supplies of coal from the imperial mines of Moldova, on the banks of the river. The first steam-boat was launched on the Danube, at Vienna, in 1830. The company, in 1839, possessed 10 steam-vessels plying between Presburg and Constantinople, the largest of which, the Eros, used between Pesth and Drenkova, was 178 ft. in length, 25 ft. across, and of 525 tons burden. In 1839, 4 relays of steam-boats conveyed goods and passengers to and from Presburg to the Ottoman capital, running continuously from the former place to Pesth; Pesth to Moldova; Gladova to Galacz; and from Galacz to the end of the journey. Some small iron boats, drawing but little water, have been built to run between Presburg and Vienna. From Moldova to Gladova, a distance of about 50 m. by land, travellers and luggage are mostly conveyed by the new road already alluded to on the left bank of the river, thus avoiding the rapids and "Iron Gate."

The success of the Austrian Steam Navigation Company led to the formation, in 1836, of a Bavarian company, which, in 1839, had two steamers plying between Ratisbon and Passau, or Linz. The barges and ordinary packet-boats on the Danube are unwieldy flat bottomed boats, covered with sheds of rough planks; the rafts in use are large and clumsy fabrics of the rudest kind; sails are unknown on the Upper Danube; and the boats are steered only by paddles. Passage

boats ply, on fixed days, as high as Ulm; but, beyond that town, the principal utility of the Danube is to assist the manufacturing industry of Wirtemberg and Baden. (*Austria and the Austrians*, i. 324.)

So far back as the 8th century, Charlemagne contemplated uniting the Danube and the Rhine, by means of a canal; and the remains of a work commenced with that view are still visible at Wessenberg. After the lapse of more than 1,000 years, an undertaking of a similar kind is now in progress, under the auspices of the Bavarian government; a canal having been commenced which is to run from Dietfurth, on the Altmühl, to Bamberg on the Mayn. A railroad from the vicinity of Linz to Budweis, on the Moldau (Bohemia), already connects the Danube with the Elbe; another railroad is opened from Linz to Gmunden on the Traun; a third from Vienna to Brunn will, perhaps, be continued to Bochnia in Gallicia, forming a communication between the Danube and the Vistula; a fourth line is in progress from Vienna to Raab, the most important corn-market in Hungary: and the especial attention of the Austrian government is now directed toward the formation of a fifth line to connect the Danube with the Adriatic. (*Turnbull.*)

The steam navigation of the Danube and the concurrent works above mentioned will doubtless materially augment the resources, and contribute efficiently to the improvement of the Austrian empire. By these means new markets will be opened for the hitherto all but unsaleable produce of Hungary, Transylvania, &c.; and these countries will in consequence be brought nearer to the position they should occupy among European nations. That Russia, whose strength is in part derived from the weakness of Austria, should look with jealousy on the Danube steam navigation is not to be wondered at; and some of the obstacles which have been thrown in its way may without difficulty be traced up to this source. At one period, in opposition to the treaty of 1814, an attempt was made by the Russians to exact tolls from the vessels belonging to the Austrian Steam Company, and other ships passing the mouth of the Danube; but, on this being resisted by Austria and other European powers, it was dropped. Facilities, however, exist in the nature of the country for obviating such attempts on the part of Russia. The elbow of the Danube at Rassova is only 30 m. from the Black Sea, within which distance a deep lake, 13 m. in length, intervenes. A ship-canal, not half so long as that from Amsterdam to the Helder, might, it is believed, be easily constructed, which would not only shorten the navigation of the Danube 200 m., but would pass through a territory nearly 100 m. S. of the frontier at present occupied by Russia. The most ample information connected with the natural history and antiquities of the Danube may be found in the rare and valuable work of Count Marsigli on that river, published in 1726, in 6 vols. folio. The original work, which is in Latin, was translated into French, and published in 1744. (See *Oesterr. Nat. Encyc.* art. *Donau; Bruguière, Géographie de l'Europe*, p. 401.; *Dict. Géog.; Paget's Hungary, &c.; Turnbull's Austria*, 1840; *Quin, Steam Navig., &c.; Murray's Handbook for S. Germany.*)

DARABJERD, a town of Persia, prov. Fars, 155 m. S.E. by E. Shiraz. It is finely situated on the banks of a river, and in an extensive plain, surrounded with groves of orange and lemon trees, which yield such an abundance of fruit that the juice is exported to all parts of Persia. Though much fallen off from its former splendour, and partially in ruins, it has still a pop. of from 15,000 to 20,000. The culture of tobacco is here carried to a great extent. (*Kinneir.*)

DARDANELLES (an. *Hellespontus*), the narrow strait

"Longus in angustum qua clauditur Hellespontus,"

connecting the Sea of Marmara with the Ægean, and separating part of the S.E. coast of Europe from the most W. part of Asia. Its modern name is derived from the castles, called the Dardanelles, built on its banks. Its general direction is N.E. and S.W. Length about 40 m.; breadth unequal, but where least, not more than ¾ m. across. Being, as it were, the key to Constantinople and the Black Sea from the W., this strait is pretty strongly fortified. The entrance is 2 m. wide, and defended by a fort on either side; that of the Asiatic coast (*Koum Kalessi*) mounting 80 guns and 4 mortars, and that on the European side (*Sertil Bahr Kalessi*) mounting 70 large guns and 4 mortars. The adjacent heights are also crowned with batteries, and about 3 m. above the New Castle of Europe there is one mounting 12 guns. Proceeding onward, 12 m. above the New Castles, are the Dardanelles, or Old Castles of Europe and Asia; these defend the narrowest part of the strait, which is here only ¾ m. wide. The *Sultanieh Kalessi*, or Asiatic castle, is the strongest, and is the residence of the seraskier pacha whose authority extends over the forts on both sides. It has 2 connected forts, and 192 guns, 18 of which are of the largest calibre. The European castle is built in the form of a crescent, and in 1832 was furnished with 64 guns: it has 2 collateral batteries recently built; the most S. of which mounts 48, and the N. 30 guns. 1¾ m. further on the Asiatic side is a battery of 46 guns; and 3 m. above the European castle is a battery called *Kiamleh Bouroun*, with 30 guns, near the small town of Maito, supposed to occupy the site of the ancient *Madytus*. The last forts on both sides are *Bovalli Kalessi*, on the site of the ancient *Sestos*, and *Nagara*, near *Abydos*, which see. The direct distance between them is about 1¼ m. A strong current runs always from the Sea of Marmara, through the Dardanelles, at the rate of from 2 to 4 m. an hour, according to circumstances. The wind also generally sets in the same direction. There are shoals in some places; but deep water is every where to be found in some part of the channel. The Asiatic shore presents the most beautiful scenery; that of Europe is, on the contrary, generally steep and rugged. To each of the Dardanelles a town is attached: the Asiatic is the larger, and contains 2,000 houses; but the streets are narrow, ill paved, and dirty, and almost all the buildings are of wood. It has manufactures of pottery. Gallipoli is the principal town on this strait, which see. This strait has been famous from the remotest period. It derives its name from Helle, daughter of Athamas, king of Thebes, drowned in it. (*Hygin. Poet. Astron.* lib. 2. § 20.) It is also memorable as the scene of the death of Leander, and of the impotent rage of Xerxes, whose ill-fated host crossed over it on a bridge of boats between Sestos and Abydos. (*Andréossy; Dict. Géogr.; Purdy's Sailing Directory*, 1834, pp. 161—167.)

DARFUR, a country of central Africa, between 11° and 16° N. lat., and 26° and 30° E. long. It lies between Bornou and Abyssinia; almost due S. from Egypt, and W. of Sennaar, whence it is separated by Kordofan. Standing, however, like an oasis in the midst of the Great Sahara desert, Darfûr is situated at a great distance from all the above-named territories. The country is of the most dreary character, without rivers, lakes, or much cultivable land, with a few mountains rising from its sandy plains.

Of the *topography* and real extent of Darfûr we possess but limited information, and only one authority for the little we do know (W. G. Browne). The principal town appears to be Cobbé, in lat. 14° 11′, and long. 28° 8′, which is 2 m. in length, from N. to S., but very narrow; each house being separated from the others by a cultivated enclosure. The inhab. are supplied with water from shallow wells dug, in most instances, beside their houses, but so unskilfully that the soil often collapses, and the same well is seldom of use longer than four months at a time. This place is chiefly inhabited by merchants, and from it a caravan starts at irregular intervals to Cairo. 6,000 persons are said to reside at Cobbé. A neighbouring village, called El Fashar, is the residence of the sultan and his court. Sweini, another Fûrian town, lies almost N. of Cobbé, at the distance of about 2 days' diligent travelling, and in the direct road to Egypt; hence it is principally resorted to by merchants. Its environs are more fertile than those of Cobbé, and when the *jelabs* (traders) remain there, it boasts of a daily market. Cubcabia, due W. from Cobbé, at a distance of 2½ days, is a more considerable place, being the depôt of merchandise brought from the W. It has also a manufactory for leather and of *tokeas*, a coarse cotton cloth from 5 to 8 yards long, and about 22 in. wide, which form the covering of all the lower class of both sexes. The other towns are Ril, Cours, Shoba, Gidid, and Gellé. (*Browne's Travels*, pp. 266—276.)

The inhab. of Darfûr, which have been estimated not to exceed 200,000 in number, are a mixture of Arabs and Negroes. They are governed by a sultan, whose power is not altogether absolute, he being, in some degree, amenable to the *kukara*, or ecclesiastics; and frequently standing in some awe of his own troops. His power is delegated in the provs. to governors, called *melcks*. Though the Fûrians are bigoted Mohammedans, they do not abstain from intoxicating liquors; the crime of drunkenness, committed by means of a decoction of hemp, is frequent among them. Snuff and tobacco appear to be almost necessaries of their existence; but for the endurance of hunger and thirst they are unequalled even by the inhab. of surrounding arid regions, among whom such a qualification is so essential. They are not remarkably cleanly in their persons; and, having no baths, rub their bodies with a kind of farinaceous paste as a substitute. The Fûrians are, unlike other moslems, jovial, and even licentious, in their manners, and are particularly fond of dancing, each tribe having a dance peculiar to itself. At Cobbé education is in some degree provided for by four or five *mectebs* (schools), where reading and writing are taught. A kukara also lectures occasionally on the Koran, and what they call *elm*, philosophy. The language is a dialect of the Arabic peculiar to the Fûrians.

Agriculture in Darfûr is at a very low ebb; indeed,

the soil which was presented to Mr. Browne's observation, consisting of bare rocks, sand, a small portion of clay, and a still smaller part of vegetable mould, seemed to offer no encouragement in that respect. Entirely devoid of rivers or lakes, the country solely derives irrigation from heavy periodical rains, which are preserved in numerous water-courses. At the commencement the farmer digs innumerable holes in his fields, into which he throws the seed, and, covering it over with his foot, leaves it without further care until the grain becomes ripe. (*Ibid.* p. 291.) The harvest is gathered by women and slaves, who break off the ears with their hands; so that the farming implements of the Fûrians are few and rude. The grains chiefly raised are wheat, *dokn* (*Holcus dochna* Forskäal), *kassob*, and *sesamum* (*simsin*, Arabic term); the pulse consists of kidney-beans, a bean called *fûl*, and another denominated *shûh*, together with other leguminous plants peculiar to that part of Africa. The occasional drought is not favourable to water-melons, though many are grown. Tamarinds, dates of an inferior quality, the *Rhamnus nabecca* of Forskäal, and tobacco, which is said to be indigenous, are all cultivated in Darfûr. (*Browne*, pp. 306—313.)

Commerce. — Although the Fûrians have but a limited variety of articles to exchange for those necessaries of life which their own country does not produce, yet commerce, from their centrical situation, affords the chief means of support to the nation. Many of their towns are entirely peopled by merchants. The caravans from Egypt, Sonnaar, &c. are laden with jewellery, swords, fire-arms, coffee, raw and manufactured silks, shoes, writing paper, Syrian soap, French and Egyptian cloths, with Indian muslins and cottons, wire, brass, silver, &c. For these the Fûrians give in exchange slaves, camels, ivory, ostrich feathers, gum, pimento, tamarinds, leather sacks for water (*ray*), others for dry articles (*geraub*), paroquets, monkeys, and guinea fowls. (*Browne*, pp. 346. 349.)

The *climate* of Darfûr is chiefly influenced by the perennial rains, which fall from the middle of June till September with frequency and violence, and suddenly invest the face of the country, till then dry and sterile, with a delightful verdure. July appears to be the hottest month, for, according to Browne's meteorological journal, kept during the years 1794-5, the thermometer never sunk below 90° at 3 P.M.; but more frequently rose to 98°. In the April of 1794, however, it ranged from 94° to 101°, while the same month of the succeeding year exhibits an average far below that of either of the July months. The thermometer seldom sunk, according to Browne's register, lower at 3 P.M. than 70°, or at 7 A.M. below 58°, which happened most frequently in February: December and January, also, exhibit low degrees. N. and N.W. winds are those which blow with the greatest frequency over Darfûr. (*Appendix to Browne's Travels*, pp. 581—588.)

Among the animals to be found in Darfûr are horses, of which there are not many; sheep, which also are scarce, yield meat of a poor quality; goats are more numerous; but horned cattle form the chief wealth of the Fûrians, as in the more S. African nations. The milk of the cows is not very palatable; but the beef is good. Camels of every variety of breed are exceedingly numerous: but the *Gerab* camel is much subject to the mange; the males are sometimes castrated. Dogs are employed both in hunting the antelope and for guarding sheep; the household cat is also met with. The wild animals are the lion, leopard, wolf, jackal, wild buffalo, &c. Elephants assemble in large herds of four or five hundred: though they are much smaller than the Asiatic elephant, the animal is a source of great profit to the Fûrians, who make a lucrative sale of his tusks, hold his flesh in great esteem as food, and manufacture the fat into a much-used unguent. Several sorts of monkeys, and the civet-cat, are also mentioned by Browne. Ostriches, vultures, paroquets, partridges, pigeons, and quails, were also seen by him. Locusts, hooded-serpents, musquitos, and white ants, infest the country in large numbers. (*Travels*, pp. 293—304.)

Of the minerals found in Darfûr, the best is copper; but iron is produced in the greatest abundance, and is formed into domestic utensils and arms. All the silver, lead, and tin is brought from Egypt. The other geological features of Darfûr are scarcely known. Rocks of grey granite and fossil salt only are mentioned by Brown. (*Ibid.* pp. 304—306.)

DARIEN. *See* PANAMA (ISTHMUS OF).

DARLINGTON, a market-town and bor. of England, co. Durham, Darlington Ward, S. div., on the Skerne, an affluent of the Tees, and on the great N. road from London to Edinburgh, 215 m. N. by W. London, and 17 m. S. Durham. Area of township, 3,470 acres. Pop. (1841) 11,033. The town consists of several well-built and well-lighted streets, which branch out from a spacious market square. The river is crossed by a bridge of 3 arches. The church, formerly collegiate and dedicated to St. Cuthbert, was built about 1160; it has a fine tower and spire 180 ft. high. The Prim. and Wesl. Methodists, Independents, R. Catholics, and Soc. of Friends, have places of worship. A grammar-school was founded by Q. Eliz. in 1567, and a blue-coat school by Lady Calverley in 1715. There are also Lancastrian, national, and Sunday schools, a dispensary, lying-in charity, and 2 alms-houses. A mechanic's institute, with a library, has been formed here. It is a bor. by prescription, governed by a bailiff appointed by the bishop, who holds a court twice a year for the manor of Bondgate, and a bor. court also twice a year, at both of which debts under 40*s.* are recoverable. Petty sessions are held on alternate Mondays in the town-hall, a neat building having a house of correction connected with it. The election for members for the S. division of the county is held here. The manufacture of linen, which was formerly carried on to such an extent as to give employment to 500 looms, has declined, but it is still pretty considerable. The manufacture of woollen yarn employed, in 1839, 3 mills, with 405 hands; in the same year there was 1 flax mill at work, with 93 hands. A good many persons are also employed in wool-combing; and there are several tan-yards, rope-walks, breweries, and iron and brass works. The Stockton and Darlington railway, one of the first in the kingdom, commences at Witton Park Colliery, near W. Auckland, and proceeds by Darlington and Yarm to Stockton, a distance of 24½ m. It has 2 fixed engines, which work 4 inclined planes, ¾ m. long each. Markets, Mondays; cattle markets, on alternate Mondays. Fairs on the 1st Monday in March, Easter and Whit-Monday, and 10th Oct.; statute fairs on 13th May and 23d Nov. The Darlington Joint Stock Banking Co., a branch of the National and Provincial Bank of England, a private banking house, and a savings' bank are established here. (*Surtee's Hist. of Durham; Bailey's Agr. View of Durham; Parl. Papers.*)

DARMSTADT, a town of W. Germany, cap. of the grand duchy of Hesse-Darmstadt, seat of the gov. and residence of the sovereign, prov. Starkenberg, in the great Rhenish plain near the N.W. extremity of the Odenwald, and on the *Bergstrasse*, or high road between Frankfurt-on-the-Maine and Heidelberg (*see* HESSE-DARMSTADT), 17 m. S. the former city, 58 m. N. by E. Carlsruhe, and 8 m. E. by N. the Rhine; lat. 49° 56′ 24″ N., long. 8° 24′ 49″ E. Pop. about 27,000, though it is said, at the beginning of the present century, to have been under 9,000. (*Berghaus.*) It is rather dull, has little trade, nor, for a capital, does it present much deserving of notice. It consists of an old and a new town; both encircled by walls: the former is ill built, and its streets are narrow and dark; while the latter has broad, straight, and handsome streets, and good houses, many of which stand singly. The town is well lighted at night. It has 3 or 4 suburbs, 72 streets, 12 squares, 4 churches, 6 entrance-gates, 3 of which are handsome structures, and 53 public edifices; amongst the latter are the opera-house, which, in the time of the late grand duke, was one of the most celebrated throughout Germany for its performances; it is built in the Italian style, and is 230 (Rhenish) ft. in length, by 158 ft. broad. The riding-school, now converted into a depôt for artillery, 319 ft. in length, by 157 ft. in breadth, is another conspicuous object. The grand duke resides in a new palace of no great architectural pretensions. The old ducal palace, surrounded by a dry ditch which has been changed into a shrubbery and garden, is a structure of the various ages from the 16th to the 18th century, and contains a picture-gallery with about 600 paintings, but mostly second-rate, a museum of natural history with some valuable fossils, a museum of ancient and modern sculpture, a hall of antiquities, collection of cork models, armoury, and a library of 120,000 vols. open to the public. The remaining principal public buildings are — the palaces of the hereditary prince and the Landgrave Christian; the Catholic church, a brick edifice, the interior of which is an elegant and imposing rotunda, 173 ft. in diameter, 123 ft. in height, and surrounded by pillars 50 ft. high; the *Casino*, in which the commons of the duchy meet; the military hospital, royal stables, orphan asylum, ducal chapel, synagogue, &c.

Darmstadt is the seat of the high court of appeal for the grand duchy, and various other judicial tribunals and government offices. It has a gymnasium, a teachers' academy, a practical school of arts and sciences (*Real-schule*), schools of artillery and military duty, of sculpture and drawing, &c. It has manufactures of tobacco, wax-candles, carpets, silver articles, coloured paper, cards, and starch: coaches are built in the town, and there are numerous mills and kitchen-gardens in the vicinity. The majority of the inhab. depend, however, for subsistence on the presence and expenditure of the court. A daily communication is maintained with Strasburg, Frankfurt, and other considerable towns from 50 to 100 m. distant. (*Berghaus, Allg. Länder und Volkerkunde*, iv. 351.; *Cannabich, Lehrbuch*, p. 476.; *Murray's Handbook for N. Germany.*)

DARTFORD, a town and par. of England, co. Kent, lathe Sutton-at-Hone, hund. Axton, Dartford, and

Wilmington; on the Darent, about 4 m. from its embouchure in the Thames, 15 m. E.S.E. London. Area of par. 4,150 acres; pop. of do. (1821), 3,593; (1831), 4,715. The town, situated in a narrow valley, consists chiefly of one main street, along the road from London to Dover, and of 2 smaller ones branching from it. The river is crossed, at the E. end of the town, by a bridge of the æra of Edw. III., widened and repaired about 60 years since. The church is a large structure, with 2 burial-yards, one surrounding it, the other on the summit overlooking its tower. There are several dissenting chapels; a free grammar-school, founded in 1576, for 8 boys; a national school, and 2 sets of almshouses. There is a co. bridewell near the town, and sessions for the upper div. of the lathe are held in it. During the reign of Elizabeth, the co. assizes were frequently held here; and at present a court of requests for debts under 5*l.*, whose jurisdiction extends over the town of Gravesend and 4 adjoining hundreds. Market, Saturday; fair, August 2., for horses and cattle. The chief business of the town is caused by the numerous large gunpowder, paper, oil, and flour mills on the Darent: there is also a large steam-engine manufactory, and a foundry connected with it, employing together between 200 and 300 hands. The river is navigable for boats to the town, where there is a small wharf, whence there are daily passage-boats to London.. The Roman Watling Street is traceable near the town. In one of the chalk hills between which it stands are several ancient excavations, supposed to have been scooped out for granaries during the Saxon period. There are some remains of an Augustine nunnery, subsequently made a royal residence by Henry VIII. and by Elizabeth. Dartford was the source of the insurrection headed by Wat Tyler, who, being a blacksmith in the town, killed the poll-tax collector by a blow of his hammer, for an insult offered to his daughter.

DARTMOOR. *See* ENGLAND.

DARTMOUTH, a parl. bor., town, and sea-port of England, co. Devon, hund. Coleridge; 170 m. (direct distance) W.S.W. London, and 26 m. S. by W. Exeter. Pop. (1821), 4,485; (1841), 4,663. Area of parl. bor. 1,850 acres. The town is situated on the W. bank of the æstuary of the Dart, near its embouchure in the English Channel, where it forms a spacious harbour, capable of containing several hundred sail of vessels of the largest size. The entrance to the harbour is narrow, and protected by a battery on its W. side, on the site of an ancient castle, from which to a castle on the opposite bank (now in ruins) a chain used to be extended, for the purpose of defence. The streets, which are narrow and irregular, rise from the margin of the river, and parallel with it, one over another, along a steep acclivity, being mostly connected by flights of steps; houses mostly antique, with projecting upper stories; the whole is paved, well supplied with water, and partially lighted with gas. There are 3 churches — St. Saviour's, built 1372, a curious old structure, usually called the Mayor's Chapel; Town-hall Chapel, on the summit beyond the town, with a tower forming a sea-mark; and St. Petovex's, adjoining the battery at the entrance to the harbour. There are also 3 dissenting chapels; 2 sets of almshouses, one of which, founded 1671, is for decayed mariners; and several minor charities. Market, Friday, in a spacious market-place, built 1820. At present there are no fairs. There are large tide-docks, adapted for the repair and building of vessels, but they have been unoccupied for many years; ship-building, however, has recently been revived at another establishment, and some remarkably fine vessels have been launched. There are also establishments for sail and rope-making, a spacious quay, and several private wharfs. The exports consist chiefly of woollen goods and cider, sent thither from the interior, and shipped coast-wise; and of various articles of general supply for the Labrador fisheries, in which several vessels belonging to the port are directly engaged, though this trade has greatly declined from its ancient importance. There are regular sailing-vessels and one steamer, for goods and passengers, between Dartmouth and London. There belonged to the port on the 1st of Jan. 1850, 456 vessels, of the burden of 33,598 tons, manned by about 2,000 seamen. In ancient times, however, its mercantile marine was comparatively much more considerable, as is evident from the fact of its having furnished 31 vessels and 757 seamen to the fleet of Edward III. against Calais. The port is a bonding one, its jurisdiction extending about 40 m. along the coast (from the Teign to the Erme), and up the Dart, to Totness bridge (10 m.). The Dart is navigable thus far for vessels of 150 tons, the channel having recently been deepened and improved: a small steamer plies daily between the two towns, and several other passage-boats; a flying bridge connects the town with the opposite bank at the higher part of the harbour; and there is a horse-ferry to Kingswear, at the lower part. An annual regatta takes place in the harbour. It claims to be a bor. by prescription, under the name of Clifton-Dartmouth, Nardness, &c.

It regularly sent 2 mems. to the H. of C. from the 14th Edw. III. down to the Reform Act, which deprived it of one mem. The elective franchise had been previously vested in the corporation and in the freemen made by them, the inhab. of the bor. not being entitled to their freedom in right of birth, servitude, or residence. (*Boundary Report.*) But the Reform Act, besides giving the franchise to the 10*l.* householders, extended the limits of the bor. to the dimensions already stated. Registered electors, 1849-50, 312. The agricultural part of the parl. bor. is excluded from the municipal bor., which is now governed by a mayor, 4 aldermen, and 12 councillors. The income of the corporation, chiefly derived from lands and houses, is about 900*l.* a year. The scenery around Dartmouth is extremely picturesque. Flavel, an eminent Calvinistic writer, and Newcomen, the inventor of the atmospheric engine, were natives of this town; which also gives the title of earl to the Legge family.

DAVENTRY, a town and par. of England, co. Northampton, hund. Fawsley. The town, situated on the high road from London to Birmingham, near the source of the Nen, is 68 m. N.W. of the former, and 12 m. W. Northampton. The par., which comprises 4,090 acres, had in 1831 a pop. of 3,046, of whom 3,586 belonged to the town. "It is clean and respectable in appearance, with some good houses and shops. The chief or only trade is that of shoe-making, which, however, is not carried on to any extent." (*Municipal Boundary Report.*) It has a good modern church; a free school founded in 1576; 5 boys are also educated by means of a legacy of Lord Crew, bishop of Durham, and 12 at the expense of the corporation. The remains of a priory founded in 1090 are now occupied as dwellings by the poor. Though incorporated at an early date, the bor. does not appear ever to have been represented in the H. of C. Market-day, Wednesday. On a neighbouring lofty eminence, called Brough hill, is an encampment occupying the whole of the summit. A spring rises in the outer ditch of the encampment, which, according to Dr. Stukeley, is one of the highest in England. (*Stukeley's Itinerarium Curiosum*, ii. 18.; *Boundary Report*, &c.)

DAVID'S (ST.), a small decayed city of Wales, co. Pembroke, hund. Dewisland, near the extreme W. point of the principality, on a small stream called the Allan, about 1 m. from the Sea, and 16 m. N.W. Milford Haven. The par., an extensive one, had in 1841 a pop. of 2,443, of which the city had about 1,000. A bishopric was established here at a very early period; and to that circumstance the place is most probably indebted for its origin. The cathedral, the bishop's palace, St. Mary's college, and other buildings appropriated to purposes connected with the establishment and the residence of the clergy, are enclosed within a lofty wall above 1,200 yards in circ. The cathedral, which occupies the site of one more ancient destroyed by the Danes, was completed in the reign of King John. It is a cruciform structure, 307 ft. in length within the walls, with a square tower at the W. end; it has many interesting monuments, but is in great part in ruins. The bishop's palace, reckoned one of the most magnificent edifices of the kind in the kingdom, is also in ruins; as is St. Mary's college, founded by John of Gaunt in 1365. The cathedral contains the tombs of St. David, the patron saint of Wales, Giraldus Cambrensis, bishop Anselm, &c.; and these, and the great antiquity of the place, conferred on it a peculiar sanctity, which in the middle ages made it be resorted to by crowds of pilgrims. The bishop now resides at Abergwilly, near Caermarthen: his nett revenue amounted, at an average of the 3 years ending with 1831, to 1,897*l.* a year: the revenue of the dean and chapter amounts to 1,362*l.* The town is at present inhabited by the few clergy who perform the duties at the cathedral, and by the farmers and others who hold land in the immediate vicinity. There is very little trade, and the place may be said to be neither increasing nor falling off. The country round is poor and unimproved, and the access to it is very bad. The poor's rate is high, but house rent is extremely low; so much so that a house that would bring 150*l.* in the vicinity of London would not let here for 8*l.*! The inhab. elect a mayor annually, whose duty it is to see that no encroachments be made on a common held under lease from the bishop and chapter, and to collect a rate for payment of its rent. (*Beauties of Wales; Boundary Report*, &c.)

DAVIS'S STRAITS, the sea stretching N.N.W. and S.S.E., and uniting Baffin's Bay with the N. Atlantic Ocean, having Greenland on its E., and Cumberland Island on its W. side. Where narrowest, under the arctic circle, it is from 150 to 160 m. across; but its length is not accurately determined. It derives its name from Davis, by whom it was discovered between 1585 and 1587. Strong currents set towards the S. from this strait, which is also much encumbered with ice and icebergs. It has been for many years past the principal resort of the ships engaged in the N. whale fishery; the whales having been nearly exterminated in the seas round Spitzbergen, the original seat of the fishery. (*See* art. BAFFIN'S BAY.)

DAUPHINÉ, one of the provs. into which France was divided previously to the revolution. It is now distributed among the deps of Isère, Drome, and Hautes Alpes.

DAX, AX, or AGS, a town of France, dép. Landes, cap. arrond., in a fertile plain on the Adour, 29 m. S. W. Mont-de-Marsan. Pop. (1836) 4,776. It is pretty well built, is surrounded by walls of Roman construction, and has an ancient episcopal palace, cathedral, hall of justice, and prison. Dax is, however, chiefly celebrated for its numerous hot saline springs, accounted efficacious in rheumatism, paralysis, &c.; and which being known to the Romans, they gave it the name of *Aquæ Augustæ*. The principal of these springs pours its waters into a large basin in the centre of the place, and the evaporation from it is so great, that in cool mornings the whole town is sometimes involved in a fog. There are several bathing establishments contiguous to the town. Dax communicates by a bridge across the Adour, with a suburb on the opposite side of the river. It has a tribunal of primary jurisdiction, a chamber of commerce, a communal college, and a theatre. Manufactures of earthenware, pitch, oil, thread, vinegar, leather, &c., and some trade in corn, wine, brandy, and wood. (*Hugo*, art. *Landes*; *Dict. Géog. &c.*)

DEAD SEA (Lat. *Lacus Asphaltites*, Arab. *Bahr-el-Lout*), a lake of Palestine, celebrated in scripture history, in about 31½° N. lat., and 35° 40′ E. long. Its dimensions have been variously stated, but it is probably about 40 m. in length, and 13 in extreme width. On the E. and W. it is bounded by lofty mountains; on the N. it opens to the plain of Jericho and the valley of the Jordan; on the S. the valley of El-Ghor extends, as if it were a continuation of its bed, though with a gradual rise, to the gulph of Akabah. (*See* JORDAN.)

Nothing can be more dreary than the scenery around this famous lake; the temperature is very high; the soil, impregnated with salt, is without vegetation, the air is loaded with saline particles, and the bare crags of the surrounding mountains furnish no food for either beast or bird. Hence its neighbourhood is generally deserted by animated beings, and the dreary stillness of the place is increased by the nature of the lake itself. Intensely salt, its waters are not moved by a gentle breeze, and, owing to the hollowness of its basin, being seldom affected by a strong one, its usual appearance is that of stagnation, agreeing well with the death-like stillness and desolation around.

This absence of life has given to the lake its popular designation of Dead Sea, and is the source of the common tradition that its waters are fatal to fish, and its exhalations to birds and other animals. This is, however, incorrect; birds fly over its surface uninjured; and Maundrell found upon its shores some shells, which seemed to imply that it was not *altogether* tenantless. The water is very limpid, but extremely bitter and nauseous, the substances held in solution amounting to a fourth part of its whole weight.* It has also a strong petrifying quality, which accounts for the want of any great variety of fish; and it is peculiarly buoyant, though the assertion that nothing sinks within its bosom is wholly fabulous. Asphaltum (whence its classical name) floats in great quantities on its surface; and a bituminous stone, very inflammable, and capable of receiving a high polish, is found upon its shores.

The valley of the Jordan has been long known to be considerably depressed below the level of the ocean.† This depression is, however, much greater than was formerly supposed. The Dead Sea is the lowest part of the valley; and its surface has recently been ascertained to be sunk above 1300 ft. under the surface of the Mediterranean, being by far the greatest depression below the sea-level of which we have any authentic account. It consequently belongs to that class of lakes that have no visible outlets; it receives six streams besides the Jordan, but gives forth none; the surplus water being carried off by evaporation. Its depth, which varies in the dry and rainy seasons, exceeds, in some places, 350 fathoms; but towards its S. extremity it is so shallow as to be in parts fordable.

Its Arabic name, *Bahr-el-Lout* (Sea of Lot), refers to the connection between the history of this lake and that of the nephew of Abraham, in whose days its bed, or a portion thereof, the fertile vale of Siddim, contained, according to the sacred writer, 5 cities (Gen. xiv. 2.); and according to Stephen of Byzantium (art. *Σόδομα*) 10, and Strabo (xvi. cap. 2. 764.), 13. In the visitation by which they were all destroyed, with the exception of Zoar, the neighbouring country underwent an extraordinary change; and is said by Moses (Deut. xxix. 23.) to have become "a land of brimstone, and salt, and burning," characteristics by which it still continues to be marked. In Scripture this collection of water is called the Salt Sea (Gen. xiv. 3.; Deut. iii. 17.; Josh. xv. 5.): the Sea of the Plain (Deut. iii. 17.); and the East Sea. (Ezek. xlvii. 18.; Joel, ii. 20.) *Maundrell*, pp. 112—115.; *Volney*, i. 288—290; *Burckhardt's Syria and the Holy Land*, pp. 393—395.; *Robinson*, i. 64—69. 286.)

DEAL, a parl. bor. and sea-port town of England, co. Kent, lathe St. Augustine, hund. Bewsborough. It is also a member of the cinque port of Sandwich. Area of par., 1,120 acres; pop. of ditto (1821), 6,811; (1841), 6,688. The town, situated on the E. coast of Kent, opposite the Goodwin Sands, and about half-way between Ramsgate and the S. Foreland, is 66 m. E.S.E. London: it consists of Upper, Middle, and Lower Deal. The latter, containing the great bulk of the pop., is built, principally in three parallel streets, close to the shingly beach, extending along the roadstead called the Downs. Streets mostly narrow and irregular, but paved and lighted. A row of houses connecting the lower with the upper village, constitutes Middle Deal: in these last the houses are detached, and are mostly occupied by the wealthier class. The par. church is in Upper Deal: there is a chapel of ease in the lower town, 4 dissenting chapels, and a national school. Walmer forms a continuation of Lower Deal, and owes its rise to the naval arsenal, hospital, and barracks, formed there during the last war. Its pop. in 1841 was 2,170 Since the Municipal Reform Act, it has been included in the bor. of Deal (of which it forms a ward); and the Reform Act conferred on both parishes, in conjunction with Sandwich, the privilege of returning 2 mems. to the H. of C. Registered electors, 1849-50, 988. Deal was probably annexed to the cinque ports soon after the Conquest; a decree exempting it from co. taxation shows it to have been so in 1229; a charter of 11th Wm. III. made it a bor. independent of Sandwich, Walmer included. It is now divided into 3 wards, governed by 6 aldermen and 18 common-councilmen. There is a court of requests for debts under 40s., whose jurisdiction comprises Deal and 9 other pars. Market, Tuesday and Saturday; two small fairs, April 5., Oct. 12. There are no manufactures, the inhabitants being mostly shop-keepers, pilots, fishermen, boatmen, &c., mainly dependent on the resort of shipping to its famous roadstead, the Downs. The latter is a spacious and convenient anchorage, bounded seaward by the Goodwin Sands, and tolerably safe, except in heavy gales from the N. and E. Most outward and homeward-bound vessels touch here to take or land pilots, letters, passengers, &c. This business, however, has greatly fallen off since the last war, when the Downs was much resorted to by men-of-war and merchantmen waiting for convoy; and, in consequence, the town is in a very depressed state, and many houses are unoccupied. Coals form almost the only article of import. Of late years, Walmer has been resorted to as a sea-bathing place, and there are several good lodging-houses for the reception of visiters during the season. Deal Castle, on the W. side of the town, is a round tower, built by Hen. VIII., with a moat and drawbridge; Sandown and Walmer castles are on either side of it, close to the sea, at the extreme limits of the bor. Deal is supposed by some to be the spot where Cæsar effected a landing, but this is doubtful.

DEBRECZIN, a town of Hungary, and, next to Pesth, the largest in the kingdom, cap. co. Bihar, in a flat, sandy, and arid plain, 114 m. E. Pesth, and 110 m. N. W. Clausenburg; lat. 47° 30′ N., long. 21° 6′ 15″ E. Pop., together with its suburbs, 45,730 (*Oest. Encyc.* 1835), nearly 44,000 of whom are Calvinists. This is one of the most singular places in Europe. Notwithstanding its size, its general appearance is rather that of a large village than a town; and notwithstanding its manufactures and trade, both of which are considerable, none of the advantages ordinarily met with in large commercial cities are here to be found. Its streets are broad, unpaved, and in rainy weather a mass of liquid mud. "Scarcely any of the houses are above one story in height, and few are built on any regular plan. The greater part are thatched, which has rendered Debreczin subject at various times to severe ravages from fire. In the spring of 1811, not fewer than 2,000 habitations were reduced to ashes in the course of six hours." (*Bright's Trav.* p. 200.) There are, however, 5 churches, 3 hospitals, 2 infirmaries, an orphan asylum, and a town-hall. The principal college of the Calvinists in Hungary, with a library of 20,000 vols., and upwards of 2,000 students (*Paget*), is at Debreczin. It has also a Piarist college, a Catholic high-school, and a monastery. Shoes are manufactured in large quantities, there being as many as 500 master-workmen; tobacco pipes to the number of 11,000,000 (*Cannabich*), red clay pipe-bowls about 1,800,000, prepared sheep-skins about 25,000 annually; coarse woollen cloth, a spongy kind of soap greatly es-

* In 100 parts, as follow: —

Muriate of lime - -	0·920
magnesia - -	10·246
soda - - -	13·360
Sulphate of lime - -	0 054
	24·580

† It has been sometimes said that it was thence called *Cale Syria*, or the Hollow Syria, by the ancients. But the country so called is situated considerably more to the N., in Syria and not in Palestine, and was designated Cœle Syria from its lying between the mountain chains of Libanus and Anti-Libanus.

teemed throughout the Austrian empire, with leather, furs, combs, coopers' and turnery wares, are amongst the principal manufactures. There is an extensive market for all these articles, as well as for oxen, sheep, horses, hogs, wheat, millet, wine, tobacco, water-melons, lard, wax, honey, and various other kinds of produce, especially at the fairs held at Debreczin every three months. On these occasions the country round the town is covered to an extent to which the eye can scarcely reach, with flocks and waggons, bales and cases, tents and huts, round which thousands of people are constantly gathered; presenting, in fact, all the appearance of an immense herd of nomades. A great deal of business is transacted at these fairs. Debreczin is, indeed, the great mart for the produce of the N. and E. parts of Hungary. By far the greater part of the pop. are Magyars; and it is here that the true Magyar character may be most advantageously studied. "The language is here spoken in the greatest purity; the costume is here worn by rich as well as poor; and those national peculiarities which a people always lose by much admixture with others, are still prominent at Debreczin." *(Paget's Hungary and Transylvania,* ii. 20, *&c.; Czaplovics Gemalde von Ungarn,* i.; *Bright's Travels in Lower Hungary, &c.)*

DECCAN (Daks-hina, *the South*), a term of Sanscrit origin, and formerly applied to the country comprising all that part of India to the S. of the Nerbudda river; but since the Mohammedan invasion, the term has been restricted so as to apply only to the countries between the Nerbudda and Krishna, that is, between the parallels of lat. 16° and 23° N., extending from the Arabian Sea to the Bay of Bengal, and including the provs. Candeish, Aurungabad, Beeder, Hyderabad, Bejapoor, Berar, Gundwanah, Orissa, and the N. Circars. British Deccan comprises the collectorates of Candeish, Ahmednuggur, Poonah, and Darwar, under the presidency of Bombay; and the ceded districts on the Nerbudda under the presidency of Bengal. The remainder of this region is mostly comprised within the dominions of the rajah of Berar, the nizam, the rajah of Sattarah, the guicowar, and scindia. For farther particulars, see the various provs., districts, and states referred to under their respective heads.

DEE, a river of England, which has its source in Bala Lake, co. Merioneth, N. Wales. At first it pursues an easterly course through the beautiful vale of Llangollen, till it passes Wynnestay. It then takes a northerly direction, and forms the line of demarcation between the cos. of Denbigh and Flint in Wales, and Cheshire in England. It nearly encompasses the ancient city of Chester, and is thence conveyed by an artificial channel, about 8 m. in length, to its spacious æstuary on the Irish Sea. Its principal tributary is the Alwyn, which unites with it at Holt. Its æstuary is much encumbered with sand banks.

The Dee is also the name of two considerable Scotch rivers, one of which falls into the N. Sea at Aberdeen, and the other into the Irish Sea at the Little Ross, about 6 m. below Kirkcudbright. The latter is navigable as far as Tongland-bridge, 2 m. above Kirkcudbright, for vessels of large burden.

DELAWARE, one of the U. S. of America, and, excepting Rhode Island, the smallest of the Union. It occupies a part of the peninsula, lying between the bays of Chesapeake and Delaware; extending from lat. 38° 30′ to 39° 50′ N., and long. 74° 55′ to 75° 47′ W.; having N. Pennsylvania, W and S. Maryland, and E. Delaware bay and river. Length, N. to S., 95 m.; average breadth about 22 m. Area, 2,068 m. Pop. (1840) 78,085, of whom 2,605 were slaves. Surface hilly in the N., more level in the S., and low alluvial, and marshy along the coast. One of the most elevated ridges in the peninsula passes through this state, dividing the waters that flow into either bay. The chief river, the Delaware, rises in New York, runs mostly S., and, after dividing that state and New Jersey from Pennsylvania, falls into the Bay of Delaware, near the N. extremity of the state, after a course of about 310 m. It receives several tributaries, and is navigable for ships of the greatest burden to Philadelphia, 55 m. from its mouth; and for small steam-vessels and boats, to nearly 135 m. higher. The other rivers are inconsiderable. There are no harbours on the sea-coast; the only one in the state is that of Newcastle, 5 m. above the mouth of the Delaware river. The climate is healthy; but the degree of cold experienced in the N. is much greater, compared with that of the S., than could be expected from a difference in lat. of only 1° 20′. The soil in the N. is a rich clay; in other parts, and especially along the shore, it is sandy, and of inferior fertility; but it is every where well cultivated, at least for America. Principal crops, wheat, Indian corn, rye, barley, oats, flax, buckwheat, &c. The flour is of superior quality, and much esteemed for its softness and whiteness. The Cypress Swamp, a tract 12 m. in length and 6 in breadth, in the S. part of the state, has supplied a great deal of fine timber. Few minerals have been met with, excepting large masses of bog iron along the banks of the smaller streams. Manufactures have made considerable progress. The mills situated on Brandywine Creek are considered the finest in the U. States; vessels are built, and there are iron-foundries and other extensive works at Wilmington. Wheat and flour are the principal articles of export. The foreign trade of this state is quite inconsiderable.

The state is divided into three cos. Dover is the cap., but yields to Wilmington and Newcastle in size, trade, and pop. There is no college in the state; one planned in 1803 at Wilmington has not come into operation; but there are good academies in this and in several of the other towns. The state has a fund for the support of free schools, which in 1834 had a capital of 170,000 dollars; and the objects of which are assisted by voluntary contributions from the different districts. A railroad, 16 m. long, from Newcastle to Frenchtown, was completed in 1832; and another, 33 m. in length, between Wilmington and Susquehannah, which communicates with the Baltimore and Port-Deposit railroad, was finished in 1837. A canal 14 m. in length, and navigable for small sea-vessels, unites the Delaware river near its mouth with the head of Chesapeake Bay.

The legislature consists of a senate and house of representatives, each co. sending 3 senators and 7 representatives; the former are elected for 4, and the latter for 2 years, by all the free white male citizens above 21 years of age who have resided in the state for a year, and paid taxes for six months preceding the election. The executive power is exercised by a governor chosen by the citizens, who retains office for 4 years, but is not re-eligible. Judges retain office during "approved conduct." Most of the pop. are Presbyterians and Methodists.

Delaware was colonised by the Swedes in 1627. In 1655 it was acquired by the Dutch; and in 1664 came into the possession of the British. In 1704, when under the proprietorship of the celebrated W. Penn, it became a separate colonial establishment, and as such remained until the independence of the States. Its constitution, formed in 1776, was amended in 1831. It sends 1 rep. to Congress.

DELAWARE BAY is an arm of the sea between the states of Delaware and New Jersey, 65 m. in length, and about 30 m. wide in its centre, and 18 at its mouth, between Cape Henlopen, lat. 38° 47′ N., long. 75° 6′ W., and Cape May, lat. 38° 57′ N., long. 74° 52′ W. It has deep water throughout, and a line-of-battle ship may ascend the river Delaware to Philadelphia, 55 m. above the head of the bay, and 120 m. from the ocean. A magnificent breakwater has been commenced at the entrance of Delaware Bay, near Cape Henlopen, to form an artificial harbour for the protection of vessels from the winds from the E. to the N.W., round by the N., and from the floating ice descending the bay from the N.W. This breakwater, which is to consist of two parts, one 1,200, and the other 500 yards in length, will, when completed, be a very great, as well as a most useful work. It is formed, like the breakwaters of Plymouth and Cherbourg, by sinking blocks of granite in the sea. *(Encyclopædia Americana; Darby's View, &c.; American Almanack, &c.,* 1834—1840.)

DELFT, a town of S. Holland, on the Schie and on the canal between Rotterdam and the Hague, 4 m. S.S.E. the former, and 8 m. N.W. the latter town; lat. 52° 0′ 48″ N., long. 4° 21′ 46″ E. Pop. (1840) 17,037. "Delft is an old-fashioned brick town, as Dutch as possible in its appearance, with old gateways, and lines of trees and havens in the middle of the streets. You at once see that the place is not what it has once been—no shipping, no trade, and no bustle in its almost empty thoroughfares. Its lines of leafy trees, once prized for their delightful shade, now bend over green-mantled pools undisturbed by traffic, and only apparently kept up for the fashion of the thing, or for the accommodation of a passing *Treckschuit*. But with all its dulness, the town is both neat and cleanly in a very high degree." *(Chambers.)* It contains few places or buildings interesting to strangers: the principal are—the palace, in which William I., the most illustrious of all the princes of the house of Orange, and the founder of the independence of his country, was assassinated, July 10. 1584; it is a plain brick building within a court-yard, and is now used as a barrack. The new church, at the E. end of the market-place, is a fine old Gothic edifice, with a conspicuous lofty tower, and one of the best peals of bells in Europe: this church contains the tomb of William I., one of the most magnificent objects of art in Holland. "It consists of a highly ornamented canopy, supported by a number of black and white marble pillars. In the centre, on a sarcophagus, lies the figure of the prince, in his robes, beautifully sculptured in white marble; and at his feet lies the figure of his faithful dog, which on one occasion saved his master's life in a midnight attack. There are several good figures in bronze round the tomb: that which is most admired is a figure of Fame blowing a trumpet, and

resting lightly on one toe, as if about to take its flight. Beneath, is the burial vault of the present royal family of Holland." (*Chambers.*) Adjacent to this superb monument is that of the most illustrious individual Delft ever produced, HUGO GROTIUS, born here on the 10th of April, 1583. It was erected in 1781, at the expense of his descendants, and is inscribed with a Latin epitaph written by the younger Burman.* "The Oude Kirke, or old church of Delft, is a structure remarkable for its extreme antiquity and huge size. It is situated in a mean street, and on approaching it the stranger is amazed at the enormous mass of brick, grey with age, which meets his eye. It is some 700 or 800 years old, and seems indebted for its protracted existence to the clusters of parasitical houses and shops built within the recesses of its buttressed walls." (*Chambers.*) It contains the tombs of the famous admiral Van Tromp; of Hein, another admiral who fell in battle at Tromp's side; of the naturalist Leewenhoek, a native of this town, &c. The large building once occupied by the Dutch E. India Company faces one of the main streets, and extends along one of the havens for a considerable length; but its windows and doors are now closed, and it is used as a depôt for military stores.

Delft was in former times the great seat of the manufacture of the common kind of earthenware, which was thence known by its name. England, however, has long since acquired a decided ascendancy in this branch of industry, and but very few persons are at present engaged in it in Delft. In fact, nearly all the "Delft ware" in use in Holland, and over the greater part of the Continent, is exported from England. Delft has a large woollen cloth factory, and others of carpets, coverlets, soap, &c., besides several distilleries and breweries. Its trade, however, is languishing, and it has little intercourse, except with Rotterdam and Delftshaven, a little town of 2,600 inhab. on the Maese, at the mouth of the canal which connects it with the Hague.

Delft was founded in 1074; it suffered severely from fire in 1536. Besides the eminent natives who have been already mentioned, it has produced many painters of celebrity, amongst whom was Beck, a pupil of Vandyk. (See *Chambers's Tour in Holland, &c. in* 1838, which has an excellent account of this and of the principal Dutch towns.)

DELHI, a prov. of Hindostan, presid. Bengal; chiefly between lat. 28° and 31° N., and long. 75° and 80° E.; having N. the prov. of Lahore, Gurwal, &c., E. Gurwal and Inde, S. Agra, and W. Rajpootana. Like the other Mohammedan soubahs of India, this prov. is not a modern subdivision under the British rule: the collectorates which have been formed out of it are subordinate to the court of Bareilly, the judicial capital in the upper or W. provinces. (*See* BENGAL, PRESIDENCY OF.) The jurisdiction of Delhi at present extends only over the country W. the Jumna. Most of this prov. is flat; but at Wuzeerabad, near Delhi city, begins the long range of hills that extends through the Macherry dom. towards Jyepoor. The chief rivers are the Ganges, Jumna, Caggur, Chittung; and, in the N.W., the almost extinct Sereswati, formerly a distinguished stream: the principal of these run through the prov. in a S.E. direction. The land is mostly arid and sandy, and in the W. suffers greatly from drought in the hot season, when the water, which is of a brackish quality, from the natron and other salts with which the ground is impregnated, can be procured only at from 120 to 200 ft. below the surface. Still, however, no part of Hindostan is susceptible of greater improvement by irrigation. The British government has latterly directed much attention to the restoration of ancient canals and the construction of new ones in this prov. The canal of Ali Merdan Khan, which had been previously choked up for 100 m., was re-opened in 1820, at an expense of 22,280*l.*; and, as its waters gradually advanced, the country for 5 or 6 m. on either side became fertilised in a most astonishing manner, and numerous wells, previously thought useless, became again serviceable. The canal of Sultan Feroze Shah, the bed of which passes from the former W. through Hurriana to the frontiers of Bicanere, has been also surveyed preparatory to its restoration. A considerable tract between the Jumna and Ganges, though now sterile and waste, was formerly highly cultivated and populous, having been fertilised by the great Doab canal. Between the Jumna and Sutlege mango trees are numerous, and the soil produces wheat, barley, and other dry grains, but the periodical rains are not sufficient to insure a crop. During the rainy season the temporary streams overflow, after which the pasture is good, and the climate tolerably healthy and temperate; but in the hot season the heat becomes so oppressive, that the natives are often obliged to seek refuge from it in underground habitations. The land is assessed under a modification of the village system; but the *mocuddim*, or head man, is not responsible for the payment, but is merely the agent for the rest of the village, removable at their pleasure, and not holding his office by any kind of hereditary tenure. Neither does he derive apparently any emolument from his office, nor is he analogous to the *zemindar* in the lower provinces, or the *potail* in other parts; there being here no middle man to enjoy any portion of the land-tax, standing between the people and the government, which last receives from one fourth part to a half perhaps of the produce of the land, according to circumstances, after the shares of the village functionaries and certain other village expenses have been deducted. The *punchayet* system of arbitration is in common use. In the zillah courts the European judges are assisted by both Mohammedan and Hindoo law-officers, but the people in this prov. do not seem so disposed to litigation as in some others; they are, on the contrary, contented, orderly, and properous. At the commencement of the British rule in 1803, there were about 600 villages deserted, the inhabitants of most of which had before 1821 returned, and claimed and cultivated the lands they formerly possessed; and both the pop. and revenue had at that period very considerably increased. Mohammedans are most numerous in Delhi city, but Hindoos every where else, except in the N.W., where the Seik religion is predominant, and the country is almost entirely occupied by petty Seik states. The chief towns are Delhi, Bareilly, Pillibheet, Shahjehanpoor, Rampoor, Moradabad, Anopshehr, Meerat, &c. (*Hamilton's E. I. Gaz.* i. 488—490.; *Reports on the Affairs of the E. I. Comp.*)

DELHI (Sanscr. *Indraprast'ha*), a celebrated city of Hindostan, presid. Bengal, lieutenancy of Agra, cap. of the above prov., and anciently the metropolis of the Patan and Mogul empires, on the Jumna, 112 m. N.N.W. Agra, 425 m. N.W. Benares, and 830 m. in the same direction from Calcutta; lat. 28° 41′ N., long. 77° 5′ E. Pop. about 200,000. That Delhi, in its period of splendour, was a city of vast extent and magnificence, is sufficiently evinced by its ruins, which are supposed to cover nearly as large a surface as London, Westminster, and Southwark. The present inhabited city, E. and N. the ruins, built by the emperor Shah Jehan, and called by him Shahjehanbad, about 7 m. in circuit, is situated on a rocky range of hills, and is surrounded by an embattled wall, with many bastions and intervening martello towers, faced along its whole extent with substantial masonry, and recently strengthened with a moat and glacis by the British government. It has many good houses, chiefly of brick: the streets are in general narrow, but the principal are wide, handsome, and, for an Asiatic city, remarkably clean; the bazaars have a good appearance. There were formerly two very noble streets; but houses have been built down their centre and across, so as to spoil them: along one of these, running from the palace S. to the Agra gate, is the aqueduct of Ali Merdan Khan, re-opened by Captain Blane in 1820. The principal public buildings are, the palace, the *Jumma Musjeed*, or chief mosque, many other mosques, the tombs of the emperor Humayoon and of Sefdar Jung, the Cuttub Minar, &c.; and within the new city, the remains of many splendid palaces belonging formerly to the great dignitaries of the Mogul empire. Almost all these structures are of red granite, inlaid in some of the ornamental parts with white marble: the general style of building is simple, yet elegant; those of Patan architecture are never overdone with ornaments so as to interfere with their general severe and solemn character. The palace, as seen from a distance, is a very high and extensive cluster of Gothic towers and battlements towering above the other buildings. It was built by Shah Jehan, is surrounded by a moat and an embattled wall, which toward the street in which it stands is 60 ft. high, and has several small round towers and two noble gateways. Heber states that, as a kingly residence, it far surpasses the Kremlin at Moscow; but, except in the durability of its materials, it is inferior to Windsor Castle. When Heber visited the emperor, he proceeded first through "a long vaulted aisle like that of a Gothic cathedral, with a small open octagonal court in its centre, all of granite, and all finely carved with inscriptions from the Koran, and with flowers. This ended in a ruinous and exceedingly dirty stable-yard, beyond which a richly carved, but ruinous, gateway led into a very handsome and striking court, with low but richly ornamented buildings. Opposite to us," continues the bishop, "was a beautiful open pavilion of white marble, richly carved, flanked by rose-bushes and fountains, and some tapestry and striped curtains hanging in festoons about it, within which was a crowd of people, and the poor old descendant of Tamerlane seated in the midst of them." The small apartment in which the bishop was divested of the robes the emperor had given him was entirely lined with white marble, inlaid with flowers and leaves of green serpentine, lapis lazuli, and porphyry, and evidently the work of an Italian artist: in the hall of public audience, also, a splendid pavilion of marble, on a wall behind the throne, a small group representing Orpheus playing to the beasts, surrounded

* This is the statement of the *Biographie Universelle*, art. *Grotius*: Mr. Chambers says that it is simply inscribed *Hugoni Grotio Sacrum.*

by mosaic paintings of birds, animals, and flowers, indicates itself as the work of European hands. The inner or chief hall of audience, which is open on one side to the court of the palace, and on the other to the gardens, is a fine quadrangular arcaded terrace of white marble; its pillars and arches richly carved and ornamented with gilt, inlaid flowers, and inscriptions in the most elaborate Persian character: the marble floor, where not covered by carpets, is inlaid similarly to the other apartments: this part of the palace is in tolerable preservation. The Shalimar gardens (so highly extolled in "Lalla Rookh") were also formed by Shah Jehan, and are said to have cost a million sterling; but "laughing Ceres has re-assumed her reign," the gardens having been reconverted to agricultural purposes. The *Jumma Musjeed*, the largest and handsomest place of Mussulman worship in India, was built in six years by Shah Jehan, at an expense of 10 lacs of rupees. It stands on a small rocky eminence, scarped for the purpose: the ascent to it is by a flight of 35 stone steps, through a handsome gateway of red stone, the doors of which are covered with wrought brass. The terrace on which it is built is about 1,400 yards square, and surrounded by an arched colonnade with octagon pavilions at convenient distances. In the centre is a large marble reservoir, supplied by machinery from the canal. On the W. side is the mosque itself, of an oblong form, 261 ft. in length; its whole front coated with large slabs of white marble, and compartments in the cornice inlaid with Arabic inscriptions in black. It is approached by another flight of steps, and entered by 3 Gothic arches, each surmounted by a marble dome. At the flanks are 2 minarets, 130 ft. high, of black marble and red stone alternately, each having 3 projecting galleries, and their summits crowned with light pavilions of white marble, the ascent to which is by a winding staircase of 180 steps of red stone. This truly noble structure is in good repair, being maintained by a grant from the British government for that especial purpose. Not far from the palace is a mosque of red stone, surmounted with 3 gilt domes, in which Nadir Shah sat and witnessed the massacre of the unfortunate inhabitants. There are above 40 other mosques; one, erected by the daughter of Aurungzebe, contains the tomb in which she was interred in 1710: some bear the marks of great antiquity; especially the *Kala Musjeed*, or black mosque, built of dark-coloured granite by the first Patan conquerors. It is exactly on the plan of the original Arabian mosques. The prospect S. the Shalimar gardens, as far as the eye can reach, is covered with the remains of extensive gardens, pavilions, mosques, and sepulchres, connecting the village of Cuttub with the new city of Delhi, from which it is nearly 10 m. distant S.W., and exhibiting one of the most striking scenes of desolation to be any where met with. The celebrated Cuttub Minar is a very handsome round tower rising from a polygon of 27 sides, in 5 stages, gradually diminishing in circumference, to the height of 242 ft.: its summit, which is crowned by a majestic cupola rising from 4 arcades of red granite, is ascended by a spiral staircase of 384 steps, and between each stage a balcony runs round the pillar. The old Patan palace, a mass of ruin larger than the others, has been a solid fortress in a plain and unornamented style of architecture: it contains a high black pillar of cast metal of Hindoo construction, and originally covered with Hindoo characters, but which Feroze Shah afterwards enclosed within the court of his palace, covering it with Arabic and Persian inscriptions. The tomb of Humayoon is of Gothic architecture, surrounded by a large garden with terraces and fountains, nearly all of which are now gone to decay. The garden is surrounded by an embattled wall and cloister, and in its centre, on a platform ascended by four flights of granite steps, is the tomb itself, a square building, with a circular apartment within about as large as the Radcliffe library at Oxford, surmounted by a dome of white marble. From the top of this building, the desolation is seen to extend to the W., in which direction Indraput stood, apparently to a range of barren hills 7 or 8 m. off.

The soil in the neighbourhood of Delhi is singularly destitute of vegetation; the Jumna annually overflows its banks during the rains; but its waters in this part of its course are so much impregnated with natron, that the ground is thereby rendered barren rather than fertile. In order to supply water to the royal gardens, the aqueduct of Ali Merdan Khan was constructed, by which the waters of the Jumna, while pure and wholesome, are conducted for 120 m. to Delhi, immediately after the river leaves the mountains. During the troubles that followed the decline of the Mogul power, the channel was neglected; and when the English took possession of this city, it was found choked up in most parts with rubbish. It is the sole source of vegetation to the gardens of Delhi, and of drinkable water to its inhab.; and when re-opened in 1820, the whole pop. went out in jubilee to meet the stream as it flowed slowly onwards, throwing flowers, ghee, sweetmeats, and other offerings into the water, and calling down all manner of blessings on the British government. The deficiency of water is the greatest drawback upon the city and its prov., since Delhi is otherwise well fitted to become a great inland mart for the interchange of commodities between India and the countries to the N. and W. Cotton cloths and indigo are manufactured, and a shawl factory, with weavers from Cashmere, has of late been established here. Shawls, fruits, and horses, are brought from Cashmere and Caubul; precious stones and jewellery are good and plentiful; and there are perhaps few, if any, of the ancient cities of Hindostan which at the present time will be found to rival modern Delhi in the wealth of its bazaars, or the activity of its pop. At the S.W. extremity of the city stands the famous observatory, built, like that of Benares, by Jye Singh, rajah of Jyepoor, and formerly containing similar astronomical instruments; but which, together with the building itself, have been since partially destroyed. Near the Ajmeer gate is the *Medressa*, or college of Ghazee-ud-Deen-Khan, an edifice of great beauty, for the repair of which, and the revival of its functions, the government has very liberally contributed. The Delhi college is now divided into the Oriental and the English departments; astronomy and mathematics are taught on European principles; and in 1830 there were 287 students. According to Abul Fazel, no less than seven successive cities have stood on the ground occupied by Delhi and its ruins. Indraprast'ha or Indraput was the first, and the residence of the Hindoo rajahs before 1193, when the Afghans or Patans conquered it: it was the seat also of the first eight sovereigns of that dynasty. Sultan Baleen built another fortified palace; Moaz-ud-deen another, on the banks of the Jumna; and others were built in different parts by succeeding sovereigns, one of which was near Cuttub; and lastly, Shah Jehan, towards the middle of the 17th century, chose the present spot for its site, which is certainly more advantageous than that of any of the preceding cities. In 1011 Delhi was taken and plundered by Mahmoud of Ghiznee; in 1398 by Timour; in 1525 by Baber, who overturned the Patan dynasty, and commenced that of the Moguls; in 1736 the Maharattas burned the suburbs: and in 1739 Delhi was entered and pillaged by Nadir Shah, who did not retain possession of it. Since 1803, together with its territory, it has virtually belonged to the British, and *is* the seat of a resident who has exclusive charge of the emperor and royal family; conducts all the ordinary negotiations with the states in the N.W. of India; in the judicial and revenue departments possesses all the powers of the sudder court; and also of the revenue board within the five divisions of the Delhi territory. The annual stipend of the Delhi emperor and family amounts to 150,000*l*. (*Hamilton's E. I. Gaz.* i. 491—501.; *Mod. Trav.* x. 5—29.; *Reports on the Affairs of the E. I. Company*.)

DELOS, a small, and now barren and deserted, but once famous island of Greece, in the strait between Mycone and Rhenea, or the greater Delos, almost in the centre of the Cyclades, lat. 37° 25′ N., long. 25° 15′ E. This island was regarded in antiquity with peculiar veneration, from its being supposed to be the birth-place of Apollo and Diana, to whom it was sacred. Magnificent temples were erected in honour of these deities. The temple of Apollo, of which the ruins still remain, raised at the joint expense of the Grecian states, is celebrated as having been one of the most splendid in the ancient world; and his oracle here was second only to that of Delphi. Pursuant to a practice begun by Theseus, a vessel sailed annually from Athens to Delos with offerings, conveying at the same time deputations appointed to perform sacrifices in honour of Apollo and Diana, and choruses of youths and virgins, who danced and sung hymns in their praise. Quinquennial games were also celebrated with great pomp, and were attended by deputations from all the Grecian states and islands. Delos was repeatedly purified; and to keep it from all pollution, neither births nor deaths were allowed to take place within its sacred precincts; but all women about to be confined, and all sick persons, were conveyed to the greater Delos. Such was its character for sanctity, that it commanded the respect even of barbarians; and the Persian admirals, who laid waste the other islands, would not touch at Delos. After the Persian war, the Athenians made it the treasury of the Greeks, and all meetings relative to the affairs of the confederacy were held in it.

Its sacred character, the security which it consequently enjoyed, its good harbour, and central position, made Delos a favourite seat of commerce as well as of religion and pleasure. Its festivals were attended by the merchants of Greece, Asia Minor, Phœnicia, Egypt, Italy, &c., who brought thither the products of their respective countries. On the destruction of Corinth, many of its principal merchants sought an asylum in Delos, which acquired a large portion of the traffic that had been driven from the former. It was a principal seat of the ancient slave trade; and Strabo states that thousands of slaves were brought thither from Cilicia, and sold in its

markets. Cicero says of it, *Insula Delos tam procul a nobis in Ægeo Mari posita, quo omnes undique cum mercibus atque oneribus commeabant, referta divitiis, parva, sine muro nihil timebat.* (*Pro Lege Manil.* § 18.) A hill in the centre of the island was called *Mons Cynthus*, and hence the epithets *Cynthius* and *Cynthia* so frequently applied to Apollo and Diana. The heaps of marble, and the fragments of columns, architraves, &c., which are every where met with, attest the ancient grandeur of this famous island. But it has been long since deserted; and Tournefort states that, in the early part of last century, the inhab. of Mycone were in the habit of holding the greater Delos for the purpose of pasturage, paying for it to the grand seignior a rent of 20 crowns a year! (*Tournefort's Voyage du Levant*, i. 290—325.; *Ancient Universal History*, viii. 335—341., 8vo. ed.; *Voyage d'Anacharsis*, &c.)

DELPHI, DELPHOS, or PYTHO (at present *Castri*), a famous city of ancient Greece, the cap. of Phocis, and the seat of by far the most celebrated oracle of the ancient world (*commune humani generis oraculum*, Liv. lib. 38. § 48.), at the S. foot of Mount Parnassus, 45 m. N.W. Corinth, and 8½ m. N.E. from the nearest point of the Crissean Sea (Gulph of Lepanto). Delphi had every attribute that could invest it with interest and inspire awe. It was supposed to be situated in the centre of the world, was built on the declivity of the mountain on successive terraces formed of Cyclopean masonry, and rising above each other like the seats in a theatre; overhanging the city on the N. rose the two famous peaks of Parnassus, the chasm between them affording an outlet for the waters of the *Castalian* spring, the source of poetical inspiration. If we add to these natural advantages, the fact that Delphi was the chosen abode and principal oracle of Apollo; that she was the seat of the council of the Amphictyons, and the place where the Pythian games* were celebrated, we need not wonder at the extraordinary respect and veneration in which she was held. She was not fortified by walls, but by precipices, and the especial protection of Apollo; so that the ancients reckoned it doubtful *utrum munimentum loci, an majestas dei plus hic admirationis habeat.* (*Justin.* lib. 24. § 6.)

The origin of this famous city, and of the oracle to which it owed all its glory, are buried in impenetrable obscurity. The most probable account seems to be, that a mephitic vapour, similar in some degree, perhaps, to that of the *Grotto del Cane* at Naples, having issued from one of the clefts of the rock, violently affected those by whom it was inhaled, making them utter strange incoherent sayings. On this narrow foundation was built one of the most extraordinary fabrics ever raised by superstition, fraud, and imposture. The ravings of those affected by the vapour were believed to be indications of future events; they were said to be inspired; and the ejaculations which they uttered were affirmed to have been owing to their being filled with the breath or spirit (*divinus afflatus*) of Apollo, the guardian god of the place! The fame of the oracle rapidly increased, and it was soon seen how rich a harvest might be derived from it. The sacred cavern was forthwith enclosed; a tripod was placed over the chasm whence the vapour issued; priests and priestesses were appointed for the service of the god; and a series of temples, each more magnificent than its predecessor, were erected in his honour. States and princes were anxious to learn their fate, or the success of any contemplated enterprise, from the responses of the oracle; and private individuals crowded to the city for the same purpose. The answers of the god were not gratuitous; and it would seem that an opinion had early gained ground that the nature of the responses was to a considerable extent dependent upon the value of the offerings! Hence there arose a kind of competition among those consulting the oracle who should be most liberal; and the wealth accumulated at Delphi came, in the course of time, to be prodigiously great. The responses were, apparently at least, delivered by a priestess. After being purified by bathing in the Castalian spring, she mounted the tripod, and having inhaled the intoxicating or stupifying vapour, she became violently convulsed —

> "Subitò non vultus, non color unus,
> Non comptæ mansêre comæ: sed pectus anhelum,
> Et rabie fera corda tument; majorque videri,
> Nec mortale sonans: afflata est numine quando
> Jam propiore dei." *Æneid*, vi. line 46. &c.

The incoherent scraps of sentences which the Pythia uttered during this paroxysm having been collected and arranged in verses by the priests, formed the desired response.

The responses of the Pythia were said to be comparatively precise; and she was sometimes resorted to in order to clear away the mystery in which those of other oracles were involved. It may, indeed, be reasonably enough supposed that superior address and information on the part of the Delphic priests might enable them in many instances to give pretty distinct responses, that could not fail frequently to square with the event. But, even if no evidence of the thing had come down to us, we might have been assured that, speaking generally, their responses would be ambiguous, and so contrived that, however the event might turn out, the credit of the oracle would be preserved: and this, in point of fact, was the case. The answer of the oracle to Crœsus, that in making war upon the Persians he should destroy a great empire (*Herod.* i. § 53.), is an instance of this; as it is plain the credit of the oracle would be equally secured whether Crœsus conquered or was himself conquered by the Persians! The answer of the oracle to Pyrrhus is another instance of this sort of ambiguity —

> "Aio te, Æacida, Romanos vincere posse,"

as it might either be interpreted in favour of or against Pyrrhus! This equivocation was not, however, the worst feature of the imposture carried on at Delphi. The oracle was at once ambiguous and venal. A rich or a powerful individual seldom found much difficulty in obtaining a response favourable to his projects, how unjust or objectionable soever. Herodotus states distinctly that the Alcmeonidæ, who rebuilt the temple at Delphi, bribed the Pythia to recommend the Spartans to assist in delivering Athens from the tyranny of the Pisistratidæ (v. § 60. 90.); and such were the base motives that made the oracle falsely pronounce Demaratus, king of Sparta, to be illegitimate, and obtained responses favourable to Lysander when he endeavoured to change the succession to the Spartan throne. This also was, no doubt, the sort of inspiration that dictated the responses favourable to Philip, which made Demosthenes declare that the Pythia *philippised!* But such and so powerful is the influence of superstition, that this threadbare system of fraud and quackery maintained a lengthened ascendancy; and that the responses of frantic girls, interpreted by venal priests, frequently sufficed to excite bloody wars, and to spread desolation through extensive states.

The credit of the oracle had been materially impaired before Christianity obtained an ascendancy in the ancient world; and the triumph of the latter was destructive of this as well as other oracles. Constantine carried off some of the finest and most costly ornaments of the Delphian temple to decorate his new capital. And there is still to be seen in Constantinople the brazen pillar, formed of three serpents twisted together, that supported the golden tripod which, after the defeat of Xerxes, was consecrated in the temple of Delphi by the victorious Greeks. (*See* CONSTANTINOPLE; *Gibbon*, cap. 17., &c.)

The vast wealth of the temple of Delphi exposed it to many attacks. A party sent by Xerxes to plunder the sacred edifice are said to have been defeated by the manifest interposition of Apollo himself. (*Herod.* viii. § 37.) But on other occasions, the god was less vigilant or less successful. The fane was successively plundered by the Phocians under Philomelus, by the Gauls under Brennus, by Sylla, &c.; and Nero is reported to have deprived it of no fewer than 500 bronze statues! And yet, despite all these deductions from its ancient stores, it had, when visited and described by Pausanias, a vast number of statues and ornaments of all sorts. But its treasure had disappeared long previously; and the rich offerings of Gyges, Alyattes, Crœsus, and Midas, were no longer to be seen.

Except its grand natural features, every thing at Delphi has undergone a total change. Not a vestige remains of the great temple, by which to form even a satisfactory conjecture as to its position. The prophetic cavern is searched for in vain: *antraque mœsta silent, inconsultique recessus.* The village of Castri, that occupies a part at least of the site of the ancient city, is poor and miserable, and does not contain above 400 or 500 inhab.

> "Tantum ævi longinqua valet mutare vetustas!"

(Besides the authorities referred to above, see *Dodwell's Greece*, i. 170—188.; *Clarke's Travels*, vii. 225—254. 8vo. ed.; *Voyage d'Anacharsis*, cap. 22.; *Cramer's Ancient Greece*, ii. 164. &c.; *Potter's Grecian Antiquities*, &c.)

DELVINO, a town of Turkey in Europe, prov. Albania, cap. of a *sanjiack* or distr., 43 m. W.N.W. Yanina. Pop. 10,000 (*Möller*, 1840.) Its vicinity contains some orange plantations; but is chiefly noted for its olive cultivation. The trade of the town is chiefly in oil, and other agricultural produce.

DEMERARA. *See* GUIANA (BRITISH).

DEMONTE, an inl. town of N. Italy, k. Sardinia, div. and prov. Coni, cap. mand., on the Stura, 13 m. S.W. Coni. Pop. about 6,000. The town is commanded by a fortress placed on an isolated height, and contains three churches and an hospital. It was formerly fortified, but its works were demolished by the French in 1801.

DEMOTICA, or DIMOTIKA, a town of Turkey in Europe, prov. Roumelia, on the Maritza, at the foot of a

* These were games instituted in honour of Apollo, and in commemoration of his victory over the serpent or tyrant Python.

conical hill, crowned by a citadel, containing a palace, occasionally occupied by the Turkish emperors during the period that Adrianople was the cap. of the empire, from which city Demotica is distant 24 m. S. by W. Pop. about 8,000. The town is tolerably well built; it contains a mosque, and several Greek churches, schools, and public baths. The citadel is supplied with water by an aqueduct. It is the residence of a Greek archbishop, and has manufactures of silk and woollen stuffs, and earthenware. Charles XII. of Sweden resided in this town for more than a year subsequently to the battle of Pultawa. (*Dict. Géog.*; *B. Ritter*, &c.)

DENAIN, a village of France, dép. du Nord, in the cant. of Bouchain, 6 m. S.W. Valenciennes, famous in modern history as being the scene of the decisive victory gained in 1712 by the French under Marshal Villars over the allies under Prince Eugene. This victory, which is partly to be ascribed to the improvidence of the allies, and partly to the skilful combinations of Villars, saved Louis XIV. from the disgrace of having the terms of peace dictated to him in his own capital. It changed, in fact, the whole aspect of public affairs; and brought the negotiations at Utrecht to a speedy conclusion. A monument erected near Denain in 1781, by Louis XVI., in commemoration of this great victory, was inscribed with the following couplet from the *Henriade*: —

"Regardez dans Denain l'audacieux Villars
Disputant le tonnerre de l'aigle des Césars."

(See *Siècle de Louis*, XIV., *par Voltaire*, cap. 23.)

DENBIGH, a marit. co. of N. Wales, having N. the Irish Sea, E. the cos. of Flint and Cheshire, S. Salop, Montgomery, and Merioneth, and W. Caernarvon. Shape very irregular. Area, 405,120 acres. Surface and soil much diversified; for the most part, however, it is rugged, wild, and mountainous; but it has some very fertile tracts, particularly in the far-famed vale of Clwyd, on both sides the river of that name, lying mostly in this co., and which is eminently beautiful and fertile, "producing the necessaries of life not only in abundance for the inhab., but in ample sufficiency to spare to supply the wants of their neighbours." The vale of Llangollen, in the E. part of the co., though inferior in point of richness to that of Clwyd, is notwithstanding pretty fertile, and there is a considerable extent of good land in the vicinity of Wrexham. The climate in the valleys is remarkably mild, but rain is very prevalent, and considerable damage is sometimes done by the overflowing of the rivers. Agriculture, though a good deal improved, is still very backward. Barley, oats, and potatoes are the principal crops; wheat, beans, and pease being also raised in some of the more fertile districts. There is no regular rotation of crops; whichever grain happens to be most in demand is sown. It is also a frequent practice to burn the surface both of fresh enclosed lands and old clover leys; but this, though at the time it yields good crops of oats and turnips, impoverishes and ultimately exhausts the land. Farms are usually very small; and being let only by the year, and without any conditions as to management, we need not wonder at the low state of agriculture. Average rent of land, in 1810, 9*s*. an acre. The hills are depastured by large flocks of sheep, and large herds of cattle are found in the valleys. The dairy husbandry is carried on to considerable extent, particularly in the E. parts of the co., adjacent to Cheshire. The minerals are valuable, coal, lead, and iron mines being wrought in different parts of the co.; it also furnishes slate and mill-stones. The woollen manufacture is carried on to some extent, and gloves and shoes are produced in considerable quantities in Denbigh. It is bounded E. by the Dee, and W. by the Conway, and is traversed by the Clwyd, Ebwy, &c. Denbigh is divided into 6 cantreffs or hundreds, and 57 parishes. It returns 3 mems. to the H. of C., viz. 2 for the co., and 1 for Denbigh and its contributory bors.: county constituency in 1838-39, 3,689. In 1831 Denbigh had 16,368 inhab. houses, 17,150 families, and 83,629 inhab., of whom 41,618 were males, and 42,011 females. Sum paid for the relief of the poor in 1838, 24,800*l*. (*Kennedy and Grainger on Tenancy of Land*; *Davies's N. Wales*, &c.)

DENBIGH, a town and parl. bor. of N. Wales, cap. of the above co., hund. Yale, near the middle of the vale of Clwyd, at the base and on the side of a steep hill, crowned with the magnificent ruins of its old castle; 22 m. W. Chester, and 180 m. N.W. London. Pop. 5,238. It consists of 3 principal and some smaller streets and lanes; it is well paved and lighted, but many of the houses have a dilapidated appearance, and it is but scantily supplied with water, and is deficient in cleanliness. The par. church, 1 m. E. from the town, has many interesting monuments; but it is in a ruinous condition, and divine service is performed in a chapel of ease within the precincts of the latter. It has also a Catholic and 4 dissenting chapels; a town-hall, free grammar-school, with a small endowment, a blue-coat school, a national school, and several Sunday-schools supported by the various sects; a reading-room, and a literary society. There is also a dispensary for the poor of the town and neighbourhood. The staple trades of the town are shoemaking, glove-making, and tanning, particularly the first; but the glove trade has greatly declined, and the town has been for some time past in a depressed state. The limits of the parl. bor. were the subject of much dispute till they were definitively fixed in 1826. They were not affected by the Boundary Act, and include a space of 742 acres. Denbigh, with Ruthin and Holt, has returned 1 mem. to the H. of C. since the 27th of Henry VIII., the right of voting being in the resident burgesses. The Reform Act added Wrexham to the contributory bors. Registered electors in the Denbigh district in 1849-50, 881. The present municipal bor. is restricted to the space immediately contiguous to the town; and had, in 1841, a pop. of 3,405. The governing body consists of 4 aldermen and 12 counsellors. The waste lands of the par. belong to the corporation, whose annual average revenue from these and other sources is about 242*l*. There is a lock-up house common to the bor. and co., in which offenders are temporarily confined, till committed to the co. gaol at Ruthin. The Easter and Michaelmas quarter sessions of the co. are held in the town, which is a polling place for the co. The castle, both from its situation and structure, was anciently of great importance. It was founded in the 2d of Edward I. by Henry Lacey, earl of Lincoln. A magnificent pointed archway, with a statue of the founder, is still in tolerable preservation; but the rest is entirely ruinous. There is a bowling-green and several cottages within the enclosure. The prospect from the castle is extensive and magnificent. In the last civil war the castle withstood a siege by the parliamentary forces in 1645; and thither the king retreated from Chester. It was taken in the following year, and soon after dismantled.

DENDERAH (the *Tentyra* of the Greeks), a ruined town of Upper Egypt, celebrated for its temple, the best-preserved of all the remains of antiquity with which Egypt, particularly the Said, abounds; near the W. bank of the Nile, 31 m. N. Thebes, lat. 26° 10′ 20″ N., long. 32° 40′ 27″ E. The town, 1¼ m. E. from the temple, stands in an extensive and well-cultivated plain, which expands on both sides the Nile, and is surrounded by mountains, so as to give it the appearance of a beautiful circular basin, shaded by thick groves of palm trees. The temple stands on the very verge of the Lybian desert, the encroachments of which have buried a large portion of the buildings under heaps of sand; but enough is still visible to indicate its magnitude and magnificence, and to impress the spectator with the deepest sense of the wealth, power, and civilisation of the illustrious but long extinct people by whom so noble a fabric was raised. The temple and the buildings appertaining to it, with the exception of one propylon, are enclosed within a square wall of sun-dried bricks, each side measuring 1,000 ft., and in some parts 35 ft. high, and 15 ft. thick. After passing a small stone building, and a gateway or propylon entirely covered with well-executed sculptures and hieroglyphics, the spectator, proceeding through the *dromos* (avenue lined on each side with sphynxes) arrives at the temple. It is nearly in the form of the letter T; and its simplicity, vastness, the durability of its structure, and its ornaments and scuptures, in perfect preservation, though no longer intelligible, excite the strongest feelings of awe and astonishment. The front of the *pronaos*, or portico, is adorned with a beautiful cornice, supported by six square columns, with capitals formed of colossal heads of Isis. Within, 24 cylindrical columns, ranged in six rows of four deep, support the roof: the capitals of these columns are quadrangular, and exhibit on each face the representation of a temple with a divinity under the portico of the sanctuary; between the capital and the shaft, heads of Isis again appear; including their base and capitals, the height of the columns is about 46 ft.: the shafts are sculptured with hieroglyphics and figures in basso-relievo, as are the front and ceiling; the designs on which last have been supposed to be intended to represent a zodiac. Indeed there is no where in the whole apartment a space of 2 ft. that is not covered with sculptures, in low relief, of human beings, animals, plants, emblems of agriculture or of religious ceremony. The temple, which is equally enriched with sculptures, consists of several apartments, partially lighted by circular holes cut in the ceiling. The sanctuary is, however, quite dark. Access is provided to the roof by means of a staircase, with steps so low that priests might convey up and down the weighty paraphernalia of sacrifice. But the most remarkable object, in the estimation of Europeans, belonging to the temple, was the ceiling of an upper chamber, exhibiting in twelve compartments, like that of the pronaos, a variety of mythological figures, which correspond very closely with the Greek signs of the zodiac: it was enclosed within three concentric circles, and supported by eight male figures kneeling, and four females standing, most harmoniously grouped. The remains of a smaller temple stand to the right of the propylon, supposed to have been dedicated to the malignant deity,

Typhon. (*Richardson's Travels*, i. 185—220.; *Belzoni's Operations and Discoveries in Egypt; Notice sur le Zodiaque de Dendcrah, par M. St. Martin*, Paris, 1822.)

A great deal of curious and learned discussion has taken place with respect to the antiquity of the zodiac of Denderah. Dupuis, Fourier, and other writers, concluded, from the places of the figures of the constellations on it, compared with their present places, and the precession of the equinoxes, that it had been constructed about 15,000 years ago! But Littrow, Playfair, and some other learned astronomers, inferred from the same data, and with infinitely more of probability, that the age of the zodiac did not exceed 3,228 years. Subsequent researches by Visconti, Letronne, St. Martin, and others, have, however, gone far to show that the calculations referred to had no real foundation, and that the figures on the so-called zodiac are probably astrological or mythological representations, and have nothing of an astronomical or scientific character. At the same time, however, it must be admitted, that the purpose of the supposed zodiac, and its antiquity, are still involved in the greatest uncertainty. With respect to the temple itself, it would seem, from its being one of the most perfect and beautiful in the country, to belong to the period of the later Egyptian kings, when the arts had attained to their highest perfection; but there are not, perhaps, any really good grounds for the notion that it is of so late a date as the æra of the Ptolemies, though alterations may then have been effected in it. The zodiac, or planisphere, that gave rise to these discussions, is now in Paris. The Pacha having consented to the desecration of the temple, this extraordinary monument was skilfully cut out, and conveyed to France, in 1822, by a M. Lelorain. It has since been purchased by the French government for 15,000 fr., and appropriately placed in the Museum. (Besides the authorities already referred to, see the arts. on this subject in the *Conversations Lexicon*, and the *Encyclopédie des Gens du Monde*, and the authorities there referred to.)

DENDERMONDE (Belg. *Termonde*), a fortified town of Belgium, prov. E. Flanders, cap. arrond., on the Scheldt, at the point where it is joined by the Dendre, 15¼ m. E. Ghent. Pop. (1836) 7,652. It has 4 churches, 5 chapels, a town-hall, an hospital, lunatic and orphan asylums, 2 convents, a college, 14 schools, and a prison. It is defended by a citadel constructed under the Duke of Parma in 1584; is the seat of a court of original jurisdiction; and has manufactures of woollen stuffs, cotton yarn, hats, lace, tobacco, soap, oil, and earthenware; bleaching and dye-houses, breweries, distilleries, and flour and other mills, with a considerable trade in corn, hemp, flax, oil, &c. It is believed to have been founded no earlier than the 8th century, though many Roman antiquities have been dug up in it at different periods. It was unsuccessfully besieged by Louis XIV. in 1667, but fell into the hands of the French in 1745. It suffered severely from an inundation in 1825. (*Vandermaelen, Flandre Orientale.*)

DENHOLM, a manufacturing village of Scotland, co. Roxburgh, 4 m. N.E. Howick, on a rising ground 1 m. S. from the river Teviot. Pop. 550. The inhab. are almost entirely engaged in the weaving of woollen stockings, on account of the Hawick manufacturers. There is a flour-mill here; as also a dissenting chapel, and a subscription library. Dr. John Leyden, the celebrated poet and linguist, was a native of this place.

DENIS (ST.), a town of France, dép. Seine, cap. arrond., in a fertile plain near the Seine, and on the canal which unites that river with the canal of Ourq, 5 m. N. Paris. Pop. (1836) 9,332. It is chiefly remarkable for its abbey-church, built in the 7th century by Dagobert I., who was buried within its walls; since which time it has been the customary burial-place of the kings of France. It was materially improved by Suger, abbot of St. Denis, in 1130, and has been further improved by different sovereigns in succeeding ages, so that it has a great variety of architectural style; it is, however, an imposing Gothic edifice, in the form of a cross, 415¼ ft. in length, by 106¼ ft. broad, and 85 ft. high. (*Hugo.*) Its front has two towers, one of which is surmounted by a spire. Most of the tombs of the kings of the first, second, and third races are in a subterranean vault. In 1793, during the revolutionary phrenzy, many of these tombs were destroyed, and the remains they enclosed, not excepting even those of Henry IV., were thrown together and buried under a heap of earth in the environs of Paris. The demolition of the building itself was subsequently ordered, but this was not effected. Napoleon contemplated making St. Denis the burial-place of the princes of his own line; and since the restoration of the Bourbons, the previous arrangement of the interior has been as far as possible restored. The town has some good infantry barracks, an establishment for the education of 500 girls, orphans of members of the Legion of Honour, founded by Napoleon, which occupies the celebrated abbey of St. Denis, founded by Dagobert I. in 613; a *dépôt de mendicité*, public library, and theatre. St. Denis is well built: it is the seat of a sub-prefect; has manufactures of woollens, cottons, leather, &c.; and a brisk trade in flour, wine, vinegar, wool, timber, &c. (*Hugo*, art. *Seine; Dict. Géog.; Guide du Voyageur.*)

DENMARK, one of the secondary European kingdoms, on the south side of the entrance to the Baltic, between 53° and 58° N. lat., and 8° and 13° E. long. It consists partly of the peninsula, stretching from Lauenburg on the Elbe to the Skaw or Skagen, the most northerly point of Jutland, comprising the prov. of Jutland, and the duchies of Sleswick, Holstein, and Lauenburg; and partly of the Danish Archipelago, or of the islands of Zealand, Funen, Laland, Falster, &c., between the Baltic and the Cattegat, and the island of Bornholm, in the Baltic. Except on the S. and S.E., where it is bounded by Hanover, and the territory of Hamburg and Mecklenburg, continental Denmark is every where surrounded by the sea, having E. the Baltic, the Little Belt, and the Cattegat; N. the Skagerac; and W. the North Sea. Iceland, the Feroe Isles, part of Greenland, and some possessions in the E. and W. Indies, belong to Denmark. But, exclusive of these, the kingdom contains an area of 21,856 sq. m., and had in 1845 a pop. of 2,239,077.

Surface and Soil. — There are no mountains in Denmark, and the few hills by which it is marked, especially in parts of Holstein and Sleswick, are little more than undulations. It is generally low and level, the coasts being seldom elevated much above the sea. In parts, indeed, of the W. coast of Jutland, and along the whole W. coast of Sleswick and Holstein, the country, which has partly been wrested from the sea, is defended, as in Holland, against its irruptions by immense mounds or dikes, managed by a government board. Soil very various. In extensive dists., particularly in Holstein, Sleswick, and the S.W. part of Jutland, it is exceedingly fertile, being very rich marsh-land, producing the finest pasture and excellent crops. In other parts, more especially in central and N.W. Jutland, and to a less extent, also, in the central parts of the duchies, the soil is arid, sandy, and barren, large tracts being heath. The soil of the islands consists of clay mixed with sand and lime. They are not so fertile as the better parts of Holstein and Sleswick, but are little, if at all, inferior to the average of these provs.

Rivers and Lakes. — Denmark having no mountains, and every part of it being within a short distance of the sea, has no rivers of any magnitude. The largest is the Eyder, and next to it the Guden, Trave, &c. The Elbe runs, for a considerable distance, along the S. frontier of the kingdom. Fresh water lakes numerous, but not large. The most remarkable feature in the physical geography of Denmark is the number and extent of the inlets of the sea, or rather lagoons, by which the continental part of the country is intersected. The principal of these lagoons, the Lymfiord, formerly communicated only by a narrow channel with the Cattegat, stretching thence in a W. direction, with long windings, and expanding in various places into immense sheets of water, encompassing large islands, across the peninsula of Jutland almost to the North Sea. In 1825, however, during a violent storm, the isthmus between the North Sea and the Lymfiord was broken down in two places, so that it now isolates the N. portion of Jutland; but it is to be regretted that the newly opened channel is too shallow to be of much use for the purposes of navigation, and the depth of the opening to the Cattegat has also decreased so as only to admit vessels of comparatively small burden. There are other fiords; but none so extensive as this. They, as well as the bays and rivers, are well stocked with fish, the fishery being a principal business and dependence of the inhab.

Animal and Vegetable Products. — These are almost the same in Denmark as in Great Britain, except, perhaps, that wild boars may be occasionally met with in the forests of the former. The horses and cattle of Holstein, Sleswick, and W. Jutland, are amongst the best that are any where to be met with; those that belong to the islands and N. Jutland are of a smaller breed, but strong and active. Great numbers of the former are annually exported; the horses to Germany, France, and Russia, and the cattle to Germany. The wool of the sheep is short and coarse; but latterly it has been a good deal improved by crossing with merinos. The marsh-land oxen supply the excellent beef so well known, when slightly smoked and salted, by the name of "Hamburg Beef." The feeding of pigs is prosecuted to a great extent, and quantities of bacon are yearly sent to Norway, Holland, &c. Poultry is so abundant that their feathers make an article of export. All the common grasses, with potatoes, flax and hemp, madder, tobacco, &c., are raised in Denmark. The forests are not very extensive. They lie principally along the eastern shores of Jutland, Sleswick, and Holstein, and in Zealand and Funen; consisting principally of birch, but also of ash, alder, and oak. Pine and fir are rare.

Mineral Products, in Denmark, are but of little value.

The subsoil chiefly consists of sand and clay, and no metals have been discovered that would repay the expense of working. There is a brine spring near Oldersloe; but it does not furnish salt sufficient for the consumption of the kingdom. The want of coal is in part compensated by the abundance of turf.

Climate. — Being almost every where surrounded by the sea, the climate is humid, and in its principal features approaches pretty closely to that of Scotland. The transition from winter to summer, and from summer to winter, is, however, a good deal more abrupt, so much so, indeed, that spring and autumn, particularly the first, are but faintly marked; the heat of the summer is, at the same time, greater than in Scotland, and the cold of the winter more severe. These differences arise from the greater proximity of Denmark to the continent. The winds not being broken by any mountains, often sweep along with great violence. The N.W. wind, called *Skai*, which is especially felt in May and June, is so severe on the W. coast of Jutland, as to wither the tops of the trees. The Sound is sometimes frozen over; but this is said to arise more frequently from the drifting of ice formed in higher latitudes than from the intensity of the cold at the place. In 1659, the Swedes marched an army on the ice across the Sound to besiege Copenhagen. Fogs are very prevalent.

Agriculture; State of the Occupiers of Land, Labourers, &c. — In Denmark, as in most other European countries, the peasantry or occupiers of the soil were at no very distant period in the most depressed state imaginable. "In Zealand," says Lord Molesworth, and the same observations apply to the rest of the kingdom, "they are all as absolute slaves as the negroes are in Barbadoes; but with this difference, that their fare is not so good. Neither they, nor their posterity to all generations, can leave the land to which they belong; the gentlemen counting riches by their stocks of boors, as here with us by our stocks of cattle, and the more they have of them the richer they are. In case of purchase, they are sold as belonging to the freehold, just as timber trees are with us. There is no computing there by numbers of acres, but by numbers of boors; who, with all that belongs to them, appertain to the proprietor of the land. Yeomanry, which is the strength of England, is a state not known nor heard of in Denmark; but these poor drudges, after they have laboured with all their might to raise the king's taxes, must pay the overplus of the profits of the lands and their own toil to the landlords, who are almost as poor as themselves. If any of these poor wretches prove to be of a diligent and improving temper, who endeavours to do a little better than his fellows, and to that end has repaired his farm-house, making it convenient, neat, and pleasant, it is forty to one but he is presently transplanted from thence to a naked and uncomfortable habitation, to the end that his griping landlord may get more rent by placing another on the land that is thus improved: so that in some years 'tis likely there will be few or no farm-houses, when those already built are fallen through age or neglect." — (*Account of Denmark in* 1692, 4th ed. p. 54.) In 1761, the queen Sophia Magdalen had the honour of being the first to set a better example to the Danish proprietors, by publicly enfranchising the peasantry on her estates; and the example was soon after followed by Count Bernstorff and others. At this period about a sixth part of the land was supposed to belong to the crown; but the crown estates were soon after divided into farms of a moderate size, and a large portion of them disposed of to any one who chose to become a purchaser. Previously to this period very few peasants were proprietors; but their number now began speedily to increase partly in consequence of the sale and division of the crown estates, and partly of their purchasing up their leases from their lords. In 1788, the peasantry of Denmark Proper, or of Jutland and the islands, were finally emancipated from all political bondage; and a commission was at the same time appointed to regulate the rents and services to be paid by those tenants holding hereditary leases, or leases for lives, where the parties could not come to an agreement. In 1791 and 1799 fresh ordinances were issued on the same subject, having for their object to reduce the number of such tenants, by converting them, under equitable conditions, into proprietors, and for restraining the right of free way, &c. The peasantry of Holstein and Sleswick were never in the same state of bondage as those in Denmark Proper; but they also have been completely enfranchised, and placed on a footing of perfect freedom.

In consequence of these measures a very great change has taken place in the distribution of property in Denmark. Large estates have been so much broken down, that at this moment *half the country* is supposed to belong to petty proprietors! — (*Foreign Communications on the Poor Laws*, p. 288.) The peasantry are all anxious to become proprietors. "The first thing a Dane does with his earnings is to purchase a clock; then a horse or cow, which he hires out, and which pays a good interest. Then his ambition is to become a petty proprietor; and for this sufficient reason, that this class of persons is better off than any other in Denmark." — (*Foreign Com. Poor Laws, loc. cit.*)

The principal drawbacks upon agriculture are, the want of capital, and the consequent too small size of the rented farms and of the petty estates. Rents are still paid in services, but oftener in a portion of the produce, on the *metayer* principle. The work on the estates of large proprietors and of considerable farmers is mostly executed by *corvée* labourers, or by labourers for hire, such as the farm servants in England. The first class get a house, having a piece of land (generally from 1 to 3 acres) attached to it; and for this they pay from 30 to 40 days' work. But this work being executed in seed time and harvest when labour is most valuable, it forms a pretty heavy rent. The landlord can neither alienate these possessions, nor assume them into his own hands. The hired servants are much better off than the corvée labourers. They are generally hired by the year, and live and board in the farmer's house.

The average earnings of ordinary agricultural labourers in Denmark may vary from 15*l*. to 20*l*. a year. Their situation is decidedly comfortable. Mr. Macgregor, the British consul at Elsineur, an intelligent and careful observer, gives the following details illustrative of their command over necessaries and comforts:—

"The Danes are great eaters, and they eat at all times of the day. The following quantities of food are usually allowed to male farm servants per month: bread 60 lbs., potatoes, half a bushel; groats, half a bushel; butter, 4lb.; bacon, 10 lb.; meat, 4 lb.; salted herrings, 30; salt fish, 2 lbs.; beer, 60 quarts; milk, *ad libitum*. The Danish peasants make 5 meals a day in summer. Early in the morning they have, 1st, breakfast, consisting sometimes of coffee, but generally of warm milk and bread; 2d, at 9 o'clock, follows bread and butter and a dram; 3d, at 12 o'clock, dinner, the introduction to which consists of spoon-meat, such as milk porridge, beer soup, curds with warm milk or beer, or of fish, boiled groats, cheese, greens or dried peas, after which follows fresh or dried fish, bacon or meat, with potatoes or other vegetables, or boiled or poached eggs, or pancakes; 4th, at 5 o'clock, bread and butter and a dram or two, especially in harvest time; 5th, supper after sunset, sour groats, curds, with milk or buttermilk. In winter, when they get up later, they have one breakfast, and, consequently, they only make 4 meals a day. The poorer families seldom boil their kale upon meat, but upon a piece of hog's lard or bacon. In most of the cottages a sheep or a lamb is killed before the winter. The more substantial peasants kill a pig, a cow, or an ox, and they dispose of what they do not require themselves to their neighbours. They also kill a certain number of geese and ducks, salting them down for the winter, and using the feathers for their beds. This mode of living applies chiefly to peasants in districts of a middling soil, but where it is richer, they have more of bacon, meat, and fish, in lieu of other dishes; also is the beer they drink of greater strength. Fish is almost their diurnal food in villages adjacent to the sea, and they often use dried fish instead of bread, especially where the rye crops have failed, when their rye bread is often found mixed with barley. Amongst the poorer cottagers who have no land, it would sometimes happen that they must content themselves with a crust of dry bread, and milk and water in lieu of beer; but such cases are not of frequent occurrence, at least all the reports on the agricultural state of the country which have been published these later years concur in stating that the generality of peasants are well off, and that there is plenty of employment in the country for all labourers that choose to work.

"I shall conclude these observations by stating the annual expenditure of a labourer with a wife and three children in this neighbourhood (Elsineur), the several items reduced into sterling:—

	£	s.	d.
House rent and taxes	0	10	0
Turf for fuel	0	12	0
Rye for bread, 3½ quarters, at 13*s*. 6*d*.	2	6	6
Barley for bread and groats, 4½ quarters, at 10*s*. 6*d*.	2	7	3
Meat and bacon 30 stone, at 1*s*. 9*d*.	2	12	6
Potatoes 12 quarters, at 2*s*. 3*d*.	1	7	0
Coffee ½lb., sugar ½lb., per week	2	2	0
Butter 1½ firkin, cheese 120 lb.	2	6	0
Milk 8 quarts per week, at ½*d*.	0	17	4
Soap, candles, and groceries	0	18	0
Clothing, brandy, and lottery tickets	3	2	0
School rate 5*d*., books 2*s*. 2*d*.	0	2	7
Religious teaching	0	3	4
	£19	6	6

"This is nearly what the amount of their joint labour would produce, provided they be employed during an average number of days in the year. At a certain dis-

tance from the large towns, the items of coffee, sugar, and brandy, must in a great measure be omitted, by which the whole expenditure would be reduced to about 15*l.* sterling per annum."

The agriculture of Denmark, particularly of Holstein and Sleswick, has been wonderfully improved during the last half century, and is at present more advanced than that of many parts of the Continent. There are excellent meadows, and in many places good hedges. Artificial grasses and herbage plants enter into most rotations; and rye-grass is more sown, perhaps, in Holstein than any where else, except in Great Britain. The badness of the roads, a consequence in some measure of the difficulty of procuring proper materials for their construction, is a considerable obstacle to agricultural improvement. The great road from Hamburg to Kiel, which is macadamized and excellent, must, however, be excepted from this remark.—(*Loudon's Encyc.* § 562.; *Jacob, 2d Report*, p. 2. &c.)

Barley, oats, and wheat are largely cultivated. Wheat, though plump, is coarse and damp; the barley of Holstein is heavy, but that of the islands is inferior; oats of a medium quality; rye, being the principal bread corn of the country, especially of Jutland, is grown in large quantities; this also is the case with rape, beans, tares, buck-wheat, and potatoes, particularly the first, which is a leading article of export to Holland and England. But the principal attention of all the more extensive and intelligent Danish farmers is directed to grazing, fatting, and the dairy. The pastures in many parts are little, if at all, inferior to those of Lincolnshire. Horses, cattle, salted pork and beef, butter, wool (which has been much improved), and other animal products are, in fact, in ordinary years, the principal article of export from the country. The stock of horses is estimated at about 550,000 head, that of horned cattle at about 1,600,000, and that of sheep at about 1,300,000. The dwelling-houses of the farmers and their office houses are generally contiguous in the same building, but they are notwithstanding sufficiently distinct; and the houses of the better class of farmers are neatly and comfortably furnished.

[A Table, showing the quantity and value of the principal articles of export, is inserted in the opposite column.]

Manufactures in Denmark are not prosecuted on a considerable scale, nor is their condition at all prosperous. The peasantry in most parts of the kingdom spin and weave linens and woollens, and knit stockings for their own use; and the women in Sleswick employ themselves in making lace. Woollens, silks, cottons, and linens, are manufactured at Copenhagen, Altona, and other towns; but the business is languishing and unprofitable. Distillation and brewing are prosecuted to a great extent, and with more success than any other branch of industry, in the capital, Altona, Flensborg, Odensee, &c. Coarse eathenware is made in various places, and a porcelain manufacture is carried on upon account of the crown, and, as might be expected, to its loss. There are also sugar refineries, paper mills, soap works, tanneries, hat manufactories, &c. With the exception of the manufacture of cannon and arms at Frederickswerk and Hellebeck, the iron and hardware works are quite unimportant. Within these few years numbers of flour mills have been constructed, and large quantities of flour are now exported from Copenhagen, Flensborg, &c.

The low state of manufacturing industry is ascribable partly and principally to natural, and partly to political causes. Denmark is essentially an agricultural country. Being nearly destitute of coal, of water power, and of the useful minerals, she has no natural facilities for the successful prosecution of manufactures; and, in addition to this, she has little capital, and is deprived of the indispensable stimulus of domestic competition. All, or nearly all, the branches of industry carried on in the kingdom are subjected to the government of guilds or corporations. No person can engage in any business until he has been authorised by its particular guild; and as this is rarely obtained without a considerable sacrifice, the real effect of the system is to fetter competition and improvement, and to perpetuate monopoly and routine. "*Nos ouvriers*," says Catteau, "*sont chers, travaillant lentement, et souvent mal et sans goût; leur éducation est négligée. On ne les forme point à penser, et l'apprenti suit machinalement ce qu'il voit faire au maître.*—(*Tableau des Etats Danois*, ii. p. 260.) And yet government attempts in the teeth of all this, by excluding foreign manufactured products, and loading them with oppressive duties, to bolster up manufactures at home! But they could not rationally expect to succeed in this Quixotic attempt, and they have not succeeded. Manufactures have made no progress since the peace of 1815 (*Foreign Communications, Poor Laws*); and the prohibitory regulations merely obstruct the commerce of the country, and encourage sloth and smuggling. These regulations were, however, somewhat modified in 1838; and the education of mechanics is beginning to be improved by the formation of mechanic's institutes, &c.

Account of the Quantity and Value of the principal Articles, the produce of Denmark and her Dependencies, exported from that Kingdom and the Duchies of Sleswick and Holstein, in 1836.

Articles.	Danish Weights and Measures.	British Weights and Measures.	Approximate Value.
I. Agricultural Produce.			*L.*
Wheat - -	156,222 tonder	75,507 qrs.	150,704
Flour -	61,021 —	29,495 —	
Rye - - -	150,477 —	72,730 —	71,570
Flour - -	6,334 —	3,061 —	
Barley - -	408,631 —	197,505 —	178,304
Flour - -	2,980 —	1,440 —	
Groats - -	23,105 —	11,167 —	
Malt - -	30,226 —	14,609 —	
Oats - -	176,347 —	85,234 —	44,855
Meal - -	674 —	326 —	
Groats - -	1,556 —	752 —	
Buckwheat - -	26,868 —	12,986 —	18,856
Flour, Groats	3,311 —	1,600 —	
Pease - -	64,607 —	31,231 —	55,309
Tares - - -	12,396 —	5,991 —	
Beans - - -	45,201 —	21,847 —	
Rape-seed - -	194,373 —	93,932 —	230,368
Flax and other Seeds	18,007 —	8,703 —	16,673
Clover-seed - -	318,880 lbs.	350,768 lbs.	5,167
Biscuits of Wheat -	2,595,952 —	25,496 cwts.	13,460
Oil Cakes -	- -	- -	14,814
Butter - -	66,665 barrels	- -	395,052
Cheese - -	956,649 lbs.	9,425 —	11,072
Pork, salted - -	5,167,136 —	50,907 —	87,171
smoked -	803,088 —	7,912 —	
Beef, salted - -	2,508,064 —	24,710 —	26,282
smoked -	164,016 —	1,616	
Tallow - -	178,016 —	1,754 —	3,297
Candles -	322,624 —	3,179 —	7,842
Horses - -	7,566 head	- -	84,067
Oxen - -	28,323 —	- -	231,610
Cows - -	5,009 —	- -	
Calves - -	6,903 —	- -	
Pigs - - -	13,028 —	- -	14,476
Sheep and Lambs -	15,242 —	- -	5,534
Corn Brandy - -	4,755 hhds.	- -	13,250
Hides:			
Horse, Ox, and Cow	2,249,136 lbs.	22,159 —	28,638
Skins:			
Calf, Sheep, and Lamb - -	1,453,903 —	14,324 —	40,387
Honey - -	52,656 —	514 —	2,782
Wax - - -	30,978 —	305 —	
Quills, writing -	14,579 —	- -	1,845
Bones - -	22,568 sh. lbs.	70,928 —	12,036
Wool - - -	5,979 —	18,797 —	83,955
Potatoes - -	119,496 tonder	57,756 —	15,490
Wood for Fuel -	10,708 fathms.	- -	7,821
Turf - - -	- -	- -	8,000
		Total -	1,880,667
II. Produce of the Fishery.			
Herrings - -	1,779 barrels	-	4,390
Fish, salted or smoked	- -	-	
Oysters - -	2,221 —	-	
III. Produce of the Colonies.			
(a) *Of Iceland, the Faroe Islands, and Greenland.*			
Eider down - -	3,759 lbs.	4,135 lbs.	62,052
Feathers for beds -	1,056 —	1,161 —	
Lub Fish - -	663 sh. lbs.	2,084 cwts.	
Flat Fish - -	629 —	1,977 —	
Walrus Skins -	100 pieces	- -	
Sheep and Lamb Skins - -	41,517 —	- -	
Reindeer Skins -	3,835 —	- -	
Fox - - -	2,407 —	- -	
Seal - - -	52,342 —	- -	
Svoolerts - -	10,800 —	- -	
Tallow - -	302 sh. lbs.	949 cwts.	
Train Oil - -	5,526 barrels	- -	
Wool - - -	2,420 sh. lbs.	7,606 —	
Worsted Jackets -	23,180 pieces	- -	
Stockings -	147,218 pairs	- -	
Mittens -	32,488 —	- -	
Whalebone - -	11,416 lbs.	112 —	
(b) *Of the Islands of St. Croix and St. Thomas.*			
Sugar - - ; Rum - -	The quantity exported not having been stated, the value has been taken of the quantity exported in the preceding year:—say - - - -		12,000
		Total -	1,959,116

Remarks. The approximate value of the articles is not official, but has been computed according to the medium prices prevailing at the end of the year. The exchange is calculated at the rate of 27*d.* per rigs-bank dollar. The exportation of corn is greatest in years when the crops are deficient and prices high in this country. In 1849 Denmark supplied us with 243,213 qrs. of wheat, 2,023,713 lbs. of wool, and sundry other articles. Since the repeal of the prohibitory duties considerable quantities of Holstein cattle and beef have been introduced into our markets.

Commerce and Navigation.—The piratical expeditions of the Danes during the middle ages are familiar to every

one and being favourably situated for maritime commerce, it might have been expected that they would have made a respectable figure in the commercial navigation of more modern times. But notwithstanding their advantageous situation, they could hardly, having but little native produce to export, engage extensively in any branch of foreign trade, except as carriers for others, and in this department they were far surpassed, first by the Hanse Towns, and afterwards by the Dutch. But since the peace of Stockholm, in 1720, the commerce and navigation of Denmark have gradually improved. During the late war between France and Great Britain, down to 1807, the neutrality enjoyed by the Danes gave them great advantages, and occasioned a considerable increase of their mercantile navy. But the attack on Copenhagen by the English in the last-mentioned year, and the hostilities in which the Danes were consequently involved, deprived them of these advantages, and materially depressed their trade. The loss of Norway, at the general peace of 1815, though it detracted little, if any thing, from the real strength of the monarchy, greatly diminished the importance of Denmark as a naval power. Her commerce has been rather improving since the peace. Her mercantile navy comprises about 4,000 vessels of above 20 tons burden, of which about 200 are employed in the carrying trade of the Mediterranean.

The exports from Denmark consist principally of agricultural products, as already specified, with fish, spirits, beer, and a few other articles. The imports consist of most sorts of manufactured goods, as woollens, cottons, linens, silks, &c.; with hardware, colonial produce, wine, oil, fruit, timber and iron, salt, coals, hemp, flax, &c.

Colonies. — In the West Indies, the Danes possess the small but well-cultivated Island of St. Croix, producing annually about 25,000,000 lbs. of sugar, and 1,400,000 galls. of rum. Previously to 1803, when the Danes, much to their honour, suppressed the slave trade, they had a considerable intercourse with Africa. But this has since nearly ceased, and latterly they have sold their establishments to England. In the East Indies they possess the settlements of Tranquebar and Serampore. The trade with the East was formerly in the hands of an exclusive company, which was dissolved in 1838; under the company it was very inconsiderable, but will now most probably be increased.

Canals. — To avoid the long and tedious navigation round the N. of Jutland, the Danish government has excavated a canal joining the navigable river Eyder with Kiel Bay. It is 10 ft. deep, and is used by large numbers of the smaller class of vessels, and would be still more frequented but for the difficult navigation of the Eyder from the sea to Rendsburg, where the canal commences. The canal of Steckenitz, in the duchy of Lauenburg, joins the Elbe to the Baltic by the Trave. There is also a canal in Funen, forming a communication between Odensee and the sea; and a canal in Zealand, opening a channel between the navigable lake Bavelse and the Baltic. Except in Zealand, the roads, as already stated, are generally bad. But a railway has been constructed from Altona to Kiel, with a branch to Gluckstadt.

Money, Weights, &c. — The marc or Rigsbank dollar is worth 2*s.* 3¼*d*, sterling. But little specie is in circulation. Paper money used to be genera ly at a heavy discount; but latterly a good deal of it has been extinguished, and it is now on a par with coin. 100 lb. Danish is equivalent to 110¼ lb. avoirdupois. The foot is equal to 12⅜ inches. One Danish mile is equal to 4·684 Eng. miles.

Races — Population. — The provs. of Jutland and Sleswick received in antiquity the name of *Cimbrica Chersonesus*, from their earliest inhab. being Cimbri or Celts, the ancestors of the Welsh. The Goths, in their progress from the N. and E., took possession of the country of the Cimbri; and the expatriated inhab., having been joined by some other displaced tribes, were wandering in quest of settlements, when they were met and entirely defeated by Marius in two great engagements, about 100 years before the Christian æra. After the expulsion of the Cimbri, the peninsula was parcelled among several Gothic tribes, of whom the Angli, who afterwards gave their name to England, were one. A tract of country called Engelland, in the E. part of Sleswick, is believed to be the original seat of Hengist and Horsa. (*Pinkerton's Geog.*, art. *Denmark; Biographie Universelle*, art. *Marius; Jacob's 2d Report on the Agriculture of the N. of Europe, &c.*)

The Danish and German languages, both dialects of the Gothic, are spoken, the first in the islands and Jutland; the latter, in the greater part of Sleswick, and in Holstein and Lauenburg.

It appears from the following table, that the increase of population in Denmark Proper, from 1801 to 1845, was 45·9 per cent., or nearly at the rate of 11 per cent. per annum. In the duchies the increase was still greater, having been, between 1801 and 1845, 47·5 per cent. This increase is principally to be ascribed to the emancipation of the peasantry; the breaking down of large estates, and the consequent increase of small properties and farms; the enclosure of commons and the progress made in agriculture; the introduction of vaccination; and the improved condition of the bulk of the people. The increase of pop. in the townships has exceeded that in the merely rural districts; but the town pop. is not very considerable; in fact, if we except Copenhagen (129,292), Altona (32,200), and Flensborg (16,500), no town in the kingdom has 12,000 inhab., and but very few approach nearly to that amount.

The extent, pop., &c. of the different provs. of the Danish monarchy, are as follows: —

Divisions.	Area in Eng. Sq. M.	Pop. 1801.	Pop. 1834.	Pop. 1845.
Zealand, incl. the island of that name, with Funen, Langeland, Laland, &c. -	5,010	531,832	692,821	773,445
Jutland, incl. the dioceses of Aalborg, Viborg, Aarhuus, and Ribe - -	9,483	393,142	530,976	576,882
Sleswick - - -	3,451	276,339	338,192	362,940
Holstein - - -	3,508	325,748	435,596	479,364
Lauenburg - -	404	- -	35,680	46,486
Total -	21,856	1,527,061	2,033,265	2,239,077

Government. — Previously to 1660, the crown of Denmark was elective. The supreme legislative authority was vested in a diet, or assembly, composed of deputies chosen by the nobility, clergy, and commons. But the influence of the nobles predominated very much in this assembly; and they also shared the executive power with the king and enjoyed many immunities. The dissatisfaction of the people with this distribution of power, and still more with the oppressions they too frequently suffered at the hands of the nobles, was greatly inflamed, at the period referred to, by the humiliating treaty concluded in the course of the year with Sweden, and by the refusal of the nobles to submit to bear an equal share of the burdens required by the state of public affairs. In this crisis the partisans of the crown prevailed on the deputies of the clergy and the commons to make a voluntary surrender of their rights, and as the only way of putting an end to the existing dissensions, and of rescuing themselves from the tyranny of the nobles, to confer absolute hereditary power on the sovereign. The nobility, taken by surprise, and unable to make any effectual opposition, were reluctantly compelled to concur with the clergy and the commons. "And thus," to use the words of Lord Molesworth, "this great affair was finished, and the kingdom of Denmark, in four days' time, changed from an estate little differing from aristocracy to as absolute a monarchy as any is at present in the world!" (*Account of Denmark.*)

This has been thought by some to be an overcharged statement; but the following fundamental article of the Royal Law of Denmark, promulgated at the epoch of the revolution, shows that it is strictly correct: — "The hereditary kings of Denmark and Norway shall be in effect, and ought to be esteemed by their subjects, the only supreme head on earth; *they shall be above all human laws, and shall acknowledge, in all ecclesiastical and civil affairs, no higher power than God alone.* The king shall enjoy the right of making and interpreting the laws; of abrogating, adding to, and dispensing with them. He may also annul all the laws which either he or his predecessors shall have made, excepting this Royal Law, which must remain irrevocable, and be considered as the fundamental law of the state. He has the power of declaring war, making peace, imposing taxes, and levying contributions of all sorts, &c." (*Coxe's Travels in the North of Europe*, ed. 1802, vol. v. pp. 116—132.)

It is due to the sovereigns of Denmark to state that they exercised these great powers with singular moderation, and there can be no question that the mass of the people were gainers by the revolution of

1660. The privileges and immunities formerly enjoyed by the nobles have been much restricted. The law has been simplified, established on equitable principles, and reduced into a code by Christian V. It is uniformly, cheaply, and steadily administered; and the slavery of the peasants has been totally abolished. Government has also, particularly within the present century, made the most praiseworthy exertions to diffuse good and useful education. His late Majesty established, by ordinances issued in 1834, provincial states in the four provinces of the monarchy, that is, in the islands Jutland, Sleswick, and Holstein; and since then a constitutional government has been established on the most liberal basis. It consists of the sovereign and of two chambers, one of representatives of the *Folksthing*, or people, and the other of representatives of the *Landesthing*, or country. They are both chosen by the suffrages of the male inhabs. of 30 years of age and upwards; but those only are eligible to the Landesthing, or Upper House, who are 40 years of age, and pay 200 rigsb. doll. a year of direct taxes, or have a nett annual sum of 1,200 rigsb. doll. The powers enjoyed by these bodies are similar to those enjoyed by the Lords and Commons in this country. There is a Folksthing deputy, for every 14,000 electors. The duchies of Sleswick and Holstein may elect deputies to these bodies in the same way as the other parts of the monarchy; but owing to the unhappy differences that have existed, they have not hitherto availed themselves of this important privilege. The duchies of Holstein and Lauenburg form part of the Germanic Confederation, and in virtue of these the king has a voice in the diet.

The nobility still enjoy considerable privileges, particularly in Holstein and Lauenburg. The highest class derive their nobility from their fiefs, which are consequently inalienable, and descend according to the law of primogeniture. The lowest class are personally ennobled. To hinder improper marriages several free nunneries or sanctuaries are established, where unmarried noble ladies may live in retirement. Public functionaries are selected indiscriminately from the persons best qualified for the performance of their duties, without respect to birth or rank.

The supreme government is conducted, under the king, by a privy council, and by departments or colleges, each having a minister at its head, in which the public business is transacted. In respect of the provincial administration, it is necessary to distinguish between Denmark Proper, or the islands and Jutland, and the duchies. They are all divided into *stifters* or dioceses, and these again into *amter* or bailiwicks; but in the first the government and the administration of justice is committed to different parties, whereas the bailie, *amtman* (prefect), or chief of the administration in the duchies, is also chief judge in their civil and criminal courts. The lowest courts consist of a judge and a secretary, chosen by the proprietors of the district, and confirmed by the king. From these an appeal may be made to the provincial courts, of which there are five; and thence either (for Denmark Proper) to the supreme court of appeal at Copenhagen, or (for the duchies) to that at Kiel. But in order to diminish the expense of justice, all civil cases must in the first instance be carried before a *commission of conciliation*, composed of the most intelligent and respectable men of the vicinage. Its sittings are private. If both parties agree to abide by the decision of this commission, it is registered, and has the effect of law: if not, either is at full liberty to proceed in a court of justice. The proceedings of the commission are upon unstamped paper, and must be concluded within 15 days. We do not know that any institution could be better devised to secure substantial justice, and discourage rash and precipitate appeals to courts of law. And as a proof of its excellence, it is sufficient to mention that more than 5-6ths of the suits that occur in the kingdom are disposed of by its means.

Religion. — The Lutheran is the established religion; and though the most perfect toleration be practised, the numbers attached to other sects is quite inconsiderable. The bishops, of which there are at present 8, are nominated by the crown. There are 1,558 subordinate clergymen, of whom 495 belong to the three duchies, and the rest to Denmark Proper, or to Jutland and the islands.

Education in Denmark is very widely diffused, there being very few persons, even among the lowest classes, unable to read and write. Besides the universities of Copenhagen and Kiel, there are gymnasia or colleges at Soroe and Altona, with grammar schools and academies in all the considerable towns. Parochial schools are almost every where established; and here, as in Prussia, attendance at school is not optional; for, by a late law, all children from the age of 7 to 14 years must attend some public school. Children whose parents are unable to pay the usual school fees are educated at the public expense. The instruction in these schools includes, besides reading, writing, and arithmetic, history, geography, and natural history. The grammar and parish schools in Denmark Proper are under the superintendence of a royal collage or commission, consisting of three assessors and a president. This commission regulates the course of study, and appoints all professors in the university of Copenhagen as well as the masters in the grammar schools. The university of Copenhagen was founded in 1479, by Christian I., and has been augmented and amply endowed by his successors. It is divided into theological, medical, juridical, and philosophical faculties. The professors are either ordinary or extraordinary, their total number being generally about 30. The examinations are strict, and the proficiency of the pupils very considerable. It is attended by about 600 students.

The university of Kiel, founded in 1665, is less richly endowed than that of Copenhagen, and is not so flourishing. Its government, as well as that of the grammar schools in the duchies, is placed under a particular department.

There is also an asylum for the education of the deaf and dumb in Copenhagen, and another in Sleswick, with two seminaries for the education of schoolmasters, and two for cadets.

Army and Navy. — The army consists partly of regular troops, and partly of a militia or *landwehr* that is only occasionally called out to be exercised. The peasantry are all, with few exceptions, liable to compulsory service in the army for 6 years, during 2 of which, they are constantly on duty; while during the other 4 they are only on duty for a month each year. At the end of the 6 years they may be enrolled in the militia. A certain number of soldiers are annually chosen by lot, in each district, according to its population, and the exigencies of the state. At present the regular army nominally amounts to 25,000 men; but latterly it has been much more considerable, amounting to 50,000 or 60,000 men.

The navy consisted in 1850 of 6 ships of the line, of which 5 carried 84 guns, 7 frigates, 5 corvettes, 4 brigs, &c.

Finances. — Previously to the late commotions the revenue of Denmark, inc. that derived from the duchies, amounted to about 1,850,000*l.* a year. It consisted of excise and customs duties, a land-tax which produced nearly 400,000*l.* a year, a house-tax, the Sound dues amounting of late years to about 217,000*l.*, and other items. But the serious falling off in the amount of the public revenue caused by the rebellion in the duchies, and the increased charge the crown has had to sustain on account of the war, have occasioned considerable financial embarrassment, and the addition of large sums to the national debt.

As already stated, from 1-5th to 1-4th part of the public revenue is derived from a land-tax. With respect to this tax it may be worth while to observe, that it is charged according to the quantity and quality of the land which each cultivator possesses, and which is measured in *tons of hardcorn*. The Danish acre, or ton of land, is equivalent to 56,000 sq. Danish ft., and 4 such acres are equal to a standard ton of hardcorn, one of the latter being consequently equal to 5¼ English acres. But as the same amount of tax is laid on each ton of hardcorn, the size of the latter varies according to the fertility of the land, from 224,000 ft. to 2,240,000 ft.! The ton of hardcorn is, therefore, in fact, an imaginary measure, which contracts as the quality of the land to which it is applied improves, and expands as it deteriorates.

Provision for the Poor. — A compulsory provision for the support of the destitute poor was introduced into Denmark early in the present century. Each market-town, of which there are 65, and each parish, forms a separate poor district, the affairs relating to the poor of which are managed by a particular board. Every man residing for three years in a parish acquires a settlement in it, and a right to be supported in the event of his becoming unable to support himself; but the principle of the law is, that the pauper shall be supplied only with those things that are absolutely necessary for his support. All begging is strictly prohibited. Opinions differ as to the influence of this law. It took effect in 1803, and the rate is said to have since progressively augmented. The too great multiplication of cottages has been specified as one of the principal causes of the multiplication of the poor. But the probability seems to be, now that the feudal system has been subverted, and that a large portion of the country has got into the hands of small proprietors, that the increase of cottages would have been greater had there not been an assessment for the support of the poor.

According to the census of 1834 there were in Denmark Proper, that is, in the islands and Jutland, 43,576 poor persons, exclusive of 1,470 inmates of bridewells and houses of correction. In Sleswick and Holstein there were 45,677 paupers, exclusive of 967 inmates of bridewells and houses of correction.

Savings' banks were introduced into Denmark in 1816; and since then upwards of ten millions of dollars, or

above one million sterling, has been lodged in them. It very rarely happens that any one of the petty proprietors either solicits or obtains parish relief. — (*Foreign Communications, Poor Law*, art. *Denmark*.)

History. — The early history of Denmark is obscure and uninteresting, at least to Englishmen. In 1385, Margaret, daughter of Waldemar king of Denmark, and wife of Haquin king of Norway, ascended the throne of these kingdoms; in 1389 she was chosen by the Swedes their sovereign, the three crowns being united, it was supposed, for ever, in 1397, by the treaty of Calmar. This great princess, who has been styled the Semiramis of the North, and whose reign is the most glorious in the annals of Denmark, died in 1412. After her death the Swedes began to evince their discontent with the union with Denmark; and after a lengthened struggle finally emancipated themselves from the Danish yoke in 1523. In 1448 the race of the ancient kings of Denmark having become extinct, Christian I., of the house of Oldenburg, was raised to the throne, which his posterity still possess; and by this means the valuable provinces of Sleswick and Holstein have been united to the crown, the first immediately, and the latter in 1761 and 1773. The reformed faith was established in Denmark with little difficulty. Lutheranism having been introduced in 1523, Catholicism was suppressed in 1537, the church lands being at the same time annexed to the crown. We have already noticed the memorable revolution of 1660, which had been preceded by a disastrous war, and the loss of the provinces previously held by the Danes in the south of Sweden. From thence down to a late period, there is little of interest in Danish history, other than the introduction of the reforms already alluded to, and the events of last war. The attack on Copenhagen by the British in 1807, which ended in the capture of the Danish fleet, was an act of very questionable policy on our part, and of which no sufficient justification either has been or perhaps can be made. From this period down to the general pacification in 1815, the Danes were amongst our bitterest enemies. At the conclusion of the war Norway, which had been so long united with Denmark, was assigned to Sweden; the former obtaining in exchange the duchy of Lauenburg and a sum of money. The Danes felt this sacrifice very acutely; but it was one of apparent rather than of real power. Since that period the Danish government has steadily exerted itself to draw forth the resources of the country, and to improve the condition of the inhabitants.

It would be to no purpose to attempt to enter in this place into any details in regard to the unfortunate contest that has arisen between Denmark properly so called, and the duchies of Sleswick and Holstein. The latter, though they have for a considerable period been subject to the Danish crown, have been, in some respects, in the enjoyment of peculiar privileges. In Denmark the crown succeeds to females in the event of the extinction of the male line; but in the duchies the Salic law, which excludes females from the succession, is said to prevail. On the death of the late king, Frederick VI., in 1839, the question of the succession began to be keenly agitated, and led to sundry protestations on the part of the States of the duchies. It is probable, however, that these differences would have been reconciled, and the integrity and tranquillity of the Danish dominions secured, but for the revolutionary outbreak in Germany in 1848. The Germans made haste to espouse the quarrel of their disaffected brethren in the duchies; and the king of Prussia was weak enough to lend his name and to employ his troops to carry out their designs. A sanguinary conflict was the result, conducted on the part of the Danes with the greatest determination. Peace has very recently been agreed upon between Prussia and Denmark; but the differences between the latter and the duchies have not yet been arranged: and it seems most probable, that if the parties be left to enforce their respective pretensions, they will terminate in bloodshed. But it is to be hoped, that means may be found, by the mediation of some of the great powers or otherwise, to avert such a result. It is of importance to Europe that the integrity of the Danish dominions should be preserved; and the liberal institutions under which they are now placed, will fully secure the rights and interests of the inhab. of the duchies as well as of the other parts of the monarchy.

DENNY, a market town of Scotland, co. Stirling, 7 m. S. Stirling, and 14 m. N. E. Glasgow, on the S. bank of the river Carron, which falls into the Frith of Forth at Grangemouth. Pop. 2,400. It is irregularly built. The only public buildings are, a parish church and a dissenting chapel; but it is a flourishing place, and is eminent for the various manufactures or public works carried on either within its bounds or in its vicinity, viz., paper-mills, print-fields, mills for spinning wool, one for preparing dye-stuffs, and collieries. Handloom weaving, in connection with the Glasgow market, is also carried on to a considerable extent. (*Nimmo's Hist. of Stirlingshire*, 1817, p. 614.; *Chambers's Gazetteer of Scotland*.)

DEPTFORD, a town and naval arsenal of England, mostly in co. Kent, lathe Sutton-at-Hone, hund. Blackheath, a small part being in co. Surrey, hund. Brixton, on the Ravensbourne, at its confluence with the Thames, 4 m. E.S.E. Lond. Pop. (1821), 20,818; (1841), 25,617. It is contiguous to Greenwich, the two appearing to make only one large town. The lower town, next the river, has narrow irregular streets, and is meanly built, but the upper town is much superior in these respects, and has many handsome modern houses; the whole is lighted by gas, is partially paved, and supplied with water from the Kent water-works. The old church of St. Nicholas was rebuilt in 1697; that of St. Paul, a handsome structure, in the Grecian style, was built in 1730, at which period Deptford was divided into 2 pars. There are also 4 dissenting chapels; 2 charity schools, educating and clothing, respectively, 10, and 95 boys and girls; a dispensary for the poor of the town and neighbourhood; a savings' bank; a mechanics' institute; and 2 sets of almshouses for decayed pilots and masters, or their widows; one founded in the reign of Hen. VIII., with 26 dwellings; the other at the end of the 17th century, with 56. This society was incorporated by charter in 4th Hen. VIII., when the ancient rights and privileges of the company of the mariners of England was confirmed to them, and they were styled the master, wardens, and assistants of the guild of the Holy Trinity, in St. Clement's, in Deptford Strond. Other charters were granted them by Eliz. and Chas. II. They are now governed by a master, 4 wardens, and 18 other elder brethren; the master and 2 wardens being chosen annually from among the elder brethren, who are elected for life. The number of younger brethren is unlimited, any master or mate sufficiently skilled in navigation being admissible; but they take no part in the business of the corporation, though, like the elders, they enjoy certain immunities, such as exemption from serving on juries, &c. The principal chartered functions of the society are — the examination of the mathematical students of Christchurch, and of masters in the royal navy; the appointment of pilots for king's ships, as well as for piloting merchant-vessels on the several coasts and ports of England, except such as are specially placed under other jurisdiction (such as those of the cinque ports, the Bristol Channel, &c.), and of fixing the rates of pilotage; the erection and maintenance of lighthouses, beacons, buoys, and other sea-marks (with the exceptions previously stated); and the hearing and determining complaints between merchant officers and seamen, the appeal from them being to the Admiralty Court. They have also the power, under certain circumstances, of licensing seamen to ply on the Thames. Their revenue is derived from ancient endowments, contingent benefactions, and lighthouse and other dues, and the surplus, after defraying the expense of maintaining these and other sea-marks, and other necessary expenses, is, by their charters, to be appropriated exclusively to the relief of decayed seamen and their widows. Between 2,000 and 3,000 is the usual number annually receiving periodical, or casual relief, to various amounts. Their affairs were conducted at Deptford till 1787, when the Old Trinity House was pulled down, and they removed to the present structure on Tower-hill. The government dockyard is an enclosed area of 31 acres, with a double and single tide-dock, 3 building slips, 2 mast-ponds, a mast-house, smithy for forging anchors, several ranges of storehouses, dwellings for the officers, &c. The victualling office is close to the Thames, and has extensive buildings annexed for baking, brewing, slaughtering cattle, curing meat, cooperage, &c. During the war, 1,500 artificers and other workmen were employed in the dockyard, but this and the other establishments have since been greatly reduced, and the town, which was mainly dependent on them, has suffered much in consequence. There are three private docks, in the largest of which several line-of-battle ships were built during the war. The Ravensbourne forms a small æstuary at its entrance, called Deptford Creek, over which is a bridge connecting the lower town with Greenwich. The Surrey Canal locks into the Thames at the North end of Deptford, whence a branch extends from it to Croydon; a railway, raised on brick arches, and extending from London Bridge to Greenwich, crosses the upper town. There is an earthenware manufactory, a foundry for gun-barrels, &c., and a large establishment, with a laboratory, and several furnaces, for refining the precious metals, making sulphuric and other acids, &c. The Reform Act included Deptford in a parliamentary borough, comprising also Greenwich, Woolwich, and part of Charlton, which returns 2 members to the House of Commons. It had in 1841 a population of 72,748, and in 1849-50, 5,976 registered electors. Weekly sessions for the district are held by the co. magistrates in the town, which is in the jurisdiction of a court of requests for debts under 40*s*., held at Greenwich. It was anciently called West Greenwich, and after Deep-ford Strand, and was a small fishing vil-

lage previously to the establishment of the dockyard in the 4th Hen. VIII. At Saye's Court (the site of the present workhouse), Evelyn, the author of the *Sylva*, &c., resided, who lent it to Peter the Great in 1698, when that monarch passed some time in Deptford dockyard. (*Hasted's Kent; Parl. Papers, &c.*)

DERA ISMAEL KHAN, an inl. town of Afghanistan, cap. distr. Damaun, now belonging to the Maharajah of the Punjab, about 100 yards from the W. bank of the Indus, and 200 m. W. Lahore; lat. 31° 50′ N., long. 70° 33′ E. It stands in a large wood of date trees, and when Mr. Elphinstone visited it was surrounded by a ruined wall of unburned bricks about 1¼ m. in circ. Its inhab. are mostly Beelooches; but some are Afghans and Hindoos. (*Elphinstone; Cantul.*)

DERBY, one of the central cos. of England, having N. Yorkshire and a part of Cheshire; E. the cos. of Nottingham and Leicester; S. the latter, Stafford, and a small part of Warwick; and W. Chester and Stafford. Length, from N. to S., about 55 m.; breadth very various. Area, 657,920 acres, of which about 500,000 are arable, meadow, and pasture. The Pennine mountain chain (*see* ENGLAND) terminates in this co., and occupies great part of its N. and E. districts. The hund. of *High Peak*, comprising the N. W. angle of the co. is one of the most celebrated mountain districts in England; for though its hills do not soar to the height of those of Cumberland, Westmorland, and Wales, nor afford the romantic beauties of lakes, cascades, and hanging woods, yet its situation in a more central part of the island, and its extraordinary caverns, perforations, and other curiosities, have made it an object of the greatest interest and attraction. (*Aikin.*) The S. parts of the co. are comparatively flat, and consist generally of strong, heavy land. The climate varies with the elevation of the land, and the nature of the soil: but, speaking generally, it is rather cold and bleak. Agriculture is in a backward state; farms generally small, and mostly held at will: there is everywhere a great want of drainage, and there are no restrictions on the mode or frequency of cropping. In the N. and some of the W. parts of the co., the dairy is the principal dependence of the farmer. Oats is the principal crop in the High Peak; and wheat and beans in the S. The drill is but rarely used; and there is a great waste of horse power in ploughing. No particular breed of cattle is preferred. Stock of sheep estimated at about 360,000 head. Average rent of land in 1843, 25*s.* 8½*d.* an acre. Derby is famous for its minerals and manufactures. The coal-field is of great extent and value; and both lead and iron mines are wrought to a considerable extent; zinc and copper are also obtained, though in no great quantity; and the spars, which are very elegant, are wrought into a variety of ornamental articles. Silk and cotton manufactures are extensively carried on at Derby, Belper, Chesterfield, Hope, Glossop, and other places. In 1838 and 1846 the silk mills in the co. employed 3,226 and 5,144 hands, and the cotton mills 5,874 and 11,602 do. The flax and woollen manufactures are inconsiderable. Porcelain, of a superior quality, is made at Derby; and nails, hats, &c., in various parts of the co. Principal river the Derwent, which traverses nearly the whole extent of the co. from N. to S., dividing it into two pretty equal parts. The Trent crosses the S. angle of the co., and the Dove forms, for a lengthened distance, the line of demarcation between it and Stafford. Derbyshire is divided into 6 hund. and 139 parishes: it returns 6 mems. to the H. of C., viz. 4 for the co., and 2 for the bor. of Derby. Registered electors for the co. in 1849-50, 12,362; viz. 5,393 for the N., and 6,969 for the S. division of the co. Principal towns, Derby, Belper, and Chesterfield. In 1841, Derbyshire had 53,020 inhab. houses; and 272,217 individuals, of whom 135,620 were males, and 136,597 females. Sum paid for relief of the poor in 1847, 54,848*l.* Annual value of real property in 1815, 883,370*l.*; do. in 1843, 1,379,125*l.*

DERBY, a town and bor. of England, in the above co., of which it is the cap., being locally in the hund. of Morliston, but possessing separate jurisdiction, on the Derwent, in a fine valley, 48 m. S.S.E. Manchester, 113 m. N.N.W. London; lat. 52° 55′ 32″ N., long. 1° 28′ 18″ W. Area of the parl. and municip. bors., which coincide, 1,660 acres. Pop. in 1841, 32,741, of whom 15,899 were males, and 16,842 females. Inhab. houses, in the above year, 6,338, ditto building, 112. At present (1850) the pop. is probably 36,000. Assessed rental in 1837, 74,023*l.* 3*s.* 6*d.*; actual ditto, 94,064*l.* 12*s.* 6*d.* Besides the Derwent, the town is traversed by the Markeaton brook, both of them being crossed by several handsome bridges. This is a very thriving place, and has of late years been much improved. The streets in the older parts are narrow and crooked; but all of them are clean, well paved, and well lighted with gas. There is here a county-hall, rebuilt about 10 years ago, a town-hall, assembly-rooms, a co. gaol, which is one of the best in the kingdom, an infirmary, theatre, &c. The most extensive, and one of the finest buildings in Derby, has been very recently completed: it stands in the centre of the town, is of Grecian architecture, has two fronts, one of 98, and one of 185 feet; and comprises a new post office, an hotel, with a large room for public meetings, dinners, &c., the office of the Derby and Derbyshire bank; a museum, &c. The market-place is a large open space in the centre of the town, and there is also a good covered market. There are 8 churches. All Saints' Church is the principal architectural ornament of the town: the body is a Roman Doric edifice; the tower, erected about the time of Henry VIII., is in the perpendicular English style, 178 ft. high. (*Hutton.*) The original church of St. Werburgh is supposed to have been built prior to the Conquest. The new church of St. John's is a fine Gothic building; and 2 handsome new churches (Trinity and Christchurch) have been recently erected by subscription. There are chapels for most classes of Protestant dissenters, and the Catholics have a chapel with a fine Gothic tower just finished. Derby has received many charters; the first from John; its last and (prior to the passing of the Municipal Reform Act) governing charter, from Charles II. It claims to be a bor. by prescription. Under the new municipal act, it is divided into 6 wards, and has 12 aldermen and 36 councilmen. Corp. rev. 1847-48, 6,904*l.* The assizes for the co. are held here, and the Epiphany, Easter, and Michaelmas sessions. The midsummer sessions are held at Chesterfield. The bor. sessions of the peace are held quarterly, before the recorder. There are courts of record and requests. A county court is established here, before which 2,210 plaints were entered in 1848. Derby has sent 2 mems. to the H. of C. since the 23d Edward I. Previously to the Reform Act, the right of voting was vested in the freemen and sworn burgesses. Registered electors in 1849-50, 2,194. Derby is also the place appointed for the election of the mems. for the S. div. of the co.

The town has to boast of many excellent charitable, educational, literary, scientific, and other institutions. Amongst the first may be enumerated the infirmary; — this, which is a very fine structure, erected by subscription, at a cost of about 18,000*l.*, was opened in 1800, and is replete with every convenience; the self-supporting charitable and parochial dispensary; a lady's charity for assisting poor women during their confinement; several friendly societies and benefit clubs; almshouses, some of which were founded by the Countess of Shrewsbury, in 1599, for 8 men and 4 women; others by R. Wilmot, in 1638, for 6 men and 4 women, now 4 of each; Large's Hospital, founded 1709, by Edward Large, for 5 clergymen's widows; subsequently enriched by sundry donations, and 13 neat and substantial almshouses, erected from the fund of a charity bequeathed 300 years ago, by Robert Liversage, to the par. of St. Peter; with various benefactions for different purposes. There are, also, National, Infant, Sunday, and other schools, furnishing instruction to great numbers of children. A free school, founded in the reign of Henry II., is supposed to be one of the most ancient endowments of the kind in England. It was formerly in a very flourishing state; subsequently, however, it fell off very much; but it has latterly been getting into somewhat better repute. The literary and scientific institutions are, the Philosophical Society (originally held in the house of Dr. Darwin), with a good library, a collection of fossils, and mathematical and philosophical apparatus; the Town and Country Library, which has been much enlarged, and has a public news-room and museum attached to it; and the Mechanics' Institute. This institution is in a flourishing condition: the building contains a number of rooms for classes, library, &c., besides the spacious and handsome hall, which has been lately added, and which is used for lectures and public meetings. Two weekly newspapers are published in the town.

Manufactures.—This town is remarkably well situated for manufactures, having an extensive command both of water power and coal; and various mills for the manufacture of silk and cotton have been established either in it or its immediate vicinity. Early in the beginning of last century, Mr. John Lombe, who had, at considerable risk, and by dint of great ingenuity and application, made himself acquainted with the machinery in Italy, erected at Derby a mill (now the property of the corporation) for throwing silk on a very large scale; and the town has ever since continued to be a principal seat of the silk-throwing business. Seventeen silk-mills, of 182 horse-power, employing 3,004 hands, viz. 956 males and 2,048 females, were at work here in 1839. (*Factory Inspectors' Returns.*)

The scale of wages varies very little, and ranges at — for children of 8 to 12 years old, from about 1*s.* 6*d.* to 3*s.* 6*d.*; 12 to 14, 3*s.* 6*d.* to 5*s.*; young women, females more advanced in life, 6*s.* to 8*s.*: in all cases differing, of course, according to the skill of the parties. In some cases, the hands, when engaged, are contracted with for a certain term, ranging from 3 to 4 or 5 years. It was stated in 1835, by one of the largest manufacturers in Derby, that there were few, if any, towns in the king-

dom in which employment generally was more abundant, and wages more uniformly steady; and that there had been very little alteration for some years. The cotton manufacture is not carried on to nearly the same extent as that of silk; but we have previously seen that of late years it has been increasing very rapidly in the co.

This was formerly a great wool mart, and the art of dyeing woollen cloth was supposed to be practised here with peculiar advantage, in consequence of the water of the Derwent being specially adapted for that purpose. Hosiery has long been an important business in Derby. There are also large manufactures of bobbin-net; and the weaving of silks and velvets has been introduced of late years. The manufacture of porcelain was originally established here about the year 1750. The ware is not, perhaps, of equal fineness with the French and Saxon, but its workmanship and ornaments are at least equal. The manufacture of figures and ornaments, in what is termed *biscuit*, is extensively carried on. The fluor spar, or "blue John," of the vicinity, is wrought into vases and other ornaments; and the black marble of Ashford into vases, columns, chimney-pieces, &c. Various other manufactures, besides those which have been specified, are conducted here on a large scale: viz., a patent shot manufactory; an establishment for the construction of steam-engines; a mill for slitting and rolling iron; a furnace for smelting copper ore, with a machine for hammering and rolling the copper into sheets; a mill for making tin plates; an iron furnace; red lead, colour, and varnish works; bleaching-grounds, in which the processes are performed by chemistry; tanneries; soaperies; extensive malting concerns; and corn-mills. The Derby and Derbyshire banking co. has its head office in the town, and there are 3 private banks, and a savings' bank. The latter had, on the 20th Nov. 1848, 140,411*l.* deposits.

The municipal corporation commissioners say the increase of the town has been in proportion to the increase of manufactures. One of the best proofs of its prosperity is the fact that, although the population has fully trebled since 1811, it being at that time only 13,043, the poor-rates have been reduced.

Derby communicates by canals with all parts of England. The river was, several years since, made navigable from the town to its junction with the Trent; but, since the opening of the Derby Canal, the navigation has been disused. This canal branches from the Trent and Mersey Canal at Swarkestone, a few miles S. of Derby, runs N., and intersects the Derwent at Derby; a towing bridge being thrown across that river. The Derby Canal supplies the town with coals, building stone, gypsum, and other things. Three railways meet at Derby:—1. The Derby and Birmingham; 2. The Midland Counties Railway, which connects Derby and Nottingham with each other, and both with the London and Birmingham Railway at Rugby; 3. The North Midland Railway, which connects Derby with Leeds, York, &c. In short, Derby is a principal centre of railway communication.

Many learned persons have either been natives or inhabitants of this town; among whom may be specified Dr. Thos. Linacre, a learned physician in the reign of Henry VIII.; Joseph Wright, an eminent painter; William Hutton, an industrious antiquary and topographer; Flamstead, the celebrated astronomer, said to have been educated in the free school; the first Earl of Macclesfield, who, after practising here as an attorney, rose to the highest rank in his profession, having been Lord Chancellor; John Whitehurst, a scientific mechanist; and the celebrated Dr. Darwin. In the vicinity are many elegant seats and mansions, and the country round is fertile, well-wooded, and plentifully supplied with water. Market-day, Friday: fairs, Jan. 25., Friday in Easter week, third Friday after 1st of May, Tuesday in Whitsun week, and July 25., for horses, cattle, and sheep; and March 21., 22., and 23., and Sept. 27., and two following days, for cheese. A cheese-market, or fair, is also held on the last Tuesday in August. Markets for cattle every Friday in May, and for fat cattle every alternate Tuesday throughout the year. (*Hutton's Hist. Derby; Glover's Hist. Derbyshire; Municipal and Boundary Corporation Reports; Private Information.*)

DEREHAM (EAST), or MARKET DEREHAM, a town and par. of England, co. Norfolk, hund. Mitford. Area of par. 5,550 acres. Pop. of do., 3,834. The town 15 m. W. by N. from Norwich, nearly in the centre of the co., having suffered much from fires at different periods, has been rebuilt on an improved plan, and is neat and clean. The church, a very ancient structure, with a tower in the centre, has some interesting relics; and in it were deposited, in 1800, the remains of Cowper the poet. Market-day, Friday; and there are two annual fairs.

DERG (LOUGH), a lake of Ireland, in the S. E. angle of the co. Donegal, about 9 m. in circ. This lake, or rather a small island in it, is famous in the history of Irish superstition. In this island there was formerly a cave, called St. Patrick's Purgatory, a pilgrimage to which was long held to be of the greatest efficacy. The cave was, however, shut up in 1630, by order of government, the chapel on the island demolished, and the monks dispersed. It was supposed that this rough treatment had put an end to the delusion; and Boate, writing soon after, says that "the pilgrimage to purgatory has quite come to nothing, and never hath been since undertaken." (*Boate's Nat. Hist. of Ireland*, p. 75. ed. 1652.) But if so, the practice revived at no distant period, and the island continues, down even to the present day, to be annually visited by crowds of pilgrims. Nor is this greatly to be wondered at, seeing that Pope Benedict XIV. wrote a sermon recommending the pilgrimage; and that, in 1830, the Catholic bishop of the diocese publicly notified that he would hold a "station" here. The "station," or period for the resort of pilgrims, begins on the 1st of June, and terminates on the 15th of August. Mr. Inglis, who visited the island in 1834, estimated the average annual number of pilgrims at from 18,000 to 20,000. At present the rites are not performed in a cave, but in a chapel. (*Inglis' Ireland*, ii. 169—181.) A river called Derg falls into this lake.

DESSAU, a town of N. Germany, cap. of the duchy of Anhalt-Dessau, residence of the duke and seat of government, on the left bank of the Mulda, near its confluence with the Elbe, 67 m. S. W. Berlin, and 33 m. N. by W. Leipzig; lat. 51° 50′ 6″ N., long. 12° 17′ E. Pop. (1846) 12,000, of whom 750 were Jews. It is walled round, except on the side next the river, which is here crossed by a fine bridge. Dessau is divided into the Old and New Towns, the Sand, and 3 other suburbs, one of which is on the opposite side of the Mulda. It is one of the best built cities of Germany, and contains 5 public squares, and upwards of 30 good streets, which are well lighted at night. The ducal palace, a part of which was built in 1340, contains a theatre, a good collection of paintings, and other works of art; the palace of the dowager-duchess, the high school, Amelia asylum, riding-school, Catholic church, 3 Lutheran churches, and the synagogue, are the other public edifices most worthy of notice. Dessau is the seat of the high court of appeal for the duchy and other judicial courts. Its public schools are numerous, and include a gymnasium, teacher's seminary, citizens' primary and female schools, academies of music and singing, the Louisa school of industry, a high female school, and a celebrated Jewish commercial school with which a Jewish classical seminary is united. There are many public charities. The inhab. mostly derive their subsistence from employments connected with the court; but they also manufacture woollens and hats, and have tanneries, distilleries, and an extensive trade in corn. The public cemetery of Dessau is very handsomely laid out, and in the vicinity of the town are the ducal country residences, *Luisium* and *Georgium*, surrounded by extensive gardens. Dessau was the birthplace of the philosopher Mendelsohn, born in 1729, deceased in 1784. (*Berghaus; Ritter.*)

DETMOLD. *See* LIPPE-DETMOLD.

DETROIT, a city of the U. S. of America, cap. Michigan; on the W. side of the strait or channel uniting lakes Erie, St. Clair, and Huron, and consequently in one of the best positions for commanding a large share of the internal navigation of America, 18 m. above the W. extremity of lake Erie; lat. 42° 19′ 53″ N., long. 82° 58′ W. Pop. (1845) 13,065. It is irregularly built, mostly of wood; but there are some large brick edifices. Three of the streets are each 200 ft. wide, the others vary from 60 to 120 ft. in width, and cross each other generally at right angles. There are several squares, and some good private mansions. In 1849 Detroit had 16 churches. The new R. Catholic cathedral, finished in 1848, is an imposing edifice. Among the other public buildings are the state-house, city hall, banks, markets, a theatre, museum, state penitentiary, co. gaol, mechanics' hall, and various public offices. There are several extensive manufactories, including iron-foundries, a brass-foundry, breweries, &c. Ship-building and the sawing of timber are the most important branches of industry. The city is the great commercial mart and emporium for the state. The markets are usually well supplied; the fish market, especially, is one of the best in the W. states. Among numerous charitable institutions there are 2 orphan asylums, several free schools, an hospital, and a poorhouse. There are scientific and literary societies, and good male and female academies. Aggregate burden of vessels belonging to the district of Detroit, during the year ending June 30, 1848, 25,850 tons. Of the various nations which compose the pop., the most numerous are the French, by whom the city was founded in 1670.

The Detroit river, or strait, between lakes Erie and St. Clair, is 25 m. long, and upwards of a mile broad. The French settlements extend for a considerable distance along its banks, which are fertile and well cultivated. (*Blois's Gaz. of Michigan*, 1838; *Peck's Guide to Emigrants, &c.*)

DETTINGEN, a small village of Bavaria, on the Mayn, 8 m. N.W. Aschaffenburg. Here, on the 26th of June 1743, the allied British and Hanoverian army, under George II. and the Earl of Stair, defeated a very superior French force under Marshal Noailles. The latter lost above 5,000 men killed and wounded; the allies about 2,000.

DEUX-PONTS (Germ. *Zwei-brücken*), a town of Rhenish Bavaria, formerly the cap. of the duchy of the same name, and at present of the Bavarian circle of the palatinate, on the Erbach near its confluence with the Serre, 42 m. W. by N. Landau, and 47½ m. S.S.E. Strasburg. Pop. 7,300. It is pleasantly situated and well built. Here are the ruins of the ancient palace of the duchy, formerly one of the most magnificent residences in Germany, but which was for the most part destroyed by the French. What remains of it has been converted into a Catholic church. The cathedral and Lutheran church are amongst the other chief edifices. There are here two bridges across the Erbach, whence the town probably derives its name. Deux-Ponts is the seat of the high court of appeal for the circle, and contains a lycæum and a gymnasium. It has manufactories of woollen cloth, leather, cotton twist, and tobacco. Here, in 1779, was commenced the publication of the series of editions of the classics, known by the name of the Bipont edition. The undertaking was not, however, completed here, but at Strasburg.

Deux-Ponts and its duchy successively belonged to its own counts, to Sweden, and Bavaria, previously to the French revolution. It was afterwards taken by the French, and formed a portion of the dep. of Mont Tonnerre; but since 1814 it has again belonged to Bavaria. (*Berghaus; Cannabich; Encyc. des Gens du Monde.*)

DEVENTER, a fortified town of Holland, prov. Overyssel, cap. arrond., on the Yssel, 18 m. S. Zwoll; lat. 52° 15′ 9″ N., long. 6° 9′ 28″ E. Pop. 13,639. A cathedral, 6 other churches, and a town-hall, are amongst its chief public buildings. It is the seat of a court of assize, a tribunal of primary jurisdiction, and several associations of public utility, and the residence of a military commandant. It has manufactures of stockings, carpets, and linen fabrics, an iron foundry, and considerable trade in cattle, corn, butter, and other goods; and sends 7 members to the states of the prov. Deventer has sustained numerous sieges, and been several times taken. (*Cannabich; Dict. Géogr.*)

DEVIZES, a parl. bor. and town of England, co. Wilts, hund. Potterne and Cannings, on an eminence near the N. limit of Salisbury Plain, on the principal road from London to Bath, and nearly in the centre of the co.; 85 m. W. by S. London. Pop. (1821), 4,208; 1841, 4,631; houses 854. It consists of several wide streets, branching from a large market-place. The houses are mostly well built, and the town "appears in every respect wealthy and prosperous." (*Boundary Report.*) It is well paved and lighted with gas; but has an inadequate supply of water, obtained from wells sunk through the sandstone strata. There are 2 ancient churches, affording interesting specimens of the Norman and pointed styles, with some curious monuments. There are also 5 dissenting chapels; a charity school, educating and apprenticing 40 boys; Lancastrian, national, and infant schools; a town-hall, with a circular front and Ionic columns; and a handsome cross, erected in 1815, by Lord Sidmouth, formerly the recorder, and one of its representatives in the H. of C. Markets, Monday and Thursday, the latter for corn, and one of the largest in the W. of England. Fairs — Feb 14. for horses; Holy Thursday, horses, cattle, and sheep; April 20. ditto, a very large one; July 5. wool; Oct. 2. sheep; Oct. 20. sheep and hogs—very large. Malting is extensively carried on; and there is a large snuff manufactory, and three others for silk, employing between 300 and 400 hands. The woollen business, formerly the most important of any, has wholly declined. The Kennet and Avon Canal passes the town, giving it a water communication with Bristol and London. Devizes claims to be a bor. by prescription, but has several charters. It has returned 2 mems. to the H. of C. since the 4th of Edward III. Previously to the Reform Act, the elective franchise was vested in 36 burgesses and an unlimited number of free burgesses; but of these few were made. The Boundary Act extended the limits of the parl. bor., which had, in 1841, a pop. of 6,156, and in 1849-50, 358 registered electors. The present municipal coincides with the parl. bor. It is divided into 2 wards, and has 3 aldermen and 18 common-councilmen. Average revenue of the corporation, between 500*l*. and 700*l*. Annual value of real property in 1843, 16,251*l*. Petty sessions for the division are held in the town, and quarter sessions for the co., alternately with Salisbury, Warminster, and Marlborough. There is a large co. bridewell and a house of correction near it, built in 1810. The co. coroners are elected, and the co. members nominated and returned, at Devizes; and it has a weekly newspaper. The origin of the name (in old records, *Divisæ, Divisis, &c.*), is supposed to be from the division of the place between the king and the bishop of Salisbury. The town owes its rise to an important castle or fortress built here in the reign of Stephen, of which nothing but the mound remains. (*Sir R. C. Hoare's Wilts; Parl. Papers, &c.*)

DEVON, a marit. co. of England, forming part of its S.W. peninsula, and having E. the cos. of Dorset and Somerset, N. the Bristol Channel, W. Cornwall, and S. the English Channel. It is of a rhomboidal shape; area, 1,654,400 acres, of which about 1,200,000 are supposed to be arable, meadow, and pasture. Surface and soil very various. A great portion of the W. district of the co., from Okehampton on the N. to Ugborough on the S., and from Ilsington on the E. to near Tavistock on the W., is occupied by Dartmoor, one of the most barren and worthless tracts in the kingdom. It includes a space of above 250,000 acres, and is said to have a mean elevation of more than 1,700 ft. above the level of the sea, but we suspect this to be an exaggeration. Its surface is, in most places, extremely rugged: the soil, where it is not encumbered with broken fragments of rock, is thin and poor; and in the most elevated part of the moor there is an immense morass, covering about 80,000 acres, and which is, in parts, incapable of supporting even the lightest animals. That part of the moor, called the Forest, is parcel of the duchy of Cornwall; and on this, and some other of the less barren portions, some improvements have been effected, particularly in the way of planting. But, with the exception of this and a few other districts of very inferior dimensions, the country is alike beautiful and fertile. The vale of Exeter, comprising from 120,000 to 130,000 acres, is one of the richest in the kingdom; and the district called the *South Hams*, extending from Torbay round to Plymouth Sound, is frequently called the garden of Devonshire, and is finely diversified, and very productive. Climate mild but moist, though not so much so as in Cornwall. Agriculture, though much improved, is still very backward; there is throughout the co. a great want of any regular system of cultivation, and the crops are inferior. Potatoes are extensively cultivated; cyder is largely produced, especially on the W. parts of the co., and is a common beverage; but it is harsh and acid; and these qualities, and the freedom with which it is drunk, are said to occasion the colic prevalent among the natives. Devon is principally a grazing and dairy co. The breed of cattle is excellent: they are of a high red colour, fatten easily, and yield capital beef; are well adapted for field labour, being, though rather light, docile, and ready to exert themselves to the utmost. The dairy farmers not unfrequently let their cows to dairymen at so much a head. Stock of sheep estimated at between 600,000 and 700,000 head. Property much divided. Farms of all sizes from 10*l*. to 500*l*. a year; but the great majority small. Average rent of land, in 1843, 18*s*. 9½*d*. an acre. Minerals important and valuable; copper and tin mines are wrought to a considerable extent; and lead, iron ore, and manganese are met with. About 28,000 tons of fine clay, raised near Kingsteignton, Bovey, and other places in that part of the co., are annually shipped for Staffordshire and other seats of the china-ware manufacture. The woollen manufacture, though a good deal fallen off, is still carried on to a considerable extent: there were in the co., in 1839, 39 woollen-mills, employing 1,810 individuals, with 3 flax and 3 silk mills. Principal rivers Exe, Dart, Tamar, Taw, and Torridge. Principal towns, Plymouth, Devonport, Exeter, Tiverton, Tavistock, &c. Devonshire is divided into 33 hund. and 465 par.: it returns 22 mems. to the H of C., viz. 4 for the co.; 2 for the city of Exeter; 2 each for the bors. of Plymouth, Devonport, Tiverton, Barnstaple, Honiton, Tavistock, and Totness; and 1 each for the bors. of Ashburton and Dartmouth: registered electors for the co., in 1850, 17,712, but those for the different divisions are not specified. Devonshire had, in 1841, 94,704 inhab. houses, and 533,460 individuals, of whom 252,760 were males, and 280,700 females. Sum paid for the relief of the poor in 1847, 196,783*l*. Annual value of real property, in 1815, 1,924,912*l*. Do. in 1843, 2,589,377*l*.

DEVONPORT, a sea-port town and parl. bor. of England, co. Devon, par. of Stoke Damerall, formerly called Plymouth Dock. It adjoins that portion of Plymouth called Stonehouse, on the W.; but though it received its present distinctive appellation in 1824, has a separate municipal government, and returns 2 mems. to the H. of C., it is quite as much a part of Plymouth as the bor. of Mary-le-Bone is of London. We shall, therefore, describe it, with the dockyard, breakwater, &c., under the head PLYMOUTH.

DEWSBURY, a thriving manufacturing town, par. and township of England, W. riding co. York. The par., which contains 9,620 acres, is situated principally in the wapentake of Aybrigg, but partly also in that of Morley: the township of Dewsbury, however, which contains 1,330 acres, is wholly in the former. Pop. of township

in 1801, 4,566; in 1831, 8,272; and, in 1841, 10,600. The town, situated at the foot of a hill, on the Calder, is 8 m. S.S.W. Leeds, 9 m. S.E. Bradford, and 9 m. N.E. Huddersfield; in the very centre, in fact, of the clothing district. The approach to the town by the London road, cut through a deep chasm, has a fine effect: the town lies, as it were, at your feet; and the smoke of the factories in the distance give it an enlarged appearance. It has a good market-place, with some good streets; and is well lighted with gas and supplied with water. All Saints, the principal church, is of great antiquity: it was rebuilt in 1766, but a good deal of the interior was preserved. Churches have recently been erected at Dewsbury Moor, Earls Heaton, and Hanging Heaton, under the million act, and there are 3 Methodist chapels, and a Friends' chapel. A charity school was founded here in 1760; it has an endowment of about 108*l.* a year, and about 80 boys are educated as free scholars. Wheelwright's free-school, conducted on the national system, was founded in 1727, and is attended by 100 boys, and as many girls. There are here 3 almshouses; but excepting these, the other charities are of little importance. A mechanics' institute was attempted to be set on foot without success.

Dewsbury is at the head of what is called the *Shoddy* trade. Our readers are aware that one of the most useful and beautiful fabrics, paper, is made out of the vilest materials, as refuse linen and cotton rags, cotton bagging, &c. Perhaps, however, they are not so generally aware that refuse woollen rags are subjected to the same sort of metamorphosis; but such is the fact. They are collected at Dewsbury in vast quantities from all parts of the kingdom; and, after undergoing certain preparations, are torn to pieces, and reduced to their original state of wool, by the aid of powerful machinery; and this wool, being re-spun, is again made into cloth! Formerly, shoddy cloth was used only for padding, and such like purposes; but now blankets, flushings, druggets, carpets and table covers, cloth for pilot and Petersham great coats, &c., are either wholly or partly made of shoddy. The clothing of the army, and the greater part of that of the navy, consists principally of the same material, which, in fact, is occasionally worn by every body. Large quantities of shoddy cloth are exported. Great improvements have recently been effected, not only in the fabric of the cloth, but also in the dyes; this is especially seen in the cloth for soldiers' uniforms, which is no longer of a brick dust colour, but makes a much nearer approach to scarlet. The beautiful woollen table cloths are made wholly of shoddy, being printed by *aqua fortis* from designs drawn in London and Manchester, and cut on holly and other blocks on the spot. The whole trade, in fact, is one of the greatest triumphs of art and civilisation: it is of comparatively recent origin, and is rapidly extending itself. It is most active in summer, and is comparatively dead in winter. About 1,200 men, and as many women and boys, are employed in the mills, and in the manufactures of shoddy in Dewsbury. Wages vary from 7*s.* 6*d.* to 20*s.* a week. No power looms are employed in the manufacture. Dewsbury is connected by canals with Hull on the one hand, and Liverpool on the other.

Petty sessions held every alternate Wednesday. Dewsbury is the centre of a poor law union. (*Private Information.*)

DEZPHOUL, a town of Persia, in Kuzistan, in a fine plain, on the Abzal, 28 m. W. by N. Shuster. Pop. 14,000 or 15,000. Its only ornament is a noble bridge of 22 arches, constructed by command of Sapor. The piers are of stone, and the arches and upper parts brick. It is 450 paces in length, 20 in breadth, and about 40 in height. (*Kinneir's Persian Empire*, 99.)

DHAR or DHARANUGGUR, an ancient inl. town of Hindostan, prov. Malwah, cap. of a small Maharatta state under British protection; 28 m. W.S.W. Indore, and 1,908 ft. above the level of the sea; lat. 22° 35′ N., long. 75° 24′ E. At one period it is said to have contained 20,000 houses; in 1820 there were less than 5,000, but the pop. was rapidly increasing. It is surrounded by a mud wall, and contains some good buildings and several tanks. The fort, detached from the town, is surrounded by walls about 36 ft. high, with round and square towers. This town is of great antiquity; its rajahs are of a most distinguished Maharatta family, and formerly had precedence of both Scindia and Holcar. (*Hamilton's E. I. Gaz.*)

DHOLPOOR, an inl. town of Hindostan, prov. Agra, cap. of a small Hindoo principality under British protection, 34 m. S.S.W. Agra, 25 m. N.N.E. Gwalior, and 1 m. N. the Chumbul river; lat. 26° 42′ N., long. 77° 44′ E. It is frequently mentioned by the Emperor Baber in his memoirs, and is still of considerable size; its environs are rich and productive.

DIAMOND HARBOUR, a harbour in the river Hooghly, Hindostan, 34 m. below Calcutta, where the Company's ships usually unload their outward, and receive on board the greater part of their homeward cargoes. Here are government warehouses for ships' stores, rigging, &c., protected by an embankment from inundation; and about thirty years ago an excellent brick road was constructed from hence to Calcutta. The place is very unhealthy; but the adjacent rice lands are in a high state of cultivation. (*Hamilton's E. I. Gazetteer*, i. 516.)

DIARBEKR, a city of Turkey in Asia (Armenia), cap. pachalik of same name, on the Tigris, by which it is nearly encircled, in a noble plain or table-land, 160 m. S.S.W. Erzeroum; lat. 37° 55′ 30″ N., long. 39° 52′ E. Pop. probably about 40,000. (Brant says about 8,000 families; of which, 6,300 are Turks, 1,500 Armenians, 85 Catholics, 70 Greeks, and 50 Jews.) "It is surrounded by a prodigious wall of black stone, which, for height and solidity, is far superior to any thing of the kind I have seen, either in Europe or Asia: it has, however, been much neglected, and is now in a ruinous condition. The houses are of stone, and have a good appearance; but the streets, though paved, are narrow and filthy. The castle is on the N. side of the town; it is also surrounded by a strong wall, and divided into many courts and handsome buildings. The bazaar is well supplied with corn and provisions; and the adjoining country is fruitful and well cultivated; cotton, silk, copper, and iron are manufactured, and sent to Bagdad and Constantinople. When viewed from a distance, it has a fine appearance. The elevation of the surrounding mountains, the windings of the Tigris, and height of the walls and towers, with the cupolas of the mosques, give it an air of grandeur far above that of any city which I have visited in this quarter of the world. The river is generally crossed on a bridge of 12 arches, about ½ m. below the town."

Such is the account of this city given by Mr. Kinneir (*Memoir of Persian Empire*, p. 334.) in 1813. But according to Mr. Brant, by whom it was visited in 1835, its condition would appear to have materially deteriorated in the interval. He states that its manufactures had greatly declined; that the trade with Bagdad was annihilated, and that with Aleppo reduced to insignificance; that the villages in the plain had been destroyed; and that no one dared venture beyond the walls of the city, except in company of a caravan. These disastrous results had been occasioned by the depredations of the Kurds, which the government was too feeble or careless to restrain. (*Journal Geog. Society*, vi. 209.)

This city was founded, or, more probably, restored, by the emperor Constans, anno 349. It is sometimes called *Amid* or *Emid*, and is described under this name by Abulfeda.

DIE (an. *Dea Vocontiorum*), a town of France, dép. Drôme, cap. arrond., on the Drôme, 26 m. S.E. Valence. Pop. (1836) 3,900. It is surrounded by a wall flanked with numerous towers; is clean and well built; has a cathedral, an ancient episcopal palace; many Roman remains; and silk fabrics, tanneries, rope-walks, and paper-mills. In the 16th century the Calvinists were very numerous, and had a university here. (*Hugo*, art. *Drôme*.)

DIE' (SAINT), a town of France, dép. Vosges, cap. arrond., on the Meurthe, 24 m. E.N.E. Epinal. Pop. (*ex. cant.*) 5,732. It is well situated and well built; is surrounded by an ancient wall; and has a communal college, and a public library with 9,500 vols. It is the seat of a sub-prefecture, court of original jurisdiction, and a bishopric, of which the dép. Vosges forms the diocese. There are some fabrics of cottons, handkerchiefs, stockings, and potash. (*Hugo; Dict. Géog.*)

DIEPPE, a marit. town of France, dép. Seine-Inférieure, cap. arrond.; at the mouth of the Arques, on the British Channel, nearly opposite Beachy Head, from which it is distant 67 m. S.S.E., 31 m. N. Rouen, and 92 m. N.W. Paris; lat. 49° 55′ 34″ N., long. 1° 4′ 44″ E. Pop. (1846) 16,820. It is well built: streets broad, regular, and one of them 3-4ths m. in length; houses mostly of brick, and ornamented with balconies. It consists of two parts,—the town properly so called, and its suburb of *Le Pollet*, separated from it by the port, but communicating with the town by a flying bridge.* It is well supplied with water, which is conveyed by an aqueduct excavated in solid rock for 3 m., and distributed to 68 public, and above 200 private, fountains. Its port, enclosed by two jetties, and surrounded by quays, is capable of accommodating a great number of vessels of from 60 to 600 tons; but it dries at low water, is with difficulty kept from filling up, and is rather of dangerous access from its narrowness and the rapidity of the current both inwards and outwards. It is protected by an old castle on a cliff to the W. of the town, and by some batteries. It has two churches, from the steeple of one of which, St. Jacques, the English coast may be seen. Since 1822, when a handsome establishment for sea-bathing was formed, Dieppe has become a favourite watering place, and the number of visiters has continued to increase. It is the seat of a court of original jurisdiction; has a communal college with a public library containing 4,000 vols., a school of navigation, an hospital,

* This is the statement of the *Encyclopédie des Gens du Monde*: the *Guide du Voyageur*, p. 183., says the bridge is of stone, and has seven arches.

and a theatre. Ivory articles are made here in greater perfection perhaps than in any other part of Europe; and there are some sugar-refineries, tanneries, rope-walks, and building docks for trading vessels. The manufacture of lace, for which this town was once distinguished, has now much diminished. Dieppe is an entrepôt for salt and colonial produce, and has considerable trade; but by far the greatest portion of the inhab. depend for support on the fisheries, especially those of mackerel, herrings, &c., for the supply of the capital. Vessels are also fitted out for the cod and whale fisheries. There are two oyster-banks, whence about 12,000,000 oysters are annually sent to Paris. A regular intercourse is kept up by steam-boats between Brighton and Dieppe; and as the journey to Paris by land is much shorter by this than by any other route, it is preferred by many travellers. Dieppe was bombarded and all but destroyed by the English and Dutch in 1694. The inhab. have been distinguished by their enterprise. They discovered Canada, founded Quebec, and explored the coasts of Africa to some distance a century previously to Vasco de Gama. Bruzen de la Martinière, the author of the *Grand Dictionnaire Géographique, &c.*, was a native of Dieppe. (*Hugo, France Pittoresque*, art. *Seine Inférieure; Encyc. des Gens du Monde.*)

DIEST, a town of Belgium, prov. S. Brabant, cap. cant., on the Demer, and on the railway from Antwerp to Liege, 32 m. E.N.E. Brussels. Pop. (1836) 6,963. It is about a league in circ., but this space is in great part occupied with fields and gardens. It has a college, manufactures of stockings, woollens, &c., and some excellent breweries; and sends 2 deps. to the states of the prov. It was taken by the Duke of Marlborough in 1705, but retaken and dismantled by the French in the same year. (*Cannabich; Dict. Géogr.*)

DIGNE (an. *Dina* or *Dinia*), a town of France, dép. Alpes-Basses, of which it is the cap.; at the foot and on the declivity of a hill, on the Bléone, 55 m. N.E. Aix, 78 m. S.S.W. Grenoble, and 373 m. S.E. Paris; lat. 44° 5′ N.; long. 6° 14′ 19″ E. Pop. (*ex. com.*) 3,945. It is encircled by ancient walls flanked with square towers. Streets generally narrow, crooked, and filthy, and the houses mean. In its vicinity are some saline baths, serviceable in rheumatic, paralytic, and cutaneous affections, and gunshot wounds. One of the avenues to the town is planted with trees and bordered with handsome houses. Digne is the seat of a court of primary jurisdiction, a court of assize, a tribunal of commerce, a communal college, and a bishopric; but neither its principal church nor episcopal palace deserves notice. It has a public library with 3,000 vols., a society of agriculture, departmental nursery grounds, tanneries, and some trade in prunes, almonds, corn, hemp, cloth, cattle, and leather. (*Hugo*, art. *Alpes-Basses; Guide du Voyageur, &c.*)

DIJON (an. *Divio*), a celebrated town of France, dép. Côte d'Or, of which it is the cap., as it was formerly of the duchy and prov. of Burgundy, in a fertile plain at the foot of the Côte d'Or Mountains, on the Ouche, at the confluence of the Suzon, 105 m. N. Lyons, and 160 m. S.E. Paris; lat. 47° 19′ 25″ N., long. 6° 2′ 5″ E. Pop. (1846) 26,674. It is surrounded by ramparts planted with trees, and is for the most part very well built. Its streets are broad, well paved, and clean; and it contains several large and fine squares. Its environs are extremely beautiful, and few towns in France possess such fine public walks. The Suzon, running in various subterranean channels through different quarters, contributes to the cleanliness for which Dijon is conspicuous. In the *Place Royale*, constructed in the form of a horse-shoe, is the palace which has succeeded to the ancient castle of the dukes of Burgundy, the greater part of which was destroyed by fire in 1502. A large square tower formerly belonging to this castle, and called *La Terrasse*, now serves as an observatory: the palace, which was finished in 1784, was destined for the reception of the states of the province, and for the residence of the princes of Condé, who, under the old *régime*, were its hereditary governors; its magnificent suite of apartments is now occupied by the museums of painting and sculpture. The castle of Dijon, commenced by Louis XI., and terminated under Louis XII. in 1513, became in the 18th century a state-prison, in which the Duchess of Maine, Mirabeau, and other distinguished persons were confined; it now serves for the quarters of the *gens-d'armes*. Several of the churches are well worthy of notice. That of St. Bénigne, in which the installation of the dukes of Burgundy took place, was founded in the 5th century, and rebuilt in 1106. It suffered materially during the Revolution; but its spire is still standing, and reaches to the height of 98 mètres, or 321½ ft. above ground. The churches of Notre Dame and St. Michael are remarkable alike for their antiquity, the beauty of their architecture, and the magnificence of their ornaments. The church of St. Anne is an elegant modern structure, with a fine dome. The hall of justice is a large ancient edifice, and the theatre is, next to that of Bordeaux, the handsomest in France out of Paris. There are two public libraries, one of which has 40,000 printed vols., and 500 or 600 MSS.; a cabinet of natural history, and a botanic garden, 2 hospitals, an orphan asylum, 2 prisons, a town-hall, hotels of the prefecture and academy, and many private residences built during the independence of the duchy, which give to the city a venerable and interesting appearance. Dijon is the seat of a royal court for the dépts. Côte d'Or, Haute Marne, and Saone et Loire, a court of assize, tribunals of primary jurisdiction and of commerce, and of a bishopric; and is the head-quarters of a military division. It has an *académie universitaire*, with faculties of law, science, and literature, a royal and 7 other colleges, a superior school of the fine arts, a secondary school of medicine, a primary normal school, and numerous learned societies. It has some fabrics of linen, cotton, and woollen stuffs, vinegar, mustard, for which it is famous, wax-candles, hats, earthenware, soap, &c.; besides sugar and wax refineries, tanneries, and breweries: but its principal dependence is on its wine trade, it being the principal depôt and market for the sale of Burgundy. This town existed previously to the period of Roman domination; it was fortified, and, according to some, rebuilt by Marcus Aurelius; and enlarged and embellished by Aurelian, anno 274. In 1137, it was burnt down, but soon rose from its ashes: it was annexed to France, with the rest of Burgundy, in 1447. It has produced many very distinguished men; among others may be specified Bossuet, the great glory of the Gallican church, born here on the 27th of Sept. 1627; Crebillon, Piron, Longepierre, Daubenton, Guyton de Morveau, &c. (*Hugo*, art. *Côte d'Or; Guide du Voyageur, &c.; Encycl. des Gens du Monde.*)

DINAGEPOOR, an inl. distr. of Hindostan, prov. Bengal; between lat. 24° 48′ and 26° 18′ N., and long. 88° 1′ and 89° 11′ E.; having W. and N. the distr. Purneah, E. Rungpoor, and S. Rajishaye; length N. to S. 105 m., breadth, 82 m.; area, 5,374 sq. m.; pop. (1822) 2,341,420, nearly two-thirds of whom are Mohammedans. This was one of the districts specially surveyed by Dr. Buchanan Hamilton, by orders from the government, in 1809. It contains no mountains, nor even hills; but its surface is undulating: it is every where intersected by rivers, the principal of which are the Mohanonda, Atreyi, and other tributaries of the Ganges. There are no lakes, but in the rainy season some of the rivers swell out into extensive marshes; and as they are constantly changing their courses, their deserted channels often contain a considerable expanse of stagnant water. The winds are more variable here than in any other part of India, but for the most part E. The rainy season commonly lasts from the middle of June to the middle of Oct. Towards the end of this season the nights are hot and oppressive, but the maximum heat is not so great as at Calcutta. From Nov. to Feb. the natives often suffer much from cold, and fires are agreeable to Europeans. The E. winds are accounted very unhealthy; and intermittent and other fevers annually destroy a great many of the pop. The soil is in some parts a red and stiff clay, unusual in Bengal; but by far the larger portion is light and ash-coloured. Nitre was formerly made in this district, but the soil is not peculiarly adapted for it, and its manufacture has been removed to more favourable situations. The banyan, mango, areca, &c., flourish; palms, generally, do not thrive. There are some small saul forests; but, generally speaking, timber is inferior, and useless for boat-building. There are few tigers or leopards, no wolves or hyenas, and the wild elephant or rhinoceros is very rarely seen. Deer, hares, porcupines, ichneumons, otters, &c., are very plentiful; and wild hogs and buffalos do much damage to the crops. Birds are abundant, and so are fish; the last form by far the greater part of the animal food consumed. Crocodiles are not uncommon, but are little dreaded; tortoises, and some lizards, are eagerly sought for as articles of diet; insects are not very troublesome. About two-thirds of the land is fully occupied and cultivated; rice is the principal article of culture, but is inferior to that of Patna; wheat, barley, millet, legumes, and oily seeds, are successively the produce next in importance. The cotton raised in the N. is very bad, but that of the S. is finer than that imported from the W. of India; the sugar-cane is largely cultivated, and is of a good quality; indigo and tobacco are also raised, but the latter not in sufficient quantity for home consumption. The husbandry of the district is deplorable; the plough is without a coulter or mould-board, and in some parts wants even the share; all the other farm implements are nearly as bad; and 6*s.* will buy all that are deemed necessary for the culture of five acres of land. Both the oxen and horses are wretched, except a breed of ponies from Bootan; all cattle are, however, ill fed, and on none but natural pastures. There are very few carts or conveyances of any kind in the district. The farms are generally small; about one farmer only in sixteen may rent from 30 to 100 acres; estates are also generally small; most of the land belongs to Hindoos. There are, however, very few individuals in a state of beggary, and such as are so are readily relieved, the disposition of

the people generally being charitable. Except those of Europeans, and some Mohammedans, no houses have any other than a thatched roof: mud walls are most common; but, in some instances, the huts are wholly constructed of straw and reeds. The furniture of both Mohammedans and Hindoos is nearly alike, and the whole, amongst the labouring classes, not worth more than a rupee. Most of these classes sleep on sackcloth or mats on the ground. They are generally very ill-clothed, but both Hindoos and Mohammedans wear many ornaments; the women of both races colour sheir eyelids with lamp-black. For food, the people are generally better off than for lodging, furniture, or clothing; and few are distressed by hunger, although their food is seldom very nourishing; the lower classes are obliged to use the ashes of the plantain root, &c. for salt, and often want for tobacco, their favourite and almost only stimulus. Slaves are few, and servants, especially female ones, scarce; for early marriages are so universal, that nearly every woman is married by the period of puberty, or is else subject to a stigma. The inhab., as might be expected from their poverty, are feeble, sickly, and subject to various diseases; and are also ignorant, mendacious, and occasionally rapacious. Dacoity was formerly a very prevalent crime. Education has proceeded to very little more than rudimental instruction among about 1 in 16 of the male sex. Christianity has made but little progress. (For copious particulars respecting this district, see *F. B. Hamilton's Statistics of Dinajpur*. Calcutta, 1833.)

DINAGEPOOR (*Dinajpur, the abode of beggars*), an inl. town of Hindostan; cap. of the above distr.; seat of the British judicial and revenue courts; between two tributaries to the Ganges; 65 m. E.S.E. Purneah, and 86 m. N.N.E. Moorshedabad: lat. 25° 37′ N., long. 88° 43′ E. Pop. 30,000, chiefly Mohammedans. It is, as its name implies, a very poor place; its houses are chiefly thatched huts, there being, according to the latest accounts, but eight brick dwellings out of 5,000, exclusive of the European residences, public offices, &c., which are built in the worst Anglo-Indian style. Its most densely peopled portion has near its centre a square surrounded with shops, &c.; in the English quarter, and other portions, the houses are detached from each other, and intermixed with gardens and pasture lands. What may be considered the port of the town, on the bank of the Punabhoba, is occupied by merchants, warehouses, &c. It is clean and well watched, but not lighted; the roads round it are kept in good repair by convicts, but bridges are wanted. It contains no public building of any importance, excepting the house of the late rajah, built in 1780, a strange mixture of European, Moorish, and Hindoo styles, surrounded by a ditch and rampart; but now in great measure gone to decay. The vicinity of Dinagepoor has a sandy soil, is ill supplied with water, and chiefly occupied by pastures. (*Hamilton; Buchanan; Dinagepoor; Hamilton's W. E. I. Gaz.*, i. 617.)

DINAN, a town of France, dép. Côtes-du-Nord, cap. arrond., beautifully situated on a height on the left bank of the Rance, 13 m. E. St. Brieuc. Pop. (1836) 7,356. It is surrounded by walls of extraordinary height and thickness, the works outside of which are now converted into gardens, and laid out as public walks. Streets mostly ill built, narrow, dark, and dirty; though of late years some parts of the town have been much improved. The principal public buildings are, — a castle, built about 1300, now used as a prison, two churches of Gothic architecture, the town-hall, clock-tower, hospital, and concert-hall. Vessels of from 70 to 90 tons come up to Dinan at high water: it communicates with Rennes by the canal of Ille and Rance, the river being navigable only as far as this town. Dinan is the seat of a tribunal of primary jurisdiction, and of a communal college: it has a school of design, a public library, a society of agriculture, &c., with manufactures of sail-cloth, cotton stuffs, flannels, shoes, and hats for the troops and colonies, leather, &c., beet-root sugar-factories; and has some trade in butter, hemp, thread, &c. (*Hugo*, art. *Côtes-du-Nord; Dict Géog.*)

DINANT, a town of Belgium, prov. Namur, cap. arrond., on the Meuse, 14 m. S. by E. Namur. Pop. (1836) 5,033. It is built on the declivity of a rocky hill, on the summit of which is its castle. It is divided into the "Town-proper" and the "Island," and has a suburb, a Gothic cathedral, several other churches, 2 hospitals, and a Latin school. Its manufactures are chiefly those of woollens, hats, cutlery, cards, verjuice, mead, gingerbread, paper, and glass; but it has several oil, flour, and hemp mills, with mills for cutting and polishing marble, and numerous salt-refineries, tanneries, and breweries. It is the seat of a court of primary jurisdiction, and the residence of a military commandant. Dinant is very ancient. In the 14th century it was a prosperous commercial town; in 1466 it was sacked and burnt by Duke Philip of Burgundy; and again sacked in 1554 by the Duke of Nevers. (*Vandermaelen, Dict. Géog. de la Prov. Namur, &c.*)

DINAPOOR, an inl. town, and British military station in Hindostan, prov. Bahar, on the S. side of the Ganges, 14 m. W. Patna; lat. 25° 37′ N., long. 85° 5′ E. The cantonments are large and handsome, with a fine quay, three extensive squares of barracks for the European troops, uniformly built, of one lofty ground story, well raised, stuccoed, and furnished with arcades; there are also large barracks for the native troops. The garrison consists, according to late returns, of 5,758 men, 1,164 of whom are Europeans. The town is well supplied with European goods; and in its neighbourhood potatoes are largely cultivated by both Europeans and natives. (*Hamilton's E. I. Gaz.*, i. 517.; *Mod. Trav.*, x. 237.)

DINGLE, a marit. town of Ireland, co. Kerry, prov. Munster, on a slope at the bottom of Dingle Harbour, on the N. side of Dingle Bay, 26 m. W. by S. Tralee. Pop. (1821) 4,538; (1831) 4,327; pop. of par. in 1834, 6,799, of whom 249 were of the estab. church, and 6,550 Rom. Cath. Many of the houses are built in the Spanish fashion, it having formerly maintained an intimate communication with Spain. The par. church and Rom. Cath. chapel are modern buildings; a second chapel is attached to a nunnery; and a large national school-house has been erected. It has a dispensary, and is a constabulary and coast-guard station; and is much frequented during summer as a bathing place. The harbour is fit only for small vessels, which lie aground on mud at low water. The corporation, under a charter of Jas. I., in 1607, consists of a sovereign, 12 burgesses, and a commonalty. It has jurisdiction over a district of land extending 2 Irish m. in every direction from the par. church; and that of the sovereign, as admiral of the harbour, is determined by the flight of an arrow discharged from the harbours of Dingle, Ventry, Smerwick, and Ferriter's Creek. It returned 2 mems. to the Irish H. of C. till the Union, when it was disfranchised. General sessions are held twice a year, and petty sessions on alternate Fridays. The linen manufacture, which formerly flourished here to a considerable extent, is now confined to that of coarse cloth in small quantities: grain and butter are the chief articles of trade. The fishery also, which had been very productive, large numbers of herring, flat and round fish, having been taken, is in a very depressed state, so much so, that the town is supplied with cured fish from foreign markets. It has two flour-mills and a brewery. Post-office revenue in 1830, 247*l.*; in 1836, 283*l.* (*Fishery Rep.; Railway Rep., &c.*)

DINGWALL, a royal and parl. bor. and sea-port town of Scotland, co. Ross, on the W. extremity of the Cromarty Frith, 19 m. N.N.W. Inverness. Pop. (1801) 1,106; (1841) 1,739. It is built in the Dutch fashion, and is rather neat, consisting of one leading street, with several inferior ones branching from it. The harbour was originally at an inconvenient distance; but in 1815-17, a canal was formed (at an expense of 4,365*l.*), by which vessels of considerable burden are now brought to the immediate vicinity of the burgh. The annual revenue derived from the canal is about 130*l.*, which is not more than sufficient to keep it in repair. The beautiful valley of Strathpeffer, at the head of which is a famous mineral spring, stretches W. 5 m. from Dingwall. The town-house is a venerable edifice, with a spire and clock: a plain parish church and a goal are the only other buildings worth notice. Dingwall is a place of little or no trade. There are but two small vessels belonging to it; and its exports consist exclusively of wheat and other country produce, and its imports of lime, coals, &c. The only bank in the town was introduced in 1828. The charter of its erection into a royal burgh was granted in 1227, by Alexander II. On the E. of the town may still be seen the remains of the Castle of Dingwall, a fortified place, long the chief residence of the noble family of Ross. Near the church, on an artificial mound, stands an obelisk 57 ft. high, erected as a family burial-place by George, first Earl of Cromarty, secretary of state for Scotland, in the reign of Queen Anne. Dingwall unites with Wick, Cromarty, Dornoch, Kirkwall, and Tain, in sending a member to the H. of C., and had, in 1849-50, 112 registered voters. (*New Stat. Account of Scotland*, art. *Dingwall.*)

DIOS, NOMBRE DE, a town of Mexico, state Durango, on the road between Durango and Sombrerete, 40 m. S.E. the former city. Pop. 7,000.? Its chief source of wealth is an extensive trade in *Vino Mescal*, a spirit obtained from the American aloe.

DIZIER (ST.), a town of France, dép. Haute Marne, cap. cant., on the Marne, at the point where it becomes navigable, 47 m. N.N.W. Chaumont. Pop. 6,366. It was formerly well fortified, and in 1544 sustained a memorable siege by the emperor Charles V.; but its ramparts have been converted into agreeable promenades. It is a handsome town, with broad streets, and houses mostly of stone. The town-hall, of recent construction, is much admired. It has an hospital, the ruins of an ancient castle, with cotton fabrics, iron-foundries, &c., and a considerable trade in wood. Many vessels are built here for the navigation of the Marne, the town being environed by a forest, whence the materials are easily procured. A part of the allied army which invaded

France in 1814, was defeated with great loss at St. Dizier on the 27th Jan. and the 27th March by Napoleon. It was here also, after the breaking up of the congress of Chatillon, that the Duc de Vicenza (Caulaincourt) announced to Napoleon that he must abandon all hope of treating with the allied sovereigns. (*Hugo*, art. *Haute Marne*.)

DJEBAIL or GIBYLE, (an. *Byblus*, Βύβλος), a coast town of Syria, S. by W. Tripoli; lat. 34° 7′ N., long. 35° 37′ E. Pop., according to Volney, 6,000, but this is probably exaggerated; the inhab., according to the older Maundrell, and more recent Robinson, being *few*. They are chiefly Maronite Christians. An old castle on the S., built with stones of an enormous size, and the wreck of a very handsome church of great antiquity, are the principal remains; but shafts, columns, and other ruins are scattered about in great profusion. The walls are 1½ m. in circ., with square towers at intervals; an artificial harbour formerly existed, but has been long destroyed; and the town is evidently in a state of gradual, if not rapid decay. At a few m. distance on the S. flows the Nahr Ibrahim (an. *Adonis*), a short, but deep and rapid stream, over which is a well-built stone bridge of 1 arch. The surrounding soil is fertile, and peculiarly favourable to the growth of tobacco. The land of the Giblites (Βίβλιοι) is mentioned in Josh. xiii. 5., and this town was evidently a place of considerable importance in the mercantile and maritime kingdom of Tyre. (*Ezek.* xxvii. 9.) Byblos occupies a distinguished place in Syrian mythology, from its being the scene of the death of Adonis or Thammuz, and a principal seat of the religious rites connected therewith. It may be mentioned, in reference to this subject, that wild boars are still very common in the surrounding mountains, and that the phenomenon mentioned by Lucian, of the river acquiring a reddish colour at certain seasons of the year, has been observed by Maundrell and other travellers, and is occasioned by the washing down of particles of red earth during heavy rains. Milton has beautifully alluded to this legend: —

> "Thammuz came next behind,
> Whose annual wound in Lebanon allur'd
> The Syrian damsels to lament his fate
> In amorous ditties all a summer's day,
> While smooth Adonis, from his native rock,
> Ran purple to the sea, suppos'd with blood
> Of Thammuz yearly wounded."

Byblus was a considerable sea-port under the Greek kings of Syria, but the existing remains are mostly of the Roman period. It was a favourite with the emperor Adrian, who appears to have been peculiarly attached to the worship of Adonis (*see* BETHLEHEM), and to whom an inscription near the land-gate still exists in good preservation. At an early period of the crusades, it was captured by the Christians, who built its present walls; but in the furious wars of that fanatical age, the port and trade of Djebail shared the ruin of the other cities of the coast. Still, in its decay, it is the cap. of the Kesraouan (the coast between Tripoli and Beirout) and the see of a Maronite bishop. (*Strabo*, xvi. 755.; *Lucian*, *De Deâ Syriâ*, 2.; *William of Tyre*, xi. caps. 9 and 14.; *Maundrell*, 44—46.; *Volney*, ii. 148.; *Burckhardt's Trav. Syr.*, 179.; *Robinson*, ii. 49—52.)

DJIDDA, or JIDDA, a marit. city of Arabia, in El-Hedjaz, being the port of Mecca, and one of the chief entrepôts for foreign commerce in the peninsula. Lat. 21° 32′ 42″ N., long. 39° 6′ E. Resident pop., according to Ali Bey, 5,000, but this number is often very much increased by the influx of strangers. The inhab. are nearly all foreigners, or settlers from other parts of Arabia; the only natives being a few sheriff families attached exclusively to the offices of religion and law. Five mosques, poor and mean, the governor's house, and a small castle, mounting 9 or 10 guns, are the only public buildings, except the khans, which are numerous and handsome. The houses in the town, built of stone and madrepore, are, from the perishable nature of the material, not very lasting; but in the suburbs they are mere huts, constructed of reeds and brushwood, inhabited principally by Bedouins. The streets are unpaved; but Djidda is, notwithstanding, cleaner, and in other respects superior to most Eastern cities of equal size. It is one of the holy places of Mohammedanism, and its sanctity is increased by the neighbourhood of the reputed tomb of Eve, a rude stone structure, about 2 m. to the N. The surrounding country is a bare desert, destitute of running streams; and though well water is easily procurable, it is generally bad. The inhab. collect the rain in cisterns, and the commonest necessaries are brought from a distance. Corn, rice, butter, sugar, tobacco, oil, clothing, &c. are imported in very large quantities from Egypt, the Abyssinian coast, and (excepting butter) even from Persia and India. Djidda depends, therefore, for its existence upon its trade, which is very extensive, and wholly of the transit kind. From the interior dates, and the celebrated balm of Mecca, are brought for shipment westward; musk, civet, and incense are procured from Abyssinia; muslins, cloths, cambrics, teak timber, cocoa-nuts, cocoa-nut oil, pepper, ginger, turmeric, shawls, tissue, &c. are brought from India; the Malay Islands send spices and (what is not generally known) young females for sale at the Mecca market. The coffee trade, which, next to that of grain, was formerly the most important, has much declined of late, partly owing to the free admission of American produce to the Mediterranean, but principally to the impolitic exactions of the pacha of Egypt upon this branch of commerce. A trade in slaves is carried on with the Mozambique coast; and, altogether, it is calculated that the port of Djidda employs 250 vessels, great and small. The imported articles are conveyed by ships to Suez, whence they find their way to the Mediterranean ports, or by caravans to Mecca and Medina, from which cities they are again dispersed to Syria, Asia Minor, and Turkey. The caravans to Mecca start daily, those to Medina every 40 or 50 days: but besides these, Djidda carries on no land trade, except occasionally with N. Yemen for corn. The duties upon coffee were formerly 7½ per cent., they are now double that amount; those upon Indian goods are from 6 to 10 per cent, according to quality; the trade in grain is monopolised by the Egyptian government. Twice at least in every year Djidda is inundated with inhabitants; viz. on the arrival of the Indian fleet (about May), when merchants from all quarters pour in to purchase at the first hand; and during the hadj, when pilgrims come from all the African ports in vast numbers. In 1831 above 20,000 pilgrims landed either at Djidda or Yembo, but mostly at the former. There is no manufacture in the town; every thing, for use as well as for consumption, is imported, and the occupations of the poorer as of the richer inhab. consist almost exclusively of barter.

Abul-Feda (*Ar. Des.*, 60.) supposes Djidda and its neighbourhood to be the *Badeo Regium* (Βαδεω βασιλειον) of Ptolemy (vi. 7. viii. 6.); but Niebuhr with more reason believes the ground on which the city stands, to have been recovered from the sea within a short period. At some distance from the shore, he describes high sand hills, full of shells and corals; and the general appearance of the coast makes it impossible, in his mind, that the modern town can occupy the same site with its namesake, in the days of Mohammed. "Djidda," he says, "s'avancera de plus en plus vers l'ouest," and in fact, although a city of this name has been, for ages, the port of Mecca, yet the town now existing is evidently of modern origin. The sultan sheriff of Mecca, as sovereign of the Beled-el-Harem (Holy Land), has possessed Djidda since the first days of Islamism; a pacha, first appointed by the caliphs, and then by the grand signior, as head of the Mohammedan faith, was indeed the nominal governor; and, professedly, the customs were to be divided equally between him and the sultan sheriff. The latter, however, in the declining days of Turkish power, paid little regard to this arrangement, and in the end expelled the Turks entirely from El Hedjaz. Scarcely was this effected when the growing power of the Wahabees became more formidable than that of the Porte. Mecca and Medina were taken, and the sheriff, shut up in Djidda, made a public but doubtful profession of the Wahabee faith. In 1811, Mehemet Ali established his power in El Hedjaz, the reigning sheriff was carried to Cairo, and his successor, appointed by the Egyptian pacha, retained only a shadow of authority, with a monthly stipend in lieu of the port dues. (*Abul-Feda*, *Ar. Des.*, 59, 60.; *Niebuhr*, *Des. de l'Ar.* 303—309.; *Voy. Ar.* i. 217—228.; *Lord Valentia*, iii. 301—332.; *Ali Bey*, ii. 40—46.; *Burckhardt*, i. 1—100.; *Wellsted*, ii. 268—289.)

DNIEPR (the *Borysthenis* of the ancients), a large river of European Russia. It has its source near the village of Dnieproosk, in the government of Smolensk, and, pursuing a S. course past Sindensk, where it becomes navigable, Mogheleff, Kieff, Ekaterinoslaff, and Kherson, unites with the Black Sea about 60 m. below the latter, after a course of above 1,200 m. Its principal affluents are the Pripet, Boresina, and Desna. It is broad and deep, and may be navigated, with ease and safety, from Smolensk as far as Ekaterinoslaff; but from the latter to Alexandrofsk it is interrupted by cataracts, which cannot be passed by any sort of craft, except in spring after the *débâcle*, and in the latter part of autumn. Works were begun in 1833 for obviating these obstructions, an object of vast importance to S. Russia; but we have not learned what has been their success. What is called the bar of the Dniepr lies about 15 m. below Kherson, and between it and the town the water is shallow, and the channel encumbered with shifting sands. There are valuable fisheries below Kherson, and in other parts of the river. (*See* KHERSON; see also, *Hagemeister's Report on the Black Sea*, p. 69., English trans.)

DNIESTR (the *Tyras* or *Danaster* of the ancients), a large river of S.E. Europe. It has its source in the Carpathian mountains in Gallicia, and, flowing in a S.S.E. direction along the E. frontier of Bessarabia, falls into the Black Sea between Ovidiopol and Akerman, after a

course of about 500 m. It has no very considerable affluents, and, being in most parts shallow and rapid, it is of little service to internal navigation, except during spring and autumn.

DODONA, a town of Epirus, famous in antiquity for its being the seat of an oracle of Jupiter, the most ancient in Greece, and second only to that of Delphi in celebrity and importance. It appears to have been instituted by emigrants from Egypt; at least this is the opinion of Herodotus, and seems to carry with it the greatest probability. (Lib. ii. §§ 52—58.) The temple was enriched by vast numbers of costly statues and other offerings, presented by the states and individuals who had consulted the oracle. Adjoining the temple was a grove sacred to Jupiter; and in it was a divine or prophetic oak, by which the responses of the god were sometimes manifested! The imposture carried on here was, in fact, even more gross and glaring than at Delphi. There the priests framed a response from the ravings of the Pythia; but at Dodona the priestess went into the sacred forest, and listening to the cooing of the doves, or the rustling of the leaves or branches of the sacred tree, drew thence her auguries! Sometimes she deduced them from the sounds emitted by the clashing of copper basins hung round the temple, and from those emitted by a brazen vessel placed on the top of a column, and struck by the figure of a child put in motion by the wind! The responses, in ordinary cases, were, of course, characterised by the usual ambiguity, so that let the event be what it might, the credit of the oracle should be preserved; but here, as at Delphi and elsewhere, a rich or powerful individual had little difficulty in getting such an answer as he wished for. (See *Ancient Universal History*, x. 67., 8vo. ed.; *Voyage D'Anacharsis*, cap. 36., &c.)

The site of this famous oracle is now matter of dispute among the learned. It is fixed by some at Protopapas, near the lake Labchistas, 12 m. N.N.W. Yannina; but others place it a good deal nearer the coast.

DOHUD (*two frontiers*), an inl. town of Hindostan, on the boundary of Malwah and Gujrat; Holcar's dom.; lat. 22° 55′ N., long. 74° 20′ E. It is of some size, well built, and well supplied with grain and water; is much frequented by traders, being on the high road between Upper Hindostan and the Gulph of Cambay; and commands the principal pass into Gujrat from the N.E. It has a fort said to have been built by Aurungzebe.

DOL, a town of France, dép. Ille-et-Vilaine, cap. cant., on an eminence among marshes which have been dried, and are very fertile; 13 m. S.E. St. Malo, and 30 m. N. Rennes. Pop. 3,990. It is surrounded by walls and ditches, the remains of its old fortifications; it having formerly been a bulwark of Brittany against the invasions of the Normans. The glacis of the ramparts has recently been converted into a fine promenade. It is ill built, and has but one tolerable street; but its cathedral is one of the largest and finest in the prov. Dol was a bishopric as early as the 6th century. (*Hugo, Ille-et-Vilaine; Guide du Voyageur.*)

DOLE, a town of France, dép. Jura, cap. arrond., finely situated at the foot of a hill planted with vines, on the Doubs, and on the canal between the Rhone and Rhine; 28 m. N. Lons-le-Saulnier. Pop. (*ex* cant.) 7,843. Streets narrow, crooked, and dirty; and the houses heavy and irregular.* It was formerly fortified, but its defences have been long since destroyed. Its chief public buildings are the cathedral, with a large square tower and three lofty naves, supported by enormous columns; the new prison, *Hôtel-Dieu*, general hospital, tower of Vergy, hall of justice, barracks, the old college of the Jesuits, theatre, &c. The bridge over the Doubs, and the port on the canal, are also worthy of notice. Dôle has, also, several Roman remains, including those of an amphitheatre, some aqueducts, and part of the superb Roman road leading from Lyons to the banks of the Rhine. It is the seat of tribunals of primary jurisdiction, and of commerce; has a *dépôt de mendicité*, an orphan asylum, a communal college, a gratuitous school of design, painting, &c., schools of geometry and music, a public library with 6,000 vols., and a society of agriculture; it has also, manufactures of straw-hats, leather, chemical products, and agricultural implements; and a considerable trade in agricultural produce. Dôle is very ancient: in the 12th century it became the occasional residence of the emperor Frederic Barbarossa, and in 1422 had a parl. and university of its own. In 1479 it was taken by the troops of Louis XI., when most of its buildings were destroyed or damaged, and many of the inhab. put to the sword. It subsequently came into the possession of the Spaniards, and being rebuilt by Charles V., many of its houses preserve the Spanish style of architecture. Ultimately it was united to France, in the reign of Louis XIV. (*Hugo*, art. *Jura; Guide du Voyageur*, 1837.)

* This is Hugo's statement: the "Guide du Voyageur" says that it is *bien bâtie et assez bien percée*.

DOLGELLY or DOLGELLEU, a town of North Wales, co. Merioneth, on the Mynach, at the foot of Cader-Idris, 46 m. W. Shrewsbury. The par. of Dolgelly comprises 870 acres, and had, in 1831, a pop. of 4,087, of which the town had about 2,300. It is very irregularly built, but has some good houses; a bridge over the river, built in 1638, but repaired some years ago; a co. hall, erected in 1825, and a church with a handsome tower and large nave. The co. gaol, situated outside the town, was built in 1811, at an expense of 5,000*l*. This town has long been noted for the manufacture of a coarse woollen fabric, called *webs*, principally shipped for America. Webs were formerly made in different parts of Montgomeryshire, but the manufacture is now entirely confined to this town and neighbourhood. Weavers earn about 9*s*. a week. The name of the town is derived from its situation in a dale, abundant in hazels.

DOLLAR, a village of Scotland, co. Clackmannan, 12 m. E. by N. Stirling. Pop. fluctuating, but may be estimated at 600. It acquires its only importance from the erection and endowment of an academy by a Mr. M'Nab, a native of the place. The academy, a beautiful Grecian building, was erected in 1819. The branches at present taught in it, in addition to English, writing, arithmetic, and geography, are drawing, mathematics, and natural philosophy, French, Italian, and German, Latin, Greek, and the Oriental languages. An infant and a female school are attached to the institution; and a library. The session commences on Oct. 1., and terminates on the third Wednesday of August. The academy has not been so successful as might reasonably have been expected. This is supposed to result from the nature of its management, the minister and kirk-session of the parish being its only patrons and governors, — an arrangement which vests the entire controul over it in the minister, the elders, or other members of the kirk-session, being appointed by him, and not subject to any public responsibility.

DOMINGO (ST.). *See* HAYTI.

DOMINICA, one of the Windward Islands in the W. Indies, belonging to Great Britain, situated between the islands of Guadaloupe and Martinique, 28 m. from either; in lat. 15° 12′ to 15° 36′ N., and long. 61° 17′ to 61° 32′ W. Length, N. to S., about 29 m.; greatest breadth 16 m.: area 186,436 acres. Pop. 22,200. At the last registration there were 14,384 slaves; on the emancipation of which the planters received the sum of 275,923*l*. 13*s*., being at the rate of 19*l*. 3*s*. 7*d*. for each slave. It is the most elevated of the lesser Antilles, and contains many high and rugged hills, interspersed with fertile and well-watered valleys. The soil is, however, generally very light, and more fitted for the growth of coffee than of sugar. Maize, cotton, cocoa, and tobacco, are amongst the other staples. The higher parts produce abundance of rose and other woods used in cabinet-making. Hogs, poultry, and game are plentiful: the fisheries on the coast are very productive: and bees, supposed to have been introduced from Europe, abound in a wild state. The island bears unequivocal marks of volcanic action, and sulphur is found in great plenty. The principal imports into the United Kingdom, in 1847, 1848, and 1849, have been as follows: —

Articles.	1847.	1848.	1849.
Sugar, unrefined	65,452 cwts.	58,000 cwts.	48,566 cwts.
Rum - - -	34,435 galls.	36,854 galls.	14,980 galls.
Molasses - -	10,668 cwts.	7,551 cwts.	7,767 cwts.
Coffee - -	19,201 lbs.	304 lbs.	1,876 lbs.
Cocoa - -	17,672 —	12,247 —	6,892 —
With small quantities of arrowroot.			

The total value of the exports from the colony in 1836 was 78,282*l*.; of imports in the same year, 68,077*l*. 169 vessels, burden 5,961 tons, entered, and 170, burden 6,548 tons, left the ports of Dominica in 1836. The island is deficient in good harbours; that of Roseau on the W., and Prince Rupert's Bay on the N., coast, are the only tolerable ones. Roseau and St. Joseph are the principal towns. Dominica was discovered by Columbus in 1493, ceded to England by France in 1763, retaken by the French in 1778, but restored at the peace of 1783. (*Parl. Reports*, 1836—1838; *Dict. Géogr.*)

DOMREMY LA PUCELLE, a small village of France, dép. Vosges, 7 m. N. Neufchâteau; celebrated as the birth-place and original residence of the famous Joan of Arc, born here in 1412. The house once inhabited by the heroine is still extant. It has been purchased by government, and is preserved with a kind of religious care and veneration. Opposite to it, in 1820, a handsome monument, surmounted by a colossal bust of Joan, and bearing an appropriate inscription, was erected to her memory by the dép.; and at the same time, a school of mutual instruction for young girls was founded in the village. This village also gave birth to a female of a very different character from Joan, Madame Dubarry, the mistress of Louis XV. (*Hugo, Vosges.*)

DON (the anc. *Tanais*), a large and celebrated river of

Russia in Europe. It rises in the distr. of Epifan, in the government of Tula; and passing by the town of Lebedian, flows S. to Voronege and Kalitva; it then turns to the E., till, at Katchalinsk, it approaches within about 36 m. of the Wolga; here it takes a W.S.W. direction, which it pursues till it falls, by various mouths, into the N.E. corner of the Sea of Azoff, a little below the town of the same name. Altogether, its course, which is very circuitous, may be about 1,000 m. Principal affluents, Donetz, Sosna, Vorona, Medveditza, &c. Its turbid and unwholesome waters are well stocked with fish. Its mouths are so encumbered with sand banks that they only admit of being entered by flat-bottomed vessels drawing from 5 to 6 ft. water; and in summer it is in most parts so very shallow that it is of little consequence as a channel of internal navigation, except during spring and autumn, when the products of the various provinces it traverses are brought down to Rostof, Nakhitchevan, and Taganrog. (*Hagemeister on the Commerce of the Black Sea*, p. 30., English trans.) Peter the Great projected a canal between the Don and the Wolga, where they approach nearest to each other; but, owing to the difficulty of the ground, it has not yet been accomplished. The former is, however, connected near its source by a canal with the Oka, an affluent of the Wolga, and, consequently, by a very circuitous course with the latter. Europe is now generally and properly extended, on the S., to the ridge of the Caucasus; but in antiquity the Don (*Tanais*) was held, during the latter part of its course, to be the line of demarcation between Europe and Asia. Lucan notices this circumstance, as follows:—

"————— quà vertice lapsus
Rhipæo Tanais diversi nomina mundi
Imposuit ripis, Asiæque et terminus idem
Europæ, mediæ dirimens confinia terræ,
Nunc hunc, nunc illum, quà flectitur ampliat orbem."
Lib. iii. *lin.* 273.

DONAGHADEE, a sea-port town of Ireland, co. Down, prov. Ulster, on the nearest point of the coast to Portpatrick, in Scotland, from which it bears S.W., distant 22 m. Pop. in 1831, 2,986; pop. of par. in 1834, 8,055; of whom 554 were of the estab. church, 7,217 Prot. diss., and 284 Rom. Cath. The town is built like a crescent, on one side of the harbour, which has been much improved by a new pier carried out so as to have a depth of 16 ft. at low water, and having a lighthouse at its extremity. The par. church is an ancient cruciform structure; and there are two meeting-houses for Presbyterians, and one for Methodists, an infirmary, and a dispensary. A manor court, with jurisdiction to the amount of 20*l*., is held in the court-house, as are a court leet annually, and petty sessions every Wednesday. The constabulary and coast-guard have stations here. The embroidering of muslin is carried on to a considerable extent, and there are numerous flax-mills in the neighbourhood. The post-office revenue, in 1830, was 217*l*.; in 1836, 236*l*. The port is a creek to Belfast, and a steam-packet station for steamers to Portpatrick, the voyage being usually made in less than three hours. In 1836 the value of the exports, chiefly live cattle and potatoes, was 62,484*l*.; of the imports, chiefly coal, culm, and herrings, 7,570*l*.

DONCASTER, a handsome corporate and market town of England, W. riding co. York, on the Don, which, including a branch called the Cheswold, is crossed by two fine stone bridges, 162 m. N.N.W. London, and 36 m. S. by W. York. Pop. in 1821, 8,544; 1841, 10,455. The town, which is approached from the S. by a magnificent range of elm trees, is extremely well built, and the High Street, extending about a mile on the Great N. Road, has a remarkably fine appearance. It is a place of much importance both in its civil and ecclesiastical character, through the whole period of our national history. At the point where the town now stands, one of the great Roman highways crossed the river. This road connected two great stations, Lincoln and York; and was an improved British track-way, used for a communication between Lincolnshire and the interior of the Brigantian territory. It is the station *Danum* in the *Itinerary* of Antoninus. In the middle ages, it had a convent of Carmelites and White Friars; and received the grant of a charter from Richard I. The property belonging to the corporation of Doncaster amounts to nearly 9,000*l*. a year. During the old corporation it was greater. But that body having incurred a debt of above 100,000*l*., the new municipal body sold the Rossington estate to James Brown, Esq. of Leeds, for the sum of 92,500*l*. to pay off the debt.; the purchase was completed in 1839. The income is principally expended on objects of public utility, as the paving, lighting, cleaning, and watching of the town, and supplying it with water; the support of educational and charitable institutions; with the erection of buildings for the purposes of public utility and amusement, and the attraction of visitors. These give to Doncaster advantages seldom presented in provincial towns, and make it a desirable place of residence for persons of limited incomes. The par. church, dedicated to St. George, is a large imposing structure, in part very ancient, with a beautiful square tower 140 ft. high. There is another church, built within these few years, by bequest from a private gentleman, John Jarratt, Esq., a native of the town, at an expense of 13,000*l*. The Wesleyans, Primitive Methodists, Unitarians, Independents, Quakers, and Catholics have also places of worship. Exclusive of the churches and chapels, the principal public buildings are,—the mansion-house, a handsome structure, erected in 1744, but improved in 1800; the town-hall, where the public business of the town is transacted, and public meetings held; the theatre, gaol, public library, and news-room, lyceum, &c., with the splendid betting-room, 90 ft. in length, which, except during the races, is used for concerts, lectures, exhibitions, &c. The old town cross having been taken down, an elegant new cross has been erected in a commanding situation at the south entrance, which is approached by large gravel paths. Among the educational institutions are a grammar-school for the sons of freemen, supported by the corporation; a national school, a British school, and Sunday-schools, supported by subscription. Of the charitable institutions the principal are, St. Thomas's Hospital, founded in 1588, by Thos. Ellis, for decayed housekeepers, with a revenue in lands, &c. of about 350*l*. a year; Kay's and Jarratt's charities; a dispensary, and sundry minor charities. The Yorkshire Institution for deaf and dumb, a flourishing charity, is situated adjoining the race-ground; and the workhouse for the Doncaster union is near the town. There are two weekly newspapers, advocating whig and tory principles; and it is a polling place at elections for the W. riding. Under the Municipal Act, the town is divided into 3 wards, and has 2 aldermen and 6 councillors for each.

Doncaster is not a manufacturing town, but it has a large flax-mill, and some small iron-foundries; a large water corn-mill on the Don bridge, and a steam corn-mill on the opposite bank. It is in the centre of a rich, populous, and highly cultivated district, possesses elegant shops, and has an extensive retail trade. Its corn-markets, held once a week, its wool-markets from June to August, and its four fairs, are extremely well attended, especially the corn markets. The Don is navigable as far as Sheffield by vessels of 50 tons burden. Doncaster used to derive considerable advantage from its situation on the Great N. Road, and the number of travellers, by coaching and posting, passing through it. But since the opening of the railway from London to Manchester and Preston, this source of emolument has been greatly diminished. The railways, however, with which Doncaster is now connected, have given an additional impetus to the town, and more than compensate for the loss of the Great N. Road.

Doncaster is principally indebted for its celebrity to its matchless races, and the deservedly high station which they hold in the sporting world. The races were established in 1703, and from a small beginning have become almost unrivalled: they are held in September, and have been zealously patronised by the corporation, the surrounding nobility and gentry, and the first names in turf annals. In 1776, the famous St. Leger stakes were established, by Colonel St. Leger, who resided at Port Hill, near the town: hence their name. The first race was won by the Marquess of Rockingham; and the list of winners includes the finest horses that have been bred in England. The race-course, about 1 m. S.E. from the town, adjoining the Great N. Road is, in every respect, one of the finest in the kingdom. The course, nearly 2 m., is railed round: it is ornamented with a magnificent grand stand, for the accommodation of the principal company; the noblemen's stand, the stewards' or judge's stand, commodious booths, minor stands, rubbing houses, &c. The interest excited by these races is quite extraordinary: they attract visitors from all parts of Great Britain and Ireland, and even from foreign countries; and nowhere, perhaps, is there to be seen such a display of magnificent equipages, beauty, and fashion. Safe and convenient accommodations are provided for all classes; the management is of the best order; and the scene truly splendid. — (*Hunter's Deanery; Dibdin's Tour; Allen's Yorkshire; Baines's Direct.; Municipal Reports;* and *Private Information.*)

DONEGAL, a co. of Ireland, prov. Ulster, of which it forms the N.W. portion; having N. and W. the Atlantic, E. the counties of Tyrone and Londonderry, and S. Fermanagh and Donegal Bay. Area, 1,165,107 imp. acres, of which 644,371 are mountainous and bog. It is deeply indented by bays and arms of the sea; and its surface is, in most parts rugged, mountainous, and dreary. It has, however, some extensive tracts of good level land, which, under good management, would be exceedingly productive. Climate very wet, and unfavourable for the ripening of grain. Property in very large estates, but some of them are let on interminable leases: farms of various sizes, in the low grounds from 3 to 30 acres; in the mountainous districts from 30 to 500 do. Partnership leases common, but on the decline

Agriculture in the worst possible state. Potatoes, oats, and flax the principal crops; the first being the main dependence of the farmer. More work is done with the *loy* or spade than with the plough. Average rent of land 5*s*. an acre, being the lowest of any in Ireland. Bulk of the people very badly off: English little spoken in some districts. The linen manufacture was widely diffused, but it is on the decline. Fishing carried on to some extent in some of the bays along the coast. The barony of Innishowen, famous for its smuggled whisky, occupies the N.E. portion of this co. between Lough Foyle and Lough Swilly. Donegal has 5 baronies, and 42 parishes; and returns 2 members to the House of Commons, both for the county. Registered electors in 1849-50, 701. In 1841, this county had 51,389 inhab. houses, and 296,448 individuals, of whom 145,821 were males, and 150,627 females.

DONERAILE, an inland town of Ireland, co. Cork, prov. Munster, on the Awbeg, an affluent of the Blackwater, 6¼ m. N.N.E. Malone, and 23 m. N. by W. Cork. Pop. in 1831, 2,652; pop. of par. in 1834, 8,308, of whom 418 were of the estab. church and 7,899 Rom.Cath. It consists of a long street, in which are the par. church, a spacious Rom. Cath. chapel, a nunnery, market-house, and dispensary. Kilcolman Castle, in the vicinity, was some time the residence of Spencer, the poet. The town, though not incorporated, sent 2 mems. to the Irish H. of C., but was disfranchised at the Union. Markets on Saturdays, and fairs on Aug. 12. and Nov. 12. It is a constabulary station. Post-office revenue in 1830, 261*l.*; in 1836, 276*l.*

DONGOLA, a prov. of Upper Nubia, consisting of that portion of the valley of the Nile which lies between 18° and 19° 30′ N. lat., bounded on the N. by Mahass, and on the S. by the country of the Sheygya negroes; but, like all the fertile districts rescued from the surrounding deserts by the inundations of the Nile, Dongola is extremely narrow, only in one instance exceeding 3 m. in breadth.

The Nile, which enters this prov. at about 18° 15′, near Korti, flows at first in a S. direction, but, immediately taking a circular bend to the W. and N., traverses the rest of Dongola parallel to its former course, and with but trifling deviations continues to follow the same line down to the Egyptian Delta. The widest portion is that nearest its first entrance into Dongola; and at "high Nile" the Rei, or low lands of the prov., are subject to inundations similar to those of Lower Egypt. The river makes its exit into the Nubian prov. of Mahass, at the island of Tumbos, whose rocky and rugged surface forms the third cataract, in lat. 19° 30′. (*Waddington's Visit to some parts of Ethiopia*, p. 40.; *Burckhardt's Nubia*, p. 66.; *Map of Nubia in Arrowsmith's Atlas*.) Navigation is exceedingly difficult in this part of the Nile, for, besides a strong current which the upward voyager has to contend against, the bed is shallow and bristles with rocks. (*Narrative of Ismael Pacha's Expedition to Dongola and Senaar, by an American in the service of the Pacha, passim*.)

The *mountains* of Dongola are a continuation of the same chains which, with slight interruptions, accompany both sides of the Nile during its whole course; perhaps the most extensive of these intervals occurs here at the immense and fertile Dongolese plain, which forms the exception to the otherwise narrow breadth of the prov. A large, solitary hill, about 4 m. E. of the river, called Mount Arambo (many-coloured, or chamelion), has from time immemorial marked the boundary between Mahass and Dongola. The great plain then intervenes, and the mountains re-commence near New Dongola, and stretch beside the river without further interruption to the S. frontier; those on the E. bank being by far the most considerable. Here the mountains are 2 hours' journey in breadth, reach close to the river, and form a natural boundary to Sheygya. Granite and sandstone are the chief components of these hills. (*Waddington and Hanbury*, p. 61.; *Burckhardt's Journey in Nubia*, p. 68.)

The *Valley of the Nile* lies for the most part in this district, on the W. bank; for the sands of the desert, encroaching close upon the water's opposite edge, render the E. side barren and unproductive, while the more favoured district has generally a harder surface. S. of the town of Hasinek commences the great plain of Dongola, called Wady Jarjar, which can hardly be exceeded in richness and fertility. At the period of the inundation it presents a watery surface of from 12 to 15 m. in breadth (*Burckhardt*, p. 66.); while at low Nile, the river, bursting from its banks through small channels, seems as if it had divided itself into natural canals to irrigate as much ground as possible, and save man the trouble of cultivation. (*Waddington*, p 43.) This plain is covered with acacia trees as far as the eye can reach. Further S. the mountains contract the valley, which to Wady Hennowah is fertile and separated into well-cultivated patches by rows of acacias. Ruins of towns and tombs of Moslem saints are frequently met with in this portion of the valley, which is much infested with hordes of the Nubian wolf (*Canis Anthus*, Rüppell). Wady Jebriah, situated towards the S. limit of Dongola, is overgrown with trees, amongst which cottages are thickly and irregularly strewed for some distance along the banks of the stream. Near Ambukol, about 8 m. W. of it, is a waste called Haagbarlak. The superficial stratum here is a coarse sandstone, curious and interesting from its containing many siliceous fossil trees. "I observed," says Mr. Holroyd (*Journal of the Royal Geog. Soc.* ix. 164.), "five or six, the largest of which, situated twenty minutes' walk from the river, is 51 ft. in length, and 20 in. in diameter at its largest extremity. It is partially buried in the sand. The peasantry splinter off fragments, and use them for gun-flints and to strike a light."

None of the *islands* with which the river is studded in its course through Dongola is so celebrated as Argo, situated above the island of Tumbos, and a large granite rock called Hadjar-el-Dahab (the golden stone). Argo is upwards of 30 m. long, and is one of the most beautiful islands that spring up from the bed of the Nile. The scenery is highly picturesque, principally composed of small plains enclosed by rows of sycamore trees. Several remains of antiquity are strewed over the island; the most remarkable of which are two colossal statues cut in grey granite, the headless form of a female sculptured out of black granite, and the figures of four hippopotami standing side by side. The colossi are broken into fragments, lying close together, and "really look as white and clear, and as free from the injuries of time, as if they were now fresh from the hand of the sculptor." (*Waddington*, p. 46.) A peculiar breed of musquitoes, not so large nor so noisy as others, annoy the inhab. of Argo. Several other islands occur at short intervals, among which may be enumerated Sodgàn, Tànger, and Gurák, as the most important and fertile. At the island of Gartooni, near Ambukol, the Dongolese country ceases.

The *towns and villages* are thickly scattered along the margins of the Nile, most frequently on the E. bank. The first of any consequence is the town of Hannek, opposite the isle of Tumbos, where the cotton plant is said to be productively cultivated. But by far the most important is Marákah, or New Dongola (situated, according to Linant, in 19° 7′ 30″ N. lat., and 29° 54′ 35″ E. long.; but placed by Rüppell in lat. 19° 10′ 19″, and long. 30° 22′ 15″ E.), the present pop. of which has been estimated at 6,000, including 100 Copts. The bazaar is daily increasing, and is supplied from Cairo with shoes, printed cottons, calicoes, sugar, rice, cloth, hardware, &c.; but, on account of a heavy duty levied upon all articles of consumption, they are four times the price that they are in Cairo. Dongola boasts of a coffee-house and a manufactory for indigo; the government is also building baths. The thermometer on Christmas-day, 1836, stood in the shade, at 2 P.M., at 86°, and at 8 P.M. at 80°. (*Journal Geog. Soc.* ix. 164.) Property is valued according to the number of water-wheels an individual possesses, and he is taxed accordingly. (*Burckhardt's Nubia*, p. 66.) The chief places from New to Old Dongola, are the dilapidated town of Handek, Basleyn, and Rodohol; between which numerous villages intervene, many of them in ruins. Tonga, or Old Dongola, the cap. of what was once a powerful Christian kingdom, is now a miserable ruin, situated on a rock which slopes down to the water's edge; it is covered with sand, a large mass of which has evidently buried the centre of the town, and divided the remains into two sections; the S. part only is inhabited by about 300 persons. The sand is of a bright yellow colour, and has accumulated in such quantities that its surface is level with the roofs of many of the houses, the only entrance to which is through the ceilings of the rooms. (*Geog. Journal*, ix. 164.) There is a mosque, on rather an elevated site, which commands a good view of the surrounding country. This consists principally of drifted sand, with at rare intervals a few feet of cultivable soil. Ambukol, the last Dongolese town, is one of little importance.

Dongola is now an appendage to the Turkish pachalic of Egypt, together with Lower Nubia, which territories have been thus appropriated by the victorious arms of Mehemet Ali Pacha. It was formerly one of the numerous kingdoms divided between the Sheygya Arabs, amongst whom, at their expulsion from Egypt, the Mamelukes sought refuge. The fugitives, however, had scarcely been a month at Argo, when, upon some slight pretext, they murdered their benefactor, the Sheygya king, and spread themselves over the country, establishing a government of their own at New Dongola. The pacha of Egypt, upon pretence of punishing this breach of justice and hospitality, sent an expedition into the country, and, meeting with little resistance, took possession of it, which he has quietly retained ever since 1820. (*Burckhardt's Nubia*, p. 65; *Quarterly Review*, xxvii. 217.) The people possess the same characteristics as the rest of their countrymen (*see* NUBIA), except that they are un-

usually "dirty, idle, and ferocious" (*Narrative of Ismael Pacha's Expedition*, p. 189.); but they are also, in common with their neighbours, extremely hospitable. Mr. Waddington describes the women as ugly in person, and unfeminine in conversation and manners: they wear scarcely any clothing.

The *Dongolese horse* must not be passed over here without particular notice; though the natural history of this region must be sought for in the art. NUBIA. This animal, so celebrated all over the East, possesses the beauty of the finest Arabian breeds, with greater size and more bone. The mares are seldom ridden, and the stallions fetch a high price; from five to ten slaves being the value usually given for them. Most of them are fed for ten months in the year on little else than straw, and in spring upon green crops of barley. (*Burckhardt's Nubia*, p. 67.)

DONOBEW, an inl. town of the Birmese empire, Pegu, on the E. arm of the Irrawadi. 50 m. N.W. Rangoon; lat. 17° 8′ N., long. 95° 55′ E. In 1825, its stockade extended for nearly a mile along the bank of the river: in 1827, the British embassy found this place considerably enlarged and strengthened. It is noted for the action, in the first named year, in which Bundoola, the Birmese leader, was killed by a stray bomb. (*Hamilton's E. I. Gaz.*)

DOONGURPOOR, an inl. town of Hindostan, prov. Gujrat, cap. of a small Rajpoot principality under British protection, 82 m. N.E. Ahmedabad; lat. 23° 54′ N., long. 73° 50′ E. Little is recorded respecting this town or its territory; the mounds enclosing the Doongurpoor lake are said to be built of solid blocks of marble. The rajahs are acknowledged to be the senior branch of the reigning sovereigns of Odeypoor; the majority of their subjects are Bheels. Bands of Arabs and Sindies, previously in the service of the rajah, harassed and laid waste this district, till a stop was put to their ravages by the British, to whom a small tribute is now paid. The country is fast recovering from the effects of war and desolation: in 1824 the gross revenues amounted to 24,358*l*. (*Hamilton's E. I. Gaz.*)

DOOSHAK, a town of Persia, prov. Seistan, of which it is the cap., near the Helmund, and about 50 m. E. from Zurrah. lat. 31° 8′ N., long. 63° 10′ E. The modern city is small and compact, but the ruins cover a vast extent of ground. It is populous, has a good bazaar, and the inhab., who dress in the Persian manner, have a more civilised appearance than the other natives of Seistan. The country in the vicinity is open, well-cultivated, and produces wheat and barley in sufficient quantities to be exported to Herat: the pasturage is also good and abundant. Its ruins show that it was formerly of much greater extent than at present; and is supposed by Mr. Kinneir, to whom we are indebted for these particulars, to be identical with the Zaranga of Ptolemy. (*Memoir of Persian Empire*, 191.)

DORCHESTER, a parl. bor. and town of England, cap. co. Dorset, div. Dorchester, hund. Uggescombe, on a gentle elevation adjoining the Frome, 115 m. S.W. by W. London. Pop. of old bor. in 1841, 3,249; but the existing parl. bor., the limits of which were enlarged by the Boundary Act, so as to include the suburb of Fordington and some additional tenements, had, in 1841, a pop. of 5,402. (*Boundary Report.*) The town consists chiefly of 3 wide streets, diverging from a central area, in the direction of the lines of road to London, Exeter, and Weymouth. It is well built, partially paved, and lighted with gas; and is very clean. "Its appearance is highly favourable to its respectability; and there is almost a total want of the poorer sort of houses, the lower classes of inhabitants being confined chiefly to Fordington." (*Ibid.*) It is more than two thirds surrounded by a fine avenue, commanding extensive and diversified views. Fordington Field, an uninclosed tract of fertile land, 7 m. in circ., adjoins the town on the S.: it is partly arable, partly pasture, and held on lives from the duchy of Cornwall. There are 3 churches, — 2 modern, on ancient sites, and 1 old, with many curious monuments and a lofty pinnacled tower; 4 dissenting chapels; a free grammar school, founded in 1579, with 2 exhibitions to St. John's Coll., Cambridge, and one to either university; another charity school, for 5 boys; 3 sets of almshouses; a small theatre; a town-hall built in 1791, with a market place under it; a shire hall, in which the county assizes and quarter sessions are held, and a county gaol and house of correction, built on Howard's plan, at an expense of above 16,000*l*., and occupying the site of the ancient castle. There are large barracks in the vicinity. Market, Sat. and Wed. Fairs, Candlemas day, Trinity Monday, St. John's day, St. James's day. These are large sheep and lamb fairs; large flocks of a valuable breed, named from the place, being kept on the extensive sheep walks of the vicinity. Formerly the town was a considerable seat of the woollen manufacture; but at present its chief dependence is on commercial business, and travellers passing through it. It has breweries noted for the superiority of their ale; and there are annual races in September. Dorchester has returned 2 mems. to the H. of C. from the 21st Edw. I. Previously to the Reform Act, the franchise was confined to inhabitants of the bor. paying to church and poor in respect of their personal estates, and to such persons as paid to church and poor in respect of their real estates within the bor. Registered electors in 1849-50,427. Under the Municipal Act it is governed by 4 aldermen and 12 councillors: its municipal limits coincide with the parl. ones. It is the place where the 3 co. mems. are nominated and returned.

Dorchester was one of the principal stations of the Romans in England. It was called by them *Durnovaria* and *Dunium*, and has still to boast of many interesting relics of its Roman masters. They had surrounded it with a wall and a fosse; part of the former having been standing so late as 1802, and "great part" of it was standing in 1775, when visited by Stukely. Maiden Castle, about 1 mile S.W. of the town, is also supposed to have been constructed by the Romans as a summer camp, *castra æstiva*. It is an irregular ellipse, surrounded by double ditches and ramparts; the former of great depth, and the latter high and steep. The inner area comprises about 44 acres. Poundbury Castle, nearer the town, on its N.W. side, is also supposed to be a Roman work; but, though of the same character, it is of very inferior dimensions to Maiden Castle. But the most interesting Roman remain near Dorchester is the amphitheatre, about ¼ m. S.W. from the town, the most perfect structure of its kind in England. The arena, or inner floor of the amphitheatre, is level with the surrounding plain; while the sloping sides, on which were seats for the spectators, and which are formed of masses of chalk, rise 30 ft. above it. Its dimensions are very large; the length of the longest external diameter being 343½ ft., and that of the shortest external diameter 339½ do.: its longest internal diameter is 218, and its shortest 163 ft. When complete, it is supposed to have been capable of accommodating about 13,000 spectators. In modern times, it has been occasionally used as a place of punishment; and on one occasion, on a woman being burnt in the arena, 10,000 persons are reported to have been congregated within the amphitheatre, to witness the horrible spectacle. It is to be regretted that this classical remain has not been preserved with due care; and that its arena has been repeatedly profaned by the plough. The assizes held at Dorchester in September, 1685, are famous, or rather infamous, for the judicial murders of Judge Jeffries. (See *Beauties of England and Wales — Dorsetshire; Hutchins's History of Dorsetshire, &c.; Stukeley's Itinerarium Curiosum*, p. 163., &c.)

DORDOGNE, one of the largest déps. of France, comprising the ancient prov. of Perigord and part of Guienne, between lat. 44° 35′ and 45° 42′ N., and long. 0° and 1° 27′ E., having N. Charente and Haute Vienne, E. Corrèze and Lot, S. Lot-et-Garonne, and W. Gironde, Charente, and Charente-Inférieure. Greatest length and breadth, about 70 m. each. Area 915,275 hectares. Pop. (1846) 503,557. Several hill-ranges intersect Dordogne, those in the N. belonging to the Limousin, and those in the S. to the Auvergne mountain chains. The principal summits are in the S.E., but none is more than about 650 ft. high. Chief rivers — the Dordogne, Vizère, Isle, Dronne, &c., all of which have a S.W. course. The Dordogne, resulting from the union of the rivulets Dor and Dogne, rises in the *Mont d'Or*, Puy-de-Dôme, flows at first S.W. and afterwards due W. through Corrèze, Lot, Dordogne, and Gironde, and ultimately joins the Garonne, about 13 m. below Bordeaux, after a course of nearly 220 m., 167 of which are navigable. Climate rather damp, but upon the whole healthy: the winter and spring are rainy seasons; the summer is very dry: violent storms frequently occur. According to the *Official Tables*, there are but 46,400 hectares of rich land, principally in the valleys of the Dordogne and the other larger streams; the smaller valleys are for the most part narrow and unproductive, and a large portion of the dép. consists of arid heaths and wastes, over which the traveller may journey for leagues without seeing a single hamlet. Sufficient corn is, however, grown for home consumption; principally rye, maize, and millet. The chestnut crops are important, and a good deal of walnut oil is made. The culture of the vine is pursued to a considerable extent, the average annual produce of wine being about 650,000 hectolitres. The white wine of Bergerac is greatly esteemed, though it is mostly on the left bank of the Dordogne that the best white wines of the dép. are grown; the right bank is more famous for its red wines. There are few meadows; but in 1830 the dép. contained 118,000 black cattle, 584,000 sheep, and 13,000 goats. Game is very plentiful. Iron, copper, lead, cadmium, manganese, coal, and lignite, are mined; and marble, alabaster, granite, lithographic stone, &c., quarried. Working in metals, especially in iron and steel, and the manufacture of paper, are the chief branches of manufacturing industry. Coarse woollens, serges, leather, kid gloves, earthenware, good beer, liqueurs, brandy,

and blue vitriol, are however, also made in the dép. The *pâtés* of Perigueux, and its truffled turkeys and other poultry, are held in the highest estimation both in France and other countries, and support a considerable trade. Dordogne is divided into five arrond., and had, in 1835, 144,282 separate properties. Chief towns, Perigueux the cap., Bergerac and Sarlat. Total public rev (1844) 9,756,389 fr. Perigord was from the 9th to the 15th century under the jurisdiction of its own counts: Henry IV., a part of whose patrimony it was, united it to the French crown. (*Hugo; France Pittoresque; Official Tables, &c.*)

DORKING, a market-town, and par. of England, co. Surrey, hund. Wotton, near the Mole, and on the high road from London to Brighton, 21 m. S.S.W. the former. Area of par., 10,150 acres. Pop. of do., 5,638, of which the town may have near 3,000. The latter is finely situated on the side of a sandstone hill, many of the houses having cellars excavated in the rock; it has wide streets, and is a well-built, well-paved, neat country town The country round is remarkably beautiful; it is well wooded, and presents a succession of fine bold hills and rich valleys, with a great number of fine seats. The church is a large ancient structure, and there is a good town-hall and some alms-houses in the vicinity. Dorking has the finest breed of fowls in England; they have *six* claws, and the capons fatten to an immense size. The custom of *Borough English*, by which the youngest son succeeds to copyhold property, prevails in this manor. Market-day, Thursday.

DORNOCH, a market town, and the only royal burgh in Sutherland, Scotland, on a low sandy beach, N.E. coast of the Dornoch Frith, 53 m. N. Inverness. The sea approaches to about 150 yards of the town, yet does not confer on it the advantages of a sea-port, there being no harbour. Pop. (1841) about 450, but supposed to have once been greater: inhab. houses, 113. It is a mean-looking town, with many marks of poverty and decay. It has no source of municipal revenue, except the customs levied at six annual fairs; but as these are on the decline, the income of the town is suffering accordingly. It was made a royal burgh by Charles I. in 1628. But Dornoch is chiefly remarkable for its cathedral, and as having once been the seat of the bishop of Caithness. The cathedral is supposed to have been built by Richard Murray, bishop of the see, who died in 1245, and who was afterwards canonised. (*Keith's Scottish Bishops*, 1824, p. 209.) The remains of the buildings are extensive and magnificent. The present parish church consists of three aisles of the old cathedral; and underneath it is the burying-place of the noble family of Sutherland. A portion of the bishop's palace serves as the county court-room and gaol. A monastery of Red Friars was founded here by Sir Patrick Murray, in 1271, of which the ruins have entirely disappeared. (*Ib.* 397.) Dornoch unites with Wick, Cromarty, Dingwall, Tain, and Kirkwall, in sending a mem. to the H. of C., and had, in 1849–50, 38 registered voters. (*New Statist. Acc. of Scotland, § Dornoch.*)

DORPAT, or DERPT (Russ. *Jourief*), a town of Russia in Europe, gov. Riga, cap. distr., on the Embach, and on the high road between Riga and Petersburg, 150 m. N.E. the former, and 170 m. S.E. the latter city; lat. 58° 22′ 44″ N., long 26° 42′ 19″ E. Pop. about 11,500. The town, which is well built, is divided into three separate portions—Dorpat Proper, and the suburbs of Riga and Petersburg. It has a fine market-place, a stone bridge over the Embach, and a cathedral now partly in ruins, but which formerly had a nave supported by 24 arches and surmounted by two towers. The old fortifications, with some of the ditches, have been converted into ornamental gardens, shrubberies, and public walks. It is surrounded by hills, which, as well as the banks of the river, offer many fine points of view.

Dorpat is the seat of a university, which in 1833 had 37 professors, and 539 students. This institution was originally founded by Gustavus Adolphus of Sweden in 1632. After suffering numerous vicissitudes during the wars between Sweden and Russia, and having been removed to Pernau, it was re-established in Dorpat in 1802 by the late emperor Alexander, in the building it at present occupies on the site of an ancient fortress. In 1833 the university possessed a library with 57,800 vols., a museum of arts, an observatory with some excellent instruments, cabinets of physical, chemical, mineralogical, zoological, and pathological subjects, an anatomical museum, a collection of agricultural models, and a botanical garden containing many rare plants: it has attached to it an hospital, theological and philological seminaries, and an institute for the education of professors. Though considered as especially belonging to this and the adjacent governments, it is much resorted to from many other parts of Russia. Some of its professors are highly distinguished, especially M. Struve, professor of astronomy. Dorpat also contains a gymnasium and a normal primary school.

This town is believed to have been founded in 1030. It was subsequently taken by the Teutonic knights, who erected it into a bishopric in 1224. Its commerce now began to flourish, and at one period it ranked as one of the Hanse Towns. It was afterwards alternately in the power of the Poles, Swedes, and Russians; but the latter have retained possession of it since 1704. (*Schnitzler, La Russie; Dict. Géog.*)

DORSET, a marit. co. on the S. coast of England, having S. the British Channel, E. Hants, N. Wilts and Somerset, and W. Devonshire. Area, 643,840 acres. Surface beautifully diversified; climate mild and salubrious, not being so rainy as in some districts more to the W. Soil principally chalk, sand, gravel, and loam. The vale of Blackmore, traversed by the Stour, containing 170,000 acres, and some other tracts in the W. part of the co. and along the coast, are eminently fertile and beautiful; but the distinguishing feature of the co. is the extent of its chalky downs, depastured by large flocks of sheep, and round Poole Harbour there are large tracts of heath. Agriculture in a medium state of advancement; but more improved in the E. than in the W. districts. Hemp and flax are a good deal grown, but less now than formerly. Water meadows extensive, and their management well understood. The greater part of the co. is in grass. There are some very large dairies; they are not generally looked after by the farmers, but let, at so much per cow, to dairymen, many of whom have made large fortunes. Stock of sheep estimated at between 600,000 and 700,000. Property in large estates. Farms of various sizes, but mostly large: they are let for 14 or 21 years, the rents, in most places, being paid once a year. Average rent of land, in 1843, 19*s.* 4*d.* an acre. St. Paul's Cathedral, Somerset House, and others of the principal buildings in London, as well as in the greater number of the towns in the S. of England, have been constructed of stone brought from the freestone quarries in the Isle of Portland in this co.; and the Isle of Purbeck supplies the potteries of Staffordshire with the clay used in the manufacture of the finer sorts of earthenware. There are considerable manufactures of flax and hemp at Beaminster, Netherbury, Bridport, &c. Shirt buttons are made at Shaftesbury and Blandford; silk is spun at Sherborne and Gillingham, and wool at Fordington and Lyme Regis. In 1839. there were in the co. 19 flax, 5 silk, and 2 woollen mills, employing in all 1,847 hands. Principal rivers, Stour and Frome. Principal towns, Poole, Shaftesbury, Weymouth, and Melcombe Regis. Dorset has 34 hundreds and 271 parishes, and returns 13 mems. to the H. of C., viz. 3 for the co., 2 each for the bors. of Bridport, Dorchester, Poole, and Weymouth, and 1 each for Shaftesbury and Wareham. Registered electors for co., in 1849–50, 5,832. In 1841, Dorset had 34,576 inhab. houses, and 175,043 persons, of whom 83,554 were males, and 91,489 females. Sum contributed to the relief of the poor, in 1847, 89,254*l.* Annual value of real property, as assessed to income tax, in 1815, 726,264*l.*; do. in 1843, 799,342*l.*

DORT, or DORDRECHT, a partially fortified town of S. Holland, on an island formed by the great inundation of 1421, on the S. side of the Waal, a branch of the Maese, 10 m. S.E. Rotterdam; lat. 51° 48′ 52″ N., long. 4° 39′ 44″ E. Pop. (1841) 22,000. Dort is a dull, though a tolerably well-built town: its streets are lined with houses of an antique fashion, the gables of which are turned outwards; "they rise with many grotesquely ornamented windows and crow-steps to a considerable altitude; while the practice of painting the bricks a bright red, and the ornamental stones and cornices a light colour, adds to their fantastic appearance. A number of the houses, as appears from the dates carved on their exterior, were erected during the period of Spanish occupation, previously to 1572." (*Chambers.*) The principal public buildings are the town-hall, a fine edifice, and the church, an old Gothic structure, 300 ft. long by 150 broad, with a heavy square tower conspicuous from a great distance. The latter building is paved entirely with flat monumental stones, some of which are of great antiquity; and its walls are surrounded with monuments, which the Dutch ingeniously preserved during the occupation of the country by the French, by concealing them with a screen of plaster. The church also contains a marble pulpit, highly ornamented with elaborate and elegant carving. The hall in which the famous synod of Dort held its sittings is still in excellent preservation, but is now degraded to the ignoble purpose of a low Sunday evening theatre! Dort is surrounded on the land side with fortifications; on the side of the Waal it has several quays, and a good harbour, from which two canals lead into the middle of the town. It is the centre of a considerable trade in flax, which is grown in great quantities in its vicinity, and a good deal of which is shipped for England and Ireland. It has also a large trade in corn, salt-fish, train oil, and timber; the latter article is floated down from the Upper Rhine in immense rafts, which, when sold, often realise from 25,000*l.* to 33,000*l.* There are many windmills for sawing deals in and near Dort, some sugar and salt refineries, linen-bleaching, tobacco, and white lead manufactories, build-

ing docks, &c. Dort is one of the oldest cities in the country; was the original residence of the counts of Holland, and, in 1572, the seat of the first meeting of the states at which the independence of the Seven United Provinces was declared; but the most memorable æra in its history is that of—

THE SYNOD OF DORT, to which reference has been already made, held in consequence of a schism in the reformed church. James Arminius, professor of divinity in the university of Leyden, having rejected the doctrine of Calvin with respect to predestination and grace, obtained the support of Grotius, Barneveldt, and other learned and eminent persons, as well as of a considerable number of the middle and lower classes. His tenets were, however, opposed with extreme vehemence, and were represented as of the most dangerous description. The disputes that grew out of this controversy being not unfrequently attended with tumult and bloodshed, the States General at last agreed to refer the subject in dispute to a council or synod for its decision. This synod, which excited the greatest interest throughout Protestant Europe, assembled on the 13th of November, 1618, and continued its sittings till the 25th of May, 1619: it was attended not merely by all the most eminent divines of the United Provinces, but also by deputies from the reformed churches of England, Scotland, Switzerland, &c. The Calvinists having a decided majority in the assembly, all its decisions were in conformity to their views. The distinctive doctrines of Arminianism were pronounced to be pestilential errors and corruptions of the true faith; and this was followed up by the excommunication of the Arminians, the suppression of their religious assemblies, and the deprivation of their ministers!

These unjust and violent proceedings, being aggravated by political animosities, led to the most deplorable results. In the persecution to which they gave rise, the eminent statesman Barneveldt, though at the age of 72, lost his life on the scaffold; many distinguished Arminians were driven into exile; and even Grotius was condemned to a perpetual imprisonment, from which he was only extricated by the sagacity, courage, and devotion of his wife. But after the death of Prince Maurice, the great enemy of the Arminians, in 1625, this persecution relaxed; and most of the exiles were soon after allowed to return to Holland. The Arminian doctrine is now very widely diffused, even among those who profess to differ from it. (See *Mosheim*, iv. 439—466., 8vo. edit.; and the lives of *Arminius, Grotius, &c.*, in the *Biographie Universelle*.)

DOUAI, a strongly fortified town of France, dép. du Nord, cap. arrond., situated very advantageously for commerce, on the Scarpe, 18 m. S. Lille; lat. 50° 22′ 10″ N., long. 3° 5′ 2″ E. Pop. (*ex. com.*) 18,890. It is well built, and the principal square is large and handsome: it is surrounded with old irregular walls, flanked with towers, and is farther defended by a fort on the right bank of the river, about 2 m. N. Douai. The town contains large establishments of artillery, a superb arsenal, and one of the three royal cannon-foundries in the kingdom. It is the seat of a sub-prefecture, of a royal court for the dépts. du Nord and the Pas-de-Calais, a tribunal of primary jurisdiction, a royal college with 262 pupils, a royal school of artillery, an *Académie Universitaire*, which has replaced its celebrated university, founded in 1562; with schools of design and music, a primary normal school, a public library with 28,000 printed vols., and 600 MSS., museums of painting and antiquities, cabinets of natural history and medical science, a botanical garden, 2 hospitals, an orphan asylum, and a theatre. Industry and the arts are alike thriving in Douai. It has fabrics of lace, tulles, gauze, cotton stuffs, thread, and earthenware, glass and soap works, and salt and sugar refineries; with a considerable trade in flax, which is extensively cultivated in its neighbourhood. Douai is very ancient, having existed previously to the invasion of Julius Cæsar. Its possession was guaranteed to France by the treaty of Utrecht. (*Hugo*, art. *Nord; Dict. Géogr.; Guide du Voyageur.*)

DOUBS, a frontier dép. of France, in the E. part of the kingdom, formerly comprised in Franche-Comté, having N. and N.W. the déps. Haut-Rhin and Haute Saône, S.W. that of Jura, and E. Switzerland. Length, N.E. to S.W., about 60 m.; breadth varying from 20 m. in the N. to 50 m. in the S.: area 525,212 hectares. Pop. (1846) 292,347. Four collateral mountain chains belonging to the Jura system intersect the dep. in nearly its entire length, decreasing in height from E. to W., and naturally dividing the surface into a mountain, hill, and plain region. The loftiest summit of the E. range, Mount Suchet, is 5,283 ft. above the level of the sea: the principal elevation of the W. range rises to only 953 ft. The plain country to the W. of the latter range is the most fertile, and well fitted for the growth of all kinds of corn, and of the vine; the rest of the country is not generally productive. The mountains are all of calcareous formation, and abound with narrow gorges, grottoes, and caverns: the more elevated ranges are covered with pine forests, and in many parts with ice and snow for 6 months of the year. Chief rivers Doubs, Loue, and Ognon. The former rises at the foot of Mount Rixon, and, after a very tortuous course through the dep., it proceeds S.W. through that of Jura, and a part of Saône-et-Loire, and ultimately joins the Saône at Verdun. From Besançon to near Montbeliard, the Doubs forms a part of the navigable canal between the Rhine and the Rhone. There are many small rivers and some large marshes. Climate variable and rather cold, but generally healthy. Wheat, rye, maize, hemp, pulse, fruits, wines, &c., are grown in the valleys and low country, which the inhabs. exchange with those of the mountainous districts for barley, flax, cheese, drugs, and timber. Agriculture very backward: fallows are so common as usually to occupy nearly a third part of the cultivable land, — a waste that might be wholly, or almost wholly, avoided by the substitution of green crops, at the same time that a great additional supply of food for cattle and of manure would be obtained. According to the official tables, 120,646 hectares of land were occupied in 1835 with forests: and this is one of the few French deps. in which the planting of trees is actively going on. Meadow lands are extensive, occupying, in 1830, 158,924 hectares: in the arrond. of Montbeliard they are well irrigated. The rearing of cattle is pursued to a considerable extent, as well as the manufacture of cheese similar to that of Gruyère. This branch of industry is mostly conducted either by the proprietors of from 40 to 60 cows, or by associations of small proprietors, whose share of the cheese is in proportion to the quantity of milk they respectively furnish. The total annual product of cheese is estimated at 2,500,000 kilogrammes, worth 1,650,000 fr.; of butter, 260,000 kilogr., value 260,000 fr. Iron, coal, and lignite are mined, and gypsum, marble, building-stone, &c. quarried. There are about 20 iron-works in the dep., which supply yearly 1,700,000 kilogr. of bar iron, 7,030,000 kilogr. of cast do., 2,400,000 kilogr. of iron wire, 150,000 kilogr. of *pointes*, 640,000 kilogr. of iron plates, and 30,000 chests of tinned ware. The establishment at Audincourt alone yields 5,000,000 kilogr. of cast and forged iron. Watchmaking employs about 2,000 artisans, and about 60,000 watches are made annually in Besançon. Cutlery, copper wares, paper, leather, liqueurs, bottles, and a few fabrics of different kinds, are amongst the other principal manufactures. The exports of the dep. are chiefly cattle, cheese, butter, timber, iron, hardware, watches, and agricultural implements; its imports corn, wines, brandy, cotton, woollen, and other fabrics. Doubs is divided into 4 arrond. Number of separate properties in 1835, 96,078 Chief towns, Besançon, the cap., Pontarlier, and Montebeliard. Total public revenue (1844) 9,899,915 fr. About 25,000 of the pop. are Protestants. This dep. formed a part of the circle of Burgundy under Charles V.; it was annexed to the French crown by Louis XIV. in 1660. (*Hugo, France Pittoresque*, art. *Doubs; Official Tables, &c.*)

DOUGLASS, the principal town of the Isle of Man, on the E. coast of which it is situated, at the mouth of the Blackwater, on a circular bay, 80 m. N.W. Liverpool, lat. 54° 12′ N., long. 4° 25′ 47″ W. Pop. 6,786. The town has some good streets and buildings; but, speaking generally, the former are narrow and dirty. It has, however, been a good deal improved of late years, in consequence of the influx of visiters from Liverpool and other places, in summer, attracted by the facilities for sea-bathing, and by the partial exemption from taxation enjoyed by residents in the island. (See MAN, ISLE OF.) The steam-packets to and from Liverpool, Belfast, and Glasgow, frequently touch at Douglass. Castle Mona, near the beach, a little N.E. from the town, formerly the property and residence of the dukes of Athol, has been sold, and is now converted into a hotel. There is here a pier 520 ft. in length, with a light-house at its head. The harbour dries at low water; but vessels drawing 10 ft. water may enter it at high-water neaps, and those drawing 14 ft. at high water springs. The anchorage in stormy weather is but indifferent. The parish church is 2 m. from the town; but it has 2 chapels, one of which is a handsome structure, with chapels for Catholics, Methodists, and Independents: it has also assembly-rooms, a public library, a Lancastrian school, and several charitable foundations. The custom-house is one of its best buildings.

DOULENS, or DOULLENS, a town of France, dép. Somme, cap. arrond., on the Authie, 16 m. N. Amiens. Pop. (*ex. com.*) 2,720. Its citadel, formerly considered one of the bulwarks of Picardy, was repaired by Vauban, and is very strong. The church of St. Martin is remarkable for beauty and lightness of style: the town has 2 hospitals, a theatre, and a large cotton-spinning factory. (*Hugo*, art. *Somme; Dict. Géogr., &c.*)

DOUNE, a market town of Scotland, co. Perth, on

the N. bank of the Teith, a tributary of the Forth, 7 m. N.W. Stirling. Pop. 1,200. It consists of three streets, radiating from a centre where the market-cross stands. Its only public building is the parish church, a Gothic edifice with a handsome tower. It is famous for its annual cattle, sheep, and horse fairs, six in number, one of them lasting three days. The cattle and sheep are from the Highlands, and are lean, and purchased to be fattened either in the Lowlands of Scotland or in England. The cotton manufactory of Deanston is within less than a mile of the town, on the bank of the Teith, and is driven by water. It belongs to a Glasgow company, and gives employment to 700 individuals in spinning, weaving, bleaching, &c. Doune Castle, which is within a few hundred yards of the town, on an elevated peninsula formed by the junction of the Ardoch with the Teith, was one of the strongest Scottish fortresses. It was originally the seat of the earls of Menteith. It was occasionally the residence of Mary Queen of Scots. It was, for a while, in the hands of the rebels in 1745. It gives the second title to the noble family of Moray, whose property it has long been. It has a square tower 80 ft. high; the walls are 10 ft. thick. The bridge of Teith, in the immediate vicinity of the town, was built in 1535 by Robert Spittal, tailor to Margaret, wife of James IV. and daughter of Henry VII. (*Nimmo's Hist. of Stirlingshire*, p. 684.; *Chambers' Gaz.*)

DOURO, (Span. DUERO, an. *Durius*), one of the principal rivers of Spain and Portugal, through the N. part of both which it flows. It rises in the Sierra, de Olbion prov. Soria, Old Castile, about lat. 42° N. and long. 2° 50′ W. At first it runs S.E. and then S. to near Soria, but thence onward its direction is generally W., through the kingdoms of Leon and Portugal to its mouth in the Atlantic: in lat. 41° 8′ N., long. 8° 38′ W., 2 m. W. Oporto. From near Miranda to beyond Torre de Moncorvo, however, it flows almost due S W., forming the boundary between the Spanish prov. of Salamanca, and the Portuguese prov. of Tras-os-Montes. It afterwards separates the latter prov. and Minho from Beira. The length of its entire course is estimated at 500 m.; it receives the Pisuerga, Seguilla, Esla (its principal tributary), Sabor, Tua, and Tamega on the right, and the Grado, Eresma, Tormes, Agueda, Coa, Tavora, Paiva, &c., on the left side: its basin may be considered the most extensive in the whole peninsula. It runs for the most part through deep and narrow valleys; its bed is generally narrow, and its current very rapid. It is, however, navigable as far as San João de Pesquiera, about 70 m. E. by N. Oporto; and since the Wine Company of the Upper Douro have partially removed some obstacles that existed at that point, it has been rendered available for flat-bottomed boats as high as Torre de Moncorvo, 100 m. from the ocean. It has a bar at its mouth, and its navigation is liable to be seriously affected by *freshes*, or sudden swellings, occasioned by rains, &c., to which it is very subject. (See OPORTO.) Soria, Aranda-de-Duero, Toro, and Zamora in Spain; and in Portugal Miranda, San João de Pesquiera, and Oporto, are situated on its banks. 16 stone bridges cross it at various points, besides which it presents numerous fords. At Oporto a bridge of boats connects that city with its suburb of Villa Nova on the opposite bank. (*Balbi. Essai Statistique sur Portugal*, i. 81, 82.; *Dict. Géog.*, *&c.*)

DOVER (vulgarly DOVOR), a Cinque Port, parl. bor., and town of England, co. Kent, lathe St. Augustine, hund. Bewsborough, on the S.E. shore of the co., on the Straits of Dover, in a valley formed by the depression of the chalk strata, 66 m. S.E. by E. London, 27 m. N.W. by W. Calais, and 21 m. from the nearest part of the French coast; lat. 51° 8′ 26″ N., long. 1° 19′ 7″ E. Pop. of town and port, 1821, 11,538; 1841, 13,872; but the limits of the existing parl. bor. being extended by the Boundary Act so as to include the greater portion of the par. of Buckland, it had, in 1841, a pop. of 17,795. It is traversed by a small stream, which empties itself into the harbour. The town consists of one principal street, extending upwards of a mile in the direction of the valley, shorter ones branching from it on each side, and ranges of houses on the shore. "What may be called the New Town of Dover, built chiefly for the reception of occasional visitors during the bathing season, is under the castle cliffs on the E.: the old part of the town is irregular, and the streets narrow and ill kept; but the whole is obviously improving, and building land is in great request."—(*Boundary Report.*) In consequence of the increase of building, the villages of Charlton and Buckland have become continuous portions of the town. It is well paved, and lighted with gas. It has 2 ancient par. churches, St. Mary's and St. James's; another recently built as a chapel of ease; a Catholic, and 7 dissenting chapels; a school, founded in 1789, for 45 boys and 34 girls, now incorporated with a national school, which educates 400 children; a girls' school of industry, established 1819; an infant school; a savings bank; a dispensary, and many minor charities; a town hall and gaol; theatre and assembly rooms, built in 1790; public libraries, reading rooms, and baths, on the Marine Parade; and excellent inns, lodging houses, &c., for the accommodation of visitors. The harbour, which is quite unworthy the ancient reputation of the port, is within the town: it is small, and the entrance to it being narrow, between two piers, great caution is required in entering in rough weather; it is only a tide harbour, and a few years ago, the bar at its entrance had accumulated so much that it was feared it would be entirely choked up; but great improvements have since been effected. By a charter of James I., the lord warden of the Cinque Ports, and 10 other commissioners, were appointed conservators of the harbour, under whose management it still continues. On an eminence bounding the S.E. side of the valley stands the castle, an immense collection of ancient and modern works, occupying an area of about 30 acres: it is approached by a bold ascent, but is itself commanded by the higher ground on the W. and S.W. There are remains of ramparts, and of a temple, bath, and Pharos, supposed to be of Roman construction. Previously to the last French war, the works were much dilapidated, but they were then repaired, and greatly augmented. There are upper and lower courts, surrounded (except towards the sea) by curtains and large dry ditches; in the centre of the former is a spacious keep, built by Hen III, and now forming a bomb-proof magazine; the curtain of the lower court is flanked, at irregular intervals, by 10 towers of various construction,—the oldest built by Earl Godwin, the others at different times during the Norman dynasty: with these, subterraneous passages communicate from the ditch; there are also 4 or 5 ancient wells, excavated to the depth of 370 ft. The modern works consist of batteries with heavy artillery, casemates, covered ways, a large vault, &c., excavated in the chalk, barracks, &c., capable of lodging 2,000 troops. The lord warden of the Cinque Ports (at present (1850) the Duke of Wellington) is now always constable of the castle. The heights on the S. side the valley were also strongly fortified during the last war. An ancient hospital, called Maison Dieu, was converted to a victualling office in 1555: there is also a military hospital on the S. side of the town. Dover has a busy, thriving appearance, its chief traffic being derived from the influx of passengers to and from the Continent: of late years, also, its popularity, as a fashionable sea-bathing place, has considerably increased. There are large paper mills in the vicinity, and in the town a brewery and private docks, where ship-building is carried on to some extent, and rope, sail, and other establishments connected with the supply of shipping. The intercourse with Calais and other French ports, and also with London, is now almost wholly carried on by steamers. The coasting trade consists chiefly of corn exported to London, and coals imported from the northern counties. The port comprises the creek of Folkestone, and the stations of Hythe and Romney. About 95 vessels, of the aggregate burden of 5,000 tons, belong to the port. Markets, Wed. and Sat. There is also a daily market for poultry, fish, and vegetables. Fair, Nov. 23., continuing over 3 market-days.

Dover, under the Municipal Reform Act, is divided into 3 wards, with 6 aldermen and 18 councillors, and the parl. and municipal limits coincide. Previously to the act now referred to, the governing body consisted of a mayor, 12 jurats, and 36 common councilmen, who, like the magistrates of the other Cinque Ports, enjoyed several peculiar privileges in the trial of crimes, &c.; but these are now either wholly done away with, or greatly abridged. The constable of the castle has still, however, the jurisdiction of a sheriff within the Cinque Port limits; writs from the superior courts are directed to him, and his warrant is executed by an officer called *Bodar;* the debtors' prison being in the castle: a court of *Lodemanage* is also still held for licensing and regulating pilots.

Dover has returned 2 mems. to the H. of C. from the 18th Edw. I. Previously to the Reform Act, the right of voting was in the freemen; the right of freedom being acquired by birth, by marriage (during the wife's life), by the possession of a freehold within the town and port, by gift, and purchase. Registered electors in 1849-50, 2,203. In 1835, there were 300 houses of the annual value of 10*l.* and upwards. The annual value of real property in the bor. in the same year was 52,011*l.*, but it has since rapidly increased.

Dover was a station of the Romans, by whom it was called *Dubris;* and being situated nearer to the Continent than any other town in England, it was long regarded as of the highest importance, and as being, in fact, the key of the kingdom. At Swingfield, near the town, are the remains of a preceptory of the Knights Templars, where K. John surrendered his crown, and received it back from the Pope's legate, in acknowledgment of superiority. In 1216, the castle was successfully defended against the Dauphin of France, by Hugh de Burgh, Earl of Kent. In the last civil war it was taken by stratagem, in 1642, by the Republicans.

Dover cliffs lie both on the E. and W. sides of the town. The noble description in Shakspeare is applicable to the latter; but the cliff to which the poet alluded having been undermined and thrown down, those that remain do not quite come up to the description. (*Hastings, Kent, and Dover Guide; Boundary Report*, &c.)

DOWLETABAD (*The Fortunate City*; Hind. *Deoghir*), an inland town and fortress of Hindostan, prov. Aurungabad, and its original cap., dom. of the Nizam, 7 m. N.W. Aurungabad; lat. 19° 57′ N., long. 75° 25′ E. The fortress stands upon an isolated conical granite rock, the summit of which is about 500 ft. above the plain below, and which has been scarped for one-third nearly of its height, so as to present all round the appearance of a perpendicular cliff. An outer wall of no strength surrounds the fort; but three other lines of walls and gates must be passed before arriving at the ditch, the causeway across which will admit of only two persons abreast, and which is defended by a building with battlements on the opposite side. The mode of access to this singular hill fortress is thus described by the Earl of Munster:— "The governor led the way through an excavation into the heart of the rock, so low that I was obliged to stoop nearly double. But after a few paces, a number of torches showed me I was in a high vault, and we began to ascend on a winding passage, cut through the interior of the body of the hill. ... This passage was about 12 ft. high, and the same broad, and the rise regular. At certain distances from this dismal gallery are trap-doors with flights of small steep steps leading to the ditch below, only wide enough to admit a man to pass, also cut through the solid rock, to the water's edge, and unexposed to the fire of the assailants, unless they were on the very crest of the glacis. We might have been in all ten minutes mounting by torchlight, and came out in a sort of hollow in the rock about 20 ft. square. On one side, leaning against the cliff, was a large iron plate, nearly of the same size as the bottom of the hollow, with an immense iron poker. On the besiegers having gained the subterraneous passage, this iron is intended to be laid down over the outlet, and a fire placed upon it." Near it is a perforated hole in the rock, intended to act as a bellows to the fire. The road hence to the summit is very steep; in some places it is covered with brushwood, in others with small houses, towers, and gates: it passes through the governor's residence, a good building, surrounded by a verandah with 12 arches. On the peak the Nizam's flag flies, and a large brass 24-pounder is mounted; but, excepting this, in the whole fortress there are but a few 2 and 3 pounders. The pettah presents the remains of many buildings of a rough dark-coloured stone; but is now in great measure deserted: the interior of the lower fort is a similar collection of ruins, and contains a column of great diameter and perhaps 160 ft. high, deformed, however, by a huge gallery, which encompasses it at about a fourth part of its elevation from the ground. From its natural strength, and the labour that has been bestowed upon it, this fortress is looked upon as impregnable; and as there is plenty of water (one tank cut out of the rock is only about 100 yards from the summit), if properly defended, it could only be reduced by famine. Notwithstanding these advantages, it was one of the first fortresses that fell into the hands of the Mohammedans, who took it by surprise and plundered it of immense riches, A. D. 1293. Early in the 14th century, Mohammed III., who made it his residence, nearly ruined Delhi by the absurd project of making its inhabitants remove to his new capital. It was afterwards successively possessed by the dynasties of Ahmed Nizam Shah, Malik Amber, Shah Jehan, and the French: since 1758 it has belonged to the Nizam's dom. The pagodas of Ellora (which see) are in the vicinity of Dowletabad. (*Hamilton's E. I. Gaz.* i. 526, 527.; *Mod. Trav.* x. 282—285.; *Rennell's Hindostan*, 213.)

DOWN, a marit. co. of Ireland, prov. Ulster, on its W. coast, having S. and E. the Irish Sea and the N. Channel, N. Belfast. Lough, and Antrim, and W. Armagh and Louth. Area, 611,404 imp. acres, of which 108,569 are unimproved mountain and bog. The mountains of Mourne, in the S. part of the co., are amongst the highest in Ireland; but, with this and a few other exceptions, the surface is abundantly level. Soil of a medium degree of fertility. There are some large estates; but there is also a fair proportion of those of medium size. Farms very small: those occupied by the better class of farmers run from 20 to 50, and a few to 100, acres; but the inferior holdings, which are the great mass, do not, perhaps, average 5 acres. The occupiers of the latter formerly depended, in a great degree, on the linen trade, but since its decline, or rather since the manufacture began to be principally carried on in factories, they have had nothing but the land to depend on, and the competition for the smallest patches is extreme. In this, as in most other parts of Ireland, a new tenant must not only pay the stipulated rent to the landlord, but he must also pay a sum to the previous occupier, whatever may have been the cause of his leaving the farm, to ensure his quiet possession. This latter sum is called the *tenant's right*; and in Down it frequently amounts to 10*l.* an acre! (*Binn's Miseries and Beauties of Ireland*, i. 85., &c.) Still, however, a good many improvements have been introduced of late years, though where the holdings are so small, it would be absurd to suppose that agriculture can be far advanced. Potatoes, oats, and flax are the principal crops: turnips rare; potatoes mostly planted in "lazy beds," though drilling is now pretty common. Average rent of land, 16*s.* an acre. Cottages very generally white-washed and neat. The condition of the cottiers or peasantry is much superior to what it is in most other Irish cos.; and would have been much more so, but for that custom, the bane and curse of Ireland, of dividing and subdividing farms, which is no where more prevalent than here. Principal rivers, Bann, Lagan, and Newry. Principal towns, Newry, Ballymacarret, and Downpatrick. Down is divided into 8 baronies and 60 parishes, and sends 4 mems. to the H. of C., 2 for the co., and 1 each for Newry and Downpatrick: registered electors for the co. in 1838-39, 3,205. In 1831, Down had 62,629 inhab. houses, 66,233 families, and 352,012 persons, of whom 169 416 were males, and 182,596 females.

LOWNHAM (MARKET), a town and par. of England, co. Norfolk, hund. Clackclose, 78 m. N. by E. London, 11 m. S. King's Lynn. Area of par., 2,880 acres. Pop. in 1841, 2,953. The town, on an acclivity near the E. bank of the Ouse, which is here crossed by a bridge, has 3 streets of well-built houses, and is paved and amply supplied with water. The church, on the summit of the acclivity is an antique Gothic structure, with a low tower and spire, approached on the S. by a noble avenue, and on the N. by a flight of steps. There are also 3 dissenting chapels, a Lancastrian school for 65 boys, and a national school for 70 girls. Market, Sat., noted for the supply of fish and wild fowl from the fens. Fairs, March 8. for horses (one of the largest in the kingdom), May 8. cattle, and Nov. 13. There is an extensive bell-foundry in the town, and in the immediate vicinity is a large mustard manufactory. It is chiefly a dairy parish, and has been long celebrated for its supply of butter; but its famous butter market, held on Monday, has been removed to Swaffham. Petty sessions are held weekly, and a court baron and leet quarterly, by the lord of the manor.

DOWNPATRICK, a marit. town and parl. bor. of Ireland, co. Down, of which it is the cap., prov. Ulster, near the Quoyle, a short distance from its embouchure, in the S.W. angle of Lough Strangford, 21 m. S. by E. Belfast. Pop. in 1841, 4,866; pop. of par. in 1834, 9,008, of whom 2,220 were of the estab. church, 2,283 Prot. diss., and 4,505 Rom. Cath. It consists of four main streets, meeting in a confined valley, and extending up the declivities of the surrounding steep hills. Like other northern towns, it is divided into the English, Scotch, and Irish quarters. It is a thriving town, "and many persons are of opinion that it has more wealth in it than any other town of its size in Ireland. House rent is higher than in Belfast. There is a quay about 1 m. from the town, on the river, accessible to vessels of 100 tons." (*Boundary Report.*) A new quay now in progress, about 1 m. nearer the lough, will be accessible to vessels of much larger burden. The town was formerly the seat of the bishopric of Down, but since the union of the see with that of Connor, the ecclesiastical business is transacted at Lisburn. The ruins of the ancient cathedral, and those of a neighbouring pillar tower, still remain. The new cathedral is built in the ancient style; besides which, there is a par. church, Rom. Cath. chapel, two meeting-houses for Presbyterians, and three for Methodists. The diocesan school for Down and Dromore dioceses is held here, as also a subscription school, the co. infirmary, fever hospital, dispensary, an almshouse, with schools annexed, endowed by the Southwell family, an asylum for clergymen's widows, a mendicity institution, and large barracks. A constabulary force is stationed here. In the immediate vicinity is a remarkable *rath*, or artificial mound, 60 ft. high, and surrounded by three ramparts, the outermost of which is nearly 1 m. in circ. Races are run every alternate July, on a course near the town, under the direction of a body of resident gentlemen, incorporated by the name of the Down Horsebreeders. About 2 m. distant, at the foot of the hill of Sleibh-na-griddle, are the Struel wells, much frequented at midsummer by Rom. Cath. pilgrims for devotional purposes, and for the supposed miraculous efficacy of their waters. The corporation, which consisted of a mayor, bailiffs, and commonalty, no longer exists, its powers being vested in commissioners. The bor. returned 2 mems. to the Irish H. of C. till the Union, since which it has sent 1 mem. to the imperial H. of C. The parl. bor. extends over a space of 1,486 stat. acres. Registered electors in 1849-50, 197. Manor courts, with jurisdiction to the amount of 10*l.*, are held every third Tuesday; courts leet in spring and at Michaelmas. The co. assizes are held here in the court-house, an elegant modern building; as are also general sessions in March and October, and petty sessions on Thursdays. The co

gaol, a spa ious building, contains 200 cells, and 16 other rooms for prisoners. The linen manuf cture is carried on in the neighbourhood: there are two breweries Markets on Saturdays; fairs on the second Thursday in Jan., March 17., May 19., June 22., Oct. 29., and Nov. 19. Post-office revenue, in 1845, 326*l.*, do. in 1818, 305*l.* Branches of the Northern and Ulster Bank are established here. A newspaper is published on Saturdays. This is a very old town, being formerly the residence of the kings of Ullagh or Ulster.

DOWNTON, a bor. town and par of England, co. Wilts, near its S. border, hund. Downton, on the Upper Avon, which here divides into 3 branches, each crossed by a bridge; 78 m. S.W. by W. London. Area of par., 11,420 acres. Pop. of do. in 1821, 3,114, in 1841, 3,648; the increase being ascribed (with what justice we know not) in the Pop. Returns, to "early and improvident marriages." The town has one irregular street, not paved or lighted, with a few respectable houses. Exclusive of the church — a large cruciform structure with a tower, — there is a chapel of ease in the parish, and 3 dissenting chapels. A free school, founded in 1679, educates 12 boys; and another, founded in 1797, 6 girls. Market discontinued. Fairs, April 23. for cattle, Oct. 2. for horses and sheep. The bor. returned 2 mems. to the H. of C. from the reign of Edw. I. down to the passing of the Reform Act, when it was disfranchised. This is a place of considerable antiquity. At its S.E. end is a conical mount, on which stood an ancient castle, whose entrenchments are still visible. Standlinch or Trafalgar House, a national gift to the heirs of Lord Nelson, is within 2 m. cf Downton.

DRAGUIGNAN, an inl. town of France, dép. Var, of which it is the cap., in a fertile valley, on an affluent of the Artesby, 40 m. N.E. Toulon, and 410 m. S.E. Paris; lat. 43° 32′ 18″ N., long. 6° 28′ 38″ E. Pop. (*ex. com.*) 8,774*l.* Its climate is temperate and salubrious, and being situated in a basin, surrounded by vine and olive clad hills, it offers a delightful place of residence. Though without any particular beauty, the town is sufficiently well built, and has numerous public fountains. Chief public buildings — the hall of justice, prison, clock-tower, and hospital. Draguignan has a public library with 15,000 vols. (*Guide du Voyageur*; Hugo says 7,500 vols.), an excellent botanic garden, cabinets of natural history, medals, &c., and a society of agriculture and commerce; with tribunals of primary jurisdiction and commerce, a chamber of manufactures, and a communal college. There are fabrics of broadcloth, thrown silks, stockings, and soap, and distilleries. (*Hugo*, art. *Var*; *Dict. Géogr.*, *&c.*)

DRAMMEN, a sea-port town of Norway, distr. Buskerud, on both sides of the river of the same name, near its mouth in the Christiana-fiord, and 20 m. S.W. Christiana. Pop. 7,584. "It is a long straggling place. Though to us it seemed to have little of the bustle of trade, it is said to export more timber, chiefly in logs, than any town in Norway. Its women are reckoned among the greatest beauties of the North; and we saw some who fully support its reputation in this respect. Most travellers, however, will recollect it better as the place in which is carried on the principal manufacture of the delightful little *carriole*." (*Bremner's Excursions*, p. 86.)

DRAVE (Germ. *Drau*), a river of Europe, and one of the principal tributaries of the Danube. It lies wholly within the Austrian empire, extending between lat. 46° 50′ and 45° 30′ N., and long. 12° 20′, and 19° E. It rises on the Toblack-heath, near the E. extremity of the Tyrol, in what is called the *Puster-thal*, about 17 m. E.S.E. Brunscken, and runs at first E.N.E. to Lienz, where it is augmented by the Isl. From this point its course generally is E.S.E. to its mouth in the Danube, near the castle of Erdödy, 12¼ m. E. Essegg. It traverses Carinthia and Styria, and afterwards forms the boundary between Croatia and Slavonia on the S., and Hungary Proper on the N. It receives the Möhl, Gurk, Lavant, and Mur (its chief affluent) on the left; and the Gail, Dran, Bedyna, and some other rivers of minor importance on its right side. Lienz, Greifenburg, Spital, Villach, Völkermarkt, Marburg, Pettau, Warasdin, and Essegg, are the chief towns situated on its banks. It runs through a mountainous country and narrow valleys, as far as Warasdin, but thence onward its course is through a plain country. Its entire length is estimated in the *Oesterrische National Encyclopädie* at 290 m.; but by Cannabich and Berghaus at 340 m.: the latter estimate is perhaps nearest the truth; the former appears intended to refer only to the navigable part of the river, which extends as high as Villach. In its upper part the Drave is extremely rapid; its navigation in many parts is greatly impeded by the number of trees torn down by its violence, which afterwards block up the current. At present this river is made but little use of for commercial purposes; but in case of an extensive steam-navigation of the Danube, its value as a means of transit would be greatly enhanced. It is said that the Austrian government has it in serious contemplation to form a communication between the Adriatic and one of the great tributaries of the Danube; and if so, this would probably be the one chosen, the country between the Upper Drave and the sea apparently presenting the fewest obstacles to such an undertaking. (See *Turnbull's Austria*, ii. 376, 377.) The author of *Germany and the Germans*, vol. ii., gives a spirited sketch and description of Hungarian peasants descending the Drave on rafts of empty barrels, after having disposed of their wine in the mountains of Carinthia

DRESDEN, a city of Germany, cap. of the kingdom of Saxony, on both sides the Elbe, 61 m. E.S.E. Leipzig. 233 m. E.N.E. Frankfort on the Mayne, 220 m. N.N.E. Munich, 100 m. S. by E. Berlin, and 230 m. N.W. Vienna; lat. 51° 2′ 50″ N., long. 13° 14′ E. Pop. in 1847, according to the official returns, 89,243, of whom about 84,000 were Protestants, and the residue R. Catholics and Jews. It is more than 400 feet above the level of the sea, and is delightfully situated in the midst of the Saxon wine district, occupying the most beautiful and richly-cultivated portion of the valley of the Elbe. The banks of the river have, however, a very different appearance. The right is abrupt, rocky, and woody, and, having a S. aspect, is in great part covered with vineyards. The left is more flat, presenting a succession of meadows, groves, gardens, and orchards, studded with numerous villages; the whole landscape gradually rising till it becomes united with the distant Erze-Gebirge mountains. The city itself has been termed the "German Florence," and is certainly, on the whole, very handsome; though, when examined in detail, the traveller's anticipations will, in many respects, be disappointed.

It is divided into the Old and New Towns, — the first on the right or S. bank of the river, and the latter on the N. bank; and has 4 suburbs, extending all round the Old Town, of which that called Friederickstadt, lying to the W. of the small river Weiseritz, near its confluence with the Elbe, is the best built and most important. Immediately adjoining the town, are the *Neue Anlagen*, consisting of public walks and gardens; and N.E. from the latter is the *Neue Anbau*, with many projected streets and buildings, but not so compact as to deserve the name of suburb. The Old and New Towns are connected by two bridges. The first, a noble stone bridge of 16 arches, 1,420 ft. in length, and 36 ft. in width, is considered the longest and finest structure of the kind in Germany. It has a foot pavement and an iron balustrade on each side, with a bronze crucifix on its centre pier, and an inscription commemorative of the destruction of part of the bridge by Marshal Davoust, to facilitate his retreat in 1813, and its restoration in the same year by the Emperor Alexander of Russia. The other bridge, forming a portion of the railway leading from Leipsic, through Dresden, to Prague, was to be opened in the course of the present year (1850). The Old Town was formerly provided with fortifications; but these were demolished by the French in 1810, and the place they occupied is now laid out in public walks. That portion of these walks facing the Elbe is called the Brühl Terrace, and is approached from the foot of the bridge by a grand flight of broad steps. From its own beauty, and the grandeur and variety of the scenery it commands, it is at all times a favourite resort of the inhabitants. As in most other fortified towns, the streets in the Old Town are narrow, the houses lofty and gloomy looking, and the squares irregular. In the construction of the buildings, generally, which are chiefly of sandstone, strength has been more studied than elegance: the principal of the public edifices are, however, in this part of Dresden. The Schloss (castle), or royal palace, opposite the bridge, is a large antique and ungainly looking building, having the appearance of a fortress rather than of a royal residence; but, internally, it is in every respect worthy of its destination. It has halls of audience, ceremony, and various other state rooms, a royal library, the hall in which the Saxon legislature is opened, and a Catholic chapel with a tower 378 ft. high. It contains the celebrated state treasury, or Green Vault (*Grüne Gewolbe*), which occupies a suite of vaulted apartments on the ground floor. They contain an immense collection of precious stones, curiosities, and objects of *virtu*, and have doubtless cost an immense sum, though we do not suppose they are worth *one*, much less "several millions," sterling. Adjoining the royal palace is the Chamber of Archives, and near it the Palace of Princes, containing a handsome chapel, gallery of portraits, library, &c. On the opposite side of the royal palace, and also communicating with it, is the far-famed gallery of paintings, the grand attraction of Dresden, being not only the finest collection in Germany, but the finest, taking it as a whole, to be found N. of the Alps. Amongst its valuable specimens of art, "not one of which can be pronounced bad, few mediocre, numbers good, and several incomparable," are the celebrated *Madonna di San Sisto* of Raphael; the *Notte*, and five other works, by Correggio, in his best style; the *St. Cecilia* of Carlo Dolci; the *Christo della*

Moneta, and a *Venus*, by Titian; other paintings, by Paul Veronese, Annibal Caracci, Guido, &c.: altogether 356, by Italian artists. In the works of the later German and Flemish masters, this gallery is also extremely rich: it contains magnificent specimens of Rembrandt, Rubens, Vandyke, Teniers, Hans Holbein the younger, Ruysdael, Wouvermans, &c. Of the French school, there are several paintings by Claude, Nic. Poussin, &c.; and beneath the gallery there is a fine collection of plaster casts of the most famous statues, made under the superintendence of Raphael Mengs. This gallery, founded by the Elector Augustus II., has remained untouched and unharmed amid the innumerable revolutions that have, in the interval, convulsed Germany. When Frederick the Great bombarded Dresden, battered down its churches, and laid its streets in ruins, he ordered the artillery to keep clear of the picture gallery; and Napoleon treated Saxony with so much consideration, that not one of her pictures made the journey to Paris!

The Zwinger, erected in 1711, and originally designed as merely the vestibule to a new palace, intended to be built by Augustus II., is a fine group of buildings, surrounding an inclosure planted with orange trees, and forming a favourite promenade. It contains the armoury (second only to the Ambras collection at Vienna), cabinets of natural history, mineralogy, and mathematical and philosophical apparatus, and a gallery of engravings, which possesses at least 200,000 specimens of that art. (*Cannabich.*) Immediately contiguous to one of the wings of the Zwinger, is the grand opera-house, a building capable of accommodating 8,000 spectators. It communicates, by a covered way, with the Palace of the Princes, but is now only used for court festivities: theatrical performances take place in a smaller theatre, near the Catholic church; the latter, occupying a very prominent situation between the royal palace and the bridge, is a large structure in the Italian style. Externally it is profusely decorated, and generally considered deficient in taste; but internally it is chaste, elegant, and imposing. It contains an altarpiece by Raphael Mengs, and a fine organ by Silberman: the music in this church is celebrated throughout Germany. As a whole, however, it is decidedly inferior in elegance to the *Frauenkirche* (church of Our Lady, or St. Mary) in the new market, a beautiful stone building, adorned with a cupola, constructed on the model of that of St. Peter's at Rome, 388 German ft. high. The other churches do not demand particular notice. The remaining principal edifices in the Old Town are, the Brühl Palace, at present inhabited by Prince Maximilian, with a collection of 50 landscapes by Canaletto; the mint, arsenal, medico-chirurgical school, house of assembly, royal guard-house — a new and beautiful specimen of Grecian architecture, new post-office, trades' hall, hall for the annual exhibition and sale of the works of Saxon artists, &c. The town hall is the chief ornament of the old market, and the only regular square in the Old Town. The New Town is altogether much better laid out, and contains fine squares, spacious streets, and elegant fauxbourgs. In this quarter stands the Japanese palace, now called the *Augusteum*, in honour of its founder, Augustus II. This magnificent palace, now appropriated wholly to public purposes, is beautifully situated on the banks of the Elbe, amid pleasure grounds, which form a most agreeable promenade for the citizens. It contains the museum of antiquities and modern statuary, which occupies 10 saloons, and is enriched by some of the finest antique statues in Germany; a cabinet of coins; a public library with 250,000 volumes, 4,000 MSS., 100,000 pamphlets, and 20,000 maps*; and the celebrated porcelain cabinet. The last is a collection of more than 60,000 pieces of China, including the finest Meissen, Chinese, Japanese, Italian, and Sèvres ware, and specimens of the manufacture of every country, altogether filling 18 apartments. Here are to be seen the three splendid China vases that Augustus II. purchased of the Elector of Brandenburg, at the price of a regiment of dragoons fully equipped!

Through the centre of the New Town runs abroad handsome street, planted with linden trees, near the upper end of which are some extensive infantry and cavalry barracks. The other chief public buildings are, the commandant's residence, several military academies, the town hall, and the church of the Trinity. The market place is embellished with an equestrian statue of Augustus II., in ancient Roman costume, with a "full-bottomed wig!" The Friederickstadt contains the Marcolini Palace, the Roman Catholic cemetery, &c.; but this quarter is mostly inhabited by the working classes. The Pirna suburb boasts of Prince Anton's handsome villa and extensive gardens; and the Wilsdruf suburb has the palace, gardens, and observatory of Prince Maximilian. Dresden has a great number of literary and scientific institutions, and establishments devoted to education. Among these are an academy of arts, two colleges, a botanic garden; schools of medicine, surgery, and veterinary medicine; a high school, 2 normal schools, numerous free elementary schools, with schools for the reformation of depraved children, deaf and dumb, blind, &c.; it has also many charitable institutions, including orphan asylums of various kinds, a foundling hospital, and 5 other hospitals. Amongst other conveniences, this city possesses excellent public baths of all kinds, the prices of admission to which being low, the poorest person is able to indulge in the use of what is found to contribute materially to the public health.

Dresden has no very considerable external trade. It has numerous painters, designers, sculptors, engravers, and other workers in the fine arts; and some manufactures of woollen and silk, leather, gold and silver articles, carpets, sealing wax, maccaroni, white lead, straw hats, artificial flowers, musical, mathematical, and philosophical instruments, with a bomb and cannon foundry, and a large sugar refinery. What is called Dresden china is not made in this city, but at Meissen, 14 m. distant. The greater proportion of its external commerce has hitherto consisted in its transit trade by the Elbe; its general trade is, however, increasing, and, since 1826, a wool market has been established.

Few European capitals have such pleasant environs as Dresden. Nearly all the roads leading out of it, and especially from the New Town and Friederickstadt, are planted with rows of trees. The Elbe to the N.W. of the city is lined on either side with fine avenues for a considerable distance. S.E. of the Pirna suburb, is the *Grosse Garten*, a large park filled with fine trees, near which is the small village of Räcknitz, and the monument erected to Moreau on the spot where he received his death wound, 27th Aug. 1813. On the right bank of the Elbe is the *Linkbad*, a hotel surrounded by some beautiful gardens, containing a theatre, &c. about 1 m. from the New Town; and 2 m. beyond this, is *Findlater's Vineyard*, a villa and grounds laid out with much taste by a deceased Scotch nobleman. To these different places people of all ranks delight to resort, which they do especially on Sunday afternoons, to take refreshments and dance, or listen to the excellent bands of music with which all the public places are provided.

Dresden and its environs have been the scene of some of the most important conflicts in modern warfare, particularly on the 26th and 27th of August, 1813, when Napoleon defeated the allies under its walls. This city has been the favourite residence of many distinguished literary men; in its immediate neighbourhood, Körner lived, Schiller wrote great part of his *Don Carlos*, and Weber composed his highly celebrated opera *Der Freischütz*. Its inhabitants generally are great lovers of the fine arts, and devoted to music; but they are not so much attached to literature or politics as the inhabitants of Berlin or Leipzig. Five newspapers are published daily, weekly, and several times a week in Dresden, but neither of them is political. The citizens are particularly remarkable for their industrious and orderly habits, and early hours; almost every body being in bed by half past ten at night, and up at six in the morning (*Berghaus, Allg. Länder und Volkerkunde*, iv. 187,188.; *Cannabich, Lehrbuch*, 356—358.; *Murray's Handbook; Strangs, Germany in* 1831; *Germany and the Germans in* 1834—1836.)

DREUX, a town of France, dép. Eure-et-Loire, cap. arrond., on the Blaise, a tributary of the Eure, which partly encircles it, 20 m. N.N.W. Chartres. Pop. (*ex. com.*) 5,394. It stands at the foot of a hill, on which are the ruins of an ancient castle, which belonged to the counts of Dreux: it is well built, and has a fine promenade along the river's bank, an hospital, public baths, a theatre, town-hall, and church. Louis Philippe, when Duke of Orleans, built in the castle a chapel, which he intended for his family burial-place. It is the seat of tribunals of primary jurisdiction and commerce, and of a communal college. Near it, in 1562, was fought the celebrated battle in which the Prince of Condé, then at the head of the Protestants, was taken prisoner. Dreux was the native place of Jean de Rotrou the tragic poet, and of Philidor, the famous chess-player. (*Dict. Géogr. Univ.*)

DRIFFIELD (GREAT), a market-town and township of England, E. Riding, co. York, near one of the sources of the Hull, 27 m. E. by N. York. Area of township, 4,910 acres. Pop. of do., 2,752. The town, at the foot of the Wolds, consists chiefly of one long street, parallel to which flows the brook above noticed, which, at the S. extremity of the town, is enlarged into a navigable canal that joins the Hull below Frodingham bridge. All Saints' church is an ancient structure in the Gothic style. The Independents, Wesleyan, and Primitive Methodists, and Baptists, have places of worship. There is a national school for 100 children, and a dispensary. The chief officer is a constable appointed annually: a court for the recovery of small debts is held here. The town is a station for receiving votes in elections of members for the E. Riding.

* Authorities differ very widely as to the contents of this library: the above seem to be the numbers on which most reliance may be placed.

Market-day, Thurs., and well attended cattle markets every fortnight. Branches of the Yorkshire Agricultural and Commercial Bank, of the York Union Bank, and two private banking houses, are established here.

DROGHEDA, a parl. bor. and sea-port town of Ireland, being a co. in itself, but locally in the cos. of Meath and Louth, prov. Leinster, on the Boyne, 4 m. above its embouchure in the Irish Sea, and 25 m. N. Dublin. From the time the English settled in Ireland, this town, formerly called Tredagh, was considered of great importance. Parliaments have been frequently held in it, and it was made the site of a university, but the privilege was not acted upon. In 1649 it was stormed by Cromwell, who put its inhabitants to the sword, with the exception of a few that were transported to the American settlements. Pop., in 1821, 18,118; in 1831, 17,365. Of the latter number 15,663 were R. Caths., 1,437 Prot. of the estab. church, and 265 Prot. Diss. Pop., in 1841, 19,260.

The Boyne divides the town into two unequal portions, the larger of which, on the N. bank of the river, is connected with the lesser by a bridge of 3 arches; part of the ancient walls, and the gate of St. Lawrence, still remain, but the buildings now extend considerably beyond them. "It is neither flourishing nor increasing, its manufactures having fallen off, and its pop. exhibits a decrease of nearly 800 within the 10 years ending with 1831." (*Boundary Report.*) The churches within the town are St. Peter's in the N. div., St. Mary's in the S., and a chapel of ease. The R. Cath. chapel of St. Peter, considered the cathedral of the archdiocese of Armagh, is a large and elegant building, as is also that of St. Mary. There are friaries of the Augustine, Dominican, and Franciscan orders, and convents of the Dominicans and the Presentation. The Presbyterians and Wesleyan Methodists have places of worship. There are here a classical school on the foundation of Erasmus Smith, and other public schools, which give instruction to about 1,050 pupils. It has also an infirmary, a workhouse for the accommodation of 940 inmates, a linen hall, a savings' bank (which, on the 20th Nov. 1848, had 28,157*l.* of deposits), a building for the widows of Protestant clergymen, and an almshouse. There is an infantry barrack in the town, and another in the vicinity of Richmond Fort. It is in general pretty well built: the streets are paved, lighted, and cleaned, by a committee of the corporation: but its appearance is unfavourable; and a few years ago the streets swarmed with beggars. Water is supplied from a well in the town.

Drogheda originally consisted of two distinct corporations, one on the side of Meath, the other on that of Louth. These were united under Henry IV., who granted the newly formed bor. a charter, under which it is still regulated. Its jurisdiction extends over 5,780 acres. The corporation consists of 6 aldermen and 18 common-councilmen, elected by the 3 wards into which the town is divided. The corporation estates produced, in 1845, 3,802*l.*; burgh rev., in 1847, 2,918*l.* The assizes are held twice a year, and general sessions of the peace by the mayor and recorder in January, April, June, and October. Petty sessions are held every fortnight. The gaol is a well arranged building. It has 6 wards and 16 cells, for an average number of 26 prisoners. The bor. sent 2 mems. to the Irish H. of C.; and since the Union it has sent 1 mem. to the imperial H. of C. Registered electors (1849–50), 579.

An extensive manufacture of coarse linens was formerly carried on here, which gave way to that of cottons; but the latter is nearly extinct, while the former has revived. Flax spinning, which employs 3 large mills and above 1000 hands, is at present (1850) the principal branch of industry carried on in the town. It has, also, an extensive foundry, where steam engines and other articles are made; with numerous corn-mills, salt-works, breweries, tanneries, soap-works, &c. Drogheda ale is in much demand both in England and in the foreign market.

The chief trade, which consists in the export of agricultural produce and of linens, is carried on with Great Britain by means of steamers, 6 of which ply regularly between the port and Liverpool. The cross-channel trade and coasting trade employ also many sailing-vessels. The greatest part of the foreign trade is with the British colonies in N. America: timber is the principal article of import. The harbour and river have undergone several improvements, by means of which vessels of 300 tons may now discharge at the bridge, and barges of 70 tons may proceed inland as far as Navan by means of the Boyne navigation. The customs' duties in 1848 were 17,515*l.*; the excise duties for 1848 were 141,439*l.*; the post-office revenue in 1842 amounted to 685*l.*, and in 1848, to 960*l.*

A railway from Drogheda to Dublin was opened in 1844, which has since been extended to Dundalk. The markets are on Thursdays and Saturdays. The corn-market is an elegant building. Fairs are held on March 10., April 11., May 10., June 22., Aug. 26., Oct. 29., Nov. 21., and Dec. 19. Horses and wool are the chief articles for sale.

Account of the Quantities and Value of the Articles exported from Drogheda in 1835.

Articles.		Quantities.			Estimated Value.
		Number.	Tons.	Cwt.	£
Corn, meal, and flour		-	23,813	4	256,852
Butter		-	75	0	4,000
Flax and tow		-	350	0	17,200
Eggs	crates	2,255	676	10	37,500
Linen	yards	900,000	150	0	30,000
Cows and oxen	head	9,216	3,072	0	136,240
Horses	—	168	84	0	2,520
Sheep	—	27,961	847	6	27,961
Hogs	—	94,343	6,289	11	233,858
Other Articles		-	-	-	17,796
Total value		-	-	-	766,027

DROITWICH, a parl. bor. and market town of England, famous for its salt springs, co. Worcester, 7 m. N.E. by N. Worcester, 118 m. N.W. London. Pop. 1841, 2,832. Though locally in the upper division of the hund. of Halfshire, it has exclusive jurisdiction, and is pleasantly situated on the side of a narrow valley, at the bottom of which runs the Salwarp, on the road from Birmingham to Worcester. It has 3 parishes, and 3 churches, of which St. Andrew, rebuilt after being destroyed by fire, in 1293, is the most ancient and interesting. The town was originally incorporated by charter from John, confirmed by Henry III. and some of his successors, previously to the charter of *Inspeximus*, granted by James I., which is the governing charter. The corporate body consists of 2 bailiffs, burgesses, a recorder, 2 justices, a town clerk, and other officers under the title of the Corporation of the Salt Springs of Droitwich. The bailiff, his predecessor, and the recorder, are justices of the peace within the borough and bailiwick of Droitwich. A court of record is held every Thursday before the bailiffs and town clerk, for the recovery of debts under 10*l.*, and sessions quarterly, by the bailiffs, recorder, &c. The bor. returned 2 mems. to the H. of C. under Edward I., and to the parliaments held in the 2d and 4th Edw. II., from which period the privilege ceased until 1554, since which time it regularly returned 2 mems. until the passing of the Reform Act, which deprived it of one of its members. Its boundaries were at the same time considerably extended, and the new parl. bor. had, in 1841, a pop. of 6,588. Registered electors, in 1849–50, 338: the bailiffs are the returning officers. The election of members for the E. division of the co. is held here. There are 3 chapels: a chapel of ease, 1 for Independents, and 1 for Wesleyans; an hospital for 38 aged men and women, founded by Henry Coventry, in 1686; and a charity school for 40 boys and 40 girls, who are educated and clothed, and on leaving school apprenticed. The salt trade is the main support of the place; malting and tanning are also carried on, and there are some mills for grinding corn.

Droitwich has been celebrated from a very remote period for its brine springs, or *wiches*, a name of Saxon origin, though its meaning be not well known. (*Campbell's Political Survey*, i. 76.) Reference is made to these springs in Domesday book, and it is certain that they were known, and that salt was obtained from them, long before its compilation, as is evinced by the grants by different Saxon kings to the church of Worcester, in all which the wiches are specially mentioned. (*Camden's Britannica, Gibson's ed.*, i. 160.) Most probably indeed they had been known to, and wrought by, the Romans. The springs are in the middle of the town, and the salt is obtained by boiling and evaporating the brine. About a century ago the usual depth of the brine-pits was about 30 ft., but now they are generally sunk to a much greater depth, and a far more copious supply of brine is obtained. An ounce of brine is said to contain 140¼ grains muriate of soda, 2¼ grains sulphate of lime, 2¼ grains sulphate of soda, and a trace of muriate of magnesia. In 1820, when a high duty was laid on salt, the produce of the Droitwich springs was about 10,000 tons a year; but it has since been trebled or more. A canal from the Severn to Droitwich is used in the conveyance of the salt for shipment, and of the coals made use of in the works.

DROME, a dep. of France, in the S.E. part of the kingdom, formerly a part of the prov. of Dauphiny, having N. and E. Isère, E. the Hautes and Basses Alpes, S. Vaucluse, and W. Ardèche, from which last it is separated by the Rhone. Length, N. to S., about 85 m.; greatest breadth, 50 m. Area, 653,557 hectares. Pop. (1846) 320,075. This dep. is naturally divided into two portions, an easterly or mountainous, and a westerly or plain region. The former includes about 400,000 hectares, or nearly two thirds of the total surface, and is inter-

sected by ramifications of the Alps, with a mean elevation varying from 4,000 to 5,000 ft. The loftiest summits attain to about 5,750 ft. The chief rivers, after the Rhone, are the Isère and Drôme, but the latter is not navigable. There are a number of streams, which, though usually small, become during the melting of the mountain snows devastating torrents. In the elevated parts it is almost always cold, while along the banks of the Rhone the summer heats are very overpowering: the climate is, however, generally healthy. In the lower parts of the dep. there are about 100,000 hectares of rich land, the rest being generally of inferior fertility. In 1834, the cultivable lands comprised 259,100 hectares; vineyards, 23,996 do.; and forests, heaths, and wastes, 308,550 do. Wheat, maize, and oats are the chief kinds of grain cultivated; but the corn grown is insufficient for home consumption. The other articles of culture are very various, including pulse of different kinds, hemp, walnuts, olives, chestnuts, almonds, madder, and other dyeing plants and fruits. The vine culture is perhaps the most important branch of rural industry, and about 150,000 hectolitres of wine of the best quality are exported annually. The finest growths are the red wines of *Hermitage, Crozes, Merceurol, Gervant, &c.*, and the white wines of *Merceurol* and *Chanoscurson*, and the *Clairette de Die*. "Ce dernier vin, doux, spiritueux, et d'un goût agréable, mousse comme le champagne, mais il ne conserve ces qualités que pendant deux ans." (*Jullien.*) The genuine Hermitage bears a comparison with the finest growths of the Bordelais and Upper Burgundy. The hills, called *Mas*, which produce it, have a S. aspect, and are mostly covered with a thin calcareous soil: they are so steep, that the mould has to be sustained by rows of low walls. The best growths of Hermitage are said by M. Jullien to be "corsés moelleux, fins, et délicats; ils ont une très-belle couleur, beaucoup de spiritueux, avec une sève et une bouquet aromatique tres-prononcés et de plus agréable." (*Topographie*, p. 190.) The wine of the *Mas of* Besas, which differs in several respects from the others, is principally bought up by the Bordeaux merchants to give body and flavour to the secondary clarets. The rearing of silkworms is carried on to a great extent, and in 1834 there was a greater number of mulberry trees in Drôme than in any other deps. of France, Gard alone excepted. The quantity of cocoons obtained in 1835 amounted to 1,479,029 kilogr. A great many bees are kept, and the honey is of very good quality. The middle mountain region is covered with woods of oak, beech, fir, &c., supplying excellent timber; above these there are extensive pasture-lands, feeding in summer numerous flocks of sheep and goats, many of which come from Provence. In 1830 the dep. had 377,000 head of sheep. Mines of iron, lead, and coal, and quarries of marble, granite, rock-crystal, limestone, &c., are wrought. Manufactures not very important; the chief are those of woollen cloth, serges, silks and silk-twist, coloured linens, stockings and gloves at Valence, hats, paper, leather, brandy, oils, steel articles, chemical products, and earthenware. The trade is principally in the products of the soil, which include excellent truffles. Drôme is divided into 4 arrondissements, and sends 4 mem. to the Cham. of Dep. No. of electors, 1,885. Chief towns, Valence, the cap., Montelimart, and Crest. Total public revenue (1831), 6,013,156 fr. Drôme was annexed to France in 1342. (*Hugo*, art. *Drôme*; *French Official Tables.*)

DRONTHEIM. *See* TRONDYEM.

DUBHOY, or DUBBOI, an inl. town of Hindostan, prov. Gujrat, dom. of the Guicowar, cap. of a pergunnah containing 84 villages, 38 m. N.E. Barroach; lat. 22° 9′ N., long. 73° 25′ E. Toward the end of the last century it contained 40,000 inhab., a few of whom were Mohammedans, and none Parsees. It is nearly an exact square, and has been elaborately fortified, though only a portion of its works remains in any degree of preservation. The ancient walls have been built entirely of large square stones: the city gates are all strong and beautiful, especially the E. portal, called the "Gate of Diamonds;" which, together with the temple connected with it, present a most complete and elegant specimen of Hindoo taste. "In proportion of architecture, and elegance of sculpture," says Mr. Forbes, "it far exceeds any of their ancient structures I have met with, and the groups of warriors on horseback, on foot, and on fighting elephants approach nearer to the classical bas-reliefs of Greece than any performances in the excavations of Elephanta." Within the walls there was a magnificent tank, ¼ m. in circuit, lined with hewn stone, and with a flight of steps all round, and partly supplied with water by means of a stone aqueduct from receptacles without the walls. In the district around Dubhoy the soil is generally rich and loamy, producing fine crops of rice, jowaree, bajree, &c.; various legumes, cotton, sesamum, palma Christi, sugar-cane, hemp, flax, ginger, plants for dyeing, &c. (*Hamilton*, i. 528.; *Mod. Trav.* x. 162—164.)

DUBLIN, the metropolitan co. of Ireland, on the E. coast of the island, having E. the Irish Sea, or St. George's Channel; S. Wicklow; W. Meath and Kildare; and N. Meath. Area, 248,631 imp. acres, of which 10,812 are unimproved, mountain, and bog. Principal river, the Liffey, by which Dublin is intersected. Surface mostly flat or undulating; soil shallow, and naturally poor, the subsoil being a retentive clay. Agriculture is by no means in an improved state; there is a want of a proper rotation and drainage, and white crops still not unfrequently follow each other. A good deal of land in the vicinity of Dublin is appropriated to garden culture. Average rent of land, exclusive of that portion called the co. of the city of Dublin, and of country houses, 22*s*. an acre; being as high an average rent as is paid by any co. in Ireland. Property a good deal subdivided. Farms near the city small, but larger at a distance. In 1841 Dublin had 42,221 inhab. houses, and 372,773 individuals, of whom 170,930 were males and no fewer than 202,420 females.

DUBLIN, a city, the seat of a University, and sea-port of Ireland, of which it is the cap., co. Dublin, on the E. coast of the island, at the mouth of the Liffey, by which it is intersected; 292 m. W.N.W. London; 138 m. W. Liverpool; 65 m. W. Holyhead; lat. 53° 23′ 2″ N., long. 6° 20′ 5″ W.

Pop. in 1682,	64,483	Pop. in 1813,	176,610
1728,	146,075	1821,	185,881
1753,	128,570	1831,	203,650
1777,	138,208	1834,	240,300
1798,	182,370	1841,	232,726

Of the population in 1834, as returned by the commissioners of public instruction, 61,800 were members of the estab. church, 3,500 Prot. dissenters, and 175,000 R. Catholics. The city is supposed to be the *Eblana* of Ptolemy, and was called by the native Irish *Ballyath-cliath*, "the town on the ford of hurdles;" and by the Danes *Divelin* or *Dubhlin*, "the black pool," from its vicinity to the muddy swamps at the mouth of the river. At the period of the English invasion under Strongbow, A.D. 1169, the city was of very limited extent; its buildings being confined to the summit and declivities of a hill on the S. side of the Liffey, and enclosed by a wall little more than 1 m. in circ. For many years afterwards its increase in extent and population was extremely slow. At the commencement of the 17th century its suburbs extended but a very short distance beyond its ancient walls. In the wars of 1641, the additional works thrown up for the defence of the place lay between the castle and the college, which was then considered as outside the city. After the Revolution, the progress of improvement was comparatively rapid: new lines of streets were opened, particularly to the N. and E.; many of the confined old avenues were enlarged; several squares were laid out, and the buildings, both public and private, were constructed with greater regard to architectural elegance as well as internal convenience. An avenue, called the Circular Road, which nearly surrounds the city, encloses an area of 1,264 acres; of which, 785 are on the S., and 478 on the N., side of the Liffey. The communication between its two divisions is maintained by 9 bridges; 7 of stone, and 2 of iron; one of which is for foot passengers only. The river is bordered on each side by broad and well-constructed quays.

The figure of the city is elliptical, its longer axis extending along the line of the river, from W. to E., 2¼ m.; its shorter, from N. to S., nearly 2 m. Sackville Street, on the N. side, is remarkable for its great width and for its buildings; St. Stephen's Green, the largest of the squares, has in its centre an equestrian statue of George II.; College Green, an irregular and confined area near the centre of the city, where most of the main avenues meet, contains some of the finest public buildings, and has in its centre the equestrian statue of William III.,

so famous in Irish party history. The other public monuments of note are, Nelson's Pillar, in Sackville Street; the Wellington Memorial, a lofty obelisk in the Phœnix Park; an equestrian statue of George I., and pedestrian statues of George III. and IV., Dr. Lucas, and Messrs. Grattan and Drummond.

To a traveller frequenting only the principal streets, Dublin appears to be one of the handsomest cities in Europe. The public buildings are all on a grand scale, and the principal streets and squares are capacious, handsome, and well laid out. But there is, notwithstanding, especially in the older parts of the town, a vast number of crowded, dirty thoroughfares, with mean, wretched houses, destitute of all the elements of comfort and cleanliness. Wealth and poverty, comfort and misery, are brought into immediate and painful contrast, and Dublin may, in this respect, be taken as a fair representation of the island of which it is the capital.

Dublin Castle stands on the E. verge of the hill upon which the city was primarily built. It was originally a square fortress, with towers at the angles; it now consists of a quadrangle, 280 ft. by 130, surrounded with buildings containing the state apartments of the lord-lieutenant, and accommodations for the meetings of the privy council and other public functionaries. Attached to it is the viceregal chapel, a small but elegant structure of florid Gothic architecture. Offices for the ordnance and quartermaster-general's departments, and for the constabulary, are also attached to it. A guard of honour, of cavalry and infantry, is mounted here daily. The lord-lieutenant's usual place of residence is in the Phœnix Park, an enclosed tract of about 1,750 acres, of which about 1,300 acres are open to the public, and serving also as a place of exercise for the troops of the garrison. In it is a powder magazine, a barrack, the offices of the trigonometrical survey of Ireland, an institution for soldiers' orphans, a military infirmary, and residences for some of the inferior officers of the government. Near its centre is a pillar, surmounted by a phœnix rising out of the flames.

The head-quarters of the military establishment for Ireland are at the Royal Hospital, Kilmainham, originally a priory of the Knights Templars, which, after the suppression of that order, was granted to the Knights of St. John of Jerusalem; and, having become the property of the crown on the dissolution of the monasteries, was converted by Charles II. into an hospital for superannuated and disabled soldiers. The building is a large square, three sides of which contain the lodgings of the veterans, and the fourth a chapel, a dining hall, and a suite of apartments for the commander of the forces.

The principal barracks are on the N. side of the city, near the Phœnix Park. They consist of several large quadrangles, containing accommodations for a general officer and his staff; and for 2,000 men, cavalry and infantry. There are also barracks at Portobello, for cavalry; at Richmond Bridge, the recruiting depôt, and Gt. George's Street, for infantry; and at the Pigeon-house Fort, and Island Bridge for artillery; having in all accommodation for 5,500 men. The military infirmary in the Phœnix Park, near its W. entrance, can receive 250 patients.

The supreme courts of justice are held in a magnificent edifice on the N. Quay, consisting of a central circular hall, opening into the courts of Chancery, Rolls, Queen's Bench, Exchequer, Common Pleas, Nisi Prius, and Admiralty; and wings, in which are record repositories, and offices for the despatch of legal business. The King's Inns, or inns of court, which are at the N. extremity of the city, contain halls for meetings and dining; the courts, offices, and record repositories of the Prerogative and the Consistorial courts of the see of Dublin, and the Registry of Deeds: near the main building is the library, containing a large collection of books. The privilege granted it under the Copyright Act of receiving a copy of every work published in the United Kingdom has been commuted for an annual grant, applicable to the purchase of books, at the discretion of the benchers. The number of barristers on the rolls of the courts is about 800, and of solicitors and attorneys, 1,600; but many of those whose names are entered never practised, and many others have withdrawn from the active duties of their respective professions.

The municipal boundary of the city differs considerably from that of the police and electoral franchise. On the E. side it extends to the village of Blackrock, 5 m. from the centre of the city; while on the N., W., and S., several parts of parishes, in close contiguity with the rest of the city, are beyond it. The extent of the franchise, which was accurately laid down at a very remote period, is still ascertained by means of a triennial perambulation by the civic authorities. The limit on the sea side is determined by the place where a javelin, thrown by the lord mayor standing at low-water mark, falls into the water.

Under the new Municipal Act the city is divided into 15 wards, and the corporation consists of 15 aldermen, one of whom is elected Lord Mayor, and 45 councillors. The Lord Mayor is the civil and military governor of the city, in which he ranks next after the lord-lieutenant: he is admiral of the ports of Dublin and Baldoyle, and a justice of the peace; he presides at the court of city quarter sessions; sits on the bench at the commission of Oyer and Terminer; holds a separate court for trial of petty offences; is chief judge of the lord mayor and sheriffs' civil court; and has the regulation of the public markets, and the inspection of weights and measures. He is personally distinguished by wearing a gold chain, called "the collar of S S," and has a cap of dignity, and a sword and mace, borne before him on public occasions; he also receives an annual salary of 1,320*l*., Irish currency, besides fees from various sources to a considerable amount. He resides in a plain old-fashioned brick building; attached to which is a large circular hall, erected for the purpose of entertaining George IV. in 1821, but without any pretensions to exterior architectural beauty. The recorder, when elected by the aldermen and approved by the common council, retains his office during good behaviour. He is the legal adviser of the corporation, and presides in the city criminal court. His salary is 1,983*l*. per annum. The corporate meetings are held in the Assembly House, a plain building, originally erected for the exhibition of pictures.

The corporation holds a criminal court four times a year for minor offences; capital cases being referred to the superior judges. The court must be opened by the lord mayor and two aldermen; but, virtually, the recorder is the ruling judge. The lord mayor's court holds pleas of personal actions above 2*l*.; those under that amount are decided in the Court of Conscience, over which the lord mayor of the preceding year presides: its meetings take place in an apartment of the Assembly House. The recorder presides in the Civil Bill court, which is held four times a year, with power to decide by summary process in all cases of debt above 2*l*. arising within the city or liberties. The judicial business is transacted chiefly at the sessions-house; where also elections for the city representatives in parliament take place. The bor. revenue, arising from rents of lands and houses, tolls, customs, and all other sources, amounted in 1845 to 34,602*l*., and in 1847 to 32,075*l*.

The city returns 2 and the University 2 mem. to the H. of C. City const in 1849-50, 16,000? University const. 1,700?

The prisons for criminal offences are,—1. Newgate, or the city gaol, a massive square building, for untried prisoners, felons condemned to death, who are executed from a balcony in its front, and convicts sentenced to transportation; there is also a ward for debtors under coroner's process: 2. Richmond Bridewell, to the S. of the city, for adult males sentenced to imprisonment and hard labour: 3. Smithfield Penitentiary, for juvenile male offenders: and, 4. Grangegorman Penitentiary, N. of the city, for females under sentence of imprisonment by the civic courts, and for female convicts for transportation, from all parts, previously to their embarkation. The debtors' prisons are,—1. the Sheriffs' Prison, near Newgate, for debtors not arrested under civic writs: 2. the Four-courts Marshalsea, for debtors under process of the superior courts: and, 3. the City Marshalsea, for those under process of the civic courts.

Analysis of the Dublin criminal returns for 1848.

	Males.	Females.	Total.
Taken into custody	26,322	18,912	45,234
Discharged by magistrates	7,385	6,146	13,531
Summarily convicted	17,838	12,073	29,911
Committed for trial by jury	1,099	693	1,792
Convicted by jury	684	383	1,067
Sentences.—Transportation for life	3	—	3
— — 15 years	2	—	2
— — 14 years	2	—	2
— — 10 years	18	—	18
— — 7 years	78	25	103
	103	25	128
Imprisonment, 2 years and upwards	3	—	3
— 1 year to 2 years	73	13	86
— 6 months to 1 year	133	62	196
— 1 to 6 months	321	248	569
— Under 1 month	23	3	26
	553	326	879
Fined, held to bail, &c.	28	5	33

The supply of water was originally drawn from the Dodder; but in consequence of its insufficiency, arising from the enlarged demands of an increasing population, additional supplies have been procured from the Grand and Royal Canal companies, at the rate of 12½ per cent. from the former, and of 15 per cent. from the latter, on the gross amount of the pipe-water revenue. The inhabitants have since received a copious supply of excellent water from three reservoirs, two S. and one N. of the river. In 1809 the corporation was empowered by act of parliament to levy an additional rate, in order to substitute cast-iron service-pipes in lieu of those of wood. The levy of the rate became the subject of legal dispute with the rate-payers, which was finally decided in favour of the latter, on an appeal to the House of Lords, the decree of which declared the corporation to be indebted to the inhabitants in the sum of 74,500*l.* on this account, and that the pipe-water rents are received and held by the corporation in trust for the benefit of the city.

The expenditure required for the erection and repair of public buildings; the formation and repair of roads; the salaries of civic officers, and public charities, are defrayed by assessments made by the city grand jury, selected by the sheriff, who is now appointed by the crown. The amount of taxation thus levied is as follows, for every fourth year of the period included in the subsequent table:—

	£		£
1838	41,963	1846	26,202
1842	32,400	1848	30,367

The assessment is made on the houses. To remedy the defects in the old valuations new valuations were made in 1833 and 1843. From the last of these it appears that there were, at that period, 21,771 houses liable to be assessed in the city, of which 9,938 were on the N. and 11,838 on the S. side of the Liffey. The nett annual value of the whole was rated at 670,435*l.*

Within or adjoining the civic bounds are five local jurisdictions mostly independent of the authority of the corporation. They are, 1 the manor of St. Sepulchre; 2. the liberty or manor of Thomas Court and Donore; 3. the liberty of the deanery of St. Patrick; 4. the manor of Grangegorman, which includes the liberty of Christ Church; and, 5. the manor of Kilmainham. The three first are popularly called the Liberties. The manor of St. Sepulchre lies to the S.E. of the city, and enjoys extensive powers, granted and confirmed to it by a succession of charters from the reign of John. It holds courts-leet and baron, and a court of record. Its criminal jurisdiction extends to capital cases, but the right, as far as respects these, has fallen into desuetude. A small court-house and debtors' prison is attached to it. The Archbishop of Dublin is lord of the manor. The pop. is estimated at 50,000. The liberty of Thomas Court and Donore lies S.W. of the city; Thomas Court being within the county of the city, and Donore in the county at large, of which it forms one of the baronies. Its separate rights are secured by a series of charters, and it holds a court-leet, a court of civil bill, and a court of record for personal pleas to any amount. It has a court-house and small prison: the Earl of Meath is lord of the manor. The liberty of St. Patrick is a small district of about 5¼ acres surrounding the cathedral of the same name. It holds its privileges by prescription, and had courts-leet, and a court for the recovery of small debts, both of which have fallen into desuetude; hence it has become a kind of sanctuary for debtors of small sums from the adjacent parishes. Attempts to abolish an exclusive jurisdiction, which interferes with the claims of the just creditor, have been successfully resisted by the corporation of the dean and chapter, which is lord of the manor. A seneschal appointed by it receives a trifling salary, but has no duties to perform. The pop. is small, and very poor; there are not more than 24 good houses in the deanery. The manor of Grangegorman or Glasnevin comprises the greater and wealthier portion of the houses in the N. city parishes, and extends in some directions 7 m. N. and 10 m. S. It claims under an ancient charter, confirmed by another of 1 Jac. I. The corporation of the dean and chapter is lord of the manor. The right of holding courts-leet and criminal courts has fallen into disuse. The seneschal holds a civil bill court on Friday morning for the N. part of the manor, and on every alternate Friday evening for the S.: its sittings are held in each case in an apartment in a tavern. There is no prison, debtors being sent to the county prison at Kilmainham. The liberty of Christ Church comprises the area in the centre of the city on which the cathedral is built. The manor of Kilmainham, in which the royal hospital is built, lies W. of the city, and extends 9 m. W.: Lord Cloncurry is lord of the manor. The seneschal holds a civil bill court six days in every quarter, with unlimited jurisdiction, but practically confined to actions under 5*l.*: the court sits in the county court-house at Kilmainham.

The watching, paving, cleaning, and lighting of the city and liberties have been transferred from the municipal corporations of each to boards appointed by government.

The police is vested, by an act passed in 1835, in 2 commissioners, with a salary of 800*l.* each, under whom are 7 superintendents, 24 inspectors, 140 sergeants, 1000 constables, and 20 supernumeraries. The city, with the liberty, is divided into the Castle, College, Rotunda, Barrack, Donnybrook and Kingstown, districts, in each of which there is an office, where an alderman and a barrister, both appointed by the lord lieutenant, sit daily. The police jurisdiction extends over a district of 8 m. round Dublin, in every direction. The expenses of the establishment are defrayed by a parliamentary grant, by a tax on the inhabitants, by fines, and by carriage licences.

The paving, cleaning, and lighting of the city was vested, in 1807, in a board of 3 commissioners, appointed and removable at pleasure by the lord-lieutenant. To this board was also given the charge of the public fountains, conduits, and sewers; and it was empowered to remove buildings that obstructed the main avenues through the city, and to widen the streets within the Circular Road. Under its superintendence, the city is well paved or macadamised, lighted with gas, and kept in a respectable state as to cleanliness.

The linen, woollen, silk, and cotton trades, which had been carried on to some extent in the city and its vicinity, have all declined. The sales of linen were chiefly effected in a large suite of buildings erected in 1728 by government, in the N. division, and rented to the factors: attached to it is a yarn-hall. The number of factors has decreased so much, in consequence of the decline of the trade, that most of the offices and stores are appropriated to other purposes. A pedestrian statue of Geo. IV. was erected in one of the halls, in commemoration of his visit to the establishment in 1821. The woollen trade was long carried on to a considerable extent in the S.W. liberties: a large building was erected there in 1814 by the late Thomas Pleasants, Esq., for tentering the cloth, a process previously carried on in the open air, and therefore subject to interruption from changes of weather; but since the repeal of the protecting duties, the manufacture has been nearly extinguished. The silk trade was introduced by emigrants from France, who settled in Dublin in the beginning of last century. The favourite manufacture was a fabric of silken warp and woollen weft, called tabbinet or Irish poplin, which is still in demand. The other branches of the silk trade have been for several years in a very depressed or extinct state. The same may be said of the cotton trade. Beer is extensively produced; and Messrs. Guinness and Darcy export large quantities of porter to Great Britain and foreign countries: there are also several distilleries. A few iron-foundries are employed chiefly in executing orders demanding immediate attention. Cabinet-making is largely carried on, as are the various trades required to meet the demands of a large and concentrated population.

The decay of manufactures in Dublin has been the subject of much irrelevant discussion. The truth is, that it has no single requisite for their successful prosecution, being without coal, and without the command of water-power. To suppose that its manufactures should ever rival, or be able to withstand the competition of those of Manchester, Glasgow, or Birmingham, would be absurd. They never had any better or more solid foundation than protecting duties; and the moment these were repealed, and the Irish people permitted fully to supply themselves with the cheaper and better products of Great Britain, the flimsy and exotic fabric fell to pieces.

Smithfield market, which is within the civic jurisdiction, is held on Mondays and Thursdays for cattle, and on Tuesdays and Saturdays for hay and straw. A pig-market is held in the vicinity. Spitalfields and Kevin Street markets are in the manor of St. Sepulchre: the principal commodities sold in both are bacon, butter, and potatoes; and in the latter hay and straw. A wholesale fish-market is held in Boot Lane; one for potatoes, fowls, and eggs, and another for fruit in the neighbourhood. The corn-market, formerly held in Thomas-street, is now carried on by a joint stock company, in a building erected for the purpose on Burgh Quay, where the grain is sold by sample. The retail markets are all private property, but their management is under the control of the officers of the jurisdiction in which they are held; those in the city being under the lord mayor.

The inland trade of Dublin has been greatly promoted by the Grand and Royal canals, both of which terminate in the city, and communicate with the sea through the Liffey. And latterly it has been still farther promoted by the opening of the Great Southern and Western Railway to Cork and Limerick, and other lines.

Banking business is transacted by the Bank of Ireland, established in 1783; the Hibernian Joint Stock Company, 1824; and by the Provincial, the National, the Royal, and London and Dublin Joint Stock Banks; 3

private banking-houses, and 2 savings' banks. The affairs of the Bank of Ireland are managed by a governor, who must hold 4,000*l.* stock; a deputy governor, with 3,000*l.*; and 15 directors with 2,000*l.* each. It is the place of deposit for all government monies. The buildings, formerly the Irish parliament house, form a quadrangle, standing on an area of 1½ acre, presenting three fronts; that to the E. of the Corinthian order, and those to the S. and W. of the Ionic. They are much admired, and the whole forms the finest pile of buildings in the city. It has a very ingenious system of steam machinery for printing the bank notes, so as to render frauds extremely difficult. A statue of Geo. III. occupies the spot on which the throne stood in the former House of Lords, now the directors' board-room. The 2 savings' banks had, on the 20th of Nov. 1848, 132,861*l.* of deposits.

An exchange was erected in 1767, in the centre of the city, partly by a parliamentary grant, and partly by subscription. The merchants held their meetings in it until 1796, when the greater facilities afforded by the Commercial Buildings in College Green induced them to transfer their dealings thither; and the exchange has been since nearly useless. The building presents a fine specimen of Grecian architecture, and contains pedestrian statues of George III., Grattan, and Dr. Lucas.

The mercantile society of the Owzel Galley, for deciding disputes relative to shipping and mercantile dealings by arbitration, was formed in 1705, and took its name from that of the vessel on which the first decision was pronounced. A chamber of commerce was established in 1820.

The river and port were vested in the corporation in 1220, by a charter of Henry III. Admiralty jurisdiction between Arklow, S., and the Nanny Water, N., was granted by Elizabeth. In 1707, it was empowered to erect a ballast-office, the annual expenses of which were 4,400*l.* at an average of 13 years, from 1753 to 1780. In 1783, the management of the office was committed to a new board, with control over the ballastage, tonnage, wherries, quayage, and pilotage of the port, including the harbours of Dunleary (now Kingstown) and Dalkey. The income of the board is now about 33,000*l.* a year.

Vessels of large burden were formerly prevented from entering the river by a bar at its mouth, with but 5 ft. water at spring ebbs. To remove this obstacle, walls were built on both sides the river; that on the N. bank called the North Bull, extends only 1,200 feet; but that on the S. bank, or South Bull, projects 3½ m. into the sea, being built about half way, in the form of a broad road, to the Pigeon-house Fort, and thence to its extremity by a broad wall of solid masonry. These structures confined the ingress and egress of the water so as to make the current act with greater effect; and its action being farther assisted by powerful dredging-machines, the depth of the channel has been so much increased that there is now from 10 to 12 ft. water over the bar at low ebbs, and 24 ft. at high springs. In consequence vessels of large burden now reach the quays.

Two supplemental harbours have also been formed, one to the N. of the Peninsula of Howth in 1807, at an expense of upwards of 420,000*l.*, enclosing a basin of 52 acres; and another at Kingstown, or Dunleary, enclosing a basin of 200 acres, with water sufficient to float vessels of 800 tons at ebb tide. The packets from Dublin to Liverpool and Holyhead sail hence, and it is connected with the city by a railway 6 m. long, constructed at an expense of about 240,000*l.* There are four lights within Dublin Bay; one on the extreme point of Howth; the second and third at the extremities of the S. and N. walls; and the fourth, a revolving light, at the entrance to Kingstown harbour. The bay, which measures 6 m. at its entrance, between the Bailey or E. point of Howth, N. to Bray Head, S., and nearly the same distance E. to the city, is much admired for the beauty of its scenery, particularly along its S. coast; but the N. and S. sandbanks render its navigation very dangerous in stormy weather.

There belonged to the port of Dublin on the 1st of January, 1850, 293 sailing vessels of less than 50 tons each, agg. burden 8,633 tons; and 134 do. of above 50 tons each, agg. burden 22,186 tons. It had, at the same time, 4 small and 44 large steamers, the agg. burden of the latter being 11,586 tons. In 1848, 410 ships arrived in the port with cargoes from the colonies and foreign parts.

The cross-channel trade, except that of coal, is now carried on chiefly by steamers, which sail principally to Liverpool, Holyhead, and Bristol; but partly also to London, Glasgow, Cork, Belfast, &c. Coals pay a duty of 4*d.* per ton, imposed to compensate the coalmeters, whose services have been rendered nearly unnecessary by the regulation allowing coal to be sold either by weight or measure.

The amount of the nett customs' duties, in 1847, was 980,280*l.*; in 1848, 978,811*l.*

ACCOUNT of the total estimated Value of the various Articles exported from Dublin in 1835, specifying the Quantities of the principal Articles.

Articles.	Quantity.	Tons.	Cwt.	Value.
				£
Corn, Meal, and Flour -	697,263 cwt.	34,865	3	378,921
Provisions - -	119,414 —	5,970	14	276,801
Potatoes - - -	3,620 —	181	0	307
Feathers, Flax, Tow, and Copper Ore - -	1,960 —	98	0	7,278
Linen Yarn - -	181 —	9	4	3,606
Hemp - - -	88 —	4	8	462
Wool - - -	496,384 lbs.	221	12	6,201
Woollen Manufactures -	117,832 yds.	19	12	47,132
Cotton do. - - -	1,268,320 —	211	7	15,854
Linen - - -	10,968,000 —	1,828	0	731,200
Spirits - - -	150,590 gals.	672	5	45,177
Beer - - -	2,448,922 —	10,933	0	122,149
Hides and Calf-skins, raw	15,753 no.	393	16	33,868
Eggs - - -	11,690,000 —	417	10	16,236
Cows and Oxen - -	50,882 head	16,960	13	407,056
Horses - - -	121 —	60	10	2,190
Sheep - - -	68,650 —	2,090	9	123,579
Hogs - - -	41,321 —	2,754	14	123,963
Other Articles - -	- -	-	-	186,857
	Total -	-		2,528,513

ACCOUNT of the total estimated Value of the various Articles imported into Dublin in 1835, specifying the Quantities of the principal Articles.

Articles.	Quantity.	Value.
		£.
Coals, Culm, and Cinders -	349,230 tons	211,461
Wood, Mahogany - -	465 —	10,695
Corn, Meal, and Flour -	314,891 cwts.	147,528
Hops - - - -	2,912 —	21,160
Sugar - - - -	38,732 —	108,449
Wool - - - -	766,914 lbs.	47,321
Coffee - - - -	832,160 —	48,542
Tea - - - -	2,349,600 —	528,660
Tobacco - - -	1,917,120 —	316,407
Seeds, Flax - - -	41,594 bush.	24,956
Wines - - - -	157,360 galls.	94,416
Spirits (British) - -	174,200 —	52,260
Other Articles - - -	- -	2,782,166
	Total - -	4,130,321

The fiscal business of the port is carried on at the custom-house on the N. side of the river, near its mouth; a very extensive and magnificent structure, capable, in fact, of serving as a custom-house for the empire. The transfer of part of the business to London, in consequence of the union of the British and Irish boards of customs and excise, having rendered great part of the building useless, many of its apartments have been appropriated to the use of the stamp office, the vice-treasurer's record department, the board of public works, the Poor Law commissioners, &c. Adjoining the main building are a floating dock and extensive stores, which were materially injured by a fire in 1834, but have since been in a great measure restored. The business of the post-office is transacted in a large and stately building in Sackville Street: its revenue in 1847 was 53,510*l.*; 1848, 50,253*l.*

Numerous steam-packets, carrying the mail, ply daily between Dublin and Holyhead, and between it and Liverpool.

Dublin is the seat of an archbishop's see, and of the second of the archiepiscopal provinces into which Ireland is now divided. The provincial jurisdiction is nearly co-extensive with the two civil provinces of Leinster and Munster. The see, including the bishoprick of Glandelough, which was incorporated with it in 1214, includes the counties of Dublin, and Wicklow, and Kildare. The landed property contains 30,040 acres, of which 23,926 are profitable. The income from rents and renewal fines was stated, in a return made in 1833, to amount to 7,459*l.* a year. There are two cathedrals: Christ Church, built near the summit of the hill on which the city stands, is the more ancient and superior. The building is plain, with no exterior architectural embellishments; it contains several remarkable monuments; among which is that of Strongbow, Earl of Pembroke. St. Patrick's Cathedral, in the valley, S. of Christ Church, also contains some remarkable monuments. The chapters and installations of the Knights of St. Patrick are held in it. The city contains 20 parishes or parts of parishes, the names of which, with the amount of ministers' money levied for the support of the established clergy, are given in the following table. The first 14 of the parishes, and St. Patrick's liberty, are to the S. of the river; the remaining 6 to the N.

Parish.	Ministers' Money. £	s.	d.
St. Peter's - - - -	1,086	15	4
St. Mark's - - - -	330	3	3½
St. Anne's - - - -	588	18	5½
St. Andrew - - - -	529	15	1
St. John's - - - -	118	9	3

Name.	Ministers' Money. £	s.	d.
St. Werburgh's - - -	200	2	0½
St. Bridget's - - - -	286	4	1¾
St. Michael's - - - -	50	5	11¾
St. Nicholas' (within) - - -	38	0	7¼
St. Nicholas' (without - - -	207	12	6¾
St. Audeon's - - - -	220	12	11½
St. Catherine's (pt.) - - -	395	3	10
St. Luke's - - - -	92	7	8¾
St. James's (pt.) - - -	109	1	4
St. Patrick's Lib. - - -			
St. Thomas's - - - -	684	12	1¾
St. George's - - - -	628	5	9¾
St. Mary's - - - -	974	16	6¼
St. Michan's - - - -	488	15	7¼
St. Paul's - - - -	255	4	1½
Grange-gorman (pt.) - - -			
Total -	7,285	6	9¾

According to the Rom. Cath. ecclesiastical arrangements, these 20 parishes are consolidated into 9 unions, each having a place of worship; besides which, there are sundry chapels attached to friaries or nunneries. There are nearly 100 places of worship. St. George's Church in the N. E. part of the city is a splendid structure, in the Grecian style. It is the only place of worship, except the cathedrals, which has a peal of bells. The Rom. Cath. church of the Conception, in Marlborough Street, considered the archbishop's cathedral, is of very large dimensions, and highly embellished internally, but not yet complete as to its exterior. The Rom. Cath. chapel of St. Francis Xavier is also an elegant building of the Ionic order.

Dublin has in all 111 clergymen of the established church, 102 R. C. clergymen, 172 nuns, 16 dissenting ministers, 437 barristers, 1,448 attorneys, 214 physicians, 242 surgeons, 36 dentists, 236 apothecaries, 297 male and 341 female school teachers, and 4,494 male and 18,865 female servants.

Dublin was the seat of a university so early as 1320, but the institution gradually declined in consequence of the unsettled state of the country and the deficiency of funds. The existing university of Trinity College was founded in 1593, in the buildings of the dissolved monastery of Allhallows, applied to this purpose by the corporation, to which it had been granted at the dissolution of the monasteries. It consisted originally of a provost, 3 fellows, and 3 scholars; but at present it consists of a provost, 7 senior, an undefined number of junior fellows, (at present 27), and 70 scholars. It has, also, 27 professors, with lecturers and assistants, all endowed. A school of engineering, founded in 1842, has 7 professors, and is said to furnish a very complete course of theoretical and practical instruction. The university is presided over by a chancellor and vice-chancellor, one of whom holds occasional visitations, and by a board, consisting of the provost and senior fellows, which sits weekly. The period of undergraduate instruction is 4 years: the number of students above 1,800. The course of studies for candidates for a fellowship is logic, mathematics, natural philosophy, ethics, history, Latin, Greek, and Hebrew. The examinations, which are public, are carried on in Latin. Exclusive of the fees of students, the university derives a large income, said to exceed 15,000*l.* a year, from lands; and it has, also, the patronage of 32 benefices. It enjoys the right of returning 2 mem. to the H. of C., who are elected by the fellows, scholars, and all those who at any time have been fellows or scholars, and have kept their names on the books. The buildings which present an extended front to College Green, are large and elegant: the principal are a library, containing upwards of 120,000 volumes, and entitled to a copy of every work published in the empire; a chapel, an examination hall, a museum, a dining-hall, a theatre of anatomy, and a printing-office; it also maintains a small but well kept botanical garden in the S. E. suburb. The College of Physicians is connected with the university; some of the courses of lectures are given in that institution, others in Sir Patrick Dun's Hospital. The College of Surgeons, St. Stephen's Green, was founded in 1784. The Incorporated Company of Apothecaries has established courses of lectures in pharmacy and other branches of medical science, at their hall in Henry Street. There are also several private medical and surgical schools, much frequented by students.

The chartered scientific and literary societies are — the Royal Dublin Society, for the promotion of the useful arts, having professorships in botany, chemistry, and experimental philosophy; drawing schools, a library, a museum, and a large botanic garden: the Royal Irish Academy, founded in 1786, for the encouragement of abstract science, polite literature, and antiquities, with a small but increasing library, containing a good collection of Irish MSS., and a museum: it has published nearly 20 vols. of Transactions. The Royal Hibernian Academy, founded in 1823, for the encouragement of the polite arts, meets in a building erected for its use, at an expense of 13,000*l.*, and presented to it by the late Francis Johnston, architect. An exhibition of the works of native artists takes place annually. These institutions mostly receive grants of public money. The principal libraries, besides those already noticed, are Marsh's or St. Patrick's Library, near the cathedral of that name; and the Dublin Library, confined exclusively to subscribers. There are smaller collections of books, none of which are open to the public, at Sir Patrick Dun's Hospital, Steevens's Hospital, the Royal Hospital, Christ Church, and the Presbyterian meeting-house at Strand Street. The unchartered societies for science, literature, and the fine arts, supported wholly by voluntary contributions, are — the Royal Irish Institution for Painting; the Zoological Society, which has a handsome garden in the Phœnix Park; the Horticultural, which maintains an annual show of flowers and fruit; the Agricultural, with an annual show of cattle; the Historical, for historical and political discussion; the Civil Engineers' societies; the Natural History Society; and the Mechanics' Institute, formed in 1837. No fewer than 28 newspapers are published in the city, some of them daily, others 3 times a week, and others weekly.

The model schools of the board of National Education are held at their respective establishments. Schools, on the foundation of Erasmus Smith, are founded on the Coombe and in St. Mark's parish. Most of the parishes and congregations have free schools attached to them. The total number of schools maintained by grants of public money and voluntary contributions is about 200; the total number of pupils is about 15,000.

The principal charitable institutions which maintain as well as educate orphans and destitute children are — the Foundling Hospital, now very much circumscribed; King Charles's, or the Blue-Coat Hospital, a large and handsome range of buildings, maintains about 100 boys, the sons of reduced citizens. The Hibernian Society, in the Phœnix Park, was founded for soldiers' children; the Marine School, on the S. E. quay, for sailors' children; the Protestants' Orphan Society; and the Female Orphan House, N. Circular Road, for female orphans. The principal institutions for the relief of disease and accidents are, — Steevens's Hospital, near Kilmainham; Sir Patrick Dun's; the Meath Hospital, which is also the county infirmary; the City Hospital; Jervis Street Infirmary; St. Mark's and Ann's, the Westmoreland Lock and Netterville Hospitals; the Hospital for Incurables; two fever hospitals, one in Cork Street, the other on the N. Circular Road; and 10 lying-in hospitals, of which that in Rutland Square is the principal. Attached to this last-named is a fine suite of apartments and an enclosed garden or pleasure-ground for public amusements, the profits of which contribute to the maintenance of the institution. There are 10 dispensaries, supported partly by parliamentary grants and partly by private contributions. The institutions for cases of mental derangement are the District Richmond Lunatic Asylum for the city and county, and for Louth, Meath, and Wicklow cos., supported by grand jury presentments; Swift's Hospital, supported chiefly by the founder's bequest; an asylum near Donnybrook; and 5 private institutions. At the commencement of 1850, there were in the District Lunatic Asylum 289 patients (137 males and 152 females). Since the introduction of the compulsory provision for the support of the poor, Dublin has been divided into 2 Poor Law Unions, the N. and S., each of which has a separate workhouse, on a large scale, and board of guardians. The chief asylum for the aged and impotent is the House of Industry, established in 1773, and supported wholly by grants of public money. Its buildings, yards, and gardens extend over an area of 11 acres.

The minor asylums for age, debility, and want, are numerous. There are 2 for the blind, the Richmond, in Sackville Street, for males; the Molyneux, in Peter Street, for females; the inmates in each contribute to their maintenance by their labour. There are 2 houses of refuge for females of good character, and 10 for penitent prostitutes.

The places of public amusement are few, and not much encouraged. They comprise the Theatre Royal, the Queen's Theatre, the Rotunda Gardens, and the Portobello Gardens. Clubs for social and convivial purposes are numerous. The principal are the Kildare Street, Sackville Street, United Service, Beefsteak, the Friendly Brothers, &c. A yacht club holds an annual regatta at Kingstown.

The environs of the city in every direction are very beautiful; the view of the valley of the Liffey from the rising grounds on the S. boundary of the county commanding the highly cultivated lands inclining to the seaside, well planted, and studded with numerous seats and villages, the bay with the hills of Killiney on the one side, and the city spread out on the other; the Hill of Howth, Lambay, and Ireland's Eye, in the back ground; and, in clear weather, the Mourne mountains in the remote distance, present a landscape of superior tranquil beauty. The external appearance of the city itself is equally striking. The main avenues to it, particularly

on the E. side, are spacious, airy, and bordered with large dwelling-houses; the public buildings, both civil and ecclesiastical, numerous, as compared with the size of the city, mostly of elegant architecture, and placed in imposing points of view. But, as already stated, this description is by no means applicable to a large portion of the city. A line drawn N. and S. through Dublin Castle would divide it into 2 parts, extremely different in appearance. The E., in which are the residences of the more wealthy class, contains most of the public buildings, all the squares and streets of fashionable resort, both for amusement and trade; the W., once the principal seat of the trade of the town, is now in a state of di apidation and extreme destitution.

A love of convivial enjoyments pervades all ranks. The habits of the higher and middle classes are social to a degree often bordering on profusion. Letters of introduction from strangers are the never failing harbingers of rounds of dinner parties, evening entertainments, assemblies, balls, and suppers. The dinner hour varies from 5 to 7, and scarcely any business is transacted afterwards. Neither do the daily occupations commence at an early hour in the morning. The courts of justice seldom meet before 11, and generally close before 4. Dancing is a favourite amusement; cards are every year getting less fashionable. Jaunting-cars, both open and covered, carrying 4 persons, supply the place of the London cabriolets, and have wholly supplanted hackney-coaches. The appearance of the lower classes, particularly in the W. division of the city, exhibits, we regret to say, every indication of wretchedness. The habitations are mean and neglected; their clothes tattered; and they seem as if they maintained a constant struggle with poverty; but, despite all this, there is a light-heartedness about them that not only enables them to bear up under the pressure of want, but which, by rendering them comparatively insensible to its existence, paralyzes their efforts to improve their condition, and makes them contented with the abject poverty in which they live. They are equally fond of amusement as their superiors; equally ready to indulge in dance and song. Intoxication is less frequent than formerly, and the spirit of riot and turbulence, which not many years since was the all but invariable consequence of festive meetings, is rapidly subsiding,—a change partly owing to a stricter and better system of police, and partly to the moral influence of an improved state of society. Several meetings are held annually in the neighbourhood, ostensibly for the transacting of business, but in reality almost solely for festive purposes. The most celebrated is Donnybrook fair, in August, which formerly continued for a fortnight, but is now restricted to a week. The fairs of Rathfarnham, Palmerstown, and Finglas, are of the same character, but in a minor degree. The family expenses of the middling classes are much the same as in London, with the exception of rents of houses, or lodgings, which are considerably higher, as compared with the accommodations. Butcher's meat is reasonable, and of excellent quality; fowl abundant; fish not so plentiful or cheap as might be expected from the vicinity of an extended line of coast well stocked with fish. Excellent coal is supplied, principally from Whitehaven, in Cumberland, at little more than half the London price; turf, brought down by both canals, supplies a cheap species of fuel for the lower classes. Considering the many advantages enjoyed by Dublin, in being the seat of the local government, and of the superior courts of justice, and the university; in the fertility of the adjoining districts; its excellent communications, both by road conveyance and inland navigation, with the still more fertile districts in the interior; in its cross-channel trade, and steam communication with the principal ports of Great Britain, and from the influx of strangers; neither the town, nor the condition of the inhabitants, has been nearly so much improved as might have been expected. Different theories have been, and may be, formed to explain this. We believe that it principally originates in the character of the population; but it would lead us too far to inquire into the circumstances by which it has been formed.

The principal events in the history of Dublin are identified with that of the island in general, and are therefore to be found in the article IRELAND. But a few facts may be stated with respect to it. In 1169, it was taken by storm by the English, under Richard de Clare, better known by the name of Strongbow; and the Danes, who 2 years after laid siege to it with a numerous naval and land armament, were defeated with the loss of their leader, and forced to raise the siege. This was their last attempt to recover the dominions they once held in Ireland. In 1172, Henry II. landed, and held his court here in a temporary building erected outside the town, which was too small to afford suitable accommodations for the monarch and his retinue. In 1205, the castle was erected, and 4 years after, the citizens were unexpectedly attacked while amusing themselves in Cullen's Wood, now a suburb, by a party of Irish from the Wicklow mountains, and forced to seek the protection of the fortifications, after the loss of many lives. In 1210, King John held his court in Dublin, and about the same time the first bridge was built across the Liffey. In 1316, Edward Bruce was repulsed in an attempt to take Dublin. It was twice visited by Richard II., who took his final departure from it in 1399, the year of his dethronement and death. In 1486, the citizens declared for Lambert Simnel and crowned him in Christ Church. About the same time, the mayor was compelled to walk barefooted through the city, as a penance for a violent outrage committed by the citizens in St. Patrick's Church. In 1534, Lord Thomas Fitzgerald, having rebelled against Henry VIII., laid siege to the city, on which occasion his batteries were mounted at Preston's Inn, now almost in its centre; but the obstinate resistance of the citizens, who burnt great part of the S. W. suburb to check his approach, compelled him to raise the siege. In 1583, a dispute between two of the Irish family of O'Conor was decided by wager of battle in the castle, before the lords justices and council. About the same time, the king's exchequer, which was kept between College Green and the castle, was plundered by a party of Irish from the mountains. During the civil wars of 1641, the battle of Rathmines, in which the Duke of Ormond was totally defeated by the garrison of Dublin, was fought in the neighbourhood. The Grand Canal was commenced in 1765. A penny post-office was opened in 1773. In 1778, the first regiment of Dublin volunteers, arrayed for the defence of the kingdom against the threatened invasion by the French, appeared under arms. The Royal Canal, to the N. of Dublin, was commenced in 1789. The first steam-engine was set up in 1791; next year the buildings of the House of Commons took fire, while the members were assembled, and were completely burnt down: the cause of the fire was never clearly ascertained. The insurrections of 1798 and 1803 form part of the general history of the island. A jubilee was celebrated in 1809, in commemoration of George III. having entered on the 50th year of his reign. In 1816, the first steam packet sailed from the harbour. In 1821, Dublin was visited by George IV., who landed on his birth-day at Howth. He was most rapturously welcomed; and it might have been supposed, were the declarations and speeches made on such occasions of the smallest value, that his visit was to be the commencement of a new æra, and that faction and party strife were never more to disturb the public tranquillity. In 1834, the railway betwen Dublin and Kingstown was opened. In 1849, on the 6th of August, her Majesty Queen Victoria and Prince Albert landed at Kingstown, and were enthusiastically received. (*Thom's Almanac, and Private Information.*)

DUBNO, a town of European Russia, govern. Volhynia, on the Irwa, 36 m. N. E. Brody. Pop. 7,000.? It belongs to the princes Lubomirski, on whom its state reflects no credit, being ill built, with narrow, crooked, and unpaved streets.

DUDLEY, a town and parl. bor. of England, in a detached part or *enclave* of the co. of Worcester, surrounded on all sides by Staffordshire 8½ m. W. by N. Birmingham. The par. of Dudley, the limits of which are identical with those of the parl. bor., contains 3,930 acres; and had, in 1841, 31,157 inhab. and 5,842 inhabited houses. It consists principally of a long street, with a church at each end; the houses are generally good, and the streets paved, macadamised, and lighted with gas. St. Thomas's church, rebuilt in 1819 at an expense of 23,000*l*., is a fine Gothic structure, with a lofty conspicuous spire; and 2 or 3 others have since been erected.

A chapel of ease has also been erected, and there are places of worship for Cath., Methodists, Baptists, Independents, Unitarians, and Quakers. It has a grammar-school founded in the reign of Eliz., and endowed with land worth about 300*l*. a year. The number of scholars averages about 30 or 40. There is a charity school for clothing and educating 40 girls, and a charity for clothing 7 poor men, established in 1819. A school was also founded in 1732, for clothing and educating 50 boys, exclusive of about 200 not on the foundation. There is likewise a blue-coat school, where many boys are educated, and a school of industry. The Unitarians have a school for girls, and there are Sunday schools attached to the several places of worship. There are several book societies, and a well-supported subscription library.

Dudley is a principal seat of the iron trade; its vicinity furnishing inexhaustible supplies of coal and iron ore; while the canals, with which it is connected, afford the means of readily conveying its products to all the great markets of the empire. The inhabitants are principally engaged in nail-making, which is the staple trade of the town, mining, the smelting of iron ore, and the manufacture of flint glass. Exclusive of nails, a great variety of iron implements are made here. In 1841, the coal and iron mines employed 1,606 men and boys; and 904 men and boys and 864 women were at the same time employed in nail-making.

The class of workmen comprises engineers, able mechanics of almost every description, such as pattern makers, carpenters, first-rate masons, founders, men of great science for working the iron-stone, coal, and many others. Some of the persons employed will earn 12*s*. a week, and others 32*s*. An able-bodied labourer, with no particular skill, will receive, perhaps, 2*s*. 2*d*. a day. A man engaged in the iron-stone pits, will get 2*s*. 6*d*. a day.: in the coal pit 3*s*. 6*d*. and 2 quarts of beer; the men employed in the furnaces get about 50*s*. a week. A carpenter will get from 3*s*. to 4*s*. a day; a blacksmith 2*s*. 4*d*. to 3*s*. 6*d*.; a mason from 2*s*. 6*d*. to 3*s*. 6*d*.; a founder or moulder from 2*s*. 6*d*. to 4*s*. a day. Boys are employed in the pits and mines to attend to the fires, and various light jobs about the furnaces, to fill the boxes, barrows, &c. for the men; they obtain from 3*s*. to 7*s*. and 8*s*. a week wages. The price of coal in this district varies from 4*s*. to 8*s*. and 10*s*. a ton: the men engaged in the works, &c., are supplied with the coal at prime cost. The custom mostly is, to pay the men by the ton: some masters, however, pay them by the day. It takes a good deal of time to make a man a collier. He is first apprenticed to a person, himself a collier, either his father or fellow workman. The labour is severe, and the workmen generally live upon good food.

A mayor and other officers are annually appointed by the lord of the manor, but the town is within the jurisdiction of the county magistrates, who hold petty sessions every Monday. A county court is established here before which 2,611 plaints were entered in 1848. In the 23 Edward I. Dudley sent 2 members to the H. of C.; but the privilege was afterwards withdrawn, and the town remained unrepresented till the passing of the Reform Act, when the right to send 1 member to the H. of C. was conferred on it. Registered electors in 1849-50, 925, all 10*l*. householders. The returning officer is appointed by the sheriff of the county.

To a stranger, for the first time approaching the town at night, the appearance presented by the numerous fires rising from the furnaces, forges, and collieries, is particularly imposing, their lurid glare illuminating the country for a considerable distance round. At Queen's Cross the coal in the mines is in a state of ignition; and the smoke or gas may be seen issuing from the interstices of the rock. These subterraneous fires generally continue until the fuel which supplies them is nearly exhausted. This phenomenon has been observed, more or less, in the neighbourhood, for upwards of a century. At Russell Hall a stratum of from 25 to 30 ft. of argillaceous substances, lying between the upper stratum of coal and the surface of the earth, has been transmuted into a species of stone by the heat arising from these subterranean fires.

In the Saxon times a strong castle was built here, which has since undergone many vicissitudes. In 1644, it withstood a siege; and the occurrence of a fire in 1750, completed its destruction. Its ruins, which are very extensive, stand on an elevated situation, and command very fine and extensive views.

One of the most striking objects of curiosity at Dudley consists of the remarkable development of the mountain limestone in the hills under and immediately adjoining the castle. The peculiar stratification incident to a force acting powerfully from beneath, which has elevated a portion of the previously deposited beds of limestone, leaving them to dip on both sides from a central ridge, is developed with great distinctness. The stratification of this locality is still farther exhibited by the very extensive excavations in the limestone itself: some of these are open, and consequently very readily inspected, but the more extensive consist of long, horizontal galleries, whose extent and brilliancy can only be observed with the aid of torches, but which well repay the labour required in gaining a view of their dark and secret recesses. These workings extend 1½ m. under the hill, and a canal, for the conveyance of the produce of the mine, extends the greater part of this distance. The organic remains of former races of animals are very numerous. Several species of *trilobites* (Dudley locust) and *crinoidea* are met with not unfrequently, and corals, madrepores, &c. are in great profusion. Perhaps it may with justice be said, that few localities in the kingdom present so many curious and interesting subjects of observation to the geologist as this. Seldom have the operations of nature and of art united in bringing so much of the secret economy of the interior of the globe under the observation of the inhab. of its surface. Many noble seats, and spacious residences, lie within a circuit of a few miles of the town. At Ladywood, within the par., and about 2 m. from the town, is a valuable spa, possessing similar qualities to the Cheltenham and Leamington waters, and equally efficacious for cutaneous diseases: here are also commodious hot and cold baths open to the public. There are also several chalybeate springs in the neighbourhood. The celebrated nonconformist divine, Richard Baxter, was for some time master of one of the schools in the par. Dudley conferred the title of Earl upon the late Lord Ward. Market-day, Saturday: fairs 8th May, 2d Oct., for cattle, cheese, and wool, 5th of Aug. for lambs.

DULCIGNO (Turk. *Olgun*), a maritime town of Turkey in Europe (the ancient *Olcinium*), prov. Albania, on the Adriatic; 19 m. S W. Scutari, lat. 41° 53′ 50″ N., long. 19° 11′ 49″ E. Pop. 6000? 40 m. S. S. E. Cattaro. The town possesses a citadel and a harbour, has some little trade, and is the residence of a R. Cath. bishop. Its inhabitants are the only natives of Albania who have a taste for a sea-faring life, or rather, perhaps, for piratical excursions by sea. When Sir J. Hobhouse visited this town in 1809, they were accustomed to enter into the naval service of the Barbary powers, or to issue, "as the Illyrians did of old, from the same port of Olcinium, to plunder the merchant ships of all nations." (*Journey through Albania*, p. 163.)

DULWICH, a village of England, co. Surrey, hund. Brixton, 5 m. S. London, being a hamlet of the par. of Camberwell, and included in its pop. returns. It is a quiet rural village, apart from any public line of road (except that to Sydenham), and mostly consisting of groups of respectable mansions scattered round a large open area planted with avenues of trees. Here is the celebrated Dulwich College, established in 1619, by Edward Allen or Alleyne, a contemporary of Jonson and Shakspeare, and the most celebrated tragic actor of his day. He endowed it with the manor of Dulwich, and certain lands and tenements in the parishes of Dulwich, Lambeth, and St. Botolph, Bishopgate; the ann. rev. being at the time 800*l*.: but at present it is very much larger. The college was originally built by the founder in the Elizabethan style, from a design of Inigo Jones; it has of late years been renovated and augmented, and forms three sides of a quadrangle, with offices, a picture-gallery, and a large garden. It was founded for a master, warden, 4 fellows, 6 poor brethren, 6 sisters, 12 scholars, 6 assistants, and 30 out-members. According to the statutes, the master and warden must each be of the blood and surname of Alleyne, or — in default of relatives — of the same surname: they must be 21 years of age, and unmarried. The 2 senior fellows are required to be of the degree of M.A., and unmarried; and the 2 junior fellows graduates in holy orders. The brethren and sisters must be 60 years old, and single, when admitted. On the death of the master, the warden succeeds, and a new warden is chosen by lot from amongst candidates qualified as above. The fellows are also chosen by lot, when vacancies occur. The poor brethren and sisters are chosen in the same mode, from the 30 out-members, who must be parishioners of St. Saviour's Southwark, St. Botolph Bishopgate, or St. Giles Cripplegate (10 from each par.), and are lodged in almshouses appropriated to the purpose: the churchwardens of the above pars. are *ex officio* assistants in the government of the college. The Archbishop of Canterbury is visitor. A library was bequeathed to it by Edward Cartwright, a comic actor, who died about the end of the 17th century, which contained a large, curious, and unique collection of old plays, subsequently (and with very questionable propriety) assigned to Garrick in exchange for some modern works. A respectable collection of pictures was also left to the institution by the founder, and by Cartwright; and to this a most valuable and splendid addition was made in 1810 by a bequest of Sir Francis Bourgeois, R.A., who also left 2,000*l*. to build a gallery for their reception, and to defray the expense of their preservation, &c. This fine collection of the old masters is open (except on Fridays and Sundays) to the public, admission tickets being obtainable by any respectable person, on application in London. It consists of about 300 pictures, mostly of the cabinet size, and was formed by M. Desenfans, an eminent collector, who bequeathed them, on his decease, to Sir Francis; and he, in turn, to the widow of his friend, for life, with reversion to the college: a mausoleum in the college chapel contains the remains of Sir Francis and Desenfans. Public service is regularly performed there, and it serves as a chapel of ease to the hamlet. There is a free school in Dulwich, founded in 1741, by James Alleyne, then master of the college, for 60 boys and 60 girls: the present revenue amounts to 200*l*. a year. There are many elegant villas in the vicinity: and in summer the villa is much resorted to by temporary visitors.

DUMBARTON, or DUNBARTON, a marit. co. of Scotland, consisting of two detached portions, of which the principal, or most westerly, lies between Loch Lomond on the N.E., Loch Long on the W. and N.W., the Clyde on the S., and the Milngavie burn on the E.: the other and much smaller portion lies on both sides the Forth and Clyde canal, from Cumbernauld to Kirkintilloch. Total area, 165,760 acres, of which nearly 20,000 are water, being principally part of Loch Lomond. It consists mostly of lofty rugged mountains, incapable of cultivation; the arable lands being principally in the S. part of the co., between Loch Lomond and the Clyde, and along the Forth and Clyde canal. The low ground

is very fertile, and is pretty well cultivated. Estates mostly large; but arable farms are rather small, and even stock farms are not so large as in most highland cos. Oats and potatoes principal crops, but very good wheat is also raised. Cattle in the upper parts chiefly of the highland breed; but in the low grounds, where dairying is extensively carried on, Ayrshire cows are almost exclusively met with. Sheep partly black-faced, and partly Cheviots. Average rent of land in 1842-43, 9*s.* 10½*d.* an acre. There are mines of coal and iron, and freestone and limestone quarries. There are large cotton mills at Duntocher in this co.; and paper-making, &c. are carried on to a considerable extent; there are extensive print-fields on the Leven, the only river of any importance. The co. returns 1 mem. to the H. of C. Registered electors in 1849-50, 1215. The town of Dumbarton unites with Renfrew, Rutherglen, Kilmarnock, and Port Glasgow, in sending a mem. to the H. of C. Dumbarton is divided into 12 parishes; and had, in 1841, 7,985 inhab. houses, 8,076 families, and 44,296 persons, of whom 22,542 were males, and 21,754 females. Valued rent, 33,327*l.* Scotch. Annual value of real property, in 1815, 71,587*l.*, do. in 1843, 147,080*l.*

DUMBARTON, or DUNBARTON, a royal and parl. bor. and sea-port of Scotland, cap. of the above co., on the W. bank of the Leven, within 100 yards of its junction with the Clyde, 13 m. N.W. Glasgow. Pop. of parl. bor., in 1841, 4,391. The town consists of one well-built, crescent-shaped street, and of some smaller ones. The houses are crowded too closely together; so that many of them are ill-aired. There is a suburb E. of the Leven, connected with the burgh by a bridge of 5 arches. Chief public building par. church, a modern structure, with a spire and clock. There are also 2 chapels, belonging respectively to the United Associate Synod and the Rom. Cath. At high water, the Leven is navigable for large vessels to the quay at Dumbarton; but not so at low tides. This is owing partly to a bar across the mouth of the river, and partly to sandbanks between the entrance and the quay. The burgh has long been celebrated for its excellent schools. Among the distinguished individuals to whom they have furnished instruction may be specified Sir John Smollet, of Bonhill, one of the commissioners for framing the articles of union between England and Scotland; his grandson, Smollet, the celebrated novelist; Dr. Colquhoun, author of a *Treatise on the Police of London*, and other works, a native of Dumbarton, &c. With regard to manufactures, shipbuilding and rope-making are carried on to a considerable extent. It was formerly the seat of flourishing glass-works; but these have been wholly abandoned, and are now (1850) being dismantled. Bleaching, the printing of cottons, and other branches of industry are carried on, along the line of the Leven from Loch Lomond, whence it flows, to the Clyde, a distance of 7 m. Dumbarton was made a royal burgh by Alex. II., in 1222; but on or near its site there had been a still more ancient town, called Alcluid, the cap. of the Strathclyde Britons. The most important object connected with the town is the castle, on a steep, isolated, basaltic rock, at the mouth of the river, once surrounded by water. It has two summits, the highest being 206 ft. above the sea, and is a conspicuous and interesting object from the Frith of Clyde and the opposite coast. The date of the erection of the castle is not known; but it has existed from a very remote period. It is intimately connected with the history of Scotland; and was successively in the possession of Edward I., Bruce, Queen Mary, Charles I., and Cromwell. It is one of the forts which it was stipulated in the treaty of Union should be kept in repair. The Dumbartonshire railway, from Baloch on the S. of Loch Lomond to Bowling on the Clyde, passes the town: it is intended to extend the line to Glasgow. Dumbarton unites with Port Glasgow, Renfrew, Rutherglen, and Kilmarnock, in sending a mem. to the H. of C.; and had, in 1849-50, 175 regist. voters. (*New Statis. Account of Scot.*, § *Dumbarton*, &c.)

DUMBLANE, or DUNBLANE, a market town and formerly a bishop's see, Scotland, co. Perth, on the Allan, a tributary of the Forth, 4 m. N. Stirling, and 22 m. S.W. Perth. Pop. 1,911. Though once a city, having been the seat of a bishop, it is now only a small village, destitute of importance, and consisting of a single street, with a few lanes. But little business is carried on, except what results from a weekly market and four annual cattle fairs. A few strangers are attracted to it in summer, owing to an excellent mineral well in its vicinity. It is chiefly celebrated for the remains of its cathedral and other episcopal edifices. The former is pretty entire, but no portion of it is converted to use except the choir, which serves for the parish church. The dean's house is now used as the minister's manse or parsonage-house. Robert Leighton, afterwards archbishop of Glasgow, held the see of Dumblane from 1662 to 1670. This celebrated person bequeathed his library, consisting of 1,400 volumes, to the cathedral and diocese of Dumblane. It is still extant, and has received great accessions by subsequent bequests. It is open not only to the clergymen of the presbytery, but, on easy terms, to the public. The battle of Sheriffmuir, on the 13th of November, 1715, between the constitutional forces under the Duke of Argyle, and those of the Pretender, under the Earl of Mar, was fought near this town. Though indecisive, the result of the conflict was eminently favourable to the revolutionary establishment. (*Chambers's Gaz.; Keith's Scottish Bishops*, p. 170.; *Murray's Life of Leighton*, Edin. 1828.)

DUMDUM, a military village and extensive cantonment in Hindostan, prov. Bengal, 6 m. E.N.E. Calcutta. It is the head-quarters of the Bengal artillery, and consists chiefly of several long low ranges of buildings of one story, ornamented with verandahs, the lodgings of the troops, and some small but convenient officers' quarters; the whole adjoining a large plain, used as a practice ground. A battalion of European artillery is usually stationed here: it has a church and a free school.

DUMFRIES, a marit. co. in the S. of Scotland, having S. the Solway Frith, E. Cumberland, N. Roxburgh, Selkirk, Peebles, and Lanark, and W. Ayrshire and Kirkcudbright. Area, 808,320 acres, of which only about 1-4th or 1-5th part is supposed to be arable. With the exception of Annandale and Nithsdale, that is of the low grounds traversed by the rivers Annan and Nith, the principal in the co., it is for the most part mountainous; the mountains, however, are not generally rugged or heathy, but are mostly of an easy ascent, and afford good sheep pasture. This, like most other Scotch cos., has been wonderfuly improved since the American war; and very material improvements have been effected within the last dozen years, principally through the facilities afforded by steam navigation for the conveyance of fat sheep, cattle, and other farm produce to Liverpool, and the consequent extension of the turnip culture, the introduction of bone manure, furrow draining, &c. Roads, fences, and farm buildings, have been astonishingly improved; and are now, speaking generally, as good as any in the kingdom. Cattle are mostly of the Galloway breed; and Cheviots have been, for some years past, a common breed of sheep among the hills, where at no remote period the principal flocks were black faced. But such has been the progress of improvement, that it is now found not only practicable but more profitable to introduce extensively half-bred sheep, or a cross between the Leicester ram and Cheviot ewe. This has, latterly, been the favourite stock, and its numbers are increasing rapidly. There are other crosses between the same rams and black-faced ewes, a hardy breed, which thrive well on the coarser grasses, and are in great request in certain districts of England and Wales for their feeding qualities. The formation of the Caledonian Railway has been of very great advantage to the store-masters of Annandale. English lime, formerly brought 25 m. and upwards by cart, is now conveyed by railway in trucks, and deposited at stations within trifling distances of the homesteads along the line; a saving and convenience the good effects of which are obvious in the increased use of the mineral, and the improved appearance of a great extent of hill pasture land. Hogs extensively raised (see next article). Property, mostly in very large estates; that of the Duke of Buccleugh, in this co., is one of the finest in Scotland, and the improvements made upon it within the last few years, reflect equal credit on his Grace's intelligence and liberality. Farms in the lower districts vary from 100 to 500 acres: in the hill district they vary from 500 to 10,000 acres. Average rent of land, in 1843, 6*s.* 7¾*d.* an acre. There are valuable coal and lead mines in the par. of Sanquhar; and freestone is abundant, particularly in the vicinity of Dumfries. Manufactures unimportant. The co. is divided into 43 parishes, and sends 1 mem. to the H. of C. Registered electors in 1849-50, 2,118. The bors. of Dumfries, Annan, Sanquhar, and Lochmaben (which are the principal towns), unite with Kirkcudbright in sending a mem. to the H. of C. In 1841 Dumfrieshire had 14,356 inhab. houses, and 72,830 inhab. Valued rent, 158,503*l.* Scotch. Annual value of real property in 1815, 295,621*l.*, in 1843, 319,751*l.*

DUMFRIES, a sea-port and parl. bor. of Scotland, co. Dumfries, of which it is the cap., on the E. bank of the Nith, about 9 m. from its influx into the Solway Frith, 64 m. S. by W. Edinburgh, and 32 m. W. by N. Carlisle. Pop. of parl. bor., which includes a suburb called Maxwellton, on the opposite side of the Nith, in Kirkcudbright, in 1841, 13,088; inhab. houses, 2,400. The town is well and handsomely, though irregularly, built; the High Street, which stretches nearly 1 m. in length, does not run in a straight line, and is greatly obstructed at one point by a steeple, or building, in which the town council holds its meetings, placed in its very centre. The other streets lie either at right angles to the High Street, or parallel to it. The houses are generally built of red freestone, which the neighbouring country produces in unlimited abundance; and such of

the buildings as are of old date are generally white-washed; while many in the modern part of the town are painted in imitation of Portland stone. Altogether, the town is clean, neat, and substantially built, with comparatively few marks of poverty or destitution; and is regarded as the provincial capital of the S. of Scotland. There has been no material increase in the streets or buildings of the town for many years past, but there has been a considerable increase in the number of villas in the vicinity. Maxwellton is connected with it by two bridges, one built in the 13th century, and consisting originally of 13 arches, of which only 7 are now visible; the other, a very elegant structure, erected in 1795. The public buildings are numerous. There are two parish churches; St. Michael's, rebuilt in 1745, and the New Church, erected in 1727. The former is chiefly remarkable for its extensive and crowded burial-ground, and the vast number and variety of its monuments. It has been estimated that, exclusive of ruinous and dilapidated monuments, the cost of erecting those in preservation could not have been less than 100,000*l*. In this cemetery was erected, by public subscription, in 1815, at an expense of 1,500*l*., a mausoleum in memory of Burns, who spent the last years of his life in Dumfries, and whose remains are deposited in a vault below. An emblematic piece of marble sculpture, executed by Turnerelli, in the interior of the structure, represents the genius of Scotland finding the poet at the plough, and throwing her inspiring mantle over him. We may add, that the house in which the poet lived and died, with some adjoining properties, was purchased on the 3rd July, 1850, for Lieut.-Colonel Burns, the second son of the bard. Near the churchyard gate are deposited the remains of Andrew Crosbie, Esq., advocate, once the ornament of the Scotch bar, who exemplified in real life the character of Counsellor Pleydell, as portrayed by Sir Walter Scott. A third church was erected in 1840; and there are sundry dissenting chapels, some of them favourable specimens of architecture. The steeple in the High Street, already mentioned, is a handsome structure, the work of Inigo Jones. In Queensbury Square, off this street, is a handsome Doric column, erected in 1780, in honour of Charles, Duke of Queensberry. The other public buildings are the trades' hall, court-house, county gaol containing a bridewell, infirmary, dispensary, academy, assembly-rooms, theatre, and lunatic asylum. The latter, called "The Crichton Royal Institution," was founded in 1838, by Mrs. Crichton, widow of the late Dr. Crichton, of Friar's Car e. Only the half of it is yet built, according to a design by Mr. Burn, Architect. An additional building was erected in 1849, capable of accommodating 200 pauper patients, which at present is nearly filled. The total expense already incurred exceeds considerably 100,000*l*. The infirmary, which was opened in 1776, is the only institution of the kind in the S. of Scotland. There is a workhouse, founded and endowed by two brothers of the name of Muirhead, in 1753, which accommodates, at an average, 30 old and 20 young paupers, besides dispensing charity to about 40 widows, who live out of the building. The poor are supported partly from the interest of money in mortmain for this purpose, and partly by an assessment, which amounted in 1847 to 2,135*l*. 9*s*. 6*d*. There is also a bequest (yielding about 200*l*. yearly) for the support of the lame and blind. As to education, the means are very ample. There are 3 parochial schools in the parish, and 4 endowed seminaries under the patronage of the town-council, united under the name of the Dumfries Academy; an institution that has long held a high character. The fees in it are, per quarter, for English, writing, and arithmetic, 5*s*.; Greek and Latin, 7*s*. 6*d*.; mathematics, &c., 10*s*. 6*d*.; and French, 1*l*. 1*s*.

The aggregate number of schools, male and female, in the town, is nearly 30. There are 4 libraries belonging to societies, a mechanics' institute, an observatory, a savings' bank, and various religious associations. There are 2 public reading-rooms, and the town produces 3 weekly newspapers; the oldest of which, established above 40 years, has an extensive local and general circulation.

With regard to manufactures, the chief branches carried on, to any extent, are those of hats and hosiery. The number of stocking-frames is now (1850) about 420 in the town and its vicinity, the value of their manufacture being estimated at from 38,000*l*. to 40,000*l*. a year. There are three hat manufactories, but the numbers employed in them are small. Formerly checked cottons were produced here; but this branch has disappeared, and the cotton weavers who remain are employed, through the medium of agents, by Carlisle or Glasgow manufacturers. The trade of tanning has declined; but the quantity of leather prepared by pit and bark processes is still considerable, and is esteemed for its durable qualities. There are several breweries, and the largest basket-making establishment in Scotland. The manufacture of *clogs*, or strong shoes, with thick wooden soles, the use of which is almost entirely confined to the inhab. of the S. of Scotland, is with one or two slight exceptions peculiar to Dumfries; but it does not employ many hands, the use of the article being on the decline. Shoemaking is here a flourishing branch of industry. It employs upwards of 250 workers at the last, and 83 females who assist as binders.

Dumfries has long been celebrated for its weekly cattle-markets, and its four great annual fairs, for the sale of cattle and horses, which, with the markets, are held on the *Sands*, an open space between the town and the river. Most part of the cattle raised in the co. of Dumfries, and a considerable part of the peculiarly fine breed of cattle raised in Galloway (cos Kirkcudbright and Wigtown), are disposed of in the Dumfries markets. Perhaps, at an average, 25,000 head of cattle, of the average value of 10*l*. each, may be annually sent up from Dumfries and Galloway to England, principally to Norfolk, where they are fattened for the London markets; and it is probable that the fat cattle sent by steam to Liverpool, and those sent to the markets of Edinburgh and Glasgow, may be worth 100,000*l*. a year additional; making an aggregate sum of 350,000*l*. a year received into the district for cattle. Prices, however, have declined considerably during the last two or three years. Very few three year old bullocks were worth 10*l*. in 1850: 7*l*. or 7*l*. 7*s*. being then nearer the mark. Sheep, inc. the fleece, have paid farmers better than cattle, since green crop husbandry became so universal. From 400 to 600 horses are annually exposed at each of the two great horse-fairs. Dumfries is also the principal pork-market in Scotland. From the end of November to the end of March, above 1,200 carcasses, of the average weight of 14,000 stones, are sold weekly: in the height of the season, the sales are frequently much more considerable, and instances have occurred of from 5,000*l*. to 7,000*l*. having been received for pork in a single market day. (*M'Diarmid*, p. 27.) The pigs come principally from Galloway, but they are produced to a greater or less extent in all parts of the district. Dumfries used also to be a great market for hare skins; but this trade has been all but annihilated; not so much from cheapened foreign furs, as from the all but universal use of silk hats. The principal foreign trade is with America and the Baltic for timber, of which the annual value imported varies from 8,000*l*. to 10,000*l*.; the remainder is coasting trade. The imports are coal, slate, iron, tallow, hemp, bones, timber, wine, and colonial produce; the exports, wool, freestone, hosiery, shoes, pork, fat cattle and sheep, grain, wood, nursery plants, and grass seeds. There belonged to the port on the 1st January 1850 150 vessels, of the aggregate burden of 10,721 tons. Customs' rev., in 1849, 12,912*l*. Vessels of above 60 tons burden can approach the town, the river having recently been much deepened: there is also a quay about 700 yds. distant; one for vessels of greater burden about a mile and a half farther down; and a fourth near the mouth of the river for foreign vessels, and such as draw too much water to approach nearer to the town. There are no fewer than 6 different banking establishments in Dumfries, the deposits in which amount to a very large sum. The town is governed by a provost, 3 bailies, and 22 councillors. Corporation revenue, in 1849, 1408*l*. Dumfries unites with Annan, Kirkcudbright, Sanquhar, and Lochmaben, in sending a mem. to the H. of C. Registered electors in 1849–50,506.

Dumfries is now united by a railway leading from the town to the Caledonian railway at Gretna, and a considerable portion of the line intended to unite it with Ayr has been constructed.

Dumfries is a place of great antiquity, though it was not made a royal bor. till the 12th century. In less than a century afterwards, Devorgilla, daughter of Alan, last lord of Galloway, and mother of John Baliol, erected a monastery here for Franciscan friars; and for the sake of this religious house, she built the old bridge, the toll on which formed part of the endowment of the institution. It was here that John Comyn, the heir and representative of Lady Devorgilla, and one of the competitors for the throne, was assassinated, under circumstances of great provocation, in 1305, by his rival, the illustrious Robert Bruce. The castle belonging to the Comyns was situated on a spot in the immediate vicinity of the town, which still bears the name of Castledykes. A strong castle once stood on the site now occupied by the New Church. Being in some respects a border town, Dumfries frequently fell into the hands of the English. It was for some time in the possession of Edward I. It was burnt by the English previously to 1440, and again in 1536. In 1570, the castle was taken and sacked, together with the town, by the Earl of Essex and Lord Scrope. Queen Mary and her privy council, in 1563, ratified, at Dumfries, a peace with England. James VI., in passing through the town, in 1617, on his return to England, presented the trades with a small silver gun, to be awarded, from time to time, to the best marksman; but this dangerous pastime has been discontinued. The inhab., in 1706, displayed their opposition to the union of the two kingdoms, by burning the articles and the

names of the commissioners at the market-cross. They evinced great loyalty towards the reigning family in 1715, and so fortified their town, that a large body of insurgents, who had determined to attack it, found it expedient to change their resolution. But in 1745, it suffered severely from the rebel army, which was stationed here a few days on its return from England.

Though reckoned an extremely healthy town, Dumfries suffered excessively from Indian or spasmodic cholera in 1832. The disease made its appearance on the 15th Sept., and disappeared in the last week of Nov. The total number of cases officially reported was 837; of deaths, 422; and of recoveries, 415. The spinsters of Dumfries would seem to have less chance of changing their condition than those of most other towns. According to the census of 1841, there were, in the town and par., 7,389 females, and only 5,699 males! (*New Stat. Acc. of Scotland*, § *Dumfries*; *M'Diarmid's Picture of Dumfries*; *Chalmers's Caledonia*; *Chambers's Gazetteer*; *Private Information*.)

DUNBAR, a royal and parl. bor. and sea-port of Scotland, co. Haddington, on a slight eminence on the German Ocean, 27 m. E. by N. Edinburgh, and 28 m. N. W. Berwick. Pop. in 1841, 3,013. It consists of a long and well-built street running E. and W., with inferior streets towards the sea, and one on the S. introducing the road from Edinburgh. Its public buildings are a new parish church of Gothic architecture, with a tower 107½ ft. high; Dunbar House, the ordinary residence of the noble family of Lauderdale; the town-hall; and burgh schools. It has a subscription and mechanics' library; an English and Latin school under one master; a mathematical school; and several private seminaries; a sailors' society for the benefit of superannuated seamen and their widows; three dissenting chapels, two belonging to the United Associate Synod, and one to the Wesleyan Methodists. The harbour has 9 ft. water at neap, and 14 at spring tides, but owing to rugged rocks the entrance is dangerous. Coal is imported to the extent of about 20,000 tons a year; foreign grain to a considerable extent. Corn of various kinds, including beans and peas, exported to the amount of about 25,000 qrs. There are two branch banks in the town, and two foundries. White fish of all kinds are caught off the coast. The cod is pickled, and sent to London; the haddocks are smoked, and sent chiefly to Edinburgh and Glasgow; the lobsters are preserved in pits, cut in the rock within sea-mark, and sent to London. The herring fishery is, also, considerably productive. Dunbar was created a royal bor. by David II., but existed as a burgh long before that date. It evidently grew up under the protection of the castle of Dunbar, a fortress which stood on a lofty rock within sea-mark; but the date of its building is unknown. The castle and lands of Dunbar were conferred, in 1072, by Malcolm Caenmore, on the Earl of Northumberland, whose descendants, created Earls of Dunbar and March, retained possession of them till their forfeiture in 1434. This fortress rendered Dunbar the theatre of many warlike exploits. It was taken by Edward I. in 1296. Edward II. took refuge in it after his defeat at Bannockburn. It was often besieged, and seems alternately to have belonged, for longer or shorter periods, to the English and Scotch. Four times it received within its walls Queen Mary. In 1567 parliament ordered it to be demolished, and scarcely a vestige of it now remains. The 6th earl of Dunbar, in 1218, founded in the neighbourhood a monastery of Red Friars, of which some traces yet remain; and the 7th earl founded a monastery of White Friars, but of it no vestige can now be seen. The title of Earl of Dunbar was revived, in 1605, by James VI., in the person of George Home, of Manderston, lord high treasurer of Scotland, at whose death, as he left no heirs male, it became extinct. A splendid marble monument was erected to his memory in the old, and is now preserved in the new, church of Dunbar. Dunbar unites with N. Berwick, Haddington, Lauder, and Jedburgh, in sending a mem. to the H. of C., and in 1849-50 had 146 registered voters. (*Keith's Relig. Houses*, pp. 369. 455.; *Caledonia*, § *Dunbar*; *Miller's Hist. of Dunbar*, 1830; *New Stat. Account of Scot.* art. *Dunbar*.)

DUNDALK, a sea-port town and parl. bor. of Ireland, co. Louth, prov. Leinster, 45 m. N. Dublin, at the extreme E. point of Dundalk Bay, near the mouth of Castletown river, on the railway from Dublin to Belfast, which is open thus far. Pop. (1821) 9,256; (1841) 10,782. In 1834, the parish, which extends beyond the town, had a pop. of 14,317, of whom 1,447 were of the estab. church, 256 Prot. diss., and 12,614 R. Cath. "It is a flourishing and increasing place" (*Boundary Report*) consisting of 2 main streets, each 1 m. in length, intersecting each other near the centre, with several transverse thoroughfares. They are paved, lighted and kept in order by commissioners under the watching and lighting act. A bridge crosses the Castletown river on the N. There is an assembly-room, a literary society, and two news-rooms. A hunting club holds its meetings here, and races take place occasionally in the neighbourhood. Near the seaside is a large cavalry barrack. The parish church is a spacious building: there is also a large R. Cath. chapel, and meeting-houses for Presbyterians, Independents, and Methodists.

It has an endowed classical school, to which the sons of freemen are admissible at a low quarterly fee, a school, called the Dundalk Institution, under the Incorporated Society; one on the foundation of Erasmus Smith; and some others supported by the contributions of individuals: these educate in all about 600 pupils: and about 500 are instructed in private seminaries. It has also a co. infirmary, a mendicity association, a savings' bank, and several minor charitable institutions. The building in which the fever hospital was held is now a pin factory. Lunatics are sent to the Richmond District Asylum in Dublin.

Though incorporated by charter of Richard II., the bor. is governed under a charter of Charles II. The ruling body consists of a bailiff, 16 burgesses, and an unlimited number of freemen chosen by the burgesses. Dundalk returned 2 mem. to the Irish H. of C., and now returns 1 to the imperial H. of C. The parl. bor. comprises 445 acres. Registered electors (1849-50), 400. The assizes and general sessions of the peace for the co. are held here twice a year, and petty sessions every Thursday. A guildhall contains apartments for municipal purposes, an assembly-room, and offices for several branches of public business. The co. court-house, an elegant modern structure, is built on the model of the temple of Theseus at Athens. The co. prison is large and well constructed; a tread-mill in it is used for raising water.

There are here a steam flour-mill, 2 distilleries, 4 tanneries, 2 salthouses, a malthouse, and a foundry. The trade consists principally in the export of a large portion of the agricultural produce of Louth, Cavan, and Monaghan; comprising wheat and wheat-flour, oats and oatmeal, barley and malt, with cattle, sheep, pigs, &c. The introduction of steam navigation has occasioned a great increase in the export of eggs and poultry. The harbour, which is safe, though shallow, has latterly been much improved. A lighthouse has recently been erected on the bar at the mouth of the river. The anchorage ground has from 4 to 8 fathoms water. Markets on Mondays; fairs on the Monday next but one before Ash-Wednesday, May 17., first Monday in July, last Monday in August, second Monday in October, and second Monday in November.

Account of the Quantity and Value of the Articles exported from Dundalk in 1835.

Articles.		Quantity.	Estimated Value.
			£
Corn, meal, and flour	cwts.	605,236	279,743
Provisions	—	10,580	46,160
Flax and tow	—	5,000	12,000
Wool	lbs.	15,640	980
Linen	yards	60,000	4,500
Eggs	number	2,410,800	5,430
Cows and oxen	head	5,932	20,000
Horses	—	100	1,000
Sheep	—	7,266	10,000
Swine	—	48,183	70,000
Other articles	value	- -	8,000
Total		- -	452,813

Dundalk is inhabited mostly by families connected with commerce and manufactures. The working classes are comparatively well clad and lodged: the vicinity of the sea enables them to make use of fish occasionally as food. Fuel, both of peat and coal, from Great Britain, is plentiful.

It was one of the fortresses erected by the English shortly after their settlement, for the defence of the northern pale; but its defences have since been suffered to fall into decay, and few remains of them are now in existence. (*Report on Irish Railways*, App. B. p. 24.)

DUNDEE, a flourishing royal and parl. bor. and seaport of Scotland, co. Forfar or Angus, on an acclivity on the N. bank of the Frith of Tay, 37½ m. N. by E. Edinburgh, 57 m. S. W. Aberdeen, and 9 m. W. of the lighthouses on Buttonness Point at the mouth of the Frith. Pop. in 1746, inc. the parish, 5,302; in 1801, 26,804; in 1841, 62,794; but in the town only 60,553. Number of inhab. houses, inc. "flats," 13,236, averaging nearly 5 persons to a house. The pop. has increased considerably since 1841, chiefly by the immigration of Irish of the lower classes, and may now (1850) be reckoned somewhat above 70,000. The town stretches upwards of a mile along the Tay, and inland about ½ m. up the acclivity which terminates in Dundee Law, an insulated conical hill, 525 feet above the level of the river. In the centre of the town is a spacious parallelogram, 360 feet long by 100 broad, called the High Street, and seven of the principal streets diverge from it, the Nethergate and Overgate to the W., the Murraygate and Seagate to the E., Castle Street and Crichton Street to the S., and Reform Street

to the N. There is generally great irregularity in the streets, except in the modern portions of the town; and there are many narrow and mean lanes which contrast strikingly with the new streets. The suburbs along the Tay are marked by many elegant villas. Of public buildings by far the most imposing is St. Mary's Church with its tower 156 feet high, a splendid edifice built in the 12th century. The only part of the original building, however, which remains is the tower, the other parts having been rebuilt in the last and present centuries. It is in the form of a cathedral, the tower at the west end, next to it the nave, then the transept, and at the east end the choir. After the Reformation it was divided, by partition walls, into different Presbyterian churches, of which at one time there were four. In 1841, three of these were burned down by an accidental fire. They have been rebuilt conformably to the original style of the structure, but now it has only three places of worship, the transept containing only one instead of two, into which it was previously divided. There being a large open space in front of the building, it has a fine appearance, and is well seen by strangers passing through the town on their way to or from Perth. There are two other churches belonging to the "Establishment," and numerous chapels belonging to Dissenters, but none of them are remarkable for their architecture. The Town House is a fine building, on the S. side of the High Street, designed by Adams, and erected about the year 1738. The Custom House is also a fine building: it was erected in 1841 after a design by Mr. James Leslie, the engineer of the harbour, the cost having been defrayed by government. A splendid arch, in commemoration of Her Majesty's landing at the harbour in 1844, from a design by Mr. Rochead, architect, is now nearly finished, at a cost of about 3,000*l*. It is in the old Saxon style, and is well suited to the site on which it is built. The public school, better known by the name of "The Public Seminaries," is a handsome building in the Grecian style. The exchange buildings also deserve notice. They contain a splendid reading room and other conveniences for the mercantile and professional classes. The "Watt Institution," so called in honour of the illustrious James Watt, is a neat building, containing a lecture-hall, library, &c., for the use of the working classes, for whose benefit it was erected by public subscription.

The chief of the *Public Works* connected with the town is the harbour. Previously to 1815 it was of very limited extent, and quite unsuited to the trade of the place. In that year an act of parliament was obtained for enlarging it, and placing it under the management of commissioners elected by the various incorporated public bodies of the town and county. The first plan of enlargement contained only 1 wet dock, but now there are 3, measuring together about 26 acres, and capable of accommodating vessels of the largest size. Besides the wet or floating docks, there is a large graving dock capable of containing 3 vessels at a time, and a graving slip on Morton's patent plan, on which sailing-vessels or steam-vessels of almost any size can be hauled up for repair. One of the wet-docks is not yet quite completed. When it is finished the harbour will have cost nearly 1,000,000*l*. sterling. This cost has been defrayed from the dues collected on goods and vessels entering and departing from it since 1815, except about 200,000*l*. of borrowed money which is now in the course of gradual repayment. Dundee has ample railway accommodation. W. there is the "Dundee and Perth," E. the "Dundee and Arbroath," N. the "Dundee and Newtyle," and S. the "Edinburgh and Dundee." By leaving Dundee early in the morning London may be reached in the evening of the same day, and other places with equal rapidity. There are 2 gas companies in the town, which afford an ample supply of that necessary article at the rate of 6*s*. per 1000 feet. One gas establishment was sufficient for the town, but during the mania for joint-stock companies in 1844 a second was projected and established, which has greatly diminished the dividends of the first and has not benefited its own partners. Until within these 2 years past Dundee was ill supplied with water; but a joint-stock company was established in 1845, and they have now brought a plentiful supply from Monikie parish, distant between 8 and 9 m. A large reservoir has been formed there to collect the rain-water of the district, and a covered conduit has been made to conduct the water to the town, where it is distributed to those who are willing to take it and pay the fixed rate of charge, which is 1*s*. 6*d*. per pound on the rent of the house. There is a smaller reservoir within a mile of the town on high ground, from which, by means of pipes, there is a constant pressure of water, so that it rises to the attics of the highest houses, and is very convenient for extinguishing fires, there being fire-cocks in all the streets, and leather hoses or flexible pipes to lead the water to the house in which the fire breaks out. The whole cost of the water works has been about 130,000*l*.

The staple trade of Dundee is the manufacture of linen, chiefly of the coarser descriptions, such as are used for the clothing of the lower orders, both at home and abroad. Large quantities of sacking, bagging, and sail-canvas are also manufactured both for the home and foreign markets; and some of the manufacturers have of late turned their attention to finer fabrics, such as drills, striped and checked linen, and fine shirting. The linen trade of Dundee is the most extensive in the U. Kingdom. Besides what is manufactured in the town, the greater part of what is made in Forfar, Kirriemuir, and the other inland villages of Forfarshire, is sent here to be dressed, packed, and sent off; so that the quantity exported from Dundee exceeds considerably that from any other port in the kingdom. In the year ending 31 May, 1848, the quantities of the different sorts were as follows: —

Osnaburgs - - - - - -	74,587	pieces.
Sheetings - - - - - -	268,355	„
Bagging - - - - - -	29,301	„
Sacking - - - - - -	157,382	„
Sail-canvas - - - - -	193,058	„
Dowlas - - - - - -	65,938	„
Sundries - - - - - -	40,304	„
	828,925	„

The value of these linens may be estimated at 4*d*. a yard on an average, or about 2*l*. a piece of 120 yards; so that the whole value amounts to 1,757,850*l*. Since May 1848 considerable quantities have been sent off by railway to Glasgow, Liverpool, &c., and thus the quantity exported from the harbour is now less than it was previously to that date; but, as the manufacturers have been in great activity for the last 2 years, it is certain that a larger amount has been sent off than the amount before stated. From the circumstance of the railway companies charging the carriage by weight and not by the piece, as is the case at the harbour, a correct account of the number of pieces cannot now be given, but it may be safely said that the increase has been 15 per cent., making the total quantity upwards of 1,000,000 pieces, and the total value upwards of 2,000,000*l*.

The raw materials for the linen manufacture of Dundee are received chiefly from Russia and Prussia. The following quantities were received in 1849: —

Flax - - - - - - -	26,075	tons.
Flax-codilla - - - - - -	10,024	„
Hemp - - - - - - -	1,124	„
Hemp-codilla - - - - - -	18	„
Jute - - - - - - -	12,476	„
	49,717	„

The whole of these raw materials were received from Russia and Prussia, except 105 tons of flax and 2,180 tons of flax-codilla from Holland, Hamburgh, and Bremen; and the jute 12,746 tons, from the East Indies. Their cost may be estimated at about 1,100,000*l*. The quantity being greater than in any previous year, and being equal to somewhat more than a year's consumption, it may be reckoned that the value of the linen manufactured from them will amount to more than the sum before stated as the value of last year's production. Supposing the raw materials for a year's consumption to cost 1,000,000*l*., and the value of the linen manufactured from them to amount to 2,100,000*l*., there will remain 1,100,000*l*. for the wages of the working people employed, and the profit on the capital engaged in the trade.

The linen trade seems to have been introduced into Dundee early last century; but for a lengthened time it was quite inconsiderable. In 1745 only 74 tons of flax were imported. From that period to 1791 the progress of the manufacture was more rapid; in the latter year, 2,444 tons flax, and 299 tons hemp being imported, and about 8,000,000 yards of linen, sail-cloth, &c., exported. Previously to this period all the yarn used in the manufacture was spun upon the common hand-wheel, partly in the town and partly in the adjacent country. But the spinning of yarn by machinery began soon after to be introduced, and the increased facility of production consequent to the erection of flax spinning mills has been such, that the cost of the yarn, including of course the raw material, is now less than the mere expense of spinning amounted to 40 years ago. The result has been the total cessation of hand-spinning in all parts of Scotland, and a wonderful increase of the quantity of yarn produced, and of the manufacture. In 1811, 4 spinning mills had been erected in Dundee; in 1831 the number was increased to 31; and now (1850) they amount to 53, all of which are in full work. The weaving of the linen is chiefly done on hand-looms, but these are in the course of being superseded by machines, or "power-looms" as they are generally called. There are now 4 large power-loom factories in Dundee, and more are projected; the linen produced from the machines being much more regular in the texture than what is done by hand, and the cost is also less. There are seven calendering and packing establishments, all of them of considerable extent. At these works the linens are passed through

machines named "calenders" for the purpose of making them smooth and close in the texture. They are then cut down into short pieces, folded into such shapes as are suitable for the markets to which they are to be sent, and packed into bales by means of hydraulic presses, which squeeze them into very small bulk, in order that they may require less room in the vessels in which they are shipped to foreign countries.

It is stated in the returns relating to Forfarshire, under the census of 1841, that there were engaged in the linen manufacture of Dundee, 5,614 males, and 4,543 females, making in all 10,157 individuals. The number at present (1850) is considerably greater; and it may now (1850) be estimated at 15,000 individuals, besides the wives and children of such of the males as are married.

The wages of the working people engaged in the linen manufacture are as follows: —

	Per Week.
Boys and girls, 13 to 16 years of age, from	3*s.* to 4*s.*
Women and girls above 16 years of age -	4*s.* to 6*s.* 6*d.*
Men employed as overseers of rooms and in repairing and making machinery -	15*s.* to 18*s.*
Mill managers - - - -	30*s.* to 50*s.*

Great numbers of Irish women and girls have lately come to work in the factories of Dundee. Until they are trained to the work, they get less wages than those who have been employed since they reached the age of 13; but, after a year or two's practice, they do the work as well as the natives of the place, and get as high wages.

More than half the linens sent from Dundee are exported to foreign countries, the remainder being sent to London, Glasgow, Manchester, and other large towns for home consumption. The linens which are exported to foreign countries are for the most part sent to Liverpool, London, and Glasgow, to be shipped there, it being found more advantageous to send them abroad as parts of general cargoes of goods, than to send whole cargoes of them direct from Dundee. Some of the manufacturers are the exporters of their own linens; others sell to exporting merchants in Dundee, who employ their capital in that branch of trade. The linens are in general sent on consignment to agents in foreign countries for sale, and are sold by them to retailers on credit of 6 to 12 months. The foreign countries to which Dundee linens are exported are, the United States, Canada, Mexico, the West India Islands, Brazil, Peru, Chili; and some are also sent to Spain, Portugal, and the countries on the Mediterranean. A large amount of capital is required to carry on the linen trade of Dundee, as the raw material is mostly paid for in ready money, and the manufactured article is sold on long credit. For that portion of the latter which is sent abroad, it is in general about two years from the time when the manufacture of it is commenced, till the time when returns are received. It may, therefore, be estimated that nearly 3,000,000*l.* sterling are constantly employed in the Dundee trade, and in that of the small towns of which it is the sea-port.

The remarkable increase which has taken place in the staple trade of Dundee during the present century has been owing to several causes. The spirit of enterprise and industry which has prevailed among the inhabitants of the town and neighbourhood has, no doubt, been the principal cause; but it has been greatly aided by circumstances. One of these has been the establishment of joint-stock banks in the town, and of branches of the chartered banks of Scotland. A competition arose among these banks and branch banks for the employment of their capital, and thereby enterprising and industrious young men in the linen trade were enabled to extend their trades to almost any amount they chose. In some instances the liberality of the banks in their advances to speculative persons who extended their trades beyond the bounds of prudence was productive of heavy losses to the partners of these banks; but in a few years these losses were forgotten, and facilities were again given to people with little or no capital to carry on an amount of business which otherwise would have been impracticable to them. Some of the "houses" in the linen trade of Dundee who carry on the largest business have been enabled, by their prudence, aided by liberal advances from their bankers, to realise fortunes of no inconsiderable amount. The improvements in spinning and weaving machinery, which have either originated here, or have been promptly adopted after having originated in other places, have also tended greatly to promote the increase of the trade. As an instance of the great improvement which has been made in spinning machinery, it may be mentioned, that the expense of spinning yarn by machinery is now only about ⅛th part of what it was 40 or 50 years ago, and the yarn is also much superior in quality to what it then was. The improvement and extension of the harbour, and the ample accommodation afforded by the shipping companies for sending off the manufactured article to London, Liverpool, and Glasgow, have also tended to the increase of the trade.

The other important branches of trade carried on in Dundee, besides the retail trade common to all large towns, are the shipping trade, ship-building, and machine-making. The number of ships or vessels belonging to the port is 342, their registered aggregate burden being 57,378 tons. Many of these vessels are employed in foreign trade not connected with Dundee, a considerable number is required for the importation of flax, &c., from the Baltic, 4 are engaged in whale-fishing, and the rest in the coal and coasting trades. All the coal used in Dundee is brought by sea, partly from the Frith of Forth, and partly from Newcastle and other ports on the E. coast of England. There are seven ship-building yards in Dundee, and there are commonly 10 or 12 vessels on the stocks. At present there is one building of a large size, being upwards of 800 tons burden. There are six extensive machine-making establishments, from which is sent out annually a large amount of machinery, consisting of steam engines, both land and marine, locomotive engines for railways, spinning frames, &c.

For the purpose of acting in concert when there is occasion, the merchants and manufacturers of Dundee established, in 1835, a Chamber of Commerce. It has been found of much utility in making representations to Parliament, the Board of Trade, and other departments of government. The chamber consists of about 160 members, and is managed by a chairman, deputy chairman, six directors, a secretary and treasurer. There is a reading-room connected with it, well supplied with newspapers and commercial and shipping lists. Each member pays 30*s.* annually towards defraying the current expenses.

The revenue of the harbour arises from dues imposed on goods and vessels arriving at and departing from the port. A schedule of these dues is attached to the Harbour Act, and a clause in that act empowers the trustees to increase the dues to the extent of 33⅓ per cent. when necessary, and to diminish them in the event of the whole revenue not being required when charged at the schedule rate. The rates have been frequently varied since the commencement of the trust in 1815. The subjoined table shows the amount of revenue actually received, and the amount which would have been received in each year had the rate always been the same. The yearly balancing of the harbour books takes place on 31 May, so that the revenue stated in the table is from that day to the same day in the following year: —

Year.	Actual Revenue.	Rate.	Schedule Revenue.
	£		£
1824-25	9,095	25 per cent. under	12,126
1829-30	12,051	25 per cent. under	16,068
1834-35	11,924	20 per cent. under	14,308
1839-40	16,810	Schedule rate	16,810
1844-45	25,660	20 per cent. above	21,383
1847-48	24,036	12½ per cent. above	21,365
1848-49	24,041	20 per cent. above	20,034

The column in this table headed "Schedule Revenue" shows the amount of the trade at the harbour more correctly than the column headed "Actual Revenue," the former being calculated on the hypothesis of the dues being always at the same rate. It is to be observed, that the apparent falling off of the trade in 1848-49 is occasioned by the circumstance of a larger proportion of the manufactured goods being now sent away by railway than formerly.

Customs Duties received at Dundee since 1833.

From 5 January	1833	to 5 January	1834	£41,944
—	1835	—	1836	40,438
—	1840	—	1841	55,827
—	1845	—	1846	46,325
—	1848	—	1849	60,130
—	1849	—	1850	64,072

The amount of customs duties does not, however, afford any thing like a true criterion of the extent of the trade of Dundee, as flax and hemp, the chief articles of import from foreign countries, are not subject to any duty. The greater part of the sugar used in Dundee being either refined, or of the sort called crushed lump, which is partially refined, there is scarcely any revenue derived from sugar, there being no refineries here, and no direct importation of raw sugar. When there was a duty on foreign corn, a considerable sum was received at this port yearly, but now that the duty is only 1*s.* per quarter, the sum received from that source is very small.

The principal merchants and manufacturers live in good style. They have houses in the suburbs, and many of them keep horses and carriages. The town is well supplied with hackney coaches, although this is only a recent luxury, the first of them having been started at the Queen's landing in 1844. The police establishment is managed by commissioners appointed by a special act of parliament, and is conducted on an economical scale, the charge on the inhabitants for watching, lighting, cleaning, and paving the streets, being only 1*s.* per 20*s.* of rent. There is an extensive prison, in which

there are generally about 200 prisoners of both sexes: its expense is defrayed by an assessment on property of about 4d. per pound of rent. The poors-rate amounts to about 12,000l. a year, and is charged on the inhabs. as in other towns. There is no workhouse; the poor are paid a monthly allowance varying from two to six shillings a month, and are permitted to live in houses of their own, or in lodgings, as they may incline. Pauperism has greatly increased within these few years, owing chiefly to the great prevalence of fever and cholera in 1846, 1847, and 1848, which carried off a great many fathers of families in the lower classes, and thus left their families to be supported by the public. If trade continue as prosperous as it is at present, it may be expected that pauperism will decrease; because, when there is full employment for all the working classes, they are able to support themselves and their families. It is to be regretted that many of the streets where the working classes live are defective in point of drainage, and, consequently, dirty and unhealthy. Many of the houses too in these streets are low-roofed and crowded upon one another, and the apartments being in general small, their ventilation is very imperfect. An attempt has been making lately by some benevolent individuals to improve the condition of the lower classes by establishing well-aired lodging-houses, coffee and reading-rooms, and garden allotments in the outskirts of the town, which, it is hoped, will be productive of good.

Dundee is well supplied with schools for the children of the middle and lower classes, and a plain education can be got on very moderate terms. At the Public Seminaries, which are under the management of directors appointed by the town council, and those who contribute to the cost of the building, classical education, to a certain extent, as well as the elementary branches, can be obtained at a very moderate cost. There are teachers of Latin, Greek, French, German, Mathematics, and Natural Philosophy. The number of pupils of all ages and ranks at the Public Seminaries is generally between 600 and 700.

The principal charitable institutions are, the infirmary or hospital, the industrial school, and the orphan house. The infirmary has accommodation for about 150 patients, and is supported entirely by donations and yearly contributions from benevolent individuals. The industrial, or ragged school, is for poor boys and girls who are deserted, or not cared for, by their parents, and is also supported by voluntary contributions. The number of children in it averages about 120. The orphan house is likewise maintained by contributions and bequests. Among the charitable institutions may also be reckoned the lunatic asylum, although it does not now require assistance from the charitable to maintain it, the board of the patients being sufficient for that purpose. The cost of the building was, in the first instance, defrayed by contributions, but the additions which have been made to it during the last twenty years have been paid for out of the profits realised from the rate of board charged to the higher classes of patients. There is accommodation for upwards of 200 of both sexes, the males being on one side of the building, and the females on the other. The entire fabric has cost 33,000l.

Four newspapers are published in Dundee. The "Dundee, Perth, and Cupar Advertiser" is the oldest, having been established upwards of 50 years ago. Until within these last 6 or 7 years it was published only once a week, but now it appears twice a week. It has always taken the popular side of politics, and has much the largest share of local and other advertisements. The "Dundee Courier" has been established about 30 years. It is Conservative in its politics, and is published weekly, on Wednesday. The "Northern Warder" was established about 10 years ago, as the organ of the Non-Intrusion party of the church of Scotland, and since the disruption of the church in 1843 it has continued to be the organ of the party calling themselves the "Free Church of Scotland." The "Dundee Commercial Journal" was commenced in February, 1850, and is published weekly, on Saturday. It is devoted almost entirely to matters relating to the trade and shipping of Dundee and of the neighbouring towns.

Seven years ago there were 4 joint-stock banking companies belonging to Dundee, viz. the Dundee Banking Company, the Dundee Union Bank, the Dundee New Bank, and the Eastern Bank of Scotland. There are now only 2, the Dundee Banking Company and the Eastern Bank. The Union Bank was bought up in 1844 by the Western Bank of Scotland, a great Glasgow company; and the New Bank was united with the Dundee Banking Company. The capital of the latter is 100,000l., divided into shares of 100l. each, of which 60l. is paid up. The capital of the Eastern Bank is 127,000l., in shares of 10l. each, all paid up. Besides these 2 native banks there are branches of the Bank of Scotland, the British Linen Company, the National Bank of Scotland, and the Western Bank of Scotland. All these branches carry on large businesses in Dundee and receive large amounts of deposits. Their principal business consists in discounting bills to the merchants and manufacturers. They charge generally 1½ per cent. per annum higher than they allow for deposits. They all issue notes of 1l. and upwards, and they endeavour to keep as many of these notes in circulation as possible, a great part of their profit consisting of the interest on them while in circulation. The amount of deposit money in the various banks and bank branches in Dundee cannot be exactly ascertained, but it is estimated by well-informed persons to be at present (1850) between 1,500,000l. and 1,700,000l.

The Dundee Savings' Bank was established in 1815, and was placed on the national security basis in 1838. Deposits on 20 Nov. 1849, 47,121l. 0s. 4d., contributed by 3,800 depositors. Interest is allowed to the depositors at the rate of 2½ per cent. per annum.

The municipal government of the town is vested in a provost, 4 bailies, a dean of guild, treasurer, and 14 councillors. They continue three years in office, and one-third of the number is elected annually by the householders paying 10l. and upwards of yearly rent. The revenue of the municipal corporation, which is derived from rent of property, and petty customs on provisions, &c. brought into the town, is barely sufficient to pay the current expenses and the interest of the debt. The provost, bailies, and dean of guild are the judges of the police court, which sits every morning for the trial of petty offences. One judge presides, and they take it in rotation for a week at each time. There is also a sheriff-substitute in Dundee for civil causes, and for the trial of graver offences than those generally tried in the police court. The sheriff-substitute is appointed by the head sheriff of the county, and may be termed his assistant. In the counties of Scotland which contain large towns, the head sheriff has one or more substitutes to assist him in his duties. Previously to the passing of the Reform Act in 1832, Dundee was joined with Forfar, Perth, Cupar, and St. Andrew's, in returning a mem. to the H. of C. But the act referred to conferred that privilege on Dundee singly. The parl. const. consists of the registered householders of 10l. rent and upwards, of whom there were 2,783 in 1849-50. The present highly-esteemed member is George Duncan, Esquire, a native of, and formerly a merchant in, the town.

The situation of Dundee is very beautiful, especially when viewed from the coast of Fife, on the opposite side of the Tay. The undulating ground on which the town is built, with the "Law" and Balgay Hill in the background, and the Sidlaw hills in the distance, form a very pleasant landscape. The numerous tall mill chimneys in the town have rather a picturesque appearance, though it must be admitted that the dense smoke which issues from them during the working hours does not improve the appearance of the scene. The surrounding country is, in general, fertile, especially to the west and east. In the direction of Perth, to the west, is the Carse of Gowrie, one of the most fertile valleys in Scotland; and in the direction of Arbroath, to the east, is a rich agricultural district which produces a large quantity of grain. N. the country is somewhat hilly, but in that direction there are also fertile valleys, especially the valley of Strathmore, whence large quantities of agricultural produce are sent for the consumption of the town, as well as for exportation to Edinburgh and London.

The origin of Dundee is involved in obscurity. In the early centuries of the Christian æra, it had probably been a village inhabited by a few fishermen who gained a livelihood by supplying the neighbouring country with fish. In the 11th century King Malcolm erected a palace or residence here, and lived in it occasionally with Margaret, his queen, a daughter of one of the Saxon kings of England. The palace was on the north side of the town as it then existed, and the site of it is still pointed out on the south side of the old burying ground. Dundee must have been a place of some importance at that time. The next remarkable occurrence of which we read concerning Dundee was the building of a church in honour of the Virgin Mary, of which the old steeple or tower is now the only remaining original part, by David, Earl of Huntingdon, a brother of William the Lion, on the occasion of his landing in the Tay after having encountered a severe storm in the North Sea. History says little more about Dundee till the time of Sir William Wallace. That brave warrior and patriot was educated at the grammar school of the town, and was often in its neighbourhood with his gallant companions during the struggles which they made for the independence of Scotland. After he was overpowered by the superior forces of Edward I., Dundee suffered much for its adherence to the cause of Scottish independence. In the civil wars during the reign of the Stuarts it was also frequently the object of contention between the two parties; and ultimately it was almost totally destroyed by the army of General Monk in 1651, because it stood out for the party of King Charles. During the rebellions of 1715 and 1745 it was also an object of contest, but it does not appear to have then suffered much. After 1745

it gradually recovered from its misfortunes, and towards the end of last century it had attained to a considerable degree of prosperity. It was formerly a walled town, but of its walls and gates no traces remain, except the "Cowgate Port," which still stands across the Cowgate street, having been preserved from respect to the memory of the famous George Wishart, one of the first religious reformers in Scotland. During the dreadful plague of 1544, he preached at the same time, from the top of this gate, to the sick on the outside, and the healthy in the inside, the sick having been all sent outside to prevent infection. Dundee was made a royal burgh in 1210, when it received a charter from William the Lion. The charter was renewed at different times by the sovereigns of Scotland, and the existing charter was given by Charles I. in 1641. At one time a considerable extent of land in the neighbourhood belonged to the burgh, but it has all been disposed of, and the only source of revenue to the corporation is the rent of ground on which houses have been built within the burgh. There is not much occasion, however, for revenue to the corporation, since the expense of the police establishment is defrayed by a general rate imposed on the inhabs. The politics of the inhabs. of Dundee for the last 60 or 70 years have been decidedly of a liberal cast, at least those of the majority. At the breaking out of the first French revolution democratic opinions became very prevalent in the town, and ever since aristocratic notions have been unpopular, except with a few. At present Her Majesty and her ministry are in favour, and no disloyalty whatever prevails, nor is likely to prevail so long as the government is disposed to promote just and liberal measures with respect to trade and the other internal affairs of the nation.

N. B. We are indebted for this comprehensive and excellent account of Dundee, to our esteemed friend, James Brown, Esq., manufacturer and merchant of the town, and provost from 1844 to 1847.

DUNFERMLINE, a royal and parl. bor. and eminent manufacturing town of Scotland, co. Fife, 3 m. N. Frith of Forth, 16 m. N.W. Edinburgh, and 6 m. N.W. North Queensferry, lat. 56° 5′ 4″ N., long. 3° 27′ 18″ W. It is about 300 ft. above the level of the sea, and occupies an agreeable but rather inconvenient situation, being placed on the face of an extensive eminence, difficult of ascent from the S. for heavy carriages. Pop. of town and suburbs, 1801, 5,484, 1831, 10,625; 1841, 13,323; but, including the parish, 19,778: inhab. houses, 2,924. The town stretches fully a mile in length from E. to W., and its average breadth is about ⅝ m. The main street, which is handsome and substantially built, is pretty regular. Almost all the other streets are more or less irreglar; and while some are handsome, not a few are of an opposite description. A large suburb having risen up on the W., and being separated from the town by a deep ravine, formed by the Tower-Burn, a bridge was thrown over the rivulet in 1770; and the ravine having been so far filled up, buildings have been erected on both sides. The only very remarkable public building is the parish or Abbey church, being part of a monastery founded here by Malcolm III., surnamed Caenmore, and which served as the parish church till 1821, when a new church was erected to the E of the old building, and in immediate connection with it: the old, in truth, serves as the vestibule of the new place of worship. When digging in what was called the Psalter churchyard (on which spot the choir formerly stood), for a proper site for the new edifice, the tomb of the most illustrious of the Scotch sovereigns, ROBERT BRUCE, was discovered in 1818. His skeleton, which was pretty entire, and 6 ft. in length, was disinterred, and a cast of his skull taken. It was re-interred amidst much state, by the barons of exchequer, the bones being placed in a new coffin, filled up with bituminous matter, calculated to preserve them. The spot is below the pulpit of the new church. This building, which is of Gothic architecture, harmonises well with the old structure, of which it is a continuation; and is surmounted by a high square tower, round the sides of which, in open hewn work, are the words "King Robert the Bruce," in capital letters 4 ft. in height. The Abbey church of Dunfermline is, in short, one of the most imposing and magnificent structures of the kind in Scotland. It has 2,051 seats; but is only available, from the obstruction of pillars and otherwise, for about 1,400 hearers. There are numerous other churches in the town and parish, some recently built, and neat in their construction. The largest church of the United Presbyterian Synod, is a huge barn-looking building which raises "its enormous rectilinear ridge" over all the other buildings in the town. In front of it was placed in 1849, a statue of Ralph Erskine. The other public buildings are the town-house, county-court-buildings, grammar and commercial schools, gaol, poors' house, and fever-hospital. The town-house consists of three stories, and is surmounted by a steeple 100 ft. in height. The 3rd story was formerly used as the town gaol, but being extremely ill-suited for that purpose, a new gaol, erected on the town green, was opened in 1844. The county-court-buildings were originally named the guildhall, afterwards the Spire Inn, on account of the lofty spire (132 ft.) that distinguishes the edifice. Many elegant villas, surrounded by garden ground, adorn the declivity S. of the High Street.

The means of instruction are ample: there is a grammar-school, established prior to the Reformation, of which Robert Henryson, an ingenious poet of the times of James II. or III., is believed to have been master; a commercial school under the patronage of the guildry; the M'Lean and various other schools. A teacher of music, termed "master of the song," has also a small endowment. There is a mechanics' institute, and a scientific association for popular lectures on science and literature: the fees of admission to these lectures being low, they have been well attended. There are several subscription libraries and a local museum.

In addition to the Abbey church, which is collegiate, two *quoad sacra* churches belong to the Establishment. there are 3 Free churches; 6 United Presbyterian churches, 1 Episcopalian, 2 Baptist, and 1 Independent. The Secession from the established church in 1732, may be said to have originated here. Of the Messrs. Erskine, justly regarded as the fathers of the Secession, one of them, Mr. Ralph Erskine, was minister of the Abbey church of Dunfermline The Relief church, also, originated here in 1752, by the deposition of Mr. Thomas Gillespie of Carnock, in honour of whom an elegant church was erected in 1849. More than three fourths the inhab. of the par. are Presbyterian dissenters.

Dunfermline is distinguished by its proficiency in the manufacture of fine table linen, and coloured table-covers, &c. The business is of considerable antiquity, having been introduced towards the beginning of the 18th century; but the original fabrics were of a coarse description, namely, ticks and checks. Damask and diaper looms were in roduced early in the last century, by an ingenious mechanic of the town, of the name of Blake; but for a lengthened period the trade increased very slowly. In 1778 a new epoch commenced in the manufacture, by the introduction of the fly-shuttle; and many improvements have since been effected in the construction and working of the loom, and in other particulars. Among the most important of these was the Jacquard loom, introduced in 1825, and now universally employed.

The goods produced at Dunfermline and in its vicinity were, until within these few years, mostly woven in the houses of the weavers, almost every master of a house being owner of his own loom, and sometimes of two or three more, which he let to journeymen and apprentices. Latterly, however, the factory system has been introduced into this department, sundry manufacturers having fitted up extensive factories with looms, partly from a belief that their yarns would be safer in such establishments, partly because on the old plan they were sometimes obliged to furnish, at a considerable risk, weavers with peculiarly expensive mountings, and partly from a belief that the business might be carried on in this way better and more to their advantage than when it was distributed over swarms of cottages. Very different opinions are entertained in regard to the influence of the new system. That it depreciated the property of the weavers is certain, but, at the same time, it has had the effect of materially shortening the hours of labour. Formerly the weavers were tempted to prolong their working hours to 9, 10, and even 11 p. m., whereas the factories all shut at 7 o'clock. Some of them have schools attached, and they are all clean and well ventilated.

Previously to the end of last century, all the yarn was spun by the hand-wheel; but at that time machinery was introduced, and has now entirely superseded the former clumsy and expensive system. The manufacturers are supplied with the finer sorts of yarn chiefly from Yorkshire and Ireland, and the other sorts from the neighbourhood, Dundee, and elsewhere. In 1836 there were 7, but at present (1850) there are only 2 spinning-mills in operation in the burgh and parish. The quantity of flax purchased by these mills is about 400 tons annually. They do not spin exclusively for the local market, but prepare such articles as linen thread, shoe thread, twist, &c., for the general market. The power-loom is employed in two factories, but only in weaving the commoner description of goods. The fineness and general fabric of the goods have been vastly improved, and the manufacture itself proportionally extended; though, latterly, we regret to say, it has declined considerably. This falling off is partly to be attributed to the overproduction of goods for some years previously to 1843. Several manufacturers, trading on fictitious capital, were forced, to meet their payments, to sell their goods at ruinously low prices, by which both the foreign and home markets were completely glutted. But for some time past the production has been more commensurate with the demand, and the trade has assumed a healthier appearance. It is, also, true that this branch of manufacture has found its way to a small extent to other parts of Fife, and to the north of Ireland. The following

table shows the progress of the manufacture within the burgh and parish, and in the neighbouring villages of Cairnyhill, Torryburn, and Culross, with Strathmiglo and Auchtermuchty, 18 or 20 m. distant, in which places the work is carried on for the Dunfermline manufacturers.

Date.	No. of Looms within the Burgh & Par.	No. of Looms out of the Burgh & Par.	Total.	Value.
				L.
1749	400	- -	400	
1788	- -	- -	900	
1818	1,500	150	1,650	120,000
1836	2,794	723	3,517	100,000
1845	3,050	1,240	4,290	128 000
1849	2,600	1,200	3,800	76,000

In 1836, the capital employed in the linen trade in the bor. and parish was estimated at 826,261*l*., and it may now (1850) probably amount to 500,000*l*. At the former period the manufacture is said to have employed in all about 5,000 hands, of whom above 3,200 were men and boys. It is now supposed to give employment to 2,000 men and boys, at wages varying from 8*s*. to 10*s*. a week, and to 1,280 women and girls at from 5*s*. to 7*s*. a week.

The patterns were for a long time conceived in a w etched taste, were ill-drawn, and in every respect far inferior to foreign specimens. They consisted chiefly of the British flag, the national Scottish arms, gentlemen's coats of arms, flowers, birds, &c.; all very unnatural and extravagant. But now the patterns display equal ingenuity and taste in design and execution, are rich and varied, and considered equal, if not superior, to the German; besides, the damask loom is capable of producing any figure, however complicated. The oldest-established and one of the principal houses is at present (1850) engaged in executing an order for damask for Her Majesty for Balmoral. The fabric is of the finest quality, and the design elegant, and appropriate to the locality in which it is to be used, being composed of deer-stalkers, stag , and hounds, with Balmoral Castle in the centre, the whole intertwined with the royal cipher. There are now a number of artists wholly devoted to design painting: to encourage the art, the manufacturers, in 1826, instituted an academy for drawing; but this has since been discontinued.

Among other manufactories Dunfermline has 2 breweries; a soap-work, which produced, in 1848, 249,320 lb. of hard soap; candle-works, rope-works, tan-works, two iron foundries, flour-mills with steam-engine, &c. There are 4 branch banks in the bor., viz. Bank of Scotland, British Linen Company, Commercial Bank of Scotland, and the Western Bank.

Dunfermline unites with Stirling, Culross, Inverkeithing, and Queensferry, in returning a mem. to the H. of C.—Parl. constit. in 1849–50, 457. It is governed by a provost, 2 baillies, and 19 councillors. There are several endowments in the bor. for the support of decayed widows and other poor persons. Poor rate in 1847, 2,881*l*, assessed on property valued at 53,518*l*. A savings bank established in 1815, had, in 1849. 1,880 depositors, and 22,550*l*. deposits. The magistrates hold a police court every Wednesday, and a nine-merk court on the same day for the recovery of debts under 10*s*. Sheriff courts are held every Friday during session time, and in the vacation on the first Friday of each month.

The town is connected by railways with Edinburgh, Dundee, Perth, Alloa, &c. There are three harbours in the parish, each about 3 m. from the town, viz., Charleston, Brucehaven, and Limekilns. The last does not admit vessels of more than 200 tons burden. Pop. 1,000. Charleston, which was founded in 1761, and contains about 900 inhab., admits vessels of 400 tons. Its basin is capacious, and perfectly sheltered from every wind.

The parish of Dunfermline abounds in coal, lime, and ironstone. The coal has been wrought for upwards of 500 years. The quantity worked is nearly 150,000 tons a year. Brucehaven and Charleston, two of the three harbours referred to, were originally constructed by Lord Elgin, whose collieries and limeworks are on a very extensive scale.

From what has already been said, Dunfermline, it is evident, can boast of great antiquity. A tower or fort, built here by Malcolm Caeumore in the 11th century, gave origin to the burgh. The same king also founded a spacious Benedictine monastery, which ultimately became one of the most wealthy and important institutions of the kind in Scotland; and ordained that its precincts should form the burying-place of the Scottish kings. His own remains and those of his consort, Queen Margaret, were interred there, as also those of eight others of the royal line, including Robert Bruce. Dunfermline continued to be a favourite royal residence as long as the Scottish dynasty existed. Charles I. was born here; as also his sister Elizabeth, afterwards queen of Bohemia, from whom her present majesty is descended; and Charles II. paid a visit to this ancient seat of royalty in 1650. The Scottish parliament was often held in it. The date of the erection of the palace is unknown; but it is believed to have been much extended and adorned by James IV. and James V. There now remains only the S. wall, and a vaulted apartment which was the king's cellar, having the kitchen above. Of the tower, erected by King Malcolm, only a mouldering fragment is seen. Of the monastery, which was once of great extent, nothing remains entire except the S. and W. walls of the fratery, or refectory, in the latter of which is a fine Gothic window; and the nave of the old abbey church, which, as above stated, forms the vestibule to the new church. But enough remains both of the abbey and palace to indicate the extent and magnificence of the original buildings. We may conclude by mentioning, that, ancient as the place is, it was not made a royal burgh till 1588. (*Chalmers' Hist. of Dunfermline; Private Information.*)

DUNGANNON, an inland town and parl. bor. of Ireland, co. Tyrone, prov. Ulster, 12 m. N. by W. Armagh, and 7 m. W. Lough Neagh. Pop. in 1841, 3,801; pop. of par., in 1834, 6,236, of whom, 1,784 were of the estab. church, 500 Prot. diss., and 3,952 Rom. Cath. The town consists of a square, with several good streets branching from it along the sides of a hill. "It is not increasing, but, on the contrary, on the decline, if we may judge from the average proportion of uninhabited houses. The linen trade has declined very considerably, and that in grain is not so good as formerly." (*Boundary Report.*) The par. church is a large ancient building, and it has also a Rom. Cath. chapel, and meeting-houses for Presbyterians, Seceders, and Methodists; a classical school, founded in the reign of Charles I., well endowed, and capable of accommodating 100 resident pupils; a dispensary, and a mendicity institution. The corporation, which consisted of a portreeve, burgesses, and commons, is now extinct. The town returned 2 mems. to the Irish H. of C. till the Union, since which it has returned 1 mem. to the imperial H. of C. Previously to the Reform Act the franchise was vested in the portreeve and burgesses. The ancient liberties of the bor. comprised 836 acres, but the parl. bor. has been restricted to 230 acres. Registered electors (1849-50), 271. A manor-court, with jurisdiction to the amount of 20*l*., is held every three weeks; as also general sessions twice in the year, and petty sessions every fortnight. The court-house, with a bridewell attached, is a handsome modern building: a party of the constabulary is stationed here. The linen manufacture, though much fallen off, is still carried on pretty extensively, and there are several bleach-greens in the neighbourhood; earthenware and pottery are also manufactured, and there are iron-works, a brewery, and a large distillery. Markets on Tuesdays and Thursdays, in a spacious and convenient market-house: fairs on the first Thursday of every month. Post office revenue increased from 584*l*., in 1843, to 1,090*l*. in 1848. Branches of the Provincial and Belfast banks were opened here in 1834, and it has a savings bank, which had, in 1848, 16,247*l*. of deposits. It is the seat of a poor law union. Dungannon is famous in Irish history from its being the place where the delegates of the Ulster volunteers met in 1782; and whence they issued their resolutions declaratory of the independence of Ireland. (*Stat. Surv.; Thoms' Alm.*)

DUNGARVAN, a marit. town and parl. bor. of Ireland, co. Waterford, prov. Munster, principally on a peninsula in the æstuary of the river Conigar, 25 m. W. by S. Waterford. Pop. in 1821, 5,105; in 1841, 8,625: pop. of par. in 1834, 13,372, of whom 335 were of the estab. church, and 13,037 Rom. Cath. As vessels of above 150 tons cannot come up to the town, it is not a place of much trade, though some corn and other produce is shipped for England. Recently it has been much improved, principally through the exertions of the Duke of Devonshire, who has built, at his own expense, a handsome bridge, connecting the main body of the town with the suburb of Abbeyside, on the opposite bank of the river. It has a neat appearance, and is a good deal resorted to for sea-bathing; but is not rich in proportion to its population, because of the vast numbers of small houses that have been erected, for the purpose of qualifying voters, the occupiers of which are mostly dependent on fishing, or some such precarious employment. The public buildings are the par. church, a new and splendid Rom. Cath. chapel, with three others belonging to convents, a school-house for 300 pupils, a court-house and bridewell, a barrack, and a fever hospital and dispensary. It returned 2 mems. to the Irish H. of C. till the Union, since which it has returned 1 mem. to the imperial H. of C. Previously to the Reform Act, the franchise was vested in the occupiers of 5*l*. houses in the town, and the resident 40*s*. freeholders of the manor. The latter comprised 8,4.9 acres, and had in 1841 a pop. of 12,382. But the extent of the existing parl. boundary, as fixed by the Boundary Act, is only 392 stat. acres. Reg. electors, in 1849-50, 407. A manor court is held every three weeks; also general sessions in Jan., April, and Oct., and petty sessions on Thursdays. Mar-

kets on Wednesdays and Saturdays; fairs Feb. 7., June 22., Aug. 27., and Nov. 8. The deep sea fishery was formerly carried on here pretty extensively, but has latterly much declined. Post-office revenue in 1842, 316*l.*; in 1848, 481*l.* Branches of the Provincial and National banks were opened in 1835. (*Boundary Report; Smith's Waterford, &c.*)

DUNKELD, a bor. of barony and market-town of Scotland, co. Perth, on the N. bank of the Tay, 15 m. N. by W. Perth, and 49 m. N. by W. Edinburgh. Pop. (1841) 1,096. Little Dunkeld is a suburb, though in a different parish, being divided from the bor. by the Tay, which is here crossed by an elegant bridge of 7 arches, built in 1809. Except a handsome new street leading from the bridge into the town, the houses are generally old and of mean appearance. But the situation of Dunkeld and the surrounding scenery are the most beautiful imaginable, and have long been objects of admiration to every stranger. The town is situated in the centre of a valley surrounded by mountains of considerable elevation, presenting a great variety of picturesque forms, and covered to their summits with trees of every species. It is, besides, regarded as the great pass to the Highlands on the E.: the bulk of its inhab. are of Highland origin, and speak the Gaelic language. The banks of the mountain stream Braan, which joins the Tay nearly opposite to Dunkeld, present some of the most striking scenery connected with the place. Dunkeld House, the residence of the ducal family of Atholl, is on the verge of the town, and the style, extent, and natural and artificial beauties of the pleasure-grounds are not equalled by any in Scotland. The late duke began a new mansion on a scale of great magnificence, but his death in 1830 put an end to the undertaking. But perhaps the most imposing object in or about Dunkeld is its cathedral, delightfully situated on the banks of the Tay; an edifice partly Saxon and Gothic, and the remains of which, owing to the care of the family of Atholl, are both extensive and in good preservation. The choir of the building is used as the parish church. Different portions of the cathedral were erected at different times, but the oldest portion, the choir, was built in 1350. Gavin Douglas, who translated Virgil's "Æneid," and Henry Guthrie, author of "Memoirs of Scottish Affairs from 1637 to the Death of Charles I.," were both bishops of this see. The Culdees had a monastery here so early as 729. When Iona, the original and chief seat of that order, was ravaged by the Danes in the 9th century, the primacy resided for some time in Dunkeld, but was afterwards transferred to St. Andrews. "But the rank of the abbots of Dunkeld," says Pinkerton, "one of whom was the father of a royal race in Scotland, and another, Ethelred, the son of Malcolm III., sufficiently marks the estimation in which that dignity was long held." (*Early Hist. of Scotland*, ii. 271, 272.) The monastery, however, was changed by David I. into a cathedral in 1127, at or about which period the system of the Culdees was superseded throughout Scotland by that of the Roman Catholics. (*Chambers's Gaz. of Scotland; Keith's Scottish Bishops, § Dunkeld.*)

DUNKIRK (Fr. *Dunkerque*, the Church of the Dunes, or Sand Banks), a sea-port town of France, and the most northerly in that kingdom, dép. du Nord, cap. arrond., on the Straits of Dover, 40 m. N.W. Lille, and 47 m. E. Dover; lat. 51° 2′ 9″ N., long. 2° 22′ 37″ E. Pop. (1846) 24,562. It is well built, and has broad and well-paved streets. The Champ-de-Mars, and the Place Jean Bart, are large and fine squares: the latter, which is planted with trees, has a bust of the brave sailor whose name it bears, and who was a native of Dunkirk; but this is said by Hugo to be *petit et mesquin.* The greatest drawback upon the town is its want of good water; it being indebted for this necessary wholly to the rain-water collected in cisterns. Its defences consist of a rampart and ditch, a citadel, and Fort Louis, about 3-4ths of a mile distant: the fortifications were formerly more formidable, but having been demolished, according to the stipulations in the treaty of Utrecht, they have not been completely re-established. Principal public buildings are the church of St. Eloi, with its fine portico, the naval storehouses, barracks, town-hall, college, &c. The *Tour des Pilotes* serves for a landmark, and was one of the positions whence Cassini, and more recently Biot and Arrago, conducted their observations relating to the map of France, and the measurement of the earth: it has a very fine chime of bells. Dunkirk has also a communal college, a public library containing 18,000 vols., a school of hydrography, a theatre and concert-hall.

The harbour of Dunkirk, though in a great degree artificial, is large and commodious; but a sand bank, which dries at low water, being interposed between the town and the roadstead, it is rather difficult of access, and is apt to fill up; but these inconveniences have been to a considerable extent obviated by works constructed in 1826. Dunkirk has both an inner and an outer roadstead, defended from the violence of the sea by sand-banks parallel to the shore, and having deep water and good holding ground. Being connected, by means of numerous canals, with a very fertile district, Dunkirk is a considerable emporium. The inhabitants have always been distinguished for enterprise. During the late and former wars between England and France, great numbers of privateers were fitted out here, that inflicted very serious injury on our trade. At present several vessels belonging to the port are engaged in the herring-fishery, and in the cod-fishery on the Dogger bank, and the banks of Newfoundland. Dunkirk was made a free port in 1826, since which its commerce has materially increased, particularly its trade in French wines destined for the supply of Belgium, of which it is a depôt. It has extensive soap-works, with starch-works, rope-works, tanneries, and iron-foundries. It has also considerable Geneva distilleries, breweries, sugar-refineries, &c. It has a general and a foundling hospital, a military and civil prison; and is the seat of a sub-prefect and of tribunals of primary jurisdiction and commerce. It is said to have been founded by Baldwin, count of Flanders, in 960; in 1388 it was burnt by the English; and in the 16th and 17th centuries alternately belonged to them and to the Spaniards and French. Charles II. sold it to Louis XIV. for 200,000*l.*, who, aware of its importance, had it strongly fortified at a vast expense. But, as already stated, Louis was compelled, by the treaty of Utrecht, to consent to the demolition of its fortifications, and even to the shutting up of its port! It was unsuccessfully besieged by the Duke of York in 1793. (*Hugo, art. Nord; Dict. Géog. Univ.*)

DUNLOP, a par. of Scotland, celebrated for its manufacture of cheese, partly in the co. of Ayr, and partly in that of Renfrew, 8 m. N. Kilmarnock. The village of Dunlop in the par. has 284 inhab.; the aggregate pop. of the par. in 1835 was 1,157. Dunlop cheese has for nearly a century and a half held a high character. Previously to this date, or between 1688 and 1700, cheese here, as well as throughout Scotland, was made of skimmed milk, as is still the case in various districts. A female of the name of Barbara Gilmour, who had fled to Ireland during the persecuting times of Charles II., returned at the Revolution, and, having married a farmer, was the first to introduce the practice of using the unskimmed milk in the making of cheese. This practice, which succeeded admirably, was for a time confined to the par., but it gradually extended to almost every part of the W. and S. of Scotland, all the cheese made in these districts with unskimmed milk being called *Dunlop*. The fact, however, is, that cheese made in the par. of Dunlop is not superior, but inferior, to that made in other districts. The number of milch cows in the par. of Dunlop, in 1837, was 910; the average quantity of cheese made during the season from each cow is about 27 stones of 14 lbs., or 24,570 stones from the whole par. annually. In some small dairies, each cow has been known to average 42 stones annually. Besides the cheese produced in the par., a great proportion of what is manufactured in other parts of Ayrshire passes through it on its way to the consumer. Being a convenient *entrepôt* between the producing country to the S. and W., and Glasgow, Paisley, &c., a considerable number of persons resident in Dunlop follow the business of cheese dealers, purchasing it from the farmers, and supplying the victuallers in the manufacturing towns and districts. Dunlop cheeses generally weigh between 20 and 60 lbs. each. (*New Stat. Account of Scotland, § Dunlop.*)

DUNMANWAY, an inland town of Ireland, co. Cork, prov. Munster, near the junction of three streams, which form the Bandon, 28 m. W. by S. Cork. Pop., in 1831, 2,738; pop. of par. in 1834, 11,649, of whom 1,613 were of the estab. church, 46 Prot. diss., and 9,990 Rom. Cath. It has a par. church, a Rom. Cath. chapel, a market-house, and a bridewell. The linen trade, after being for some years rather flourishing, has declined; but tanning and brewing, and the corn trade, are largely carried on. A manor court is held every third Saturday, and petty sessions on alternate Mondays.

DUNSE, a bor. of barony, and market town of Scotland, co. Berwick, in a plain at the S. foot of Dunse Law, an eminence 630 ft. above the level of the sea, 13 m. W. Berwick-upon-Tweed, and 36 m. S.E. Edinburgh. Pop. 2,656, families 630. Dunse is neat and regularly built, but devoid of public buildings, except the town-hall and Dunse Castle, in its vicinity, the residence of the feudal superior of the bor., of Gothic architecture, the greater part modern, but added to an ancient tower said to have been built by Randolph Earl of Murray, in the time of Robert Bruce. The par. church is a plain building; as are the three dissenting chapels belonging to the Associate Synod, and the Relief. The means of education are ample; a par. school, an eminent unendowed academy, six other unendowed schools, besides private seminaries for females, and several Sabbath schools. A subscription library was commenced so far back as 1768. There are two circulating libraries, and a reading-room

The assessment for the poor of the bor. and par. is 710*l.* There are two friendly societies, a savings' bank, and two branch banks. There is a weekly market, three fairs for black cattle and horses annually, and a quarterly fair for sheep.

Dunse was erected into a burgh of barony by James IV. in 1489; it was then situated on the N.W. side of Dunse Law; but having been afterwards burnt by the English, it was rebuilt in 1588, and its present site adopted, in order that it might be more immediately under the protection of Dunse Castle. After Berwick-upon-Tweed was ceded to the English (1482), and ceased to be the co. town, Dunse enjoyed that distinction in common with Lauder. It was afterwards (1600) transferred by act of parliament to Greenlaw; but Dunse was not altogether deprived of the privilege till 1696. It is, however, by far the largest and most important town in the co., and more country business is done in it than in both the towns referred to. In 1639, when Charles I. lay on the S. side of the Tweed with the intention of reducing the Scotch Presbyterians to submission, General Leslie took up his station on Dunse Law, with a body of 20,000 Covenanters, to defend the country from invasion. After the two armies had continued in this position for three weeks, a treaty of peace was concluded, and both were dissolved. Dunse has given birth to many distinguished men, among whom may be specified, John Duns Scotus, the Subtle Doctor, descended of the ancient family (not long extinct) of Duns of Duns, or of that ilk; Boston, author of the *Fourfold State* and other works; Dr. M'Crie, the historian of Knox; Mr. John Black, the learned and able editor of the *Morning Chronicle*, &c. (*New St. Acc. of Scotland*, § *Dunse*; *Chambers's Gaz. of Scotland.*)

DUNSTABLE, a town and par. of England, co. Bedford, hund. Manshead: area of par., 520 acres. Pop. of ditto, 2,582. The town, situated on the S. acclivity of the Chiltern Hills, near the source of the Lea, on the road from London to Fenny Stratford, 32 m. N.W. the former, has four streets, and is pretty well built. A celebrated priory was founded here by Henry I., in 1131, of which the par. church contains the nave. The Baptists and Methodists have also places of worship. Here is a charity school, founded in 1727, for 40 boys and 15 girls; with 12 almshouses for poor widows, and 6 do. for decayed maiden ladies. Dunstable is the principal seat of the British straw plait manufacture, which employs many females in the town and vicinity. Ladies' straw hats were, and still are, not unfrequently called Dunstables. (For a full account of this manufacture, see *Commercial Dictionary*, art. HATS (STRAW). Market-day, Wednesday.

DUNWICH, a sea-port bor. and par. of England, co. Suffolk, hund. Blything, on the E. coast of the co., 90 m. N.E. London, and 26 m. N.E. Ipswich. Pop. in 1831, 232. Though now a poor fishing station, this was once an important sea-port, having an extensive trade, a large population, 2 abbeys, and several churches. It has been reduced to its present state of insignificance by repeated inroads of the sea; and would probably have been totally abandoned, but for its having had the privilege of returning 2 mem. to the H. of C. The encroachment of the sea began previously to the Conquest. In the reign of Edward III., an inundation swallowed up more than 400 substantial houses. The last great encroachment was in 1740; but the sea has continued progressively to encroach on the land; and at present there remains only the ruins of one of its many churches. It was disfranchised by the Reform Act; and no longer attracts any attention, except from those who visit the coast to study the great natural revolutions of which it has been the theatre. (*Campbell's Survey*, i. 277.; *Lyell's Geology*, i. 403. 3d ed.)

DURANGO, a town of Mexico, cap. of the state of the same name, in the Sierra Madre, 6,848 ft. above the level of the sea, 450 m. N.W. Mexico, and 150 m. N.W. by W. Zacatecas; lat. 24° 25′ N., long. 108° 15′ W. Pop. 22,000. (*Ward.*) It is regularly built, and contains a cathedral and other churches, several convents, a mint, and a theatre. It is the seat of a bishopric. Its inhabs. are industrious: they manufacture many wooden articles, woollen goods and leather, and have a considerable trade in cattle. Iron mines are worked in the vicinity. (*Ward's Mexico.*)

DURAZZO (an. *Epidamnus* and *Dyrrachium*), a seaport town of Turkey in Europe, Albania, on the E. shore of the Adriatic, and on the S. side of a projecting tongue of land, 7 m. S. Cape Pali; lat. 41° 17′ 32″ N., long. 19° 26′ 44″ E. Pop. 5,000.? This town, which has greatly declined from its ancient importance, is surrounded by walls, and is indifferently fortified. It has some trade in the export of corn. The bay, on the N. side of which it stands, is 5 m. broad from N. to S., with from 7 to 3 fathoms water, the best anchorage being about 1¼ m. S by E. from the town.

According to Plautus, the inhab. of Dyrrachium were immersed in every sort of debauchery and vice; wherefore, says he, —

> " —— huic urbi nomen Epidamno inditum est,
> Quia nemo ferme huc sine damno divortitur!"
>
> *Menæchmi*, Act ii. Sc. 1.

And certainly, if we may depend on the statements of M. Poucqueville, their descendants at the present day, if they be less luxurious, exhibit few other symptoms of improvement. He calls their town *une anarchie, un repaire de pirates, un sejour d'assassins, et le receptacle impur des scélérats qui peuvent s'échapper des côtes de l'Italie!* (*Voyage dans la Grèce*, i. 326.)

Dyrrachium was founded by a colony from Corcyra, anno 625 B. C. After it fell into the hands of the Romans, it became a place of great importance, from its being the port which vessels from Brundusium, bound for the opposite coast, endeavoured to make; and from its being the usual place of departure for ships crossing the Adriatic with despatches or passengers from Greece for Italy. It became the seat of some important strategical operations during the struggle between Cæsar and Pompey, which terminated advantageously for the latter. (*Cæsar, de Bello Civili*, iii. § 41).) It was made a Roman colony by Augustus; and, after various vicissitudes, was subjected to the Turks, under whose destructive sway it still continues, by Bajazet II.

DURHAM, a marit. co. in the N. of England, having E. the German Ocean, N. Northumberland, W. Cumberland and Westmoreland, and S. Yorkshire. Area, 702,080 acres. In its W. parts it is occupied by offsets from the Pennine range of mountains, and by black heathy moors. Soil in parts good; but generally it rests on a sub-soil of stiff clay, and is cold and infertile. It is a curious fact, however, that the W. parts of the co., though naturally the least productive, are the best cultivated. Principal crops, wheat, oats, barley, beans, and pease. A mixture of rye and wheat, provincially called *maslin*, is also rather extensively cultivated. Turnips are generally introduced, particularly in the W. districts. Lime, of which there is an abundant supply, is principally used as manure, the quantity applied being from 70 to 80 bushels an acre. Drainage is much neglected in the E. parts of the co. which, in consequence, are in a comparatively backward state. The Teeswater breed of short-horned cattle, so called from the river Tees, which bounds the co. on the S., is admitted to be one of the very best, both for feeding and milking, and is now very widely diffused. Sheep mostly Cheviots; stock estimated at between 200,000 and 250,000 head. A great deal of property belongs to the church, and there are besides some large estates; but property is, notwithstanding, a good deal subdivided. Farms of all sizes, but the greater number rather small; and the condition of the occupiers of the small farms is said to be very unfavourable. Average rent of land, in 1843, 15*s*. 4*d* an acre. Durham has some of the most extensive and valuable coal-fields in the kingdom; and she has also valuable lead and iron mines. Vast quantities of grind-stones are produced from the quarries at Gateshead Fell. Manufactures various, but not very extensive or important. Principal rivers, Tees, Wear, and Derwent. Durham has 4 wards and 75 parishes, and returns 10 mem. to the H. of C., viz. 4 for the co., 2 each for the city of Durham and Sunderland, and 1 each for Gateshead and S. Shields. Registered electors for the co., in 1849-50, 12,010, being 6,456 for the N., and 5,554 for the S. div. Principal towns, Durham city, Sunderland, Gateshead, S. Shields, Darlington. In 1841, Durham had 57,513 inhab. houses and 324,284 inhab., of whom 160,073 were males and 164,211 females. Sum paid for relief of poor in 1847, 68,232*l*. Annual value of real property in 1815, 885,580*l*.; do. in 1843, 1,668,986*l*.

DURHAM (originally *Dunholme*, from *dun*, a hill, and *holme*, a river), an ancient and celebrated city of England, cap. co. same name, and nearly in its centre, on a bend of the river Wear, 230 m. N by W. London, and 65 m. N.N.W. York; lat. 54° 36′ 31″ N., long. 1° 34′ 6″ W. Pop. in 1821, 10,282; in 1841, 14,151; but from the latter epoch down to the present year (1850), there has been a great increase in the pop. of the town and its immediate vicinity, occasioned chiefly by the opening of several new and extensive collieries. Probably, at next census, the pop. of the city and neighbourhood, within 3 or 4 m. on each side of the former, will be ascertained to be little short of 45,000.

The grand objects of interest in the city are the cathedral and castle: their appearance from the surrounding country is most striking, being situated in a rocky peninsula, elevated about 80 ft. above the Wear, by which it is nearly encircled. The first of these structures, begun in the reign of William Rufus, but much enlarged and improved in subsequent ages, is a large and majestic pile of Norman architecture: it is 461 ft. in length, by about 200 in extreme breadth, from the N. to the S. transept; it has a central tower, 214 ft. in height; and at the W. end are two low towers, once topped with spires. The inside has much of the clumsy though venerable magnificence of the early Norman style. The pillars are vast cylinders, 23 ft. in circumference, and variously adorned. In the

Galilee, or lady's chapel, at the W. end of the cathedral, is the tomb of the venerable Bede, his remains having been transferred thither from Jarrow in 1370; and in the Nine Altars, at the E. end of the cathedral, is the shrine of St. Cuthbert, the patron saint of the sacred edifice. Dr. Johnson says, characteristically, of this noble structure, that "it strikes with a kind of gigantic dignity, and aspires to no other praise than that of rocky solidity, and indeterminate duration!"

The see of Durham is well known to have been about the most valuable in the kingdom. At an average of the three years ending with 1831, it yielded a nett revenue of 19,066*l*. a year! The total revenue of the dean and chapter, during the seven years ending with 1834, amounted to 36,937*l*. a year; the dean having a revenue of 4,800*l*., and each of the canons residentiary, of whom there are twelve, having a revenue of 2,280*l*. a year! But on the death of one of the bishops of Durham, in 1836, the bishop's revenue was fixed, pursuant to the recommendation of the ecclesiastical commissioners, at 8,000*l*. a year, the surplus revenues of the see being reserved to form a fund for the augmentation of the incomes of the poorer bishops. The bishop of Durham was also, till deprived of it by the act 6 and 7 William IV. cap. 19., *custos rotulorum* and chief civil governor of the co., which has distinct courts and law officers; he presided at the assizes, and all writs were returnable to him, and not to the king. The practice in the Palatinate courts is now, however, assimilated in a great measure to that of the superior courts at Westminster; and as actions may be commenced in them for any sum, however large, the change has been productive of great public benefit.

It is a curious fact, that Cromwell founded a university in Durham in 1657, assigning to it the houses and part of the lands belonging to the dean and chapter. This institution, which, had it survived, must have been of great service to the N. counties, fell to pieces on the Restoration, when the church recovered her old possessions. No new attempt, or at least no successful one, was made to establish another university at Durham till 1831. In that year, however, a university, endowed by the dean and chapter, the bishop, and other wealthy individuals, was founded, to afford instruction, and grant degrees in the different faculties. It was incorporated by royal charter in 1837, and consists of a warden, professors, tutors, &c.; but, however creditable to the liberality of the founders, it is far from adequately meeting the existing wants of society, its grand object being to furnish instruction for candidates for holy orders in connection with the church of England.

The castle, founded by William the Conqueror, and intended partly to bridle that part of his own dominions, and partly as a defence against the irruptions of the Scotch, stands a little to the N. of the cathedral, and on the same elevated peninsula. It was long used as the bishop's palace, and has some magnificent apartments. It is now (with the exception of a suite of rooms reserved for the accommodation of the bishop, on his visits to the city) appropriated to the purposes of the university, being occupied by students. Adjoining the castle, on an artificial mound of considerable elevation, is the ancient tower, or keep, which had fallen into decay, but has recently been restored, and presents a most imposing appearance. On the palace green is the exchequer, a large square building, in which the bishop's courts of exchequer and chancery were held, and near it is a magnificent library, erected by Bishop Cosins; and a little further distant is the office for the registry of wills. The cloisters adjacent to the cathedral are 147 ft. square, and very neat. The chapter-house, a plain building, opens into them.

The shelving sides of the peninsula, from the cathedral, castle, and other buildings, down to the river, are laid out in hanging gardens, intersected with walks, and planted with trees, that have a most imposing effect.

Besides the cathedral, there are here six par. churches. Those of St. Nicholas and St. Oswald, the latter remarkable for its vaulted roof of wood, are of considerable antiquity. The Primitive and Wesleyan Methodists, Rom. Catholics, Independents, and Quakers, have also places of worship.

The grammar school connected with the cathedral has four exhibitions, of 25*l*. each, for the sons of clergymen at the school, and of 50*l*. each at either university; in addition to this, it has five scholarships, of 10*l*. each, at Peterhouse, Cambridge. There is a blue-coat school, an infant school, and an endowed charity school, which, together, furnish gratuitous instruction to about 1,000 children. It has an infirmary, founded in 1791, dependent on voluntary contributions, a lying in hospital, and several almshouses. There are here also a public reading-room, a library, and assembly-rooms, and two weekly newspapers. Races take place annually in May.

The city is divided into several distinct portions: that which contains the cathedral and castle has some excellent and finely situated houses, principally occupied by the dignitaries of the church. What is called the old town adjoins the castle on the N.: in it are the market-place, the theatre, and principal shops, but it has a great many inferior houses; in the market-place is a fountain for the supply of the city with water, conveyed thither from springs about 1½ m. distant, consisting of an octagon building, surmounted by a statue of Neptune. The township of Elvet lies on the E. side of the cathedral peninsula, being separated from it by the Wear. It is comparatively well built. In this quarter of the town is the magnificent new co. gaol and co. court-house, erected in 1809, at an expense of nearly 140,000*l*. On the W. side of the Wear and of the cathedral are the townships of Crossgate and Framwellgate; they are occupied by a very inferior class of houses, and have the appearance of great poverty. The communication between the different parts of the town is kept up by two old and one comparatively modern bridge. The latter, called Prebend's Bridge, was erected by, and is maintained at the expense of, the dean and chapter: it is placed in a very romantic situation, and connects the public walks called "the Banks," already alluded to. The city is well paved and lighted.

Durham, for a lengthened period, made little or no progress. It used to be one of the dullest and most stagnant of cathedral cities. But from the flow thitherward of the tide of pop., through the opening of the collieries, previously mentioned, and the construction of several railways in the district, connecting it with Shields, Sunderland, Hartlepool, and Stockton, none of which are more than 20 m. distant, a powerful impetus has lately been given to its trade. This is visible in the crowded state of the weekly markets, the improvement of the shops, and other signs of the increasing importance and trade of the town. An extensive carpet manufactory and a worsted spinning mill are situated on the banks of the Wear. The Great N. of England Railway connects the city directly with Newcastle-on-Tyne, 14 m. distant; and the Newcastle and Carlisle Railway opens an easy communication with the W. coast. The neighbourhood of Durham abounds with situations well adapted for the establishment of various manufactures, having numerous rivulets and inexhaustible stores of stone, lime, coal, and iron. The want of means of outlet have hitherto rendered these resources unavailable; but as the railways now constructed supply facilities of transit, this part of the kingdom may, in the course of a few years, be expected to afford an excellent field for the advantageous employment of capital and industry.

Durham has sent 2 mems. to the H. of C. since 1675. Previously to the Reform Act, the right of voting was in the freemen who had acquired their freedom by patrimony or servitude within the city of Durham, the bor. of Framwellgate, "or the streets and suburbs adjoining thereto." Hence the limits of the parl. bor were not definitively fixed, but varied with the varying size of the suburbs; a definite limit was, however, given to it by the Boundary Act, which included, in 1841, a pop. of 9,577, with about 700 houses worth 10*l*. a year. Registered electors in 1849-50, 1707. Under the Municipal Reform Act, the city is divided into three wards, and is governed by 6 aldermen and 18 counsellors. Market-day, Saturday. (*Hutchinson's and Surters' History of Durham; Pennant's Tour in Scotland*, iii. 330. *&c.; Boundary Rep.;* and *Private Information*.)

DURLACH, a town of the grand duchy of Baden, circ. Central-Rhine, 2 m. E.S.E. Carlsruhe, with which it communicates by a road lined throughout with poplars. Pop. 4,900. Before Carlsruhe was built, this town was the residence of the margraves of Baden-Durlach, an old castle belonging to whom, now in ruins, stands upon a contiguous height; and has attached to it a fine garden, in which several Roman antiquities have been discovered. A palace of a later date has been in part converted into a cavalry barrack. The inhab. manufacture porcelain, tobacco, and sealing-wax; and have some trade in corn, wine, fruit, and other agricultural produce. (*Berghaus; Möller*.)

DUSSELDORF, a town of the Prussian states, prov. Rhine, cap. reg. and circ. same name, at the confluence of the Dussel with the Rhine; lat. 51° 13′ 46″ N., long 6° 46′ 25″ E. Pop. 23,537, of whom 20,000 are Cath. It has nearly trebled its pop in the course of the present century. It is a well-built, handsome, thriving town. "We were delighted with its singular neatness, and the beauty of its environs. It stands so close upon the Rhine, that vessels sail up to its quays, and then take on board the merchandise of which the town is the depôt. Near the river the streets are narrow, and full of symptoms of industry; but beyond these the town consists of handsome white stone houses, disposed in rows as streets, or as open squares and places with trees in the centre, all which are remarkably clean and quiet." (*Chambers's Holland*, &c. p. 49.) The castle and other fortifications were destroyed by the French in 1794. It is the seat of the provincial states or parl. of the Rhine prov., has a court of appeal for the

regency, a gymnasium or college, an academy of sciences, an observatory, a fine public library, a theatre, and some remains of the noble collection of paintings transferred to Munich. Recently the *school* of painting at Dusseldorf, under Schadow has attained to very considerable celebrity. There are considerable manufactures at Dusseldorf; but it derives its principal importance from its position on the Rhine, nearly opposite to where it is joined by the canal leading to Venlo on the Maese, and from its being the *entrepôt* and principal port of the contiguous flourishing manufacturing district, of which Elberfeldt is the capital. Cottons, cloths, &c. are imported from the latter; hardware, iron, and steel, from Solingen, Remscheid, &c.; linen from Ratingen, &c. Large quantities of coal, brought from the mines on the Roer, are shipped here for the Netherlands; and there is also an extensive trade in corn, oil, and wine.

DWARACA or JUGGUTH, a marit. town of Hindostan, prov. Gujrat, the most W. point of which it occupies, dom. of the Guicowar, on a sandy shore 95 m. N.W. Joonaghur; lat. 22° 15′ N., long. 69° 7′ E. It is the most sacred place in this part of India, and is annually frequented by about 15,000 pilgrims from all parts of that extensive country. Its principal pagoda is a magnificent carved stone building of high antiquity, dedicated to Runchon, an incarnation of Krishna, with an entrance towards the sea by a very long and noble flight of stone steps, succeeded by a massive gate, where the whole front breaks upon the view with a striking effect; its great pyramid is 140 ft. high, and much ornamented. There are numerous subordinate temples, having flags with representations of the sun and moon. In front of the large temple is the sacred place of ablution, formed by a creek of the sea, which is lined for some distance by small temples with stone steps down to the margin of the water, on which prayers are made, and idols, rings, and amulets sold by the Brahmins: the town itself is small, but surrounded with walls and towers washed by the tide. The devotees here are usually stamped by means of a hot iron, with the insignia of the god, and this rite is often practised upon young infants. The chalk with which the Brahmins mark their foreheads comes from Dwaraca, whence it is carried by merchants all over India. The revenue of the temples, derived from pilgrims, is estimated at about one lac of rupees, and was formerly swelled by the plunder of many piratical vessels, fitted out in the name of the idol. Dwaraca submitted to the British forces in 1816; but in the following year was transferred to the Guicowar, to whom its sanctity rendered it a highly acceptable acquisition. (*Hamilton's E. I. Gaz.* i. 531, 532.; *Mod. Trav.* x. 203—205.)

DWINA, the name of two Russian rivers, one of which falls into the White Sea by several mouths, 35 m. below Archangel, and the other into the Gulph of Riga, in the Baltic, 9 m. below Riga. The first, or *Northern Dwina*, is a large and important river. It is formed by the junction of the Soukhona, which rises in the farthest W. part of the government of Vologda, with the Joug rising in the central S. part of the same government. From the point of confluence, near Ousteoug-Veliki, the united river flows in a deep and broad stream, N.W. to its embouchure below Archangel, a distance of about 350 m. Its principal affluent is the Vitchegda, flowing W. from the confines of Perm. The extent of natural navigation for boats and barges on this river and its affluents is very great, extending W. to the city of Vologda, S. to Nikolesk, and E. to the frontier of Perm. At Vologda an artificial navigation begins, which, by means of the Lubinski canal and the lake Bielo, connects the Soukhona with the Neva; while, on the E., the Severnoi canal connects the Vitchegda with the Kama, one of the principal affluents of the Wolga. Hence, goods imported at Archangel may be sent by water to either Petersburg or Astrakhan, and conversely! The ebb and flow of the sea is perceivable in the Dwina many m. above Archangel. Opposite to the latter it is above 4 m. in width; it is also very deep, though owing to the sand-banks at its mouth it does not admit vessels drawing more than from 12 to 14 ft. water. It is frozen over for about half the year. (*See* ARCHANGEL.)

The second, or *Southern Dwina* or *Duna*, though of inferior dimensions to the preceding, is also a large and important river. It rises in the Valdai hills, not far from the source of the Wolga; and following a S.W. course to Vitebsk, it thence pursues a W.N.W. course to its embouchure below Riga. It is navigable from near its source, or for about 625 m. Near Dunaburg, however, it is a good deal interrupted by cataracts, and in other places it is encumbered with shoals, so that it can only be navigated with safety after the breaking up of the ice in the spring, and after the setting in of the autumnal rains. It has few affluents of any considerable magnitude. At Riga it is about 2,400 ft. broad. Its mouth is encumbered with banks, which render it inaccessible for vessels drawing more than from 12 to 15 ft. water. It begins to freeze over about the end of Nov., and the breaking up of the ice, or *débâcle*, usually takes place in the beginning of April, when there are inundations that frequently occasion great injury to Riga and the adjacent country.

This river has always been the principal channel by which the masts and other timber exported from Riga were conveyed to it. But owing to the gradual exhaustion of the forests, it is necessary to go much farther S. than formerly, to the provs. of Tchernigoff and Kieff, the timber from which is conveyed by water, against the stream, up a part of the Dniepr, and then carried across the country separating that river from the Dwina, to be embarked on the latter. This, however, is a very expensive and tedious process, requiring about 2 years for its completion; and hence the mast trade, that formerly centered wholly at Riga, is now beginning to be transferred, in part at least, to Kherson, to which place the trees are, at the proper season, easily and rapidly floated down the Dniepr. (*Hagemeister on the Black Sea*, p. 122. English trans.)

DYSART, a royal bor. and sea-port of Scotland, co. Fife, on the N. coast of the Frith of Forth, 11¼ m. N. by E. Edinburgh, and 1 m. E. Kirkaldy. Pop. 1801, 4,884; 1841, 7,057, exclusive of above 100 sailors. This includes the immediately contiguous villages of Pathhead, Sinclairtown, Gallaton, and Borland, the inhab. of all of which, so far as industry is concerned, may be regarded as forming one community. Their pop. in 1831 was as follows: — Town of Dysart, 1,801; Pathhead, including Sinclairtown, 3,330; Hawkley Muir, or upper par. of Sinclairtown, 434; Gallaton, 1,053; Borland, 184: total pop., in 1831, 6,802.

Dysart consists chiefly of 3 narrow streets, with a species of square in the centre. The central or High Street is full of antique substantial buildings, the fronts of which are generally decorated with inscriptions and dates, and, in one part, with piazzas, the latter being the places in which, in former times, merchants exposed their goods to sale; but the greater part have been built up. In the middle of the town stands the town-house, erected in 1617, but rebuilt, after having been accidentally burnt by Cromwell's soldiers. Under its roof are, the council-chamber, the prison, the public weigh-house, the guard-room, the black hole. Dysart House, the elegant residence of the Earl of Rosslyn, stands on the W. of the town, being separated from it only by a wall. The par. church is a plain building; also the two dissenting chapels, which belong respectively to the Relief and Associate Synod. Dysart is a collegiate charge, or has the services of two parochial clergymen.

With regard to the means of education, there are no fewer than 14 schools in the par.; namely, 4 at Dysart, 4 at Pathhead, 2 at Sinclairtown, 3 at Gallaton, and 1 at Borland. All these schools are unendowed except three: one at Dysart; a free-school in Pathhead, endowed by the late Bailie Philp—salary to the teacher 120*l.* yearly; and one in Borland. There are 4 subscription libraries in the par., and 2 reading-rooms. Philp's school is the only charitable endowment. There is no legal assessment for the poor. There are several friendly societies, and a savings' bank.

Before the union between England and Scotland, Dysart was a place of such commercial eminence as to have been called "Little Holland." But its importance in this respect is now greatly reduced. Nail-making flourished in the bor. and neighbourhood, particularly at Gallaton, for a hundred years previously to the end of last century. But that trade has now entirely disappeared. It was in reference to Gallaton that Adam Smith remarked, in his "Wealth of Nations," published in 1776, "There is at this day a village in Scotland where it is not uncommon, I am told, for a workman to carry nails, instead of money, to the baker's shop or the ale-house." The number of men employed in this business within the last 50 years was not less than 100. The manufacture of linen cloth, once extensively carried on here, has also disappeared. Salt was made here from sea-water at so early a period as 1450; and the trade continued to flourish till 1823, when the duty being repealed, it was relinquished. The salt-pans were very extensive. The principal trade at present is the manufacture of checks and ticks, a branch of the Dundee staple trade. This business was introduced into Dysart between 1710 and 1720; but so slowly did it advance, that in 1776 the annual value of the manufacture was not estimated at more than 9,000*l.* It is very different at present. The number of looms employed in the manufacture of this fabric is not less than 2,088; and the value of the cloth annually produced is estimated at about 150,000*l.* The number of hands employed, including weavers, winders, and warpers, has been estimated at from 5,000 to 6,000; but this, we believe, is beyond the mark. The number of looms employed by the manufacturers out of the par. is above 1,000. A mill for spinning flax has recently been built, and is in active operation. It employs about 100 hands.

Dysart coal was among the first wrought in Scotland, operations having been begun upwards of 350 years ago.

Upwards of 100,000 tons are dug yearly. Sandstone, limestone, and ironstone also abound, and are in considerable demand, particularly the two latter. The harbour is one of the safest on the Frith of Forth, except with easterly winds. It has a wet dock. There are only, however, a few brigs and sloops belonging to the port, and no foreign vessel approaches it, except occasionally from Holland or the Baltic laden with flax, or when coals are wanted.

Dysart is a place of great antiquity. It is mentioned in history so early as 874, when the Danes invaded Fife. But it was not made a royal burgh till the time of James V. The town was taken by Cromwell. There is a place at the harbour called the Fort, said to have been fortified by the Protector, but no remains of any work on it can now be seen. To the W. of the burgh is the castle of Ravenscraig, standing on a steep crag fronting the sea, but now a ruin. It has been the property of the Sinclairs, now Earls of Rosslyn, for 500 years. On the S. or lower part of the town, there are the remains of a chapel said to have been dedicated to St. Dennis. The ruins of the old church of Dysart are nearly at the same spot. One of the windows bears the date of 1570.

Dysart unites with Kirkaldy, Burntisland, and Kinghorn in returning 1 mem. to the H. of C., and in 1849-50 had 137 registered voters. (*New Stat. Acc.*, § *Dysart*; *Muir's Account of Dysart*; *Boundary Rep.*; *Private Inform.*)

E.

EAGLESHAM, a market-town, and burgh of barony, Scotland, co. Renfrew, on a tributary of the White Cart, 9 m. S. Glasgow. Pop. (in 1840) 1750. The town, which is modern, though on the site of an ancient village, consists of two rows of well-built houses, all of freestone, with a space between varying from 100 to 250 yards, laid out in fine green fields interspersed with trees, with a beautiful streamlet running down the middle. Length of the town nearly 3 furlongs. The cotton manufacture was introduced here about 40 years ago. The cotton-mill at Eaglesham, which is driven by water power, employs 87 males and 113 females; that of Millhall in the vicinity, also driven by water, employs 40 females and 24 males. Besides cotton spinning, there are no fewer than 400 persons in the town engaged in weaving. The noble family of Eglinton are the feudal superiors of the place, and appoint the baron bailie. (*New Stat. Acc. of Scotland*, art. *Renfrew*, p. 383.)

EARLSTON (formerly *Ercildoun*), a village in the par. of the same name, Scotland, co. Berwick, 30¼ m. S.E. Edinburgh, and situated in the middle of a pastoral district, within ¼ m. of the Leader, a tributary of the Tweed. Pop. 927. It is straggling and irregularly built; but it is recently become well known in manufactures, and "Earlston Ginghams" are now familiar to most persons in the S. of Scotland. Messrs. Whale and Co. established, about 20 years ago, a manufactory of ginghams, merinos, shawls, muslins, shirtings, and furniture stripes, which affords employment to about 80 individuals. Another manufactory has also recently been established by Mr. Wilson, for plaidings, blankets, and flannels, and gives work to about 50 persons. Such instances of manufactures starting up, and eminently prospering, in a small remote village, are but rare. "Thomas the Rhymer," whose proper name was Thomas Learmont, who flourished in the 13th century, and is famous both as a poet and an alleged prophet, belonged to this place. An account of this celebrated person will be found in Sir W. Scott's edition of "Sir Tristrem," a poem ascribed to the Rhymer. The walls of the castle, called "Rhymer's Tower," in which he lived, are still standing within ¼ m. of Earlston. (See *Sir Tristrem*; *Barbour's Bruce*; *Irving's Scottish Poets*; and *New Stat. Acc. of Scot.*, art. *Berwickshire*, p. 18.).

EBORA, or EVORA, a city of Portugal, cap. prov. Alentejo, 85 m. E. Lisbon, 42 m. S.W. Elvas. Pop. 14,680. It is built on an eminence, in the centre of a fertile plain, and is venerable from the appearance of its ancient towers, as well as striking from its elevation. It is surrounded by ramparts, and has two forts in ruins. Streets narrow, crooked, and filthy; but it has some good houses. It is the see of an archbishop, and has a magnificent Gothic cathedral, with an altar in the Italian style, extremely rich, and decorated with various marbles. (*Lord Caernarvon.*) Exclusive of the cathedral, there are four churches, several convents and hospitals, a house of charity, and fine barracks. There is a good collection of books in the bishop's library, and the museum is said, by Lord Caernarvon, to be the finest in Portugal. It was formerly the seat of a university, suppressed on the expulsion of the Jesuits.

This city was for a lengthened period the head-quarters of the famous Roman general Quintus Sertorius, by whom it was fortified, and adorned with several fine public buildings. An ancient temple, supposed to have been dedicated to Diana, though much dilapidated, has still to boast of some noble columns, evidently raised during the best period of Roman architecture (*Idem*); but this fine ruin has been greatly neglected, and even degraded to a slaughterhouse! (*Murphy.*) There is here also a magnificent aqueduct, said to have been built by Sertorius, in fine preservation, and still applied to its original purpose.

It has manufactures of hardware, tanneries, and a fair for cattle on St. John's day, which is much frequented. Julius Cæsar made it a municipal town, and gave it the name of *Liberalitas Juliæ*. The Moors took it in 715. It has been the residence of many of the Portuguese sovereigns. In 1828 the populace and the militia rose *en masse* in favour of Don Miguel, and having overpowered the regular troops and constitutionalists, expelled them from the city. (*Caernarvon, Portugal and Gallicia*, ii. 47. 75. 95., *et seq.*; *Murphy's Travels in Portugal*; *Miñano*, iii. 315.)

EBRO (an. *Iberus*), one of the principal rivers of Spain, through the N.E. part of which it flows, uniformly almost in a S.E. direction, being the only great Peninsular river that has its embouchure in the Mediterranean. It rises at Fontibre, prov. Santander, on the S. declivity of the Sierra Sejos, about lat. 43° N., and long. 4° W., near the sources of the Pisuerga, an affluent of the Douro. It afterwards separates the provs. Santander, Biscay, and Navarre from Old Castile, intersects Aragon in its centre, and disembogues near the S. extremity of Catalonia, about lat. 40° 40′ N., and long. 0° 55′ E. Its entire length is estimated at somewhat above 400 m.: its principal tributaries are, the Nela, Aragon, Gallego, and Segre, with the Cinca on the N., and the Oca, Tiron, Nagerillo, Xilon, Guadaloupe, &c., on the S. side. Reynosa, Miranda, Logrono, Tudela, Saragossa, Mequinenza, and Tortosa, are the chief cities and towns upon its banks. It runs mostly through a succession of narrow valleys till it reaches Mequinenza; after which it enters Catalonia, and flows through a more level country. At Amposta, 13 m. W. from its mouth, it is about 300 yards wide. It immediately afterwards forms a kind of delta; a navigable canal having been cut from the port of Alfaquez, or San Carlos, at its S. mouth, to Amposta. The Ebro is navigable for boats as high as Tudela, but its current is very rapid, and its bed in many parts encumbered with rocks and shoals. To avoid these obstacles, and the numerous windings of the river, the Aragon canal has been cut along its right bank from near Tudela to Sastago. An ancient Moorish canal, now dry, formerly connected the town of Alcanez, on the Guadaloupe, with the Ebro. The principal commercial utility of the Ebro is the transport of grain from Saragossa to Tortosa, together with the floating down of timber from the Pyrenees. This river, before the second Punic war, formed the boundary of the Roman and Carthaginian territories, and, in the time of Charlemagne, between the Moorish and Christian dominions. (*Miñano, Dict. Géog.*; *Inglis's Spain.*)

ECBATANA. See HAMADAN.

ECIJA (an. *Astigi*), a city of Spain, prov. Seville, finely situated on the banks of the Xenil, which is here crossed by a fine ancient bridge, 47 m. E.N.E. Seville, 31 m. S.W. Cordova; lat. 37° 31′ 51″ N., long. 5° 4′ 34″ W. Pop. 34,730. It is surrounded by walls, and has narrow crooked streets. Its churches, of which there are six, are "built entirely of brick, fitted up in the old taste, and crowded with pillars, loaded with proportionate ornaments, and covered with gold. The most extravagant of all is the church of *Neustra Senora del Rosario*, in the convent of the Dominicans; this may serve as a model for the perfection of vitiated taste." (*Townsend*, ii. 305.) Exclusive of churches, there are here 20 convents, 4 hospitals, a foundling hospital, and a public granary. The Plaza Mayor, a fine spacious square, has a double row of balconies the whole way round. Along the river's side is a handsome *alameda*, or public promenade, planted with elms and other ornamental trees, provided with seats, and decorated with statues. It has manufactures of coarse cloth, serges, camlets, friezes, linens, &c.; and the vicinity produces wheat, wine, and oil. This is a very ancient city, having been called by the Romans *Astigi* and *Augusta Froma* (*Plin. Hist. Nat.* iii. § 1.). It was for a lengthened period a border town between the Moors and Christians, and is famed in many a romance; but it is no longer of any importance as a fortress, and its walls are covered with brambles. When Mr. Townsend visited this city, the king's troops had been defeated the previous day in an engagement with smugglers; and as the oppressive duties and prohibitions, out of which this contest arose, have sustained no material diminution in the interval, such encounters still occasionally take place; and to this cause, and vicious government in other respects, are to be ascribed the robberies for which the vicinity of Ecija was long infamous.

ECKMUHL, an inconsiderable village of Bavaria, circ. Regen, on the great Laber, 13 m. S. by E. Ratisbon. Here, on the 22d April, 1809, the grand French army, under Napoleon, gained a decisive victory over the Aus-

trians, under the Archduke Charles. Marshal Davoust having particularly distinguished himself on this occasion, was raised by Napoleon to the dignity of Prince of Eckmuhl. The battle of the 22d was preceded by partial actions on the 19th, 20th, and 21st, all of which terminated favourably for the French.

ECLOO, a town of Belgium, prov. E. Flanders, cap. arrond., on the road between Ghent and Bruges, 15 m. E. the former city. Pop. (1836) 8,730. It is generally well built, and has several squares and well paved streets. It has 2 churches, a town-hall, an ancient convent, 8 schools, and a prison. Its manufactures are chiefly of coatings and other woollen stuffs, cottons, starch, soap, chocolate, hats, &c.: it has also breweries, distilleries, salt refineries, and various mills. Its trade, which is very active, especially at its weekly markets, which are the largest in the prov., is mostly in corn, linens, timber, and cattle. (*Vandermaelen, Fland. Orient.*)

EDDYSTONE LIGHTHOUSE. This, which is one of the most remarkable structures of its kind, is built on one of the points of a reef or ridge of rocks, from 600 to 700 ft. in length, in the English Channel, about 9 m. S. by W. from the Ramhead, and 14 m. from Plymouth; lat. 50° 10′ 56″ N., long. 4° 15′ 3″ W. The Eddystone rocks are covered at high water; and being much exposed to heavy swells from the Bay of Biscay and the Atlantic, the waves frequently break over them with tremendous fury. In consequence of the many fatal accidents occasioned by ships running against these rocks, a lighthouse was erected on one of them in 1696: after standing many storms, it was overthrown in the dreadful tempest of the 27th Nov., 1703. A second lighthouse, erected in 1708, was burnt down in 1755. The present edifice, built by the celebrated engineer Smeaton, and finished in 1759, is universally admired for its solidity and the skill displayed in its construction, and bids fair to last for ages. The total height of the lighthouse is 100 ft.; the lantern being elevated 72 ft. above the sea at high water. The light is fixed, and is of the first magnitude. This lighthouse has served as a model for that on the Bell Rock, and others of the same kind.

EDEN, a river in the N.W. of England, which has its sources on the borders of Westmoreland and Yorkshire, near Pendragon castle, close to the sources of the Swale, in one of the highest parts of the Pennine or central range of mountains. It pursues a N.W. course through the valley between the Pennine and Cumbrian mountains past Carlisle, 7 m. below which it falls into the Solway Frith. It is navigable to Carlisle; but the navigation being tedious and difficult, a canal has been cut from Carlisle to Bowness, lower down the Frith, a distance of 11½ m., which admits vessels of from 60 to 80 tons burden.

EDER, a town of Hindostan, prov. Gujrat, cap. of a principality of the same name, 17 m. N. by W. Ahmednuggur, and 117 m. S.W. Odeypoor; lat. 23° 53′ N., long. 72° 3′ E. Pop. 12,000? It is but a poor town, though built within the walls of a magnificent fortress constructed by the Mohammedan kings of Gujrat. (*Hamilton's E. I. Gaz.*)

EDFOU (the Ἀπόλλωνος πόλις of Strabo, and *Apollonopolis Magna* of the Romans), a town, or more correctly a large assemblage, of mud huts congregated around and amidst the superb ruins of an ancient temple on the W. bank of the Nile, in Upper Egypt, about 2 m. from the river, and 52 m. S. by E. Thebes. Lat. 24° 58′ 43″ N., long. 32° 54′ E. Pop. from 1,500 to 2,000, consisting principally of Ababdie Arabs, with a few Coptic families, who manufacture blue cotton, cloth and pottery, and boast of inheriting from their ancestors the art of making earthen vessels; and it must be admitted that their kilns and the forms of their vases exactly resemble those of ancient Egypt, as represented on the monuments. Dr. Richardson says that the inhab. are "civil and dirty," and the place would be unworthy notice were it not for its antiquities; but two noble temples, placed opposite to each other, though half buried in the sand, and an ancient quay, still remain to evince the former grandeur of *Apollonopolis Magna*. The great temple on a small eminence, commands a view of all the surrounding country, and is therefore called, in Arabic, *Qala*, or "the citadel." Its *propylon*, or entrance, consists of a doorway, 17 ft. 4 in. wide, between two vast truncated rectangular pyramids or moles. The base of each of these pyramids is 104 ft. by 37 ft.; their height is 114 ft.; and the horizontal section of each at the top 84 ft. by 20. The door is surmounted by the often-repeated sculpture of the globe with the serpent and wings; and three rows of immense figures are sculptured on the sides of the pyramids. These gigantic structures are not solid, but have chambers, to which and to the top access is provided by means of staircases. Within the doorway is an open rectangular court, now filled with huts and rubbish, 161 ft. by 140 ft., enclosed by high walls, which also confine the temple itself, and are 414½ ft. on each of the longer sides, and 154½ ft. on the shorter. Notwithstanding these vast dimensions, the walls are elaborately covered with hieroglyphics. On each side of the longer walls in the court there is a row of pillars, so disposed that a space intervenes between them and the walls, which being roofed form two covered ways, leading from the *propylon* to the portico or *pronaos* of the temple. The columns, of which there are 32, present a most magnificent perspective. There is a gradual ascent in the court to the portico, the outside of which is adorned with six columns, having various capitals; and within are several apartments and corridors, supported by columns, and ornamented with sculptures. The *sekos*, or sanctuary, is an oblong apartment, about 33 ft. by 17 ft. The terraced roofs of the temple, from the *pronaos* to the extremity, are covered with mud huts, and the sanctuary and adjoining chambers are now either used as repositories for grain or other products, or are half filled with sand, and with filth and rubbish, shot down by the Arabs through the apertures that formerly lighted the chambers. (*Egyptian Antiquities, Library of Entertaining Knowledge; Modern Traveller*, vi. 176. &c.)

The plan and arrangement of this temple is simple and symmetrical. Its largest columns are 6 feet 4 inches in diameter, 21 ft. in circ. and 42 ditto in height; the capitals are 37 ft. in circ. The *palmiform* capital, peculiar to Egyptian architecture, is here seen to great advantage. It represents the trunk of a palm, of which the spreading foliage forms a graceful frieze. Art has here copied Nature with great fidelity; it has preserved the same number of leaves, the exact form of the fruit, and the scales of the trunk, and the capitals gradually augment in size till they balance the leaves. The 32 capitals of the peristyle, and the 6 of the pronaos, exhibit in alternate columns the dactyliform and lotiform figure, which last is as faithfully borrowed from Nature as the palmiform. This is the account given by Jomard in the *Description d'Edfou* (p. 20.), and copied by *Ritter*, who praises the simplicity and pure antique style of the temple. But a higher authority, *M. Champollion*, is of a wholly different opinion: — "Ce monument," says he, "imposant par sa masse, porte cependant l'empreinte de la décadence de l'art Egyptien, sous les Ptolemées, au règne desquelles il apartient tout entier; ce n'est plus la simplicité antique; on y remarque une recherche et une profusion d'ornements bien maladroites, et qui marquent la transition entre la noble gravité des monuments pharaoniques, et le papillotage fatigant, et de si mauvais goût, du Temple d'Esneh, construit au temps des empereurs." (*Lettres*, p. 191.) This, however, is probably too unfavourable an opinion.

Notwithstanding its truly colossal character this temple is not, as was long supposed, of the pharaonic æra, but is comparatively modern, being, as now stated, the work of the Ptolemies. This is proved by the date of its decorations, the most ancient of which, according to Champollion, belong to the age of Ptolemy Philopater. It would appear from the same authority that the meaning of the sculptures, and the object of the temple, had been completely misunderstood by Mr. Hamilton, M. Jomard, &c., who supposed that it was sacred to Osiris, the beneficent deity. M. Champollion affirms that this magnificent edifice was consecrated to a triad consisting of, — 1st, the god Harhat, the personification of heavenly science and light; 2dly, the goddess Hathor, the Egyptian Venus; and, 3dly, their son Harsont-Tho, the Eros of the Greeks and Romans. (*Lettres d'Egypte*, p. 192.)

The other and much smaller temple at Edfou, is peripteral, and was supposed to be devoted to the worship of the malignant deity, Typhon, whose image was believed to be represented above the capitals of the columns, and elsewhere on the walls. But Champollion has shown that this temple is really one of those *mamisi* that were always erected near the grand temples devoted to the worship of a triad, and that it represents the birth-place of the third person of the triad, or of Harsont-Tho, son of Harhat and Hathor. The *bas-reliefs* on this temple are of the age of Ptolemy Euergetes II. and Soter II. (*Lettres*, 193.)

Between Edfou and El Cab, one of those transverse valleys which frequently divide the mountain ranges of the E. desert, opens to the E., and is called the valley of Edfou. It extends from the Nile to the Red Sea, near Berenice; and upon it have been traced the tracks of a great commercial road, over which the traffic of the ancient sea-port of Berenice, and the produce of the celebrated emerald mountains were conveyed. It was also, formerly, a much-frequented caravan route.

EDINBURGH, or MID-LOTHIAN. *See* LOTHIAN.

EDINBURGH, a celebrated city, the metropolis of Scotland, co. Mid-Lothian, 2 m. S. from the Frith of Forth, built principally on three parallel ridges, running E. and W., and separated by deep depressions, lat. 55° 57′ 2″ N., long. 3° 11′ W., 337 m. N. N. W. London, and 42 m. E.

by N. Glasgow. The central ridge is terminated on the W. by a rock, nearly 400 ft. above the level of the sea, surmounted by the castle, and on the E. by the palace of Holyrood, 108 ft. above the same level. The circumference of the city, exclusive of Leith, its sea-port, lying between it and the Forth, is rather less than 6 m.

When comprised within its ancient limits, the pop. of Edinburgh was extremely dense It is said by Maitland (*Hist. of Edin.* p. 7.), referring to the year 1600, to have been "so full of inhabitants that probably there is no town elsewhere of its dimensions so populous." At the Union, in 1707, the pop. was estimated at 35,000; in 1755, before the New Town was commenced, and when the southern districts did not exceed a fifth part of their present extent, the pop. was estimated at 50,000; in 1775, soon after the commencement of the New Town, the pop. was 60,000; in 1791, about 71,000: but these enumerations exclude Leith, the pop. of which in 1753 (*ib.* p. 500.) was 7,280. The pop. of Edinburgh, city and suburbs, exclusive of Leith, according to the censuses since 1801, has been as follows: viz. 1801, 66,544; 1811, 81,784; 1821, 112,235; 1831, 136,301, and 1841, 138,182. Including Leith, which forms a con inuation of Edinburgh, the pop. in 1841 was 164,615.

In 1841 there were in Edinburgh (*ex. Leith*) —

Houses inhab. - - -		22,898
Males under 20 years of age -	28,492	
Females - - - -	29,927	
Males of 20 years and upwards -	32,821	
Females - - - -	46,912	
		138,182
Persons born in the county of Edinburgh -	80,430	
Elsewhere - - - -	57,752	
		138,182

In Edinburgh a house often accommodates several families, each story (provincially *flat*) constituting, in such cases, a separate dwelling, to which access is obtained by means of a common stair. Nay, a story is sometimes subdivided into two or more separate residences, each being accessible by its own door opening to the same common stair. In the Old Town common stairs are all but universal. They are general also in the southern districts; but more rare in the New Town, separate or "self contained houses," as they are termed, generally prevailing in this fashionable and wealthy quarter of the city. The loftiest houses are in Mound Place, in the Old Town: they extend to 11 stories, including the attics; and as each story is generally divided into two lodgings, each house is supposed to contain, at an average, about 20 families, or 100 individuals. In the above table, by houses, are to be understood both houses and flats, when the latter are let or occupied separately. With the exception of the older buildings, which range from five to six stories in different districts, the usual height is three stories, exclusive of the attics and the basement floor, which latter is generally half sunk under the level of the street. This is the case, with very unimportant exceptions, throughout the New Town. The word *land* is used in Edinburgh to signify a house or tenement, from top to bottom, whether it be occupied by one family or several. Previously to the houses being numbered, they were distinguished by such names as Todrig's *land*, Moodie's *land*, Gavenlock's *land*, &c. Similar remarks apply to Leith.

The situation of this city is eminently romantic. It stands, as previously stated, on three separate ridges, of which that in the middle, having the castle at its W. extremity, is at once the most striking and the best defined. The castle is peculiarly picturesque. The rock on which it is built is on three sides, N., W., and S., high, steep, and in parts almost perpendicular. On its E. side the ground declines in a sloping ridge to Holyrood Palace; and on it,

"Piled deep and massy, close and high,"

stands the greater part of the Old Town. The neighbourhood is also marked by lofty hills, except towards the N., where the ground gently declines to the Frith of Forth The Calton Hill, 347 ft. above the sea, on the E. side of the city, now surrounded with fine terraces of houses, affords the remarkable spectacle of a verdant hill, except where covered with monuments, within the precincts of a large town. Arthur's Seat (822 ft. above the level of the sea), and Salisbury Crags (547 ft.), the latter divided from the former by a deep and gloomy ravine, lie on the S.E. of the city. Each of these hills rises abruptly from its base, and commands varied and very extensive views. Blackford Hill, the Braid Hills, the Pentland Hills, and Corstorphine Hill, rise at different distances on the S. and W. These eminences form a magnificent amphitheatre, within which, on elevated but lower ground, the Scottish capital is situated.

The ridge on which the Old Town is built was not inaptly compared by Arnot to a turtle, of which, says he, "the castle is the *head*, the High Street the ridge of the back, the *wynds* or *closes* the shelving sides, and the palace of Holyrood-house the tail." (*Hist. of Edin.* 4th ed. p. 179.) It is separated from the New Town on the N. by a deep valley, which for centuries formed a lake, called (as it is still) the North Loch; but having been drained in 1763, it is now laid out in gardens, and is traversed by the Edinburgh and Glasgow railway. On the S. the Old Town is divided from the southern districts by a similar valley, the site of the Cowgate, now a narrow and mean, though once a fashionable street. From the High Street, on the summit of the ridge, descend, on both sides, in regular rows, numerous narrow lanes, which are mostly steep and difficult of passage, being rarely more than 6 ft. in width, and in general very dirty. Those of the greatest width, or which admit of a cart or carriage, are termed *wynds*, as Blackfriars' Wynd, St. Mary's Wynd, &c., while those which admit foot passengers only, are called *closes*. A few have no thoroughfare, being in the form of *culs de sac*.

The High Street, which (including the Castle Hill, Lawn Market, and Canongate) stretches in nearly a straight line from the Castle to the Palace, a distance, as already stated, of more than 1 m., is a truly magnificent street; the houses, which vary from five to six or seven stories in height, have been mostly rebuilt; but a few, especially on the Castle Hill, are of great antiquity. This street, with its shelving lanes and appendages, constitutes the whole of what is properly the "old town." It is connected with the southern districts by the Cowgate, and by two bridges which stretch over the valley in which that street is built, viz. the South Bridge, opened in 1788, and George the Fourth's Bridge, opened in 1836. On the other hand, the Old and New Towns are connected by the North Bridge, which spans the North Loch, and forms a continuation of the line of the South Bridge, and by the "Earthen Mound." The North Bridge, which consists of 3 central arches, with several smaller ones at each extremity, was opened in 1768; while the Mound, which was begun in 1784 from the ac-

cumulation of the rubbish from the excavations of the New Town, was formed into a thoroughfare about the beginning of the present century, but it has since received great additions. It is supposed to contain 500,500 cubic yards, or about 1,500,000 cartloads of earth. W. of the Cowgate lies the Grass Market, a wide, open street, used as a market-place for the sale of horses, sheep, corn, &c

The New Town, which, as well as the more modern parts of the southern districts, is built of light coloured freestone, procured in abundance in the immediate vicinity of the city, stands on an eminence, which slopes to the water of Leith, the small river at the mouth of which Leith is built. The leading streets run in straight lines from E. to W., and are crossed at the distance of about every 250 yards, by streets running in an opposite direction; so that great regularity, elegance, and beauty characterise this quarter of the city. George's Street, which stretches along the top of the ridge, is terminated on the E. by St. Andrew's Square, and on the W. by Charlotte Square. Great King Street, which lies considerably down the declivity, and nearer the Water of Leith, has, in like manner, the Royal Circus on the W., and Drummond Place on the E. There are, also, James's Square (the oldest in the New Town), and Rutland Square, recently built. Nor is variety, in other respects, entirely wanting. Another New Town may be said to have lately (1822-3) risen up, covering about 33 acres of ground, having Moray Place in its centre, and Randolph Crescent on the W. This is the most elegant and fashionable part of the city. The *feus*, or building leases, in this quarter fetch from 20*s*. to 40*s*. annually per foot of frontage. This portion of the city is terminated by the steep banks of the Water of Leith, and is connected with the grounds N. of that stream by the Dean Bridge, an elegant structure, consisting of 4 arches, each 96 ft span, the height of the road-way above the bed of the river being 106 ft. One of the most celebrated streets in the New Town is Prince's Street, forming a species of terrace, and facing the Old Town, of which it commands a fine view, which, especially by moonlight, is probably unequalled. Waterloo Bridge connects this street with the Calton Hill, being thrown over a deep ravine occupied with ancient, but shabby buildings, called the Low Calton. The line of road, to which this bridge leads along the E. side of the Calton Hill, forms a grand approach to the city in this direction. The Queen Street Gardens, a piece of ground which extends from E. to W., about ¼ of a m., by about 200 yards in width, may be regarded as bisecting the New Town. Elegant streets have, at different periods, been built W. of Prince's Street and Charlotte Square, of which the most important are Atholl and Coates's Crescents: the greatest length of the New Town, from Atholl Place to the termination of Waterloo Bridge, is 1½ m.

The situation of the southern districts is considerably more elevated than that of the New Town; but the buildings are of an inferior order, nor has much regularity been observed in the laying out of the streets. The houses are high, mostly four stories, and common stairs prevail, with partial exceptions, particularly in George's Square: this, which is the handsomest place in this quarter of the town, was built above 80 years ago, and is of large dimensions. It has on the W. the public walk leading to the Meadows; and on the S. it is separated from them by Buccleuch Place. The principal line of buildings is Nicolson Street, which stretches from the South Bridge, already mentioned, to the country on the S., and now forms the main approach to the city in this direction. The former approaches on this side were parallel to Nicolson Street, being an old street, called the Pleasance, on the E., and the Causeway Side on the W. While the Meadows bound the southern districts on the W., a valley or ravine, fronting Salisbury Crags, forms their termination on the E. Not a few of the public buildings, including the University, are in this district.

The pop. of Edinburgh has been nearly stationary since 1831. And it had, in fact, been completely overbuilt previously to 1825, both by the erection of too many houses, and of houses constructed on too great a scale, and far exceeding the means of the occupiers. This necessarily led to a great fall of rents and a ruinous revulsion in the value of house property, which proved extremely injurious, not only to those who had speculated in it, but also to the labourers and others who had been attracted to the city by the previous great demand for labour. Within the last seven years, however, rents have again begun to rise; but, notwithstanding this increase, they are, we believe, lower at present (1850) in Edinburgh than in any other great town in the empire. The cheapness of houses is, indeed, one of the principal recommendations of Edinburgh as a place of residence.

The original *royalty*, or "*borough roods*," embraced only the Old Town, excluding even the Canongate, which intervenes between it and the Palace. But the "extended royalty," as it is called, obtained from Parliament in 1767, while it excludes the Canongate, embraces the whole of the New Town, with the exception of a few streets which have stretched beyond its limits. The suburbs of Edinburgh may be briefly enumerated: — the Canongate, including the Calton, a contiguous hamlet at the base of the hill of that name, the superiority of which is vested in the city of Edinburgh. The town council of the city has a veto on the election of two resident bailies for the Canongate: that body, besides, appoints one of its own members as baron-bailie. Wester and Easter Portsburgh, the former lying W. of the Grass Market, and the latter, now called the Potter Row, S. E. These two places, which are of considerable antiquity, and which took their names from *ports* or gateways in the Old Town Wall, are also subject to the city of Edinburgh, being governed in a way similar to the Canongate. Leith was formerly in the same predicament; but it has of late years been rendered entirely free and independent. Broughton, a burgh of regality under the same jurisdiction, and lying on the site of the streets in the New Town, which now bears its name, has been nearly obliterated, and will soon entirely disappear. Its separate jurisdiction was destroyed when the Act for extending the royalty was obtained.

Edinburgh was first walled in 1450. But the wall was confined to the town as it then existed; that is, it did not embrace the Canongate, nor did it extend so far S. as the site now occupied by the Cowgate. But after the battle of Flodden, in 1513, a new wall was built, comprising not merely the Cowgate, but the acclivity S. of that street, and running parallel to it throughout its whole length. Some remains of this wall, which enclosed the ground now occupied by the workhouse, the University, Infirmary, Old High School, &c., are yet standing. A number of *ports*, or gates, gave ac-

cess to the city in different directions, the last of which was removed in 1785. The Netherbow port, between the High Street, and the Canongate, removed in 1764, was ornamented with a spire.

Public Buildings.—Of these the castle deserves the first notice. The date of its foundation is unknown. It was originally called *Castrum Puellarum*, because the daughters of the Pictish kings were educated and kept in it till their marriage—a necessary precaution in these barbarous times. Queen Margaret, widow of Malcolm Caenmore, died in this fortress in 1093. James VI. of Scotland, and afterwards I. of England, was born here in 1556. The fortress, which corresponds with none of the rules of art, being built according to the irregular form of the precipice on which it stands, is any thing but impregnable. It has been successively taken and retaken by contending parties, and was often in the hands of the English. It is, in short, of little or no strength, and is interesting only from its romantic situation on the top of a rugged basaltic rock, perpendicular on all sides except on that next the Old Town, the splendid view which it commands, and the many historical associations connected with it. It was occasionally used as a royal residence. In an apartment called the crown room were deposited the Scottish regalia at the Union in 1707: these relics, which consisted of the crown, sceptre, sword of state, and the lord treasurer's rod of office, were long supposed to have been removed or lost, but they were discovered, in 1818, in a large oaken chest in the crown room, by royal commissioners appointed to conduct the search. They are now open to the gratuitous inspection of the public.

The Palace of Holyrood, which stands at the E. extremity of the city, next claims our attention. It is a fine castellated edifice, of a quadrangular form, with an open area in the centre, 94 ft. square. The most ancient parts of the present palace were built by James V. in 1528. It was partially burnt by the English during the minority of Queen Mary, and again by the soldiers of Oliver Cromwell; but after the Restoration it was repaired and altered to its present form by Charles II. And it is now (1850) undergoing considerable repairs in the anticipation of its being visited by her Majesty on her way to the N. The mean and unsightly buildings by which it is hemmed in on the S. and on the side next the city, should be removed. The Pretender took up his residence here in 1745. George IV., on his visit to Scotland in 1822, though he resided at Dalkeith palace, held levees and drawing-rooms in this ancient abode of his ancestors. Meetings of privy council were also held here. The Count d'Artois, afterwards Charles X. of France, and other royal and noble French refugees, obtained a refuge here in 1793; and in 1831 the same apartments served a second time as an asylum for nearly the same individuals. It has a peculiar interest, from the circumstance of the apartments occupied by Queen Mary having been carefully preserved in the state in which she left them. Her bed is an object of interest to strangers; and many relics of her majesty's needlework exist in the rooms. The spot where Darnley and his accomplices murdered her favourite, David Rizzio, and other interesting localities, are carefully marked. The closet in which Mary was at supper, with the Countess of Argyle, Rizzio, and others, when this tragical scene was acted, is only 12 ft. square. In what is called the picture gallery, a hall 150 ft. in length, and 27½ in breadth, are hung the portraits (most of them fanciful) of 111 Scottish monarchs, painted towards the end of the 17th century by De Witt, an artist of the Flemish school, by order of James II. of England, when Duke of York. In this hall the election of the 16 Scottish representative peers takes place.

In immediate connection with the palace on the N., are the ruins of the Abbey of Holyrood, founded by David I. in 1128. The king conferred a large endowment and other privileges on the monks (of the order of St Augustine) whom he established here; among these, the privilege of erecting a burgh between the abbey and the town of Edinburgh. Hence the origin of the Canongate, the superiority of which at the Reformation passed from the bands of the monks to the Earl of Roxburgh, from whom it was purchased in 1636 by the city of Edinburgh, which still retains it. At the Reformation, the buildings connected with this abbey suffered much; and it is now in a state of ruin, the roof having fallen in so long ago as 1773. The area of the royal chapel, which formed the nave of the Abbey Church, has long been used as a burial-place by several of the Scotch nobility. In the S.E. corner of the chapel is the royal vault, in which are deposited the remains of several of the Scotch sovereigns, and branches of their families. The precincts of the Abbey of Holyrood, including Arthur's Seat and Salisbury Crags, constitute a sanctuary for insolvent debtors.

The buildings of the Royal Institution, an edifice in a pure classical style, situated at the N. termination of the Earthen Mound, and fronting Princes Street, have a range of Doric pillars on each side, and another range surmounted with a pediment in front. The Royal Society of Edinburgh, the Royal Society of Arts, and the Board of Trustees, which last was instituted in 1727, for encouragement of trade and manufactures in Scotland, have also apartments under the roof of this institution. The Board of Trustees, besides the primary object for which it was founded, pays 500*l.* a year to the Royal Academy for the encouragement of the fine arts. The Royal Scottish Academy of Painting, Sculpture, and Architecture has hitherto had annual exhibitions in the Royal Institution. But this will speedily cease to be the case, as a National Gallery is about to be erected on the Mound, at an estimated cost of 30,000*l.* to be defrayed by government.

The Calton Hill is the site of several interesting monuments: that of Nelson, though by no means in the best taste, is the most prominent; it stands on the edge of a precipice, and consists of a lofty circular hollow tower, having a stair inside, and battlements at the top. Here, also, is the National Monument, in commemoration of the naval and military glories of the late French war. The foundation stone of the latter was laid in 1822, when George IV. was in Scotland; but from the want of funds only 15 columns have been finished. It is meant to be a *fac-simile* of the Parthenon in the acropolis of Athens, except that it is of sandstone, whereas its great prototype is of marble, and to contain both a church and a place of sepulture. On the same hill are monuments to Dugald Stewart, the celebrated metaphysician, and Professor Playfair; the former singularly chaste and beautiful, being a reproduction, with some variations, of the choragic monument of Lysicrates at Athens. On the S. of the hill, on a detached eminence overlooking the Canongate, is a monument to Robert Burns, belonging to the Corinthian order. The Calton Hill is also the site of the Observatory and of the High School. On the S.W. corner of the hill, along the right of the road leading from Princes Street to the country on the E., stand Bridewell and the Gaol, two heavy and plain but well arranged buildings.

There are various other monuments in different parts of the town: that to the late Lord Melville, in St. Andrew's Square, consists of a column, surmounted by a statue, total height 153 ft., after the model of Trajan's pillar at Rome, but the shaft, instead of being ornamented with sculpture, as is the case with its archetype, is fluted. Bronze statues of George IV. and William Pitt, by Chantrey, are placed on granite pedestals in George Street, at the crossings, respectively, of Hanover Street and Frederick Street; and a bronze statue of the late earl of Hopetoun, by the same artist, is placed within a vacant space, opposite to the office of the Royal Bank, in St Andrew's Square. Another bronze statue, by Campbell, of the late Duke of York, has been erected on the Castle Hill, between the High Street and the castle. The monument to Sir Walter Scott, on the vacant ground south of Princes Street, at the foot of St. David's Street, though not, perhaps, in the best situation that might have been selected, is one of the most striking and magnificent of this class of buildings. It is open Gothic, 200 ft. in height, and, including the statue, cost 15,650*l.* An equestrian statue of the Duke of Wellington is about to be placed in front of the Register Office. The monument of David Hume, the historian, within the old Calton Hill burying-ground, is a conspicuous and interesting object; which is more certainly than can be said for the martyrs' (!) monument in its vicinity.

The Register Office, a building erected to preserve the public records of Scotland, was constructed after a plan designed by Mr. Rob. Adam, and though begun in 1774 was not completed till 1822. It is situated at the E. end of Princes Street, and fronts the North Bridge. The building, which is of two stories, exclusive of the basement floor, consists of a square of 200 ft., with a quadrangular court in the centre, covered by a dome of 50 ft. diameter. It has great architectural beauty. Its front is ornamented with Corinthian pilasters, supporting a pediment, within which are the royal arms of Great Britain, with a fine entablature of the same order. It is disposed in nearly 100 small arched apartments entering from long corridors on both stories; and, though heated by flues, is, from the total absence of timber, proof against fire.

Churches, &c.—Edinburgh originally consisted of one parish, and John Knox was, for a time, the only minister of the city, that is, of the ancient royalty, independent of the suburbs. The single place of worship at that time was St. Giles's, or the High Church. In 1625, the royalty was divided into 4 pars.; in 1641, into 6; and now (1840) into 9; but including the extended royalty, the number of pars. is 14, of which 4 are collegiate, or have each 2 clergyman; consequently, the number of pa-

rochial ministers in the city is 18. This is exclusive of the Canongate, whose church is collegiate, and of the par. of St. Cuthbert; which latter, after having had 4 of the city pars. formed out of it, still contained, in 1841, no fewer than 71,908 inhab. Its par. church is collegiate. But in addition to the parishes recognised by the civil law, there are no fewer than 13 *quoad sacra*, or ecclesiastical pars., each having a distinct church and clergyman: most of these have been formed since 1834.

The most important ecclesiastical edifice is St. Giles, so called after the tutelary saint of Edinburgh. It stands n the High Street, and forms the N. side of the Parliament Square. It is an ancient Gothic building, the date of its erection being unknown; and is built in the form of a cross. Its length is 206 ft., its greatest breadth 129. It is adorned with a lofty square tower, the top of which is encircled with open figured stone-work, whilst from each corner of the tower springs an arch, which meeting together in the centre, form a magnificent imperial crown. A pointed spire, elevated 161 ft. from the ground, terminates this stately tower. Shortly after the Reformation, St. Giles was divided into separate places of worship. In 1822-23 it was thoroughly repaired, with the exception of the tower, renovated, and greatly improved in appearance by an entire casing of new freestone walls, its ancient character being at the same time carefully preserved. It now contains only 3 churches. The High church, or Easter St. Giles, has an ornamented seat for the sovereign, with a canopy supported by 4 handsome columns. It has, also, the official seats of the magistrates of the city, and of the judges of the court of session.

The next church, in respect of antiquity, was Trinity College church, founded in 1462, by Mary of Gueldres, widow of James II. The building, which was Gothic, and in the cathedral form, appears never to have consisted of more than the choir or E. part, and the transept or cross, the W. part having been begun but not finished. But this interesting relic of a bygone age has recently been removed to make room for the terminus of the N. British Railway!—the proprietors of the latter being, however, duly bound to produce a fac-simile of the old church on some appropriate spot! But this burlesque will not, it is to be hoped, be perpetrated.

The Tron church, which stands at the point of intersection of the South Bridge and High Street, is also of Gothic architecture, blended with Roman ornaments and details. The present spire of this church, 160 ft. in height, replaces a former spire of wood, burnt down in 1824. Among the other and more modern churches, are St. Andrew's, erected in the extended royalty, in 1781, with a spire 168 ft. high; St. George's, opened in 1814; St. Mary's, in 1821; St. Stephen's, in 1828; and Greenside, in 1839. St. George's, on the W. side of Charlotte Square, is a large, heavy, tasteless square fabric. From the centre rises a tower surmounted with a dome 150 ft. in height, in imitation of St. Paul's: the building cost 33,000*l.* A new church has recently been erected for the Tolbooth parish, instead of that which it formerly enjoyed under the roof of St. Giles. It is situated on the castle hill, has commodious apartments, inc. Victoria hall, for the use of the General Assembly, and is surmounted by a fine spire 238 ft. in height, the most conspicuous object in the city. The town council of Edinburgh are the patrons of the 15 city pars.

The chapels, 7 in number, belonging to the Scotch Episcopal church, are generally handsome structures. Of these, the principal are, St. John's, at the W. end of Princes Street, in the florid Gothic style, with a square tower 120 ft. high; St. Paul's, in York Place, of Gothic architecture; and Trinity chapel, at the N. extremity of Dean Bridge, also in the Gothic style.

The Rom. Catholics have 2 handsome places of worship, both Gothic; one in the new town and the other in the old. They have also recently instituted a convent of nuns, called St. Margaret's, at the head of Bruntsfield Links, attached to which is an establishment at Milton House, in the Canongate.

The chapels of the various dissenting denominations (including the Free Kirk) are all respectable, and many of them spacious, elegant, and costly. The following is the number of places of worship in the city and suburbs (exclusive of Leith), with the denominations to which they severally belong:—

Established Church, including the *quoad sacra* parishes		30
United Presbyterian Church		14
Cameronians		1
Associate Synod of original seceders		2
Free Church		25
Total number of Presbyterian congregations		72
Independents	3	
Episcopalians	9	
Roman Catholics	2	
Baptists	5	
Methodists	4	
Glassites, Quakers, Unitarians, Jews, New Jerusalemites, Bereans, 1 each	6	
		29
Total number of churches and chapels		101

The city parochial clergy, 18 in number, are supported chiefly by an assessment (called annuity tax) of 6 per cent. levied on all houses and shops within the ancient and extended royalty, with the exception of the dwelling houses of the members of the College of Justice, that is, of the legal practitioners before the court of session. The annuity being a very unpopular impost, its payment is often evaded, even at the risk of imprisonment or distraining of goods, so that great defalcations are experienced in its collection. The clergy drew, till 1838, certain shore dues at Leith, and other trifling imposts; but, by an act of parliament passed in that year (*Edinburgh and Leith Agreement Bill*, cap. 55.), the sum of 2,000*l.* was secured to them, in lieu of all such claims. Their average income of late years has exceeded 500*l.*

Education—University.—Edinburgh is not more celebrated for any thing than for her literary and educational institutions: of these, the university deserves the first notice. The building of this seminary, the only foundation of the kind established in Scotland since the Reformation, began in 1580, after many unsuccessful efforts had been made by the citizens of Edinburgh to obtain for their city the advantages of such an institution. It received a charter from James VI. in 1582; and in 1583 the college was opened for the reception of students, the number of whom was 48. (*Crawfurd's History of the University of Edinburgh*, p. 31.) On the first institution of the college there was but one professor or *regent*; a second was soon afterwards added, then a third, and so on, till there were six—a principal, who was also professor of divinity; four regents of philosophy; and a regent of humanity. Each of the regents of philosophy conducted his class for four successive years, including, in his course of study, almost every department of science and literature—the classics, logic, metaphysics, ethics, mathematics, and physics. A division of labour in teaching was gradually introduced, as new professorships were founded; but it was not till 1708 that the old system was entirely superseded. In the year just mentioned, the number of professors, including the principal (from whose duties the office of regent of theology had been withdrawn in 1620), was 15; but such has since been the increase, that it is now 32. The medical school of Edinburgh, of late years so famous, had its origin so recently as the end of the 17th century, there being no professor of medicine previously to the year 1685. The magistrates, whose predecessors may be regarded as the founders of the university, and who have been at all times its munificent guardians, are its general patrons, and have power to institute new professorships, and to alter or modify the academical discipline. Out of the 32 appointments, they possess the exclusive right of presentation to the offices of principal and of 14 professors; they unite with other parties in the right of election to 7 other chairs; the crown enjoys the patronage of 8; while the principal and professors are invested with the patronage of 1, viz., music, instituted in 1839. The chair of clinical medicine is taught in rotation by certain of the medical professors, according to an arrangement among themselves. The crown is the patron of those chairs only instituted by itself. No party except the crown (and even that was at one time disputed) has a right to found a professorship without the sanction of the magistrates. The incomes of the professors depend chiefly (some of them entirely) on the fees paid by the students. The crown endowed most of the chairs which it has founded; while such of the others as have salaries attached derive them either from the patrons of the university, their respective founders, or the bequests of private individuals. The chair of music, founded and endowed by General Reid, has attached to it the comparatively large salary of 300*l.* The table on next page (*Report of Scottish University Commissioners*) contains a view of some not unimportant particulars.

The above sums include, in the case of the older chairs, allowances for house rent, as the professors and also the students originally lived within the walls of the college; but such is no longer the case. Both parties now live wherever they choose; and no discipline is exercised over a student, except when within the walls of the college. The professorships are divided into the four faculties of philosophy, law, medicine, and divinity. The students wear no particular academical dress. The principals of the University, of whom the most illustrious by far was Dr. Robertson, were, till the appointment of Dr. Lee (1840), ministers of Edinburgh; so that the smallness of the endowment was less felt. There is no such officer as a chancellor or rector, except that the functions of the latter are said to be officially vested in the lord provost of Edinburgh. A standing body, called the college committee, appointed by the town council out of their own number, has charge of the seminary. There is but one session annually, from the first of November till the end of April. There are, however, a few summer classes for three months, such as botany, natural history, &c.

The exhibitions, or *bursaries*, attached to the univer-

Offices.	When founded.	Salaries.
First Regent - - -	1583	
Second Regent - -	ditto	
Principal - - -	1586	£151 2 2
Third Regent - -	ditto	
Fourth Regent - -	1589	
Chair of Humanity - -	1597	87 4 4
——— Divinity - -	1620	196 2 2
Hebrew - - -	1642	115 0 0
Mathematics - - -	1674	148 6 8
Botany - - -	1676	127 15 6
Theory of Physic - -	1685	None.
Practice of Physic - -	1685	None.
Church History - -	1695	200 0 0
Anatomy and Surgery -	1705	50 0 0
Public Law - - -	1707	Unknown.
Greek - - - -	1708	87 4 4
Natural Philosophy - -	1708	52 4 4
Moral Philosophy - -	1708	102 4 4
Logic - - - -	1708	52 4 4
Civil Law - - -	1710	100 0 0
Chemistry - - -	1713	None.
Universal History - -	1719	100 0 0
Scotch Law - - -	1722	100 0 0
Midwifery - - -	1726	None.
Clinical Medicine - -	1741	None.
Rhetoric - - -	1762	100 0 0
Natural History - -	1767	100 0 0
Materia Medica - -	1768	None.
Practical Astronomy -	1786	120 0 0
Agriculture - - -	1790	50 0 0
Clinical Surgery - -	1803	100 0 0
Military Surgery - -	1806	100 0 0
Medical Jurisprudence -	1807	100 0 0
Conveyancing - -	1825	120 0 0
General Pathology - -	1831	None.
Music - - - -	1839	300 0 0
Total amount of salaries, exclusive of the class of Public Law - - -		£2,759 4 2

sity are 34, their benefits being extended to 80 students; their aggregate amount is 1,172*l.* a year. Three are of the annual value of 100*l.*, six of 30*l.*, ten of 20*l*, four between 20*l.* and 15*l.*, one of 15*l.*, five between 15*l.* and 10*l*, forty-two between 10*l.* and 5*l.*, and three under 5*l.* The fees paid by the students are — for each class in the faculty of divinity, 2*l.* 2*s.*; in that of arts, 3*l.* 3*s.*; in those of law and medicine, 4*l.* 4*s.* There is, also, 1*l.* paid annually on matriculation.

The number of students increased pretty regularly from the institution of the university till 1823, when it was at its maximum. The number attending the class of each regent, previously to 1646, ranged from 13 to 70; the average being 35. (*Craufurd*, passim.) The aggregate attendance during that period, including divinity, the only other department then taught, did not probably exceed 180. The number did not exceed 500 in 1753 (*Maitland*, p. 370.): it was 1,279 in 1791-92. The rapid diminution of attendance since 1823, will be seen from the following table: —

Years.	No. of Students.
1822-3 - - - -	- 2,344
1830-1 - - - -	- 2,025
1836-7 - - - -	- 1,504
1849-50 - - -	- 1,564
Decrease since 1822-3 -	780

It may not be uninteresting to trace the diminution in the different faculties.

Years.	Arts.	Medicine.	Law.	Divinity.
1822-3 - -	930	867	274	273
1849-50 - -	640	690	166	68
Decrease -	290	177	108	205

The large secession that took place (1843) from the Church of Scotland accounts for the falling off in the theological department: but the number of Divinity students at the four universities is quite sufficient to supply the vacancies that occur in the church.

The proportion of medical students is great, though the decline in this faculty is nearly as considerable as in the other departments. But, despite this decline, the number of graduates in medicine, though they, also, have fallen off, is still very considerable. Reckoning from 1726 to 1826, the total number of graduates amounted to 3,070, or to an average of 30 per annum. But the average for the last 25 years is considerably above 100.

Years.	Number of Graduates.	Years.	Number of Graduates.
1816	76	1839	119
1827	160	1845	79
1833	110	1849	51
1836	123		

While the number of medical graduates is so great, those in arts are very few indeed. For 50 years preceding 1826, the total number was only 168, or little more than 3 a year. The number is still only about 6 annually; the fact is, that but little value is attached to the possession of the degree of A.M. The degrees of D.D. and LL.D. are entirely honorary, and are professed to be bestowed only on persons of literary eminence. The right of conferring this honour is vested in the *senatus academicus*; and it would seem as if it had not been abused. The degrees of D.D. average about 2 yearly; and of LL.D. only 1.

The great diminution of students to which we have referred is owing, it is proper to remark, not to any inefficiency that attaches to the university of Edinburgh, for that seminary could rarely boast of more able and assiduous teachers, and has seldom been in a state of greater proficiency than at present, but to a combination of other circumstances, particularly to the recent institution of the Free Church College, and of several colleges in England, to an increased emigration to our colonies, and to the country having become more commercial, and supplying more advantageous channels of employment than those afforded by the learned professions.

The university library consists of about 100,000 vols. It is open on payment of the matriculation fee, referred to above, to all students, who may borrow from it and carry to their lodgings as many books as they please, on depositing a sum equal to their value, which is returned to them when the books are replaced. The library is supported by the matriculation fee, by 5*l.* paid by each professor on his election, and by a portion of the fees of graduates both in medicine and in arts. It was one of the institutions that were entitled to a copy of every book entered in Stationers' Hall; a right commuted for a certain fixed sum paid by government. The library hall is 198 feet in length by 50 in width, and is certainly one of the largest and finest halls in the kingdom. There are various other subsidiary apartments. The theological faculty has a library, consisting of about 6,000 vols. appropriated to the use of its own students. The college museum, which occupies two large and elegant rooms, besides minor apartments, is particularly rich in objects of natural history.

The present university buildings, which are on a very magnificent scale, were begun in 1789, the expense being defrayed partly by public subscriptions, but chiefly by repeated grants from government. The structure is quadrangular, 358 ft. by 255, inclosing a court. A handsome portico, supported by massive Doric columns, forms the chief entrance. This is to be surmounted by a dome, the only thing that is now wanted to complete the building.

Free Church College. — In addition to the old, Edinburgh has now a new college in connection with the Free Church. The latter, situated at the S. end of the Mound, is a handsome and commodious building, after a design by Mr. Playfair. Though complete in itself, the present structure forms only one of three quadrangles, embraced in the original plan. The N. front has a church at the E. end, and in the centre two large towers rise on each side of the portico or entrance. The buildings around the area of the quadrangle consist of the hall of the senatus academicus, the library, museum, divinity hall, and several class rooms. The S. part of the ground, which is as yet unoccupied, extends to the High Street. It was founded in 1843, and though principally intended for the education of students belonging to the Free Church, it is not confined to any denomination; and the classes of moral philosophy, logic, and natural science, as well as those of theology, are open to all who choose to avail themselves of them. Besides the principal and two professors of theology, there are professors of divinity and ecclesiastical history, Hebrew, exegetical theology, moral philosophy, logic, natural science, and a classical tutor. The number of pupils at the college in the session 1849-50 amounted to 416, whereof 274 attended the theological and other professors, and 146 the classical tutor. The professors have 400*l.* a year of salary, and there are several scholarships. The necessary funds for the maintenance of the college are derived from contributions and collections throughout the Church and the fees of students. The library exceeds 10,000 vols., and the museum possesses several valuable specimens in the department of natural history.

But, while we are ready to applaud the zeal displayed in the foundation of this college, we doubt much whether it will be of any considerable utility. Edinburgh is not extensive enough to support two colleges. It was quite right that the Free Church should have its own theological professors; but its pupils might have acquired all other branches of instruction quite as well at the university. There are but slender grounds for thinking that the institution of new professorships of logic, moral philosophy, &c., will improve the teaching of these sciences; but it will, by dividing, and consequently reducing, the number of pupils, proportionally lessen the emolument of the professors, and tend to deter able men from undertaking their duties. It will most likely give two inferior teachers, instead of one superior.

The celebrity of Edinburgh as a medical school has depended materially (but formerly more than during the

last dozen years) on the schools of a number of private lecturers of eminence in their separate departments, particularly in medicine. They are generally members of the Royal College of Surgeons, and attendance on their courses of lectures is allowed by that body to qualify for examination. This college grants diplomas in surgery, but not in medicine; so that a person may obtain the rank of surgeon in Edinburgh without attending a single class in the university. The lectures delivered under the auspices of the Royal College of Surgeons, are recognised by the University of London, and qualify for examination before that body. The Royal College of Surgeons, incorporated by charter in 1778, has recently built a Hall in Nicolson Street, which ranks amongst the handsomest buildings in the city.

The Royal College of Physicians was established so early as 1681 by a charter from Charles II. The number of its fellows, resident and non-resident, is 186.

The *High School* is at once the oldest and most celebrated of all the Edinburgh schools; and is surpassed by few classical seminaries in the empire. It was instituted in 1519, but having fallen into decay, was re-erected in 1577. It now consists of a rector, and four other Greek and Latin masters, each of whom begins an elementary class yearly, and at the end of four years hands it over to the rector, under whom, generally during two additional years, the *curriculum* of study is completed. The school also embraces teachers of writing, arithmetic, mathematics, and French. The present building, one of the greatest ornaments of the city, is situated on the S. slope of the Calton Hill; it was opened in 1829, is composed of a central body and two wings, and cost 34,000*l*. The number of scholars has been (1820) as high as 968; but for some years past, the number has been between 400 and 500. This decline is not, however, ascribable to any falling off in the reputation of the school, but to the institution, in 1824, of a more aristocratical establishment of the same kind, called the Edinburgh Academy, conducted by a committee of subscribers. Considering the excellence of the instruction, the fees charged at the High School are very moderate, not exceeding in all 5*l*. a year; the fees at the Academy are about twice as much. A Naval and Military Academy, instituted in 1825, embraces all the classes necessary for the two professions from which its title is derived, as well as all the branches implied in a liberal education. The other more eminent schools, to which we can do no more than allude, are the Normal Schools in connection with the church of Scotland and the Free Church, the latter being held in the house that once belonged to the Regent Murray; the Southern Academy, situated in George-Square, embracing not merely classical literature, but all the branches requisite in a commercial or general education; the Hill-street Institution in the New Town, of which a similar character may be given; the Circus Place School, a seminary for English literature; the Ladies' Institution for the Southern Districts; the Scottish Institution for the education of young ladies (attendance upwards of 100, whose average age may be 16); Dr. Bell's Schools (attendance 800); Lancastrian School (attendance 600); the Sessional School, supported by the Kirk Sessions of Edinburgh (attendance 300); School of Arts, or Mechanics' Institute (attendance 500). There are, also, ragged and industrial schools, &c.

Perhaps, on the whole, the number of young persons at the different schools may amount at present (1850) to 10 per cent. of the population. These returns do not extend to pupils attending the School of Arts, or the Edinburgh Philosophical Association; the object of the latter is to afford instruction by lectures to the middle classes after business hours, in winter. The attendance on the one may be, as stated above, about 400; on the other, 450. Literary and scientific associations are common in Edinburgh, such as the Royal Society, the Astronomical Institution, the observatory attached to which on the Calton Hill is in the purest classical taste, the Society of Antiquaries, Wernerian Society, Royal Physical, Royal Medical, Cuvierian, Plinian, Speculative, &c. There are also various subscription libraries, some of them of great ext nt and value.

Charitable institutions are so numerous in Edinburgh, that we can do little more than barely enumerate them. The most important is George Heriot's Hospital, from the name of its founder the goldsmith and jeweller of James VI. This noble structure, which is of a quadrangular form, with a court in the centre, and of Gothic architecture, from a plan of the celebrated Inigo Jones, is devoted to "the maintenance and education of poor fatherless boys, freemen's sons of the town of Edinburgh." It was opened for the reception of boys in 1659, when 30 were admitted. It now contains 180; but by a recent act of parliament, the governors of the hospital are empowered to erect schools from the surpluses of income, throughout the town, for the gratuitous education primarily of freemen's sons; but if circumstances admit, to be open to the children of poor parents generally. There are already ten such schools, including three infant schools; aggregate attendance about 3,500. The management of the charity is vested in the 18 city c ergymen, and in the members of the town council; total 51. The revenue of the hospital is upwards of 17,000*l*. a year. The other charitable institutions are George Watson's Hospital, founded in 1741, containing 80 boys; John Watson's Hospital, founded in 1825, and containing 120 children, male and female; the Merchant Maiden and the Trades' Maiden Hospitals; the Orphan Hospital; Gillespie's Hospital, for the reception of old decayed men and women, having attached to it a free-school, attended by about 160 poor children; Trinity Hospital, founded by the widow of James II. in 1461, for the benefit of "burgesses, their wives, or children not married, nor under the age of 50 years;" Cauvin's Hospital for the maintenance and education of the sons of poor teachers, and of poor but honest farmers; the Institution for the Deaf and Dumb, Asylum for the Blind; Magdalene Asylum; Lunatic Asylum; House of Refuge; Royal Infirmary, founded in 1736; Society for the Relief of the destitute Sick; Lying-in Hospitals; Dispensaries. In addition to these, and other less important charities, some large bequests have recently been made for benevolent purposes. James Donaldson, printer, Edinburgh, who died in 1830, bequeathed 210,000*l*. for the endowment and erection of an hospital for the maintenance of poor boys and girls, of whom a certain number are to be deaf and dumb. The building for this hospital, a little to the W. of the city, reflects the highest credit on the architect, W. H. Playfair, Esq. It is quadrangular, in the Elizabethan style, and is decidedly the finest of all the structures belonging to Edinburgh. It is to be opened in the course of this summer (1850). Provision is made in it for the immediate accommodation of 300 children, with the capacity of increasing it so as to admit 100 more. Sir William Fettes, who died in 1836, left the greater part of his large fortune to form an endowment for the maintenance, education, and outfit of young people whose parents have fallen into adverse circumstances. George Chalmers, plumber, who died in 1836, bequeathed 30,000*l*. for the erection and support of an hospital "for the sick and hurt." And an hospital is at present, also, being erected for the maintenance and education of poor boys, from a fund which now amounts to 90,000*l*., bequeathed for the purpose by Mr. Daniel Stewart.

But it may be doubted whether this excessive multiplication of hospitals be of much advantage to the city. They cannot fail to be abused; and children are often admitted to them whose parents are quite able to defray the cost of their education. There are but few places, notwithstanding its numerous charities, in which the poor are more numerous than in Edinburgh, or the rates heavier. So true it is that wherever the carcase is "there will the eagles be gathered together."

Courts of Law. — Edinburgh is distinguished by being the seat of the supreme courts of Scotland, or College of Justice, founded by James V. in 1532. Of these, the principal is the Court of Session, or supreme civil court, which possesses in itself all those peculiar powers exercised in England by the Courts of Chancery, Queen's Bench, Common Pleas, Admiralty, and others, being a court both of law and equity. The constitution of the court has undergone various modifications in its different departments, during the last 300 years. At present it consists of 13 judges, called lords, and separated into the first and second divisions: in the former there are 6 lords, in the latter 7. The two divisions form distinct courts, but they may, and on important questions do, sit in judgment together. From the first division are detached 2 judges, called Lords Ordinary, and from the second there are taken 3. Before one or other of these Ordinaries, all cases must be brought in the first instance; but an appeal lies from their judgment to that division before whose ordinary the case was primarily tried. Cases may be appealed from the Court of Session to the House of Lords, the decision of the latter being final. The court has a winter term of 4 months, and a summer term of 2 months. Trial by jury in civil cases was introduced into Scotland, under a separate court, in 1816; but in 1830 this tribunal merged in the court of session. In the same supreme court has been vested the jurisdiction of the Teind or Tithe Court (the peculiar duty of which was to regulate the stipends of the clergy of the established church of Scotland), of the Commissary or Consistorial Court, and the Court of Exchequer. The High Court of Justiciary or supreme Criminal Court was instituted in 1672. It is composed of a president called the Lord Justice Clerk, and of other five judges, who must, at the same time, be lords of session, but the crown may appoint any of the other lords to act should such a step be thought expedient. (*See* SCOTLAND.)

The edifice which, since the Union, has been the place of meeting of the College of Justice, was the parliament house of Scotland, from 1640, the date of its erection, down to 1707, when the Union extinguished the separate

legislature of Scotland. The building is situated in the centre of the Old Town, being separated from the High Street by the cathedral of St. Giles. A small space called the Parliament Square intervenes between it and that church. Nearly half the buildings which formed this square were burnt down in 1824; but both St. Giles and the Parliament House escaped. A new front, though but little in harmony with the surrounding buildings, has been given to the latter, and great changes have been effected in its interior in the course of the present century. There is in the court occupied by the second division an admirable statue by Roubilliac, of Duncan Forbes, of Culloden, president of the Court of Session; and in the court occupied by the first division is a statue of President Blair; and in the hall, where the lords ordinary sit, is a statue of Henry Dundas, Lord Melville: the last two are by Chantrey, but they are poor and spiritless, compared with the masterly production of Roubilliac.

The faculty of advocates is an association of barristers (but not incorporated), entitled to plead before the supreme or any other courts of record. The society of writers to the signet is an incorporated body, qualified to conduct cases, as agents, before the same courts, and enjoying the exclusive right of preparing such papers or warrants as are to receive the royal seal or signet, whence their designation. The solicitors before the supreme courts form a body of attorneys incorporated in 1797, but of inferior grade and dignity to the writers to the signet. Advocates' first clerks may practise before the supreme courts on undergoing the usual examination, and paying certain fees.

The legal practitioners, all ranks included, may be regarded as the most important class in Edinburgh. Public opinion is, to a considerable extent, affected by their influence: they form a very numerous body; but while they have greatly increased in numbers during the last 40 years, the business of the Court of Session, before which almost all of them exclusively practise, has undergone a remarkable diminution. The following table shows the number of new cases enrolled for the first time in the Court of Session at several different periods*, with the numbers of advocates and agents, the latter embracing writers to the signet, and all professional men entitled to practise before the supreme courts:—

Years.	No. of Cases.	No. of Advocates.	No. of Writers to the Signet.	Other Agents.
1798	2,631	237	245	196
1810	2,37	270	252	171
1835	1,818	457	707	308
1839	1,486	451	702	296
1849	1,789	437	609	239

It thus appears that while the number of cases annually enrolled for the first time in the Court of Session is only about 2-3rds of what it was in 1798, the number of advocates has almost doubled, and that of agents of all kinds has nearly trebled. As, however, the capital and pop. of the country have about doubled within the time specified, it is probable that conveyancing and such departments of business have greatly increased, though not nearly to the same extent as the number of lawyers.

In immediate connection with the parliament house are numerous apartments, some of them spacious and highly ornamented, fitted up for the libraries belonging to the faculty of advocates, and the writers to the signet. The library of the former body was established in 1682. This collection, which exceeds 150,000 volumes, is by far the most extensive and valuable in Scotland, and is, in fact, a very noble national library. It receives a copy gratis of all works entered in Stationers' Hall. The library of the writers to the signet is also large and very valuable.

Places of Amusement.—Among these may be specified the theatre, which is tolerably well attended; the assembly rooms, &c. The former, situated at the N. end of North Bridge-Street, is a plain building externally, but is handsomely and conveniently fitted up. The assembly rooms in George-street are large and elegant. Golf is a favourite game; and curling and skating are very favourite amusements in winter, when the *lochs* of Duddingstone and Lochend happen to be frozen over. Cricket is now also beginning to be practised, and various cricket clubs have recently been formed.

Manufactures.—Edinburgh can scarcely be regarded as a manufacturing town. The brewing of ale has for upwards of two centuries been established in Edinburgh; and without referring to the breweries in the vicinity, the number at present in operation in the city is 28; the number of persons employed, exclusive of masters, about 600; and the produce nearly 200,000 barrels a year. There is only one distillery immediately connected with Edinburgh, but it is on a large scale. There are 16 coach-making establishments in Edinburgh, which employ about 600 hands. Figured shawls, in imitation of those of Cashmere, were first successfully made in Edinburgh, where they are still produced in great perfection. This took place about 1805, and the honour of it belongs to a Miss Bowie, who, with her father, had been for a number of years engaged in the gold lace manufacture, and who then "attempted to make square shawls of the most simple patterns, in imitation of the Cashmere, by means of the sewing needle, from a fabric made of silk, spun from the waste made in reeling the finest Italian silk. This plan was tedious and expensive, and in effect fell short of the originals." But how clumsy soever, this was the origin of a manufacture now of great importance. The invention of the Jacquard loom gave for a time the superiority in shawl-making to our French neighbours. But a knowledge of the invention having reached this country, produced a reaction in favour of the Scotch manufacture; and while this business was being cultivated with greater or less success in France, it established itself in Norwich, and in Paisley and Glasgow. Edinburgh, from the commencement of this manufacture, has taken the lead in most of the improvements connected with it, always producing the best goods of the kind; but from the circumstance of labour of various kinds being lower in Paisley and Glasgow, the manufacture has mostly been transferred to these places. At one time there were about 1,000 hands employed in Edinburgh in this manufacture, but now (1849), the numbers are very greatly reduced. (*Encyc. Britannica*, art. *Shawls.*)

Literature has long been not only the principal glory of Edinburgh, but has also afforded a principal source of employment to the population. The great works of Hume, Robertson, and Smith, were not indeed printed or published in Edinburgh; but from their æra the city began to attain to great distinction in the literary world, and several valuable works soon after began to issue from her press. The publication of the Edinburgh Review, which commenced in 1802, added greatly to the celebrity of Edinburgh as a literary mart, which was not long after still farther extended by the appearance of the earlier productions of Sir Walter Scott. Since then a vast number of works of the highest eminence, in almost every department of literature, philosophy, and science, have appeared in Edinburgh; and it is not going too far to say, that her press has contributed ten times more to the instruction, the amusement, and the glory of the country, than all the other presses of the kingdom put together, that of the metropolis only excepted. In this respect, indeed, Edinburgh need not fear a competition with any city, either of ancient or modern times. Her press presents at this moment no symptoms of decay; and besides various standard works, it furnishes two widely circulated monthly magazines, a journal (Chambers'), the best, perhaps, and most extensively read, of the class of cheap publications; and 16 newspapers, 1 of which appears three times a week, 6 twice a week, and the others weekly. There are now (1850) in Edinburgh 67 printing offices, employing from 1000 to 1,200 workmen, exclusive of masters. The business of bookbinding gives employment to about 500 persons, exclusive of masters. The art is carried to great perfection; the binding of Messrs. Henderson and Bisset ranking with that of Hayday and other first rate metropolitan artists.

There are in the city about 115 booksellers, of whom 31 are also publishers. Some of the latter have the most extensive business of the kind out of the metropolis.

The linen manufacture, both as respects the coarser and finer fabrics, long flourished in Edinburgh. "The number of looms," says Arnot, "employed in Edinburgh in the linen trade is extremely fluctuating; the largest number that has been known is about 1,500; at present (1779) it is supposed there are upwards of 800. This city has long been famous for making the finest damask table linen, and linen in the Dutch manner, equal to any that comes from Holland." (*Hist.* p. 461.) But so thoroughly has the linen trade disappeared, that there are not at this moment 50 looms employed in the city. Dunfermline and Dundee have become the chief seats of the manufacture, the former devoting itself chiefly to damask and diaper, the latter to Osnaburghs and the coarser fabrics.

Banks.—The first of the Scotch banks, the bank of Scotland, was established in Edinburgh in 1695. The office now occupied by this bank was erected in the course of the present century; it is situated in the street leading from the High Street to the S. end of the Mound, and is a large handsome edifice, occupying a conspicuous place among the public buildings of the city. The next bank instituted in the city was the Royal Bank of Scotland, in 1727. The third, or British Linen Company, set on foot, in 1746, has recently had its office in St. Andrew's Square rebuilt on a highly ornamented plan. There are now 12 banks in the town (of which 3 are branches of Glasgow banks), which, with the exception of Messrs. Allan

* The table does not include cases, which are mere matters of form; such as an application for a judicial factor; as these cases (865 in number last year) involved no litigation.

& Co., are all joint-stock establishments, with wide constituencies, having in general large capitals, and vast sums in deposit. They are all, with the exception of the Exchange bank, about to be dissolved, banks of issue. (For an account of the Scotch system of banking, *see* SCOTLAND.) A savings' bank was established in April, 1836. Its deposits amounted, on the 20th Nov. 1848, to 275,380*l*. 17*s*. 4*d*.; contributed by about 25,000 depositors.

Canals and Railways.—The Union Canal, which commences at Port Hopetown, on the W. of Edinburgh, and joins the Forth and Clyde Canal, near Falkirk, forms a continuous line of water communication between the Scottish capital and Glasgow and the W. of Scotland. The course of the Union Canal is 31½ m., its depth 5 ft., its width at the surface 40 ft., and at the bottom 20 ft.

Edinburgh is, also, extremely well supplied with railway accommodation, and it has in this respect the peculiar advantage that, with one exception (the Caledonian) the railways have their termini in the very centre of the city, in the hollow contiguous to N. Bridge. They consist of the railway to Glasgow; the N. British railway to Berwick, with a branch to Hawick; the railway to Perth and Dundee; the latter is carried under the new town by a tunnel, whence it extends to Granton, and begins again at Burntisland on the N. side of the Frith of Forth. The Caledonian railway, which has its terminus at the Lothian road, in the W. of the city, extends to Carlisle. The express trains from Edinburgh reach London in 12 or 13 hours.

For a lengthened period, Edinburgh was very indifferently supplied with water. There are no springs of any importance within the city; the water required for its consumption being conveyed in pipes from a considerable distance. The first of these pipes was laid in 1681; and additions were made to it in 1722, 17*87, and 1790. Still, however, the supply, owing to the increase of population, was very defective, and it became necessary to take more efficient measures for increasing its quantity. In this view a joint-stock company was established by act of parliament in 1819, which has conveyed into the town the water of the Crawley and Glencorse springs, about 7 m. S.W. from the city: and recently (1849), the Bavelaw and Harlaw springs, 7 m. directly W. of the city. The works that have been constructed to effect this object are on a scale of great magnificence, and do honour alike to the skill of the engineer, Mr. Jardine, and the public spirit of the company. The whole cost of this great work amounted to upwards of 300,000*l*.; but the city has now the inestimable advantage of an abundant supply of excellent water. The cost is defrayed by a water rate charged on all property.

Edinburgh is extremely well lighted with gas; and the pavement of the streets and lanes has long been celebrated for its excellence. The best material for paving is found in the neighbourhood. Some of the leading streets are now macadamised.

Advantages and Disadvantages of Edinburgh as a Place of Residence.—As a place of residence for persons in the upper ranks, to whom the expenses and excessive distractions of a London life may not be quite suitable, Edinburgh seems to hold out greater advantages than any other city perhaps in the empire. Not being to any great extent a seat of trade or manufacture, there is neither that eager and restless pursuit of gain, nor that occasional ostentation and misuse of *new* riches, which have a tendency to lower the tone of society in such places, and to make them, for the most part, uncomfortable for the habitation of those who take no share in the prevailing occupations; while there is still such an assemblage of educated persons in easy circumstances, as to constitute a society, at once unusually intelligent, and reasonably polite. The upper classes of this society consist chiefly of the most distinguished members of the legal and other learned professions; a very unusual proportion of accomplished artists, engineers, and men of science, with a certain admixture of landed proprietors, or other persons of independent fortune, who have come with their families for the purposes of education or amusement, which may both be here found of better quality, and at easier rates, than in most other places. At the High School, and the New Academy in particular, every thing that is taught at the great public schools of England may be as perfectly acquired at an infinitely less expense, and with less hazard, in many respects, to the moral habits of the pupils; being all day-schools only, and the lads continuing therefore to reside in the bosom of their own families, or in others into which they have been individually adopted, and never collected promiscuously in large boarding-houses. There are also excellent teachers for all the modern languages, music, drawing (for which last there are also two public academies), dancing, fencing, and other accomplishments, on far more moderate terms than in the metropolis.

There is a regular theatre royal, and other inferior dramatic establishments; an annual exhibition of painting and sculpture, by native artists; out of which there have been purchases made (chiefly by means of a very extensive association) to the amount of more than 3,000*l*. for each of the last five years; frequent professional concerts, very numerously attended; and, besides public assemblies, a great deal of dancing and music in private houses for about half the year.

There are no regular residents of *great* fortune; and the style of living is pitched, therefore, on a comparatively moderate scale of expense. There probably are not four or five families that spend so much as 4,000*l*. a year; and for half that sum an establishment may be maintained (with good management) on the highest level of the place. There probably are not more than 150 private carriages kept, exclusive of cabs or flies. But, from the shortness of the distances, and old frugal habits, this is by no means considered as so indispensable to a complete establishment, as in many societies of no higher pretensions. These remarks are applicable, of course, only to those who may wish to live and receive company on the best and handsomest footing. Much comfort and respectability may no doubt be obtained on far inferior incomes; nor is there any place perhaps in the kingdom, where individuals enjoying any reputation, or possessing any accomplishment or social recommendation, may find access to the best company with less necessity of expense. Persons engaged in literary undertakings, have facilities for obtaining loans of books from the great public libraries already mentioned, that are wholly unknown in London.

Ordinary provisions, or at least fish, poultry, and vegetables, and in a more particular manner fuel, the keep of horses, and house rents, are very greatly lower than in London: but bread, wine, groceries, servants' wages, ordinary clothing, and household furniture, are nearly the same. There are very good coach-building establishments, and on an extensive scale; from which very substantial articles are furnished very much under the London prices.

There is nothing to be called gaming now in Edinburgh society; a good deal of literary and political conversation; much dining out, with excellent wines, still perhaps too liberally partaken of; and rather more than the London opportunities for love-making, with quite as few rash or unsuitable marriages. Party politics run higher, perhaps, and are more bitterly asserted, than in the larger society of the metropolis, and to an extent which still interferes too much with the natural operation of social affinities; though less, certainly, than during the first heats and panics of the French revolution. The Episcopal chapels are very well attended, and chiefly by the higher classes. The clergy of the (Presbyterian) establishment go less than in former times into general society; and are mostly occupied in the zealous and merito-

rious exercise of their sacred duties: though, undoubtedly, some religious acrimony and uncharity may be occasionally found to disturb the harmony of societies which would be otherwise delightful. There is a greater turn for reading, and even for scientific study, among the middling and lower orders, than in any other place of the same extent in the empire; and more lectures and subscription libraries for their use, and mostly maintained entirely by their contributions. It cannot be denied, however, that in consequence of causes that will be afterwards noticed, the condition and habits of the poorer part of the population have been lowered, and that local misery and destitution prevail to an extent which seems to call on the justice as well as the feelings of the community for some effectual relief.

Edinburgh is also to be considered as a garrison town; having generally a foot regiment quartered in the castle, and a regiment, or part, of a regiment of horse, in the cavalry barracks at Piershill; besides a station of ordnance or engineers at Leith fort; establishments which, together with the habitual residence of the commander of the forces in Scotland, and his *suite*, tend, in some degree, to diversify and enliven its general society.

The only other places within the realm which can be named in competition as places of residence, are Bath and Dublin; but Edinburgh seems entitled to the preference over either: Bath is still but a great watering-place, with little of a settled population, and far less original intellectual activity. Nobody will imagine that the Edinburgh Review, or Blackwood's Magazine, could have originated or been supported in that great resort of gouty canons and card-playing dowagers. As to Dublin, again, few British families, it is thought, have ever taken up a voluntary residence in any part of the sister island; and Dublin would scarcely appear the most attractive part. The extremes of fortune and of party are too much blended there. The pomp of the vice-regal court contrasts painfully with the squalid misery of the poorer quarters; and the bitter Orangeism of its churchmen and university, with the fiery and turbulent zeal of the Catholic body: while the ghost of recent independence stalks frowningly across the path of the *avatar* of impossible repeal.

The Scotch metropolis had long the unenviable reputation of being one of the dirtiest towns in Europe; and though vast improvements have been effected in this respect, the reproach is not yet completely obviated. The dirtiness of the Old Town seems to have been mainly attributable to the crowded state and height of the buildings, and to the want of water. These circumstances hindered the formation of water-closets, and of common sewers; and down to the commencement of the American war there was probably not a dozen of the former, and certainly not one of the latter, in the city. Both are now universal in the New Town, but they are still wanting in very many parts of the Old Town; and notwithstanding the regulations laid down and enforced as to the casting of filth on the streets, they can never, under the circumstances, be perfectly clean. In very many, too, of the stories (*flats*) or houses, especially those in the narrow closes or wynds on each side the High Street, there is no supply of water, save what is obtained from the public pumps in the vicinity; and this circumstance, combined with the want of ventilation, and with the poverty and usually crowded state of the inmates, render them the abode of misery and disease, to an extent that would not easily be believed.

None but burgesses were till lately entitled to carry on any trade or manufacture within the royalty. But we are not aware that there now exists any such prohibition or exclusion. None, however, but burgesses or their children have a claim on the charity of the Trinity Hospital, and none but the sons of burgesses are entitled to admission to Heriot's Hospital. There are eight incorporated crafts within the burgh—hammer-men, tailors, wrights, bakers, shoemakers, weavers, fleshers, and barbers—all nominally enjoying exclusive privileges, and all possessed of funds appropriated to the support of decayed members and the widows of members.

Being situated near the sea in a rich well-cultivated country, the markets of Edinburgh are extremely well supplied with all sorts of provisions at a reasonable rate. Fish, in particular, is both abundant and cheap. Coal, which is the only fuel, is brought by railway from near Dalkeith, on the one hand, and from near Linlithgow, on the other: it is not so good as that used in London, but costs less than half the price.

Notwithstanding its picturesque beauty, the situation of Edinburgh has several very considerable disadvantages. Owing to the unevenness of the ground on which it is built, a large expense has had to be incurred in the formation of bridges and roads between the different parts of the city, and in the lower parts of many of the houses. The town is also very much exposed; and is probably more subject to violent gusts of wind than any other great city in the empire. The E. winds in April, May, and June are unusually piercing, and not unfrequently bring with them thick fogs: owing to the difficulty of watering the streets they are often infested with dust so as to be extremely unpleasant. But, on the other hand, the views from the Calton Hill and the Castle, embracing, as they do, the Frith of Forth, the opposite shores of Fife, and a vast extent of fine country bounded by distant mountains, are of almost unrivalled beauty and variety. No where else, perhaps, can such varied and extensive prospects be commanded within the precincts of a large city.

Condition of the Poor.—The condition of the lower classes in Edinburgh has been progressively declining for several years past, and is, at this moment, exceedingly depressed.

The poor here, as in most other Scotch towns, were formerly supported partly by assessments, partly by collections at the church doors, and other voluntary contributions, and partly by the interest of money in mortmain. At an average of the three years ending with 1837, the permanent paupers on the roll amounted to 2,911, the lunatics to 140, and the occasional poor to 542, making an aggregate of 3,593 individuals. The total sum collected, at an average of the same three years, for the relief of the poor, including the expense of management, amounted to 17,674*l.* a year, of which 14,030*l.* were raised by assessment. (*Report of Committee of Assembly on the Poor*, 1839, p. 2.) But it was conclusively shown by Dr. Alison, in his tract on the "Management of the Poor" (Edinburgh, 1840), that here, as elsewhere in Scotland, the provision for necessitous persons was altogether inadequate. In consequence of the attention that was thus drawn to the subject, an amendment of the Scottish system of poor laws was effected by the stat. 8 & 9 Vict. c. 83. Under this new system the rates have considerably increased, partly from the increased allowances made to the poor, and partly from circumstances connected with the state of the population. In 1849, the sum expended on the relief of the poor amounted to 55,642*l.*: the persons to whom relief was given were 12,722, of whom 4,130 were casual poor, and 525 fatuous or insane.

Mortality.—The population (corrected) of Edinburgh (Parliamentary Burgh) embraced in the bills of mortality, was

In 1755	-	-	49,697 souls.
1780	-	-	63,745
1791	-	-	71,045
1800	-	-	69,288
1811	-	-	84,624
1821	-	-	114,235
1831	-	-	139,123
1841	-	-	140,241

The population doubled between 1800 and 1830, but has been almost stationary since; indeed, it is questionable whether it has not decreased since 1841, as it did between 1790 and 1800.

In the years 1844	there died in Edinburgh		3,964
1845	-	-	3,688
1846	-	-	4,594
1847	-	-	6,707
1848	-	-	5,475
1849 no register kept.			

Fever and influenza raised the mortality in 1847.
Fever and cholera raised it in 1848.

Edinburgh improved in healthiness from the middle of last century down to 1820; since then its healthiness has diminished and the mortality has increased. Thus the annual deaths

From 1780 to 1789	were in the ratio of		1	death to every	34·37 living.
1790 to 1799	-	-	1	-	36·55
1800 to 1809	-	-	1	-	39·50
1810 to 1819	-	-	1	-	40·01
1820 to 1829	-	-	1	-	38·16
1830 to 1839	-	-	1	-	34·45
1840 to 1849	-	-	1	-	31·53

The high mortality of the last decennial period has been caused by the ravages of 3 epidemics of *typhus fever* (viz. 1841, 1843-4, and 1847-8), by one of *influenza*, and one of *cholera*.

The increased mortality since 1820, is no doubt mainly a consequence of the great increase of wretchedness and destitution among the lowest and pauper class since that period. The *Irish* first began to settle in Edinburgh in 1818, on the beginning of the construction of the Union Canal. Every year has added to their numbers by immigration and natural increase, and now they constitute five-tenths of the lowest class, and nine-tenths of the paupers! In proportion to the increase of this pauper horde, and the consequent increase of filth, wretchedness, &c. have epidemics of typhus fever become more frequent and virulent; so much so indeed is this the case, that while formerly epidemic typhus did not prevail oftener than once every 10 or 12 years, Edinburgh has suffered, as already stated, from 3 severe attacks of typhus during the last decennial period.

In proof of this statement it may suffice to mention that 18,324 fever patients were treated in the Royal Infirmary of Edinburgh from 1840 to 1848; no fewer than 8,555 of these having been admitted during the last epidemic in 1847-48!

Most part of this high mortality falls on the lower classes, as is apparent from the fact that the mean age at death of the middle and higher classes is above that of most towns of Great Britain: thus, of

I. Gentry and professional, the mean age at death is 47·22 years.
II. Merchants, master-tradesmen, &c. - - - 36·53
III. Artisans, servants, labourers, paupers, &c. - 25·88

By another calculation the same result is arrived at. Thus of 1000 of each class born, it is found that an exact half, or 500, of each class are cut off before the following age is attained:—

1st Class, gentry, &c. half die before 51½ years of age.
2d Class, merchants, &c. - - 33
3d Class, artisans and labourers, &c. 17½

Notwithstanding the high exposed situation of Edinburgh, consumption, and diseases of the respiratory organs, are less prevalent and less fatal than in almost any other large town of the kingdom. A 5 years average of the mortality from this class of diseases over England and Wales shows that 264 out of every 1000 deaths from all causes, are attributed to consumption and diseases of the respiratory organs; but the last 3 years average of the mortality of the same diseases in Edinburgh, shows that they cut off in the low proportion of 193 out of every 1000 deaths.

There are no diseases peculiar to Edinburgh. It has no manufactures; and were it not for the ravages of typhus fever among the lower classes, occasioned by the insufficiency and bad quality of their food, and the crowded and abominable state of their lodgings, there would not be a healthier town in Britain.

For further particulars see Dr. Stark's Report on the sanitary state of Edinburgh, and Reports on the mortality of Edinburgh in the Edin. Med. and Surg. Journal, 1846, 7, 8 and 9.

It is usual to ascribe a great deal of the misery of the poor of Edinburgh to the prevalence of habits of intemperance; but we believe that dram-drinking is a consequence more than a cause of poverty — that it is resorted to as an antidote to despair, and as a means of effecting a temporary escape from misery and wretchedness. Besides, it is not true that drinking has increased; on the contrary it has diminished. It is no doubt greatly to be wished that it were far less prevalent; but it is not the source of a tenth part of the misery and destitution met with in this and other great towns.

Representation. — Before the passing of the Reform Bill, in 1832, the town-council of Edinburgh, which consisted of 33 members, may be said to have been self-elected. With the exception of 6, who were returned by certain incorporated trades, the council for the time being had the exclusive right of nominating their successors, the public having no voice or right to interfere in the matter. The town-council thus elected possessed the exclusive right of choosing a representative in parliament for the city. Owing to the unpopularity that necessarily attached to this self-elected and irresponsible body, the passing of the Reform Bill was no where more strenuously insisted upon, or received, when framed into a law, with more sincere rejoicing, than in Edinburgh. By this law 2 representatives were given to the city. The first election of members of parliament under it took place on the 21st Dec. 1832; and never, perhaps, was so great a concourse of people collected in the streets of Edinburgh. The members chosen on this occasion were the late Francis Jeffrey, Esq. (afterwards a lord of session), one of the most distinguished citizens of whom Edinburgh has had to boast in recent times, and the Hon. James Abercromby, now Lord Dunfermline. In 1849-50, the registered voters were 5,661. Under the Municipal Reform Act, Edinburgh is divided into 5 wards, and is governed by a lord provost, 4 bailies, or aldermen, and 28 counsellors.

Owing partly to the large amount of the debts incurred on account of the excavation of docks at Leith and other improvements, and to the waste of the public money that prevailed under the old irresponsible system of municipal government, the affairs of the city of Edinburgh were recently involved in the greatest embarrassment; and it seemed as if a ruinous bankruptcy would inevitably take place. Luckily, however, an arrangement was effected under the auspices of government, which obviated this threatened calamity. The creditors surrendered a portion (25 per cent) of their claims, and provision was made for payment of the remainder. The corporation revenue amounted in 1848-49 to 24,888*l.*

History.—The origin of Edinburgh is involved in obscurity. So early as the beginning of the 7th century it had obtained the name of Edwinesburgh, derived, it is supposed, from Edwin, a prince of Northumberland, who overran a great part of the S. of Scotland. In the year 1128, it is called by David I. *his burgh of Edinburgh;* whence we infer that it was then a royal burgh. It was not a walled town, as previously stated, till the middle of the 15th century. James IV. encouraged the erection of its first printing press, in the beginning of the 16th century; but it was not till the succeeding reign that it was recognised as the undoubted capital of Scotland. From this time its history merges in that of the kingdom. It was converted to the Protestant faith at an early period of the Reformation; and the great bulk of its inhab., in successive ages, and under various forms of persecution, adopted the Calvinistic creed, and adhered rigidly to the Presbyterian form of worship. John Knox was, for some time, minister of Edinburgh; and the house which he inhabited (at the Netherbow, near the E. extremity of the High Street) is still standing, and is regarded with no ordinary degree of reverence. The union of the kingdoms excited great tumults in Edinburgh with the view of intimidating those members of the Scotch parliament who were favourable to the obnoxious measure. The act, however, was eventually passed (1st May, 1707) without bloodshed. In the rebellion of 1715, an unsuccessful attempt was made by the Jacobites to surprise the castle. In the subsequent rising of 1745, the rebels got possession of the city, a party of the Highlanders having secured the Netherbow Port; and they remained masters of the town from the 15th Sept. to the 31st Oct. But finding it impossible to reduce the castle, they abandoned the city, and proceeded on their march to England.

In 1736, a remarkable occurrence took place in Edinburgh, known by the name of the Porteous mob. On the 14th of April, at the execution of a smuggler of the name of Wilson, a disturbance arose, and the executioner and city guard were assailed by the populace. Porteous, the captain of the guard, having ordered his men to fire on the crowd, 6 people were killed and 11 wounded. Having been tried for the offence before the high court of justiciary, Porteous was condemned to death, but was reprieved by the crown. Resolved, however, that he should not thus escape the fate which they thought he merited, the mob, on the evening of the day previously to that on which he was to have been executed, broke into the gaol in which he was confined, and, having dragged him out, led him to the usual place of execution, and there hanged him by torch-light on a dyer's pole. It being supposed that the municipal authorities had neglected their duty on this occasion, the city was ordered to pay a fine of 2,000*l.* sterling to the widow of Porteous; and what is remarkable, though a reward was offered for the discovery of the perpetrators, they never were discovered; and their names continue to be unknown.

Few events worth notice have since occurred in the annals of Edinburgh. On the 2d of February, 1779, during the parliamentary discussions on the subject of the Catholic claims, an infuriated mob burnt one Catholic chapel, plundered another, and threatened to demolish the house of Principal Robertson. Soon after the breaking out of the French revolution, a number of the inhabitants of Edinburgh, sympathising with the principles which then prevailed in France, formed themselves into societies for obtaining parliamentary reform, and similar political objects. The proceedings of these associations, the members of which styled themselves "the friends of the people," were sometimes, perhaps, neither very wise nor constitutional. At length they attracted the notice of government; and the servility of the judges, and the wretched state of jury trial in Scotland at the time (see *antè*, p. 469.), afforded a ready means of inflicting on them the utmost penalty of the law. One of the prosecuted parties, named Watt, was beheaded for sedition; and Muir, Skirving, and others, were transported. Among the other events connected with Edinburgh which may, perhaps, be worth notice, may be specified the visits of George IV., in 1822, being the first sovereign who had entered the city since the year 1650, and of Queen Victoria and Prince Albert in 1842. (See *Maitland's Hist. of Edinburgh*, fol. 1753; *Arnot's Hist. of Edinburgh*, ed. 1018; *Stark's Picture of Edinburgh; Stevenson's Annals of*

Edinburgh; Crawfurd's Hist. of the University of Edinburgh; Creech's Fugitive Pieces; Chambers' Gaz. of Scotland, and Traditions of Edinburgh; Chalmers' Caledonia; Pennant's Tour, &c.)

EGER (Boh. *Cheb*), a town of Bohemia, ranking third in that kingdom, near its W. frontier, circ. Elbogen, on a rock on the Eger, 94 m. W. Prague; lat. 50° 5′ N., long. 12° 23′ 15″ E. Pop. (1834) 9,890. It was formerly an important fortress; but its walls are now almost destroyed, and its ditches gradually filling up. It contains some handsome buildings, inclusive of a fine par. church and town-hall. In the centre of the town is a large market-place, at the E. end of which is the *Burgomaster's house*; in a bed-room of which, Wallenstein was assassinated in 1634. In an angle of the fortifications overhanging the river, stand the ruins of the imperial castle, containing an ancient square tower built of black lava, supposed by some to have been constructed in the time of the Romans, a singular double chapel, and the hall in which the principal friends of Wallenstein were treacherously put to death at the same time with their master. Eger has a gymnasium, 2 convents, a high school, a school for the children of soldiers, 2 hospitals, an orphan asylum, 3 workhouses, a foundation for 12 old men, and manufactures of chintz and cotton fabrics, wool, hats, soap, &c. (*Berghaus; Oesterreischen Encyc.*)

EGHAM, a par. and village of England, in the N. part of the co. of Surrey, hund. Godley, contiguous to the Thames. Area of par., 7,440 acres. Pop. 4,203, of which the village may have nearly a half. The latter, situated near the Thames, 18 m. W. London, is connected with Staines on the other side of the river by an iron bridge, erected in 1807. The church, though of mean appearance, is ancient, and contains some curious monuments. There are 2 almshouses, one for 5 poor women, and one for 6 poor men and as many women. N. from Egham, between the village and the Thames, is Runnymede, famous in English history from its being the scene of the conferences between King John and the barons, that led to the signing of *Magna Charta* by the king, in 1215. In this parish is Cooper's Hill, which commands a fine prospect, and is the subject of the well-known descriptive poem of the same name, by Sir John Denham.

EGINA or ENGIA (an. *Ægina*), an island of Greece, in the centre of the gulph to which it gives name (*Saronicus Sinus*), 16 m. S. by W. Athens, 34 m. E. by S. Corinth, and 6 m. from the nearest point of the promontory of Methana. It is about 8 m. from E. to W. and 8 from N. to S.; surface diversified with hills and valleys; in the N. part of the island there are rocks of lava. Soil rocky and of a light colour. The low and cultivated grounds are however fertile, and produce good crops of corn, with wine, cotton, olives, figs, almonds, and other fruits. The hilly and uncultivated portions are deficient in water, and are covered with pines, small cypresses, junipers, &c. The red-legged partridge is very abundant. The pop. may, perhaps, amount to from 5,000 to 6,000: during the revolution, it was much greater, the island having been then resorted to by crowds of emigrants from the adjoining continent and islands, but since the peace these have mostly returned home. The inhab., who are industrious, carry on a considerable trade. The port, and principal town, called Egina, or Engia, is on the W. side of the island, near the extensive ruins of the ancient city of the same name. There are from 15 to 18 fathoms of water in the roadstead, on a tough clay ground. There is another and smaller town in the N. part of the island.

Though so unimportant in modern times, in antiquity Egina was early celebrated for its wealth and population. Its position is very favourable for commercial pursuits; and it was indebted for its greatness to the zeal and success with which it carried them on. At one period its naval power was superior even to that of Athens; and it sent 30 ships to the battle of Salamis, to whom the prize of valour was accorded by the suffrages of the Greeks. But the proximity of Egina to the Piræus awakened the jealousy, and provoked the vindictive hostility of the Athenians, who, having defeated the Eginetans and taken their city, treated them with the utmost severity — *Duris etiam Athenienses, qui sciverunt ut Æginetis, qui classe valebant, pollices præciderentur: hoc visum est utile; nimio enim imminebat, propter propinquitatem, Egina Piræus.* (*Cic. De Offic.* lib. iii. § 11.) After various vicissitudes, Egina was restored to a nominal independence by Augustus; since which period it has usually followed the fortunes of the adjacent country of Greece.

The temple of Jupiter Panhellenius in the N.E. part of the island, is among the most interesting of the Grecian ruins. The hill on which it stands, though of no great height, commands the greater part of the island, the whole coast of Attica, with the city of Athens, part of Peloponnesus, and several of the islands in the gulph. It is built on a platform, supported on all sides by terrace walls. The temple, said to have been erected by Æacus, grandson of Jupiter, is certainly one of the most ancient in Greece. It is of the Doric order, being 90 ft. in length, measured at the base of the columns, by 45 in breadth. Originally it had 36 columns, exclusive of those in the *cella*, of which 25 were standing when it was examined by Mr. Dodwell. The greater number of the statues that occupied the tympanum of the pediment, were dug up in 1811; and having been carried off, were purchased by the present king of Bavaria for 10,000 sequins, and are now in the museum at Munich. They are in the peculiar style of sculpture called Eginetan, and are amongst the most interesting relics that have ever been conveyed from Greece. (*Chandler's Greece*, caps. 3 and 4.; *Dodwell's Greece*, i. 558—574.)

EGYPT (the Mizraim of the Hebrews, and Αἴγυπτος of the Greeks), a country on both banks of the Nile, occupying the N.E. angle of the African continent; one of the earliest seats of art, science, and literature, and famous alike for the historical events of which it has been the theatre, its magnificent monuments, and physical character.

Boundaries, Extent, &c.—There have been very discordant statements as to the boundaries of this famous country. There cannot of course be any doubt as to its N. limit, which is formed by the Mediterranean; and it seems to have been generally agreed from a very remote period that its S. limit should be fixed at Syene, or rather at Philæ, in lat. 24° 3′ 45″ N. But the difficult point is to determine its breadth. From Philæ to near Cairo, the Nile in most parts flows through a narrow valley, bounded on either side by a ridge of hills, or inferior mountains: at Cairo these ridges diverge, that on the E. to Suez, and that on the W. in a N.W. direction to the Mediterranean. Some authors identify Egypt with the tract lying between the mountain chains now referred to; while others, regarding the Nile as the source of life and vegetation in Egypt, restrict its territory within the limits covered by the inundation of the river. (*Strabo*, lib. xvii. p. 544.) But from the age of the Ptolemies down to the present day, the desert country lying between the valley of the Nile and the Red Sea has been uniformly included in Egypt. On the W. side the mountain ridge already noticed seems to be its only natural boundary. Still, however, it has been usual to reckon the oases that lie within 100, or even 200 m. of this limit, as belonging to Egypt.

From Cape Bourlos, on the coast, lat. 31° 36′ N., to Philæ, the distance N. and S. is 7° 32′ 15″, about 452 geographical, or 520 English m. But the distance by water and the extent of the alluvial territory are considerably greater than would appear from this, because of the many and considerable bends of the river. The breadth of the Egyptian coast is 160 m.; but in ascending to Cairo (104 m. from Cape Bourlos), the cultivated tract tapers off to a point, and the rest of the country is chiefly comprised in the narrow valley of the Nile; which, however, at Beni-souf, 83 (by water) m. higher, spreads to the W. to form the vale of Faïoum, a circular valley of great fertility and beauty, measuring about 40 m. from E. to W., and 30 m. from N. to S. Thence to Syene, the valley of the Nile is mostly confined within very narrow limits. The whole cultivable territory of Egypt, including its lateral valleys, has been estimated at about 16,000 sq. m., or about half the area of Ireland. (*Malte-Brun*, iv. 21. 23.; *Modern Trav.*, art. *Egypt*, i. 6.; *Heeren's Researches, Engl.* ii. 210.)

The Nile, so important among the great rivers of the world, is also the most striking object in the *general aspect* of a country which not only is wholly comprised within the sphere of its influence, but is entirely indebted to it for existence. As already stated, the Nile enters Egypt at the island of Philæ; and from it to Assouan (*Syene*), a distance of about 6 m., it has cut a passage for itself, through a ridge of granite rocks, with which its stream is much encumbered. At Assouan is the last of the cataracts of the Nile, so celebrated by ancient authors. (*Senec. Nat. Quest.* lib. iv. § 2.; *Plin. Hist. Nat.* lib. v. § 9.; *Lucan*, lib. x. line 320, &c.) Their statements with respect to it seem to be not a little exaggerated, though there can be no doubt that the cataract must have been much more magnificent 2,000 years ago than at present; as the attrition of the water for so long a period could not fail materially to deepen and smooth its bed: at all events, however, it is now rather a rapid than a cataract. According to Sir F. Henniker, it is not really more formidable than the fall in the Thames at low water at Old London Bridge, previously to its demolition (p. 147.). But it is clear that its height and rapidity must depend materially on the state of the river. When the inundation is at its height the fall is hardly perceptible, but at low water it varies from 8 to 10 feet. After leaving Assouan, the river runs on in a placid quiet stream, till a little below Cairo, at Batn-el-Bakara, it divides into two great arms, the most E. of which falls into the sea at Damietta, and the most W. at Rosetta; but it has other, though very subordinate outlets. For the immense distance of 1200 m., — that is, from lat. 17°

4°', and about 34° 5' of E. long., where it is joined by the Atbara or Tacazze,— the Nile rolls on to its mouths in the Mediterranean in solitary grandeur, without receiving a single affluent: an unexampled instance in the hydrographic history of the globe. The periodical inundations, which water the country and cover it with mud, have given occasion, in all ages, for much discussion, and modern discovery has confirmed the conjectures of the ancients (*Herodotus, Euterpe*, §§ 20—28.; *Strabo*, xvii. 543.), that these overflowings result from rains falling near the mountains amongst which the Nile has its source, or early course. Bruce has explained this phenomenon as follows:—"The air is so much rarified by the sun during the time he remains almost stationary over the tropic of Capricorn, that the winds, loaded with vapours, rush in upon the land (to restore the equilibrium) from the Atlantic Ocean on the W., the Indian Ocean on the E., and the cold S. Ocean beyond the Cape. Thus a great quantity of vapour is gathered, as it were, into a focus; and as the same causes continue to operate during the progress of the sun N., a vast train of clouds proceed from S. to N. In April all the rivers in the S. of Abyssinia begin to swell; in the beginning of June they are all full, and continue so while the sun remains stationary in the tropic of Cancer." It may be further observed, that when the sun approaches the tropic of Cancer, the Etesian winds along the coast of Egypt begin to blow from the N., and convey vast quantities of aqueous vapours to the mountains, which are there precipitated in torrents along with the vapours derived from the oceans already specified. The Etesian winds also contribute to increase the inundation, by determining the waters of the Mediterranean to the coast of Egypt, and obstructing the exit of those of the river. On the sun again turning to the S. the rains begin to abate, and on his passing the Equator they cease in the N. and commence in the S. hemisphere. The torrents, detaching in their rapid course the soil from the upper country, bring down supplies of alluvium, so that the valley of the Nile is constantly gaining in elevation. Nor is the delta of Egypt exempted from this peculiarity; though, from there being a wider space for the deposits to spread over, the increase of soil is not nearly so great: indeed, the accumulation decreases, even in Upper Egypt, in proportion as the river approaches the sea. "According to an approximate calculation," says Wilkinson (*Journal Geog. Soc.* ix. 432.), the land about Elephantiné, or the first cataract, in lat. 24° 5', has been raised 9 ft. in 1700 years; at Thebes, in lat. 25° 43', about 7 ft.; and at Heliopolis and Cairo, in lat. 30°, about 5 ft. 10 in. At Rosetta and the mouths of the Nile, in lat. 31° 30', the diminution in the perpendicular thickness of the deposit has lessened in a much greater decreasing ratio than in the straightened valley of Central and Upper Egypt, owing to the great extent E. and W. over which the inundation spreads."

Were it not that the bed of the river rises in the same proportion as its banks, the country would cease to be inundated,— an apprehension which till lately was strongly entertained. It is impossible to find any where among terrestrial objects a more striking instance of the stability of the laws of Nature than the periodical rise and fall of this mighty river. We know by the testimony of antiquity that the inundations of the Nile have been the same, with respect to their season and duration, for 3,000 years. They are so regular that the value and annual certainty of this gift regulates the public revenue; for when, by means of Nilometers, it is ascertained that the waters promise an unusually prosperous season, the taxes are proportionally increased. (*Russell's Egypt*, p. 46.) Sometimes, however, when the river exceeds its ordinary height, it becomes a calamity; occasioning the loss of life and property. In September, 1818, Belzoni witnessed a scene of this sort; the river having risen 3½ ft. above the highest mark left by the former inundations, it ascended with uncommon rapidity, and carried off several villages, and some hundreds of inhabitants. The swellings of the Nile in Upper Egypt are from 30 to 35 ft.; at Cairo, 23 ft.; in the N. part of the Delta, owing to the breadth of the inundation and artificial channels, only 4 ft. Pliny says of the inundation,—"*Justum incrementum est cubitorum* 16. *Minores aquæ non omnia rigant: ampliores detinent tardius recedendo. Hæ serendi tempora absumunt solo madente; illæ non dant sitiente. Utrumque reputat provinciæ. In duodecim cubitis famem sentiant, in tredecim etiamnum esurit: quatuordecim cubita hilaritatem afferant, quindecim securitatem, sexdecim delicias.*" (*Hist.Nat.* lib. v. § 9.) The depth and rapidity of the river vary at different times in different places. It is seldom that any vessel exceeding 60 tons burden can ascend as high as the Cataracts. The mouth of Damietta is between 7 and 8 ft. deep when the waters are low, that of Rosetta does not exceed 4 or 5 ft.; but when the waters are high, caravels of 24 guns may sail up to Cairo. (*Mod. Trav.* i. 52.) As a beverage the water of the Nile is considered delicious: Maillet declares that it is among waters what champaign is among wines. The mud of the river gives on analysis one half of argillaceous earth, one fourth carbonate of lime, the remainder being water, oxide of iron, and carbonate of magnesia. (*See* NILE.)

The *Mountain system* of Egypt is on many accounts deserving of attention. Two ranges, already noticed, pressing closely on each bank of the river, extend from Syene to Cairo, and form the valley of the Nile, protecting it from the ravages of the deserts on either side. That to the E. gives out an arm at Kenneh (lat. 26° 12'), and bisects the desert to the Red Sea at Cosseir in nearly the same latitude; while the Libyan or W. range branches off from Assouan to the Great Oasis. (*Ritter*, ii. 397.) Near Cairo the mountains diverge on both sides; one ridge running in a N.W. direction to the Mediterranean, the other due E. to Suez. (*Malte Brun*, iv. 22.) The geological components of the hills, from Philæ through the cataract region to Syene, are chiefly granite, and a peculiar highly crystallised red formation called syenite marble. This primitive rock is remarkable for durability and the fine polish it is capable of receiving. From quarries of this stone the Pharaohs, Ptolemies, and Antonines drew materials not only for the stupendous monuments which still make Egypt a land of wonders, but also for many of the public buildings of Italy, the remains of which attest the genius of the Roman artists. Some days' journey S. of Thebes extends the limestone region, dug out into innumerable catacombs, their entrances artfully contrived to conceal the abode of the ancient dead, a precaution suggested by a prominent superstition of the Egyptians. Between this district and the most S. one, the mountains are composed of sandstone, evidently a recent deposit; for it is so very soft that the buildings constructed of it would not have long resisted the weather, had they not been covered with a coloured varnish. Towards the valley of Suez the mountains contain limestone. On the W. side of the Delta not the least remarkable object presented by this wonderful country is the Scete, or Valley of Natron *Lakes*, bounded on one side by a lofty ridge of secondary rocks, which, perhaps, proves the means of concentrating the saline deposit which gives its name to the place. The banks and waters of these lakes, six in number, are covered with crystallisations, consisting of sea-salt and natron, or carbonate of soda, sometimes united; at others, found separately in different parts of the same lake. (*Russell's Egypt*, p. 48.)

The most considerable of the Egyptian lakes are those of Menzaleh, Bourlos, Etko, and Mareotis, lying along the shore of the Delta. But though called lakes, they are more properly lagoons, and bear a striking resemblance to the *haffs* that skirt the shores of Prussia. Some of the lagoons, especially that of Menzaleh, E. of Damietta, are of large dimensions. They are all shallow; are separated from the sea, with which they communicate, by a narrow bank or ridge of sand; and are in the course of being gradually, though slowly, filled up. In antiquity, the Nile is said to have disembogued itself by seven channels—*Septemgemini ostia Nili;* but of these some were certainly artificial; and then, as now, there were two principal mouths—the Pelusiac, or Eastern, and the Canopic, or Western. The Sybennitic mouth, in the centre of the Delta, was also of considerable importance. But considering the nature of the soil, and the efforts that have been made from the remotest times to divert a portion of the river by canals and otherwise into new courses, we need not be surprised that very great changes should have taken place in the channels by which it pours its waters into the Mediterranean.

Exclusive of the lagoons in the Delta, there is a considerable lake occupying the N.W. parts of the valley of Faïoum. The principal *canal* of Egypt, the Bahr Jousef, communicates with this lake. It branches out from the Nile at Deirout-el-Sherif, S. of Minzeh, traversing the valley of the Nile at the foot of the Libyan chain, till it reaches the waters of Faïoum at Habun, and thence continues still parallel to the Nile, the Rosetta branch of which it finally joins at Alkam. Under the name of Souhadj the same canal is continued to Farhout in Upper Egypt. The whole of the Delta is intersected with canals in every direction, in which the overflowings of the Nile are preserved after the inundations, to afford communication between the various towns, and to keep a constant supply for the irrigation of the cultivated lands. (*Browne's Travels*, pp. 177—187., &c.)

Egypt is naturally divided into—1. The Delta, or Lower Egypt. 2. The Valley of the Nile, comprising Central and Upper Egypt. 3. The E. Desert. 4. The W. Desert, and Oases.

1. *The Egyptian Delta*, which derived its name from the similarity of its figure to the Greek Δ, is a triangular tract, formed by the bifurcation of the Nile. The soil consists of the mud of the river, resting upon desert sand. Near the banks of the two branches this alluvium has collected to a thickness in some places of more than 30 ft., while at the extremity of the inundation it does not exceed 6 in. This constant accu-

mulation and spreading of the deposit E. and W., has gradually extended the limits of the Delta further into the adjoining deserts than they reached in antiquity (*Wilkinson on the Levels of Egypt*, in *Geographical Journal*, ix. 437.), so that the arable land of the country is constantly increasing; and though the sand in its turn frequently encroaches in various places, yet the injury it inflicts is only partial and temporary, while the alluvial deposit goes on steadily increasing in extent. The greatest length of the Delta is at present about 85 m. from E. to W., and from the fork of the Nile to the sea about 90 m. intervene; but the inundations extend very considerably beyond these limits. The Delta is covered with meadows, plantations, and orchards, and presents a more fertile aspect than any other part of the country; but various causes have combined to prevent the spread of husbandry and cultivation, proportionally to the increase of territory rescued from the deserts by the annual overflows. (*Ibid.* p. 437.) This district, from its comparatively low situation, and from the absence of those mountains which enclose the Valley of the Nile and confine its waters, aptly designated by Browne "the walls of Egypt," is more influenced by the inundations than the upper lands; and when the river is at its greatest height, it presents the aspect of an extensive marsh. The river begins to swell in June, and continues to increase till Sept.; at which period the fields of the Delta are completely submerged, its villages, towns (which are built on natural or artificial mounds), and trees, only appearing above the water. After remaining stationary for a few days, the waters begin to subside, and by the end of Nov. leave the land altogether, having deposited a rich alluvium. An Egyptian spring, corresponding to our winter, gives to the Delta its most smiling and verdant appearance. The rice fields, having been sown before the water has entirely receded, are covered with a vivid green, trees put forth their blossoms, and the whole country bears at this season the aspect of a fruitful garden.

The question as to the origin of the Egyptian Delta, has engaged the attention of the ablest inquirers from the remotest period. The most probable as well as most ancient theory, is that which represents it as wholly formed of the deposits brought down by the Nile, and as constantly, though slowly, gaining on the sea. (*Herodotus*, ii. § 5.) Originally the sea is said to have flowed as far S. as the Pyramids; but in the course of ages, through the gradual accumulation of the mud of the river, assisted in some degree by the construction of canals and dykes, the land rose above the level of the sea, and ceased to be submerged, except during the period of the inundation. (*Savary's Letters on Egypt*, Letter I.) This opinion has, however, been stoutly denied; and though it be admitted on all hands that the land of Egypt and the bed of the river are both slowly rising, it is contended that the limits of the Delta to the N. are the same now as in the remotest antiquity. This opinion is supported by the high authority of Sir J. G. Wilkinson; and it is also supported by the learned author of the very able and elaborate article on Egypt, in the new edition of the *Encyclopedia Britannica*. But though it were admitted that the limits of the Delta on the N. had continued nearly stationary from the age of Herodotus, that would not invalidate his statement that the cultivated portion of Egypt is the *gift of the river*. (*Ubi supra.*) The chain of sand-banks skirting the Delta on the N. probably existed long before the Delta attained its present form; and the lakes, or lagoons, already noticed, lying to the S. of this chain, are apparently the last remains of the sea by which it was anciently covered. That the Delta should owe its existence to the Nile, is perfectly agreeable to what is observed in all similar situations; and no positive evidence has been brought forward to controvert, or even materially weaken the strong and all but conclusive presumptions in its favour. (*Shaw's Travels*, 385, &c., 4to. ed.; *Rennel's Geog. of Herodotus*.) But without insisting further on these points, it is sufficient to observe that but few traces are now to be found of the many famous cities with which this part of Egypt was formerly studded; and that, except Alexandria, the only places of consequence in the Delta, at the present day, are Rosetta and Damietta, situated at the two mouths of the Nile. At the former the river is 1800 ft. wide, but at Damietta only 800. The villages are numerous, and generally large; but the houses seldom exceed from 10 to 12 ft. square. They are built of sun-dried bricks, and are covered with flat roofs of straw and Nile mud. (*Dr. Richardson's Travels*, i. 40.; *Clarke's Travels*, iii. 13.; *Modern Traveller*, i. 180—232., &c.)

2. *The Valley of the Nile, in which Central and Upper Egypt are comprised.* — Ascending the river from its fork, the cultivable land at the apex of the Delta and for some distance is found to decrease; for here the banks are much more elevated, and are seldom quite covered with water, even during the highest inundations. (*Geog. Journal*, ix. 434.) Hence the alluviums do not reach the interior at this point. The E. or Arabian mountain chain terminates abruptly at Mount Mokattem, near Cairo, and diverges towards Suez; while the opposite or Libyan range ends at Faioum, having turned off to the W. to inclose that valley. Throughout the entire district the E. chain has generally more transverse breaks and ravines, is more lofty and rugged, and comes closer to the river, than the hills on the opposite side. Between Faioum and the Nile the Libyan ridge has nearly a level summit, overlooking the country below; and this tableland was chosen for the site of the Pyramids. The space left between both ridges seldom exceeds 10 m. in Central Egypt, while in the upper country they press even more closely upon the sides of the river; thus that part of the Valley of the Nile which belongs to Egypt has but a contracted breadth, and even that is not all available for the labours of the husbandman, a great portion of it being, from the height of the banks, out of the reach of the overflowings and their beneficent deposits; hence a stripe of desert mostly runs along at the foot of the hills. Where, however, the land is laid under water at high Nile, communication is kept up between one village and another by means of elevated roads or dykes, which commence on a level with the banks of the river; and, as they extend to the interior, rise to so great a height above the fields as to leave room for the construction of arches for the passage of the water. As the river enters the Egyptian territory from Nubia, the granitic hills bear the appearance of having been rent by the stream. Hence, between the Isle of Philæ and Assouan the current is interrupted by innumerable islands. Others, of a less rocky character — some of them extensive, considering the breadth of the Nile — spring up out of its bed at various intervals during its progress to the Mediterranean. The Isle of Elephantinê, opposite to Assouan, wears so beautiful an aspect that it is called by the natives the "Isle of Flowers" (*Djeyiret-el-Sahir*); and most European travellers describe it as a sort of terrestrial paradise. The Egyptian valley is strewed with those stupendous monuments of human labour, those beautiful remains of ancient art, which have excited the wonder and admiration of ages; and which, the more closely they are examined, the more astonishment they create.

3. *The desert E. of the Nile* is broken by rugged mountains, and intersected by numerous wadys or ravines, sometimes thickly, but more frequently scantily, clothed with verdure. It has, however, the advantage of numerous springs; beside which are traced ancient caravan tracks, that are still traversed in exactly the same manner as when the "company of merchants" found Joseph in the pit. The leading characteristic of this desert, particularly in the N. part, is its gradual ascent from the Nile to a certain distance E., where commences a plain nearly level, and of some extent, from which all the valleys or torrents running in a W. direction empty themselves into the Nile, and those to the E. into the Red Sea. Of such a character are the Ataka hills, mentioned before as branching E. from the Mokattem mountains, near Cairo. These are joined at a right angle by a series of eminences which skirt the shores of the Red Sea into the Nubian country; under the names of the Zarafana, Doffa, and Jaffatine ranges; and form the E. edges of the plateaux raised by the transverse hills, a chain of which appears again in lat. 29° between Benisouef and that part of the Suez gulph called Birket Farân. These are entirely of limestone, and present a gradual ascent from the Nile to a distance E. of 30 m.; the high plain which succeeds is about 16 m. broad, and the descent down to the Red Sea occupies a space of about 50 m. At the S. declension of the N. Kelâlla mountains is a copper-mine, which appears from the ruined huts, furnaces, scoriæ, &c., found by Wilkinson to have been extensively worked. (*Geog. Journ.* ii. 32.) The Wady Arabah intervenes its desert of sand to the S. Kelâlla or Kolzim mountains, at the foot of which are situated the two celebrated convents of St. Anthony (17 m. from the sea) and St. Paul, placed about 14 m. apart; between these convents and the gulph at Wady Girfi, are the remains of houses and catacombs which appear to belong to the Greek period. In lat. 28° 26′, the limestone formation, which continues with little interruption throughout the N. hills of this desert, is joined by primitive rocks, which present more irregular surfaces, but rise from the banks of the Nile, with a gentler declivity than the series already described; and abut with proportionate abruptness upon the shores of the Red Sea. Mount Grârib (28° 15′), one of these rugged eminences, is the highest of the hills in this desert; being 6,000 ft. above the sea. Four hours S. of Grârib are two copper mines, with the same appearances of having been worked as those before mentioned. In lat. 28° the character of the levels again changes, being higher and more uniform from the Nile to where they make a descent to the sea, which is gradual till they reach Mount Azzeit, which gives them an abrupt termination. Near Mount Dokhan (lat. 27° 25′) are the ruins of a town, and vast quarries of red por-

phyry, strewed with the materials of a small temple, which was evidently never completed. At Cosseir, whose bay indents the Red Sea, at about lat. 26° 6′, end the primitive hills that intersect the desert in a direction parallel to the Nile and the Red Sea, and join a transverse range, upon which extends the caravan route from Kenneh on the Nile to Cosseir, where pilgrims embark to pay their devotions at the shrine of Mecca. (*See* Cosseir.) The valley of Cosseir extends down to about 25°, where another transverse range occurs, which contains, near the sea, some lead mines. Mount Zabarah, celebrated by ancient writers for its emeralds, rises a little further inland. Attempts have been made to re-open the sources of wealth which these mines are said to have afforded, but without success. (*Calliaud's Travels*, fol., Paris, 1822, p. 60.) Nearly on a line with Assouan (lat. 23° 56′) are the ruins of Berenice. The whole of the desert of Egypt is the resort of distinct tribes of Arabs, who confine themselves to particular localities; they consist of the Maazy, occupying the country to the E. of Benisouef, Atouni, and Beni-Oasel, S. of the Maazy and the Ababdie Arabs, who are scattered over the N. part of the desert, and breed camels for the market of Esneh.

4. *The desert W. of Egypt* presents a scene so formidable to travellers, that few have visited the *oases* by which it is here and there interspersed. The most N. of these is Sivah, or Ammon; S.E. from which, and nearer to the Nile, is the Little Oasis, or Wah-el-Bahryeh; the chief village of which lies in lat. 28° 16′ N., and long. 28° 55′ E. S. and W. are the small oases of El Hayz, Farafreh, and Zerzoora; and still further S. is the Dakhleh oasis, whose first European visitant was Sir A. Edmonstone, in 1819. Its chief village stands in about lat. 25° 35′ N., and long. 28° 55′ E. Three days' journey to the E. brings the traveller to the Great Oasis, or Wah el Khargeh, extending in length from 24° 30′ to near 26° N. lat. Instead of islands of the blest (Μακάρων νῆσοι) springing up amidst the surrounding and desolate ocean of sand, as the ancients describe them, the oases are valleys or *depressions* of the lofty plain which forms the extensive table-land of E. Africa. On descending to them, they are found to bear, in many respects, a similarity to a portion of the Valley of Egypt, being surrounded by steep cliffs of limestone, at some distance from the cultivated land, which vary in height in the different oases; those rising from the S. oases being the highest. Neither do they present a continuation of cultivable soil, all of them being intersected by patches of desert. They, no doubt, owe their origin to the springs with which they abound, the decay of the vegetation thence arising having produced the soil by which they are now covered. Their fertility has been deservedly celebrated; but, as already observed (Africa, p. 22.), the glowing eulogiums of travellers on their surpassing beauty, are probably, in a great measure, to be ascribed to the striking contrast they present to the surrounding deserts of arid, burning sand. It may appear contradictory, considering the high opinion the ancients entertained of the fertility and beauty of the oases, that they should have selected them for places of banishment; but that such was the case, at least under the Romans, is certain. A law of the *Digest*, lib. 48. tit. 22., refers to this practice; and it has been supposed that the poet Juvenal was one of those who suffered a temporary banishment (*relegatio*) to the Oases, though the evidence of this is by no means clear. (*Biographie Universelle*, art. *Juvenal*.) But the fact of their being selected as places of banishment is not in anywise inconsistent with the received opinions as to their salubrity and fertility. They were selected, not because of their being naturally noxious or disagreeable, but because of their being, as it were, out of the world, and from the extreme difficulty of escaping from them. The larger oases have some fine remnants of antiquity; the most celebrated of which is the temple of Jupiter Ammon, at Siwah. (*Edmonstone's Visit to the Oases, passim; Geog. Journal*, ix. 440, 441, &c.)

The climate of Egypt is extremely hot: this is a consequence, no doubt, of the lowness of its elevation, of its being surrounded on all sides except the N. by vast tracts of burning sand, and of the scantiness of the rain. According to Volney, two seasons only are distinguishable — spring and summer; or, rather, the cool and the hot season. The latter continues from February or March to October; and Volney says, that during the whole of this period the air is inflamed, the sky sparkling, and the heat oppressive to those unaccustomed to it: during this season the average height of the thermometer is about 90° Fahr. But this heat of the atmosphere is so much tempered by the inundations of the Nile, by the vapours brought by the Etesian winds from the N., and by the dews in the nights, that the natives and even Europeans occasionally complain of cold. During the remainder of the year, the average height of the thermometer is about 60° Fahr. It is necessary at all times to avoid exposure to the night air.

It might be imagined that Egypt, being for about three months of the year either wholly or partially inundated, and being subjected, at the same time, to the action of a powerful sun, producing an excessive evaporation, would be extremely unhealthy. But such is by no means the case. The exhalations from stagnant waters, so fatal in Cyprus, and at Iskenderoon and most other parts of the Levant, are here comparatively innoxious. They are not, however, entirely divested of their bad qualities. On the retiring of the waters, in November, which is the Egyptian seed-time, W. winds and fogs are prevalent, which produce ophthalmia, fever, diarrhœa, and catarrh. From December to March the winds blow mostly from the E.; the nights are cold, but the temperature during the day is that of June in France: the various productions of the earth are then vigorously on the increase; its surface is covered with the finest verdure; and all nature, reanimated by the fertilising influence of the river, and the moderate temperature, seems to grow young again. In Upper Egypt, the exhalations being comparatively few, the climate is proportionally healthy.

This general salubrity of the climate, notwithstanding the powerful deleterious influences to which it is exposed, is ascribable, according to Volney, to the natural dryness of the air; the proximity of the African and Arabian deserts, which incessantly absorb the humidity; and the currents of wind that sweep over the country without meeting with any interruption. This aridity, he says, is such that butchers' meat exposed, even in summer, to the N. wind does not putrefy, but dries up, and becomes hard as wood. In the desert dead carcasses are found dried in this manner, so light that a man may easily lift with one hand the entire body of a camel. But it is necessary to bear in mind that near the sea the air is much less dry than farther up the country, and that at Alexandria and Rosetta iron exposed to the air speedily rusts.

We have already seen that on the approach of the sun to the tropic of Cancer the winds invariably blow from the N. or N.W.; but as the sun recedes to the tropic of Capricorn the winds become variable, blowing from the E. and W.; passing to the S. about the vernal equinox, and blowing from this quarter till about the end of May or the beginning of June. During this season Egypt is at intervals visited by the pestilential hot winds of the desert, here called *khamsin*, but identical with the *simoom* of the Arabs, and the *samiel* of the Turks. They have the same effects as in Arabia and other contiguous countries. (*See* Arabia, p. 130.) Their heat is sometimes excessive; the soil is parched, and broken by chasms; the trees are stripped of their foliage, and the fields of their verdure. The fine impalpable sand with which they are loaded obscures the sun, insinuates itself into every thing, and gives to every thing a dusty appearance. During the simoom the streets are deserted, and are as silent during day as during night — "Les habitants des villes et des villages s'enferment dans leurs maisons, et ceux du desert dans leurs tentes, ou dans puits creusés en terre, où ils attendent la fin de ce genre de tempête. Communément elle dure trois jours. Si elle passe, elle devient insupportable. Malheur aux voyageurs qu'un tel vent surprend en route loin de tout asyle; ils en subissent tout l'effet, qui est quelquefois porté jusqu'à la mort." (*Volney*, i. 56.) The rising of the Nile terminates these accesses of heat and drought, and again diffuses life and gladness over the land. The beneficent river

> From his broad bosom life and verdure flings,
> And broods o'er Egypt with his wat'ry wings.

The saline properties of the earth, or, as Volney supposes, of the air, in conjunction with the heat of the climate, give to vegetation an activity in Egypt unknown in cold climates. Wherever plants have water the rapidity of their growth is prodigious. But it is a curious fact, that the soil is exceedingly unfavourable to exotics, and that the seeds of those raised in the country require to be annually renewed. (*Volney, Voyage en Syrie et en Egypte*, i. 61—66., ed. 1787.)

In consequence of the extreme dryness of the air, comparatively little rain falls in Egypt; and some seasons have passed away without the occurrence of a single shower. But this is not usually the case, and occasionally the rains are pretty heavy. In this respect there is a great variety in the seasons; and according to Marshal Marmont, falls of rain would appear latterly to have become comparatively frequent. He says that in Lower Egypt they have now pretty generally from 30 to 40 rainy days in the year; and that the pacha has constructed immense warehouses for the securing of products in harvest, which were formerly exposed without inconvenience to the open air. (*Voyage, &c.* iii. 177.) No doubt, however, the rains have been quite as frequent and heavy in Egypt in past times, as at present. In proof of this we may mention, that the learned and accurate Mr. Greaves, who visited Egypt in 1638 and 1639, states that the rains were heavier at Alexandria in December and January, than he had known in London; and that

there were, also, at the same time, very heavy falls in Cairo. (*Pyramidographia, Works*, i. 103.) Hail showers occasionally occur in winter at Alexandria, and sometimes, though rarely, in Cairo. Snow is totally, and thunder and lightning nearly, unknown in Egypt. Earthquakes occur but seldom, but they are not unknown.

Diseases of Egypt. — The inhab. of Egypt are subject to a variety of diseases, some of which seem to be, at least in their extent, to a considerable degree peculiar. Of these ophthalmia is one of the most prevalent; and Volney says that nothing appears more extraordinary to a stranger in Cairo, than the number of persons whose sight is either lost or impaired. It is more common in Lower than in Upper Egypt. "It generally arises from checked perspiration; but is aggravated by the dust and many other causes. Where remedies are promptly employed, this disease is seldom alarming in its progress; but vast numbers of the natives of Egypt, not knowing how to treat it, or obstinately resigning themselves to fate, lose one or both their eyes." (*Lane*, i. 4.) Small-pox and leprosy are also very frequent. Elephantiasis is met with among labourers in the rice fields; and in the marshy districts of the interior the legs often swell to an enormous size. Syphilis is exceedingly prevalent; and malignant fevers prevail in April and May. The plague occasionally breaks out with great violence in Egypt; and Mr. Lane says that, in 1825, it destroyed 80,000 persons in Cairo only! It generally, though not always, breaks out during the prevalence of the Khamsin, or hot wind from the desert. But notwithstanding this formidable list of diseases, it is still true, as already stated, that no part of Egypt can be justly characterised as insalubrious. The diseases to which the people are subject are mostly to be ascribed to their depressed circumstances—their filth, misérable accommodations, and the bad quality and deficiency of their food. Much also is owing to their apathy, their belief in the doctrine of predestination, and, consequently, in the inutility of remedies and precautions; and the inefficiency of the police. The present pacha has, however, effected, in these respects, some material reforms; and the improvements in surgery and police have powerfully contributed to diminish disease. "During the last ten years," says Mr. Lane, "the country having been better drained, and quarantine regulations adopted to prevent or guard against the introduction of this disease from other countries, very few plague-cases have occurred, except in the marshy parts of the country near the Mediterranean, and in these the pestilence has not been severe." (i. 4.) These remarks were written before the occurrence of the dreadful plague of 1835, introduced from Turkey; but that does not affect their general accuracy.

The *vegetable productions* of a country possessed of such a climate are of a nature peculiarly fitted to its exigencies. The absence of rain forbids the existence of forests; and there being no high mountains, alpine productions are no where found. The native plants of Egypt are of a loose plethoric texture; so that their proper aliment is prepared in continually distended veins, whose widely-opened mouths receive and retain the copious dews, and cause the leaves to perform the functions of so many roots. Hence, great transpiration is excited, and the continually moist roots enable the plants to pass from the extreme drought of summer to the humidity of a three months' flood. These characteristics will be found in the celebrated papyrus, the lotus, and its three varieties, Egyptian arum and safflower. Bulbs find a congenial soil in Egypt, and the gourd and cucumber tribe are every where planted. The acacia of the Nile, and date palm (which is heavily taxed), and sycamore, are scattered rather than grouped over the country. The constant use to which the soil is put in rearing valuable plants prevents the accumulation of such as are noxious and weeds; so that the country is remarkably free from them. The number of fruit trees in Egypt by no means answers to the culture and fertility of the soil.

The peculiar hydrography and vegetation of Egypt exercise a great influence over its *zoology*. The larger species of wild animals find no forests in which to prowl — no recesses for their dens; and except those monsters of the Nile — hippopotami and crocodiles — are banished from the land. Birds also, that inhabit mountains and groves, avoid the exposed deserts and scorching fields around the Nile. The country is also unfriendly to some insects; their eggs and chrysalides being either washed away by the overflowings of the river, or smothered in the stagnant pools formed by its overflow.

The only primeval animals now left in Egypt are the hippopotamus and crocodile. The former, so poetically yet accurately described in the book of Job (xl. 15—24.), has been known to measure 16 ft. long, 15 ft. in circumference, and to stand 7 ft. high. The skin is sufficiently thick and tough to withstand the effect of a musket-ball. Though amphibious, the animal is not nearly so powerful on land as in the water. Its appetite is enormous. The Nile crocodile is a lizard of enormous size, covered with a complete armour of ball-proof scales; its feet are provided with strong sharp claws: an immense mouth, opening as far as the ears, exhibits two rows of teeth like saws, fitting into each other when closed. This is also an amphibious animal; but more than one-fourth part of its existence is passed in water, and, like the hippopotamus, it is a most voracious eater. The ichneumon is a persevering destroyer of the eggs of crocodiles and serpents. The jerboa, or jumping mouse, Nilotic fox, Egyptian and Alexandrian rat and arvicola, complete the list of wild animals. The domestic and tame animals are chiefly oxen, and buffaloes, which are employed in agriculture; the Egyptian goat; dogs, of which there is a peculiar breed at Alexandria; and the true cat, a native, it is supposed, of Egypt. Horses are much esteemed, and the Egyptian grooms are reckoned among the best in the world. Asses are in requisition all over the country. Lastly, the camel and dromedary yield their important services to the inhabitants of this desert-bounded land. (*See* Arabia.)

Of the feathered tribe peculiar to Egypt, the first to claim attention is the ibis, so often mentioned by ancient writers, and identified by Bruce with the *abou-hannès*, — a species of curlew, placed by Cuvier amongst the *grallæ*, or wading birds. Its size is equal to that of a hen, with white plumage, except the tips of the quill feathers, which are black, the largest of them having violet reflections. Part of the head and neck are naked; black in the adult, but clothed with short black feathers in the young. (*Cuvier's Animal Kingdom*, by Blyth and others, 243.)

The Egyptian vulture and stork perform the office of scavengers in towns, by feeding upon the animal substances that would be otherwise left to corrupt the air. Pelicans are numerous along the banks of the Nile, and have a beautiful plumage. Pigeons are kept by almost every farmer in the country for the sake of their dung, and are provided with curious conical huts. Poultry abounds in Egypt; and the artificial mode of hatching eggs forms an important branch of Egyptian industry. Plovers, bustards, and partridges are often met with; quails visit the land in immense flocks, from the interior of Africa; and sea swallows abound along the base of the Delta, and on the shores of the Red Sea. History, sacred and profane, attests the predilection of the Egyptians for *fish* as an article of food; and the Nile abounds with it. Nile salmon is highly esteemed. The fishermen of the coast form an important and turbulent community. Besides the crocodile, the reptiles of Egypt are numerous. Serpent-charming is a regular profession; and some of the Arabs really perform extraordinary feats with the most venomous snakes. The horned and hooded viper (*Coluber cerastes* and *C. Haje*) are the most dangerous. Insects abound in Egypt during a great part of the year, particularly flies and musquitoes. (*Lane*, i. 3.) Locusts also occasionally scourge the land, visiting it in such immense flights as to obscure the sun's rays, and destroying when they alight every vestige of herbage. The breeding and keeping of bees forms an extensive branch in the rural economy of the country. The beetle peculiar to Egypt (*Scarabæus sacer*), so often represented on the sacred monuments, is rather larger than the common beetle, and is entirely black. The Egyptian bat is also much larger than that of other countries. Zoophytes abound in the Red Sea, and it is the red coral which supplies its name. Sponges, various corallines, polypes, and madrepores, are also found on its shores. (*Hasselquist's Appendix to Voyages and Travels in the Levant*, &c.; *Richardson's Travels, passim*; *Russell's Egypt*. 464, &c.; *Conder's Egypt, passim.*)

Population, Manners, Customs, &c. — The political revolutions to which Egypt has been subject from the earliest historical æra have — as the Persians, Greeks, Romans, Arabs, Turks, and other nations, gained in their turn the ascendency — introduced into the country people of all those races. These, added to the Copts, descendants from the ancient Egyptians, slaves from the Upper Nile countries, a small number of Jews, and a few Europeans, make up the motley congregation at present assembled in the land of the Pharaohs. But of all its conquerors, Mohammed has left the most permanent traces in Egypt. The descendants of the Saracens who fought under his banner form by far the greatest portion of the present population. In the absence of more precise data, the estimate made in 1822 by M. Mengin (*Histoire de l'Egypte sous le Gouvernement de Mohammed, &c.* Paris, 1823), founded on a computation of the number of houses, and an average of the [illegible] has been much relied upon. But [illegible] which made the pop. amount to [illegible] correct at the time it was made, various causes have since then been at work to diminish its amount. Political oppression, which leaves the cultivators of the soil scarcely enough to support existence, and withdraws the best portion of the male pop. from their homes to convert them into soldiers, and other, though minor evils,

must have materially reduced the number of inhabs. during the 18 years which have elapsed since M. Mengin's estimate was made. Marshal Marmont, in comparing the Egypt of 1800 with that of 1837, says, "Je fus également frappé du *grand nombre de villages en ruine, resultat du misère actuelle des paysans, et d'un diminution sensible dans la population.*" (iii. 176.) The following is Mr. Lane's more recent statement: —

1. Arab Egyptians	- -	1,750,000
2. Christian Egyptians (Copts)	-	150,000
3. Turks	- -	10,000
4. Syrians	-	5,000
5. Greeks	- - -	5,000
6. Armenians	- -	2,000
7. Jews	- -	5,000

Of the remainder (namely, Arabians, W. Arabs, Nubians, negro slaves, mamelukes or white male slaves, female white slaves, Franks, &c.) the amount may be about 70,000, the respective numbers being very uncertain and variable. (*Lane's Modern Egyptians*, 12mo. ed. i. 32.) Concerning the number of Arabs of the desert, it is next to impossible to approach accuracy; Volney (*Travels*, i. 78.) affirms, that they could supply a body of 30,000 horsemen.

1. The Arab-Egyptians are divided, by Volney, into *three* classes. The first are the fellahs or husbandmen, the posterity, he says, of the Arabs who emigrated from the peninsula after the conquest of Egypt by Amrou in 640. They still retain the features of their ancestors, but are taller and stronger. In general they reach 5 ft. 4 in., and many 5 ft. 6 or 7 in. (Fr. meas.). Their skin, tinged by the sun, is almost black. They have oval heads, prominent foreheads, large but not aquiline noses, and well-shaped mouths. They constitute the bulk of the Egyptian peasantry. The second class of Arabs are Moghrebbins, or settlers from Mauritania. They are very numerous in the Said, where they live in villages by themselves; they likewise are fellahs. The third class are Bedouins of the desert, or wandering tribes.

The Arabs, particularly the Bedouins, wherever they are found, have a remarkable identity of appearance and character; and we beg therefore to refer the reader to the article Arabia for a full description of this singular race. But the fellahs or husbandmen of Egypt, having been subjected for centuries to a despotical government, and deprived of that wild freedom that is now, as of old, enjoyed by their brethren of the desert, have lost several of the distinguishing traits of the Arab character. They are rigid Mussulmen, and strictly observant of the religious rites and ceremonies laid down by their sheiks, or priests. "Very few large or handsome houses are to be seen in Egypt, excepting in the metropolis and some other towns. The dwellings of the lower orders, particularly those of the peasants, are of a very mean description: they are mostly built of unbaked bricks, cemented together with mud. Some of them are mere hovels. The greater number, however, comprise two or more apartments; though very few are two stories high. In one of these apartments, in the houses of the peasants in Lower Egypt, there is generally an oven (*foorn*), at the end farthest from the entrance, and occupying the whole width of the chamber. It resembles a wide bench or seat, and is about breast high: it is constructed of brick and mud; the roof arched within, and flat on the top. The inhabitants of the house, who seldom have any night-covering during the winter, sleep upon the top of the oven, having previously lighted a fire within it; or the husband and wife only enjoy this luxury, and the children sleep upon the floor. The chambers have small apertures high up in the walls, for the admission of light and air — sometimes furnished with a grating of wood. The roofs are formed of palm branches and palm leaves, or of millet stalks, &c., laid upon rafters of the trunk of the palm, and covered with a plaster of mud and chopped straw. The furniture consists of a mat or two to sleep upon, a few earthen vessels, and a hand-mill to grind the corn. In many villages large pigeon-houses, of a square form, but with the walls slightly inclining inwards (like many of the ancient Egyptian buildings), or of the form of a sugar loaf, are constructed upon the roofs of the huts, with crude brick, pottery, and mud. Most of the villages of Egypt are situated upon eminences of rubbish, which rise a few feet above the reach of the inundation, and are surrounded by palm trees, or have a few of these trees in their vicinity. The rubbish which they occupy chiefly consists of the materials of former huts, and seems to increase in about the same degree as the level of the alluvial plains and the bed of the river." (*Lane, Mod. Egyptians*, 30, 31.) The dress of the peasantry consists of coarse woollen cloths; and, like all orientals, they are fond of attending coffee-houses, and listening to the tales of pretended magicians, or the rude music of strolling musicians. But, what is most singular, they submit, without murmuring, to every species of ill-treatment; principally, we believe, from a deep-rooted conviction of its inutility, which has degenerated into an apathy that now forms the main feature of their character. They are — in spite of diet both poor in quality and scanty in quantity — robust, healthy, and capable of undergoing great severity of labour and fatigue, being muscular without fleshiness or corpulency. Like Bedouins, they have a habit of half shutting their eyes, from constant exposure to the sun. The women are in a most degraded condition, and perform all the laborious and menial offices. The Bedouins, or wandering Arabs, have a great contempt for the established peasantry of Egypt, and apply to them the name of fellahs, as one of contempt, signifying boors; distinguishing themselves as true Arabs (*bedawees*). The latter, whenever they please, take the daughters of the former in marriage, but will not give their own daughters in return. Should a Bedouin be slain by a fellah, blood revenge is often perpetrated upon the offending tribe three or four fold.

2. *The Egyptian Christians, or Copts*, are usually regarded as the descendants of the ancient Egyptians; and it is believed that their written language is identical with that spoken by their ancestors. Some learned men have supposed, from certain resemblances between the Hebrew and Coptic, that the latter was a dialect of the former, or that it belonged to the Semitic languages. But this opinion is now all but abandoned. Michaelis says, that "every person competent to form an opinion knows that the Coptic and the Hebrew *have not the slightest original affinity*; and that although some words occur in the former that resemble Semitic vocables, they are to be attributed to the influence which the proximity and intercourse of Semitic nations have exercised over the idiom of the native Egyptians." (Quoted by *Prichard*, ii. 211.) The characteristics of the Coptic language are shortness of the words, and the simplicity of its grammatical construction; its genders and cases are expressed by prefixes and infixes, and not, as is usual with Asiatic and European languages, by terminations. (See *Quatremère, Recherches sur la Littérature Egyptienne.*) The modern Copts, however, speak Arabic, their original tongue being understood but by few persons; and though their liturgy be written in Coptic, it is expounded in Arabic. (*Lane*, ii. 312.; *Quarterly Review*, lix. 170.) They are sober and steady; are much employed as secretaries in public offices, &c.; and are the best accountants in the country, few respectable traders being without a "Coptic clerk." They are held in such esteem by the present government as to possess certain immunities, being unmolested in their religion, and exempted from military conscription; for which privilege, however, they compound by payment of a tribute. Their patriarch, though called the patriarch of Alexandria, resides in Fostat, or Old Cairo. Many conflicting opinions have been entertained as to the physical characterictics of the ancient Egyptians. Their early and high civilisation, and their great works, show conclusively that they were of a very different race from most other African nations. Cuvier, who states that he had examined the heads of more than 50 mummies, declares that not one of them had any of the distinguishing characters of the Negro or Hottentot races; and he concludes that they belonged to the same race of men as the Europeans. Even at this day the appearance of the Copts contrasts most advantageously with that of the Arabs. M. Pugnet, an intelligent and discriminating physician, observes, "*A l'extérieur chétif et misérable des Arabes*, les Coptes opposent un air de majesté et de puissance; à la rudesse de leurs traits une affabilité soutenue; à leur abord inquiet et soucieux, une figure très-épanouie."

3. *The Turks* settled in Egypt, though few in number, occupy important social positions, being masters of the country. They fill all the high offices of state, which are, in most instances, made the objects of bargain and sale, and are hence administered with little impartiality; and few favourable specimens of the Turkish character, as it exists in its native country, are to be found in Egypt. Of the Syrians, Greeks, and Armenians, no detailed account need be given; and the *Jews* are a despised, and therefore a distinctive class in Egypt, and have a particular quarter of every large town set apart for their residences — generally the most confined and dirty portion of the place. They are usually bankers, money changers, gold and silver-smiths, merchants, &c., and enjoy a fair share of religious toleration. Slaves, chiefly from Nubia, Abyssinia, Darfur, &c. are introduced in large numbers, and are sold in public markets belonging to every moderately sized town. (*Lane*, ii. 311—353.; *Burkhardt's Arabic Proverbs*, passim; *Niebuhr's Travels*, &c.)

The following statements, as to the condition of the labouring classes in Egypt, apply principally to the fellahs; they were supplied by an English gentleman long resident in the country.

"With the labouring classes of Egypt *bread* is the great article of food, and may be said to be there more properly the staff of life than in any other country. Beans and lentils are next in importance. With bread, as a sort of seasoning, they use the yam, radish, cucumber, date, onion, and at certain seasons the melon, of which there

is great abundance, and occasionally also cheese, and a sort of butter or ghee, in common use for cooking. Fish, too, and particularly the dried fish of Lake Menzaleh, is a favourite article of food. Rice is less used here than in most eastern countries, being dearer than bread; but still their favourite dish of pillau, or rice and butter mixed, with the addition of a fowl or meat, if the party happen to be of the better sort, is sometimes to be seen. Butcher's meat is beyond the reach of the labouring classes; and unless at their great festival of the Bairam, when the duties are taken off, they rarely taste it. But though thus living in a great measure on vegetable food, they are a robust and healthy people, capable of undergoing great fatigue; and in despite of the general unprepossessing appearance of both sexes, there are often to be seen specimens of the human form of matchless symmetry and beauty, particularly among the boatmen on the Nile. Their only luxuries are coffee and tobacco; the latter a coarse description produced in the country, yet still such a solace to the poor man, that while he has it he seldom complains, though all else were wanting. The dress of both sexes consists of a coarse blue cotton shirt manufactured in the country, without any thing else, except the red, and often less showy cap, which covers the head, the shawl and broad cloth so ambitiously worn by the upper classes being far beyond the reach of the humble labourer. The richer classes of natives, including those in offices of trust under the government (which is the major part), or engaged as retailers or handicraftmen in such pursuits as yield a decent livelihood, live as well and as fully, and are as well clothed, as the same classes in any other country.

"In Egypt, where there is no personal liberty, — where the government claims and enforces its right to the *labour* of every man, willing or not willing, on its own terms, — where among the native traders there is no property, or if it exist is not seen, — where no enterprise can be undertaken but with consent of the government, or at the risk of clashing with some of its private interests, there can be no proper rate of wages as applicable to any particular trade, nor any chance of the remuneration for labour being bottomed otherwise than upon favour or caprice. The native artisans, as cutlers, silk weavers, shoemakers, saddlers, coppersmiths, &c., confine their operations to their own little booths and shops, and usually find in themselves and their families sufficient hands for all their work; and the same applies to all retailers of silk and cotton goods, coffee, tobacco, sugar, and every other article of consumption. Were a capitalist, supposing him possessed of the authority of the government, to embark in any enterprise, he would be almost sure to come in competition with the pacha, and to be driven out of the field, commanding, as the latter does, all the labour of the country at his own price, besides having monopolies of nearly every thing consumed in the country. Hence it will be seen that it is upon the pacha the whole labouring classes must mainly depend for support; and it has been generally stated, that whatever be the nature of the work, the average rate of wages paid by him does not exceed a piastre per day for a full-grown man; one half usually in bread, upon which he has his profit, for he is a large baker also, and the other half in money. To women and children he pays from 10 to 20 paras per day. A Frank cannot command the labour of the same people for less than double the money. In the manufactories men who have made themselves remarkable for their skill are occasionally to be found drawing from 3 to 6 piastres per day, but these are rare exceptions. The common rate of one piastre per day may be said just to preserve the parties in existence, and that is all."

Government and Laws. — Egypt, whose history commences with the history of civilised man and organised government, which gave laws to the old world and art to the Greeks, after being, for many centuries, subjected to foreign masters, became, at length, a prov. of the Ottoman empire. Under the Turkish sway it has been her fate to suffer that worst kind of despotism resulting from the delegation of arbitrary power by a careless tyrannical master to a scarcely responsible servant. The bold, innovating spirit of its present ruler, the celebrated Mehemet Ali, has, however, introduced several reforms into the administrative constitution of the government, which have been upon the whole beneficial; though he has always endeavoured to make the interests of the country in some degree subservient to his own personal aggrandisement. The government of Egypt, as at present existing, comprises, 1st, the pacha, whose power is unlimited and despotic. 2d, His deputy, called *Kikhy'a*. 3d, Seven councils of state, who have each a distinct department of the government to preside over. 4th, Governors (*Nazir*) appointed to each prov., of which there are thirteen, viz.—

1. The province of	Thebes	in the Saïd, or Upper Egypt.
2. - -	Girgeh	
3. - -	Scout	
4. - -	Faïoum	in the Vostani, or Central Egypt.
5. - -	Beni Souef	
6. - -	Mingeh	
7. The province of	Bahireh	in the Bahari, or Delta.
8. - -	Rosetta	
9. - -	Damietta	
10. - -	Gharbiyeh	
11. - -	Menouf	
12. - -	Mansourah	
13. - -	Sharkeyeh	

Besides these provincial governors, the fellahs retain their hereditary *sheiks*, who regulate the local affairs of villages and small communities; but every sheik on his accession is obliged to propitiate the pacha by a sum of money, that he may be confirmed in his office. The civil and criminal laws are administered by a *cadi*, or chief judge, and his deputy, or *naib*. But most of these offices being filled by Turks, who speak their own language, an official interpreter is necessary. The court of the cadi has also its *bash roosool* (chief sergeant of arrests, which are executed by his inferior officers); its *bash kâtib*, or chief secretary; and *shâhids*, or recorders, who prepare the business of the court, and relieve it of such details as would unnecessarily take up the time of the cadi. Petty cases are at once decided by a *zabit* or magistrate. The police is numerous and effective, and consists of the military, and the magistrates, or zabit police. Though still very defective, the administration of justice in Egypt has been vastly improved under the government of Mehemet Ali. Except in rare cases convicts are usually punished by being compelled to labour at the public works. (*Lane's Modern Egyptians.*)

State of Property and Taxation. — The pacha of Egypt may truly exclaim, in the words of Louis XIV., "*l'Etat? c'est moi!*" He has rendered himself, with some few exceptions, proprietor of all the land of Egypt; and he is, in fact, the only considerable agriculturist, manufacturer, and trader in the country. Private property and freedom of industry, the principles that lie at the bottom of all real prosperity and lasting improvement, are all but unknown in Egypt. The pacha is the sole manufacturer, printer, and bleacher of cotton goods; the sole maker of sail-cloth and Fez caps; the sole glass-blower, paper-manufacturer, iron-founder, gun-maker, gunpowder-manufacturer, &c.; he has the monopoly of opium, indigo, saltpetre, and linseed oils; he is the only tanner in his dominions; he is the owner of all the mills and manufactories, and of more than *half the camels*, horses, buffaloes, and cattle in the country; *and of half* its boats, &c. But this is not all. Not satisfied with engrossing so many businesses, he dictates the terms and conditions under which every one else shall be carried on. He specifies the employments in which the bulk of the pop. shall engage; the crops or produce they are to raise or furnish, and the prices at which, when produced, they are to deliver them to his agents. Interference with individual property has never been carried to half the extent in any other country to which it is now carried in Egypt; and if we add to this, that every man is subject to the conscription, and may, at any moment, be torn from his home and compelled to join the army or the fleet, we may well be astonished that such a system should be submitted to: the apathy with which its inflictions are borne can only be accounted for by the spirit of the people having been totally broken, and their energies extinguished, by the long-continued oppression and misgovernment to which they have been subject.

Marshal Marmont has supplied the latest and best information as to the nature and working of the pacha's economical system, and the following details with respect to it are principally borrowed from his excellent work.

The head cultivator (*chef de culture*), in conjunction with the head civil authority (*cheyk-el-beled*) of each village, makes every year a division of the lands to be cultivated by the inhabitants: this division having been made, the kind of culture to which each portion is to be applied is determined, — so much being devoted to dhourrah; so much to wheat, barley, pulse, and trefoil; so much to sugar, rice, cotton, indigo, &c.

The quantity of dhourrah to be cultivated is regulated according to the quantity presumed to be necessary for the support of the cultivator's family; and the produce is given up wholly to him for their support. The other products are divided into *two* classes. The different kinds of wheat, barley, pulse, and trefoil belong to the cultivator, after the quantity of each demanded by the pacha has been deducted: this quantity varies every year, but is most commonly the half or two-thirds of the whole! The remainder, including rice, cotton, sugar, indigo, opium, and woad, are reserved exclusively for the pacha. The cultivator is prohibited, under the heaviest penalties, from retaining the smallest portion of any one of these articles: they are deposited in the public magazines established throughout the country, and placed to the account of the fellahs at a price fixed by the pacha, which never exceeds two-thirds of the market price.

The fellah has to pay to the pacha the *miry*, which may be regarded either as a land-tax, or the rent of the land. This impost is regulated according to the quality of the land; the maximum is 28 pataks (15*s*.), the mini-

mum 17 pataks (8*s.* 1*d.*) the feddan. The average may be about 9*s.* or 10*s.* an acre.

The fellah pays, moreover, a personal tax, which varies, according to the presumed circumstances of the individual, from 15 piastres to 5 cents. His cattle is also taxed; oxen and cows at 30 piastres, and at 70 piastres when they are sold to the butcher; on the animal being killed, the skin belongs to government. Camels and sheep pay 4 piastres: Nile boats 200 piastres, &c.

Male children only, above the age of 12 years, are subject to the personal tax; but as there is no certain method, — no registers existing, — of ascertaining the precise age of an individual, the appearance of the person is held to determine the matter, which, as may be supposed, is always decided in favour of the government.

Marshal Marmont states that the fellah is obliged to obtain from the public magazines every thing he requires, even to his clothes; as blue linen shirts, winter cloaks, &c.; but we are assured that this is an error. It is true that the articles required for the clothing of the fellah can in general be only procured from the government offices; but the fellahs are under no obligation to resort to them, and many of them buy articles direct from the European stores. The fellah buys of the pacha his seed corn, for which he pays a price higher than that at which he formerly delivered it in. Does he require oxen to convey the water destined for irrigation, it is the pacha who furnishes them. Does he require for his boat a sail and other rigging, the pacha is his purveyor. The mat he sleeps on comes from the government magazines!

An account is opened by the village tax-gatherers with each inhabitant: the fellah is credited with the value of the produce which he has deposited; and debited with the *miry*, and the other imposts, as well as the prices of the articles with which he has been furnished, which always exceed their value. The accounts are balanced every four years.

If the fellah be found a debtor, he is sued; if a creditor, the sum which is due to him is kept back as a security for the payments of the other fellahs of his village who may be in arrear, or perhaps it is at once carried to the account of another fellah indebted to government. This method of equalising accounts exists not only between individuals of the same village, but also between neighbouring villages, and even provinces; so that a rich and industrious canton may be charged with the taxes of another canton or province, the inhabitants of which are sunk in sloth and idleness! And to add to this injustice, the debts of the government to the fellahs, being never available to the latter, are in reality imaginary.

Much, however, of this injustice, and of the exactions to which the fellahs are exposed, originates in the peculation and underhand proceedings of the governors of provinces and their subordinate officers. It is, in fact, alleged, that for every dollar that finds its way into the coffers of the pacha, two or three are appropriated by the parties in question! The pacha is aware of this abuse; but he has hitherto been prevented from taking effectual steps for its suppression. There are some places in which there is a large consumption of articles, — as Cairo, Alexandria, Damietta, Rosetta, Syene in Upper Egypt, and Cosseir, which are subject to taxes on consumption (*octrois*), laid on nearly every article. Corn is taxed at 18 piastres the ardep, an impost which considerably augments its price; in addition to which, the cultivator, who has corn to sell, is not suffered to bring it to market until all that had belonged to the government has been sold, and the magazines are empty.

A cultivator, included in that portion of a district on which the corn required by the pacha is ordered to be grown, if he wish to commute for the delivery of that article by a money payment, is charged at the rate of 36 piastres the ardep; and he will generally rather pay this sum than double the sum at his credit with government; such credit being of no service to him, since it is never paid; while, by selling his corn, notwithstanding the duties and the 36 piastres which he pays, he receives at least, in money, a fourth or fifth part of its value.

Mehemet Ali has not neglected to tax manufactures of whatever kind. All traders pay an income tax (*firdeh*), amounting to a twelfth part of their annual gains. Long-established manufacturers cannot dispose of their products excepting to the pacha, and at the price which he himself fixes. The meanest articles are burdened with duties. For instance, Egypt is naturally destitute of fuel, which is supplied by mixing straw and dung; but before being used it must pay a tax, called an *apalte*. No one can fish in the Nile, or sell eggs or chickens in a town, without paying an apalte. The fellah pays duties on his palm-trees, exclusive of the *miry* or tax on the land on which they grow; and Marshal Marmont states, that these duties have occasioned the destruction of many palm-trees; and that they would have been wholly destroyed, notwithstanding their great utility, had not the pacha declared, that lands where palm-trees grew should be charged, in addition to the other imposts on them, with the tax on palms, whether they were cut down or not. (iii. 176.)

It must, however, be admitted, notwithstanding the grinding oppressiveness of this system, that it has materially improved the agriculture of the country; and that some new and important branches of culture have been introduced, as that of cotton, now a staple product. We agree with Marshal Marmont in thinking that these improvements never could, under any system, have been effected by the fellahs, who are ignorant, attached to old habits, and easily satisfied. But the vice of the present system is, that the fellahs reap no advantage whatever from this increased production. On the contrary, it has stripped them of not a few of their limited enjoyments, and rendered them more impoverished and depressed than they ever were at any former period of their history: their increased labour, instead of bringing with it an increase of comfort, brings only an increase of privations. Hence, were any thing to occur that should overthrow the government of Mehemet Ali, or should it pass at his death into less vigorous hands, the whole fabric would fall to pieces, and leave not a wreck behind. It is forced, factitious, and unnatural; it is not bottomed on or associated with the interests or affections of the people, but merely on the supposed, though not real, interests of the government; and will necessarily go to ruin the moment it ceases to be upheld by power.

It is due to Mehemet Ali to state, that in constituting himself proprietor of all the land of Egypt, and loading the cultivators with oppressive taxes, he may plead the example of most Asiatic monarchies, and even of British India, where, we regret to say, the taxes on the land are quite as oppressive as in Egypt; and their assessment and collection equally arbitrary and unjust. The pacha has been driven into his monopoly system partly by the necessity under which he is placed of levying a very large revenue, and partly by the belief, natural to persons in his situation, that he can do every thing better than any one else. But it is needless to say that there is no foundation for any such opinion. A system like that of the pacha may, no doubt, force the premature developement of a few branches of industry; but by annihilating individual enterprise and competition, it is sure, in the end, to paralyse industry, and to extinguish every germ of real improvement.

It is not, therefore, in the cotton mills and workshops of the pacha, but in his canals and public works, in his schools, and in the improved police and military organisation he has introduced, that we must seek for the advantages which his government has conferred on Egypt. And it is greatly to be regretted that these substantial and real improvements, being associated with the degradation and impoverishment of the great bulk of the people, can be looked upon by them with but little favour; and will, consequently, stand a great chance of being destroyed on any change of the government.

Besides the taxes previously noticed, customs duties are levied on all ships entering at the various ports, and also on all goods transported to Upper Egypt (which are collected at Boulac, the river port of Cairo), to an annual amount of about 120,000*l.* sterling. The gross yearly revenue of Egypt and its dependencies is unknown, and various estimates have been framed of its amount. It has been recently stated at 1,000,000 purses of 125 French francs each (about 5,000,000*l.* sterling); viz. Egypt, 780,000 purses; Syria, 150,000; Nigritia, 25,000; Hedjaz, 25,000; Candia, 20,000. (*Augsburg Gazette*, Feb. 21. 1840.)

Army and Navy.—The regeneration of the army was one of Mehemet Ali's first projects on attaining to the pachalic of Egypt. To accomplish this, to consolidate his government, and to pave the way for his other reforms, the reconstruction, or, if that was impossible, the destruction of the Mameluke force that had so long ruled in Egypt, was indispensable; and this Mehemet accomplished, partly by force and partly by the vilest treachery. This superb cavalry being destroyed, with the exception of a small party who enrolled themselves under the banners of the pacha, the latter commenced his work of military reform with equal vigour and success. He had long been sensible of the vast superiority of European tactics and discipline over the brave but tumultuary onsets of Asiatic troops, and he was determined at all hazards to introduce the European system into his dominions. With this view he had the troops commanded by his son, Ismael Pacha, drilled and disciplined in the European fashion, chiefly through the instrumentality of some Italian officers. But the troops were naturally disinclined to the change; and the injudicious severity with which it was attempted to be introduced and carried into effect, gave rise to a dangerous mutiny, that threatened to put an end to the projects and power of the pacha. Mehemet having succeeded in suppressing this formidable insurrection, saw his error, and resolved to proceed with greater caution. With this view he formed a depôt of fellahs in Upper Egypt, and had them trained in the European manner. Perhaps, however, he might have failed even in this, and at all

events there is but little probability that he should have succeeded so well, but for the invaluable services of Colonel Selves, now Solyman Pacha. This officer, who had served with distinction under Napoleon, undertook the arduous task of new-modelling the army of the pacha, and of organising and disciplining it according to the most approved models; and by a rare combination of firmness, bravery, and good sense, he has overcome the all but insuperable difficulties with which he had to contend. He succeeded in gaining the confidence both of the pacha and the troops. Marshal Marmont has spoken in the highest terms of the excellence of the new system; and there can be no question that the troops of the pacha are equal and probably superior to any ever embodied in the East. The army is raised by conscription, which, in consequence of the limited pop. of the country, is very severe: it is alleged that the peasantry frequently maim themselves in order to escape being subject to it. The number of troops, in 1838, including veterans and invalids, amounted to 127,286, besides from 10,000 to 12,000 irregular Turkish troops, and the Bedouin Arabs, who can furnish 30,000 men. In his tract on Egypt, published in 1838, Mr. Waghorn states the pay of a general of division at 150,000 piastres, and that of a soldier of the line at 180 ditto; but since then the pay of the higher class of officers and functionaries has been reduced. The medical-staff is well organised; and the title of M.D., from one of the faculties of Europe, is required to obtain the rank of major.

The Egyptian *navy* is also a creation of the pacha: it numbers 11 ships, carrying 852 32-pounders; 7 frigates with 352 32-pounders; 4 corvettes, 102 32-pounders, short; 7 brigs, 134 32-pounders, carronades; and 3 steamers. The ships, which are constructed by native builders, are beautifully modelled; and though the crews have not attained to the proficiency of English or American sailors, they have, regard being had to the circumstances under which they have been placed, made the most extraordinary advances.

Literature and Education.—The literature of the Arabs is very comprehensive. The works on religion and jurisprudence comprehend about one fourth of the entire number of Arabic books. Others on grammar, rhetoric, philology, history, and geography, are also numerous; as are also their poetical compositions. There are many large libraries in Cairo, most of which are attached to the mosques. (*Lane*, i. 287.) A system of public instruction has been organised by the pacha, which deserves high praise. It is nearly as follows:—The pupils are first sent to the "primary" schools, of which there are 50 throughout the country, instructing, in 1838, 5,500 scholars. The youth having acquired the rudiments of education at these, they are advanced to the two "preparatory" schools, at which there were 2,300 pupils in the same year. The next step is to the "special" schools, which are 10 in number, each devoted to particular studies; namely, medicine, midwifery, veterinary surgery, languages, music, and agriculture; the other 3 being military schools, to fit the scholars for the cavalry, artillery, or infantry service. At Aboosabel in Cairo, the pacha has established a military hospital and a medical college, both under the direction of a distinguished French physician, Dr. Clot,—now Clot Bey. The success that has attended this establishment has been quite extraordinary and notwithstanding their old prejudices, many of the Arab pupils have become expert anatomists and clever surgeons.

It is impossible to appreciate too highly the beneficial influence of these establishments; they have already effected, and will, no doubt, continue to effect, a very great revolution in the public mind in the East; and will pave the way for reforms and changes of which, at present, no one can form any distinct idea. Almost every mosque or public fountain has a school attached to it, mostly endowed by benevolent persons. At these schools, getting the Koran by heart forms the chief employment; but reading and writing are also taught: those who aspire to the higher branches of learning become students of the University of El-Aghás at Cairo, the principal seat of learning in the East. In this building are certain *riwaks*, or colleges, set apart for the natives of particular provinces. The regular subjects of study are grammar, rhetoric, Mohammedan theology, and the traditions of the Prophet; law, religious, civil, and criminal; algebra, and arithmetic. The sciences are but imperfectly understood in Egypt, though great improvements have been made in medical science, in consequence of the introduction of European practitioners, and natives being sent to Europe to study. Egyptian geography describes the earth as a flat surface; and astronomy, beyond merely computing the calendar, is studied for the purposes of astrology. Music affords a favourite study for pastime, but the theoretical system is complicated, as each tone has three intervals or gradations of sound instead of two. Their melodies are mostly of a plaintive kind; but a kind of recitative, in which they chant their romances, has some bold measures. (*Lane*, i. 285. *et seq.*; *Waghorn's Egypt in* 1838, *Appendix*; *Egypt, a Popular Description, &c.*, 182—190.)

Productive Industry and Commerce. — No soil can be better adapted for *agriculture* than that brought down by the Nile, and deposited on its banks. The earliest authentic records of the human race represent Egypt as the granary of the old world, to which less fortunate nations resorted in times of scarcity; while she received from them, in exchange for the necessaries of life, all those luxuries and riches which enabled her people to make such early progress in the arts, and to leave behind them monuments surpassing even the remains of the classic world in costliness, extent, and grandeur. The supplies of slime annually brought down by the river considerably abridge the labours of the husbandman, and have enabled the country, with but little of his assistance, to bear for the last 3,000 years three, and sometimes four annual crops, without the least impoverishment. The husbandry of Egypt is divided into two great classes:— the upper, or *sharakee* lands, where the banks are too high for the country beyond them to benefit by the inundation; and the *rei*, or low lands, which are watered by the natural overflowings of the river.

About four millions of *feddáns* are now under cultivation in Egypt, of which from 200,000 to 300,000 are occupied with cotton; 1,000,000 with flax, indigo, sugar, dates, hemp, &c.; and the other 2,800,000 or 2,700,000 feddans with grain, principally millet (*dhourra*), maize, wheat, and rice. In Lower Egypt sowing commences immediately after the waters subside; the seed only requiring to be strewed over the land, and it either sinks into the soft earth by its own weight, or is trodden down by cattle driven over it. This is generally done in November; in February the fields are verdant, and in May the harvest takes place. In July rice and maize are again planted, and yield a second harvest in September. In Upper Egypt the constant artificial supply of irrigation required by the land gives to the farmer unceasing employment. Deprived of rain, and exposed almost always to a burning sun, the land would be arid and barren if not constantly refreshed with moisture. After the water has been preserved in canals and wells, it is raised by Persian water-wheels, worked by oxen, or by means of a hand-machine of a more simple construction. Sowing begins here about November, as in Lower Egypt; and the corn begins to spring up before the end of the month, and by December gives to the country the appearance of a verdant spring. In January lupines, dolichoes, and cumins are sown; and towards the end of the month the first barley harvest commences. In February sugar-canes are cut for the press. By April flax has ripened, and the plants are pulled up; tobacco leaves are gathered, and the wheat harvest is got in. In July there is a third crop of trefoil, and a second of rice. October is the month for all sorts of leguminous seeds to be sown. (*Malte-Brun*, iv. 43—45.; *Burckhardt's Arabic Proverbs*, 134.; *Wilkinson's Topography of Thebes, &c.*)

The efforts of the pacha having been principally directed to the culture of cotton, the crops of wheat have greatly fallen off, and Alexandria has ceased to be a port for the shipment of this species of grain. The cotton of Egypt is long-stapled, of good quality, and the soil is well suited to its growth; but it is notwithstanding more than doubtful whether the forcing its culture has been judicious. It may have been more immediately profitable to the pacha, but it is very questionable whether it has been profitable to the country; and the opinion of the best informed parties seems to be that the cotton plantations of Egypt will have great difficulty in maintaining themselves, on any thing like a free system, which could never be the case with its wheat culture. Marshal Marmont estimates the amount of the indigo crop at 3,000 cwts. Immense plantations of mulberry trees have been executed by order of the pacha, which already produce 100,000 kilog. of silk.

As the productiveness of Egypt depends wholly on the extent of the inundation and the command of water, it would be of vast importance to the country if means could be found of regulating the inundation, and preserving the waste of water, which is here the one thing needful. These important considerations, which engrossed a large share of the care and attention of the ancient rulers of Egypt, who excavated the lake Mœris in this view, have not been overlooked by Mehemet Ali; and it is greatly to be regretted that instead of expending his energies in attempts to introduce manufactures wholly unsuited to the country, and which cannot be carried on except at a constant sacrifice, he had not applied them to this great work. Marshal Marmont has given an account of the works (*barrage*) which were projected by the pacha for the regulation of the inundation; and it is believed that it is by no means impracticable so to regulate the flow of the river that it might always be equably diffused over a much larger extent of country than at present, and that an inexhaustible supply might be secured for irrigation in the

dry season. But the engineers employed by the pacha appear to have been unequal to the task; and, after costing large sums, the work is now abandoned. But it is to be hoped that it may be resumed under more favourable auspices. It could not fail to double or treble the productive capacities of the country; and were it carried into effect, and full scope given to private enterprise and industry, the wealth and population of Egypt in modern times might be as great as under the Pharaohs.

Manufactures are not carried on, at least to any considerable extent, by private individuals in Egypt. Such, indeed is no where the case; unless in countries where the government abstains from engaging in similar undertakings, and where property is secure, and every individual left to dispose at pleasure of the fruits of his industry, enterprise, and economy. But, as has been already seen, all this is unfortunately wanting in Egypt. The pacha seems to have concluded that the same system that has given him an army and a navy would be equally successful in establishing manufactures. But it is needless to say that the means by which these different ends are to be attained are as radically and completely different as the ends themselves. It is to be hoped that the pacha may speedily become aware of this; and that by ceasing to interfere with the industrious pursuits of individuals, and allowing them to prosecute their own industry in their own way, he may insure the stability of his plans for regenerating the country. The fact is, that Egypt is totally unsuited for manufactories, inasmuch as the humidity of the climate along the shore, and the sand in other parts of the country, prevent the proper working of fine machinery, and, in the end, destroy it. The pacha, it is believed, is now sensible of his mistake, in forcing manufactures, and several of his establishments have been allowed quietly to expire. The most extensive was that erected at Boulac, near Cairo, for spinning, weaving, dyeing, and printing cotton goods; it was superbly fitted up, and was worked by a steam engine, and lighted with gas. About 800 men and boys were employed in this building three or four years ago; but we have no very recent details respecting it. The linen at present fabricated in Egypt has degenerated from the "fine linen" ancient historians so often mention with praise: it now consists chiefly of the coarser kinds, for towels, sackcloth, &c., large quantities of which are exported. Carpets for sofas are made at Benisouef, and embroidered silk handkerchiefs at Cairo. The potteries of Egypt are extensive, and celebrated for a species of porous jars admirably adapted for clarifying and cooling water. But the most curious branch of Egyptian industry is the hatching eggs by artificial means — that of ovens of various degrees of heat, skilfully graduated according as the egg advances towards incubation. (For a full description of the process, see *Lane*, ii. 5.; *Wilkinson's Topog.; Thebes, &c.*)

Possessing so absolute a control over his subjects, Mehemet Ali has means at his command for the carrying on of *public works* which less absolute rulers do not possess. Canals have chiefly occupied his attention: old ones have been opened, and new ones cut, so that the whole produce of Upper Egypt is now easy of transit down to the coast. The manner in which the canal that connects the harbour of Alexandria with Fouah was opened, affords a good example of the pacha's arbitrary system. All the labouring classes of Lower Egypt were compelled to assist; but were paid one month in advance to provide themselves with subsistence. The Arabs were marched down in immense numbers, under their respective chiefs; and having set to work, completed the canal (which is 48 m. long) in the short space of six weeks.

Commerce. — No country can be better situated for commerce than Egypt. She forms the link that connects the Eastern and Western worlds; and it is to her admirable situation in this respect, and to the commerce of which she in consequence early became the centre, that her ancient wealth and civilisation are mainly to be ascribed. It has been customary to trace the ruin of commerce in Egypt, in modern times, to the discovery of the route to India by the Cape of Good Hope; but more stress has been laid on this event than it really seems to deserve. No doubt it most probably would, under any circumstances, have diverted a portion of the trade with the extreme western states of Europe, and in the bulkier articles, into a new channel; but had the same facilities for conducting the commerce with the East existed in Egypt in the 15th and 16th centuries that existed in antiquity, the trade between India and the countries on the Mediterranean, and in the lighter and more valuable products, would, there is every reason to think, have continued to a great extent in the old channel. The truth seems to be, that the extinction of the trade through Egypt, at the epoch referred to, was mainly owing to its having become subjected to the lawless and arbitrary dominion of the Mamelukes, who loaded all articles passing through the country with oppressive exactions, and treated all foreigners, especially Christians, with insolence and contempt. But a new æra has begun; and the intercourse with the East has already in part reverted to its old channels. The establishment of a steam communication between Europe and India by way of Alexandria and Suez, is one of the most striking and important events in recent times. It has shortened the journey to India by nearly a half. Steamers ascend the Nile as far as Cairo; and the passengers and mails are thence conveyed across the desert from Cairo to Suez, and conversely, by carriages; and it is a fact that no fewer than 5 inns or khans are now established along this road, which is travelled with comparative comfort and expedition. And no doubt can be entertained, provided the present order of things in Egypt be not violently subverted, that the facilities for the intercourse with the East through it will be greatly increased. With respect to the steam communication with India carried on through Egypt, it may be mentioned that the mail for India, which leaves London on the night of the 4th of each month, reaches Alexandria on the 19th, and leaves Suez for Bombay on the 22d; and the mail from Bombay, which leaves that city on the last day of each month, reaches Suez on the 18th, and Alexandria on the 21st of the ensuing month. The mail boxes, which sometimes weigh a ton, are sent across the desert between Suez and Cairo without a guard; and it is honourable to the Egyptians that, down to the present time (January, 1840) there has not been a single instance of a box or even a letter being missing since the regular communication was established! Europeans may now establish steamers and other vessels on the Nile; and Messrs. Hill and Co., of Alexandria, have availed themselves of this privilege, by establishing a steam packet between that city and Cairo.

We are assured, that were it not for the hostilities in which the pacha has been almost always engaged, he would have attempted to re-open the famous canal that formerly connected the Red Sea and the Nile. According to Herodotus, this canal was commenced by Nechos, King of Egypt, and finished by Darius. (Lib. ii. § 158. iv. 39.) Under the Ptolemies, by whom, according to some authorities it was completed, this canal became an important channel of communication. It joined the E. or Pelusiac branch of the Nile at Bubastis, the ruins of which still remain; it thence proceeded E. to the bitter or natron lakes of Temrah and Cheik-Aneded, whence it followed a nearly S. direction to its junction with the Red Sea at Arsinoe, either at or near where Suez now stands. It is said by Strabo (lib. xvii. p. 805.) to have been 1,000 stadia (122 m.) in length; but if we measure it on the best modern maps it could hardly have exceeded from 85 to 95 m. Herodotus says that it was wide enough to admit two triremes sailing abreast. This great work having fallen into decay after the downfal of the Ptolemaic dynasty, was renovated either by Trajan or Adrian; and it was finally renewed by Amrou, the general of the caliph Omar, the conqueror of Egypt, anno 639. (*Hérodote, par Larcher*, iii. 450.) The French engineers traced the remains of this great work for a considerable distance; and it would be of singular advantage to Egypt and the commerce of the world were it re-opened.

Marshal Marmont states that the ground has been carefully examined by M. Lepère, an able engineer, and that it presents no sort of difficulty that may not easily be overcome. This, indeed, might have been inferred from the fact of its former construction; for the ancients, being unacquainted with the use of locks, had to encounter difficulties in the construction and working of canals which are now obviated with the utmost facility. According to M. Lepère, the cost of constructing a navigable canal from the Nile to the Red Sea would not exceed 17,000,000 fr., or less than 700,000*l.* (*Marmont*, iv. 161.) The completion of this work need not, therefore, be despaired of. The opening of the Mahmoudieh canal, from Alexandria to Fouah, shows what the present government is able to achieve; and an enterprise like that now under consideration, though more difficult, would be of still greater importance to Egypt as well as to Europe and Asia. Marshal Marmont appears to think that the ground between Suez and Cairo is quite unsuitable for a railway, to which project the pacha is, however, understood to be most favourable. In fact, a portion of the iron rails for this undertaking have been ordered from England, and are now in Egypt; but the attention of the pacha having been diverted to other matters, the project has been, for the present, abandoned.

The whole foreign trade of Egypt centres in Alexandria; and we beg to refer the reader to the article on that city for an account of the imports and exports of the country, and of the mode in which the trade is at present carried on.

Money. — Accounts are kept in Egypt in current piastres, each equal to something under 3*d.*, there being 100 of them to the pound sterling. There are, besides, coins to represent the ½ piastre (*noos ckfrsh*) and 1-40th (*Jud-*

dâh or *parâh*), and 5 and 10 fuddah pieces. The *saadee-yeh* is a small gold coin, of the value of four piastres; and the *kheyreéyeh* is equal to nine piastres, or 21*d*. and 3-5ths. These are the only Egyptian coins. There is, however, the nominal *kees* or purse, which stands for 500 piastres, and the *kazneh*, or treasury of 1,000 purses, or 5,000*l*. sterling. The coins of Constantinople are current in Egypt, but scarce. European and American dollars are pretty generally exchanged for 20 piastres. The English sovereign is called *gin yeh*, for guinea, and is freely taken. (*Lane*, ii. 378—80.)

Antiquities of Egypt. — A contemplation of the remains of antiquity scattered throughout Egypt, carries us back to a period of which history furnishes no other records than those derived from the monuments themselves. The temples, the palaces, and pyramids of the country, mark the spot where idolatry began — where civilisation commenced its career; while the annals of other nations prove that this land of gigantic fabrics had attained to a high degree of civil and social order, and architectural proficiency, when the rest of the world was involved in barbarism. The range of objects presented to the archæologist may be classified thus: — 1. Pyramids; 2. Temples; 3. Colossi and sphinxes; 4. Sculptures and hieroglyphics; 5. Tombs and paintings.

1. The *Pyramids*, which, for vastness and duration, stand at the head, not only of all the monuments of Egypt, but of the ancient world, are placed, at irregular intervals, along the E. foot of the Libyan hills, at some distance from the W. bank of the Nile. They commence at Ghizeh, nearly opposite to Cairo, in about 30° lat., and extend S. to about 29°. The pyramids of Ghizeh, three in number, are the best known, the largest, and most celebrated. They stand on a plateau of rock, elevated about 150 ft. above the desert, about 7 m. W. by S. from Cairo. The pyramidal form seems to have been adopted in order to ensure stability. Their plan is that of a perfect square, and their sides contract by regular gradations till they terminate in a point, but so that the width of the base always exceeds the perpendicular height. They are not solid; at least chambers and galleries have been explored in some of the principal pyramids.* The greatest of the pyramids of Ghizeh, and indeed of Egypt, that of Cheops, the building of which is described by Herodotus, is a gigantic structure. The sides of its base, which are in the line of the four cardinal points, measure, at the foundation, 763·4 ft., so that it occupies a space of more than 13 acres. Its perpendicular height is about 460 ft., being about 100 ft. higher than the summit of St. Paul's. Supposing this pyramid to be entirely solid, its contents would exceed three millions of cubic yards, and the mass of stone contained in it would be six times as great as that contained in the Plymouth breakwater! (*Egyptian Antiquities, Library of Entertaining Knowledge*, ii. 213.) This huge fabric consists of successive tiers of vast blocks of calcareous stone, rising above each other in the form of steps. The thickness of the stones, which is identical with the height of the steps, decreases as the altitude of the pyramid increases, the greatest height being 4·628 ft. and the least 1·686 ft. The mean breadth of the steps is about 1 ft. 9 in. The best authorities agree in estimating the number of steps or tiers of stone at 203. According to the information communicated to Herodotus by the priests, 100,000 men were employed for 20 years in the construction of this prodigious edifice; and ten years were employed in constructing a causeway by which to convey the stones to the place, and in their conveyance. (Lib. ii. § 124.)

The other pyramids are of inferior dimensions; but they are mostly all, notwithstanding, of vast magnitude — *instar montium eductæ*; they are not all of stone, some of them being of brick.

Many learned dissertations have been written, and many fanciful and a few ingenious conjectures have been framed, to account for the original use and object of these imperishable structures. But the difficulty of the subject is such, that hitherto no satisfactory conclusion has been arrived at. Even in the remotest antiquity their origin was matter of doubt, and nothing certain was known with respect to them or their founders. (*Plin. Hist. Nat.* lib. 36. § 12.) On the whole, however, it would seem to be most probable that they were intimately connected with the religion of the ancient Egyptians; and that they were at once a species of tombs and temples, but participating more of the latter than of the former character. (For some remarks on this part of the subject, see *Shaw's Travels*, p. 170, &c. 4to. edit.; and *Greaves's Pyramidographia*, in his Works, vol. i.)

It has long been customary to regard the pyramids as monuments merely of the power and folly of the monarchs by whom they were raised, and of the bondage of their subjects. This, however, seems to be a very superficial prejudiced view of the matter. The varying magnitude of the pyramids, the fact of their being scattered over a space extending lengthwise about 70 miles, and their extraordinary number, appear to show, pretty conclusively, that they must have been constructed from a sense of utility or duty; and not out of caprice, or from a vain desire to perpetuate the names or the celebrity of the founders. If we had a sufficient knowledge of antiquity, it would probably be found that the motives which led to the construction of the pyramids were, at bottom, nearly identical with those which led to the construction of St. Peter's and St. Paul's; and that they are monuments of the religion and piety, as well as of the power, of the Pharaohs.

It is impossible for any one to look at these stupendous piles without a deep sense of their sublimity. Their prodigious magnitude, the impenetrable mystery that hangs over their origin and the purposes to which they were applied, and the conviction that they will endure long after the proudest existing monuments of human greatness have been levelled with the dust, awaken feelings that cannot be excited by any other display of the power and industry of man. The pyramids, too, are associated with some of the most interesting events in the history of the human race. They were probably gazed upon by Moses; and certainly were regarded with wonder and admiration by Homer and Herodotus, Pythagoras and Plato: Alexander the Great and Napoleon marshalled their hosts under their shadow; and they are no doubt destined to receive the homage of poets, historians, and philosophers, and to witness the exploits of warriors, through the all but endless series of future ages. (For further details as to the Pyramids, besides the authorities already referred to, see the *Description de l'Egypte*, tom. ix.; *Modern Traveller*, *Egypt*, vol. i.; *Clarke's Travels*, vol. v. 8vo. edit.; *Greaves's Works*, i. 1—164., ed. 1737; *Ancient Universal History*, i. 425—445.; *Hérodote, par Larcher*, lib. ii., with the notes; and a host of other works.)

2. *Temples.* — The remains of buildings devoted to religious worship form, next to the pyramids, the most considerable reliques of antiquity in Egypt. Reared after one uniform design, gigantic in size, massive in detail, and calculated to strike awe to the heart of the worshipper, they show how large a share religion occupied in the policy of the rulers, and in the social condition of the people. Egyptian architecture has — unlike that of Greece — found few imitators; for the vastness and solidity it demands, the enormous proportions it exhibits, require an amount of labour and material only to have been furnished in the land of the pyramids. Hence the unvarying uniformity which all the specimens of it presents, unmixed as they are with the additions of modern taste, untouched by the hand of improvement, renders the architecture of Egypt, above that of all other nations, the most characteristic and unique. The plan and appurtenances of an Egyptian temple consist, first, of the approach to it, or *dromos*; a sacred avenue lined on each side with sphinxes, and in some instances a mile long. This conducts to the entrance, or *propylon*; a principal feature in the building, consisting of pyramidal moles, with a rectangular base and sides, inclining less to one another than in the perfect pyramid, upon which the most elaborate sculptures were cut. Between them is the door; but before the door sometimes two obelisks rise beside two colossi, as in the temple of Luxor (*Thebes*). The number of these propyla and dromi is indefinite; occasionally three must be passed before arriving at the pronaos, or portico of the temple itself, which has a massive façade, supported by pillars. A doorway leads to the sekos, or cell, which is always divided into several apartments. A second door generally leads to an hypostolite hall, having a flat roof, supported by huge pillars. (DENDERAH.) Some of these halls are of immense size. Other chambers succeed, until the holy recess presents itself; an oblong room, with an altar and several idols sculptured in stone. To almost every apartment there are staircases leading to the terraced roofs, many of which are of such dimensions that at present Arab villages are built upon them. Although many of the temples are more than a mile in length, their interiors are uniformly covered in every part with the most elaborate sculptures. The structures will be found more minutely described under DENDERAH, EDFOU, THEBES, &c. (*Strabo, Edt. de Casaubon*, 805.; *Egyptian Antiquities*, i. 69—77.)

3. *Colossi, Sphinxes, &c.* — Although these have been invariably found as appendages to the temples, yet the important place they occupy in the antiquities of Egypt, demands a separate notice. Immensity of size, so main an element in producing grandeur of effect, was the chief end of the Egyptian artist; and that this might take a stronger hold upon the imagination of the spectator, the largest colossi have mostly placed near them a small figure for contrast and measure of magnitude. Those representing men are always the figures of some deity, and were placed in pairs opposite the propylæa. They are naked, except a head-dress and cloth bound

* Colonel Howard Vyse has opened and explored four new chambers in the great pyramid; he also opened the third pyramid of Ghizeh, of the previous opening of which no tradition exists; but there can be no doubt that it had been previously opened, as a sarcophagus was found with the broken lid on the floor.

round the waist. Some are sculptured of one entire stone (hence called monolithes), and were cut out of the quarries and transported to the temples at an enormous expense of time and labour. On the plain of Thebes, about half way between the W. desert and the Nile, are two colossal figures, about 50 ft. in height, seated each on a pedestal 18 ft. long, 14 ft. broad, and 6 ft. high. One of these, supposed to be the "Memnon," the most celebrated by far of the Egyptian statues, is said to have emitted sounds at sunrise or soon after, and when the sun's rays fell on its lips. Strabo saw the statue, and heard the mysterious sound; and Tacitus tells us that Germanicus visited the *Memnonis Saxea effigies, ubi radiis solis icta est, vocalem sonum reddens.* (*Annal.* lib. ii. § 61.) A portion of a similar statue, but of smaller dimensions, may be seen in the British Museum (No. 4, Egyptian saloon), which was brought by Belzoni from the Memnonium. Besides these gigantic representations of deified human beings, those of other gods are met with throughout the country. The strangest are those ideal figures called sphinxes, some having a man's head, and lion's limbs and body (*andro sphinxes*); others, the most numerous, with a female head; others again displaying a ram's head. Sphinxes were usually placed in those double rows which formed the avenues, or dromi, of the temples, and vary very much in size. The largest is that placed E. of the second pyramid of Ghizeh. It is an andro-sphinx, much of it buried in sand, but the head and a portion of the body are visible; the first measuring, from the chin to the top of the forehead, 28 ft., the body being above 100 ft. long; the face has been much mutilated. The excavations of M. Caviglia disclosed some curious appendages to this gigantic monster. On a stone platform, between the fore-paws, is a block of granite 14 ft. by 7 ft., and 2 ft. thick, highly embellished with sculptures in bas-relief; and on the second digit of the southern paw, a Greek inscription is deeply cut (given with others in the *Quarterly Review*, xix. 411., with a translation by Dr. Young). Between the legs of the sphinx, and on the ground in front of it, is a small temple, a plan of which may be seen in the *Quarterly Review.* (xix. 416.) Appearances around the sphinx indicate that it was originally inclosed within a wall. Besides the human colossi and sphinxes, other figures belonging to the Egyptian mythology are of frequent occurrence. All the colossi, of whatever denomination, were, it is supposed, coloured over in every part; many of them still exhibiting traces of paint. (*Heeren's Researches, Engl. trs.*, ii. 214.; *Quarterly Review, &c.*)

4. *Sculptures and Hieroglyphics.* — Hitherto we have regarded only those specimens of Egyptian architecture and sculpture whose immensity, and, when compared with the classic elegance of Grecian models, whose uncouth forms, might be deemed the first rude, though gigantic efforts of the Egyptian artists; but a close examination of the ornaments with which the ancient buildings are profusely enriched, shows the great proficiency to which they had attained in the more refined branches of art. The obelisks, the walls, and all the apartments of the edifices described above, are covered in almost every part with sculptures executed with the most minute finish and exquisite skill. The ruined temples and obelisks of Egypt are, in fact, so many historical records. The wars and triumphs of the Egyptian sovereigns were, for the most part, the theme of the sculptor. The immense propylæa and walls of Luxor and Karnac, for example, give a vivid picture of the forms of pursuit, the attitudes of the victors, the wounded, and the dying, — the sea fights, the religious sacrifices and processions. And it has been surmised, with what probability we shall not undertake to determine, that Homer's admirable descriptions of similar scenes is principally to be ascribed to his study of these monuments!

The *hieroglyphics* are intimately connected with this part of our subject; but we have to regret that our limited space will not allow of our giving more than a very short and imperfect sketch of their nature, and of the recent researches with respect to them. By hieroglyphics are popularly understood the various figures, symbolical devices, and characters with which the Egyptian obelisks and other monuments are covered. They are highly interesting, from the insight which they afford into the steps by which men were led to the use of a written language. The most obvious expedient for communicating substantive ideas would be by drawing figures of the objects: thus, a battle might be represented by the figures of armed men contending with each other, &c. But this is a very clumsy and inconvenient mode of conveying information, and cannot be applied to represent mental feelings or abstract ideas. Hence pictorial are very soon superseded by or mixed up with symbolical or allegorical representations, which depict facts, qualities, or circumstances, by conventional or arbitrary marks; and these sort of characters being, in the course of time, still further simplified, lose a great portion of their original pictorial character, and degenerate into what may be called a common, *demotic*, or *enchorial* writing.* The Chinese is the most perfect example of this sort of conventional writing; and Duhalde has given an interesting account of the steps by which it was derived from pictorial writing. (*Duhalde, Description Géographique, &c.* ii. 272. ed. 1736.) The present Chinese characters are, in truth, nothing but a refined and improved species of hieroglyphics, each character presenting to the eye a distinct object or quality. At this point the Chinese have stopped; and it seems never to have occurred to them to attempt to mark the different sounds of the voice by characters or letters, and by combining these to form a written language. Now, it was long supposed that, like the Chinese, the characters on the Egyptian monuments were wholly hieroglyphical, and much learning and ingenuity have been expended in efforts to decypher them. It was latterly, however, conjectured by Zoega (*De Origine et Usu Obeliscorum*, p. 454.) that some of the characters on the monuments might be neither pictorial nor symbolical, but *phonetic* (from φωνή, *vox*); that is, that they might represent sounds, and not things, and be either alphabetic or syllabic, or both. Warburton had already shown how the refined symbolic writing might pass into the phonetic, but he erroneously concluded that the monuments afforded no specimens of the latter. (*Divine Leg.* iii. 161.) The surmise, for it was little better, of Zoega has since, however, been established by Dr. Young, Champollion, and others. But in doing this they had facilities unknown to Warburton, Zoega, and previous inquirers. The French, when in Egypt, discovered at Rosetta a stone, now in the British Museum, on which three inscriptions are sculptured; and it appears from the last and most perfect of these, which is in Greek, that the inscriptions are either entirely or substantially identical with each other, being the same royal decree which, it says, was ordered to be cut in sacred characters or hieroglyphics, in *enchorial* characters (that is, in modified or conventional hieroglyphics), and in Greek. The inscriptions are a good deal mutilated, particularly the hieroglyphical; but they are still sufficiently distinct to allow the hieroglyphical and enchorial to be compared with each other and with the Greek. The study of this trilingual stone enabled Dr. Young to determine, or rather perhaps conjecture with considerable probability, which of the enchorial and hieroglyphical signs were phonetic, and to fix their value. M. Champollion and others have since zealously followed up the path thus opened, but with no great or marked success. If, indeed, the Egyptian writing were either wholly figurative or wholly phonetic, a key to its mysteries might be discovered, and its long-hidden treasures be again brought to light. But the most probable conclusion seems to be, that it is partly the one and partly the other; or that the characters are in a state of transition from the former to the latter. This, also, is the matured opinion of Champollion, who lays it down distinctly, in the second edition of his *Précis du Système Hieroglyphique*, published in 1828, that "the hieroglyphic mode of writing is a complex system — a system *figurative, symbolical*, and *phonetic*, in the same text, in the same phrase, I would almost say in the same word." An examination of the hieroglyphic writings must go far to satisfy every one that this is a tolerably correct statement. Many of the characters are purely pictorial; while others are mere arbitrary symbols, and may be, and most probably in some instances are, phonetic, or, which is the same thing, alphabetic or syllabic. In fact, no certain conclusions can be, or, at all events, have been, drawn with respect to it. No doubt it was sufficiently intelligible to those who were instructed in its mysteries, but to those destitute of such instruction its interpretation must be a work of all but insuperable difficulty; so that there seems but little probability that the veil which covered Isis in antiquity should ever be wholly removed.† (Besides the authorities already referred to, the reader may consult the *Essay on Hieroglyphics* in the new edition of the *Encyc. Britannica*, the most able and elaborate treatise on the subject that has ever appeared.)

5. *Tombs and Paintings.* — Every relic of the ancient Egyptians appears to have been originally designed for an almost perpetual endurance. Their architecture, — the forms of which are mostly pyramidal, with bases that have withstood the most studious and continued destruction; their colossal sculptures, — many of them monolithes cut out of the solid rock; and even the bodies of their dead, — all seem to have been intended for eternity. Thousands of years have passed since many of the mummies recently unrolled were embalmed, yet every feature, every fibre, still remains. Even the colours of the paintings with which their se-

* See the clear and convincing statements of Warburton, *Divine Legation of Moses*, iii. 69—162. ed. 1765.

† The learned and able author of the work on *Egyptian Antiquities*, in the *Library of Entertaining Knowledge*, says, that if M. Champollion's statement, as to the diversified character of hieroglyphics be true, "no man in his senses will ever trouble himself about decyphering an hieroglyphic text." (ii. 361.)

pulchres were adorned are still as vivid as if they had been laid on yesterday. So deep were their religious sentiments concerning dissolution, that they bestowed more labour and ornament upon the dwellings of the dead than upon the habitations of the living. "They call," says Diodorus Siculus, "the houses of the living inns, because for a short space we inhabit them; but the sepulchres of the dead they call *eternal mansions*, because they continue with the gods for an infinite space. Wherefore, in the structure of their houses they are little solicitous; but in exquisitely adorning their sepulchres, they think no cost sufficient." *Diod. Sic.* lib. i.) It was not enough that the bodies of individuals should be preserved by the laborious and expensive process of embalming, but their actions and employments during life were elaborately recorded, and, as it were, perpetuated, by the hand of the painter on the walls of the tombs in which they were laid. In every instance the entrances of the tombs were artfully concealed, presenting an exact resemblance to the rest of the rock in which they were cut; for all the tombs of Egypt are excavations,—those of the people being dug in the side of the mountains, and those of the kings within the enclosures of the temples; the most remarkable of which is *Biban-el-Moluk* at Thebes. The expedients employed to secure the dead from desecration are elaborate in the extreme: not only were their entrances a secret, but descent to the chambers where the bodies were laid is only to be made by deep shafts and endless winding recesses. The mummy was enclosed in a sarcophagus profusely ornamented, and standing in the midst of a chamber. Besides human bodies, those of animals held to be sacred were also often embalmed. (*Belzoni's Operations and Discoveries; Wilkinson's Topography of Thebes.*)

As the monuments unravel, in some degree, the dark mystery of Egypt's ancient history, so an examination of the paintings that cover the tombs gives us some insight into the domestic condition and usages of its people. Every employment and amusement is vividly pourtrayed around these sepulchral walls, each according to the station of life of the person to which it refers. The forms of every article of furniture, of ships, of carriages, of every thing, in short, pertaining to civilised life, are there accurately figured. As pictures, however, these efforts of the primeval artists are far from pleasing. The colours, though still bright and vivid, are all positive, seldom being blended or softened; and perspective, or any approach to it, is no where to be detected. But the details of private life that they present are wonderfully minute and copious; and by a long and careful study of these, assisted in parts by an active imagination, and by a large infusion of what Dugald Stewart has called conjectural history, Sir J. G. Wilkinson has produced a singularly interesting and instructive work. In fact, if we might trust to his ingenious suggestions and deductions, we should have a clearer insight into the habits, manners, and every-day life of the ancient Egyptians, than we have into those of most European nations! (*Manners and Customs of the Ancient Egyptians*, 3 vols. Lond. 1837; a 4th vol. is to be added to this work. Rosellini has produced a similar work; *Monumenti dell' Egitto, &c.* Pisa, 1834.)

Present State of Egypt.—It is difficult to lay before the reader any statements that would convey a proper idea of the existing state of Egypt. The fact is, that it is now in a state of transition, and that the feelings, opinions, and habits of the people are undergoing a great and rapid change. Mehemet Ali has nothing about him of the religious intolerance that has for centuries been a distinguishing characteristic of the rulers of Egypt; he regards all religions, provided their professors do not interfere with political matters, with the same favour; and in consequence fanaticism is every day becoming less powerful in Egypt; and an infidel, or unbeliever in the doctrines of Mohammed, is no longer looked upon with contempt or aversion. The arts, sciences, and customs of Asia are also fast losing their influence in Egypt, and are making room for those of France and England. The taxation of the pacha is, no doubt, essentially Asiatic; but his armies, his schools, and his manufactures, are all European. In Cairo, ten or a dozen years ago, a man who should have walked the streets in a European dress would have been pointed at, and even an the risk of being pelted; whereas at present (1839) the European dress is more respected than the Eastern. At no very distant period, the pacha sat squatted on carpets or ottomans, fed himself with his fingers, and drank brandy by stealth; but now he uses a high chair, dines from a mahogany table covered with a handsome Dunfermline table-cloth, and well furnished with the finest crystal, cutlery, and plate, with a bottle of claret to each guest. The same style is observed by all his principal officers; by all those, in short, who constitute the good society of Cairo and Alexandria.

It is not easy to exaggerate the vast influence of this extraordinary change. Unhappily, however, too much of its success depends on the life of an individual now in old age. But all who are anxious for the improvement of the human race, and especially of this most interesting country, must surely be desirous that the good which the pacha has effected should be rendered permanent. Now, this will be most likely to be secured by the great European powers guaranteeing the independence of Egypt, and securing the succession in the family of the pacha. As the price of such guarantee, they might fairly stipulate for the diminution of some of the grievous burdens now laid on the fellahs; and they would be censurable if they did not enforce the adoption of such measures as may seem best fitted to facilitate the transit of passengers and goods across the country.

At present the pacha is compelled to keep a military force on foot quite disproportionate to the population and resources of the country; and this compels him, even were he otherwise inclined, to impose the most oppressive taxes and exactions on his subjects. The settlement of the "Eastern question" is, therefore, a matter of vital importance to the people of Egypt and Syria as well as to the pacha; and it would seem reasonable to conclude, that as the pacha is really independent, he should be acknowledged to be such, and be relieved from the tribute he has still to pay to the Porte. *The government of the latter has been the most dreadful by far of all the plagues that ever fell upon Egypt*; and now that she has all but emancipated herself from this ruinous bondage, it certainly cannot be the wish, and it is difficult to imagine that it can be for the interest, of any Christian power to prevent her becoming completely independent.

The Mamelukes having been for a lengthened period the masters of Egypt, and acquired a high degree of celebrity, the reader may not be disinclined to have some account laid before him of that singular and formidable force. They were a body of cavalry, consisting originally of about 12,000 Circassian, Mingrelian, and Abazian slaves, captured by the Tartars under Jengis Khan, in their conquest of W. Asia in the 13th century. About the year 1230 they were sold by their first masters to one of the successors of Saladin. This prince had them trained up to military exercises, and soon obtained a body of the handsomest and best troops in Asia, though at the same time the most mutinous. The Mamelukes, like the Prætorian bands, speedily gave laws to their master. They became still more insolent under his successor, whom they deposed in 1250; and shortly after the disaster of St. Louis, they put to death the last Turkman prince, and enthroned in his stead one of their own chiefs, with the title of Sultan, retaining themselves that of Mamelukes, or Memlouks, which signifies military slaves.

The Mamelukes had no other rule of conduct and government than the violence natural to a licentious and insolent soldiery. The first leader whom they elected, having found employment for their turbulent spirit in the conquest of Syria, reigned 17 years; but after him none governed so long. The sword, the bow-string, or poison, public murder, or private assassination, were the fate of a series of tyrants, 47 of whom are enumerated in the space of 257 years. At length, in 1517, Selim, sultan of the Ottomans, having taken and hanged Touman Bey, their last chief, put a period to their dynasty.

The body of Mamelukes, however, continued to exist in Egypt down to the present century; but, singular as it may seem, notwithstanding a residence of nearly 6 centuries, they never became naturalized in the country. Disdaining to ally themselves with natives of Egypt, their wives were all brought from Georgia, Mingrelia, and the adjacent countries; and Volney remarks that their offspring invariably became extinct in the second generation: they were therefore perpetuated by the same means by which they were first established; that is, their ranks were recruited by slaves brought from their original country. The Circassian territories have been, in fact, in all periods, a nursery of slaves. The ancient Greeks, Romans, and Asiatics resorted to them for supplies; and from the æra of the Tartar conquest slaves of both sexes, carried first to Constantinople, have thence been dispersed throughout the provs. of the Turkish empire.

Towards the end of last century, when they constituted the whole military force, and had acquired the entire government of Egypt, the Mamelukes, according to Volney, did not exceed 8,500 fighting men, or, together with the Serradjes, a kind of mounted domestics, 10,000 in all, including a number of youths under 20 or 22 years of age. They lived under a system similar to that of the feudal clanships of Northern Europe—their beys keeping each in their pay generally from about 50 to 200, though one or two might have perhaps from 400 to 600 retainers. Some hundreds of them were dispersed throughout the country and in the villages, to maintain the authority of their corps, and collect tribute; but the main body constantly remained at Cairo. Strangers to each other, bound by no ties as parents or children, placed amongst a people with whom they had nothing in com-

mon, despised as renegades by the Turks, ignorant and superstitious from education, ferocious, perfidious, seditious, and corrupted by every species of debauchery, the disorders and cruelties which accompanied their licentious rule may be more easily imagined than described. Sovereignty with them was to have the means of possessing more women, toys, horses, and slaves, than others; of managing the court of Constantinople, so as to elude the tribute or the menaces of the sultan; and of multiplying partisans, countermining plots, and destroying secret enemies by the dagger or poison. The great agent in effecting all this being money, their only employment was to procure it, which they did by wresting it by violence from its possessor wherever it was to be found, and imposing arbitrary contributions on the villages and on the custom-house, which, in its turn, levied them again upon commerce. But, with all this, they were brave in the extreme. Their beys, and even the common soldiers, distinguished themselves by the magnificence and costliness of their accoutrements, though these were in general clumsy and heavy. Being trained from infancy to the use of arms and horsemanship, they were admirable horsemen; and used the scimitar, carbine, pistol, and *djerid* or lance, with almost unequalled skill and vigour. Hence, notwithstanding the defects of their armour, and the want of union in their movements, the Mamelukes were very formidable in the field; and had they been properly disciplined, would have been the finest body of cavalry that ever existed; nothing could exceed their boldness and intrepidity; and though they were foiled in their onset on the squares of Napoleon, they did all that the most unflinching courage and contempt of danger could effect. (*Volney*, i. 151—186.; *Gibbon*, cap. 59.) The Mamelukes are now extinct as a body, and almost as individuals. Even had they escaped the proscription of the pacha, they could not long have survived; for the conquests of the Russians, by putting a stop to the export of slaves from the Caucasian territories, has shut up the sources whence they drew their supplies of recruits.

History.— The origin of the Egyptian nation, and the history of their native princes, are involved in the greatest obscurity and uncertainty. This much, however, is established beyond the possibility of doubt, that the Egyptians had attained to great wealth and civilisation, and had established a regular, well-organised, and (if we may estimate it by its results) wisely-contrived system of government, while the greater number of the surrounding nations were involved in the grossest barbarism. At length, however, Cambyses, emperor of Persia, added Egypt to his other provinces. It continued attached to Persia for 193 years, though often in open rebellion against its conquerors. Alexander the Great had little difficulty in effecting its conquest; and it has been inferred from his foundation of Alexandria, which soon became the centre of an extensive commerce, that he intended to establish in it the seat of the government of his vast empire. On the death of Alexander, Ptolemy, the son of Lagus, became master of the country. Under this able prince and his immediate successors, Egypt recovered the greater portion of its ancient prosperity, and was for three centuries the favoured seat of commerce, art, and science. The feebleness and indolence of the last sovereigns of the Macedonian dynasty facilitated the conquest of Egypt by the Romans: Augustus possessed himself of it after a struggle of some duration, and for the next 666 years it belonged to the Roman and Greek empires, constituted their most valuable prov., and was for a lengthened period the granary, as it were, of Rome. In 640 Egypt submitted to the victorious Amrou, general of the caliph Omar; under whose successors it continued till about 1171, when the Turkmans expelled the caliphs: these again were in their turn expelled, in 1250, by the Mamelukes. The latter raised to the throne one of their own chiefs with the title of sultan: and this new dynasty reigned over Egypt till 1517, when the Mamelukes were totally defeated, and the last of their sultans put to death by the Turkish sultan Selim. The conqueror did not, however, entirely suppress the Mameluke government, but merely reconstructed it on a new basis, placing at its head a pacha appointed by himself, who presided over a council of 24 Mameluke beys or chiefs. So long as the Ottoman sultans preserved their original power and authority, this form of government, though about the worst that could have been devised had the interests of the country been ever so little attended to, answered their purpose of preserving Egypt in dependence, and of drawing from it supplies of men and money: but the power of the pachas declined with that of their masters; and latterly the whole executive authority centred in the beys, who, except upon rare occasions, paid little more than a nominal deference to the orders of the sultan.

This state of things continued till 1798, when a French army, commanded by Napoleon, landed in Egypt. The Mameluke force having been annihilated or dispersed in a series of engagements with the French, the latter succeeded in subjugating the country. Napoleon having returned to France, the French in Egypt were attacked in 1801 by a British army, by which they were defeated, and obliged to enter into a convention for the evacuation of the country. The British having not long after also evacuated Egypt, it relapsed into its former state of anarchy and barbarism, from which it was at last rescued by the good fortune and ability of Mehemet Ali. This extraordinary man, a native of an obscure village of Albania, having entered the military service, attained, partly by his bravery, and partly by his talent for intrigue, to the dignity of pacha in 1804. His subsequent history is well known. The massacre of the Mamelukes, in 1811, raised him to almost absolute power; and his victorious arms subsequently wrested Syria from the Grand Seignior. But he was compelled, in 1840, by the interference of the European powers, to relinquish all his Asiatic possessions. The treaty of London, in 1841, made the government of Egypt hereditary in his family; and it is now (1850) held by Abbas Pacha, one of his descendants.

EHRENBREITSTEIN, a strong fortress of Rhenish Prussia, on a steep and picturesque rock, 773 ft. in height, on the E. bank of the Rhine, opposite to Coblentz, with which it is connected by a bridge of boats. A tower or fortress is said to have been constructed on the summit of this rock by the Romans; and in modern times it was regularly fortified, a well was cut in the rock to the depth of 584 ft., and it was justly regarded as one of the principal bulwarks of Germany. It was unsuccessfully besieged by the French in 1795, 1796, and 1797; but it fell into their hands on the 27th of January, 1799, the garrison having been previously reduced to such a state of famine that a pound of horse flesh sold for 80 kr.! The French blew up the fortifications subsequently to the treaty of Luneville. They have, however, been reconstructed by the Prussian government since 1815, and rendered more extensive and formidable than ever. Ehrenbreitstein, with the new fortresses on the hill of the Chartreuse and the Petersberg, forms a portion of the grand military position of which Coblentz (which see) is the centre. The town of Ehrenbreitstein, situated at the foot of the castle rock, has about 2,500 inhab. (*Schreiber, Guide du Rhin, &c.*)

EICHSTADT, a town of Bavaria, circ. Regensburg (Ratisbon), cap. of the mediatised dom. of the Duke of Leuchtenberg, on the Altmühl, 41 m. W.S.W. Ratisbon. Pop. 7,500. (*Möller*, 1840.) It is well built, and contains the summer residence of the ducal family, with a Brazilian cabinet, and other collections of art and science; a cathedral, in the Gothic style, commenced in 1259; with several other churches, a Capuchin convent, bishop's palace, Latin school, ecclesiastical seminary, public library, and museums of painting, antiquities, and natural history. It has four suburbs. About 1 m. distant is the Willibaldsburg, a castle on a height, believed to have replaced a Roman fortress. It has a well of great depth, and its trenches have been cut in the solid rock; but it is now in a state of decay. Eichstadt has manufactures of hardware, earthenware, and woollens; besides breweries and stone quarries. The principality of which it is the cap. consists of about 217 sq. m., with a pop. of 24,400. It originally belonged to the prince-bishops, successors of St. Willibald, by whom Eichstadt was built in the 8th century; but, in 1817, it was given to Prince Eugene Beauharnois, to whose memory the citizens have erected a handsome monument in the vicinity. (*Cannabich; Berghaus.*)

EIMBECK, or EINBECK, a town of Hanover, cap. principality Grubenhagen, distr. Hildesheim, on the Ilme, by which it is surrounded, 37 m. S. by E. Hanover. Pop. 5,400. It is enclosed by walls and broad ditches, and is ill built and dirty. It has two hospitals, and a superior school. Eimbeck was formerly celebrated for its beer, which, like London porter, was sent all over the empire. At present, Eimbeck is less celebrated for its beer; but it has some breweries, with fabrics of woollen and linen cloth, linen yarn, stockings, shoes, leather, and chemical products, and a brisk trade in flax and other agricultural produce. In 1836 it suffered severely from a fire.

EISENACH, a market-town of Central Germany duchy of Saxe-Weimar-Eisenach, cap. of the principality or prov. of same name, on a gentle declivity at the confluence of the Nessa and Hörsel, encircled by wooded hills, 44 m. W. by S. Weimar, and 91 m. N.E. Frankfort-on-the-Mayn. Pop., with its suburbs, 9,325. It is the principal town in the Thuringian Forest, and is well built and laid out, paved and well lighted. It has five suburbs, with four churches, a handsome market-place, in which is the ducal residence, and the new citizens' academy, estab. 1825: a mint, four hospitals, a workhouse, house of correction, town-hall, gymnasium, teachers' seminary, school for foresters, schools for the indigent, and various other public and benevolent institutions. Formerly, this was the most flourishing of all the manufacturing towns between Leipzig and Frankfort.

it was particularly noted for its manufactures of serge, plush, and other woollen stuffs; but during the period of the "Continental System," the capitalists of Eisenach forsook the manufacture of wool for that of cotton, which, on the re-opening of the continental ports to British goods, was all but annihilated. It has now only one considerable woollen yarn factory, a few others of woollen and cotton fabrics, white lead and soap, and some tanneries and dye-houses. About 1¼ m. S. of the town, is the celebrated castle of Wartburg, in which Luther passed his 10 months durance, under the friendly arrest of the Elector of Saxony. Travellers are still shown the room he occupied, though the castle is, in great part, in a state of decay. (*Berghaus; Cannabich, &c.*)

EISLEBEN, a town of the Prussian states, prov. Saxony, distr. Merseberg, 19 m. W. by N. Halle, and 35 m. S.W. by S. Magdeburg. Pop. 7,523. It is situated on elevated ground, near the Böse, and is divided into an old and a new town, the former of which is encircled with walls and ditches. It has several suburbs; an ancient castle, formerly the residence of the counts Mansfeld; 4 churches; a Protestant gymnasium, and 2 hospitals; and is the seat of a council for the circle, a judicial tribunal for the circle and town, a board of mines, &c. But it derives its entire celebrity from its being the native place of the great reformer, Martin Luther, born here on the 10th of November, 1483; and who also died here on the 13th of February, 1546. The house in which he was born, and where he breathed his last, was almost wholly destroyed by fire in 1689. Being afterwards rebuilt, it was converted into a gratuitous school for poor children, and a teacher's seminary; the cap, cloak, and other relics of Luther, are preserved in it, and shown to visiters; and his bust is placed over the door. In one of the churches of the town is a pulpit, from which he occasionally preached; and here, also, are metal busts of himself and Melancthon. Luther was the son of a miner at Eisleben, and the greater part of its inhab. continue to work in the copper and silver mines in its vicinity; but it has also some potash and saltpetre factories, and one of tobacco, besides several breweries. (*Zedlitz; Berghaus, &c.*)

EKATERINEBURG, a town of the Russian empire, gov. of Perm, near the bottom of the E. declivity of the Oural chain, on the Iset, and in the line of the great road leading from Perm to Tobolsk. Pop. (in 1830) 10,695. It was founded by Peter the Great in 1723, and is regularly built and fortified. Besides being the key of Siberia, it is the cap. of the richest mining district of the empire; has a board for the general direction of the mines, a mint for the coinage of copper, and extensive iron and copper foundries in its immediate vicinity. Its inhab., who consist mostly of bondsmen belonging to the crown and individuals, are almost wholly employed in the mines and working metals.

EKATERINOSLAF, a gov. of European Russia, having the sea of Azoff, and the gov. of Taurida on its S. frontier. Area and pop. both doubtful; but Schnitzler estimates the former at 25,500 sq. m., and the latter at 610,000. Nearly two thirds of the surface consist of a vast steppe or plain, without trees, and with a thin arid soil. The portions on this side the Dniepr, by which it is traversed, are the most fertile. Grazing is the principal occupation of the inhab., who possess immense numbers of horses, cattle, sheep, hogs, goats, &c. The breed of sheep has been materially improved. Bees are abundant; and the silk-worm is raised in the vicinity of Mariopoul. The pop. consists principally of Russians and Cossacks; but there are several other races, among whom may be mentioned 10,000 German colonists. Principal towns. Ekaterinoslaf, Bakhmont, and Mariopoul.

EKATERINOSLAF, the cap. of the above gov., on the Dniepr, immediately below the cataracts, lat. 48° 27′ 20″ N., long. 34° 55′ E. Pop. 9,000. Catherine II. laid the first stone of this town, in presence of the emperor Joseph II., in 1787. It is designed on a large scale, and its broad rectangular streets are still very far from being completely filled up. Exclusive of the gov. offices, it has a gymnasium, and some other literary as well as charitable institutions.

ELBA (the *Œthalia* of the Greeks, and the *Iloa* or *Ilva* of the Etruscans and Romans), an island of the Mediterranean, or rather of the Tyrrhene sea, belonging to Tuscany, from which it is separated by the strait of Piombino, 7 or 8 m. across, being the largest and most important of those in the possession of the grand duchy; between lat. 42° 43′ and 42° 53′ N., and lon. 10° 5′ and 10° 25′ E. Shape irregular, but not very unlike that of the letter T, having the upper end towards the E. Length, E. to W., 16 m.; breadth, varying from 2 to 12 m.; circumference, about 68 m.; area, 150 sq. m. Pop. in 1835, 16,865. It is covered with mountains; a central chain runs through its whole extent, the principal summit of which, towards its W. extremity, is 2,624 ft. in height. Granite abounds, especially in the E. part of the island, and it in a great measure constitutes the numerous rocky shelves with which the coasts are bristled. Geologically the island affords no traces of the action of fire. Secondary and tertiary formations, calcareous, aluminous, or magnesian, are plentiful in the W.; on the E. shore the surface is covered with a reddish vegetable earth, many feet in thickness, and furrowed with ferruginous veins. Iron is every where abundant:

> Insula inexhaustis chalybum generosa metallis.
> *Æneid.* x. 174

besides which, copper, calamine, antimony, alum, asbestos, opal, tourmaline, and various kinds of marble are found. There is no navigable river, but there are many small rivulets used to turn mills; the largest are on the N. side of the island, where there are also some salt marshes. Climate excellent, the heats being neither excessive, nor of long duration; nor the cold severe. Except in a few particular localities, Elba is decidedly healthy. The appearance of the island is far from prepossessing; and the cultivable land is but of very limited extent. "Ruins scattered over the face of the country, wretched hamlets, two mean villages and one fortress—these, generally speaking, are all that meet the sight on the side of the island which extends along the channel of Piombino. The traveller, however, finds the scene changed on visiting Monte-Grosso (in the N.E.), covered with myrtles, rosemary, the mastick tree, laurel-thyme, &c.; and Monte-Giove, where the green holm oak, cork tree, laurel, yew, and a small number of wild olives, afford an agreeable repose to the eye. The branches of the hills, which stretch towards Lungone (S.E.) present only naked rocks, almost destitute of verdure. In the centre of the island the hillocks are overspread with olives, mulberries, and vines. On the W., the summits and declivities of the mountains consist of granitic rocks. Industry and toil render fertile the small quantity of earth which is collected at their base." (*Berneaud's Voyage to Elba*, pp. 94, 95.)

Though the soil is throughout hilly, and the vegetable earth generally shallow, little labour suffices to render it productive. Agriculture, however, is nearly confined to the lowest hill ranges, and the sheltered valleys between them. The corn crop is trifling; at the beginning of the present century De Berneaud says it would have hardly supplied the wants of the inhab. during ½ part of the year. Maize and pulse are grown. The produce of flax is very small, and hemp is not cultivated: the thread that is used is manufactured from the leaves of the numerous aloes with which the fields of Lungone are covered. All kinds of fruit trees common to Europe grow, excepting the apple; but they are generally ill cultivated, and their fruit inferior. The vintage takes place in September. Both white and red wines are produced; the former are chiefly for home consumption: the latter in small quantity, and good; constitute a chief article of export. The most esteemed is the *Alcatico*, obtained from a superior red Muscadine grape. The oak, beech, chestnut, poplar, alder, buckthorn, &c., are amongst the forest trees; but timber fit for carpenter's work is rare, the island affording little more than mere underwood. Pasturage is scarce, and cattle few: they consist of asses, some mules, and a few stunted horses, oxen, and cows. The number of pigs, sheep, and goats is more considerable; but the breeds are very inferior. The sea around Elba swarms with fish, including tunnies, anchovies, soles, the *donzellina* (*labrus julis*, Linn.), mullet (*mullus barbatus*), &c. Of these the tunny and mullet are taken in large quantities, and from 5,000 to 6,000 tons of the former are annually exported, besides a considerable supply of the latter.

But the chief wealth of Elba is in its mines of iron and salt, which have been wrought from a very remote epoch. The principal mine, near the little town of Rio, on the E. side of the island, consists of an entire mountain about 530 ft. in height, which, to use the words of Pliny, is, *totus ex ea materia*. It supplies iron ores in every known variety; some yielding from 0·75 to 0·85 of excellent iron, from which a very good steel is obtained. The ancients made many deep excavations and winding galleries in this mine; and pickaxes, nails, lamps, and various other antique articles have been from time to time discovered in it. The average produce of iron ore from Elba has of late years been nearly 18,000 tons a year, worth about 21*s*. a ton; the whole of which is taken to the opposite coast of Tuscany to be smelted. In 1836 there were 208 miners, and 60 carriers employed in conveying the ore to the place of embarkation. The miners work 8 or 9 hours a day, and are paid 40 lire (about 25*s*.) a month, 5 per cent. of which is deposited for a pension from the government, for themselves or their widows. Marine salt is manufactured by evaporation in four basins, near Porto Ferrajo. About 4,000,000 lbs. are produced annually, and nearly 100 persons employed in the manufacture. The other branches of industry are principally domestic.

Commerce is chiefly limited to the importation from Leghorn and Marseilles of grain, cheese, cattle, and other articles of prime necessity; and the exportation of tunny, salt, iron ore, Vermont and Aleatico wines, vinegar, and granite There are two towns—

Porto Ferrajo on the N., and Porto Lungone on the E. coast. The former, which is the cap., is built on a peninsula, between which and the main land is a spacious and good harbour. Pop. about 3,000. It is fortified; its streets, which are wide, clean, and well paved, are mostly terraces cut out in the rock; houses small, badly divided, built of brick, and generally two stories high. It is the residence of the governor of the island and of a military commandant, the seat of a civil and criminal court, and contains two churches, with a prison, lazaretto, hospital, and some subterraneous corn magazines. Porto Lungone, with 1,500 inhab., has a tolerable harbour, and is well fortified and difficult of access. The ordinary food of the pop. consists of dried pulse, cheese, bacon, smoked provisions, coarse bread, fresh fish, and a few vegetables; fresh meat and white wine are used only on holydays. Their houses and furniture are equally simple and solid. Bowls, nine-pins, quoits, tennis, and firing at a mark, are the chief sports of the men; there is not much gaiety exhibited in the amusements of the island generally. Robbery is rare, murder still more so; the number of paupers inconsiderable.

The Etruscans, Phocians, Carthaginians, and Romans successively possessed Elba; in the middle ages it was subject to the Saracens, Pisans, Genoese, Lucchese, the counts of Piombino, Orsini, &c. In the 16th century it was ravaged by Barbarossa, and soon afterwards fell to the crown of Naples. Under the French empire it formed part of the kingdom of Etruria; but its chief historical interest is derived from its having been the residence and empire of Napoleon from the 3d of May, 1814, to the 26th of Feb., 1815. During this short period a road was opened between the two principal towns, trade revived, and a new æra seemed to have opened for Elba. (*De Berneaud, Voyage to the Isle of Elba; Serristori, Statistica; Bowring, Report on Tuscany.*)

ELBE (an. *Albis, flumen inclytum et notum olim*, Tacit. Germ. § 41.), a large and important river of Europe, through the central part of which it flows, generally in a N.W. direction from Bohemia to the German Ocean. Its total length is about 720 m., during which course it passes through Austria, Saxony, Prussia, Anhalt-Dessau, Hanover, Mecklenburg, Denmark, and Hamburg. Its principal affluents are—on the left, the Moldau, Eger, Mulda, Saale, Ohre, Ietze, Pimenau, and Oste; and on the right, the Iser, Schwarz Elster, and Havel, with the Spree. Dresden, Meissen, Torgau, Magdeburg, Leutzen, Lauenburg, Harburg, and Hamburg, are situated upon its banks. It originates in several streams on the S. side of the Schneekoppe (*Snow-cap*), one of the Riesengebirge chain in the circ. of Bidschow in Bohemia, about 4,400 ft. above the level of the sea. At first its direction is E., next S.: at Pardubitz it turns W., and at Kolin N.W., from which direction it does not afterward greatly vary. After leaving Torgau it runs for the most part through a flat country. Near Königgratz, about 40 m. from its source, its elevation above the sea is only 658 ft., at Melnik 454 ft., at Schandau 341 ft., at Dresden 279 ft., at Magdeburg 136 ft., and at Arneburg (Brandenburg) 176 ft. only. Above Melnik it is navigable for only small craft, but vessels of 1,500 centners burden may come up to that town. Its volume receives a considerable augmentation by the union of the Moldau; and when it enters Saxony the Elbe is upwards of 350 ft. in width. Between Hamburg and Harburg it is divided into several arms, inclosing some large islands; but these soon afterwards reunite, and the river proceeds in an undivided stream to its mouth. Its æstuary, opposite Cuxhaven, 12 m. wide, is encumbered with sand banks, which render its navigation difficult; but ships drawing 14 ft. water come up to Hamburg at all times, and those drawing 18 ft. come up safely at spring tides.

The bridges across the Elbe are numerous above Torgau; but below that town communication between the opposite banks takes place by means of ferries only. It is connected by the Finow and Frederick William canals within the Prussian dom. with the Oder and the Vistula, and by that of Steknitz with the Trave near Lubeck; while, by means of the railroad between Budweis on the Moldau and Linz, it has been placed in communication with the Danube; and besides this, it will shortly be connected with the Danube by means of the Bavarian canal, now in the course of being excavated. (See *antè*, p. 308.)

In a commercial point of view, the Elbe is a river of the highest importance, being the channel by which the countries of N.W. and central Germany, from Hamburg to the E. parts of Bohemia, export their surplus products, and receive those they import from abroad. By the treaty of 1815 it was provided that its navigation should be free throughout its whole course. But the governments through whose dominions the river flows have contrived to evade this provision, and a series of vexatious tolls and heavy duties are imposed on foreign merchandise passing upward. Prussia obliges the transfer at Magdeburg of all goods (excepting mill-stones and earthenware) passing downward to her own vessels. (*Bruguière, Orographie de l'Europe; Berghaus; B. Ritter, &c.*)

ELBERFELD and BARMEN, two contiguous towns of Rhenish Prussia, circ. Elberfeld, distr. Dusseldorf, forming one municipal body, and constituting the most important manufacturing community in the Prussian dominions. They are situated in the valley of the Wüpper, on the N. side of the river, and form, in fact, one town; 15 m. E. by N. Dusseldorf, and 23 m. N.N.E. Cologne; lat. 51° 15′ N., long. 6° 32′ 13″ E. United pop. in 1846, 67,940, of which Elberfeld has rather the largest proportion. Elberfeld, which has risen to its present extent and importance almost wholly within the present century, is not regularly built, but it contains some good houses, most of which have gardens attached to them. It is the seat of the council for the circle, of the judicial and police courts, a commercial tribunal, and a board of taxation, and has 2 Protestant churches, a R. Cath. church, gymnasium, citizens' and commercial schools, a school of industry, numerous elementary schools, a town-hall, exchange, theatre, general hospital, 2 orphan asylums, 2 workhouses, a *mont-de-piété*, founded in 1821, and a children's savings' bank, established in 1822. There are several *casinos*, or club-houses, and a new promenade has been laid out. In the winter there are frequent balls and concerts. Its principal manufactures are silk, which in the circle employ about 6,000 looms; with cotton and linen fabrics, linen and cotton thread, velvet, lace, ribands, with establishments for calico printing, &c. In the cotton factories many steam engines are employed, and there are numerous water-mills and establishments for the bleaching of linen. But the most celebrated of the Elberfeld factories are those appropriated to the dyeing of Turkey red. In this art, whether it be owing to the air or the water, or to some peculiar process or mystery, the dyers of Elberfeld have attained to unrivalled excellence; and notwithstanding all our efforts at rivalry, our colours are neither so lasting nor brilliant as theirs. So much so is this the case, that considerable quantities of yarn are annually exported from Glasgow and other places in the United Kingdom to be dyed at Elberfeld, and are again imported to be wrought up. Elberfeld is the seat of the Rhenish Foreign Trade Company, the German-American Mining Union, the Rhenish Prison-Society, a Bible and a scientific society, and many benevolent institutions, a general fire and life insurance office, &c.

Barmen is a long straggling town, formed by the union of several villages. It has 4 churches, one of which, erected in 1830, for the use of the R. Cath. pop., was liberally contributed to by the Protestants; a high school, a deaf and dumb asylum, exchange, 2 discount banks, a police court, and a commercial tribunal. Its manufactures are nearly the same as those of Elberfeld, with the addition of steel and plated articles, hardware, chemical products, and earthenware. Along the banks of the river are some extensive meadow grounds, used for bleaching linen, which branch of industry contributed greatly to the rise of both towns. Numerous kitchen gardens surround Barmen, the cultivation of which occupies many individuals. The road through the valley of the Wüpper, for a distance of perhaps 6 m. adjacent to these towns, is lined on either side with mills, factories, and habitations; this being the most populous as well as the most industrious district of the Prussian monarchy It is estimated that altogether nearly 16,000 hands are employed in manufactures in and near Elberfeld and Barmen, and that the value of the manufactured goods annually amounts to 12,000,000 or 14,000,000 rix-dollars, or from 1,800,000*l.* to 2,100,000*l.* Wages, owing to the increasing demand for labour, are high at Elberfeld, and the working classes are comparatively well off. Mr. Symmons mentions that in the dye-works men earn about 12*s.* a week for the first-class work, and 9*s.* 1*d.* for the second class. Weavers earn from 8*s.* 6*d.* to 16*s.* a week, and in some rare instances as much as 3*s.* 4*d.* a day. (*Zedlitz, Der Preussische Staat*, iii. 427—429.; *Berghaus; Symmons's Arts and Artizans, &c.* p. 78.)

ELBEUF, a town of France, dép. Seine Inférieure, cap. cant., on the Seine, a tributary of which intersects it, 11 m. S. by W. Rouen, and about the same distance N.W. Louviers. Pop. (1846) 16,010. It is generally ill built and ill paved, but it possesses a tolerably good square, and some handsome buildings. It has no public edifices worthy of notice except 2 churches, one of which has some stained glass, presented by the cloth manufacturers of the town in 1466, exhibiting a curious emblematical device indicative of their profession. Elbeuf has been long celebrated for its woollen manufactures, and is at the present moment the principal seat of that branch of industry in France. In 1787, Elbeuf produced about 18,000 pieces of cloth yearly; in 1814, the quantity had increased to from 20,000 to 25,000 pieces; and in 1834, the produce was estimated at from 60,000 to 70,000 pieces of 40 ells (*aunes*) each, of the value of about 50,000,000 fr., or 2,000,000*l.* sterling. The total amount

of capital vested in the manufacturing establishments was estimated at the same period at 150,000,000 fr. It was then also supposed that about 2,800,000 kilog. of wool were annually consumed in the manufacture, and that about 20,000 men, women, and children were employed in the different departments of the business; but of these many belonged to the surrounding districts, and returned from town at night to their lodgings in the country. "The working classes of Elbeuf enjoy, in general, easy circumstances; they have always lived happily, for two very powerful reasons: the first, because the manufacturers are constantly in their workshops, work themselves with their workmen, know their wants, and identify themselves with all that happens to them for good or evil; the second, because the price of weaving varies very little, the proportion between times of prosperity and times of distress being 20 per cent. at most on the amount of wages, and that only in certain departments. The work-people are divided into 3 classes; the adults, the day labourers, and the weavers. The adults receive a salary which varies according to their age, strength, and intelligence, from 75 c. to 1 fr. 50 c.; largest number receive the average of 1 fr. 10 c. Young men from 12 to 18 years of age are classed as adults; children from 9 to 12 gain 50 c. to 75 c. per day. The day labourers, taken at large from 18 years to 60, are paid from 1 fr. 50 c. to 2 fr. per day, 1 fr. 75 c. being the average; this class is but little intelligent. The weaver gains from 2 fr. to 3 fr. per day, the ordinary average being 2 fr. 50 c. The women receive from 75 c. to 1 fr. per day. The young girls from 9 to 16 years old earn from 50 c. to 80 c. The day's work begins at 5 in the summer, and ends at 8 in the evening; half an hour for breakfast, and an hour for dinner. In winter they work from 7 to 10 hours. There are in Elbeuf a gratuitous school of mutual instruction for boys, a gratuitous institution for girls, an infant school, and a gratuitous Sunday school for the adult workmen; and, independently of these public institutions, there are a number of private schools." (*Letter from the Mayor of Elbeuf*, in *Rep. of Hand-loom Weavers*, 1839.) M. Villermé states that, compared with the work-people of Rouen, those of Elbeuf are much the more correct in their morals and habits. They are, he says, for the most part industrious and economical; and many of them are supposed to have saved a certain portion of their earnings, especially those who live out of town.

Elbeuf is said to have existed in the 9th century, but its origin is uncertain. During the administration of Colbert, its manufactures were in a comparatively flourishing state; but they suffered severely by the revocation of the edict of Nantes. At the beginning of the 18th century, its manufacturers had begun to establish commercial relations with Spain and Italy; and it now has a direct trade not only with those countries, but with America, Germany, and the Levant. (*Villermé, Etat Physique et Moral des Ouvriers, &c.; Encyc. des Gens du Monde.*)

ELBING, a town of Prussia, prov. Prussia, cap. circ. on the Elbing, about 5 m. from where it flows into the S.W. angle of the Frische Haff, 31 m. S. E. by E. Danzig, and 58 m. S. W. Königsberg; lat. 54° 8′ 20″ N., long. 19° 22′ E. Pop. 18,725. (*Berghaus.*) It is divided into the old town, new town, and suburbs, part of which are enclosed, together with the old and new town, within a line of fortifications. The ramparts and walls are lofty, flanked with towers, and surrounded with ditches, but they have not been in a state of efficient defence since 1772. The town is entered by 7 gates. The new town is well built, but it is quite otherwise with the old town. Elbing is well lighted; it has a Catholic and 9 Protestant churches, a synagogue, a gymnasium with a library, 6 hospitals, an orphan and other asylums, a convent for old women, a house of industry, established by an Englishman named Cowle, in which 400 children are educated, and numerous schools for both sexes, and all classes; education among the poor having made great progress in this town. It is also the seat of a council, a judicial court for the circle, and a municipal tribunal. It has a garrison, a bank, exchange, fire assurance office, numerous warehouses, principally in one of its suburbs, and many sugar refineries, with pearl-ash, vitriol, tobacco, linen, sail-cloth, oil, starch, soap, chicory, and other factories, in some of which large steam engines are employed. The trade of Elbing is extensive: its exports consist chiefly of corn, timber and staves, hemp and flax, the produce of its own manufactures, feathers, horse-hair, wool, fruit, butter, packthread, &c. The Krafuhl canal connects Elbing with the Nogat. The Frische Haff is too shallow to be navigated by vessels of any considerable burden, so that the trade of the town by sea has to be carried on, by means of small vessels or lighters, through Pillau at the mouth of the Frische Haff. About 25 ships, besides river craft, belong to merchants of the town. Elbing was founded about 1237, and became afterwards one of the Hanse Towns. It was united to the Prussian dom. in 1772. (*Zedlitz, Der Preussische Staat*, i. 472—474; *Berghaus.*)

ELCHE (an. *Ilici*), a town of Spain, prov. Valencia, near the left bank of the Elda, in a plain almost entirely covered with palm trees, 15 m. W.S.W. Alicant, and 8 m. W. from the Mediterranean. Pop., including that of the suburb of St. John, 22,828. (*Miñano.*) It is surrounded by walls, has some good streets and squares, and 6 public fountains, but of these one only has potable water; 3 par. churches, the principal of which is a fine building, with a majestic dome; 3 convents; a magnificent old castle, belonging to the Duke of Arcos, on whose estate the town is built; a barrack for cavalry; 3 primary schools, and a grammar-school. It has manufactures of coarse linens and cottons; 10 flour-mills; with distilleries, tanneries, &c.

Elche might, with propriety, be called the "city of dates," being every where surrounded by plantations of palms. "It may," says Mr. Inglis, "be called a flourishing city. Besides its large produce of dates, the country round abounds in barilla, that exported from Alicant being chiefly raised in the vicinity of Elche. A great proportion of the dates imported into England as the produce of Barbary, are from this city. The wages of field labour here are 3 or 4 reals; and every thing is proportionally cheap: barley bread, which is much used in this neighbourhood, is sold at 2 quarters, less than 1 farthing per lb.! Elche has also the important advantage of being less overrun with priests and friars than most other Spanish towns." (ii. 227.) Elche is the native country of Don George Juan, a distinguished mathematician and natural philosopher, the companion of Ulloa, in the commission sent to Peru, towards the middle of last century, by the French and Spanish governments, for the measurement of a degree of the earth's surface. Elche was recovered from the Moors in 1363.

ELCHINGEN, a small village of Bavaria, on the N. bank of the Danube, about 7 m. N.W. Ulm. This village was the scene of an obstinate engagement between the French, under Marshal Ney, and the Austrians, on the 14th of Oct., 1805: the former at length succeeded in carrying the bridge and position of Elchingen, and by this success contributed materially to the capture of Ulm, which, three days after, surrendered to Napoleon. Ney was rewarded for his gallantry on this occasion with the title of Duke of Elchingen.

ELEPHANTA, a small island on the W. coast of Hindostan, presid. Bombay, prov. Aurungabad, on the E. side of the harbour of Bombay. It is about 6 m. in circumference, and consists of two long hills and a narrow valley between them. It is named *Garapori* by the Hindoos: the Portuguese gave it the name of Elephanta, from a colossal elephant, about three times the natural size, hewn out of the solid rock, and standing about ¼ m. from the landing-place, but which has now almost entirely fallen to decay. A gentleman who visited the island in 1836, reports, that only three legs and a part of the fourth were then remaining. This island is celebrated for some remarkable cave-temples, so many of which exist on the W. side of India. In the face of a hill, about ½ m. from the landing-place, is the first cave; little of which, however, appears to have been completed. About ¼ m. farther, is the great cave, an excavation 130½ ft. from N. to S., by 133 ft. from E. to W.; its ceiling flat, varying from 15 to 17½ ft. in height, and supported by 26 pillars and 16 pilasters. It has three entrances, — on the N., E., and W.; the front of each consisting of 2 pillars and 2 pilasters; but the N. front is the principal, and directly faces the remarkable triad or three-headed figure, — the principal object within the temple. This is a gigantic bust, 15 ft. high, composed of three colossal heads; the front face having a placid and agreeable physiognomy; that on the left being to all appearance a female, and also mild looking; but that on the right, according to most travellers, having a repulsive aspect. The latter, as well as the front face, has the third eye in the forehead, so characteristic of Siva. Indeed, in the opinion of the best authorities (see *Erskine*, in *Trans. of the Bombay Lit. Soc.* i.; *Sykes*, in *Journ. of the Asiat. Soc.* v. 81—90., &c.), the whole three-headed figure relates to Siva only, and not to a trinity of Brahma, Vishnu, and Siva, as has sometimes been imagined. Similar busts abound in the Brahminical caves at Ellora (which see) appropriated to the worship of Siva. This figure has originally had 6 arms, each of the hands of which held some object; but all are now greatly mutilated.* The niches on either side the triad are of considerable size, and crowded with figures, among which, as well as in the other compartments around the temple, Brahma, Vishnu, Paravati, Kartik, Ganesa, and other Hindoo divinities, may be recognised, but always in a condition inferior to Siva. On either side of the principal figure is a small dark chamber, probably anciently devoted to the use of the Brahmins; and there are three

* In the corresponding triads at Ellora, most of which are perfect, the hands of the front figure contain a rosary and a cocoa-nut; of the left hand one, a looking glass and pencil brush; and of the right hand one, a dish and a *cobra de capello*. The snake alone is now conspicuous in that of Elephanta.

separate sanctuaries within the temple, each containing a figure of the *lingam*. The columns and other portions of this cave are ornamented in a most elaborate manner, and, altogether, the temple within presents an imposing appearance. From some cause, however, it is not much frequented by pilgrims: several of its pillars have been thrown down; it is in part mouldering away with damp, and becoming choked with earth; and, unless some effectual means be speedily taken for its preservation, it will in a few years be in a state of irreparable decay. (*Erskine*, in *Bombay Trans.; Sykes, Asiat. Res.; Grindlay's Views; Forbes, Heber, &c.*)

ELEPHANTINE', the last of the larger islands, at the extremity of the cataracts of the Nile, immediately opposite to Assouan, near the S. boundary of Egypt; lat. 20° 5' 2" N., long. 32° 54' 49" E. Placed at the threshold of the kingdom, Elephantiné has been justly called the key of Egypt, and claims some importance as a military post. Under Psammeticus it contained an Egyptian garrison, to protect the country from the inroads of the Ethiopians. Herodotus (*Euterpe*, § 30.) found it occupied with Persian troops; and in Strabo's time, the Romans had three cohorts there, to guard what Tacitus has expressively called the *Claustra Romani imperii*. (*Strabo*, lib. 17.; *Tacit. Annal.*, lib. 2. § 61.)

The base or kernel of the island is a granite rock, covered with the rich alluvial soil brought down by the river; and to prevent this from being again washed away, it has been protected by quays, which have been repaired from time to time, so that it is impossible to fix the epoch of their first construction. The richness of its soil admits of the island being cultivated in every part; and though it be less than 1 m. in length, and not ¼ m. broad, it presents a verdure and fertility equal to the finest spots of Egypt, and forms a refreshing contrast to the sterility to which, for many miles round, beyond the banks of the Nile, the country is doomed. Hence, the Arab name for Elephantiné, is *Djezirct el-Chaf*, "the islet of flowers." The S. extremity of the island only is rocky and elevated, and the bare rock comes down to the edge of the river; but the rest of it is covered with shrubs, groups of palms, mulberry gardens, acacias, dates, and sycamores interspersed amongst human habitations, mills, canals, and the ruins of temples. (*Ritter's Africa*, 3d division, § 26.; *Richardson's Travels, &c.*)

The wreck of the ancient town forms a sort of plateau, and gives to the island its greatest elevation. Here, till recently, were the remains of two temples, one dedicated to Cnouphis by the pharaoh Amenophis III.; and one dedicated to a triad consisting of Cnouphis, Sate, and Anouke, the latter being of the age of Alexander, son of Alexander the Great. But we regret to say that these interesting ruins no longer exist, having been barbarously demolished in order to employ the stones in building barracks and warehouses at Assouan. In the quay Champollion found fragments of edifices that had been constructed by the pharaohs Mœris, Mandouel, and Rhamses the Great, or Sesostris. (*Lettres de l'Egypte*, p. 172.)

The most interesting part of Elephantiné is its quarries. These furnished, in the reign of Amasis, one of the greatest marvels Herodotus (*Euterpe*, § 175.) saw at Sais — a single block of granite, out of which was cut an entire temple. No fewer than 2,000 men are said to have been occupied during three years in transporting this huge monolithic edifice down the Nile to its destination. The quarry affords ample proofs of the mechanical skill and patient labour of the ancients. Immense columns have been evidently cut out of the solid rock in one mass. The marks of the workman's chisel and wedge are as fresh as if they had been imprinted yesterday, and the tracks of carriage wheels are equally distinct. Some sculptures are merely blocked out, while others appear in a more advanced stage, and a large sarcophagus is two thirds cut out of the rock.

Besides the remains of Egyptian architecture, others have been found which would appear to belong to the Romans, particularly a large wall to the S. Another, from 40 to 45 ft. high, and 609 ft. long, of a convex construction, had a Nilometer fixed in it, which, there can be little doubt, was the one mentioned by Strabo (lib. xvii.). Champollion, however, says nothing of the Nilometer; and it may, perhaps, have been destroyed as well as the remains of the temples. Over the ruins of the ancient town are strewed many fragments of pottery, among which other memorials of the Romans have been found, consisting of tokens or coins of red earthenware, having the name *Antonius* inscribed on them in a Greek running hand. (*Ritter*, ib.; *Jowett's Christian Researches*, p. 40.; *Conder's Egypt*, ii. 191—193., *&c.*)

Elephantiné is inhabited by Nubians, who are said to be kind and hospitable to strangers. The women are described by Dr. Richardson as possessing much personal beauty, somewhat too freely displayed. (*Light's Travels*, pp. 51—53.; *Richardson's Travels, &c.*)

ELGIN, a royal bor. and market town of Scotland, co. Elgin or Moray, on the Lossie, 5 m. from its influx into the sea at Lossiemouth, 120 m. N. Edinburgh, and 59 N.W. Aberdeen. The situation of the town is very agreeable; having the Lady Hill, a beautiful verdant mount on the W., and the Quarrywood Hill on the E., clothed with wood to the summit. Pop. in 1831, 4,493; inhab. houses, 784. Pop. of town and parish in 1831, 6,130; in 1811, 6,083.

The town consists of one street, about a mile in length, with a few small streets intersecting it at various distances. The principal street is handsome, well paved, and so wide that a fine new church, recently built, stands in the middle of it, on the site of an old church, called St. Giles. This new church, which has a richly ornamented cupola 112 feet high, and a spacious Doric portico, is one of the most distinguished of the numerous public buildings which Elgin contains. Grey's Hospital (founded in 1819 for the reception of the sick poor of the town and county of Elgin), a building of two stories, of Grecian architecture, with a projecting portico of four Doric columns, and the centre crowned with a dome, stands on a rising ground at the W. end of the town, and forms a beautiful termination of the High Street. At the opposite end of the town stands the Elgin Institution, a quadrangular building of Grecian architecture, founded by the late General Anderson, for the education of youth, and the support of old age. This institution, which cost 12,000*l.* (its founder having bequeathed 70,000*l.* altogether for the charity), is calculated to contain 10 aged and indigent persons, and 60 children, and to afford gratuitous education for about 230 children belonging to the town and parish. The other public buildings are the academy, assembly rooms, Trinity Lodge rooms, jail and court-house, and chapels belonging respectively to the Episcopalians, the United Associate Synod (two), the Independents, and the Roman Catholics. But Elgin, which was the seat of the bishops of Moray, is principally celebrated for the ruins of its cathedral, one of the most magnificent in the kingdom. It was built in 1224, the cathedral establishment having been transplanted at that time from Spynie to Elgin. The original structure (with other sacred buildings, and no small portion of the town) was burned in 1390 by the Earl of Buchan, youngest son of Robert II., known by the name of the "Wolf of Badenoch." It was rebuilt by the bishops of Moray, in the form of a Passion or Jerusalem cross, having 5 towers, one at each end, and one in the centre. The length of the building was 264 feet; the breadth of the traverse 114; while the height of the centre tower was 198. The cathedral was unroofed in 1568, by order of the Regent Morton, for the sake of its lead; and this venerable specimen of architecture and sculpture has since been allowed to fall into decay. The great centre tower fell in 1711. But the chapter-house, the turrets and walls of the east choir, and the towers on the west, are still remaining. Of the walls of the nave and traverse only a few fragments remain. Steps have recently been taken by the barons of exchequer in Scotland to prevent any further dilapidation. A college was attached to the cathedral, and contained not only the church and grave-yard, but also the bishop's house, and those of 22 canons. The eastern gateway, and part of the wall, are still standing. The ruins of a convent of Greyfriars, settled here by Alexander II. in 1234, are still to be traced S. of the town. Of the convent of the Observatines, established here in 1479, no remains can now be seen. A Maison Dieu, or religious hospital, once stood on the site now occupied by the Elgin Institution. (*Keith's Scot. Bishops, by Russell*, Edin., 1824, pp. 138. 141, 142. 444. 453.)

In addition to the two charitable institutions already mentioned (Grey's and Anderson's), there are eight other charitable endowments of a subordinate order, most of them old. One of them is Grey's charity (the founder of the hospital), for the support of reputed old maids of the town of Elgin, with funds amounting to 3,000*l.* The seven incorporated trades, and the guildry, are each, in one respect, of the nature of provident institutions. The average number of poor on the roll may be about 160. Assessment in 1847, 1,200*l.* 7*s.* 7*d.*

The academy, which is partly endowed, and partly supported from the town's funds, contains three separate schools, and has long been a distinguished seminary. There are no fewer than ten schools in the town. There is a subscription and other libraries, as also a reading-room, with numerous benevolent and religious societies.

There are no manufactures, if we except a tannery and a brewery. There are two distilleries in the neighbourhood. The town has ten fairs yearly for live stock, and a weekly market for grain and other agricultural produce. It has, also, two printing presses, and a weekly newspaper. There are no fewer than five branch banks in the town, and a savings' bank.

Elgin can boast of great antiquity. In the 12th century it was a considerable town with a royal castle

situated on the Lady Hill. The earliest charter of guildry was granted in 1234. It unites with Cullen, Banff, Peterhead, Kintore, and Inverary, in sending a member to the H. of C., and, in 1849-50, had 230 registered voters, including Bishop Mill, a small suburb on the opposite bank of the Lossie, in the parish of New Spynie. (*Shaw's Hist. of Moray; New Statist. Account of Scotland*, § *Elgin; Boundary Returns; Chambers's Gazetteer*.

EL JEM. *See* TYSDRUS.

ELORA, or ELLORA (*Eluru*), a village of Hindostan, dom. of the Nizam, prov. Aurungabad, in about lat. 19° 58′ N., and long. 75° 23′ S.; celebrated for some remarkable cave temples, excavated in the solid rock, about 1 m. to the E., which in magnitude and perfection of execution, surpass all other structures of the kind in India. The site of these curious monuments of art is a crescent-shaped hill, of moderate elevation, the concavity of which faces W. or N.W. Its constituent rocks are chiefly basalt, a hard vesicular rock, and a rock of a loose, gritty, absorbent, and crumbling nature, interspersed with veins of quartz, siliceous stone, blood-stone, &c. The caves are cut in the W. slope or concavity of the hill above mentioned, extending, with intervals of various length between them, for about 1 m. from one extremity to the other. They may be divided into three groups: the N., which appear to have belonged to the Jain sect, since the purely Buddhic sculptures and emblems in them are intermixed with many Brahminical ones; the central, which are by far the most numerous, and are solely Brahminical; and the S., which are as decidedly Buddhic. Beginning at the N. extremity, a few hundred yards up the hill, cut in a mural rock of black basalt, is what is called the *Parisnauth*, a colossal figure of Buddh, 10 ft. high, apparently in a triumphal car, and seated on the folds of a large snake, whose seven heads form his canopy. Six attendant figures surround this statue, over which a handsome stone porch was erected about a century since. This idol is still held in much reverence by the Jains, many of whom make an annual pilgrimage thither. About 200 yards below this idol is what is called the *Indra Subbah*, or "Court of Indra," a temple consisting of three caves, opening one into another, and situated behind an area cut out of the rock, in which stand an elaborately sculptured pagoda, a handsome obelisk, and the figure of an elephant. The front of this temple is in many parts covered with sculptures in relief; and at the extremities of the verandah before it are two figures, a male and a female, the former seated on a couchant elephant, and the latter on a lion. These figures have been generally called Indra and Inderanee; but Col. Sykes contends that they represent the prince and his consort who founded this temple. (See *Journ. of the Asiat. Soc. of Bengal*, vi. (1837), 1038, &c.) The caves consist of two stories each; but the lower stories are greatly injured by damp, and partially choked up with earth. The three chambers on the story above vary from about 60 to 70 ft. in length, by nearly as much in breadth, and from 13 to 15 ft. in height, and their ceilings are supported by numerous pillars and pilasters. Each contains a colossal figure of Buddh, similar to that already described; and in the first and second chambers there are figures of other personages. The compartments round the walls of each of these rooms contain figures of Buddh, in various attitudes, "some standing and some sitting: the attendants are riding on elephants, tigers, and bulls." (*Sykes*.) None of these caves has any cells opening from it, which appendages are almost universally found in temples strictly Buddhic. About 40 or 50 paces farther to the E. there is a fourth cave, and still farther on, another; but both are much choked up with earth.

The first of the series of Brahminical temples, proceeding from the W., is about 200 yards distant from the latter, and entitled *Doomar Leyna*, "the Nuptial Palace." This is the most extensive chamber of all, under one roof: it is 185 ft. in length, by 150 ft. broad; its ceiling averages 19 ft. in height, and is supported by 28 pillars and 20 pilasters. The entrance to this excavation is through a passage cut in the solid rock, 100 ft. long by 8 ft. broad. On the left-hand side of the W. entrance is an eight-armed figure of a revengeful character, representing Siva in one of his forms; on the right are Siva and Parvati together in a heaven, which Rawun (the Hindoo *Briareus*), a figure with numerous heads and arms, is endeavouring to shake. At the end of the central colonnade is a square sanctuary, entered by four doors, each guarded by two gigantic figures, 14 ft. 8 in. in height, and containing the *lingam*, which emblem is found in nearly all the second group of caves at Ellora. There are numerous small caves, all of which are considered to have been devoted to the worship of Siva; in the front of each there is a bust of the celebrated triad, a mutilated specimen of which exists at Elephanta. (*See* ELEPHANTA.) Over the door of one cave is the image of Luximee, attended by elephants; and another, a noble hall, 90 ft. long, 26½ ft. wide, 15 ft. in height, and adorned by highly-finished pillars, has numerous compartments full of figures, amongst which is a group supposed to represent the marriage of Siva and Parvati.

But the most splendid temple at Ellora is that called *Kylas*, or "Paradise," a pagoda of a sugar-loaf form, 100 ft. in height, surrounded by five chapels, nearly similar in form; the whole, together with the area in which they are situated, being excavated in the solid rock, and covered with sculptures from top to bottom, both within and without. The extreme depth of the excavation is 401 ft.; the area itself is 323 ft. in depth, by 185 ft. in its greatest breadth (on the E. side). On the N., S., and E. it is surrounded by colonnades, varying in length from 185 to 115 ft., and having from 15 to 18 square pillars each: the walls which these colonnades surround are covered with sculptures, and in the front of the wall by which the area is enclosed on the W. side are niches filled by gigantic figures. *Kylas* contains the representations of nearly all the Hindoo Pantheon; but, as Col. Sykes observes, notices of its figures alone would fill a volume, and the temple must be seen to be duly appreciated. Those who wish for farther information may resort to Captain Seely's work, and to the accounts of the Ellora caves, by Col. Sykes, in the *Trans. of the Lit. Soc. of Bombay*, iii. 281. &c.; Sir C. Malet, in the *Asiatic Researches*, vi. 382—424.; Mr. Erskine, and others.

We must, however, notice the southern group of caves. There are four principal ones: the first has three stories; the second, 2; the third, 80 ft. long by 42½ broad, and 35½ in height, is in beauty inferior to none, and has an arched roof, supported by ribs of wood similar to that of Carlee, or the great cave at Kennery; the fourth is accompanied by several smaller ones, and all are very highly finished. Each temple of this group contains a large figure of Buddh, and other characteristics of Buddhic temples. For some speculations as to the æra of these caves, see *Journ. of the Asiat. Soc. of Bengal*, vi. (1837) 1038—41.

ELSINEUR, or ELSINORE (Dan., *Helsingor*), a marit. town of Denmark, on the E. shore of the isl. of Zealand, at the narrowest part of the Sound, or principal channel leading from the N. Sea to the Baltic, 7 m. W. Helsingborg in Sweden, and 23¼ m. N. by E. Copenhagen; lat. 56° 2′ 17″ N., long. 12° 36′ 49″ E. Pop. (1846) 8,500. The town stretches irregularly over sloping ground towards the shore. It is well built, and has some good edifices. There are 2 churches, one of which, though externally very plain, contains many interesting objects of antiquity, and a lofty altar gorgeously ornamented. The public cemetery of Elsineur is a large and handsome enclosure. Immediately adjacent to the town, on the N.E., is the castle of Cronborg. This edifice, built by Frederick II. in the boldest style of Gothic architecture, is said to be one of the finest structures of its kind in Europe. "Though of great extent, yet so elegant are its proportions, that it seems as light and graceful as a building raised more for ornament than for use. So far, however, from being a mere thing of show, it is a strong and substantial fortress, strengthened by all the advantages that military science can give to a position which, though very low, is still extremely important, from its sweeping the Sound most completely, both up and down. The approach, therefore, is garnished with lunes and demi-lunes, scarpes, ditches, stockades — in short, all the imposing externals of a fortress kept in the highest order." (*Bremner*, i. 253.) From the summit of the light-house of this fortress the scene is one of surpassing beauty. Cronborg is now chiefly used as a prison; it was the place of confinement for some years of the unfortunate Queen Matilda, sister of George III. of England. All merchant ships passing to and from the Baltic are obliged, under certain reservations depending on the weather, to salute Cronborg Castle by lowering their topsails when abreast of the same; and no ship, unless she belong to Sweden, is allowed to pass the Sound without clearing out at Elsineur and paying toll, according to the provisions in treaties to that effect, negotiated with Denmark by the different European powers. The first treaty with England having reference to this subject, is dated in 1450. The Sound duties had their origin in an agreement between the King of Denmark on the one part, and the Hanse Towns on the other, by which the former undertook to construct light-houses, land-marks, &c. along the Cattegat, and the latter to pay duty for the same. The duties have varied at different periods; the greater part of the inhab. of Elsineur are, in some way or other, connected with their management or collection. (*See* SOUND.) Former travellers speak of the bustle at Elsineur, from the number of foreign sailors constantly in its streets. The place is now very quiet; the captains, to prevent delay, seldom allowing their men to come ashore, unless occasionally to take in vegetables. So well organised is the system for collecting the dues, that ships are frequently not detained more than half an hour. Ships of war are exempted from payment. Most maritime nations

have consuls at Elsineur. The principal communication between Denmark and Sweden takes place here; and regular boats sail three times a day to and from Helsinborg.

Elsineur is well known to Englishmen, at least by name, from its being the scene of Shakspeare's noble tragedy of *Hamlet*. "The principal incidents of the play are founded on fact, but so deeply buried in remote antiquity, as to make it difficult to discriminate truth from fable. Saxo-Grammaticus, who flourished in the 12th century, is the earliest historian of Denmark who relates the adventures of Hamlet. His account is extracted, and much altered, by Belleforest, a French author; an English translation of whose romance was published under the title of *The Historye of Hamlet*, and from this translation Shakspeare formed the groundwork of his play, though with many alterations and additions." (*Coxe's Travels in the N. of Europe*, v. 90.)

ELVAS, a fortified city of Portugal, on the frontiers of Spain, prov. Alentejo, 120 m. E. Lisbon, 12 m. W. Badajos, lat. 38° 40′ N., long. 6° 57′ 45″ W. Pop. 16,460. It is picturesquely situated, on a hill covered with olive trees and orchards, between two other hills which command it, and on which are the fortresses of Santa Lucia and La Lippe. These and the other defences of the town, reckoned the *chef-d'œuvre* of the Count de La Lippe Schomberg, and a model of their kind, render it so strong, that no impression could be made upon it, except by a large army and a regular siege. The principal street, Rua de Cadea, has an antique, venerable appearance, from the remains of Moorish houses and towers. The cadea, or prison, stands at one end, and opposite to it is the hospital for the townspeople, which is well conducted, and divided into wards, as in England, with separate apartments for infectious diseases. On the whole, however, the town is ill built, and the streets mostly narrow and dirty. The principal edifices are— the cathedral, arsenal, bomb-proof barracks for 6,000 or 7,000 men, theatre, &c. It has several churches and convents, with a college, a seminary, &c. There are manufactures of arms and jewellery; but the principal dependence of the inhab. is on the contraband trade carried on across the Spanish frontier. The Plaça, or great square, is remarkable for a singularly formed tower in front of the cathedral, and the houses exhibit specimens of domestic architecture from the days of Moorish splendour and elegance down to modern times. Several of the grotesque carvings are executed with great richness and delicacy. The rooms in the modern houses are large, lofty, and paved with bricks arranged in various figures; the windows not being glazed, but merely closed with latticed blinds. The decorations of some of the chapels in the cathedral are extremely elegant, the walls and ceilings being covered with a profusion of gilded carving, but the pictures are execrable. The grand altar is supported by Corinthian pillars of grey marble, surmounted by a canopy of crimson and gold silk, beneath which is a large picture of the birth of Christ: the altar itself is covered with crimson and gold silk, and is crowded with silver candlesticks. There is no room in the town for public gardens, but the covered way from the Porta d'Esquina to the Olivença gate is planted with trees, and each *place d'armes* has a fountain, and is tastefully laid out. The walk round the ramparts is extremely fine, commanding a view of the country for many miles in all directions.

The town is furnished with water, brought from an eminence about 3 m. W. from it (*Milano*) by an aqueduct constructed by the Moors, which supplies numerous fountains, one of which is of very large dimensions. In crossing the valley, 1¼ m. in width, this aqueduct has four tiers of arches, each above the other, making together 250 ft. in height. It is supported by strong buttresses; and, to add to its strength, it is built in a zig-zag direction. The environs are fertile in grain, wine, oil, and fruit. Manufactures, arms, and hardware.

Elvas was a post of great importance during the peninsular war. Marshal Junot took possession of it in March 1808, and held it till it was given up, under the convention of Cintra, in August following. It has bomb-proof barracks for 6,000 or 8,000 men, and furnished the artillery and stores for the siege of Badajos. The Duke of Wellington had a powerful telescope placed in the tower of La Lippe during the operations, by which the interior of the castle of Badajos could be plainly looked into, and all the operations discovered. (*Napier's Peninsular War*, i. 144. 160. 202., ii. 126., iii. 510., iv. 185. 401. &c.; *Link's Journey through Portugal*, p. 130., *et seq.*; *Penny Magazine*, vi. 316, 317. 344, 345.)

ELY, a city of England, co. Cambridge, in the distr. called the Isle of Ely, on an eminence near the Ouse, 16 m. N.N.E. Cambridge. The city includes the parishes of Ely, Trinity, and St. Mary's; the extra-parochial district of Ely college, and the chapelry of Chetisham, comprising, in all, an area of 17,480 acres, and a pop. of 6,189, of which about 5,000 may belong to the city properly so called. The latter consists principally of one long street, with a market-place in the centre; several of the houses are built of stone, and have an antique venerable appearance; and the place seems to have been but little affected by those changes that have so materially modified the appearance of most other towns. It owes its entire distinction to its being the seat of a bishopric, established here in 1107. Its cathedral is one of the most celebrated in England. Being partly of the reigns of William Rufus and Henry I., and partly of subsequent periods, it displays a singular admixture of the Saxon, Norman, and English styles of architecture; but notwithstanding the dissimilarity of its parts, it must, when considered as a whole, be regarded as a truly magnificent edifice. Its extreme length from E. to W. is 535 ft; the length of the transept is 190 ft.; the height of the lantern on the summit of the dome over the celebrated octagon tower, is 170 ft.; the extreme height of the W. tower, one of the finest in the kingdom, is 270 ft.; the height of the E. front to the top of the cross is 112 ft. It has many interesting monuments. St. Mary's chapel, contiguous to the cathedral, now Trinity church, was commenced in the reign of Edward II., and is one of the most perfect structures of the age: it is 200 ft. in length inside, by 46 ft. in breadth; the height of the vaulted roof being 60 ft.: it has neither pillars nor side aisles, but is supported by strong buttresses. The cloisters and other buildings, which belonged to a monastery founded here at a very early date, have been long since demolished, with the exception of the refectory, that has been converted into a deanery. The Episcopal palace, near the W. end of the cathedral, retains few traces of its ancient architecture. The bishops of Ely formerly possessed powers within the Isle similar to those enjoyed by the Bishop of Durham, appointing their own chief justice and magistrates; but these were taken away by the act 6 and 7 William IV. cap. 87. The revenues of the see amounted, at an average of the three years ending with 1831, to 11,105*l.* a year; but a deduction was made from this income on the appointment of the present bishop in 1836, in pursuance of the recommendation of the ecclesiastical commissioners. The total revenue of the dean and chapter of Ely, at an average of the seven years ending with 1834, amounted to 7,686*l.* a year. The assizes are held here in the new shire hall, erected in 1821. Ely has a grammar-school, founded by Henry VIII.; a free school endowed by a lady of the name of Needham; and a national school supported by voluntary contributions. A considerable landed property left for the benefit of the city poor is vested in a body of incorporated trustees. There is an earthenware and tobacco-pipe manufactory within the city; but the inhab. are principally employed in gardening, which is extensively carried on in the vicinity. Ely sent 2 members to the H. of C. in the 23d of Edward I., but has not subsequently been represented. Market-day, Thursday. The Isle of Ely is included within the great level of the Fens, and is extremely fertile. (See *Bentham's History and Antiquities of the Conventual and Cathedral Church of Ely, passim, &c.*)

EMDEN, or EMBDEN, a sea-port town of Hanover, being the second in that kingdom in respect of size and importance; prov. Aurich, cap. cant., on the N. bank of the æstuary of the Ems, or rather of the bay called the Dollart, 15 m. S.W. Aurich, and 46 m. W.N.W. Oldenburg; lat. 53° 22′ 3″ N., long. 7° 12′ 38″ E. Pop. 12,000, mostly Calvinists. It is surrounded by walls and wet ditches, and divided into the old town and the *Faldern*; the latter being the best built. Emden has 6 churches, one of which is a fine edifice, a council-house, judicial tribunal, custom-house, exchange, commercial weighing-house, naval assurance office, school of navigation, house of correction, orphan asylum, lying-in charity, gymnasium, society of natural history, &c. A navigable canal connects it with Aurich, and various others intersect the adjacent country, and the town, communicating with the port. The latter, which consists of two inner harbours opening into an outer harbour, is large, but shallow; so that vessels drawing more than 11 ft. can enter it only at high water, unless lightened of a portion of their cargo. But the roadstead, which is well protected, has water sufficient to float vessels of any size, and the holding ground is good. Emden has manufactures of linen and linen yarn, stockings, tobacco, brandy, leather, hats, soap, starch, &c.; its herring fishery was formerly of considerable importance, and employed 1,300 hands, who took about 13,000 tons of fish annually; but this branch of industry has greatly declined, and from 60 ships formerly engaged in it, the number is now reduced to 15. The general trade of the town has also declined. In the 16th century it had 600 sea-going vessels; and, in 1784, 273 of the aggregate burden of 19,289 lasts: in 1837, however, it had only 103 sea and river vessels and barges, of the united burden of 4,806 lasts! (*Reden*, i. 286.) In 1827-28, between 800 and 900 ships entered and left the port; whereas in 1838, this number was reduced to 653 (562 Hanoverian, and 91 foreign), of the burden of 16,186

lasts. By far the greater number of the vessels that now frequent the port, are inland craft.

Though Emden be a free port, the advantage it thence derives is in time of peace very insignificant. It has little communication with the interior of Germany, except with E. Friesland and the co. of Munster, of which it continues to be the emporium. The import trade it formerly carried on in colonial produce has been almost entirely transferred to Amsterdam, Hamburg, and Bremen, whence it is supplied at second hand. Its chief imports are hemp, potash, timber, &c. from the Baltic and Norway. The imports of timber are very considerable, the vicinity of Emden being singularly deficient in wood. It also imports considerable quantities of French wine. Its chief exports are oats, wheat, beans, rapeseed, rye, barley, herrings, butter, cheese, gin, tallow, honey, wax, wool, and hides. The annual exports of some of these articles may be estimated as follows, viz. wheat 1,200 lasts, rye 900 do., oats 3,000 do., beans 600 do., barley 400 do., rapeseed 900 do., butter 18,000¼ firkins. The Dutch currency is that for the most part in circulation at Emden; but inland produce is often paid for in Louis d'ors at 5 dollars each, or in Prussian currency. (*Reden; Das Konigr. Hannover; Berghaus; Private Communication from Emden.*)

ENGIA. *See* EGINA.

ENGLAND and WALES. This most populous, wealthy, and important portion of the U. Kingdom of Great Britain and Ireland comprises the most southerly, largest, and most fertile part of the island of Great Britain. It lies W. from and opposite to, France, Belgium, Holland, and the S. parts of Denmark, between 49° 57′ 30″, and 55° 47′ N. lat., and 1° 46′ E. and 5° 41′ W. long.; being bounded by the German Ocean on the N.E. and E.; by the British Channel on the S.; by St. George's Channel and the Irish Sea on the W.; and on the N.W. and N. by Scotland, from which it is separated by a waving line extending in a N.E. direction from the mouth of the Sark, in the N.E. corner of the Solway Frith, by Peel and Carter Fells, and the Cheviots, to Carham, and thence along the Tweed to Berwick. Its S.E. extremity, at Dover, approaches to within 21 m. of the opposite coast of France. (*See* BRITISH EMPIRE.) Its shape approaches nearest to that of a triangle, of which Berwick may be considered the apex, and a line from the Land's End to the N. Foreland (342 m.) the base; a line from the former along the W. side (426 m.), and from the latter along the E. side (334 m.), complete the figure. The sea-coast, if measured from one headland to another, is about 1,200 m. in extent; but if its principal indentations are followed, it will be found to be fully 2,000 m. The bays and harbours on the S. and W. shores are numerous, and some of them rank among the finest in the world; but on the E. side there are few that can be called safe, or easily accessible; the ports of London and Harwich being the only really good ones between the S. Foreland and the Tweed. The area amounts to 58,320 sq. m., or to 37,325,000 acres.

Aspect of the Country. — England combines within itself all that is most desirable in scenery with all that is most necessary for the subsistence and comfort of man. "Although its features are moulded on a comparatively minute scale, they are marked with all the agreeable interchange which constitutes picturesque beauty. In some parts plains clothed in the richest verdure, watered by copious streams, and pasturing innumerable cattle, extend as far as the eye can reach; in others, gently rising hills and bending vales, fertile in corn, waving with woods, and interspersed with flowery meadows, offer the most delightful landscapes of rural opulence and beauty. Some tracts furnish prospects of the more romantic and impressive kind; lofty mountains, craggy rocks, deep dells, narrow ravines, and rumbling torrents; nor is there wanting, as a contrast to these, scenes in which every variety of nature is a different charm, the vicissitude of black barren moors, and wide uninimated heaths." (*Aikin's England Described*, p. 2.)

The distinguishing peculiarity in the aspect of England is, however, the exuberance of its vegetation, and the rich luxuriant appearance of its lower and far most extensive portion. It owes this distinction partly to nature and partly to art. The humidity and mildness of the climate maintain the fields in a constant state of verdure: in winter they are seldom covered with snow, or blighted by long-continued frosts, and in summer they are rarely withered and parched by droughts. In this respect England is as superior to the finest countries of continental Europe — to Italy and Sicily, for example — as she is superior to them and to every other country in the amount of labour that has been expended in beautifying, improving, and fertilising her surface. It is no exaggeration to affirm, that thousands upon thousands of millions have been laid out in making England what she now is. In no other nation has the combination of beauty with utility been so much regarded. Though without any extensive forests, England is extremely well wooded. The country is portioned out into innumerable fields; and these being all, or nearly all, surrounded with hedges and rows of trees, it has, even in the best cultivated districts, a woody appearance, and sometimes almost resembles a vast forest. Since the middle of last century a great deal has been effected in this way. Most of the extensive, bare, and nearly worthless commons, that were then every where met with, have been in the interval subdivided, enclosed, and brought under tillage; making a vast addition to the productive capacities of the kingdom, and materially improving its appearance.

Another peculiar feature in the physiognomy of England is the number and magnificence of the seats of the nobility and gentry. These superb mansions, many of which are venerable from their antiquity, and all of which are surrounded with fine woods and grounds, give to the country an appearance of age, security, and wealth that we should in vain look for any where else. The farm-houses and cottages have mostly also a substantial, comfortable look; and evince that taste for rural beauty, neatness, and cleanliness, that eminently distinguish their occupiers

The number, and the prodigious size and splendour of many of the cities and towns of England, justly excite the admiration and astonishment of foreigners, and even of natives. They are the chosen seats of opulence, art, science, and civilisation. All the gratifications that wealth can command, or the caprices of taste or fashion require, may there be had in the utmost profusion; at the same time that art and industry are carried in them to the highest perfection to which they have attained, and are aided by every invention and discovery, how remote the country or distant the æra of their origin.

Description of the Country. — Though the mountains of England no where attain an alpine elevation, they form one of its most interesting, as well as most prominent features. The principal chains, which are found in its N. and W. portions, have received the names of the Pennine, Cumbrian, Cambrian, and Devonian ranges. The first of these ranges extends from the Scottish border, where it is connected with the Cheviots, S., to near Derby: it occupies the W. portion of the cos. of Northumberland, Durham, and York, and the E. portion of Cumberland, Westmorland, Lancaster, Chester, and the middle part of Derbyshire. Its highest summits are Cross Fell, in Cumberland (2,901 ft.); Shunnor Fell, on the confines of Yorkshire (2,329 ft); Great Whernside (2,385 ft.); Ingleborough (2,361 ft.); and Pen-y-Gant (2,270 ft.), in Yorkshire: at either end, however, the range declines considerably, so that at the part traversed by the old Roman wall, and the modern railway between Newcastle and Carlisle, its height does not exceed 445 ft.; and on the S. side, where the Liverpool and Leeds Canal is conducted across it, the elevation is not more than 500 ft.: still further S., the Derbyshire portion of the chain again becomes more elevated, attaining at Castleton and Great Axehill, 1,751 ft.; and at the Weaver Hill, near Ashbourne (the S. extreme), 1,154 ft. The breadth of the range between Sheffield and Macclesfield is about 22 m., and it comprises, in this portion, some very picturesque scenery; but such is very far from being the character of the N. portion of this mountain system, which may be generally described as with rounded summits, of gradual ascent from either side, having a scanty peat soil covered mostly with ling, and undulating in dreary succession; the patches of green sward being few and far between, and the aspect of the whole cheerless and monotonous. With the exception of the Thames and Severn, most of the great rivers of England have their sources in this chain: being much nearer the W. than the E. side of the island, the rivers that rise in its E. acclivities have generally the longest course, and are the largest and most important. Of the latter, the Tyne, Tees, the affluents of the Ouse, the Aire, Don, and Trent are the principal; the Eden, Ribble, and Mersey are the principal rivers flowing W. from the Pennine chain. The beautiful vale of the Eden, which separates the Pennine from the Cumbrian range, gradually expands into the Cumbrian plain, which extends N. to the Solway Frith, and occupies the whole tract from

Brampton, Croglin, and Renwick, at the base of the Pennine chain, W. to the sea, comprising an area of about 300,000 acres. On the E. side of the Pennine chain, from its N. extreme to the Coquet, the district, though hilly, has tolerably good pasture, and comprises a few breadths of well-cultivated land; S. of that stream, a large moorland tract extends through Northumberland, the middle of Durham and Yorkshire, to the Holm Moss in Cheshire, varying in breadth from 10 to 30 m., and in elevation from 500 to 1,000 ft.: its N. is its most sterile portion; but the whole tract consists of a series of monotonous wastes, furrowed, in the two N. cos., by a few narrow glens only; towards the S., these widen and become more frequent, but without much affecting the general aspect, which is preserved, for the most part, through the whole extent of the district. Betwixt it and the sea are the vales of the Tyne and Tees, and the great Yorkshire plain; the latter extending N. and S. between 60 and 70 m., with an average breadth of between 14 and 20 m.: it widens towards the S., and every where presents a gently undulating surface of fertile and well-cultivated land. The E. moorlands and wolds, bounding the York plain on that side, have, at their N. limit, the fertile vale of Pickering, extending about 35 m. E. and W., and 10 m. in the opposite direction. It presents the appearance of a drained lake, enclosed between the Hambledon hills and the Yorkshire wolds. The last-named tract, together with the Lincoln wolds, S. of the Humber, occupy about half the space between the German Ocean on the E., and the rivers Derwent and Trent on the W.: generally speaking, they form good pasture lands, interspersed in parts by a few sterile moors, and in others, by moderate breadths of good arable land. The plain of Holderness, N. of the Humber, and extending from the base of the wolds to the sea, has a strong clayey soil, producing heavy crops of wheat and beans, as well as luxuriant pasture, and ranks amongst the most productive districts in the kingdom; an alluvial tract, of somewhat similar character, also extends along the base of the Lincoln wolds between the Humber and Wash; the low line of coast, forming the E. limits of these tracts, has a submarine forest stretching along it, which is traceable for 1 or 2 m. in breadth between the high and low watermarks.

The Cumbrian group of mountains occupies the central and S. portions of Cumberland, the W. and largest portion of Westmorland, and the N. and insulated portion of Lancashire. It extends N. and S. about 37 m., and E. and W. about as much. It contains the most elevated summits in the kingdom, and is intersected by deep narrow glens, some of which are occupied by lakes, that radiate in all directions from the central portion of the mass, so as to form several distinct ranges: the whole system declines more rapidly on the N. than the S. side. The highest and most remarkable summits are, Helvellyn (3,055 ft.), Scafell (3,166 ft.), Bowfell (2,911 ft.), Coniston Fell (2,577 ft.), High Pike (2,101 ft.), in the central part of the group; at the N. extreme are Skiddaw and Saddleback (3,022 ft. and 2,787 ft. respectively; and at the S.W. end, Blackcombe rises 1,919 ft. above the sea. The Cumbrian mountains are mostly bold, steep, and rugged; their slopes are in general covered with a fine green sward, affording good pasture for sheep, and have little of the tame, monotonous character that belongs to the Pennine range. Except in some of the glens, opening on the N. and W. sides, the cultivable land among these mountains is not very considerable. The lakes embosomed in these mountains rather resemble the reaches of a large river than the expanded figure usually considered as belonging to a lake. Winander Mere, the most extensive of these sheets of water, is between 10 and 11 m. long, and from 1 to 1¼ m. broad, with a depth, in some parts, of 35 fathoms. It has 13 or 14 small islets or holms, the largest of which contains about 30 acres; its area, including these, is about 2,574 acres. Ulswater, the next in size, is about 8¼ m. in length, by 1 m. at the broadest part, and zigzags in a N.E. direction from Patterdale. Derwentwater, Bassenthwaite, Buttermere, Waswater, Ennerdale, and Coniston Mere, are the names of the more considerable amongst the remainder: all of them abound in fish, chiefly trout, perch, pike, and eel; Ulswater, and one or two of the smaller tarns, have char; and Bassenthwaite salmon, which find their way thither by the Derwent. The scenery of the district occupied by the Cumbrian mountains is perhaps the most interesting and romantic of any in England; and in many parts, as at the head of Ulswater and the Kirkstone Pass, between that lake and Winander Mere, it assumes features of great power and magnificence. The line of road between Ambleside and Keswick, through the vale of St. John, may also be mentioned for the picturesque and beautiful scenery through which it winds: but the whole is too well known to require further notice. The poems and delineations of Southey and Wordsworth have made it, in some degree, classic ground; and it is annually traversed by thousands of tourists.

The Cambrian mountains extend, on the W. side of the kingdom, from the Irish Sea to the Bristol Channel, occupying nearly the whole of Wales. Of these, the Snowdonian range is the chief: its principal chain stretches N.E. and S.W., the whole length of Caernarvonshire, from Penmanmawr on the N. to the point of the peninsula of Lleyn on the S. Several of its summits exceed 3,000 ft. in height: that of Wyddva (the highest pinnacle of the huge mountain mass bearing the general name of Snowdon) has an elevation of 3,571 ft.: and commands a view of surpassing grandeur, which is only limited by the horizon. Two or three other chains branch from this main one, in a S. direction, many of whose summits reach 2,400 ft., and one (the Arennig Mawr) 2,809 ft. The country included between these ranges has a few picturesque and well-sheltered vales, such as those of Festiniog and Dolgelley; but its general character is that of an unreclaimed pasture tract, comprising the most magnificent alpine scenery in the kingdom. Anglesea, on its W. side, has several small ridges and detached hills and peaks, but it cannot be called mountainous. On its E. side the beautiful vale of Clwyd extends between the Hierathog hills and another parallel range stretching between it and the æstuary of the Dee; the vales of Mold and Llangollen, also celebrated for their beauty and fertility, extend on the same side, towards the great Cheshire plain.

The Berwyn mountains stretch across the whole principality, S. of the Snowdon ranges, from Llangollen, to the middle of Cardigan Bay: the highest summit, Cader-Idris (2,914 ft.), gives its name to the portion of the chain between it and the sea, which narrows to a mere ridge, in parts, not more than 4 or 5 m. across. The general character of the country comprised within the Berwyn range is of the same kind as the former, though with less elevated and abrupt outlines; towards the vale of the Upper Severn, and between it and the Plynlimmon chain, a few strips of cultivated land occur. The famous mountain, whence this chain takes its name, is 2,463 ft. in height, and gives birth to the two great rivers, the Severn and Wye, flowing S. to the Bristol Channel, and to the Rheidiol, which has its embouchure at Aberystwith, on Cardigan Bay. From Plynlimmon the chain extends in a curve to the Bredden hills, W. of the Shropshire plain, whose highest summit reaches 1,330 ft. The whole of the Plynlimmon range is characterised by smooth gradual slopes, and a succession of regularly rounded summits, clothed with a fine green sward, that supports numerous flocks of a small fine-woolled breed of sheep. The hilly tract extending through the S. of Shropshire to Wenlock Edge, may be considered as a continuation of this range, and is characterised by the same general features: its highest summit (Clee Hill) attains 1,805 ft. The mountain region, extending S. of the Plynlimmon chain to the Towy, and stretching E. and W. between the Wye and Dyfi, forms the largest waste in the kingdom, and consists of a succession of rounded, barren hills, enclosing vast morasses, amongst which a few spots covered with coarse herbage are sparingly scattered, and afford summer pasturage to a small hardy breed of sheep: Dwggan Hill, near the centre of this cheerless region, is the highest summit, and attains 2,071 ft. The Epyut hills, on its S. border, enclose many strips of good arable land, and are themselves clothed with fine pasture; but the country on the W. side of this great waste, on to Cardigan Bay, is mostly of a rugged, desolate aspect, and comprises a series of table-lands, with broken surfaces and scanty vegetation: on the N. side the Ystwith, however, and along the courses of that stream, and the Rheidiol, especially near Hafod, the scenery is picturesque, and includes many fine cataracts; and along the coast are several large pasture tracts of various degrees of fertility. S. of this, on to St. David's Head and the Bristol Channel, the country consists mostly of unreclaimed table-lands of unequal surface, with occasional ridges and detached hills, all of a rugged, sterile aspect, with the exception of the district round Milford Haven, and the Peninsula of Gower, between the bays of Swansea and Carmarthen in the Bristol Channel, which are fertile and well cultivated.

The Radnor and Black Forest ranges, that stretch S. from the centre of the Plynlimmon chain, on either side the Wye, are mostly covered with verdure, and form good sheep-walks: their offsets stretch into Herefordshire and terminate in that fertile and undulating plain. The districts on either side the range, especially the vales of the Wye and Usk, include much cultivated land. Two other main ranges complete the Cambrian mountain system, — those of the Forest Fawr and Glamorgan: the former stretches through Carmarthenshire and Brecknockshire to Abergavenny, on the Usk; the highest summits are the beacons named, from those counties, which are respectively 2,596 ft., and 2,862 ft. high. It comprises excellent and extensive sheep-walks. The Glamorgan range extends S. of the last in an E. and W. direction from Pontypool on the Usk to Swansea,

about 36 m., and in the widest part (from Merthyr-Tydvil to Llantrissent) about 15 m. The summits are mostly table-lands, with steep declivities on either side, intersected by deep narrow ravines, the whole having a rugged, cheerless aspect, but enclosing the most extensive coal and iron deposits in the kingdom: the tract between the two last-named ranges is also of the same sterile character, and wholly unreclaimed; but the plain stretching from the S. declivity of the Glamorgan chain to the Bristol Channel has a rich productive soil, and may, independently of its vast mineral treasures, be considered as the best and most fertile district of the principality: an alluvial tract, 3 or 4 m. in width, extends from the Taff to the Monmouth plain, and is of a similar character. The Welsh lakes are numerous, but for the most part small and uninteresting, rather absorbed by the majestic scenery round them than forming one of its essential features, as is the case with the Cumbrian lakes. The Bala Pool or Llyn Tegid is the largest of the Welsh sheets of water, and extends 4 m. from S.W. to N.E., with an average breadth of 1 m. and depth of 40 ft.; its waters cover an uneven rocky bed, and are remarkable for their purity and clearness: in common with most of the others, it abounds in red trout, pike, and eel, but the *gwyniad*, or silver skate, is peculiar to it. The Dee issues from its N.E. end, flowing by the vale of Llangollen, and the Cheshire plain, to the Irish Sea; the Clwyd, and the Conwy, discharging on the same side; the Sciout, Maw, and Teify, in the St. George's, and the Towy, Wye, and Severn, in the Bristol Channel, are the other chief rivers that originate in this the wildest and most mountainous portion of the kingdom.

The Devonian chain, stretching through the S.W. peninsula of England, between the Bristol and the British Channels, is the last that requires any especial notice in this sketch. Dartmoor Forest, forming its wildest and most elevated portion, is an unreclaimed and extensive waste, affording summer pasturage for the store cattle of the lower and more fertile tracts surrounding it: the whole may be considered as a table-land (the average height of which is above 1,600 ft.), with an unequal surface, rising in large rounded swells, with corresponding concavities, and strewed with large boulders and fragments of granite, which also rises through the soil in irregular masses, or *tors*. Exmoor, at the N.E. extreme of the range, and considerable tracts intermediate between the two, are also unreclaimed, and for the most part of a sterile character: the same description also applies to the central and northern parts of Cornwall, onward to the Land's End; but the less elevated districts on either side the range contain many extensive breadths of fertile land, more especially on the S. One of these, extending from Dartmoor to the sea, between the Dart and Yealm, and known as the South Hams, ranks among the most fertile corn districts in the kingdom. The chain gradually declines from Dartmoor to the Land's End, and also becomes more contracted in that direction. The chief summits are, Dunkerry Beacon, on Exmoor (1,668 ft.); Cawsand Hill (1,782 ft.), Rippon Tor (1,549 ft.), Butterton (1,203 ft.), all on Dartmoor; and in Cornwall, Brown Willy (1,368 ft.), Carnmarth (849 ft.), Carn Brea (697 ft.); and, lastly, the cape itself (about 70 ft.). The Taw and the Torridge, which discharge in the Bristol Channel, and the Fal, Fowey, Tamar, Plym, Dart, Teign, and Exe, descending to the British Channel, are the chief rivers of the district. On the N. coast sand accumulates rapidly in many of the creeks and inlets, forming in some places extensive dunes, beneath which the remains of ancient churches and villages have been discovered. On the beaches of Bude Bay, and a few others, this sand is chiefly composed of comminuted shells, and forms the chief manure of those localities.

The surface features of the central region of England, whence her wealth and importance are mainly derived, though extremely diversified, are almost wholly devoid of the magnificence and romantic beauty of those previously described. The great plain of Cheshire and Shropshire, on its W. side, extends about 50 m. in a N. and S. direction, and from 25 to 30 m. in the opposite: a few heathy moorlands occur within its limits, but by far the greater portion is very fertile; the soil is either rich sand, of a reddish colour, or strong loam. This plain is remarkable for its verdure, and is one of the principal grazing districts, being largely appropriated to the dairy husbandry. Of a similar character are the vales of Severn, Evesham, and Gloucester. The first of these extends about 70 m. on either side the Severn, with a breadth varying from 5 to 12 m., and is alike fertile and beautiful. The district S. of these last has probably the most broken and irregular surface of any part of the kingdom; it is, however, for the most part fertile and well cultivated. Beyond it are the Mendip, Quantock, and Black Down hills, and the fertile and beautiful vales of Taunton and Exe.

The basins of the Trent and Thames occupy the remainder of the central region: the former, in a general point of view, may be considered as forming an extensive plain, with gradual swells and broad intermediate vales, but with very few remarkable elevations. The vale of Belvoir is one of its most fertile portions. In the district forming the basin of the Thames, and drained by that great river and its various tributaries, the surface is, for the most part, gently undulating, forming wide vales, often extending into plains: the principal elevations are near the valley of the Thames, but none of their summits reach the height of 1,000 ft. The geological character of the tract is perhaps the most diversified of any, which, of course, causes a corresponding variety in the soils; these, however, on the whole, are of a light chalky nature, and moderately fertile, with but few absolute wastes of any extent: the higher constitute the least fertile portions, most of which are obviously indebted to skilful cultivation and the humidity of the climate for a great proportion of their productiveness. The most fertile tract is the vale of Aylesbury, which has a fine loamy soil, not surpassed in fertility by any in the kingdom. The chalk hills, which (with some interruptions) range from the S. side of the Wash to the Thames, between Goring and Henley, to which part the name of the Chiltern Hills applies, form the S.E. limits of the basin, sloping gradually in this direction to the Thames, but with many abrupt escarpments on the other; whence extensive views are commanded of the country between the basins of the Trent and Thames, through which the Ouse, Nen, and Welland flow N.E. to the Fens, draining Bedfordshire, Hants, Northampton, and Rutland, in their course through a district possessing very few striking inequalities of surface.

The courses of these rivers to their outfalls in the inlet of the German Ocean, called the Wash, are by channels and embankments, artificially formed, through the whole of the extensive, flat, and marshy district known as the Fens. (*See* BEDFORD LEVEL.) Deposits of mud and sand are constantly and rapidly accumulating on this portion of the E. coast, so that it is not without considerable difficulty that the outfalls of the rivers are kept open, and the harbours accessible. Additions are always being made to the surface of the district, by encroachments on the sea; and a plan is now (1840) in progress for securing no less than 170,000 acres of fertile land, extending seaward between the ports of Boston, Wisbeach, and Lynn Regis, all of which is, *comparatively speaking*, of recent formation.

The great plain S.E. of the Fens, comprising Norfolk, Suffolk, and Essex, has an undulating surface throughout; but the inequalities are greater towards the N. extreme, where, in some places, an elevation of 200 ft. above the sea is attained. In this quarter it is not very fertile, but it has been wonderfully improved; and many parts of Norfolk and Suffolk that half a century ago were mere sandy wastes, have, by dint of marling and the introduction of the turnip culture, become among the best and most productive barley lands in the kingdom. The soil of Essex is mostly a strong clayey loam, ranking in the first class of wheat and bean lands. That portion of England extending from Bagshot Heath to Salisbury Plain, and comprising both, may be considered as a sort of elevated table-land, no part of which, probably, is less than 300 ft. above the sea: Thorney Hill is 610 ft., and Westbury Down 775 ft. Both these eminences are on Salisbury Plain, the highest portion of the tract. This celebrated plain extends about 22 m. from E. to W., and 15 m. in the opposite direction; it is traversed by many considerable depressions, and has a light scanty soil, ill adapted to cultivation, but affording good sheep-walks. The part of the country of this tract between Chichester and Southampton Water has a fair proportion of tolerably fertile and well-cultivated land; but further W., the Hants and Dorset downs occupy the surface nearly to Dorchester, and form a continuous heathy, dreary, and sterile tract, with but a scanty proportion even of sheep pasture.

To the E. of the Anton river are the chalk ranges of the N. and S. downs, which extend round the weald district of Sussex, Kent, and Surrey; Beachy Head forming the E. extreme of the S. Downs, and the bold chalk cliffs of the Dover Straits that of the N. Downs. The Alton hills extend between and connect the two. The first are clothed with fine pasture, and form excellent sheep-walks; at their base extends the fertile plain of Chichester. The tract of which the N. Downs forms the W. portion is, for the most part, well cultivated, and here and there attains considerable fertility, though, generally speaking, the soil is meagre and arid. The weald district, enclosed by the last ranges, has in some parts an undulating unequal surface; and there are a few detached hills that attain considerable elevation: taken as a whole, however, it may be considered as forming an extensive plain of about 1,000 sq. m. in extent, the more level portions of which are from 100 to 200 ft. above the sea. The soil is principally clay; in parts very stiff and adhesive, in others mixed with sand in various proportions. The whole is under cultivation, and includes many breadths of luxuriant pasture; at the E. extreme is Romney

Marsh, an alluvial tract of about 50,000 acres, which has been reclaimed from the sea, and is defended from its encroachments by embankments. This marsh is, for the most part, remarkably fertile.

Geology. — A brief sketch of the geological structure of England will be best accomplished by commencing with the mountain ranges on its W. side, and thence, following the general direction of the successive rock strata: of these, the primary and transition, or (as they are now more correctly designated) Plutonic and metamorphic formations, constitute the mass in the Cumbrian and Cambrian groups; and that of the S.W. peninsula, all of which have a general resemblance in their mineral composition, though presenting some points of local and minor difference: thus, granite, which is only traced to a very limited extent in one or two parts of the Cumbrian system, and scarcely at all in Wales, is extensively developed in the S.W. peninsula, where it occupies a considerable part of the most elevated portion of the range, in large interrupted masses, from Dartmoor to the Land's End; beyond which the Longship Rocks, and the Scilly Islands, continue the formation in the same general direction, and are supposed (with much probability) to have once formed continuous portions of the range. The veins of tin ore also appear to be limited to this last district. Neither gneiss nor mica slate (so abundant in the Grampians) occurs, to any extent, in either of the ranges under consideration; clay and graywacke schists, of very various composition and texture, forming the prevailing rocks in all of them. The whole of these strata are traversed by beds and veins of porphyry, hornblende, and trap, and are for the most part considerably inclined and contorted, every where presenting indications of powerful disturbing causes, and of having been upheaved, but there are no traces of volcanic action. In the Carnarvonshire ranges elevated beaches occur at the height of 1,000 ft. and upwards above the sea level, which are formed of gravel and fragments of recent shells, precisely similar to the present marine beaches; similar beaches also occur on the N. coast of Cornwall and S. coast of Devon, from 20 to 30 ft. above the present reach of the tides.

The veins of tin and copper which intersect the strata in Devon and Cornwall make the S.W. peninsula one of the most important mining districts in the kingdom. These veins, or lodes, have all a general E. and W. direction, and are intersected by others in an opposite (hence called cross-courses), which, by heaving or disturbing the regular course of the lodes, are often the cause of great perplexity and expense in mining operations; a large dike of this kind traverses Cornwall, from one coast to the other, through its chief mining district, intersecting and disturbing the course of every one of its lodes. Besides these lodes of tin and copper, which furnish the chief mineral riches of this range, lead ore occurs in some of the cross-courses, and has been extensively worked at Beer Alston on the Tamar, and one or two other localities: iron is also found in similar dikes near Lostwithiel, in Cornwall, and at the Berryhead on the coast of Devon; from each of which places many thousand tons are annually shipped for the supply of the Welsh furnaces.

Plumbago and manganese occur on the E. side of Dartmoor, both which are worked to some extent, and shipped at Exeter for the manufacturing districts. Porcelain, pipe, and common potters' clay, are also productions occurring in this tract, and are largely shipped for the Staffordshire and other potteries; granite and roofing slate are also quarried in a few localities. This last forms the most important production in the corresponding rock formations of Wales, the quarries of Penrhyn and Llanberris, in Carnarvonshire, being the largest, and furnishing the finest slates in the kingdom; some copper veins also occur in various parts of this group, though of very minor importance compared with those of Cornwall; in the Parys mountain, however, on the N. side of Anglesea, a very extensive deposit of that ore was discovered in the course of last century, and formed for a considerable period the most productive mine in the kingdom; it is still worked, though at present the produce is very limited. (*See* Anglesea.) On the W. side of the same island mona marble, or verd antique, is quarried for various ornamental purposes, at the termination of a large porphyry dike which traverses the district.

In the Cumbrian group, the most remarkable mineral production is the famous graphite, or plumbago, which occurs in an irregular pipe-vein at Botaller in Borrodale. A few lead veins also occur, and are worked to a limited extent, on the N.E. side of the range; at Coniston, copper veins are wrought on a small scale; and near Ulverston, hæmatetic ore, which produces iron of a very ductile quality, which is used in the manufacture of carding-wire; a few quarries of roofing slate are also worked in the same neighbourhood. Beyond the limits of the three main groups we have been describing, similar rock formations occur in a few isolated ridges, of which the most prominent are the Malvern Hills, that traverse the cos. of Worcester and Hereford; the Lickie Hill, N.E. of the last; the Charnwood range in Leicestershire; and a few intermediate rocks along the N. side of Warwickshire. Basaltic rocks also occur in the Wrekin and Caradoc hills, and along the limits of the mountain line, both in Derby and Durham: a large basaltic dike also traverses Yorkshire, from Middleton to the sea-coast S. of Whitby.

The mountain lime and coal formations are the next in order, being limited on the W. by those last described; and on the E. by the lias, which formation may be traced, by a waving but continuous line, through the kingdom, from the N.E. coast (between the mouth of the Tees and Whitby), by Charnwood Forest, Evesham, Gloucester, Bath, and Axminster, to the S.W. coast at Lyme Regis. All the mineral riches of the kingdom, as well as the greater part of its manufacturing establishments, are situated on the W. side of this line, by which the three lower of what are usually termed secondary formations are limited. In the mountain lime of the Pennine range are the chief lead mines of the kingdom; in that part of it which extends through Allendale and Alston Moor, on the E. side of Cross Fell, the ore occurs in E. and W. veins, that are heaved and disturbed by N. and S. courses, as those in Cornwall. In the Derby portion of the range many lead mines also occur, that have been wrought from a very remote æra; and others in the same formation in Flintshire, near the æstuary of the Dee. The coal fields to which England, and, indeed, the empire, is mainly indebted for her manufacturing superiority (see *ante*, p. 451.), may be thus briefly enumerated: those of Northumberland and Durham extend from the Tweed to the Tees, between the mountain lime and the sea-coast; the most northerly has only been partially explored, and is worked, on a limited scale, chiefly for local purposes. The coal field of S. Northumberland and Durham extends about 50 m. N. and S., with an average breadth of from 12 to 15 m. The seams or beds dip S.E., and crop out successively in an opposite direction, so that none of the beds extend through the entire limits of the district: the two thickest and best (high and low main) are 6 ft. thick, and are separated by strata of shale, sandstone, and smaller seams of coal, of the aggregate average thickness of 360 ft. The mines in this district furnish annually a vast quantity of coal, of which about 4,700,000 tons are sent to London and the S. part of the kingdom, and 1,000,000 to foreign parts. Various and very discordant estimates have been framed of the period that will probably be required to exhaust this vast deposit of fuel. But the district has not been sufficiently explored to admit of such estimates being framed on any thing like solid grounds; and, no doubt, were any deficiency in the supply of coal apprehended, methods would be found for materially diminishing the immense quantities now left in the mines, as well as for reducing the waste.

The Whitehaven is a small but valuable field, between the Cumbrian mountains and the Irish Sea, under which the adits of several of its mines are driven: the coal is exported in considerable quantities to Ireland and elsewhere. The Yorkshire and Derby fields extend N. and S. about 70 m., from Leeds onward; their breadth, between Halifax and Aberford, being about 25 m., but it diminishes considerably through the Derbyshire part, to its S. extreme, near Nottingham.

Most of the coal raised in Yorkshire is consumed in its extensive woollen, iron, and hardware manufactories, and in the domestic economy of its numerous population. The Derby field supplies, through the medium of canals, many of the midland cos. The Lancashire field is parted by a range of hills from that of Yorkshire, and extends along their base from Macclesfield to Oldham, thence N. to Rochdale and Colne, and W. to Prescott near Liverpool, having Manchester on its S. border. Coal is excavated in various parts of this extensive field, which affords all but inexhaustible supplies for the various uses of the most important manufacturing district in the kingdom. S. of the above, occur some smaller fields in Leicestershire and Warwickshire, in the vicinity of Ashby-de-la Zouch, Tamworth, Atherstone, and Coventry. The Staffordshire field extends N. and S. about 10 m., with a breadth varying from 5 to 7 m. Numerous beds of coal are worked in various parts of this field, which also furnishes potters' clay, and is the site of the potteries. The Wolverhampton and Dudley field, in the same co., extends about 14 m. N. and S., with an average breadth of 4 m., and is the most valuable of any in the central part of the kingdom. Two beds of ironstone, each of considerable thickness, also traverse the field, and supply the innumerable furnaces of the district. The whole rests on transition lime, abounding in beautifully preserved fossils. A few small fields also occur in Shropshire and Herefordshire, of which the chief is that of Colebrook Dale, 6 m. long by 2 m. in breadth. This formation is also traversed by ironstone, and many furnaces and foundries are established in the locality, though of late years it has not maintained

its former comparative importance. The forest of Dean includes a valuable coal basin, which (geologically considered) is the most perfect of any; the different beds of coal and sandstone being regularly arranged in a rounded concavity, and resting on millstone grit and mountain lime: its extent is about 10 by 6 m. The most S. of the English fields extends about 25 m., with a breadth of 5 or 6 m., through the cos. of Gloucester and Somerset, on either side the Avon; but it is overlaid in many parts by more recent formations, and the coal seams are thin, and of inferior quality. The last of those valuable deposits now left to notice, and probably also the most extensive and important, is the great coal field of S. Wales, extending about 100 m., from the Usk, in Monmouthshire, through the cos. of Glamorgan, Carmarthen, and Pembroke, to St. Bride's Bay, and comprising an area of about 1,200 sq. m. There are 23 available seams, of the aggregate average thickness of 95 ft., arranged in a prolonged concavity, and dipping both from the N. and S. towards a central axis; the deepest part of the field being near Neath, where coal occurs 700 fathoms below the highest portions of the seams. The quality of the yield varies considerably; that on the W. side being mostly what is termed dry coal, and the other bituminous coking coal, adapted to the smelting of iron ore. Extensive beds of that mineral also occur in this district, which is now the seat of the greatest iron-works in the empire. It has been supposed that the Welsh coal field is of itself capable of supplying a demand as extensive as that of the entire kingdom at the present time for from 1,500 to 2,000 years!

The new red sand occupies nearly all the remaining portion of the surface on to the lias; it consists of beds of clay, marl, gravel, sand, &c., of various texture,— the débris of older rock strata. Extensive deposits of gypsum, and vast and all but inexhaustible beds of rock salt occur in this formation, which will be elsewhere noticed. The upper secondary strata occupy the surface from the W. limits of the lias, previously described, to those of the chalk formation on the E.; which last has the same general direction, though forming a much greater curve, which terminates at either extreme of the lias. The strata included within these limits are of very various character, and abound in fossil remains: in some parts they furnish fine freestone for building purposes; in others, lime, fullers' earth, and pipe-clay. Their aggregate thickness has been estimated at between 2,000 and 3,000 ft., all formed by deposition in an oceanic basin, as the character and abundance of the fossil remains clearly indicate. The green sand formation rests on those of the oolite, and is succeeded by that of chalk, both abounding in marine testaceous remains; the average thickness of the latter, when fully developed, being about 1,000 ft. It occupies the S. coast, from the Reculver Cliffs to Folkestone, and from Beachy Head to Brighton, stretching inland from the former round the weald district, and from the latter inland towards Salisbury, and thence over the Hampshire and Dorset downs nearly to Dorchester: the Inkpen, in Hants (1,011 ft.), is the highest summit of the chalk. The general dip of all the strata, from the lias to the chalk inclusive, is S.E., and very gradual: a line from the N. escarpment of the chalk in Berkshire to the Malvern Hills, would intersect the Basset edges of the entire series. The deposits above these are chiefly limited to the S.E. cos., and have little of variety or well-marked character to distinguish them; the chief are those of the London and plastic clays, occupying the basin of the Thames. Formations of similar character extend along the sea-coast, from Brighton to Southampton, and occupy a portion of the Isle of Wight. The sandy strata that occur in several of the S. cos., and known by the general name of Bagshot sand; the mixture of ferrugineous sand and clay with chalk fragments (crag) that occupy the E. parts of Norfolk and Suffolk; and the still more recent alluvial deposits of Holderness, the Fens, and Romney Marsh; all obviously constituted of the débris of older rock formations, and the latter resulting from atmospheric, oceanic, and other presently existing influences now in active operation. Our limits will not permit more than a brief reference to other interesting geological phenomena; such as the boulders and fragments of rocks from the Cumbrian and Welsh mountains, that are strewed over some of the midland cos.; the beds of chalk, flint, and gravel, that occur at great distances from the main formations, and are found capping summits of others, wholly different; and the remains of mammiferous animals in the lime caverns of York and Devon; such as those of the extinct species of the elephant, hyæna, bear, &c., which must once have ranged over the districts in which these relics are deposited.

The only medicinal springs of importance are those of the cos. Derby, Gloucester, and Somerset, which will be found fully described under the heads of their respective localities.

Climate.— The British sky is truly said by Tacitus to be *crebris imbribus ac nebulis fœdum*, but also to be without the *asperitas frigorum*. (*Vit. Agric.* § 12.) The climate of England is chiefly characterised by the absence of extremes in temperature, by humidity, and by almost incessant variations within a limited range, peculiarities ascribable to the geographical position of the country, in contiguity with an extensive continent on one hand, and a vast ocean on the other: the latter with nearly the same temperature throughout the year, and exerting an equalising influence over the contiguous atmosphere; the other with a varying temperature, above that of the ocean in summer, and lower during the winter months. Hence the origin and direction of the prevailing winds at different periods of the year, according to which ever of those great surfaces exert most rarefying power: those blowing from the continent being comparatively dry, whilst those from the ocean, being charged with its exhalations, bring the chief part of the rain that descends, 2-3ds of the whole of it falling on the W. side of the kingdom. Rains are more prevalent during the summer and autumnal months, when the higher relative temperature of the continent, and greater rarefaction of the atmosphere in contact with it, cause aërial currents from the ocean to set in that direction, in order to supply the comparative vacuum; whilst the E. and N.E. winds, that frequently prevail in winter and spring, are attributable to the higher temperature of the sea at those periods. According to a series of observations made under the direction of the Royal Society, the S.W. is the most frequent wind in every month of the year, but is more prevalent in July and August than in any other; the N.E. prevails most in Jan., and from March to June, inclusive; whilst the N.W. is most frequent from Nov. to March, and least so in Sept. and Oct. It also appears, from the same observations, that rain is less prevalent in March than in Nov., in the proportion of 7 to 12; in April than Oct., in the ratio of 1 to 2; and in May than Sept., in the ratio of 3 to 4: hence the summer, autumn, and earlier part of winter, are the most humid portions of the year. The minor differences of climate that exist within the kingdom itself are wholly in accordance with the above views and observations: in Cornwall, the annual average quantity of rain falling is 45 in., and in the W. part of the kingdom, generally, it is found to vary from 30 to 51 in.; in the S.E. counties, and also in the metropolis and its vicinity, the quantity is only from 20 to 25 in.; whilst Norfolk has, in all probability, the least humid climate in the kingdom: as yet, however, sufficient data do not exist to make other than an approximate calculation of the average that falls in any of the districts, and of course the general average of the whole can only be stated in the same qualified way. The estimate made by Dr. Dalton appears to be, on the whole, the most precise and satisfactory on this point: and he makes the whole annual quantity falling on the surface of England and Wales, 31 in.; to which he adds a depth of 5 in. supplied from the atmosphere in the form of dew, and calculates that 23 in. of the whole are carried off by evaporation, and the remaining 13 in. through the medium of the various rivers to the ocean. We have previously noticed the limited range of the thermometer, which at the coldest period (Jan.) seldom falls much below the freezing point, and at the warmest (July and Aug.) as rarely rises higher than 80° Fahr., though occasional instances of greater variation may be cited. In the N. cos. from their contiguity to the sea on either side, the range is still more limited, rarely exceeding 75° or falling more than 3° or 4° below zero: so that their mean annual temperature is within 2° or 3° of those on the S. coast. In a general view, however, the influence of the ocean in tempering the atmosphere (as well as in the humidity it imparts) is greatest on the W. side of the kingdom, and most so within the limits of the S.W. peninsula; the temperature of the ocean on that side being, during the coldest season, rarely so low as 50°, whilst that of the German Ocean, on the other, except in the height of summer, seldom exceeds 45° Fahr. On the whole, the most obvious difference that occurs in the local climates of the N. and S. parts of the kingdom is the lateness of spring in the former as compared with the latter; at an average about a fortnight between the cos. N. of the Mersey and Humber, and those of the S. and S.W. The local effect of the W. mountain ranges is considerable, and tends to increase, in a greater ratio than would otherwise be the case, the quantity of rain falling in their vicinity; but, as a whole, the elevation of the surface is no where so considerable as to have any remarkable influence on the general character of the climate. The fens on the E. coast, and the wolds of Kent and Sussex, are the only tracts of any extent where the superfluous moisture would, but for artificial means, be retained long enough to generate miasma; in almost every other part of the country the surface has sufficient elevation and inequality to facilitate the free percolation of water, and to conduct the superfluity by natural means to the numerous streams that intersect it; so that no where can its physical structure be said to exert an injurious influence on the climate.

The more general enclosure and cultivation of the surface within the last century must also have greatly augmented these facilities, and improved the salubrity of the climate, which, however, as regards its chief characteristics, seems to be much the same as when Cæsar and Tacitus described it. There appears but little foundation for the notion once prevalent that the climate has deteriorated, and become colder; an inference from the fact of vineyards having once been cultivated to some extent in various parts of the country: but the same accounts also prove that verjuice formed no inconsiderable part, and in some summers constituted the only produce of these vineyards. It is probable that a better result than this might be obtained in the present day, were favourable spots selected, and any probable advantage to be derived from the culture of the vine. The mean daily range of the thermometer on an average of the whole year has been estimated at 11° for the metropolis, 14° for the midland counties generally, and 8° for Cornwall; but the extent of the daily range of course varies with the different seasons, being greatest when the sun has most influence, and the processes of evaporation and radiation are in most active operation. The mean difference between the coldest and the warmest months of the year has been stated at, for London 26°, Cornwall 18½°, and England generally 24½°; but these, and similar calculations, can only be considered as probable approximations to the truth, deduced from such series of observations as exist; which, however, are far too few and limited to make further details or generalisations of any practical utility.

The great drawbacks upon the climate are the prevalence of cold, biting N.E. winds in April, May, and June, which frequently render them the most disagreeable season of the year; and the occasional occurrence of wet summers and harvests. The crops in England are very rarely injured by droughts; but they not unfrequently suffer from excess of humidity. In Cornwall, where the climate is most equal, and the winters the mildest, the moisture and coolness of the summers are such that the fruit is inferior in flavour to that raised in the more E. and midland counties, at the same time that it arrives later at maturity.

Vegetable Productions. — The Flora of the kingdom comprises between 1,400 and 1,500 indigenous species of phaneogamous plants, of which upwards of 100 belong to the grass family: these, together with the furze (*Ulex europæus* and *nanus*), the three common heaths (*tetralix*, *cinerea*, and *vulgaris*), and the different kinds of rushes and sedges, occupy a very large surface, and perhaps characterise better than any other the nature and capabilities of the tracts they occupy. The oak (*Quercus robur*) is the king of native British trees, and supplies the timber of which our finest ships are built. Hence the oak is intimately associated with the maritime glories of England. Take it for all in all, it is probably the best timber of which we have any certain knowledge. Some is harder, some more difficult to rend, and some less capable of being broken across; but none contains all the three qualities in such great and equal proportions; and thus, for at once supporting a weight, resisting a strain, and not splintering by a cannon-shot, it is superior to every other timber. In favourable soils it will flourish at an elevation of 700 ft. The ash, alder, and hawthorn, thrive, under similar circumstances, at 800 ft.; the fir (*P. sylvestris* — the only indigenous species) at 1,000 ft.; the mountain ash, and some of the smaller and prostrate varieties of the willow tribe, ascend nearly to the highest summits; whilst the hornbeam, lime, maple, poplar, and elm, flourish only in localities much less elevated than any of the preceding. The beech and sycamore reach 750 and 800 ft. respectively; but these, though long perfectly naturalised, are foreign introductions, as are also the larches, pines, chestnut, horse-chestnut, and many others that flourish and attain to considerable size in the extensive parks and plantations of the kingdom. Of indigenous fruits, the list is very scanty; the pear, crab, medlar, wild cherry, bullace, raspberry, blackberry, gooseberry, currant, strawberry, and cranberry, being nearly, if not quite, all that can be so called; and the greater part of these, in their natural state, can scarcely claim to rank as such in the more common acceptation of the word.

Every one is ready to admit that England is indebted to commerce, or to her intercourse with other nations, for a very large proportion of her superior wealth and comforts. But it is now seen that her obligations in this respect are really much greater than is generally supposed. We are not indebted to foreign countries for mere luxuries and superfluities, but for the greater part of those plants and vegetables that supply the largest portion of our food. We have brought from abroad all our bread corns, our potatoes, most part of our garden stuffs and fruits; with hops, turnips, and a vast variety of useful and ornamental vegetable products. But it is the good fortune of England that most of these are so admirably suited to the soil, that, unless the contrary were known, they might be supposed to be indigenous. Those species of fruits that require a powerful sun to bring them to maturity do not, indeed, answer in our climate, except artificial means be employed in ripening them. But the more useful kinds attain to perfection. *Solum præter oleam vitemque, et cetera calidioribus terris oriri sueta, patiens frugum, fecundum; tardè mitescunt citò proveniunt; eademque utriusque rei causa, multus humor terrarumque cœlique.* (*Tacit. Agric.* § 12.)

Of the smaller herbaceous plants our limits only permit the notice of a few most characteristic of the features of an English landscape, or which are otherwise distinguished for their beauty and rarity. Of these, the various grasses that may almost be said to be in a state of constant growth, and to cover so large a portion of the surface, in a literal sense, with perpetual verdure, claim precedence; of flowers, the daisy, primrose, cowslip, violet, and lesser celandine, are the most common and most universal favourites, next which, perhaps, the woodbine, eglantine, hyacinth, harebell, and goldcups, contribute more largely to the adornment of the scenery: of the less common kinds, the tamarisk, musk, gentian, and a few others, are limited to the S.W. peninsula; the hop, briony, pheasant eye, &c., to the midland cos.; the juniper, parnassia, and a few others, to the more elevated regions of Wales, and the N. cos.; and the water lily can only be considered in its native locality when expanding its fine flowers on the surface of the Cumbrian lakes. The foxglove, henbane, hemlock, nightshade (*Atropa*), and the *Cicuta virosa* of the Cambridge fens, are almost the only species that possess active medicinal qualities. The woad, madder, teasel, hop, flax, buckwheat, clovers, tares, and melilots; together with the carrot, parsnip, cabbage, sea kale, and asparagus, comprise the chief indigenous species available for economical purposes; whilst the misletoe and ivy claim a passing notice from traditional associations. Of cryptogamous plants there exist about 300 distinct species of moss, and upwards of 500 of *Algæ*, that is, lichens and sea weeds: two or three of the lichens are identical with those extensively used as dyes, but they scarcely occur any where in sufficient abundance to be worth collecting: various species of sea weed are thrown abundantly on some parts of the sea-coast, and collected as a manure, but are no where, we believe, converted into kelp or barilla.

Zoology. — Without recurring to an older geological period, when the animals, whose bones are found in the limestone caves of Yorkshire and Devon, occupied the country, we find that, within a comparatively recent period, it was in a great degree overspread with vast forests, the abodes of many wild animals, which, as well as their coverts, have now wholly disappeared. The bear may be traced as an inhabitant of these down to A.D. 1057, and may have existed later: the beaver to 1188, when its habits were noticed and described by Giraldus Cambrensis, as witnessed by him on the Teifi: many notices of wolves occur so recently as the reign of Edw. I., notwithstanding the war of extirpation waged against them by Edgar. The New Forest in Hampshire was the latest resort of the wild boar, which must have been extirpated during the period of the last civil war: the wild cat has disappeared from its latest haunts — Cumberland and Westmorland — within living memory, but is still found in Scotland. The wild ox (*Urus*) has only escaped a similar fate, by having been preserved as a curiosity in Chillingworth Park near Berwick, and in one or two other localities, where this fierce and distinct breed (with cream-coloured hide, black muzzle, and downward-bent horns) may still be seen. The stag, fallow deer, and roe have also been saved by similar interference and protection. The indigenous quadrupeds now existent in a wild state are — the fox, badger, polecat, beech and pine martens, otter, weasel, stoat, hedgehog, mole, land and water shrews, squirrel, hare, rabbit, dormouse, field and water lemmings, black rat, common, field, and harvest mice, and six species of the bat tribe. Of cetaceous mammalia, the razor-back and porpoise are the only species that occur with any frequency, though such lists as comprise stragglers notice 13 or 14 others, as of occasional occurrence on the coasts. The Norway rat is an ascertained immigrant, which has warred with the indigenous species, and made it by far the scarcest of the two. The domesticated animals and poultry will be noticed under another head. The great bustard appears to be almost the only species of bird that has been banished from the kingdom by the extension of enclosures and cultivation; although the bittern and two or three others have become scarcer, and have wholly deserted many of their ancient haunts, yet they may still be met with, whilst the former has wholly disappeared from its latest locality, the Wiltshire downs. Pennant, in 1777, notices bustards as occurring in flocks of 50 or more, on most of the open tracts of the S. and E. counties, from the Dorset downs to the Yorkshire wolds. Of those species which are either indigenous or habitual visiters, 20 are birds of prey; of gallinaceous birds (grouse, pigeons, &c.) there are 80 species; of *insessores*, or the tooth-billed tribe (shrikes,

ouzels, &c.), 83; of the conical-billed tribe (finches, &c.), 34: the climbers (woodpeckers, &c.) include 9 species; the *fissirostres* (swallows, &c.), 7; the wading tribe, 60; and the swimming water-fowl, 78 species. In all, 274 species have been enumerated; the numbers of land and water-birds being nearly equal — a singular circumstance attributable to our insular position, and extensive coast-line. Puffins' eggs on some parts of the Welsh coast, and in a few other localities, are objects of some traffic. The different species of fish frequenting the seas, lakes, and rivers of England, have been estimated at about 170; a large portion of these, as well as of birds, are migratory. The more important species will be subsequently specified. 9 species only of amphibia have been noticed, comprising one kind of lizard, 2 newts, 3 snakes — the viper or adder, green or common snake, and blind worm, of which the first only is venomous; and the common toad, frog, and natter-jack. There are between 450 and 500 species of *testacea;* of which the oyster, scallop, cockle, periwinkle, whilk, limpet, and muscle, are the principal edible kinds. The *crustacea* include the crab, lobster, crawfish, prawn, and shrimp; but the former are limited to the more rocky portions of the coast. Upwards of 10,000 insects have been enumerated by Mr. Stephens, whose catalogue does not however include the whole. Of these, *diptera* (flies) comprise about 1,700 species, *hymenoptera* (bees, wasps, &c.) 2,000, *coleoptera* (beetles) above 3,000, and *lepidoptera* (butterflies, moths, &c.) about 1,900. None of the latter is of any great size; but several of the British butterflies can boast of considerable beauty, and variety of hue. *Annelides* comprise the medicinal, and horse-leech, &c. Radiated animals and *zoophytes* are abundant on the coasts.

Civil Divisions, &c. — Since the days of the great Alfred, England has been divided into counties or shires, and these again generally into hundreds, and always into parishes. Sometimes, however, instead of being divided into hundreds, a co. is divided into wards, as is the case in the N. counties; sometimes it is divided into ridings (a corruption of trithings), as is the case with Yorkshire; and sometimes into lathes and sokes, as in Kent and Lincoln. (For an account of these divisions, see *Statistics of British Empire*, i. 144—150.) We subjoin a

Table showing the Number of Square Miles and of Imperial Acres in the several Counties of England and Wales, with the Number of Parishes and the Population of each County in 1851; and showing also the Number of Inhabited Houses, and the Number of Acres to each Person, with the Number of Persons to a House in each County.

Counties.	Square Miles.	Statute Acres.	Parishes.	Population Returns, 1851.			Inhabited Houses, 1851.	Number of Acres corresponding to each Person.	Number of Persons corresponding to each House.
				Males.	Females.	Totals of both Sexes.			
Bedford	461·85	295,582	123	59,911	61,637	124,478	24,673	2·4	5·1
Berks	704·75	451,040	151	84,927	85,138	170,065	33,481	2·7	5·1
Buckingham	729·58	466,932	207	81,074	82,649	163,723	33,196	2·9	4·9
Cambridge	818·53	523,861	165	92,699	92,706	185,405	37,226	2·8	5·0
Cheshire	1,104·81	707,078	91	222,383	233,339	455,725	85,260	1·6	5·3
Cornwall	1,365·00	873,600	205	171,636	183,922	355,558	67,987	2·5	5·2
Cumberland	1,561·49	1,001,273	105	96,244	99,248	195,492	36,763	5·1	5·3
Derby	1,029·38	658,803	140	147,737	148,347	296,084	59,371	2·2	5·0
Devon	2,589·35	1,657,180	465	269,583	297,515	567,098	98,387	2·9	5·7
Dorset	987·54	632,025	275	89,204	95,003	184,207	36,138	3·4	5·1
Durham	972·62	622,476	76	196,700	194,297	390,997	64,977	1·6	6·0
Essex	1,652·11	1,060,549	414	185,399	183,919	369,318	73,530	2·9	5·0
Gloucester	1,257·97	805,102	335	218,187	240,618	458,805	86,339	1·8	5·3
Hants	1,672·21	1,070,216	223	202,014	203,356	405,370	75,238	2·7	5·3
Hereford	835·66	534,823	134	58,114	57,375	115,489	23,880	4·6	4·8
Hertford	611·16	391,141	102	82,831	84,467	167,298	32,573	2·3	5·1
Huntingdon	360·72	230,865	413	31,933	32,250	64,183	13,285	3·6	4·8
Kent	1,627·31	1,041,479	67	307,041	308,735	615,766	107,748	1·7	5·7
Lancaster	1,905·03	1,219,221	213	991,090	1,040,146	2,031,326	349,938	·6	5·8
Leicester	803·38	514,164	630	112,937	117,371	230,308	48,953	2·2	4·7
Lincoln	2,776·15	1,776,738	197	205,083	202,139	407,222	81,335	4·4	5·0
Middlesex	281·51	180,168	123	882,823	1,003,753	1,886,576	239,362	·1	7·9
Monmouth	575·62	368,399	748	82,349	75,069	157,418	28,939	2·4	5·4
Norfolk	2,116·10	1,354,301	303	215,254	227,460	442,714	93,143	3·1	4·8
Northampton	984·94	630,358	94	105,984	106,396	212,380	43,942	3·0	4·8
Northumberland	1,952·03	1,249,299	212	149,515	154,053	303,568	47,737	4·1	6·3
Nottingham	822·00	526,076	218	132,263	138,164	270,427	55,019	1·9	4·9
Oxford	738·88	472,887	51	85,524	84,915	170,439	34,398	2·8	5·0
Rutland	149·69	95,805	217	11,801	11,182	22,983	4,588	4·2	5·0
Salop	1,290·71	826,055	474	114,340	115,001	229,341	45,648	3·6	5·0
Somerset	1,636·28	1,047,220	318	211,015	232,871	443,916	85,054	2·4	5·2
Stafford	1,137·61	728,468	151	310,032	298,684	608,716	116,273	1·2	5·2
Suffolk	1,480·75	947,681	509	166,308	170,907	337,215	69,282	2·8	4·9
Surrey	748·12	478,792	144	325,011	358,041	683,082	108,322	·7	6·3
Sussex	1,460·71	931,851	314	165,772	171,072	336,844	58,663	2·8	5·7
Warwick	881·17	563,946	201	232,411	242,602	475,013	96,731	1·2	4·9
Westmoreland	758·49	485,432	32	29,079	29,208	58,287	11,217	8·3	5·2
Wilts	1,351·71	865,092	303	125,728	128,493	254,221	51,667	3·4	4·9
Worcester	737·76	472,165	175	136,956	139,970	276,926	55,639	1·7	5·0
York, East Riding	1,200·64	768,419	187	109,443	111,540	220,983	44,363	3·5	4·9
City and Ainsty	4·25	2,720	48	16,977	19,326	36,303	7,007	·7	5·1
North Riding	2,109·57	1,350,121	192	106,710	108,504	215,214	44,446	6·3	4·8
West Riding	2,668·79	1,708,026	196	659,619	665,876	1,325,495	264,302	1·3	5·0
Totals of England	50,922·54	32,590,429	9,942	8,281,734	8,640,154	16,921,888	3,076,620	1·9	5·5
Anglesey	302·27	193,453	74	28,101	29,226	57,327	12,124	3·4	4·7
Brecknock	718·91	460,158	68	31,314	30,160	61,474	12,221	7·5	5·0
Cardigan	692·79	443,387	63	32,961	37,835	70,796	14,978	6·3	4·7
Carmarthen	947·39	606,331	76	53,076	57,556	110,632	22,445	5·5	4·9
Carnarvon	578·55	370,273	68	42,978	44,892	87,870	18,005	4·2	4·9
Denbigh	603·21	386,052	60	46,708	45,875	92,583	19,124	4·2	4·8
Flint	288·92	184,905	25	34,452	33,704	68,156	14,041	2·7	4·8
Glamorgan	855·46	547,494	125	100,748	111,101	231,849	43,202	2·4	5·3
Monmouth	608·27	385,291	34	19,151	19,692	38,843	8,159	9·9	4·8
Montgomery	755·90	483,323	52	33,634	33,701	67,335	13,350	7·2	5·0
Pembroke	627·65	401,691	141	43,675	50,465	94,140	19,136	4·3	4·9
Radnor	425·20	272,128	52	12,693	12,023	24,716	4,614	11·0	5·4
Totals of Wales	7,397·64	4,734,486	838	499,491	506,230	1,005,721	201,119	4·7	5·0
Totals of England and Wales	58,320·18	37,324,915	10,780	8,781,255	9,146,384	17,927,609	3,278,039	2·1	5·5

Population. — The information with respect to the number of people in England antecedent to 1801, when the first census was taken, is extremely vague and unsatisfactory. According to *Domesday Book*, England, exclusive of Wales and the four N. counties of Northumberland, Cumberland, Durham, and Lancaster, contained immediately after the Conquest, 300,785 families, which, at an average of five persons to each family, will give about 1,500,000 individuals. Adding to this number 650,000 for the pop. of Wales and the excluded English counties, and other omissions, the entire pop. of the kingdom, at that epoch, will be 2,150,000. From the poll-tax

returns in 1377, it appears that 1,367,239 persons paid the assessment levied upon every lay person, whether male or female, of 14 years of age, mendicants only excepted. But Wales, Chester, and Durham are not included in these returns; and there are doubtless many omissions in the returns that were given in. Little dependence can, therefore, be placed on them; but Mr. Chalmers has thence concluded that the pop. at the period in question amounted to 2,350,000. Perhaps, however, this estimate is rather under the mark; for, in 1377, the country could hardly have recovered from the disastrous influence of the great pestilence of 1349; and it is highly probable that the children and persons under age then exceeded a third part of the pop. at which they are estimated by Mr. Chalmers. Harrison and Sir Walter Raleigh set down the number of fighting men in the kingdom in 1575 and 1583 at 1,172,000. But this was probably little better than a rough guess; and unless it included all the able-bodied individuals between certain specified ages, it would afford but slender means by which to estimate the pop. Perhaps, however, we may conclude that it was then somewhere about 4½ or 5 millions. There is no reason to suppose that the pop. was materially affected by the civil war under Charles I.; and the period from the Restoration to the Revolution was one of considerable prosperity. Previously to the Revolution, a hearth tax had been imposed; and the celebrated Gregory King, founding on returns obtained under this act, estimated the pop. of England and Wales, in 1696, at 5,500,000; which probably was not far from the mark. A great deal of discussion took place in the course of last century with respect to the progress of pop. Dr. Price and others contending, on the one hand, that it was progressively diminishing; while Mr. Howlett, Mr. Wales, and others, contended, on the other, that there were really no grounds for this conclusion, and that, instead of diminishing, the pop. was steadily increasing. The census of 1801 put an end to these disputes, and showed that, supposing Gregory King's estimate to have been nearly correct, the country had gained an accession of about 3,373,000 inhab. in the course of the 18th century! The accounts of the population in 1700 and 1750, in the subjoined table, have been deduced from the parochial registers of births, marriages, and deaths; it being assumed that these bore the same proportion to the population at the periods referred to as in 1801.

Account of the Population of England and Wales, exclusive of Army and Navy, in 1700, 1750, 1801, 1811, 1821, 1831, 1841, and 1851; showing its Amount in each County, with the Ratio of its Increase in each deceunial Period since 1831.

Counties.	1700.	1750.	1801.	1811.	1821.	1831.	Incr. per Cent.	1841.	Incr per Cent	1851.
Bedford	53,706	59,542	68,393	70,213	84,052	95,483	13	107,936	16	124,478
Berks	77,845	92,393	110,480	119,430	132,639	146,234	10	161,759	5	170,065
Buckingham	76,325	87,821	108,132	118,065	135,133	146,977	6	156,439	5	163,723
Cambridge	82,227	78,097	89,346	101,109	122,387	143,955	14	164,459	13	185,405
Chester	101,598	115,681	192,305	227,031	270,098	334,391	18	395,660	15	455,725
Cornwall	124,084	141,744	192,281	220,525	261,045	301,306	14	342,159	4	355,558
Cumberland	91,421	87,109	117,230	133,665	156,124	169,262	5	178,038	10	195,492
Derby	115,564	108,251	161,567	185,487	213,651	237,170	15	272,202	9	296,084
Devon	335,667	329,398	340,308	382,778	438,417	493,908	7	532,959	6	567,098
Dorset	88,628	91,909	114,452	124,718	144,930	159,385	10	175,054	5	184,207
Durham	114,272	139,799	149,384	165,293	193,511	239,256	29	307,963	27	390,997
Essex	170,842	193,932	227,682	252,473	289,424	317,507	9	344,979	7	369,318
Gloucester	157,348	218,149	250,723	285,955	336,190	387,398	11	431,495	6	458,805
Hereford	75,229	75,682	88,436	93,526	102,669	110,617	2	113,272	2	115,489
Hertford	73,599	82,163	97,393	111,225	129,731	142,844	10	156,660	7	167,298
Huntingdon	31,966	32,516	37,568	42,208	48,946	53,192	10	58,519	10	64,183
Kent	157,833	181,267	308,667	371,701	427,224	479,558	12	549,353	11	615,766
Lancaster	242,014	341,451	673,486	828,499	1,052,948	1,336,854	24	1,667,054	22	2,031,236
Leicester	80,210	98,488	130,082	150,559	174,571	197,003	10	215,867	7	230,308
Lincoln	181,555	164,708	208,625	237,634	283,058	317,465	14	362,602	12	407,222
Middlesex	729,802	553,047	818,129	953,774	1,145,057	1,358,330	16	1,576,636	20	1,886,576
Monmouth	26,831	31,727	45,568	62,105	75,801	98,126	36	134,368	17	157,418
Norfolk	245,842	237,766	273,479	291,947	344,368	390,054	6	412,664	7	442,714
Northampton	113,670	120,180	131,525	141,353	163,097	179,336	11	199,228	7	212,380
Northumberland	120,006	149,385	168,078	183,269	212,589	236,959	12	266,020	14	303,568
Nottingham	86,315	91,353	140,350	162,964	186,873	225,327	11	249,910	8	270,427
Oxford	85,159	95,886	111,977	120,376	138,224	153,526	6	163,127	5	170,439
Rutland	15,616	12,618	16,300	16,380	18,487	19,385	10	21,302	8	22,983
Salop	118,981	135,480	169,248	184,973	198,311	213,518	6	225,820	2	229,341
Somerset	217,037	239,132	273,577	302,836	355,789	403,795	8	435,599	2	443,916
Southampton	109,898	144,159	219,290	246,514	282,897	313,976	12	354,682	13	405,370
Stafford	125,856	151,051	242,693	294,540	345,972	409,480	24	509,472	20	608,716
Suffolk	163,460	171,485	214,404	233,963	271,541	296,317	6	315,073	7	337,215
Surrey	132,764	143,384	268,233	323,851	399,417	486,434	20	584,036	17	683,082
Sussex	98,534	101,353	159,471	190,343	233,328	272,644	10	300,075	15	336,844
Warwick	98,725	134,070	206,798	228,906	274,482	336,645	19	401,703	19	475,013
Westmoreland	40,685	38,634	40,805	45,922	51,359	55,041	3	56,454	3	58,287
Wilts	152,372	168,937	183,820	191,853	219,574	237,244	8	256,280	—1	254,221
Worcester	104,132	102,910	146,441	168,982	194,074	222,655	12	248,460	12	276,926
York, East Riding	53,315	61,417	111,192	133,975	154,643	168,891	15	194,936	12	220,983
City and Ainsty	17,717	17,703	16,846	19,099	21,711	26,260	10	28,842	26	36,303
North Riding	120,282	115,548	158,927	170,127	188,178	192,206	6	204,701	5	215,214
West Riding	242,129	325,716	572,168	662,875	809,363	984,609	18	1,163,580	14	1,325,495
Totals of England	5,653,061	6,066,041	8,350,859	9,553,021	11,281,883	13,090,523	14	14,997,427	13	16,921,888
Anglesey	- -	- -	33,806	37,045	45,063	48,325	5	50,891	12	57,327
Brecon	- -	- -	32,325	37,735	43,826	47,763	16	55,603	11	61,474
Cardigan	- -	- -	42,956	50,260	57,784	64,780	6	68,766	3	70,796
Carmarthen	- -	- -	67,317	77,217	90,239	100,740	6	106,326	4	110,632
Carnarvon	- -	- -	41,521	49,655	58,099	66,818	21	81,093	8	87,870
Denbigh	- -	- -	60,299	64,249	76,428	82,665	7	88,478	5	92,583
Flint	- -	- -	39,469	45,937	53,893	60,244	11	66,919	2	68,156
Glamorgan	- -	- -	70,879	85,067	102,073	126,612	35	171,188	35	231,849
Merioneth	- -	- -	29,506	30,854	34,382	35,315	11	39,332	—1	38,843
Montgomery	- -	- -	48,184	52,184	60,245	66,844	4	69,607	—3	67,335
Pembroke	- -	- -	56,280	60,615	73,788	81,425	8	88,044	6	94,140
Radnor	- -	- -	19,135	20,417	22,533	24,743	3	25,458	—3	24,716
Totals of Wales	391,947	450,994	541,677	611,236	718,353	816,274	13	911,705	10	1,005,721
Totals of England and Wales	6,045,008	6,517,035	8,892,536	10,164,256	12,000,236	13,896,797	14	15,914,148	13	17,927,609

Until 1837, when a new system of registration was established under the direction of the Registrar General, there were no means by which to form a correct estimate of the numbers of births and deaths. In 1538, the clergy were required to keep registers of these, as well as of marriages, in their respective parishes; and in 1603 the injunction was renewed; but the rite of baptism in the parish church being objected to by numerous sects of Dissenters, the registration of births has been at all periods very defective. The same was the case, though in a less degree, with respect to the registers of deaths, various classes of Dissenters having their own cemeteries, in which their own forms of burial were adopted; and it happened that in many places a reference to the parish registers merely supplied the means of making an approximate estimate of the number of deaths. The statute of the 26th Geo. II., which made registration indispensable to the validity of a marriage, having come into operation in 1754, the registers of marriages have been since nearly correct. The following tables, compiled from the official returns, embrace the fullest information it

has been possible to bring together with respect to births, deaths, and marriages in England and Wales. Since 1800 we have annexed a statement of the annual average prices of wheat per imperial quarter, which is interesting from its exhibiting the powerful influence of variations in the price of corn over the condition of the population, as evinced in the numbers of births, marriages, and deaths.

(A) Account of the Population of each County of England and Wales in 1841; showing also the Numbers of Males and Females in each, under and above 20 years of age, with the numbers respectively born in England and Wales, Scotland, Ireland, &c.

Counties.	Total of Persons.	Ages. Under 20 Years. Males.	Ages. Under 20 Years. Females.	Ages. 20 Years and upwards. Males.	Ages. 20 Years and upwards. Females.	Born in England and Wales.	Born in Scotland.	Born in Ireland.	Born in Colonies and elsewhere.
England.									
Bedford	107,936	25,970	25,976	26,220	29,770	106,889	172	235	640
Berks	161,147	37,214	36,481	43,017	44,435	157,665	512	900	2,070
Bucks	155,983	37,032	36,337	39,450	43,164	154,001	269	367	1,346
Cambridge	164,459	39,397	39,219	42,214	43,629	162,234	232	883	1,110
Chester	395,660	93,692	95,149	99,954	106,865	379,182	1,808	11,577	3,093
Cornwall	341,279	84,625	82,703	80,132	93,819	337,587	360	981	2,351
Cumberland	178,038	41,111	41,038	45,181	50,708	165,050	6,355	4,881	1,752
Derby	272,217	64,450	64,425	71,170	72,172	268,354	487	1,849	1,527
Devon	533,460	120,785	121,773	131,975	158,927	524,269	1,040	4,084	4,067
Dorset	175,043	40,862	41,280	42,692	50,209	173,296	224	645	878
Durham	324,284	77,632	76,488	82,441	87,723	309,947	7,272	5,407	1,658
Essex	344,979	81,264	81,076	91,084	91,555	339,640	637	2,216	2,486
Gloucester	431,383	95,611	98,377	109,932	127,463	420,065	1,235	5,778	4,305
Hereford	113,878	25,088	24,811	31,890	32,089	112,705	126	322	727
Hertford	157,207	37,444	36,515	40,173	43,075	154,538	391	526	1,752
Huntingdon	58,549	14,080	13,991	14,992	15,486	57,954	74	185	336
Kent	548,337	125,279	123,057	147,253	152,718	524,781	4,515	10,401	8,640
Lancaster	1,667,054	388,901	394,009	425,946	458,198	1,526,932	21,747	105,916	12,459
Leicester	215,867	50,138	50,665	55,478	59,586	213,576	376	970	945
Lincoln	362,602	84,982	84,025	96,776	96,819	357,623	588	1,244	3,147
Middlesex	1,576,636	304,723	322,044	434,181	515,688	1,457,679	20,921	58,068	39,968
Monmouth	134,355	30,741	29,473	39,865	34,276	130,116	329	2,925	985
Norfolk	412,664	94,982	95,967	104,119	117,596	408,612	557	924	2,571
Northampton	199,228	46,608	45,995	52,369	54,256	196,755	376	966	1,131
Northumberland	250,278	56,708	56,954	64,560	72,056	231,179	11,910	5,218	1,971
Nottingham	249,910	57,606	59,036	64,125	69,143	246,189	634	1,522	1,565
Oxford	161,643	37,945	37,725	42,491	43,482	159,863	226	430	1,124
Rutland	21,302	5,071	4,823	5,650	5,758	21,097	25	36	144
Salop	239,048	55,645	54,624	63,710	65,069	236,139	391	1,199	1,319
Somerset	435,982	99,468	99,765	109,915	126,834	430,720	717	2,122	2,423
Southampton	355,004	81,115	80,247	93,908	99,734	346,876	2,024	3,402	2,702
Stafford	510,504	125,113	122,786	133,751	128,854	500,975	1,064	4,803	3,662
Suffolk	315,073	74,537	74,245	79,558	86,733	312,631	358	773	1,311
Surrey	582,678	123,570	126,384	154,633	178,091	554,063	4,642	13,822	10,151
Sussex	299,753	70,927	71,220	76,677	80,929	293,862	1,055	1,399	3,437
Warwick	401,715	90,880	92,931	104,799	113,105	390,395	1,358	6,333	3,629
Westmoreland	56,454	13,242	13,045	14,971	15,196	55,290	431	242	491
Wilts	258,733	61,370	60,194	66,870	70,299	255,965	284	605	1,879
Worcester	233,336	53,681	54,578	60,983	64,094	230,139	383	1,411	1,403
York, East Riding	194,936	43,079	43,278	52,939	55,640	189,466	1,129	1,945	2,396
——, City and Ainsty	38,321	7,792	8,277	10,381	11,871	37,234	275	534	278
——, North Riding	204,122	46,332	45,572	54,160	58,068	201,202	868	905	1,147
——, West Riding	1,154,101	282,957	282,179	291,163	297,802	1,129,217	3,688	15,177	6,019
Total of England	14,995,138	3,429,639	3,448,737	3,893,748	4,223,014	14,461,950	102,065	284,128	146,995
Wales.									
Anglesey	50,891	11,952	11,738	12,422	14,779	50,502	45	137	207
Brecon	55,603	12,448	12,452	15,626	15,077	54,897	155	282	269
Cardigan	68,766	16,144	16,320	16,071	20,231	68,387	35	70	274
Carmarthen	106,326	25,720	25,782	24,956	29,868	105,743	63	163	357
Carnarvon	81,093	18,870	18,904	20,755	22,564	80,337	86	292	378
Denbigh	88,866	21,226	20,462	23,202	23,976	88,132	116	316	302
Flint	66,919	16,345	15,567	17,463	17,544	65,919	90	370	540
Glamorgan	171,188	39,974	38,738	47,895	44,581	166,471	401	3,174	1,142
Merioneth	39,332	8,844	8,616	10,435	11,437	39,109	21	52	150
Montgomery	69,219	16,479	16,527	17,804	18,409	68,720	58	95	346
Pembroke	88,044	20,242	21,313	20,008	26,481	87,293	91	292	368
Radnor	25,356	6,036	6,026	6,790	6,504	25,211	12	33	100
Total of Wales	911,603	214,280	212,445	233,427	251,451	900,721	1,173	5,276	4,133
Persons ascertained to have been travelling by railways and canals during the night of June 6. 1841.	5,016	542	120	3,588	766				
Total of England and Wales	15,911,757	3,644,461	3,661,302	4,130,763	4,475,231	15,362,671	103,238	289,404	151,428

I. Corrected Table of the Annual Proportions of Baptisms, Burials, and Marriages, to the Population of England; calculated upon an Average of the Totals of such Baptisms, Burials, and Marriages, in the Four Years ending with 1842.

Counties.	1839–42. Births.	1839–42. Deaths.	1839–42. Marriages.
Beds	28	47	126
Berks	34	49	151
Bucks	30	47	146
Cambridge	29	45	124
Chester	32	42	150
Cornwall	30	53	143
Cumberland	33	50	173
Derby	31	46	141
Devon	36	54	131
Dorset	33	54	147
Durham	27	43	121
Essex	33	49	134
Gloucester	34	45	117
Hereford	38	49	165
Hertford	31	50	168
Huntingdon	27	47	123
*Kent (except Greenwich)	34	52	142
Lancaster	27	36	112
Leicester	30	45	136
Lincoln	31	51	132
*Middlesex (part of)	40	50	212
Monmouth	30	43	122
Norfolk	33	49	143
Northampton	29	47	127
Northumberland	31	47	133
Nottingham	30	47	138
Oxford	32	47	138
Rutland	32	51	149
Salop	37	49	130
Somerset	33	49	147
Southampton	36	52	132
Stafford	28	43	124
Suffolk	32	50	137
*Surrey (part of)	37	53	206
Sussex	34	54	148
Warwick	30	44	137
Westmoreland	35	50	165
Wilts	34	49	155
Worcester	28	47	120
York, East Riding	34	45	108
West Riding	27	44	128
North Riding	33	51	140
England and Wales	31	45	120
Metropolis	33	39	102

* The Metropolis includes the greater part of Middlesex, part of Surrey, and the Greenwich district of Kent. — *Reg. Gen. 6th Report*, p. 29.

II. Totals of registered Baptisms, Burials, and Marriages in England and Wales, with the average Prices of Wheat in each Year from 1801 to 1840 both inclusive.

Years.	Baptisms. Males.	Baptisms. Females.	Baptisms. Total.	Burials. Males.	Burials. Females.	Burials. Total.	Marriages.	Price of Wheat per Imperial Quarter. £ s. d.	Average Price of Wheat. £ s. d.
1801	120,521	116,508	237,029	101,352	103,082	204,434	67,288	5 19 6	
1802	139,889	133,948	273,837	99,504	100,385	199,889	90,396	3 9 10	
1803	150,220	143,888	294,108	102,459	101,269	203,728	94,379	4 18 10	
1804	150,583	144,009	294,592	91,538	89,639	181,177	85,738	3 2 3	
1805	149,333	142,868	292,201	91,086	90,154	181,240	79,586	4 9 9	
1806	147,376	144,553	291,929	92,289	91,163	183,452	80,754	3 19 1	4 3 11½
1807	153,787	146,507	300,294	97,996	97,855	195,851	83,928	3 15 4	
1808	151,565	144,509	296,074	102,614	98,149	200,763	82,248	4 1 4	
1809	152,812	147,177	299,989	97,894	93,577	191,471	83,369	4 17 4	
1810	152,591	146,262	298,853	104,907	103,277	208,184	84,470	5 6 5	
Totals -	1,468,677	1,410,229	2,878,906	981,639	968,550	1,950,189	832,151		
1811	155,671	149,186	304,857	94,971	93,572	188,543	86,389	4 15 3	
1812	153,949	148,005	301,954	95,957	94,445	190,402	82,066	6 6 6	
1813	160,685	153,747	314,432	93,726	92,751	186,477	83,860	5 9 9	
1814	163,282	155,524	378,806	103,525	102,878	206,403	92,804	3 14 4	
1815	176,233	168,698	344,931	99,442	97,966	197,408	99,944	3 5 7	4 7 6¼
1816	168,801	161,398	330,199	103,954	102,005	205,959	91,946	3 18 6	
1817	169,337	162,246	331,583	101,040	98,229	199,269	88,234	4 16 11	
1818	169,181	162,203	331,384	107,724	105,900	213,624	92,779	4 6 3	
1819	171,107	162,154	333,261	106,749	106,815	213,564	95,571	3 14 6	
1820	176,311	167,349	343,660	104,329	101,020	208,349	96,833	3 7 10	
Totals -	1,664,557	1,590,510	3,255,067	1,011,417	998,581	2,009,998	910,426		
1821	181,811	173,496	355,307	107,482	104,870	212,352	100,868	2 16 1	
1822	190,508	182,063	372,571	111,299	109,116	220,415	98,878	2 4 7	
1823	189,144	180,616	369,760	119,649	117,737	237,386	101,918	2 13 4	
1824	189,401	182,043	371,444	124,027	120,047	244,074	104,723	3 3 11	
1825	192,003	183,050	375,053	129,727	125,291	255,018	110,428	3 8 6	
1826	194,527	185,886	380,413	136,100	132,061	268,161	104,941	2 18 8	2 19 5½
1827	191,428	182,758	374,186	128,991	122,880	251,871	107,130	2 18 6	
1828	200,333	192,121	392,454	130,015	125,318	255,333	111,174	3 0 5	
1829	194,089	186,156	380,245	134,525	129,705	264,230	104,316	3 6 3	
1830	194,200	187,860	382,060	129,290	124,777	254,067	107,719	3 4 3	
Totals -	1,917,444	1,836,049	3,753,493	1,251,105	1,211,802	2,462,907	1,052,095		
1831	196,255	189,007	385,262	140,785	135,112	275,897	110,989	3 6 4	
1832	195,232	188,759	383,991	149,396	145,737	295,133	115,463	2 18 8	
1833	201,251	194,665	395,916	145,925	141,669	287,594	118,947	2 12 11	
1834	203,808	197,854	401,662	142,071	138,135	280,206	120,674	2 6 2	
1835	204,022	196,855	400,877	142,827	135,865	278,692	118,414	1 19 4	
1836	202,827	198,034	400,861	142,485	136,278	278,763	119,631	2 8 6	2 16 11
1837	231,850	226,208	458,058	169,833	163,604	333,437	111,599	2 15 10	
1838	189,003	184,118	373,121	147,855	141,815	289,670	111,932	3 4 7	
1839	184,630	179,494	364,124	144,631	139,332	283,963	115,385	3 10 8	
1840	182,940	177,638	360,578	152,738	148,576	301,314	114,325	3 6 4	
Totals -	1,991,818	1,932,632	3,924,450	1,478,546	1,426,123	2,904,669	1,157,359		

III. Numbers of Marriages, Births, and Deaths, registered in 1839, and the three following Years. — (*Sixth Report, Registrar-General*, p. xviii. 8vo. ed.)

	1839.	1840.	1841.	1842.
Marriages - -	123,166	122,665	122,496	118,825
Births - - -	492,574	502,303	512,158	517,739
Deaths - - -	338,979	359,634	343,847	349,519
Excess of births over deaths - - -	153,595	142,669	168,311	168,220

It is seen from Table IV. that the proportion of marriages to the whole pop. during the period 1839-42 is as 1 to 130. About 4 2 births is the estimated proportion to each marriage, allowance being made for defects of registration: and the proportion of male to female births is as 19 to 18. It appears from the burial registers, that the proportion of deaths to the pop. for the 5 years ending with 1800, as compared with that of the 4 years ending with 1842, had varied from 1 in 48 in the former period, to 1 in 45 in the latter.

IV. Table showing the Proportion of Marriages, Births, and Deaths, 1838-42.

Years.	Annual Number of Marriages, Births, and Deaths, to a Population of 100.			Numbers living out of which a Marriage, Birth, or Death took place.		
	Marriages.	Births.	Deaths.	One Marriage in	One Birth in	One Death in
1838	- -	- -	2·240	- -	- -	45
1839	·794	3·177	2·187	126	31	46
1840	·781	3·197	2·290	128	31	44
1841	·769	3·217	2·160	130	31	46
1842	·736	3·209	2·167	136	31	46
Mean	770	3·200	2·209	130	31	45*

* The return in Table II. was prepared by the census commissioners, and includes those baptisms, marriages, and funerals, which are registered in the churches and chapels belonging to the Church of England, with an estimate of the supposed number that have to be added for dissenters and others omitted in such register. The tables Nos. I., III., IV. are taken from the elaborate reports of the registrar general, which, as they include the births, marriages, &c., registered in dissenting and other chapels, as well as in the church, are probably very nearly correct. It will be seen from the discrepancy between the tables that the census commissioners had not added a sufficient sum to their numbers to make up for omissions.

Account of the total Population, and of the Numbers of Births, Deaths, and Marriages in England and Wales, in each year from 1840 to 1853, both inclusive.

Years.	Population.*	Births.	Deaths.	Marriages.	Years.
1840	15,739,994	502,303	359,634	122,665	1840
1841	15,947,249	512,158	343,847	122,496	1841
1842	16,148,398	517,739	349,519	118,825	1842
1843	16,349,822	527,325	346,446	123,818	1843
1844	16,566,238	540,763	356,950	132,249	1844
1845	16,786,194	543,521	349,366	143,743	1845
1846	17,018,600	572,625	390,315	145,664	1846
1847	17,236,817	539,965	423,304	135,845	1847
1848	17,376,386	563,059	399,800	138,230	1848
1849	17,571,744	578,159	440,853	141,883	1849
1850	17,735,871	593,422	368,986	152,738	1850
1851	18,001,551	615,865	395,174	154,206	1851
1852		624,171	407,938	158,439	1852
1853		612,341	421,775	162,135	1853

We have elsewhere given some statements illustrative of the diminished rate of mortality, and improved health of the community, to which we beg to refer the reader. (See *antè*, 460.) At present, after deducting the deaths occasioned by the diseases of infancy, ⅓ of the whole are ascribed to tuberculous diseases (consumption, mesenteric disease, &c.) Next to these, fever, dysentery, and small-pox may be considered as amongst the most frequent causes of death. The two former, which, together with plague and cholera, caused in the 16th century 4-10ths of the total mortality, sweeping off annually 31 in every 1,000 of the existing pop. (or about 5 times as many as now fall victims to consumption), are now much less frequent. Small-pox, also, which, between 1760 and 1780 caused an annual average of 2,323 deaths in the metropolis, and 1,740 during the succeeding 20 years, did not during the 5 years ending with 1835, occasion more than 1 in 1,300 of the deaths occurring in London.

Density of Population.—The table previously given exhibits the information obtained under the census of 1851, in regard to the density of the pop. per sq. m. and per acre. But all inferences as to the condition of society deduced from such tables are most likely to be erroneous, unl ss it be known what proportion of the pop. live in towns and villages, and what in the country; and whether the increase of pop., when such is taking place, be the result of an increase of the town or of the country

* Estimated, and including army, navy, and merchant seamen at home and abroad, belonging to England and Wales.

pop. Great density of country pop. is generally accompanied by a great subdivision of the land, and indicates a low rather than a high state of civilisation. But if great density of pop. be the result of the growth of towns and villages, without being accompanied by the too great subdivision of the land, it is one of the most conclusive evidences of a high state of civilisation, and of great improvement in the arts. The examples of Ireland and of England sufficiently illustrate what has been stated. In the former the pop. is exceedingly dense; but that density, not being the result of any increase of manufactures or commerce, or of town pop., but of the purely agricultural pop., occasioned by the endless division and subdivision of the land, is really a proof of the low state of civilisation, and of the vicious economical condition of the country. Luckily, the contrary of all this obtains in England; here there has been no splitting of farms; and the increase of pop. has been the result of the unprecedented increase of manufactures and commerce; and has consequently been almost wholly confined to towns and villages. We subjoin, as exemplifying this increase,

An Account of the Population of the Principal Cities and Towns of the United Kingdom, in 1801, 1811, 1821, 1831, 1841, and 1851.

N.B.—The same limits have been preserved throughout, or as near as was practicable.

Cities or Towns.	1801.	1811.	1821.	1831.	1841.	1851.
ENGLAND—						
London	958,863	1,138,815	1,378,947	1,654,994	1,948,417	2,362,236
Manchester and Salford	94,876	115,874	163,635	237,832	311,009	401,321
Liverpool	82,295	104,104	138,354	201,751	286,487	375,955
Birmingham	70,670	82,753	101,722	143,986	182,922	232,841
Leeds	53,162	62,534	83,796	123,393	152,074	172,270
Bristol	61,153	71,433	85,108	104,408	125,146	137,328
Sheffield	45,755	53,231	65,275	91,692	111,091	135,310
Wolverhampton	30,584	43,190	53,011	67,514	93,245	119,748
Bradford	13,264	16,012	26,307	43,527	66,715	103,778
Plymouth and Devonport	39,787	50,886	55,169	65,963	70,340	90,401
Newcastle-upon-Tyne	33,048	32,573	41,794	53,613	70,337	87,784
Hull	29,580	37,005	44,520	43,510	67,308	84,690
Stoke-upon-Trent	23,278	31,557	40,237	51,589	68,444	84,027
Oldham	21,677	29,479	38,201	50,513	60,451	72,357
Portsmouth	33,226	41,587	46,743	50,389	53,032	72,096
Brighton	7,440	12,205	24,741	41,994	49,170	69,673
Preston	12,174	17,360	24,859	33,871	50,887	69,542
Norwich	36,238	36,748	49,705	60,505	61,846	68,195
Sunderland	24,998	25,821	31,891	40,735	53,335	67,394
Merthyr Tydvil	10,127	14,945	20,959	27,281	43,031	63,080
Bolton	17,966	24,799	32,045	42,245	51,029	61,171
Leicester	17,005	23,453	31,036	40,639	50,806	60,584
Nottingham	28,861	34,253	40,415	50,680	53,091	57,407
Bath	33,196	38,408	46,700	50,800	53,196	54,240
Stockport	14,830	17,545	21,726	25,469	50,154	53,835
Blackburn	11,980	15,083	21,940	27,091	36,629	46,536
Exeter	17,412	18,896	23,179	28,242	37,231	40,688
Derby	10,832	13,043	17,423	23,627	32,741	40,609
Macclesfield	13,255	17,143	23,154	30,911	32,629	39,018
Dudley	10,107	13,925	18,211	23,430	31,232	37,962
Coventry	16,034	17,923	21,448	27,298	31,032	36,812
York	16,846	19,099	21,711	26,260	28,842	36,303
Southampton	7,913	9,617	13,353	19,324	27,744	35,305
Cheltenham	3,076	8,325	13,396	22,942	31,411	35,051
Halifax	12,010	12,766	17,056	21,552	27,520	33,582
Ipswich	11,277	13,670	17,186	20,201	25,384	32,914
Wigan	10,989	14,060	17,716	20,774	25,517	31,941
Swansea	10,117	11,963	14,896	19,672	24,604	31,461
Bury	9,152	11,302	13,480	19,140	24,846	31,262
Huddersfield	7,268	9,671	13,284	19,035	25,068	30,880
Yarmouth	16,573	20,418	21,007	24,535	27,865	30,879
Ashton-under Line	5,727	7,037	9,222	12,441	22,678	29,791
Rochdale	8,040	10,392	12,998	18,351	24,272	29,195
Tynemouth	13,171	17,548	23,173	23,206	25,416	29,170
South Shields	11,011	15,165	16,503	18,756	23,072	28,974
Chatham	12,940	15,787	19,177	21,124	24,269	28,424
Oxford	11,694	12,931	16,364	20,649	24,258	27,843
Cambridge	10,087	11,108	14,142	20,917	24,453	27,815
Chester	15,052	16,140	19,949	21,344	23,866	27,766
Worcester	11,460	13,814	17,023	18,610	27,004	27,528
Northampton	7,020	8,427	10,793	15,351	21,242	26,657
Carlisle	9,415	11,476	14,416	18,865	21,550	26,310
Walsall	10,399	11,189	11,914	15,066	19,857	25,680
Gateshead	8,597	8,782	11,767	15,177	20,123	25,568
Birkenhead	110	105	200	2,569	8,223	24,285
Dover	7,084	9,074	10,327	11,922	17,795	24,244
Warrington	11,321	12,682	14,822	18,184	21,116	23,363
Wakefield	10,581	11,393	14,164	15,932	18,842	22,057
Reading	9,742	10,788	12,867	15,595	18,937	21,456
Burnley	3,918	5,405	8,242	10,026	14,224	20,828
Maidstone	8,027	9,443	12,508	15,790	18,086	20,801
Stalybridge	- -	- -	- -	- -	- -	20,760
Gloucester	7,579	8,280	9,744	11,933	14,152	17,572
Lincoln	8,676	10,217	11,776	13,205	16,172	17,536
Boston	- -	- -	- -	- -	14,618	17,518
Hastings	- -	- -	- -	- -	11,614	17,011
Gravesend	- -	- -	- -	- -	- -	16,633
Lancaster	- -	- -	- -	- -	14,389	16,168
Leamington	- -	- -	- -	- -	- -	15,692
Shrewsbury	14,739	16,606	- -	- -	17,688	19,681
Colchester	11,520	12,544	14,016	16,167	17,592	19,443
King's Lynn	10,096	10,259	12,253	13,370	15,751	19,355
Kidderminster	6,110	8,038	10,709	14,981	15,427	18,462
Canterbury	9,000	10,200	12,799	13,679	15,422	18,398
Cardiff	- -	- -	- -	- -	9,714	18,351
Whitehaven	- -	- -	- -	- -	15,841	18,916
SCOTLAND—						
Edinburgh	66,544	81,784	112,235	136,301	138,182	160,302
Glasgow	83,769	110,160	147,043	202,426	280,682	347,001
Aberdeen	- -	25,370	44,796	58,019	61,923	71,973
Dundee	- -	29,616	30,575	45,355	62,873	78,931
Paisley	26,084	- -	- -	- -	47,695	47,952
Greenock	17,458	19,042	22,088	27,571	35,645	36,689
Perth	14,878	- -	- -	- -	20,167	23,835
IRELAND—						
Dublin	- -	- -	185,881	204,155	[illegible]	[illegible]
Cork	- -	- -	- -	- -	80,720	85,745
Belfast	- -	- -	45,177	48,224	75,308	100,300
Limerick	- -	- -	- -	- -	48,391	53,448
Waterford	- -	- -	- -	- -	23,216	25,297
Kilkenny	- -	- -	- -	- -	19,071	19,973
Drogheda	- -	- -	- -	- -	16,261	16,845
Galway	- -	- -	- -	- -	[illegible]	[illegible]

Industry — Tenures, Estates, &c. — The tenures under which land is held have varied very much at different periods of our history. At present, they may be divided into freehold, copyhold, and leasehold. By the first, an estate is held unconditionally, under the constitutional laws of the kingdom, liable to neither fine nor forfeiture. By the second mode, estates are held of corporate bodies, or of individuals, as portions of some manor or other possession, and subject to certain claims, customs, &c. Leaseholds are either long, as for 1,000 years; life leaseholds, contingent on one or more lives, or subject to certain fines or conditions, but at all times giving a power of alienation or transfer to the lessor. Such leases as do not convey this power do not strictly come under the designation of tenures; they form, however, a large and important class of holdings, usually varying from terms of 7 to 14 years, and the conditions and stipulations in them have a powerful influence over agriculture and the value of property, in the districts in which they prevail. Lands held merely from year to year, at the option of either party, are said to be held at will, and form a large proportion of the lands of the country. The size of estates varies exceedingly; but despite the great number of very large estates, it is still true that landed property in England is very much divided; by far the largest portion of the kingdom being portioned out into estates under 1,000*l.* a year. Dr. Beeke, in 1801, estimated the number of proprietors in England and Wales at 200,000; and supposing this estimate to be nearly accurate, and that the total gross rental of the kingdom amounts to 40,000,000*l.* a year, it will give 200*l.* as the average annual value of each estate. But as a great number of estates are much above this average, it follows that the majority must be proportionally below it.

Agriculture. — According to the census of 1831, the number of agricultural occupiers of land employing labourers, amounted to 161,188; the occupiers not employing labourers, to 114,799; and agricultural labourers, to 799,875. According to the census of 1841, there were in England and Wales 1,261,448 persons engaged in agricultural and horticultural employments.

Arthur Young, in 1770, estimated the capital employed in agriculture at 4*l.* per acre: at present it may, perhaps, be taken at about 6*l.*; which, on 31,000,000 acres, will give 186,000,000*l.* The rental of the land in England and Wales may be estimated at about 1-4th part of the value of the total produce. It amounted, in 1815, to 34,330,462*l.* (*antè*, p. 456.); and it appears from the subjoined returns, that the present rental exceeds 41,000,000*l.* a year; the fall that has taken place in the interval in prices having been everywhere partially, and in most parts more than fully countervailed by the spread of improvement, and the opening of new and better markets for all sorts of products. Under the property tax act the profits of the farmers are supposed to amount to half the rent; and though this rate be frequently most unjust in its application to individuals, it may not, at an average, be very wide of the mark; and supposing this to be the case, the aggregate profits of the farmers would exceed 20,000,000*l.* a year. Farmers holding lands let under 200*l.* a year, are exempted from the tax. Farms in England are of a medium size, their average being probably about 150 or 160 acres. Wheat, barley, and oats, but especially the first, which may be emphatically said to be the bread-corn of England, are the principal crops. The best wheat, as well as the greatest quantity, is raised in Kent, Essex, Suffolk, Rutland, Herts, Berks, Hants, and Hereford.

An Account of the Total Annual Value of Lands, Houses, and other Real Property, in every County of England and in Wales, assessed to the Property Tax, during the Year ended the 5th of April, 1851.

Counties.	Value of Lands.	Value of Houses.	Value of other Real Property.	Total Gross Amount of Property assessed.
	£	£	£	£
Bedford	398,243	162,236	6,876	567,355
Berks	586,917	351,738	36,153	974,808
Bucks	635,745	230,970	5,504	872,219
Cambridge	864,788	272,116	39,546	1,176,450
Chester	992,672	906,382	192,983	2,092,037
Cornwall	728,287	261,573	253,836	1,243,696
Cumberland	634,946	231,942	130,749	997,637
Derby	826,146	376,942	817,780	2,020,868
Devon	1,553,120	831,186	204,612	2,588,918
Dorset	656,834	262,777	25,623	945,234
Durham	573,184	516,359	578,950	1,668,493
Essex	1,358,397	517,159	41,718	1,917,274
Gloucester	1,164,752	886,055	121,152	2,171,959
Hereford	650,238	133,439	18,803	802,480
Herts	528,645	329,957	15,446	874,048
Hunts	305,387	78,317	16,925	400,629
Kent	1,411,259	1,631,297	111,811	3,154,367
Lancaster	1,593,614	5,548,383	1,739,706	8,981,703
Leicester	929,599	341,858	74,704	1,346,161
Lincoln	2,424,696	439,849	87,787	2,952,332
Monmouth	285,021	209,242	183,154	677,417
Norfolk	1,750,928	613,685	47,833	2,442,446
Northampton	969,742	284,375	18,758	1,272,875
Northumberland	874,699	453,485	666,956	1,995,140
Nottingham	717,135	399,498	70,212	1,186,845
Oxford	627,980	288,321	73,458	989,759
Rutland	131,294	22,785	6,060	160,139
Salop	1,027,076	293,220	159,658	1,479,951
Somerset	1,657,478	1,025,742	282,076	2,965,296
Southampton	895,410	833,894	65,967	1,795,271
Stafford	1,073,817	1,015,670	667,880	2,757,367
Suffolk	1,207,411	528,822	49,209	1,785,442
Surrey	451,973	2,493,792	1,192,504	4,138,269
Sussex	897,900	866,242	44,275	1,808,417
Warwick	897,174	1,317,690	214,924	2,429,788
Westmoreland	256,600	61,924	20,036	338,560
Wilts	1,068,131	335,973	18,907	1,423,011
Worcester	758,321	504,805	118,026	1,381,152
York	3,919,776	3,039,934	947,864	7,907,574
London	-	1,418,624	736,546	3,933,997
Westminster	354	2,329,437	387,301	1,805,925
Middlesex	354,347	6,661,898	210,344	2,540,135
Wales	2,496,283	701,169	2,900,159	9,916,404
Total, England and Wales	41,118,329	40,046,762	13,714,760	94,879,851

From 2½ to 3 Winch. bushels per acre are required for seed, and the average produce in the above cos. may vary from 26 to 40 bush. per acre. Barley is grown principally in the eastern and some of the midland cos., and chiefly for malting; oats are principally in demand for horses; and the increase of the latter has occasioned a proportional increase in the culture of oats. They are grown more especially in the N. and N.E. cos.; in the midland cos. their culture is less extensive, but it is prevalent throughout most parts of Wales. Rye is scarcely at all raised for bread, except in Durham and Northumberland; where, however, it is usually mixed with wheat, and forms what is called *maslin*, a bread-corn in considerable use in the N. Peas and beans are important crops, and in some parts are pretty largely raised. The potato, has unluckily become pretty general throughout the kingdom, but is most extensively raised in Lancashire and Cheshire, where it also comes to the greatest perfection. The introduction and general extension of the turnip husbandry has effected a revolution in the agriculture of England, second only to that which the inventions of Arkwright have effected in manufactures. They have now all but superseded fallows on the lighter lands. But the giving a valuable crop to the farmer, where there was none, without in any degree diminishing the facilities for clearing the land, is but a part of the advantages resulting from the turnip culture: for, while it enables the farmer to keep and fatten a much larger stock, it also enables him to accumulate a vastly greater supply of manure — of that invigorating power which adds to the productiveness of the best lands, and without which the middling and inferior would hardly repay the husbandman's toil. It is not easy to estimate the prodigious additions that have been, in this way, made to the productive capacities of the soil; and the recent introduction

of guano, and the application of bone manure to turnip husbandry, have already had a wonderful influence, and, no doubt, will continue to become still more and more important. Rape is grown for its oil, or as food for sheep, in all parts except the cos. N. of Yorkshire; and cabbages and carrots are chiefly produced in the E. Flax and hemp are at present but little raised, being found less profitable crops than most of the foregoing. Hops are for the most part confined to Kent, to the vicinity of Farnham in Surrey, and to Herefordshire: their crop is the most uncertain of any, varying in the same localities, in different years, from 1 to 20 cwt. an acre. The total annual produce may be estimated at about 80,000,000 lbs. The apple orchards of Devon, Somerset, Gloucester, and a few other neighbouring cos. are important, on account of the cider they furnish. Perry is made chiefly in Worcestersh. Kent is famous for its cherries and filberts.

The best farmed counties are on the E. coast; and Northumberland, Lincoln, and Norfolk, may bear a comparison with Berwickshire or E. Lothian. Such, however, is not the case in very many districts; and we believe it may be safely affirmed that the available produce of the kingdom might be *doubled*, were it generally cultivated on the principle, and according to the practice, followed in the best farmed districts. Winter wheat sowing usually takes place from Sept. to Nov.: drilling is more in use for barley than wheat, which is mostly sown broadcast. The grain harvest is commonly at its height in Aug. and Sept. Potatoes are taken up and stored for winter use in Oct. and Nov., which are also the chief cider months.

The farm implements in common use in England are decidedly superior to those of most other countries; though a good deal remains to be done in the way of their improvement. Perhaps few classes of people maintain their prejudices with such obstinacy as agriculturists, and especially agricultural labourers; and to this must be mainly attributed the continued use of the old-fashioned clumsy ploughs which are to be seen in some districts; and, what is far less excusable, the employment of 3, 4, 5, 6, and sometimes even 7 horses, to do what might be as well or better done by 2! The use of horses in farm labour is universal, except in Sussex, and some of the W. counties; and machines for thrashing, &c. have become common.

Britain has been celebrated from the æra of Cæsar for the extent and excellence of her pastures, and the abundance of her cattle. A full half or more of the arable land of England is applied to grazing husbandry. The best grazing lands are in the vale of Aylesbury, the Fens, Romney Marsh in Kent, and some of the midland and W. counties. Hay is made from natural grasses, and from clover, rye-grass, and in the S. counties sainfoin and lucern; the natural sward yielding from 1 to 1½ tons an acre, and the artificial crops from 1 to 3 tons. The hay-harvest throughout the country takes place pretty generally in June and July.

There are several breeds of horses, the aggregate stock of which, at the present time, probably reaches 1,000,000 head, worth, perhaps, about 10,000,000*l.* sterling. Of this number it may be estimated that 2-3ds are employed in agricultural labour. The old English road-horse is now nearly extinct: the large dray-horse, so admirably adapted for draught, which is believed to have been originally imported from the Low Countries, is bred in considerable numbers in some of the midland counties. Yorkshire is celebrated for its carriage horses, especially the Cleveland bays; and the farm breed of Suffolk is also excellent. The English race-horse, derived from the Arab, Persian, and Barb, is superior to every other breed in speed, and inferior to none in bottom and beauty. Mules and asses are very little used in England; the former are almost unknown, and the latter belong chiefly to the poor.

The stock of cattle may be estimated at little short of 4,500,000, about a fourth part of which are annually slaughtered. They are divided into long-horned, short-horned, and polled: the first division comprising the Lancashire; the second, the Holderness, Northumberland, Durham, N. Devon, Hereford, and Sussex; and the last, the Suffolk duns, &c. Butter and cheese are most important products: Epping Forest, in Essex, Cambridgeshire, and Dorset are the districts most celebrated for the former; and Cheshire, Gloucestershire, Wilts, and other W. counties, and Leicestershire, for the latter. The rich and fine cheese, called Stilton, is made wholly in Leicestershire. Milk is an important marketable article in the vicinity of large towns, and the cows kept for the supply of this article to the metropolis have been estimated to amount to 12,000, yielding milk to the value of 700,000*l.* sterling a year. Sheep, the total number of which in England and Wales may be about 26,000,000, are divided into long-woolled and short-woolled; the former, including the Romney Marsh, Teeswater, Lincoln, and New Leicester breeds: and the latter (which far excel the former in the quality of the mutton), the South-Down, Dorset, Wilts, Hereford, &c. breeds. The merino breed, introduced from Spain towards the end of the last century, has been chiefly useful in crossing and improving the fleece of other breeds. In some parts of England sheep are kept on fallows, for the benefit of their manure. Great numbers are fed on the open chalk downs of the S. counties. The total annual produce of wool in England is estimated at about 470,000 packs of 240 lbs. each. Hogs are fattened on most farms, and are also kept with advantage by millers, dairymen, brewers, distillers, &c., whose refuse they consume. The Hants, Berks, Gloucestersh., and Herefordsh. are the best of the large breeds, and that of Suffolk is distinguished among the smaller ones. Yorksh. and Westmoreland are famous for their hams; Hants, Wilts, and Berks for their bacon. Poultry are reared on most farms, and by the majority of agricultural cottagers. Large flocks of geese are kept in the Lincoln fens, and plucked once a year for their quills, and 4 or 5 times for their feathers. Fowls are largely reared at Oakingham in Berks, and Dorking in Surrey has acquired a name for a fine and large five-clawed variety. Ducks are plentiful in Bucks, and pigeons in almost every co. Since the foundation of our W. India colonies, and the importation of sugars, the demand for honey has declined; this, however, has not affected wax, so that bees still keep their ground as appendages to almost every farm, and to many cottage gardens. Goats are not reared except in the few mountainous parts of England, and deer are now mere articles of luxury, kept in the parks of noblemen and gentlemen. There are still some extensive rabbit-warrens in Norfolk and Cambridgeshire, but they have greatly decreased.

About 122,620 acres of land are occupied by the royal forests, 62,620 of which are inclosed for the growth of timber. As already observed, England is very well wooded, especially the S. and W. cos. Oak, the most valuable species, grows in the greatest perfection in the weald of Kent, Sussex, and Surrey. The oak-bark harvest takes place in May. For an estimate of the quantity and value of the agricultural produce, live stock, &c. of England, see *anté*, 453, &c.

Agriculture received its first great impulse in England

during the reign of Henry VII. from the policy of that monarch; and together with all kinds of commercial enterprise throughout Europe, it derived a stimulus from the great discoveries of the period. But the breeding of sheep was the branch of rural industry the first to extend, and throughout this and the succeeding reigns for a lengthened period wool was extensively exported. The first English treatise on agriculture was written in the reign of Henry VIII., and the hop, as well as several of the common garden vegetables, are introductions of the same period. Sir W. Raleigh has the credit of introducing the potato, which, in the early part of last century, appears to have been a tolerably frequent crop in Lancashire, from which its culture extended to other parts of the kingdom. Turnips seem to have been first cultivated on a large scale in Norfolk, also, in the early part of the same century. Pope speaks of "All Townsend's turnips." The old duties and restrictions on the exportation of corn were abolished at the Revolution, and a bounty was then also given on its export.

This, no doubt, gave a stimulus to agriculture, which has been still farther promoted by the restrictions that have been imposed on importation from abroad. But we incline to think that the influence of this encouragement has been much overrated: and there can, we apprehend, be no question that agriculture in England is mainly indebted for its progress and the high state of improvement to which it has attained to the operation of the poor laws in preventing the splitting of farms and the building of cottages, and, above all, to the extraordinary increase of manufactures and commerce since 1760. This occasioned a corresponding increase of the town pop., accompanied, at the same time, by a great increase of luxury and refinement, which led not only to a proportionally increased demand for the products of the soil, but especially for those of an improved species. Hence the great comparative increase in the culture of wheat, and the extraordinary increase that has taken place in the demand for butcher's meat. During the latter years of the war, prices were comparatively high in England; but on the renewal of the intercourse with the Continent, in 1814, vast quantities of corn being imported, prices suddenly gave way, and have not been so high since. This fall occasioned a good deal of agricultural distress, which, however, was but of temporary duration. In no long time improvements began to be prosecuted with greater vigour than ever; and from 1832 to 1837, both inc., we grew a sufficient supply of corn for our consumption. The subsequent recurrence of bad seasons and the failure of the potato, led to the modification and final repeal of the corn laws (1849). Luckily, however, their abolition has had no injurious influence over agriculture, which continues to be prosecuted with the same zeal and success as formerly.

Fisheries. — These are not commensurate, either in extent or importance, with the extent of coast; and have never been a principal source of national wealth. The herring fishery is the principal; but until the middle of last century most of the fish taken on the E. coast (its chief seat) were captured by Dutch smacks. Yarmouth bay is the principal resort of the herring, and about 100 smacks, of from 40 to 50 tons each, belong to the town of Yarmouth, where the fish, smoked for sale, have obtained some celebrity under the name of "Yarmouth bloaters." At Sunderland, Whitby, Scarborough, Harwich, &c., there are also extensive herring fisheries. The cod fishery, including that of haddock, whiting, ling, hake, &c., ranks next in importance. The pilchard fishery is exclusively confined to the coasts of Devon and Cornwall. A portion of the fish caught are used fresh or salted in those counties; and the rest, to the amount of about 17,000 hhds. a year, are salted and exported chiefly for the Italian markets. The pilchard fishery, by means of *seans*, employs about 1,500 hands, and that by *drift* nets employs from 900 to 1,000 men, and 230 boats, exclusive of the women assisting on shore in curing the fish. (*Com. Dict.*, art. Pilchards.) Mackerel are very abundant, and extensively consumed during the season; sprats, which arrive in immense shoals on the E. and S. E. coasts, are taken in great numbers for manure. Oysters, which meet with so rapid and extensive a sale in the markets of the metropolis and other large towns, are found on many parts of the coast; and are largely bred near Milton on the Kentish shore of the æstuary of the Thames, and in the tideways of the creeks on its Essex shore. Some very fine oyster-beds also exist at Emsworth, in Hampshire; others of a larger kind come from Poole, Jersey, &c.

Mining Industry.—Coal stands at the head of the mineral products of England; and we are probably more indebted to our inexhaustible supplies of this valuable mineral than to any thing else, for the extraordinary progress we have made in manufacturing industry. (See *antè*, p. 450.) The coal-mines are all in the N. and W. parts of the kingdom; and these, consequently, are the great seats of our manufactures.

The following is an estimate of the tota produce of coal in Great Britain in 1852: —

	Tons.
Domestic consumption and smaller manufactures -	20,000,000
Production of pig and bar iron - - -	12,250,000
Cotton manufacture - - - - -	800,000
Woollen, linen, silk, ditto - - - -	900,000
Copper smelting, brass manufactures, &c. - -	2,000,000
Salt works and gas works - - - -	1,000,000
Lime works - - - - - -	500,000
Railway carriages, steam boats, &c. - - -	1,500,000
	38,950,000
Exports to Ireland - - - - -	1,800,000
Ditto to Colonies and foreign parts - - -	3,640,000
Total - - - -	44,390,000

During the year 1852, the imports of coals into London amounted to 3,745,345 tons, of which 3,330,428 were brought coastwise, and the residue by internal navigation and railways. It is difficult to discriminate between the consumption of England and Scotland; but we are not inclined to estimate the consumption of the latter at above 7 millions of tons. Supposing the above quantity of coal to cost the consumer 10*s*. a ton at an average, it will cost in all about 22,195,000*l*.!

Of this quantity, between 7,000,000 and 8,000,000 tons are shipped from the Tyne, the Wear, and the Tees. These districts employ about 30,000 miners, &c.; and multiplying this sum by 6, and adding thereto 15,000 for the number of seafaring men employed in its transport, we have a total of 196,000 individuals directly deriving their support from their manual labour in the coal trade.

Iron ranks next in importance to coal. It was known to exist at a very early period; and the Romans, and perhaps, also, the Britons, had iron-works in the Forest of Dean, and elsewhere in the kingdom. Iron ore is very generally diffused; at present, however, all the great iron-works are situated in the coal districts, an abundant supply of coal being indispensable to the extensive production of iron. But in the infancy of the iron trade, when timber was the only fuel employed in smelting the ores, Kent and Sussex being the best wooded counties, were also those in which most iron was made. In 1740, the total quantity of pig iron made in England and Wales did not exceed the trifling quantity of about 17,000 tons, and we were then, and for a considerable time afterwards, mainly dependent on foreign supplies. But about this period coal began to be successfully substituted for timber in the preparation of iron, and its production was, in consequence, materially augmented. In 1750, the quantity produced did not, however, amount to 20,000 tons: but in 1788 it had increased to 68,000 tons, and in 1796, to 125,000 tons. The progress of the trade has since been rapid beyond all precedent. In 1806, a project (a most insane one certainly) was entertained for laying a tax on pig iron; and it was then ascertained that the production amounted to about 250,000 tons a year. In 1820 the produce had increased to about 400,000 tons; and in 1830, it was carefully estimated at about 641,000 tons! But owing to the great demand for iron for railways and other public works, the increase of the business during the last 20 years has been still more considerable; and we are well assured that, at this moment (1854), the produce of iron in England and Wales is not under, if it do not exceed, 1,850,000 tons a year. We subjoin an account of the pig iron produced in England and Wales in each of the principal seats of the business in 1840 and 1852.

Estimate of the Total Produce of Iron (Pig) in England and Wales in 1840 and 1852, showing the Quantities produced in each of the Principal seats of the Manufacture, and the Number of Furnaces in and out of blast in 1848.

	Iron produced in 1840.	Iron produced in 1852.	Furnaces in 1852.	
			In blast.	Out of blast.
	Tons.	Tons.		
Forest of Dean -	15,500	- -	- -	- -
South Wales - -	505,000	666,000	147	50
North Wales - -	26,500	30,000	6	7
Northumberland -	11,000	35,000	7	6
Yorkshire - -	56,000	150,000 (Yorkshire and Derbyshire)	35	7
Derbyshire - -	31,000			
N. Staffordshire -	20,500	90,000	17	4
S. Staffordshire -	407,150	725,000	127	32
Shropshire - -	82,750	120,000	27	13
Durham - - -	- -	110,000	18	8
	1,155,400	1,926,000	387	127

We incline, however, to think that these estimates are exaggerated, and that the produce in 1852, did not really exceed 1,800,000 tons; to which adding 650,000 for the production of Scotland, the total produce of iron will be 2,450,000 tons! Different estimates have been made of the quantity of coal required to produce this quantity of iron; and it is probable, allowing for the coal required to convert pig iron into bar iron, that it may be taken at a rough average, at 5 tons of coal to 1 ton of iron.

It may be worth while to mention, as evincing the extraordinary progress of the iron trade, that it could hardly be said to exist in S. Wales previously to 1760. So much, indeed, was this the case, that in 1755, the land and minerals for several miles round Merthyr Tydvil — then an inconsiderable village, but now the seat of the greatest iron works in the kingdom — were let for 99 years for a rent of 200*l.* a year!

Supposing its average price to be 5*l.* a ton, the pig iron annually produced in England and Wales will be worth 9,000,000*l.*; and adding in this 4,500,000*l.* for the labour required to convert the pig iron into bar iron, that is, into bars, bolts, rods, &c., the total value of the iron produced in England and Wales will amount to 13,500,000*l.* a year. Besides supplying the prodigious demand for iron for the hardware manufactures, and other channels of consumption at home, we exported, in 1852, the enormous amount of 1,035,881 tons, of the value of 6,656,148*l.* We still, however, continue to import about 20,000 tons a year of foreign iron, principally Swedish, for conversion into steel, for which it is better fitted than British iron. It is estimated that from 250,000 to 275,000 individuals are directly dependent for subsistence on the iron trade. We subjoin an

Account of the Quantities of the Different Varieties of British Iron (inc. Unwrought Steel) exported from the U. Kingdom in 1852, specifying the Countries to which they were sent, and the Quantities sent to each.

Countries to which exported.	Iron, Pig.	Bar Iron.	Bolt and Rod Iron.	Cast Iron.	Iron Wire.	Wrought Iron, viz.: Anchors, Grapnels, &c.	Hoops.	Nails.	All other Sorts, (ex. Ordnance).	Iron, Old, for Re-manufacture.	Un-wrought Steel.	Totals.
	Tons.	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*
Russia - - -	1,106	4,145	114	855	318	227	12	141	563	65	487	8,053
Sweden - -	372	152	7	139	3	155	- -	- -	170	- -	18	1,91[illegible]
Norway - -	1,733	2,525	547	257	25	597	92	13	886	31	33	6,739
Denmark - -	14,445	3,909	842	499	76	365	844	25	1,055	198	66	22,32[illegible]
Prussia - -	16,793	13,519	123	814	6	86	29	41	2,673	5,203	143	39,430
Mecklenberg - -	200	637	95	6	7	105	99	1	125	- -	6	1,281
Hanover - -	8,970	15,351	1,480	24	179	107	426	26	2,860	634	18	30,075
Oldenburg - -	4,337	963	172	- -	- -	2	30	- -	857	- -	1	6,362
Hanseatic Towns -	12,430	12,452	1,444	817	518	1,100	1,512	49	6,421	1,476	1,163	39,387
Holland - -	23,117	7,324	329	9,039	167	1,218	1,421	137	7,027	33	586	50,398
Belgium - -	200	29	- -	343	544	25	- -	- -	121	273	680	2,215
Channel Islands -	110	550	102	214	4	125	36	121	223	- -	13	1,498
France - - -	20,195	425	166	11	23	268	253	3	667	200	114	22,3[illegible]
Portugal, Azores, &c.	803	3,784	2,236	186	26	79	1,549	64	763	- -	8	9,498
Spain and Canaries -	3,481	12,542	61	5,109	357	594	1,319	131	3,534	144	97	27,369
Gibraltar - -	135	141	17	35	2	138	51	25	25	25	2	596
Italy - - -	7,929	27,279	2,797	4,628	313	991	2,624	196	3,504	2,505	387	53,153
Malta - - -	36	186	69	204	2	100	124	8	108	- -	3	840
Turkey, - -	218	3,558	1,222	11	10	339	153	76	518	- -	8	6,113
Wallachia and Moldavia - -	- -	1,495	14	1	- -	2	282	54	199	- -	- -	2,047
Egypt - - -	30	11,971	96	11,062	33	34	35	6	2,020	- -	1	25,288
Western Coast of Africa - -	20	1,128	15	370	1	5	411	37	109	- -	- -	2,096
British South Africa	50	1,217	48	455	5	149	266	101	499	- -	9	2,799
Mauritius - -	11	407	21	426	2	51	82	113	341	- -	2	1,456
British East Indies -	1,401	17,118	2,084	1,126	169	747	2,239	259	3,285	- -	249	28,677
Java - - -	20	626	234	193	- -	38	32	2	94	- -	41	1,280
Philippine Islands -	55	53	89	7	- -	3	- -	2	8	- -	2	219
China (inc. Hong Kong) - -	398	187	1,851	10	92	9	236	9	48	- -	1	2,841
British Australia -	2,724	4,696	93	1,848	200	269	477	1,436	2,193	- -	92	14,028
British N. Am. colonies - -	12,962	51,979	344	8,209	199	2,675	1,183	1,628	6,028	27	530	85,764
British W. Indies and Guiana - -	101	1,774	36	2,693	24	54	625	825	1,206	5	8	7,351
Foreign West Indies -	170	2,855	127	2,881	12	131	317	571	1,546	100	22	8,732
U. States of America	104,230	334,224	1,439	3,979	1,787	5,465	7,936	590	25,574	5,147	10,787	501,158
Brazil - - -	956	3,664	192	3,729	2	163	263	340	1,852	278	125	11,564
Chili - - -	447	1,978	- -	246	3	51	95	54	420	3	60	3,357
All other places -	306	4,153	190	1,439	162	194	626	315	1,145	1	51	8,58[illegible]
Total - -	240,491	548,996	18,696	61,865	5,271	16,661	25,679	7,399	78,665	16,348	15,813	1,035,881

The production of tin is confined to Cornwall and Devonshire: these are also the great copper cos.; but copper is likewise produced, though in smaller quantities, in N. Wales, and some other parts. The total annual produce of tin may be taken at 4,500 tons, worth from 65*l.* to 80*l.* a ton: and that of copper at 13,000 tons, worth 90*l.* or 100*l.* per ton. (*See* CORNWALL.)

Lead mines have been wrought in England from a very remote epoch. At present the most productive are in the N. cos.: their total produce is estimated about 57,500 tons of which from 20,000 to 23,000 tons are exported. Lead, when first extracted from its ore, always contains a certain proportion of silver, varying from a few grains to 45 oz. or more in the ton. When the silver mixed up with the lead is sufficient to repay the expense, it is usual to separate it, which is effected by the process termed *refining*. The lead of some of the English mines, especially those of Cornwall, and also of the Isle of Man, contains very considerable quantities of silver; and the reader will, perhaps, be surprised to learn that it has been estimated by the highest authority (R. Hunt, Esq., Museum of Practical Geology), that in 1852 the U. Kingdom furnished no fewer than 818,325 oz. silver, worth at 5*s.* an oz. 205,080*l.*, obtained from lead. Zinc is found in Derbyshire, &c., manganese in Somersetshire, and *plumbago*, or black lead of a very superior kind, at Borrowdale, in Cumberland. Salt, one of the most important of the British minerals, is procured in immense quantities from both fossil beds and brine springs, in Cheshire and Worcestershire. Previously to the discovery of the fossil beds, during the 16th century, and subsequently, a good deal of salt continued to be made by the evaporation of sea-water in salt pans at Lymington, near Portsmouth, and at other places; but the works at these places are now wholly abandoned, while the article in question has become greatly improved in quality; and instead of being imported, as formerly, is very largely exported. The consumption of Great Britain only, exclusive of Ireland, amounts to about 196,000 tons, and the foreign exports to about 18,000,000 bushels a year! mostly sent to the U. States, British N. America, the Low Countries, Russia, &c. Before 1823, an oppressive tax of 15*s.* a bushel, or about 30 times the original cost price of the article, was imposed on salt; but in that year this enormous tax was totally repealed. Alum, fullers' earth, chalk, and lime are amongst the remaining useful minerals; clay for bricks, tiles, earthenware, &c. is also a product of considerable importance. Freestone is very abundantly diffused; but most of our buildings being constructed of brick, its use is limited, except for pavements, &c. Bath or Portland stone is that which has hitherto been mostly used for building. There are granite quarries at Dartmoor, Haytor, &c.

Manufactures. — Of these the most ancient is that of woollen, the chief seats of which are the W. Riding of Yorkshire, and the cos. of Gloucester, Wilts, Devon, Lancaster, and Somerset. The first impulse towards the improvement of the woollen manufacture was given in the 14th century, by Edward III., who invited a number of Flemish manufacturers to settle in England. But the manufacture laboured, down almost to our own day, under a number of vexatious and oppressive restrictions; and it did not begin to make any very rapid progress, or to participate in the wonderful improvements made in the cotton trade, till the introduction of the gig-machine, &c., in 1802, and the repeal of the prohibitory acts of Edward VI. and Mary, in 1807. Leeds, Wakefield, Huddersfield, and Saddleworth, are the great centres of the broad cloth manufacture; Halifax

is noted for its flannels and baizes, and Bradford for worsted spinning. Narrow cloths are made at and near Huddersfield; and blankets, flushings, &c., between that town and Leeds. At Dewsbury and Batley there are large establishments, called *shoddy mills*, in which old woollen rags are torn to pieces, respun, and manufactured, sometimes with and sometimes without an admixture of new wool, into various descriptions of coarse cloth. (*See* DEWSBURY.) Rochdale in Lancashire is also a great seat of the woollen manufacture.

Gloucestershire has numerous fine broad cloth factories; but Bradford in Wilts is the principal centre of the superfine cloth trade. At an average of the 10 years ending with 1837, there were annually produced in Gloucestershire 1,784,928 yards of every description of cloth. (*Hand-loom Report*, v. 365.) The cloths of Somerset are of inferior quality.. Serges, or long ells, are made in almost every town and village in the co. of Devon, and also to a considerable extent at Wellington, in the co. of Somerset. Carpets are principally made at Axminster, Kidderminster, Ashton, Wilton, &c. Salisbury is noted for its flannels, and Witney in Oxfordshire for its blankets; though most of what are called Witney blankets are in reality made in Wales. Norwich was long the principal seat of the worsted manufacture; but the command of coal, and the greater facilities for carrying on the business enjoyed in Bradford, and other places in the West Riding of Yorkshire, have given them a decided superiority. The manufacture of woollen and worsted stockings is principally carried on in Leicestershire; about 14,000 stocking-frames being supposed to be at work in that county. Coarse woollens, druggets, &c., are made in Cumberland, baizes, &c., in Essex and Suffolk, and a few articles are made in North Hants and Surrey; but the woollen manufactures of the S. cos. are comparatively unimportant. The total value of the exports of woollen goods and worsted goods and yarn in 1819 amounted to 8,431,430*l.*, of which the exports to the U. States exceeded 2,500,000*l.* The woollen and worsted factories of England and Wales employed, in 1848, 35,098 males, and 61,386 females. We subjoin

An Account of Quantities of Wool (Sheep, Lamb, and Alpaca) imported into the U. Kingdom in each of the 14 years ending with 1842, specifying the Countries from which it was imported, and the Quantities brought from each.

Years.	Spain.	Mecklenburg, Hanover, Oldenburg, and Hanse Towns.	Other Countries of Europe.	British Possessions in South Africa.	British Possessions in the East Indies.	British Settlements in Australia.	South America.	Other Countries.	Total.
	Lbs.	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*
1840	1,266,905	21,812,664	8,541,264	751,741	2,441,370	9,721,243	4,387,274	613,823	49,436,284
1841	1,088,200	20,959,375	8,306,994	1,079,910	3,018,664	12,399,362	9,174,249	155,220	56,170,974
1842	670,239	16,613,269	7,050,436	1,265,768	4,246,083	12,979,856	3,207,489	848,499	45,881,639
1843	597,091	16,805,448	6,877,538	1,728,433	1,916,129	17,433,780	4,588,987	295,667	49,243,093
1844	918,853	21,847,684	15,313,087	2,197,143	2,765,853	17,602,247	3,760,063	1,308,831	65,713,761
1845	1,074,540	18,484,736	17,606,515	3,512,924	3,975,866	24,177,317	6,468,338	1,513,619	76,813,855
1846	1,020,476	15,888,705	11,733,601	2,958,457	4,570,581	21,789,346	4,890,273	2,404,023	65,255,462
1847	424,408	12,673,814	7,935,697	3,477,392	3,063,142	26,056,815	7,295,550	1,665,780	62,592,598
1848	106,638	14,429,161	7,024,098	3,497,250	5,997,435	30,034,567	8,851,211	924,487	70,864,847
1849	127,559	12,750,011	11,432,354	5,377,495	4,182,853	35,879,171	6,014,525	1,004,679	76,768,647
1850	440,751	9,166,731	8,703,252	5,709,529	3,473,252	39,018,221	5,296,648	2,518,394	74,326,778
1851	383,150	8,219,236	14,263,156	5,816,591	4,549,520	41,810,117	4,850,048	3,420,157	83,311,975
1852	233,413	12,765,253	13,382,140	6,388,796	7,880,784	43,197,301	6,252,689	3,661,082	93,761,458
1853	154,146	11,584,800	26,861,164	7,221,448	12,400,869	47,075,812	9,740,032	4,358,172	119,396,445

Cotton Manufacture.—We have already noticed the rise and progress of this great department of British industry. (See *antè*, p. 455.) Vast as this manufacture now is, it may be said to have almost entirely grown up since the accession of Geo. III. in 1760. The first grand stimulus was given to it in 1767, by the invention of the spinning-jenny; and the subsequent and almost miraculous inventions of Arkwright, Watt, Cartwright, Crompton, and others, have carried it to the extraordinary state of improvement to which it has now arrived. Cotton goods of great beauty and excellent quality have been so much reduced in price, as to be within the command of all but the merest beggars. Hence the astonishing increase in the demand for them; the produce of the British manufacture being now widely diffused over the remotest countries of America and Asia. The following table, drawn up by Messrs. Holt and Co. of Liverpool, exhibits a comprehensive view of the more important particulars connected with the progress of manufacture from 1816 down to 1853, both inclusive. (See table at top of following page.)

This table is applicable to Great Britain; but it appears from *Burn's Glance*, a tabular statement of high authority, annually compiled at Manchester, that the whole quantity of yarn spun in Great Britain, in 1845, amounted to 494,766,487 lbs., of which only 27,737,022 lbs. were spun in Scotland. The manufacture in Ireland is confined to the neighbourhood of Belfast, and is quite inconsiderable. Lancashire is the grand seat of the English cotton manufacture; and next to it, but at a great distance, are Cheshire, Derbyshire, and Yorkshire.

Various estimates have been given of the value of this great manufacture, and of the number of persons employed in and dependent on it. Perhaps we shall not be far wrong if we estimate the total value of the various descriptions of cotton fabrics and yarn now annually produced at 35,000,000*l.*; and the total number of persons of both sexes, and all ages, employed in all departments of the business, at about 542,000. If we be right in this latter estimate, it will follow that from 1,000,000 to 1,200,000 individuals may be regarded as depending for support on this great manufacture. (See *Statistics of British Empire*, i. 688., &c., 4th ed.)

Estimating the entire annual value of the cotton fabrics of Great Britain at 35,000,000*l.*, the value of those annually produced in Scotland, may, perhaps, be estimated at nearly 5,000,000*l.*; for, as a large proportion of the fabrics made in Scotland are of a comparatively fine description, their value exceeds what might be inferred from the amount of yarn produced in Scotland as compared with that produced in England.

The value of the cotton goods annually exported amounts to above two-thirds of the value of those annually produced. Thus, in 1849, the declared value of the exports of cotton fabrics amounted to 20,071,046*l.*; and that of the yarn to 6,704,089*l.*; making together the sum of 26,775,135*l.* Germany and Holland, the United States, India, Italy, Brazil, Turkey, Russia, the W. Indies, &c., are the principal markets.

Statement of the Imports into, the Exports from, and of the Consumption, Prices, &c. of Cotton Wool in Great Britain, in different Years, from 1816 to 1853, both inclusive.

Consumption.	1816.	1820.	1825.	1830.	1835.	1840.	1845.	1850.	1852.	1853.
Upland	- -	2,918	3,713	5,452	5,896	5,346	7,243	4,450	5,750	5,235
Orleans and Alabama	990	1,192	2,442	4,756	7,823	13,854	17,169	15,788	21,998	22,279
Sea Island	- -	409	360	460	354	392	392	529	450	357
Total United States	4,036	4,519	6,515	10,668	14,073	19,592	24,804	20,767	28,198	27,871
Brazil	1,589	2,408	2,502	3,602	2,339	1,444	2,192	3,310	2,111	2,325
Egypt	- -	- -	891	508	446	540	1,062	1,542	1,885	2,427
East India	207	1,518	1,096	910	1,069	2,227	1,888	3,385	3,163	3,801
Demerara, West India, &c.	656	534	527	284	421	260	331	121	133	188
Total weekly consumption	6,488	8,979	11,531	16,002	18,318	21,063	30,277	29,125	35,790	36,613
Packages annually consumed	337,400	466,900	599,600	832,100	951,100	1,251,300	1,574,400	1,514,500	1,861,100	1,903,900
Average weight of packages consumed, in lbs.	263	258	278	298	333	367	385	389	397	400
Weekly consumption in packages, average 400 lbs.	5,715	7,943	10,205	13,910	15,634	22,076	29,143	28,951	35,521	36,613
Average weight of packages imported, in lbs.	256	249	270	300	331	365	386	392	392	396
Packages exported	29,300	23,400	72,800	33,400	102,800	119,700	122,800	271,800	282,800	350,200
Lbs. weight annually imported in millions and tenths	93·9	143·9	222·4	261·2	561·7	583·4	716·3	685·6	925·2	902·4
Lbs. weight consumed, ditto	88·7	120·3	166·8	247·6	318·1	458·9	606·6	588·2	739·6	760·9
Lbs. weight in ports, 31st Dec., ditto	19·2	110·5	107·0	91·4	73·3	162·9	400·8	194·1	212·2	248·7
Lbs. weight in Great Britain, ditto	- -	127·0	115·5	118·8	89·6	207·0	453·5	231·6	300·9	306·9
Average price per lb. of uplands in Liverpool	18½d.	11½d.	11·6d.	6·9d.	10½d.	6d.	4·375d.	7¼d.	5½d.	5¾d.
Ditto, ditto, Pernams	26d.	15¼d.	15·1d.	8¼d.	14·1d.	9¼d.	6·375d.	7¾d.	7d.	7¼d.
Ditto, ditto, Surats	15¼d.	8¼d.	8·9d.	5d.	7¼d.	4·625d.	3d.	5¼d.	3¾d.	3¾d.

N. B.—Messrs. Holt and Co. estimate the average weight of the packages imported in 1853 at 396 lbs. per bag Upland; 448 lbs. Orleans and Alabama; 337 lbs. Sea-Island; 182 lbs. Brasil; 248 lbs. Egyptian; 380 lbs. East Indian; and 210 lbs. West Indian.

The linen manufacture is seated chiefly in Yorkshire, Lancashire, Salop, Cumberland, Westmoreland, Durham, Dorset, and Somerset. In 1846 the linen factories employed 19,840 hands, of whom no fewer than 12,842 hands belonged to Yorkshire. The silk manufacture is more important. The metropolitan district of Spitalfields, Manchester, and Macclesfield, are the chief places in which broad silks and handkerchiefs are made; Coventry is celebrated for its riband factories. Crapes are made mostly in the E. cos.; but this branch of manufacture is declining. A great revolution was effected in the silk manufacture in 1825. Previously to that epoch the legislative enactments with respect to it were the most contradictory and impolitic that can well be imagined. The importation of foreign silks was prohibited under the severest penalties; but the advantage that this prohibition was believed, though most erroneously, to confer on the manufacturer, would, under any circumstances, have been more than neutralised by the imposition of oppressive duties on the raw material. This vicious system was productive of a two-fold mischief; for, by teaching the manufacturers to depend on custom-house regulations for protection against foreign competition, it made them indifferent about new discoveries and inventions, while, owing to the exorbitant duties on the raw material, and the want of improvement, the price of silks was maintained at such a price as to restrict the demand for them within comparatively narrow limits. In 1825, however, a new and more reasonable order of things was introduced. The duties on the raw material were greatly lowered; at the same time that foreign silk goods were allowed to be imported on payment of a duty of 30 per cent. *ad valorem*. This new system was vehemently opposed at its outset, and it was confidently predicted that it would occasion the ruin of the manufacture; but the result has shown the soundness of the principles on which it was bottomed. The manufacturers were now, for the first time, compelled to call all the resources of science and ingenuity to their aid; and the result has been that the manufacture has been more improved during the last dozen years than it had been in the whole previous century; and that it has continued progressively to increase. In 1846 the duty was farther reduced to 15 per cent. *ad valorem*.

The total quantity of raw silk imported into the U. K. in 1852 amounted to 7,588,748 lbs., the re-exports being 705,816 lbs. The imports of thrown silk amount to about 440,000 lbs. a year. The total number of individuals directly engaged in the manufacture has been estimated at upwards of 207,000, but we incline to think that this is beyond the mark. The value of the silks annually produced may, perhaps, be estimated at from 13,000,000*l.* to 15,000,000*l.*

The following table, abstracted from the Parl. Paper, No. 294., Sess. 1847, exhibits the number of individuals employed in the principal factories of the United Kingdom in 1846, classified according to their sex and age. (See table at top of next page.)

Health of Persons employed in Factories.—Children, that is, young persons, between the ages of 9 and 14 years, as well as adults, are largely employed in factories; and while the health and morals of the latter are said to suffer severely, the former have been described as being stunted in their growth, and rendered decrepit and miserable for life, by the prolonged confinement, drudgery, and ill treatment to which they are exposed. These representations of the injurious effects of what has been called white slavery were embodied in a Report of a Committee of the House of Commons, in 1832. We believe, however, that we run little risk in affirming that this report contained more false statements and exaggerated representations than any other document of the kind ever laid before the legislature. It made a great sensation; and the discussions to which it, or rather the proposal that grew out of it, for limiting factory labour to 10 hours a day, gave rise, induced government to appoint a commission to inquire, on the spot, into the actual condition of the labourers, and especially of the children employed in factories. This commission collected a great deal of valuable and

ACCOUNT of the Numbers of the Work-people employed in the Cotton, Woollen, Worsted, Flax, and Silk Factories in the United Kingdom, in 1846, distinguishing between England, Scotland, and Ireland, and between the Sexes and Ages of the Work-people.

	Ages.						Total.		
	Under 13 Years of Age.		Between 13 and 18 Years of Age.		Above 18 Years of Age.				
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Ma. and Fe.
ENGLAND.									
Cotton - - -	10,723	6,814	33,814	47,914	78,783	98,950	123,320	153,708	277,028
Woollen - - -	4,206	3,068	10,624	8,253	23,135	13,401	37,965	24,722	62,687
Worsted - - -	3,453	3,884	4,452	10,767	7,228	22,013	15,133	36,661	51,797
Flax - - -	836	752	2,385	4,517	3,837	7,518	7,058	12,782	19,840
Silk - - -	2,951	4,777	3,603	9,310	7,218	15,831	13,772	29,918	43,690
Total -	22,169	19,295	54,678	80,791	120,201	157,713	197,248	257,791	455,012
SCOTLAND.									
Cotton - - -	379	366	3,046	8,661	5,796	16,868	9,221	25,895	35,116
Woollen - - -	80	68	1,312	1,754	4,023	2,410	5,415	4,222	9,637
Worsted - - -	- -	- -	4	52	58	29	62	81	143
Flax - - -	109	296	1,973	4,253	3,465	11,234	5,517	15,783	21,330
Silk - - -	17	59	63	330	141	407	221	796	1,017
Total -	585	779	6,398	15,050	13,483	30,948	20,466	46,777	67,243
IRELAND.									
Cotton - - -	4	11	592	773	954	1,849	1,550	2,633	4,183
Woollen - - -	2	1	79	144	452	404	533	549	1,082
Worsted - - -	- -	- -	21	46	80	91	101	137	238
Flax - - -	9	27	2,458	4,235	3,218	7,231	5,595	11,493	17,088
Total -	15	39	3,150	5,198	4,614	9,575	7,779	14,812	22,591
Total for England -	22,169	19,295	54,878	80,791	120,201	157,713	197,248	257,791	455,012
Total for Scotland -	585	779	6,398	15,050	13,483	30,948	20,466	46,777	67,243
Total for Ireland -	15	39	3,150	5,198	4,614	9,575	7,779	14,812	22,591
Total for U.K.	22,769	20,113	64,426	101,039	138,298	198,236	225,493	319,383	544,876

authentic information; and much light has since been thrown on the question of factory labour. It were absurd to pretend, as some have done, that the statements and representations, as to its pernicious influence, were proved to be wholly destitute of foundation, but they were shown to be very greatly exaggerated. That great inattention to cleanliness, and some very revolting abuses, existed in some factories, particularly in those of the smaller class, is quite certain; but the instances of abuse bore but a small proportion to the total number; and, speaking genenerally, factory work-people, including non-adults, are as healthy and contented as any class of the community obliged to earn their bread in the sweat of their brow.

We do not, however, know that we should object to the total exclusion of children, from 9 to 13 years of age, from factories provided we had any reasonable security that they would be moderately well attended to, and instructed at home. But no such security is to be looked for. The parents of such children frequently want the ability, oftener the opportunity, and sometimes the wish, to keep them at home in any thing like a decent condition; to provide them with instruction, or to impress on them the importance of habits of cleanliness, sobriety, and industry. Were they turned out of the factories, few would either go to the country or to school. Four-fifths of them would be thrown loose upon the streets to acquire a taste for idleness, and to be early initiated in the vicious practices prevalent amongst the dregs of the populace in Manchester, Glasgow, Leeds, and other great towns. Whatever may be the state of society in these towns, we hesitate not to say that it would have been ten times worse but for the factories. They have been their best and most important academies. Besides taking the children out of harm's way, they have imbued them with regular, orderly, and industrious habits, their earnings are considerable, and are a material assistance to their parents; at the same time that they make them perform their tasks with a zeal and alacrity that is rarely manifested by apprentices serving without pay, merely that they may learn some art, trade, or mystery. Many factories have also day schools, or Sunday schools, or both, attached to them, which the children attend. But, independently of this, the training they undergo in factories is of inestimable value, and is not more conducive to their own interests than to those of the public. The regulations adopted under the acts 3 & 4 W. 4. c. 103., the 10 & 11 Vict. c. 29., &c., in relation to the employment of children in factories, and the inspection to which the latter are subjected, have gone far to eradicate the abuses that formerly existed, and have been productive of much advantage.

The *hardware manufacture* is one of the most important carried on in England: it comprises all kinds of articles, from the anchor of a man-of-war down to the delicate furniture of a lady's work-box. The more ponderous are wrought in Staffordshire, Colebrook Dale, and elsewhere; cutlery, and the finer kinds of articles, are made chiefly in Birmingham and Sheffield. In Birmingham steam engines of the largest size are also produced, and the whole tract to the N. W. for a considerable distance is one immense field of smithies and forges, and the goods made in it and its immediate neighbourhood are estimated to be worth more than 3,500,000*l.* annually. Firearms, needles, &c., are made in great quantities in London. Watch and clock works are made especially in Lancashire. The total number of hands employed in this great branch of industry is probably upwards of 350,000, and the total value of the goods produced amounts perhaps to 17,000,000*l.* a year. The value of the hardware exported in 1852 amounted to 2,691,697*l.*, of which the exports to the United States made more than a third part. The manufacture of leather is nearly equal in importance to that of hardware. Worcester and Yeovil are the principal seats of the glove factories, and furnish together upwards of 800,000 pairs of leather gloves annually. Many more are manufactured in Woodstock, London, Nottingham, Ludlow, &c. Shoes, harness, and saddlery, are made in most large towns, and especially in the metropolis. Boots and shoes are also made in great numbers in Northamptonshire and Staffordshire. The leather manufacture is estimated to employ, in all, nearly 234,000 hands, and to produce goods to the value of 13,000,000*l.* a year, or upwards.

The N.W. part of Staffordshire is devoted almost wholly to potteries. British earthenware,

so highly improved by the intelligence and ingenuity of Mr. Wedgwood in the last century, now rivals the best produced on the Continent in elegance and excellence, and is much superior in point of cheapness. Hence the earthenware and china of England are very widely diffused; and are the only varieties to be seen in most parts of the Continent and of America. Chinaware is made at Derby, Worcester, &c. The total value of the articles manufactured in both branches of the trade is estimated at about 2,500,000*l.* The glass manufacture has grown up since the end of the 16th century, but has especially increased within the last 50 years. Bottle and crown glass are made chiefly at Newcastle and S. Shields; plate-glass exclusively at the former town, and at Ravenhead in Lancashire. There are numerous glass-works in the W. and N.W. cos.; and the total produce of glass articles is valued at 2,300,000*l.* a year, their manufacture employing 50,000 hands. This branch of industry has been materially injured by oppressive duties. But these, after being reduced in 1835, were finally repealed in 1845. Paper is made in Hertfordshire, Kent, Lancashire, Yorkshire, &c. It is estimated that there are in all about 312 mills at work in England, employing about 25,000 individuals, and producing goods to the value of about 2,300,000*l.*, a year. Paper, like glass, has been subjected to oppressive duties; but these were reduced a half, or from 3*d.* to 1½*d.* per pound, in 1836. Hats to the value of between 1,500,000*l.* and 2,000,000*l.*, bricks and tiles to an enormous extent; soap, candles, gunpowder, starch, vinegar, dyes, coaches, furniture, straw plait, &c., &c., are amongst the remaining principal articles produced by the manufacturing industry of England; and extensive sugar-refineries are established in London, Liverpool, Bristol, &c.

The conversion of grain into fermented liquors gives rise to three very important and extensive branches of manufacture and trade, those of malting, brewing, and distilling. Malt, which in 1804 was made to the extent of 21,854,111 bushels, was in 1852 produced to the amount of 35,483,623 bushels. The breweries throughout England yield upwards of 5,000,000 barrels of beer of all sorts: and from 1,800,000 to 2,200,000 barrels are supposed to be annually supplied by the porter breweries of London, which are the largest and finest establishments of the kind in the empire. There is also a very large consumption of spirits, particularly gin, in England. But, notwithstanding the numerous allegations to the contrary, there can be no doubt, comparing the consumption with the population, that it is decidedly less at present than it was in the reign of George II., and at more recent periods. This is established beyond all question by the statements made in parliament in the debates on the Gin Act in 1742, and by the details given in the tract of the celebrated Henry Fielding on the Increase of Robberies (London 1752), and other authentic documents. No doubt there is still, in this respect, ample room for improvement. Nothing, however, can be more unfounded than the complaints so often put forth of the increase of drunkenness: that the lower classes are not so temperate as could be wished for, is most true; but they have improved, and are now less given to intoxication than at any former period of our history. We subjoin an Account (see top of next column).

In addition to the supply of British spirits there were retained for consumption in the U. Kingdom, in 1849, 8,089,862 gallons rum, 2,187,358 do. brandy, and some small quantities of Geneva and other spirits, with 6,251,862 gallons wine. The

Account of the Total Number of Gallons of Proof Spirits entered for Consumption in England, Scotland, and Ireland, respectively, and in the U. Kingdom, in the under-mentioned Years since 1825.

Years.	England.	Scotland.	Ireland.	U. Kingdom.
	Galls.	*Galls.*	*Galls.*	*Galls.*
1825	3,684,049	5,981,549	9,262,744	18,928,342
1830	7,732,101	6,007,631	9,004,539	22,744,271
1835	7,315,053	6,013,932	11,381,223	24,710,208
1840	8,278,148	6,180,138	7,401,051	21,859,337
1845	9,076,381	6,441,011	7,605,196	23,122,588
1846	9,179,530	6,975,091	7,952,076	24,106,697
1847	8,409,165	6,193,249	6,037,383	20,639,797
1848	8,581,327	6,548,190	7,072,933	22,202,450
1849	9,053,676	6,935,003	6,973,333	22,962,012
1850	9,331,512	7,122,987	7,408,086	23,862,585
1851	9,595,368	6,830,710	7,550,518	23,976,596

Account of the Quantities of Home-made Proof Spirits entered for consumption in England, Scotland, and Ireland, respectively, and in the U. Kingdom in 1848, with the Rates of Duty on the same, and the Amount of the Duty.

	Spirits entered for Consumption.	Rate of Duty.		Produce of Duty.		
	Gals.	*s.*	*d.*	*£*	*s.*	*d.*
England - -	8,613,256	7	10	3,373,525	5	4
Scotland - -	6,548,190	3	8	1,200,501	10	0
Ireland - -	7,072,933	2	8	943,057	14	8
U. Kingdom -	22,231,379	-	-	5,517,084	10	0

beer, or porter, noticed above, is mostly consumed in England; very little comparatively being drank in Scotland and Ireland.

Ship-building may be classed among the principal manufactures of England. The government dockyards are at Portsmouth, Plymouth, Chatham, Sheerness, and Milford; the other ports at which vessels are mostly built are London, Sunderland, Newcastle, Hull, Yarmouth, Liverpool, &c. (See *ante*, p. 460.)

Internal Communication. — The turnpike roads of England are at present, perhaps, the best in the world. They are placed under the direction of trusts, and kept in repair by tolls levied on passengers and carriages, and rates, which the surveyors of roads are empowered to levy by the act 5 & 6 Will. 4. c. 50. According to a parliamentary paper, printed in 1843, there were in 1841, in England and Wales, 23,000 m. of turnpike road, the tolls levied on which amounted to 1,574,518*l.*, and since that period several hundred additional miles of road have probably been added. The construction of canals in England originated during the latter half of the last century. Most of them are in the N. W. or manufacturing districts. The principal are the Lancaster canal, from Kendal to Wigan; the Liverpool and Leeds; Burnley and Skipton; Aire and Calder Navigation; Duke of Bridgewater's canal, from the head of the Mersey æstuary to Manchester; those connecting Bolton and Bury with the latter town; the Rochdale from Manchester; Huddersfield, from Manchester by Ashton-under-Line; Peakforest; Trent and Mersey; Ellesmere; Hereford and Gloucester; Thames and Severn; Berks and Wilts; Arundel; Grand Junction from the Thames at Brentford to Northampton; Paddington and Regent Canal, on the N. side of the metropolis, &c. The total length of the canals traversing England exceeds 2,200 m. All have been constructed by private companies or individuals, and several exhibit splendid triumphs of art over nature; as, for instance, the Ellesmere, which in one place is carried over the Dee at an elevation of 125 ft. above that river, by means of a course of cast-iron plates supported on 19 pairs of stone piers. The Grand Junction has a tunnel, 3,080 yds. long, and the Duke of Bridgewater's canal is excavated subterraneously for a total distance of several m. But the extension of canals has been nearly suspended since railways came into vogue. These originated also in the latter half of the last century in the N. mining district. The wooden rails at first used gave way to others of iron. The Stockton and Darlington railway, opened in 1825, was the first intended for public use; but it was not till 1830, when the Liverpool and Manchester railway was opened, that their vast importance became manifest. The formation of railways would

however, have been of comparatively little value, but for the invention of locomotive engines, which being successfully introduced on the Liverpool and Manchester railway, made its opening a memorable æra in the history of internal communication. By means of these engines long trains of carriages, loaded with passengers and goods, are now impelled along railways at a speed varying from 25 m. to 45 m. or upwards an hour! Hence it is that time and space are nearly annihilated in as far as railway travelling is concerned. This extraordinary speed has also been attained with a great increase of comfort and security; the accidents by railways being very decidedly fewer, as compared with the number of passengers, than those arising out of travelling by common coaches. The latter, in fact, are all but wholly superseded on all the great lines of road. Railways have been already opened from London N. to Birmingham, Manchester, Liverpool, York, Glasgow, Edinburgh, and Aberdeen; from London W. to Bristol and Exeter; and from do. S. to Dover, Brighton, Southampton, &c., and a vast many undertakings of the same kind have been undertaken and completed in other parts of the kingdom.

The progress of the railway system has, indeed, been quite extraordinary. It is stated in the official returns laid before parliament that on the 30th June, 1853, no fewer than 7,511 m. of railway had been opened for traffic in the U. K., that 682 m. of railway were then in the course of being constructed, and that an additional extent of 4,372 m., though not open, was in part constructed and authorised. On the 1st Jan. 1849, a total sum of 200,173,000*l*., raised by shares and loans, had been expended, and the existing companies had power to raise a still farther sum of 143,717,000*l*. which, however, would not suffice to defray the cost of the works they had authority to construct. We subjoin

A Statement of the Names of the Principal Lines of Railway open in the U. K. in 1850, with their Length, the total Sum expended on each Line, and the Dividends payable by the different Lines during each of the 3 Years ending with 1849.

Names.	Length in 1850.	Amount expended.	Dividends. 1847.	1848.	1849.
	Miles.	£	£	£	£
Aberdeen	72	1,366,713			
Belfast and Ballymena	37¾	495,921	-	5	1
Birkenhead, Lancashire, and Cheshire	16	1,796,563	2¾	5	5
Bristol and Exeter	85½	2,902,429	4½	4	3¾
Caledonian	100	5,326,143	-	1½	
Chester and Holyhead	94¾	3,915,383			
Dublin and Drogheda	53	785,152	2½	-	1¾
Dublin and Kingstown	7¾	442,000	7	7	7
Dundee, Perth, and Aberdeen	81	660,180	8	6½	1½
East Anglian	61½	1,309,238			
Edinburgh and Glasgow	57¾	2,887,808	3	6	3½
Edinburgh, Perth, and Dundee	71	2,371,335	-	2	
Eastern Counties, and N. and E.	322	12,585,950	5	3¾	1¼
East Lancashire	75½	3,192,759	-	-	1
Eastern Union	95	2,000,353			
Glasgow, Kilmarnock, and Ayr	100	2,705,601	6	3	1¼
Glasgow, Paisley, and Greenock	22½	866,462	3½	3	2½
Great Northern and East Lincoln	143	5,406,157			
Great Southern & Western (Irish)	188	3,890,228			
Great Western	230	13,238,411	7½	6½	4
Lancashire and Yorkshire	245¾	10,818,479	7	5½	3½
Lancaster and Carlisle	90	1,950,000	4	4½	4½
London & North-Western, &c.	470	28,192,031	8½	7	6
London and Blackwall	5½	1,362,156	28	1½	9
London, Brighton, and S. Coast	171½	7,103,103	4	3¾	3¾
London & South-Western	239	8,113,460	9	5½	3½
Manchester, Sheffield, and Lincolnshire	160½	6,470,533	5		
Midland, Bristol, and Birmingham	491½	15,319,419	7	5½	2¾
Midland, Great Western (Irish)	50	1,168,628			
Newcastle and Carlisle	60	1,576,490	6	6	6
North British	135	4,013,757	5	5	2½
North Staffordshire	112	3,208,677			
Scottish Central	45	1,448,910	-	7	5
Scottish Midland Junction	32	537,720			
Shrewsbury and Chester	49	1,161,840	-	-	2¾
South Eastern	234	8,907,515	6½	5¾	3
South Devon	58	2,063,841			
South Yorkshire, Doncaster, and Goole	69				
Taff Vale	40	907,398	5½	6¾	6
York, Newcastle, and Berwick	290½	6,301,307	9	7	1¾
York and North Midland	260	4,375,682	10	7	1

It is seen from this table that there has been a great falling off in the dividends on the principal lines, that others do not pay anything, and that the railway interest was at that moment, and still (1854) is, in a state of great depression.

A great variety of circumstances have conspired to bring about this result. In the *first* place, many lines have been constructed which should never have been attempted, and which could not reasonably be expected to yield any dividend. In the *second* place, the profits of the best lines have been reduced by the directors grasping at all the subsidiary lines connected with them, how little soever they might be capable of yielding an adequate return. And in the *third* place, the whole system has been justly discredited by the rascality and bad faith evinced by some of its leading managers, and by the difficulty of obtaining any really accurate information in regard to the financial condition of any line. The gambling connected with the railway system has been on quite as gigantic a scale as the system itself; and has reflected no little disgrace on the national character. The high dividends that were paid on many lines were often fictitious, not being realised by the working of the lines, but being partly, or principally, derived from encroachments on their capital! The public, however, not being aware of this, were tempted to buy shares in these lines at proportionally high prices. And when the fraud was discovered, and the stock fell, the reactionary shock became proportionally great. There would seem to be no doubt that with careful management some of the main lines will yield handsome returns; but there is very little chance of this ever being the case with the majority of lines.

Commerce.—For an account of the trade of the U. Kingdom, see *ante*, pp. 459—463.

Constitution and Government. — The legislative power, by the constitution of Great Britain, is vested in the great council of parliament, consisting of the King and the three estates; that is, the Lords Spiritual, Lords Temporal, and Commons.

The early history of the parliament of England is enveloped in great obscurity. This much, however, is certain, that previously to the Norman invasion it was usual to consider and debate matters of public importance in the *Wittenagemote*, or great council of the nation. After the Norman invasion, and the establishment of the feudal system, the king, as lord paramount, was assisted by a great council composed of the principal feudal superiors, or tenants *in capite*, whose concurrence was necessary in matters of general or national importance. In *Magna Charta*, signed by King John on the 15th of June, 1215, it is stipulated that "no scutage or aid shall be imposed on the kingdom, beyond the ordinary liabilities of the feudal tenure, unless by the *common council* of the kingdom." This shows that even at this early period the principle was recognised, that the nation should not be taxed except by its own consent. The great number of tenants *in capite*, or of those who, as they held directly from the crown, were entitled to a seat in the great council or parliament, and the disinclination and inability of many of them to attend, gave rise to the practice of summoning, by name, a few only of the most distinguished, or of those called the greater barons, whence originated baronies by writ; while the others, who were not summoned, adopted, in no very long time, the practice of sending representatives. The latter consisted of two knights for each shire, and of one or more burgesses for the three boroughs, or of those holding of the crown. Different opinions are entertained as to the period when these important innovations took place; but, at all events, there is undoubted evidence to prove that burgesses attended the parliament summoned by Simon de Montfort, Earl of Leicester, in 1265. At this time, also, the clergy were summoned to attend by their procurators (proctors); but they struggled successfully to rid themselves of this burden (as it was then considered), and obtained the privilege of meeting in convocation for each of the two provinces: the bishops and mitred abbots only continuing to attend parliament. Under the reign of Edward I. knights and burgesses were regularly summoned; and in that of Edward II. parliament appears to have been

divided into two houses; that is, into the House of Lords, consisting of the great feudal lords who directly attended; and the House of Commons, consisting of the representatives of the smaller tenants and burgesses. In the same reign parliament seems for the first time to have exercised, in a regular manner, the functions of a legislature. In the reign of Henry IV. we first find the right of the Commons to originate all supplies noticed as an existing institution. From this period, the history of parliament is closely interwoven with that of the nation. The number of burgesses was gradually increased by the enfranchisement of fresh boroughs; and the popular influence in the legislature progressively gained strength with the increasing wealth and intelligence of the nation. But for a lengthened period the nature of the government was not well defined, and the rival powers of the crown and of parliament were frequently coming into contact. During the reigns of Henry VIII. and Elizabeth, the regal power attained to a maximum. But the growth of commerce under the latter, combined with the powerful influence of the Reformation, and other causes, not only gave a great accession of strength to the bulk of the people, but made them better acquainted with their rights, and less disposed to submit to their invasion. The princes of the House of Stuart wanted sagacity to appreciate the changes that had thus taken place in their position with respect to the public. Their maxims of government were as arbitrary as those of the Tudors, but they had neither their ability nor their power. Their attempts to govern without a parliament, and in defiance of principles that had been sanctioned from the earliest periods of the monarchy, produced, in the end, a civil war, that happily terminated in favour of the popular party. But it was not till the Revolution of 1688, when the Stuarts were finally expelled from the throne which they had shown themselves unfit and unworthy to fill, that the principles of the constitution were clearly established. The celebrated statute, called the Bill of Rights (1 Will. & Mary, sess. 2. 1689), declared that the suspension of laws, or their execution by regal authority, without the consent of parliament, was illegal; that parliament had the exclusive right to levy money from the subjects; that the debates or proceedings in parliament were not to be questioned in any court or place out of parliament; that it was the right of subjects to petition the king; that jurors were to be duly pannelled and returned; and that parliaments should be held *frequently*. By the Triennial Act (1704) the duration of parliaments was limited to three years. In 1715 it was extended to seven, at which period it has continued fixed. The union with Scotland (1707) and Ireland (1800) increased the number of members to 658. We have elsewhere adverted to the circumstances that occasioned the passing of the Reform Act of 1832. (See *antè*, p. 462.) This important statute made some material changes, by enfranchising some of the greater and disfranchising some of the smaller boroughs; and by modifying the electoral franchise, and creating a new right of voting in all occupiers of premises of the value of 10*l.* a year in boroughs, throughout the Three Kingdoms.

The king, as a constituent part of the parliament, has the prerogative of giving a final assent or negative to any bill which has passed the two houses. But the royal veto, though conceded by the theory of the constitution, has long ceased to be exercised; and the assent of the sovereign is now nothing more than a formality, necessary to give an act of parliament the force of law.

The descent of the crown of England is limited partly by customary law, partly by statute. By the Act of Settlement (12 & 13 W. 3.), it is vested in the descendants of the Princess Sophia, youngest daughter of Elizabeth, Queen of Bohemia, and granddaughter of James I., *being Protestants;* and every person marrying a Papist is rendered incapable of possessing or enjoying it. Subject to these limitations, the crown descends, as of hereditary right, first to the male, then to the female issue in succession. There is no minority in the case of an heir to the crown; and whenever a minor is likely to be called to it, it is usual for parliament to make beforehand a special provision for the emergency.

The House of Lords consists of the lords spiritual and temporal.

The *lords spiritual* are, the 2 archbishops and 24 bishops of England; with 1 archbishop, and 3 bishops of Ireland, who succeed in rotation, and sit for a session only. Before the Reformation, 27 abbots and 2 priors sat in the English parliament. In consequence of the distinction between the two *estates* (spiritual and temporal), doubts were felt, even so late as the time of Coke, as to the validity of bills which might pass the House of Lords by the votes of one estate only, against or without the voice of all the spiritual or temporal peers. But such scruples are no longer entertained by any constitutional lawyer, and no distinction remains between the two estates.

The temporal lords of parliament are, 1. English peers; viz. dukes, marquisses, earls, viscounts, and barons. Peerages are said to be held by *tenure*, or created by *writ* or by *patent*. The former, which appears to have been the most ancient species of peerage, consisted in the holding of certain baronial estates or "honours," which are supposed to have entitled the owner to be summoned by name as of right to parliament. It has been in effect long obsolete: a few baronies are still asserted to be held by tenure, but it is doubtful whether the claim, if preferred, would be admitted. Creation by writ is a summons to the individual, by the name and style of the peerage conferred, to attend parliament. Creation by patent, at present the ordinary mode, is the grant of a peerage by the crown, with specific limitations as to the descent, usually, in modern times, to the heirs male of the body of the peer, with or without remainder to other branches. The right to a contested or claimed peerage is tried by the House of Lords. 2. Sixteen Scotch peers are elected every parliament by the whole peerage of that country. 3. Twenty-eight Irish peers are elected in like manner for life. Scotch or Irish peers, who have also English peerages, sit and vote in parliament by the title of those peerages. The chancellor, by virtue of his office, is speaker of the House of Lords. This house claims the privilege of originating all bills for the restitution of honours or blood.

The number of members of the House of Commons, has been, since the union with Ireland, 658. The number of English representatives was fixed by ancient usages and charters, and that of Scotch and Irish by the respective Acts of Union of those two countries with England; but the distribution of members was materially altered by the changes introduced by the Reform Act of 1832. Aliens and denizens are disqualified from sitting and voting in the house; so are peers of parliament, and Scotch (but not Irish) peers, the

clergy, and the holders of various offices: while other offices only render it necessary to vacate a seat in parliament, the holder remaining eligible. Bankrupts, persons attainted of treason and felony, and outlaws (in criminal cases), are also excluded. The necessary qualification of estate is, for counties, the possession of 600*l.* a year issuing out of land (held for the life of the member, or a greater estate); for boroughs, that of 500*l.* Members for the universities alone are exempted from the necessity for this qualification.

We have elsewhere given (*antè*, p. 462.) a statistical view of the representation of the different parts of the United Kingdom, to which we beg to refer the reader.

Of the English boroughs, 50 return 1 member each; London 4, the remainder 2: 6 counties return 2 members each; 7 return 3 members each; 26 return 4 members each, being 2 for each of the districts or divisions into which they were apportioned by the Reform Act. Yorkshire returns 6 members, being 2 for each Riding. The Isle of Wight has 1 member. Welsh counties, 1 each; with the exception of Caernarvon, Caermarthen, Glamorgan, 2. Welsh boroughs, 1 each. Scotch counties, 1 each: boroughs, 1 each, with the exception of Edinburgh and Glasgow, which return 2. Irish counties, 2 each: boroughs of Dublin, Cork, Belfast, Limerick, Galway, Waterford, 2; the remainder, 1. The right of voting for county mems., in England, is in all freeholders possessing land of the value of 40*s.* per ann., if of inheritance, or in actual occupation, and not acquired by purchase: the latter conditions being introduced to guard against the creation of fictitious votes. An estate for life of 10*l.* per annum is sufficient under any circumstances. Copyholders to a certain amount, and leaseholders to a certain amount and duration, are now also in the possession of the franchise; as are all tenants, whether with or without leases, who pay a *bonâ fide* rent of 50*l.* a year. In Scotland, besides certain votes on account of ancient rights of a peculiar description, termed superiorities, freeholders of 10*l.* per annum have the right of voting, and tenants nearly as in England. The right of voting for counties in Ireland is also fixed at 10*l.* per annum, for freeholders; leaseholders and copyholders nearly as in England.

In English boroughs a uniform franchise, created by the Reform Act of 1832, is possessed by the occupiers of a house or other building, or building with land, of the value of 10*l.* per annum. In cities that are counties of themselves, freeholders vote as in counties. Besides these, there are in all the boroughs, except such as were enfranchised by the Reform Act, certain ancient rights, reserved to those who were in the possession of the franchise at the passing of that act. These vary according to the usage of particular boroughs. Such are the ancient franchises of pot-wallopers, or pot-boilers, payers of scot and lot, freeholders, burgage tenants, and freemen admitted to the freedom of corporations. But in all these cases provision is made for the gradual extinction of the ancient franchises, no new claimants being registered unless they have acquired the right in certain excepted ways. In Scotland and Ireland, also, the occupiers of houses of the value of 10*l.* per annum in boroughs possess the franchise, with reservation of certain ancient rights in the latter country. Voters for the universities are such as have attained the degree of master of arts, and have kept their names on the books.

The following is, perhaps, a tolerably fair estimate of the mode in which the present House of Commons is constituted. There may be still from 20 to 25 nomination boroughs; that is, boroughs the members for which are habitually appointed, without opposition, by individuals, generally large landed proprietors in the neighbourhood, who possess a paramount influence over the constituency. There are 6 or 7 in which government exercises great or paramount influence. In the remainder, the local influences, as, for instance, of landed property, great manufacturing or mercantile establishments, &c., vary in degree (frequently acting so as to counterbalance each other), according to the comparative "openness" of the constituency, until in the greater boroughs they can scarcely be said to exist, unless in the case of freemen who are swayed by old corporation politics. Counties are generally, though with differences of more and less, governed by the landed aristocracy of their soil.

In Scotland, the county constituencies have been supposed to be more independent of the great landlords than in England; but we doubt whether there be any real foundation for this opinion. Owing to the differences as to religion in Ireland, the tenants, who are mostly all Catholics, have of late years been very frequently opposed to their landlords, who are mostly all Protestants. But when no such powerful influence as that of religious feelings or prejudices come into the field, tenants usually support the candidates patronized by their landlords. If the admission of the occupiers of 50*l.* farms to the elective franchise in 1832 were meant to increase the already paramount influence of the landlords, or to balance the inroads made on it by other parts of the Reform Act, it was judiciously devised; for, no doubt, it has had that effect to a great degree. We attach little consequence to the distinction between tenants at will and tenants occupying under a lease of reasonable duration. The object in forming a constituency should be to vest the franchise in the persons who may be supposed most likely to give their suffrages to those candidates only of whose political principles and public conduct they really approve. Assuredly, however, the occupiers of land do not, speaking generally, belong to this description of persons. Taken as a class, they are, perhaps, the most dependent of any in the country. Many of them are indebted to their landlords; and the number of those who are in a situation to act on their own convictions, without caring for the consequences, is extremely limited indeed. Even in Scotland, where leases are universal, and the occupiers mostly in comfortable circumstances, the number of those who vote otherwise than their landlords is so very inconsiderable, that, in estimating the chances which any candidate has of succeeding in a county, no one ever thinks of inquiring into the politics of the tenants, but merely into those of the landlords; it being supposed that the former will, as a matter of course, follow the latter.

The House of Commons is summoned by warrant of the king to the lord high chancellors of Great Britain and Ireland, or to the keepers or commissioners of the great seal, to issue their writs for the election of knights, citizens, and burgesses. When a new parliament is summoned, 40 days must elapse between the date of the writ and the return to it. On vacancies occurring during the session, the writ is issued to the clerk of the crown in chancery, on warrant from the speaker; and the speaker also makes out a writ on vacancy occurring during the recess. The writs are delivered to the sheriffs of counties and returning

officers of boroughs, who are bound to give the proper notices. If the member or members be not elected by show of hands on the nomination day, a poll is demanded, and takes place on the next day but 2 in counties, and lasts 2 days; on the next day in boroughs, lasting one day only. Votes are publicly given and recorded. In Scotland the poll for boroughs may continue 2 days; in Ireland 5, both for counties and boroughs. The name of every elector who is admitted to poll must (since the Reform Act) appear on the register of voters, which is constructed in a different manner, and by different officers, in the 3 countries. Where votes are equal, it is usual for the returning officer to make a double return.

The validity of a return may be questioned by petition to the House of Commons, not only on the ground of irregularity in making it out, but also of riot, of treating or bribery by the member elected, and of the admission of unqualified votes or rejection of good ones. The trial is before a committee of the House of Commons, regulated in its appointment and proceedings by a variety of statutes. The impression, however, is, that the decisions of these committees are influenced more by political biasses than by regard to the merits of the cases brought before them; and repeated efforts have been made, though with no very marked effect, to render them more impartial. The law as to bribery and treating seems also to stand much in need of amendment. A landlord or great manufacturer supports a particular candidate on the implied, perhaps, though often on the agreed, and always distinctly understood condition, that if the candidate in question be returned, he will do his best to promote the views of the individual supporting him, by recommending his family or connections to government, or to the leaders of his party, as deserving of their especial support and patronage. This is held to be a fair legitimate transaction; but if so, — if a commission in the army, or a place in the customs or excise may be thus bargained for,—where is the justice of prosecuting and punishing the needy tradesman or shopkeeper, who contents himself with stipulating for payment of some 5*l.* or 10*l.*? The fact is, that it is altogether impracticable to put down bribery at elections, taking the word in its enlarged sense. Where poor men have that in their possession which rich men are eager to acquire, it is the merest drivelling to suppose that it is possible to hinder the former from selling, and the latter from buying. A traffic in votes has always been, and always will be, practised indifferently by all parties. We doubt whether the institution of prosecutions has the slightest influence over its amount. It, no doubt, makes the traffic be transacted less openly, and tends, in fact, to make the disgrace, like that attaching to theft in Sparta, be applied rather to the circumstance of its being so clumsily conducted as to lead to a discovery, than to the perpetration of the offence! Perhaps, however, it might be unwise wholly to abstain from prosecutions for treating, and for that particular, though least common form of bribery, which consists in the payment of money to voters; but there is really no way by which materially to lessen the amount of this species of bribery other than by establishing a property qualification, and conferring the franchise on those only who may be presumed to be in a condition to be above being influenced by pots of beer and small sums of money.

The House of Commons claims the privilege of electing its speaker; and also that most important one, which is a fundamental principle of the constitution, the right to originate all bills imposing any tax or levy on the subject, technically called money bills, or bills of supply. Should the Lords, in amending bills sent up from the Commons, introduce clauses containing such impositions, they are invariably rejected by the latter, as infringing on their undoubted privilege.

By the Septennial Act (1 Geo. I. 1715), a *new* parliament must be summoned every seven years; but as the crown has the prerogative of arbitrary dissolution, and as there is a dissolution also on the demise of the crown, the length of a parliament has rarely approached that limit. The sessions of parliament are annual. It does not appear that there is any statutable necessity for its being summoned oftener than once in three years; but as the supplies are annually voted, it is impossible to dispense with a yearly summons. The ordinary session of parliament lasts about six months, from February to August; but it has of late years been often of longer duration. Parliament is *adjourned* from day to day, or over a short recess (as at Easter), by the authority of each house separately. It is *prorogued* by the king's authority, and frequently in his presence, by the lord chancellor, at the close of the session: but, in practice, for two months only, at the end of which it again meets *pro formâ*, and is again prorogued, and so on to the commencement of the session. It is dissolved, as has been said, at the will of the crown, or by efflux of the seven years, or on the demise of the crown: in the latter case, it continues six months after such demise, unless sooner prorogued.

Privilege of Parliament is a comprehensive term, embracing both the personal privileges enjoyed by every member of the legislature, and also the general rights of the body. To the former class belongs, for example, the freedom from arrest in civil proceedings enjoyed by every member: to the latter, the freedom of debate, authority to punish for contempts, and the various other safeguards to the liberty and power of the legislative assembly, which have from time to time been acknowledged as principles of our law. The extent of these privileges, and the mode by which they are to be ascertained, are questions to which as yet no authoritative decision has been given. The assertion of those who rate the authority of parliament highest, is, that when either house claims a privilege, other tribunals have no authority, either to reject such claim if the privilege be proved, or to decide whether the privilege be proved or not; parliament alone (that is, each house for itself,) being the judge of its own privileges.

The great council of parliament possesses exclusive legislative authority. In this character it is said to be legally omnipotent; that is, that there is no recognised power in the constitution to check or overrule it. This legislative authority is commonly exercised, not only in matters of public interest, but also in the passing of laws at the request and for the benefit of private individuals or associations, to give them powers which without such authorisation they could not possess.

The course of legislation in ordinary cases is as follows:—Any member of parliament may bring in a bill, or draught of a law, which (except in certain cases, before enumerated) may commence in either house. In the House of Commons, however, it is necessary first to obtain leave from the house to bring in the bill. The

bill is then "read for the first time," with or without discussion, which, except on questions of great public interest, does not usually take place on this first stage. It is then printed, and a day fixed for the second reading. The principal debate ordinarily takes place on this occasion. If it pass the second reading, it is referred, if of public importance, to a "committee of the whole House:" private bills, and others of less consequence, are usually referred to select committees. In committee, the clauses of the bill are considered one by one. On the report of the committee, the third reading of the bill takes place, with the amendments which the committee may have made upon it. If it be not rejected on the third reading, it is sent to the other House, where it passes through similar stages. If the other House amend, the bill is sent back to that in which it originated. If the two Houses disagree as to the amendments, a succession of "conferences" may take place; and if no agreement be thus effected, the bill drops; otherwise it proceeds to receive the royal assent, and thus becomes an act of parliament, or a statute law.

Bills of supply, or for the providing of the funds required for the carrying on of government, must originate, as has been said, in the Commons. They must always begin in a committee of the whole House, moved for at the commencement of every session by the Chancellor of the Exchequer. All applications for grants of public money come in the form of messages from the crown. Bills of supply, when they have received the assent of the Lords, return again to the Commons.

Committees are either of the whole House, in which case the principal departures from the usual course of business are, that a private member is voted into the chair, instead of the speaker, and that the same strictness is not observed in the usages of debate, members being allowed, for example, to speak more than once; or permanent, nominated by each house at the commencement of the session, which has now become a mere formality; or consisting of a small number of members selected by the Houses, at their discretion, for the purpose of having bills referred to them. Committees have power to examine witnesses; but those of the House of Lords only examine on oath.

It is well known how extensive a control is exercised by parliament over the conduct of the executive, not merely by legislation, but by various established methods of expressing satisfaction or dissatisfaction. Such are *motions* made by individual members, either founded on *petitions* (which it is a peculiar part of the business of both Houses to receive and consider), or otherwise; on which *resolutions* may be adopted by the House, *addresses* to the crown moved, *committees* appointed to examine and report, and so forth. The right of parliament to exercise this species of superintendence is unquestionable. But the extent to which it may or ought to be carried in any particular case must always depend on circumstances; and will be differently judged by different parties, according as they happen to be more or less swayed by monarchical or democratic tendencies.

Should the prime minister for the time being happen to be a peer, as is very frequently the case, some member of the cabinet, usually the home secretary or chancellor of the exchequer, acts as "leader" of the ministerial body, and principal representative of the government in the House of Commons, in which the conflict of parties is chiefly fought. So convenient is this species of leadership found, that any considerable body in opposition usually find it advisable to select a similar head. A certain majority in the Commons, on ordinary occasions, however small, is absolutely necessary for carrying on the government, which may be said to be strong or weak according to the magnitude of this majority. The truth is, whatever may be said in theory of the balance of power in the different branches of the legislature, that the House of Commons has been since the Revolution of 1688, and still more emphatically since the Reform Act of 1832, the paramount power in the state. Supposing the majority of the House of Commons to be decisive and firm to its purpose, it may compel either the Crown or the House of Lords to give way; for, by resorting to the extreme measure of stopping the supplies, it might, were its demands not acceded to, stop the whole machine of government.

Acts of parliament are either public or private. There is no distinction between those two classes as to the binding character of their authority: the only difference being that judicial tribunals are bound to take cognizance of all acts declared "public," but not of others, unless specially exhibited and proved before them.

The Executive.—The whole executive and administrative functions of government, as well foreign as domestic, are performed in the name of the king. He has the sole power of making war and peace; and, as incident to that power, the command and disposal of the army, navy, and other forces of the kingdom. He is conservator of the public peace, in which character all criminal prosecutions are carried on in his name; and all the civil power of the kingdom is placed at his command. He is the head of the judicial system of the country; and, by fiction of law, is supposed to be present in all his courts when justice is administered. He has the power of granting pardons for offences, with some exceptions created by statute. He is commonly called the "fountain of honour;" in which character all honours, titles, and privileges are conferred by him: he can also erect and dispose of offices, but no remuneration can be attached to them without consent of parliament. He is also supreme head and governor of the national church. He has the regulation of internal commerce—establishes fairs and markets, regulates weights and measures, and coins money.

Substantially and in fact, however, the power of the crown is comparatively limited. It is a constitutional principle that "*the king can do no wrong;*" but, though he be not, his ministers are held to be responsible for all illegal or unconstitutional acts committed in his name. It is farther indispensable that his ministers should be able to command a majority in ordinary cases in the H. of C. Unless they can do this, the countenance and approbation of the sovereign will avail them but little; and the king will be compelled to dismiss them to make room for other ministers, which, though less acceptable to himself, are more agreeable to the majority of the House. The latter has therefore, in effect, a veto on the choice of the king. He appoints ministers; but it belongs to the representatives of the people to confirm these appointments, to inquire into the fitness of ministers for their situations, and to determine whether they shall continue in office or be displaced to make room for others.

Practically, too, the power of the crown to elect ministers is a good deal narrowed by the ne-

cessity of choosing those individuals only for the more prominent situations who are members of the House of Lords, or can procure their return to the House of Commons. However well qualified an individual might be to fill the office of Secretary of State, for example, he could not be appointed unless he were a peer, or could recommend himself to some constituency; and the Chancellor of the Exchequer, the Attorney-General, Lord Advocate, &c., must necessarily be members of the H. of C. Previously to the passing of the Reform Act this was a less serious control over the free choice of the sovereign than it has since become, a much greater number of nomination boroughs being then at the disposal of the crown. Now, however, it frequently happens that less competent individuals have to be appointed in preference to others, merely because they are able to command seats in the H. of C. To obviate this inconvenience it has been proposed to give ministers *ex officio* seats in the H. of C., which should entitle them to speak but not to vote; and probably, on the whole, this would be an improvement.

King's Councils. — Every peer of the realm is, according to the theory of the constitution, an hereditary counsellor of the king, and may be called to advise him, whether parliament be sitting or not, but this principle has no practical consequences.

Privy Council. — To understand the manner in which this body was formed out of the great council of the nation or parliament, it must be remembered that one of the original objects of that institution was the summary redress of grievances which the ordinary legal forms did not avail to meet. The privy council was thus, in its origin, a species of committee of the great council, but nominated by the king, to which such plaints were preferred; and in the course of time its sittings became permanent, to afford relief when parliament was not assembled. From the reign of Richard II. to that of Charles I. we find the privy council (consisting usually of some of the chief officers of state, and some inferior members personally nominated by the king,) exercising, in various ways, a very extensive jurisdiction, especially in matters, whether civil or criminal, in which the state was, however remotely, concerned. Under the Tudors and first Stuarts, the privy council was in the habit of granting warrants for the arrest, imprisonment, and even torture of the subject. The court of Star Chamber, and other tribunals of the same description, were offsets of the privy council. Its political functions were also extensive, though not admitting so easily of definition. In the reign of Charles I. (1640) the writ of *habeas corpus* was granted to persons arrested under warrants from the privy council; and its power in this respect was thus placed on a level with that of ordinary magistrates. The judicial functions of the council were thus effectually annulled; nor have they been revived, except as a court of appeal from the civil law courts, and from the local tribunals subsisting in our colonies and foreign dependencies. The number of privy counsellors, originally inconsiderable, was in the course of time greatly extended: limited by Charles II. to thirty, it has since his time again become indefinite. The political functions of the privy council are now virtually annihilated; and the title of privy counsellor is only one of distinction. The appellate jurisdiction already alluded to is exercised by a body selected from the mass, termed the judicial committee of the privy council.

The cabinet council is a body which, though without any recognised legal existence, directs, in effect, the government of the country. It consists of a certain number of privy counsellors, usually consisting of the principal ministers of the crown for the time being, summoned to attend at each meeting. The name is said to be derived from the cabinet of Queen Henrietta, in which the advisers of Charles I. were accustomed to meet. The number is usually from 12 to 15. The first lord of the treasury, the chancellor, the chancellor of the exchequer, the president of the council, the three secretaries of state (home, foreign, and colonial), are always, in practice, members of the cabinet: some other offices are usually, but not invariably, accompanied by a seat in it.

The influence which the sovereign exercises over the deliberations of the cabinet, and the degree of executive power that centres in him personally, necessarily differ very greatly at different periods, inasmuch as they must materially depend on his character and capacity, and on the state and character of parties. At different periods since the Revolution Parliament has compelled the crown to dismiss one set of ministers and choose another in opposition to its own predilections; but such ministries have rarely enjoyed much real power or been very lasting. Whichever party in the state was known to have the countenance and to enjoy the confidence of the crown, has generally contrived, in no very long period, to secure a majority in parliament. Hence it is that from the Revolution down to the accession of George III., the Whigs, with the exception of a few short intervals, were constantly in power; and that the Tories held, with similar exceptions, the reins of government from the accession of George III. down to the introduction of the Reform Bill. But it is doubtful whether such will be the case in future. It was comparatively easy for the crown to deal with the proprietors or patrons of nomination boroughs; but the support of such persons is no longer sufficient to secure a majority: the favourable opinion of the constituents must now be also conciliated; and no ministry whose proceedings were disapproved by the bulk of the middle classes could hope to obtain a majority in the event of a dissolution, however high they might stand in court favour. Whether the nation shall be better or worse governed in time to come than it has been since the Revolution, experience only can decide; but there can be no doubt, speaking generally, that the government must now be conducted more in accordance with the opinion of the public. Still, however, the influence of the crown is very considerable; and when parties are nearly balanced in the country and in the H. of C., it may be able to turn the scale in favour of whichever party it espouses. But it is no longer in the power of the crown to make any effectual resistance to a decided majority in parliament, otherwise than by enlisting the public sympathies in its favour. If it cannot do this, there is nothing for it but to submit to be dictated to by the leaders of the dominant party for the time being. And this, in fact, is the decisive criterion of a free government — that the highest authority in the state should be obliged to act in accordance with the public voice as expressed by its representatives.

Not only are the legislative measures proposed by the crown, and the conduct of the internal government of the country and its foreign relations with other states, entrusted to ministers,

but they have also the disposal of all or by far the greater part of the patronage belonging to the crown. Offices involving no political responsibility, such as those of the household, have been sometimes excepted from this rule, and left to be filled up by the sovereign according to his personal predilections; but this is not by any means a uniform practice, and ministers have repeatedly required and obtained the disposal of these offices.

Generally speaking, patronage in a country like England is always exercised with a view to the acquiring or preserving parliamentary support. Napoleon, the king of Prussia, and the emperors of Austria and Russia, might select individuals to fill offices on the sole ground of their superior fitness to discharge their duties. But in a free country suitableness for office is not the only thing to be attended to in deciding as to the comparative claims of candidates for official preferment: if they possess it, so much the better; but the primary consideration is, how is the government to be carried on? Now that, it is plain, will be best effected by securing the active support of the friends of government, and by weakening the party of their opponents; and the distribution of patronage is one of the principal means by which these objects are to be realized. A government that should neglect to avail itself of this power could not long exist. Hence in England nine out of every ten situations are disposed of on the recommendation of persons possessed of parliamentary influence. This, in fact, is here the *via regia* to preferment and state distinction. In filling up the more conspicuous situations, the talents and acquirements of the candidates, as well as their recommendations, must necessarily be taken into account; but in the great majority of cases parliamentary patronage is the *sine quâ non*. Were the government more popular than it is, this result would be still more apparent. A man of ability in Prussia without connections has a much better chance of getting on, if he devote himself to the public service, than in England; but, at the same time, the chances of such a person being advanced are infinitely greater here than in the United States. In the latter, every thing is sacrificed to party considerations; and the most splendid talents and capacity to render great public services would never advance their possessor one step on the ladder of promotion if he happened to be of a different party from that in power at the time, or to want party support. The reason is, that in England parliamentary influence predominates merely, whereas in America it is every thing; and every thing must, in consequence, be made subservient to its support.

Officers of State, and King's Ministers. — In England, as in other countries, the sovereigns early found the advantage of surrounding themselves with counsellors, or rather with servants, more submissive, and more useful for their purposes, than those great functionaries of state whose dignity nominally entitled them to the chief weight and influence in their several departments. Hence, of the ancient great offices of state, one only can be regarded as now subsisting in the full extent of its power and importance.

Some have become altogether obsolete; others are kept in commission, and their duties thus divided among several persons; others confer little more than titular dignity.

The great officers of state were,—

1 The lord high steward. This officer is now only nominated on the occasions of a coronation, or an impeachment, in which case he acts as president of the House of Lords.

2. The lord high chancellor. He is entrusted with the care of the king's great seal. If there be no chancellor, the seal is in the hands of an officer styled the lord keeper, or is put in commission. In precedency, he ranks next to the Archbishop of Canterbury, and above all other lords temporal and spiritual. He acts as speaker of the House of Lords; he is always a member of the cabinet, and generally has great influence. Besides various other important duties, he exercises the functions of chief judge of the Court of Chancery, in which capacity he will be afterwards noticed.

3. The lord high treasurer. For a very long period this office has not been filled. It is placed in commission, in the hands of officers styled lords of the treasury. The first lord of the treasury is usually prime minister for the time being. The treasury has the control of all matters connected with the receipt and expenditure of the public money, the appointment and superintendence of the boards and offices of customs and excise, stamps and taxes, post-office department, &c.

4. The lord president of the council (privy council), an office of great antiquity, revived in the reign of Charles II., and which has ever since continued. Its duties are little more than nominal; but it is attended, by custom, with a seat in the cabinet.

5. The lord privy seal. This officer has the custody of the king's privy seal, for the purpose of affixing it to charters, &c., as the lord chancellor has of the great seal. He also usually sits in the cabinet.

6. The lord great chamberlain. This office is hereditary, and has passed in succession to several great families. It is at present vested in females, by whom the deputy chamberlain is appointed. It is now merely a titular office, and not to be confounded with that of the lord chamberlain of the household.

7. The lord high constable was also a hereditary officer, and had extensive military authority. None has been appointed, except on special occasions, such as coronations, &c., since the attainder and execution of Stafford, Duke of Buckingham, in 1521.

8. The earl marshal. This dignity is hereditary in the family of Howard, Duke of Norfolk. The earl marshal has various ceremonial duties, and a jurisdiction extending for a certain distance round the king's palace at Westminster, which is executed by deputy.

9. The lord high admiral. This office has generally, although not uniformly, been in commission since the Revolution. The commissioners are styled lords of the admiralty, and the first lord is usually a member of the cabinet. The Board of Admiralty has the control and direction of all matters relating to the navy of the kingdom, the naval dockyards, &c.

The office of secretary of state appears to have originated, or rather to have first assumed a character of importance, in the reign of Queen Elizabeth. At that time, however, the secretary of state was not yet elevated to the rank of a member of the privy council, but attended its deliberations in an inferior capacity. The number of secretaries of state has varied at different times; but the office has continued to increase in importance, and at present may be said to discharge most of the higher functions of the executive in these kingdoms and their dependencies. It is divided into four branches, — the

offices of the secretary of state for the home department, foreign department, colonies, and the secretary to the lord lieutenant of Ireland. Each office has two under secretaries: one permanent, for the discharge of the regular business of the office; the other a political functionary, depending on the changes in the cabinet. The home office exercises a general superintendence over the police and magistracy of the country, and over the execution of justice. The duties of the foreign and colonial offices extend to all the general business of those departments. The secretary of state for Ireland is the representative, in parliament, of the Irish government, and is usually, in effect, the officer principally charged with its conduct. All four are members of the cabinet. The government of Scotland is, in effect, vested in the Lord Advocate, or principal law officer for that part of the kingdom.

The secretary at war has a distinct department, being the ordinary channel of communication between the government and the military authorities. The affairs of our East Indian possessions, so far as these are subject to the control of the king's government, are transacted, according to the provisions of Mr. Pitt's act of 1784, by a board of commissioners, commonly termed the board of control.

10. The board of trade and plantations is a committee of the privy council: it has cognizance of all matters relating to the commerce and navigation of the country.

11. The post-office is under the control of an officer styled the postmaster-general.

12. Executive officers of the crown, employed in the administration of justice, &c. Of the lord chancellor and the judges, more will be said under the head "Courts of Law." In each county the sheriff is the principal executive officer. He is annually appointed by certain officers of the crown. His principal duty is to carry into effect the process of the law within his local jurisdiction. He is also judge of the county court; decides the elections of knights of the shire and coroners; and performs various other duties. There appears to be no strict legal qualification for the office of sheriff; but, in practice, it is usual to appoint men possessed of considerable landed property; and, as the exceptions and legitimate excuses are numerous, and the expenses are sometimes heavy, the appointment is felt as a burden by those on whom it falls. The legal duties of the sheriff are executed in practice by his under-sheriff, usually a solicitor, appointed by him.

The custos rotulorum has the custody of the rolls and records of the sessions in each county. This office is usually joined with the military dignity of lord lieutenant. His deputy is the clerk of the peace, who performs the ministerial business of the court of quarter sessions in his behalf.

The coroner is chosen by the freeholders in the county court: the office is generally filled by an attorney. His chief duty consists in holding inquisitions in cases of sudden death, where the body is found; for which purpose he summons a jury of four, five, or six persons.

The justices of the peace are commissioners, appointed under the great seal. Their general duty is to keep the peace, and any two or more of them to inquire of and determine felonies and misdemeanors. New commissions are always made out on the demise of the crown, and on other occasions when deemed advisable. The only legal qualification seems to be property to the amount of 100*l.* per annum; but, in practice, the principal gentry of the counties, and respectable inhabitants of the towns, discharge these important and gratuitous functions. The powers of justices of the peace are extended and defined by a great variety of statutes. They have summary jurisdiction, either singly or in their petty or district sessions, over various minor offences, and in some civil disputes, as between masters and servants respecting wages. They hold, four times a year (in some counties more frequently), courts of general sessions, for the trial of felonies and misdemeanors, and other business. They levy rates, and direct the application of the funds thus raised to purposes of county expenditure.

In towns having municipal corporations, the municipal officers were formerly *ex officio* magistrates: but since the late act (1835), the crown issues commissions of the peace in such boroughs. Police magistrates (stipendiary) are appointed in the metropolis under various acts of parliament, and may be appointed, on petition, in any borough.

Constables are either *high*, appointed by the justices of the peace for the several hundreds; or *petty*, inferior officers charged to keep the peace in each town or parish. They are chosen by the jury at the court leet; or, in default of such court, appointed by two justices of the peace. The police force now established in London was created by Sir R. Peel in 1829. It is under the superintendence of commissioners of police, and acts under the direction of the magistrates.

Churchwardens, and overseers of the poor, are officers appointed by the inhabitants of every parish, meeting in vestry, under the authority of various statutes; the first to superintend the preservation of the church, the latter the affairs of the poor. Their duties are much curtailed by the recent changes in the poor laws, under which a number of parishes are united, so as to form a district; and every union has its guardians of the poor, — partly magistrates, who act *ex officio*, — partly chosen by the vestry for every parish.

13. Municipal corporations, are bodies established for the purposes of municipal government in borough towns. The limits of boroughs, to which their jurisdiction extends, are fixed by act of parliament, or by prescription. Municipal franchises began to be granted at an early period of our history, and generally to the whole body of townsmen in every place which obtained them. But in the course of centuries their charters became more narrowly interpreted, or were renewed, with different and more oligarchical provisions. Hence, in most towns in the three kingdoms, exclusive governing bodies were formed, to which the right of admission (freedom of the borough) was vested in the municipality itself. But of these bodies the mayor and aldermen, or other governing magistrates, were chosen according to the usage of each particular place. The business of these corporations consisted in superintending the administrative government, and preserving the peace of the town; managing the corporate funds, which were often considerable; and exercising (by properly appointed officers) judicial functions in courts both of criminal and (in some instances) civil jurisdiction. The Municipal Reform Act of 1835 effected a most extensive change, by abolishing the exclusive government of the English boroughs, and extending the municipal franchise to occupiers in general. The common council or deliberative body, the aldermen, and the mayor, are now chosen by open election; the recorder, who

executes the judicial functions of the corporation, and the magistrates, are appointed by the crown.

Courts of Justice. — The king, as head of the executive, is also the fountain of justice. He is, by a fiction of law, supposed to be present in his courts of justice by the persons of his judges. No court of justice can be created, except by the king's commission; this, however, cannot be issued without the authority of parliament.

In early times it was customary for the sovereigns to hear and decide cases in person; but this function has been long delegated to judges, whose jurisdiction is regulated by certain established rules, which cannot be altered except by statute. In England, previously to the Revolution, judges held their situations *durante bene placito*, and might be removed by the sovereign; but when this is the case, as it still is in many countries, it would be too much to expect that the judges should manifest much independence in cases in which the crown is concerned. Subsequently to the Revolution it was enacted, in order to provide in as far as possible for the independence of the judges, by the stat. 13 Will. 3. cap. 2., that the commissions of the judges should be made *quamdiu se bene gesserint;* that their salaries should be ascertained and established; and that they should not be removable except by an address from both houses of parliament. Their commissions, however, continued to be vacated by the demise of the sovereign till the accession of George III., when it was enacted that the demise of the crown should no longer vacate the judges' commissions.

But, as already stated (p. 463.), the great security for our liberties, and for the fair and impartial administration of justice, depends not so much on the laudable precautions taken to secure the independence of the judges, and to prevent their being biassed in favour of the crown, as on the institution of juries. In the common law and criminal courts, juries are the only judges of the facts of any case, and they may also decide as to the law. So long, therefore, as the grand institution of jury trial is preserved, and as juries are fairly and impartially selected, we have little to fear from the weakness or corruption of judges. It is the proud distinction of the English people, that they are self-judged as well as self-governed.

Courts of justice are either general or local. the first of these are — 1. The courts of common law; 2. The courts of equity; 3. The Court of Bankruptcy; 4. The Insolvent Court; 5. The ecclesiastical courts; 6. The courts maritime. To these may be added the courts of assize and gaol delivery, the courts of quarter and general sessions, county courts, &c., which, although each, strictly speaking, is limited to its own locality, are parts of the general system, and subject to the same general principles of law.

Courts of Common Law. — 1. The superior courts of common law are three, — the K.'s Bench, Common Pleas, and Exchequer. Each consists of a chief justice, and five inferior or *puisne* judges — in the last court termed chief and puisne barons. They must be barristers of the degree of serjeant. Their appointment is nominally in the crown, but substantially, like all other appointments, in the minister for the time being. Criminal jurisdiction, and a general power of superintendence over inferior courts, corporations, and magistrates, throughout the kingdom, are reserved to the court of King's Bench: that of Common Pleas has the exclusive jurisdiction in real actions, now (through the effects of various statutes) becoming obsolete. Suits in matters relating to the king's revenue are mostly determined in the Exchequer. With these exceptions, no difference now exists between the authority of the three courts; in either of which ordinary civil actions may be carried on indiscriminately.

From the decision of any one of the three courts, an appeal (by way of writ of error) lies to what is termed the court of Exchequer Chamber, — a court of appeal, formed by the judges of the two other courts: thus, decisions of the K. B. are reviewed by the C. P. and Exchequer, and so forth. This court derives its name from the apartment in which it commonly sits, being an appendage of the Court of Exchequer.

From the court of Exchequer Chamber, a writ of error lies to the House of Lords, the highest appellate authority of the country.

Of the inferior courts of common law, of general jurisdiction, those principally deserving of notice are — the county courts, presided over by the sheriff of each county (always in practice by deputy), in which civil suits of small value are tried; and the courts of sessions, held by the magistrates of the several counties, vested, by various statutes, with a civil jurisdiction in certain matters of public interest (such as questions of the settlement of paupers between parishes), and with a criminal jurisdiction assisted by juries. The nature of the courts of assize and gaol delivery will be best explained when describing the course of the administration of justice.

2. The courts of equity, originally established, as the name implies, to render substantial justice in cases where an injury would be inflicted by abiding by the strict rules of law, are now divided into two: 1. The Court of Chancery, consisting of two subordinate courts — one presided over by the vice-chancellor, the other by the master of the rolls; and one superior, presided over by the lord chancellor, which in part adjudicates on matters brought before it on appeal from the other two divisions, and has in part an original jurisdiction. The chancellor is also judge of appeal in the last resort from the Court of Bankruptcy. 2. What is termed the equity side of the Court of Exchequer, *i. e.* a court presided over by a single baron of the exchequer, and subject likewise to appeal to the lord chancellor. From a decree of the chancellor, appeal lies only to the House of Lords.

3. The Court of Bankruptcy consists — 1. of six commissioners, who carry on the ordinary legal proceedings consequent on the state of bankruptcy in a trader in the metropolis; 2. of a Court of Review (now consisting of three judges), which reviews their judgments, with further appeal to the chancellor. There are also a large number of country commissioners, generally practising barristers or attorneys, who adjudicate on bankruptcies out of town.

4. The Insolvent Court consists of three commissioners, who sit in London, and also hold circuits in the country, for the discharge of prisoners detained in execution for debt, on delivery of their property to creditors under certain statutes. The powers of this court are materially altered and extended by the late enactment abolishing arrest on mesne process.

5. The ecclesiastical courts have jurisdiction in some civil causes, viz. testamentary and matrimonial; some that are termed mixed, of which suits for tithes are the principal; and some termed purely *spiritual*, viz. in the correction

of certain offences, both of the clergy and laity. Justice is administered in them according to the civil and canon law. The principal ecclesiastical courts are—1. The provincial courts of the two archbishoprics, of which the Court of Arches, in that of Canterbury, is the supreme court of appeal; 2. The diocesan or consistorial courts of each diocese; 3. The courts of the archdeacons; 4. Peculiars (which indeed are local courts), of a small exclusive jurisdiction, which are very numerous.

6. The Court of Admiralty is held before the lord high admiral or his deputy: it consists of the Instance Court, which takes cognizance of contracts, and injuries on the high seas; and the Prize Court, which adjudicates on prizes taken in war. This court also professes to follow the civil law.

Local courts, both of criminal and civil jurisdiction, used to be extremely numerous, and were governed by a variety of different usages. Such are the courts of the boroughs, having municipal corporations, manor courts, &c., but most part of the inferior and local courts have been superseded by the

County Courts, established under 9 & 10 Vict. c. 95., and subsequent statutes. Under their provisions England and Wales are divided into 491 districts, which are classed into 60 circuits. To each of the latter a judge is appointed, who must hold a sitting in each of his courts, at least once a month, for the trial of causes without the intervention of a jury. The jurisdiction of these courts extends to all actions for debt and damage not involving more than 50*l.*; and actions of more importance may be tried in these by consent of the litigants. Appeals may be made to the superior courts of Common Law on points of law, and as to the validity of evidence in actions for more than 20*l.*; but an action is not removable by *certiorari*, except by leave of the judge of the County Court, and then the claim must exceed 5*l.*

The establishment of these courts has been a most advantageous measure. They have already attracted, and no doubt will continue to attract, a large amount of business.

The machinery of courts in general will perhaps be best understood by the following very brief sketch of the mode in which justice is administered by their means; which, for the sake of brevity, must be confined to the superior courts.

1. If a party have a complaint of civil injury against another, either in a matter of contract, or *tort*, *i. e.* civil wrong, such as trespass and the like, (unless for a debt below a certain amount, for which, by various statutes and customs, the plaintiff may sue, if he please, before various local and inferior tribunals — or for certain small trespasses cognizable by magistrates,) he commences a suit in one of the superior courts of common law. The first step in the action is technically termed a writ of summons. If the suit were for a sum certain, the plaintiff had formerly the right to arrest or hold to bail the defendant; but this right is now extinguished, and the ordinary (or "non-bailable") process substituted for it, except in certain peculiar cases. The writ of summons is followed by a statement of the cause of action, termed a *declaration;* which the defendant answers by one or more *pleas;* and these reciprocal allegations are continued (being drawn up in a technical form, and shown by the one party to the other) until a direct contradiction (technically an *issue*) is arrived at, either in point of law or of fact. If the former, the case is argued before the court in which the action is commenced, and judgment given; if the latter, the cause is sent to be tried before a jury.

The three courts of common law hold four terms in the year (each of about 3 weeks' duration), during which the judges of each sit together. In these sittings they decide on issues of law; hear applications in causes already decided by juries, to have them sent down again for what is termed a new trial; set aside, or maintain, the verdicts of juries on grounds of law; and perform other business, which it is impossible here to particularise. The Court of K.B. also exercises at this time its appellate jurisdiction over inferior courts.

To try issues of fact, juries are summoned — 1. In London and Middlesex, four times a year, before each of the three courts, for a certain number of days during and after each term. A single judge (usually the chief) of the court in which the action is commenced, presides at its trial by the jury. 2. The remainder of England and Wales is divided into seven circuits: two of these (the Welsh) are travelled by a single judge each, who meet in the county of Chester. In the remaining five, two travel together. These circuits are held twice a year — spring and summer — occupying from seven to four weeks. In the course of them, the judges visit every county town. The selection of circuits is left to the choice of the judges. They hold several commissions, of which the principal are those technically termed of assize, nisi prius, oyer and terminer, and general gaol delivery. The first of these is now nearly obsolete. By virtue of the two second (through various fictions originating in ancient usages), they hold courts at which juries are summoned to try causes, in the manner before explained, in each county. It is evident, from the foregoing sketch, that the issues of fact in an action are not necessarily tried before a judge of the court in which the action was commenced; but if it be sought to set aside that verdict, or obtain a new trial, application must be made to that court.

Persons are qualified to serve on juries by the possession of certain species of property; chiefly freeholders of 10*l.* per annum, and householders of a certain value. There are numerous causes of exemption, which practically extend to all the higher classes of society. Jurors are summoned by the sheriff, on a system intended to take all qualified persons in the county as nearly as possible in rotation; and twelve are selected by ballot from the list of those in attendance for the trial of each cause, — *challenges* being allowed under certain legal restrictions, but to such an extent as to exclude all individuals who can be fairly supposed to be biassed in favour of either party, or in a situation to hinder them from bringing in a conscientious verdict. Plaintiffs or defendants may, if so inclined, pray for a special jury; persons qualified to serve on which belong to a higher class of society. Witnesses are examined *vivâ voce*, in open court. On verdict given, the court pronounces judgment, with damages and costs, according to the principles of law applicable to each case.

Such is the course of an action *at common law;* but if the question arising between the parties touch on matters of equitable jurisdiction, (which, in technical language, is said to extend to *trusts, charities, matters of account, fraud, accident,* and *mistake,*) in some cases the preferable, in others the exclusive, mode of obtaining justice, is by application to a court of equity. That application is by a suit commenced by *bill* on *information:* questions arising in the progress of the suit are determined on *petition* or *motion*. Not only the pleadings, as in courts of common law, but the examination of witnesses, are conducted in writing. The judgment of the court is styled a decree. When a doubtful question of fact arises, the judge will sometimes send the question to be tried by way of issue before a jury in a common law court; but he is not bound by its verdict in making his decree.

It is a general principle in courts of law and equity, that all the proceedings in a cause (with some very trifling exceptions) may be carried on by plaintiff or defendant in person; but this is very rarely done, from obvious causes. If not in person, the party can only carry them on by the authorised officers of the court — viz. 1. Attorneys, or solicitors, who are employed in carrying on all or most of the preliminary pro-

ceedings; 2. Barristers, or counsel retained by the former to conduct the proceedings in court. Without entering into technical distinctions, it is sufficient to state that barristers (beginning with the lowest order) are classed as — 1. *Utter*, or *within the bar*, ranking by seniority; 2. Serjeants, a body formerly possessing the exclusive right to practise in the Court of Common Pleas — now confounded in practice with the next, or third class; 3. Counsel within the bar, — to which rank they are admitted by patent either as king's counsel or of precedency, enabling them to take rank according to the date of their patent. The attorney and solicitor general rank at the head of the bar. These officers are the counsel employed by the crown in various contingencies, and considered as forming part of the administration—going out of office along with it. There are also other classes of practitioners, not *necessarily* barristers, viz. pleaders, employed in drawing pleadings at common law; and conveyancers, whose business consists in drawing deeds relating to property.

In the ecclesiastical and admiralty courts, the pleadings are according to forms derived from the civil law: evidence is documentary. The duties of the attorney are executed by officers styled proctors; and the counsel are doctors of civil law, graduates of the universities.

Criminal Process. — Crimes are divided by the ancient customary law of England into treasons, felonies, and misdemeanors: the latter, being generally offences of inferior importance (such as breaches of the peace, riots, attempts to commit certain other offences, &c.), are punishable by fine or imprisonment only. Parties suspected of criminal acts may be apprehended on the warrant of a justice, granted only on the sworn testimony of one witness at least, directed to the constable or other peace officer of the district; but any one may lawfully arrest one who has committed felony, or breach of the peace, in his presence. The offender is then carried before a justice of the peace. Unless the case be one of those minor offences for which the justice has power to punish on summary conviction, without the aid of a jury, the party charged is committed to gaol, or admitted to bail, according to the nature of the offence. He is committed to take his trial, in most cases at the next ensuing sessions of the peace (either in boroughs or counties), or at the next gaol delivery, by the judges at the assizes, whichever may happen first; but capital, and in general the most serious, class of offences are tried at the assizes only. In Middlesex and certain adjoining parts, offences are now tried by the Central Criminal Court, which sits twelve times a year at least, and is usually attended by two or more judges of the superior courts, and the judicial authorities of the city of London. The prosecution is then carried on, in the name of the king, by indictment before the grand jury. This body, consisting of from 12 to 23 persons, (at the assizes, persons of rank in the county; at the sessions, persons of somewhat inferior station,) receives all indictments, and hears the evidence on the part of the prosecution. If the indictment be dismissed, it is returned to the court with the endorsement "no bill," and the accused is free. If the evidence appear to them *primâ facie* satisfactory, the bill is said to be *found*, and the prisoner or defendant is put on his trial. (The grand jury is also summonened to find bills against parties not in custody or on bail for offences for which there is no previous arrest, such as perjury; and these are tried at the *ensuing* gaol delivery.) There is also, in certain offences, chiefly of a public nature, a mode of proceeding by *information*, which supersedes the necessity of an indictment.

The accused, when brought into court under this preliminary process, is *arraigned* before a petty jury, summoned in the same manner as the jury in civil causes just described. If he plead guilty on arraignment, his plea is recorded, and judgment given. If he plead not guilty, the trial proceeds. [There are also certain pleas in bar, or defences to the prosecution of a technical nature, rarely resorted to, as the accused by pleading them waves the trial by jury.] The witnesses are then heard; and if the jury find the prisoner "not guilty," he is released; if "guilty," he is convicted, and judgment passes. A judgment may be reversed for error of law, by the superior court; and pardon may be granted, either by act of parliament, or by the king's letters patent under the great seal. Pardon, and remission of part of the sentence, is, in point of fact, obtained through the agency of the Home Office. The sheriff is the officer to whom the execution of the sentence of the law is intrusted.

Crimes and Punishments. — If the returns as to the number of criminal offences might be depended on, it might be concluded that there had of late years been a great increase of crime. Little dependence can, however, be placed on these returns; and by far the greater part of the apparent increase of crime that has taken place of late years is to be ascribed to the greater vigilance and efficiency of the police, and to the committal of many persons for offences that were previously hardly thought worthy of notice.

There has been of late years a great decrease in the number of most sorts of crimes of violence. The detestable crime of *arson*, or malicious fire-raising, has, however, considerably increased; and there has also been a considerable increase of stabbing and maiming. Poverty and destitution have always been the great incentives to crime; and the measures best calculated to mitigate or avert the former, are, at the same time, the best calculated to mitigate or avert the latter. It would seem that the constitution of the police force in great towns might be materially improved. At present it is extremely well adapted for preserving order and preventing the committal of crimes, but it is ill-fitted for their discovery when committed; and it would, therefore, seem to be worth consideration, whether a select police force especially devoted to the discovery of crime should not be added to the present preventive police.

The criminal law of England might formerly, perhaps, have been justly characterised as sanguinary; but in this respect a great change has been effected within these few years, and capital punishments are now never inflicted except for murder and other atrocious offences. It is, indeed, believed by many, and, we incline to think, not without good reason, that, in this respect, we have recently gone too far on the side of leniency. Prisons have, also, within these few years, been much improved; and great attention is now paid to the classification of prisoners, and to the maintenance of an efficient prison discipline.

Among the secondary punishments, transportation long occupied a prominent place. But a notion had latterly been gaining ground unfavourable to its efficiency, and it has now been wholly relinquished. It was, indeed, no longer possible to maintain it by sending criminals to Australia; for that, instead of being a punishment, was a favour to the parties. Probably, however, it may be practicable to find some other unoccupied locality to which criminals may be transported. At all events, it is quite evident that the question in regard to the best method of disposing of criminals is one of which the difficulty is not greater than the importance. We are not of the number of those who expect that any material advantages are to be realised by the reformatory discipline carried on in hulks and prisons. We subjoin a Return of the number of persons committed, and of those tried, convicted, or acquitted in England and Wales in 1852. (See table at top of next column.)

Church of England. — The king is head and supreme governor of the national Church of England; in which character he has the right to assemble, prorogue, and dissolve all synods and convocations of the clergy; is the ultimate judge of appeal in ecclesiastical causes (an authority exercised by the lord chancellor); and has the nomination to bishoprics and some other ecclesiastical preferments.

The clergy of the Church of England are di-

	Offences.	Convictions. Death.	Transport. for various periods.	Imprisonment, and all lighter Punishments.	Insane, &c.	Acquitted and discd.
Offences against the Person -	2,241	41	139	1,349	16	696
Offences against Property with violence -	1,975	18	623	862	-	472
Ditto, without violence -	21,309	-	1,594	15,217	12	4,486
Malicious offences against Property -	271	2	63	62	2	142
Forgery and offences against the currency -	899	-	84	723	-	92
Other offences	815	-	31	496	-	288
Total	27,510	61	3,534	18,709	30	6,176

vided into three degrees or orders, — bishops, priests, and deacons. There are two archbishops and 24 bishops within the realm of England. They are nominated to their respective dioceses by the crown; the election being by a writ of *congé d'élire*, or licence to elect, addressed to the dean and chapter of the diocese, accompanied by a letter from the sovereign, directing them to elect a certain specified individual. By the canons of the church, every candidate for holy orders must be examined and approved by a bishop. The bishop has episcopal jurisdiction in his court in ecclesiastical matters; and the general superintendence over the clergy. An archbishop is the chief of the clergy in his province; has the inspection of the bishops and inferior clergy; and exercises an appellate jurisdiction from the episcopal courts.

Magnitude and Emolument of Bishoprics. — The discrepancy that prevailed in ancient times in the size of bishoprics, though somewhat diminished by the erection of new sees at the Reformation, has continued down to the present time, and the inconveniences thence resulting have been greatly augmented by the wonderful increase that has taken place since 1760 in the population of certain districts compared with others. The following Table gives a view of the population, parishes, &c. contained in each bishopric, as they existed on the 1st of May, 1831.

Benefices, Parishes, Churches, and Chapels, and Population of the several Dioceses in 1831.

Diocese.	Number of Benefices.	Number of Parishes.	Churches and Chapels.	Population.
St. Asaph - -	160	139	143	191,156
Bangor - -	131	179	192	163,712
Bath and Wells -	440	479	493	403,793
Bristol - -	255	298	306	232,026
Canterbury - -	343	369	374	405,272
Carlisle - -	128	100	129	135,002
Chester - -	616	530	631	1,883,958
Chichester - -	266	289	302	254,460
St. David's - -	451	525	561	358,451
Durham - -	175	140	214	469,933
Ely - - -	156	158	160	133,722
Exeter - - -	607	681	711	795,416
Gloucester - -	283	296	330	315,512
Hereford - -	326	346	360	206,527
Llandaff - -	194	221	228	181,244
Lichfield and Coventry - -	623	650	655	1,045,481
Lincoln - -	1,273	1,370	1,377	829,468
London - -	577	689	689	1,722,685
Norwich - -	1,076	1,178	1,210	690,138
Oxford - - -	208	207	237	140,700
Peterborough -	303	335	338	194,339
Rochester - -	93	107	111	191,875
Salisbury - -	408	451	474	384,683
Winchester - -	389	408	464	729,607
Worcester - -	222	230	260	371,687
York - - -	828	741	876	1,496,538
Total	10,533	11,077	11,825	13,897,187

The revenues, too, as well as the territorial extent and pop. of the different sees, differed very widely; so much so, that while the bishop of Durham had a nett revenue of from 18,000*l.* to 20,000*l.* a year, the revenue of the see of Llandaff did not exceed from 900*l.* to 1,300*l.* a year! and there were other instances in which the discrepancy was not much less striking. This difference was partly owing to circumstances connected with the original establishment of the various sees, and partly to the property attached to some having, from various causes, become in the course of time much more valuable than that attached to others.

But, however the inequalities referred to may have originated, it has long been felt that a new arrangement of the bishoprics, both as respects their territorial magnitude and their revenues, would be highly desirable; and such an arrangement is now in course of being effected. Commissioners appointed in 1834 recommended that two new bishoprics — those of Manchester and Ripon — should be formed in the principal manufacturing districts, chiefly out of territories included in the dioceses of York and Chester. They further recommended that, saving the rights of the (then) existing incumbents, the bishoprics of Gloucester and Bristol should be united, and the bishopric of Sodor and Man suppressed. At an average of the 3 years ending with 1831, the total nett revenue of the different sees amounted to 160,292*l.*, giving, had it been equally divided, an annual income of 5,925*l.* to each see. But though the differences in the incomes of the various sees were then much too great, it is right that the revenues of archbishops should exceed those of bishops, and it may also be proper to make reasonable distinctions in the revenues of the latter. Such appears to have been the view of this matter taken by the commissioners; and they consequently recommended that, according as opportunity offered, sundry deductions should be made from the revenues of the sees of Canterbury, York, London, Durham, Winchester, &c.; and that the surplus revenue so arising should be formed into a fund for the endowment of the two new bishoprics, and for raising the income of the poorer class of sees to from 4,000*l.* to 5,000*l.* a year. These recommendations have since been confirmed and carried out in most particulars by the act 6 & 7 Will. IV. c. 77., and by the orders in council issued under its authority. The income of the bishop of Durham was to be reduced in 1836, on the death of Dr. Van Mildert, to 8,000*l.* a year; but in point of fact it has turned out to be very considerably greater. In the course of the same year Ripon was formed into a bishopric. The sees of Gloucester and Bristol have also been united. The bishopric of Manchester was formed in 1847. (See statement at top of next column, which sets the most important particulars now brought under the reader's notice in the clearest point of view.)

Every diocese has a chapter, consisting of a dean and a certain number of canons and prebendaries. The chapter is often styled the council of the bishop; but it exercises, in point of fact, no sort of interference with the ecclesiastical jurisdiction, or with the general superintending authority of the bishop. The chief duty of its members consists in maintaining the constant celebration of divine service in the cathedral church. Deaneries are in the gift of the crown; some by the form of election by the chapter (as in the case of bishops), others by the king's letters patent. The canons are variously appointed, — by the crown, by the bishop, or by election among themselves. Besides the chapters in cathedral churches, there are also chapters in a few others, which are styled collegiate churches.

Archdeacons are church officers, appointed (in most cases) by the bishops for their assistance in various matters connected with the superintendence of the diocese.

Account showing the Gross and Nett Revenue produced by the different Archbishoprics and Bishoprics of England and Wales in 1843; the Revenue that will be enjoyed by each Archbishop and Bishop under the Act 6 & 7 Will. IV. c. 77., when it takes effect; and the Instances in which it has already taken effect.

Sees.	Income of Archbishoprics and Bishoprics in 1843. Gross.	Nett.	Income of Incumbent as regulated by Act 6 & 7 Will. IV. c. 77.	Sees in which the 6 & 7 W. IV. c. 77. has taken effect.
	£	£	£	
Canterbury	27,706	20,970	15,000	
York - - -	20,142	19,065	10,000	York.
London - -	13,519	12,481	10,000	
Durham - -	22,416	6,792	8,000	Durham.
Winchester -	11,599	9,104	7,000	
St. Asaph - -	8,085	5,749	} 5,200	
Bangor - -	7,467	5,211	}	
Bath and Wells	4,567	4,003	5,000	Bath & Wells.
Carlisle - -	2,477	1,585	4,500	
Chester - -	1,894	1,384	4,500	
Chichester - -	6,520	6,381	4,200	Chichester.
St. David's - -	4,753	4,077	4,500	St. David's.
Ely - - -	6,487	3,686	5,500	Ely.
Exeter - -	1,092	342	5,000	
Gloucester and Bristol - -	5.226	3,990	5,000	Gl. & Bristol.
Hereford - -	5.936	5,012	4,200	Hereford.
Lichfield - -	(no return)		4,500	Lichfield.
Lincoln - -	5,610	4,639	5,000	Lincoln.
Llandaff - -	890	806	4,200	
Manchester -	- -	- -	4,500	
Norwich - -	8,765	7,568	4,500	Norwich.
Oxford - -	2,507	1,601	5,000	Oxford.
Peterborough -	4,061	3,785	4,500	Peterborough.
Ripon - -	4,564	4,124	4,500	Ripon.
Rochester - -	1,102	794	5,000	
Salisbury - -	12,879	12,142	5,000	Salisbury.
Worcester - -	7,295	4,674	5,000	Worcester.

Parsons are the incumbents of parish churches. They must be priests; and derive their title by presentation, induction, and institution. They are termed rectors or vicars; the former being such as are entitled to the whole tithes of the parish; the latter only to a certain portion. The number of parochial benefices in England and Wales amounts to above 10,500. Of these, the *advowson*, or right of presentation, to about one half is in the hands of private owners; the remainder belong to the crown (of which the patronage is exercised, as respects livings of inferior value, by the chancellor), to archbishops and bishops, ecclesiastical corporations, universities, &c. The residence of incumbents in their benefices, and the restriction of the right to hold more than one benefice, have been the objects of a variety of regulations both in canons and statutes. Incumbents may be deprived either by sentence in the ecclesiastical courts for particular offences, or in pursuance of certain penal statutes. *Curates* are likewise priests, licensed by the bishop of the diocese, and nominated to serves cures. Stipendiary curates are such as are appointed by rectors, either to supply their place in case of non-residence, or to assist them; whose salary is regulated by statute, or episcopal authority. Perpetual curates are appointed to churches in which there is neither rector nor vicar; or to chapels of ease, parochial chapels, and free chapels, that is, district churches in large parishes.

The order of deacon, in the constitution of the English church, serves merely as a necessary preliminary to that of priest. By the canons of the church, no bishop can admit any one to holy orders, "who is not of his own diocese, except he be of either of the universities of this realm, or except he bring letters dismissory from the bishop of whose diocese he is." But in practice, it is not usual for any bishop to admit to holy orders any one who has not taken the degree of Bachelor of Arts, or its equivalent, at the university of Oxford or Cambridge. Exceptions are made in favour of the new university of Durham for students of the North of England, of the college of Lampeter for Welshmen, &c., and, in some cases, of Trinity College, Dublin.

The canons of the church of England were made by the archbishop and clergy of the province of Canterbury convened in convocation in 1603, and ratified by James I. They have not been established by act of parliament, and consequently are binding on the clergy only.

The convocations of the clergy had, originally, the exclusive right of imposing taxes on that body, as well as of deliberating and making canons for the government of the church. They were summoned by the king; and consisted, in each province, of the archbishop, bishops, and deans, and a certain number of representatives (styled proctors) from the chapters and parochial clergy. They are still formally summoned at the commencement of every parliament; but have not been assembled since the reign of queen Anne.

The revenues of the church are derived partly from land, and partly from tithes. The latter formed the original endowment of every parochial church. But a very large proportion of them fell gradually into the hands of ecclesiastical corporations; and a part of these again, at the dissolution of monasteries, into the hands of private individuals. Out of the 10,500 benefices, more than 3,000 have had their "great" tithes, or those of corn, wool, &c., appropriated or impropriated; in most of these instances, however, the "small tithes," as they are termed, or those of fruit, milk, pigs, and such like articles, are reserved for the maintenance of the church. Nearly a third part of the land of England and Wales is wholly tithe-free, owing to exemptions enjoyed in former times by religious houses. Tithe is now, by an act passed in 1837, under a course of commutation for an invariable corn rent, to be converted into money, at the prices of the day.

The Commissioners of Ecclesiastical Inquiry have given the following details with respect to the incomes of the clergy: —

"From the returns of our inquiries arranged and digested in the tabular statements before mentioned, it appears that the total amount of the gross annual revenues of the several archiepiscopal and episcopal sees in England and Wales, is 181,631*l.*; affording an average of 6,727*l.*; and the total amount of the nett annual revenues of the same is 160,292*l.*; affording an average of 5,936*l.*

"The total amount of the gross annual revenues of the several cathedral and collegiate churches in England and Wales is 284,241*l.*, and the total amount of the nett annual revenues of the same is 208,289*l.*

"The total amount of the gross annual separate revenues of the several dignitaries and other spiritual persons, members of the cathedral and collegiate churches in England and Wales, is 75,854*l.*; and the total amount of the nett annual separate revenues of the same is 66,465*l.*

"The total number of benefices, with and without cure of souls, the incumbents whereof have made returns to our inquiries, omitting those which are permanently or accustomably annexed to superior preferments, and which are included in the statements respecting those preferments, is 10,540. The total amount of the gross annual revenues of these benefices is 3,197,225*l.*, giving an average income of 303*l.*; and the total amount of the nett annual revenues of the same is 3,004,721*l.*, giving an average income of 285*l.*

"The total number of benefices, with and without cure of souls, in England and Wales, including those not returned to us, but exclusive of those annexed to other preferments (about 24 in number), is 10,718; the total gross income of which, calculated upon the average of those returned, will be 3,251,159*l.*, and the total nett income thereof will be 3,055,451*l.*

"The total number of curates returned to us as employed by resident incumbents, is 1,006, whose annual stipends or payments in money amount to 87,075*l.*, affording an average of 86*l.* Those employed by non-resident incumbents are 4,224; the amount of their stipends 337,620*l.*, and the average 79*l.*: and the average of the whole of the curates' stipends is 81*l.*"

But there are good grounds for thinking that these returns are very decidedly under the mark. They were made by the clergy; and it may be fairly presumed that, speaking generally, they would be disposed rather to underrate the amount of their incomes. This, indeed, is fully established by the claims the clergy have set up in cases relating to the commutation of tithes: these have, in most instances, very decidedly exceeded what might have been inferred from the returns alluded to above.

Although the Church of England be still recognised as the national establishment, the exclusive privileges formerly enjoyed by its members, and, indeed, all legal distinctions between different classes of subjects on account of religious opinion, have, by a series of changes, been nearly abolished. The chief remaining rights, privileges, and liabilities, which connect the church with the state, are nearly as follows: —

1. The headship of the king: as a necessary consequence of which, the sovereign himself must be a member of the national church. This headship, all persons taking certain offices are required to recognise, by the oaths of abjuration and supremacy, for which a declaration is substituted in the case of Roman Catholics. Roman Catholics are also specifically excluded from the office of chancellor, and a few other high dignities.

2. The form of public prayer and administration of the rites of the church, its articles of belief, and various points in its discipline, originally settled by convocation, are established by the authority of parliament.

3. The archbishops and bishops sit and vote in the House of Lords.

4. Although the free enjoyment of their different forms of worship be now guaranteed to all Christian dissenters, and that of others (as Jews) tacitly tolerated, there are still some legislative provisions respecting them, by which the superiority of the established church is recognised. Thus, Roman Catholic archbishops and bishops are forbidden to assume the titular dignities of their respective dioceses; public functionaries are forbidden to attend dissenting places of worship with the insignia of their office, &c.

5. The clergy of the Church of England have long acted as officers of the civil power, in the character of registrars of births, marriages, and deaths; but the late act, by establishing a new system of registration, has materially altered their position in this respect, and their exclusive authority is now taken away.

A great deal of discussion has taken place at different periods with respect to the right of parliament to interfere with the property and revenues enjoyed by the church. It is now, indeed, pretty generally admitted, that parliament is entitled to alter the *distribution* of the church revenue; but it is contended by many that it has no right to take away any portion of such revenue, and that it would be sacrilege to apply any part of it to any purpose other than the support of the church! But a pretension of this sort is totally inadmissible. Whether it would be wise and proper to make any such diversion is a matter dependent on circumstances, and to be judged of at the time; but certainly there is no principle or right of any kind to hinder parliament, should it be so disposed, from dealing with church property as it would deal with any thing else. An established church is neither part nor parcel of religion: it is a mere human institution, with functionaries appointed and paid by the state; and should parliament be honestly impressed with the conviction that the great interests of religion and morality will be better promoted by diverting a portion of the church property to other purposes, it is not entitled merely, but it is its bounden duty so to divert it. The rights of existing incumbents ought, of course, to be protected; but provided this be done, parliament is quite as much entitled to remodel the church, and dispose of its property, as it is to remodel the army or the navy, or to disband a regiment, or pay off a line of battle ship.

Dissenters from the Church of England are now, after more than a century of struggles, placed entirely on an equal footing with its members in respect of political rights and privileges. The dissenters consist principally of,—

1. The Roman Catholics, who have increased, chiefly through the immigration of Irish labourers, from 60 00 to 500,000 or 600,000 since the accession of George III. 2. The members of what are commonly called the three denominations,—Presbyterians, Independents, Baptists: of these, the first, since the period of the civil wars, when for a short time they had political power and the revenues of the church in their hands, have rapidly diminished. Many of their churches have become Unitarian. The Independents or Congregationalists are so termed from asserting, as their fundamental principle, the *independence* of each separate congregation. They are numerous, and, unlike the Presbyterians, have, for the most part, retained the fundamental doctrines professed by the great majority of Christians. The Baptists are divided into general (or Arminian) and particular (or Calvinistic). These three bodies do not appear to advance in numerical strength. 3. Of the Methodists, there are likewise two principal divisions. The Wesleyans, the most powerful and important, whose origin was about a century ago, now number about a million of members. Their dissent from the church is less complete than that of other sects. The Calvinistic Methodists are chiefly established in Wales. 4. The Quakers are more remarkable for the singularity of their tenets and observances (although their strictness in the latter appears to be on the decline), than for their numbers. 5. Jews are not numerous in England; but are supposed to have augmented considerably of late years, and to amount at present to 20,000 or 25,000.

The following table, compiled by Mr. Mann from returns obtained under the census of 1851, comprises the most complete and authentic data to be met whence to infer the numbers attached to the different religious denominations.

Account of the Number of Places of Worship belonging to the different Christian Denominations and to the Jews in England and Wales; of the Number of Sittings in the same; and of the Number of Attendants at Public Worship at the same on Sunday, 30th March, 1851. (Population, 17,927,609.)

Religious Denominations.	Number of Places of Worship.			Number of Sittings.				Number of Attendants at Public Worship, 30 March 1851.		
	Separate Buildings.	Not sep. Buildings.	Total.	Free.	Appropriated.	Not distinguished.	Total.	Morning.	Afternoon.	Evening.
BRITISH PROTESTANTS:										
Church of England and Ireland	13,851	223	14,077	1,803,773	2,123,395	995,244	4,922,412	2,371,732	1,764,641	803,141
Scottish Presbyterians	151	6	160	13,366	62,247	8,160	83,773	46,744	9,236	23,084
Reformed Irish Presbyterians	1	- -	1	120	- -	- -	120			
Independents or Congregationalists	2,960	284	3,244	402,905	578,823	20,779	1,002,507	515,071	228,060	448,847
Baptists	2,485	304	2,789	347,625	345,047	12,891	705,663	353,061	219,407	337,614
Society of Friends	343	28	371	80,683	920	7,948	89,551	14,016	6,458	1,459
Unitarians	217	12	229	23,153	37,787	2,830	63,770	27,612	8,610	12,406
Moravians or United Brethren	29	3	32	7,768	455	500	8,723	4,681	2,312	3,202
Wesleyan Methodists	8,852	2,155	11,007	983,596	1,040,494	8,685	2,032,775	691,348	633,253	1,042,859
Calvinistic Methodists	890	47	937	89,917	142,191	1,341	233,152	90,694	65,239	143,173
Sandemanians or Glassites	5	1	6	610	28	- -	638	439	256	61
New Church	42	8	50	3,732	7,833	300	11,865	4,652	2,308	2,978
Brethren	77	55	132	14,216	1,623	30	15,869	5,613	4,441	7,272
Isolated Congregations	372	167	539	61,862	21,549	3,637	90,048	34,706	22,726	40,835
FOREIGN PROTESTANTS										
Lutherans	5	1	6	931	1,241	- -	2,172	900	220	
French Protestants	3	- -	3	560	- -	- -	560	150	21	10
Reformed Church of the Netherlands	1	- -	1	350	- -	- -	350	70		
Germain Protestant Reformers	1	- -	1	140	60	- -	200	120	- -	60
OTHER CHRISTIAN CHURCHES:										
Roman Catholics	506	64	570	77,200	73,210	14,254	164,664	240,792	51,406	73,232
Greek Church	3	- -	3	291	- -	- -	291	240		
German Catholics	- -	1	1	100	200	- -	300	500	- -	200
Italian Reformers	- -	1	1	150	- -	- -	150	- -	20	
Catholic and Apostolic Church	29	3	32	6,460	273	240	6,973	3,077	1,607	2,622
Latter Day Saints, or Mormons	88	134	222	22,255	264	432	22,951	7,212	11,016	15,954
JEWS	42	11	53	2,608	5,353	- -	7,961	2,848	1,043	1,673
Totals	30,959	3,508	34,467	3,947,371	4,443,093	1,077,274	9,467,738	4,428,338	3,030,280	2,960,772

These returns, however, are in some respects incomplete; and allowing for their deficiencies, the total number of attendants at the morning service on the 30th March 1851 is estimated at 4,647,482. But we should form very inaccurate conclusions in regard to the total numbers belonging, or professing to belong, to the different denominations, if we supposed them to be proportioned to the numbers attending divine service. Everybody knows that it is much better attended by certain denominations than by others. In this respect the members of the church of England, are, perhaps, the least exemplary.

For details as to the military force, navy, revenue, &c., of the kingdom, see *antè*, p. 464., &c.

Public Education.—In England no system of public instruction has been established by authority of the legislature. Schools have, however, been established in most parishes, and very large sums have been left by private individuals for the purpose of supplying gratuitous instruction. Almost all the grammar schools in the kingdom

owe their origin to this source; and there is, perhaps, no country in which so great an amount of property has been appropriated for the education of youth. Unluckily, however, these bequests have not been subjected to any controlling authority, so that they have not unfrequently been embezzled and diverted to other purposes than those for which they were originally destined. Still, however, the amount of property applicable to educational purposes in England is very large; but it is made of comparatively little avail by the conditions which regulate its application, and which vary according to the rules laid down by the founders. It is not easy, indeed, to say in how far it would be prudent for the legislature to interfere with the regulations as to bequests or endowments; but it is inconsistent alike with principle and common sense, that the application of property left to promote the education and well-being of the community, should be made to depend, in all time to come, on the conditions in wills dictated in a less enlightened age, or by capricious and uninstructed, though benevolent, individuals. The public interest should, in all cases, be the paramount consideration; and the conditions in wills and testaments should be respected in so far only as they are consistent with its advancement.

It is believed that, at this moment, the incomes of the estates and other property left for educational purposes, would amount, if properly managed, to about 400,000*l.* a year. But it is well known that the management of such property is far from efficient; and the utility of the funds that are realised is, as stated above, greatly impaired by the conditions and restrictions under which they are applied. It were, therefore, much to be wished, that something were done to obviate the abuses in this important department of the public economy, and to administer the funds left for the advancement of education, so as to render them productive of the greatest amount of national advantage.

The grammar and endowed schools appear to have been principally intended for the use of the upper and middle classes, especially the latter; and it was not till a comparatively recent period that any vigorous effort was made to supply the lower classes with education, or to bring this most important instrument of civilisation and advancement within the command of the children of the poor. But during the present century a great many schools have been founded, having this object in view. These consist principally of what are called National, British and Foreign, and Sunday schools. The first, under the control of the National Society, are conducted on the system recommended by Dr. Bell of Madras, and use the catechism of the church of England, with which they are closely connected. The schools of the British and Foreign Society are not connected with any religious sect, but are open to all pupils of whatever creed. Sunday Schools, so called from their being taught on the Sunday evenings, sometimes belong to one sect and sometimes to another, and sometimes, though more rarely, to none.

The estimates that were framed of the number of children at school previously to the last census have proved to be less wide of the mark than might have been expected. The returns which were then obtained are of the highest value, and have been carefully condensed and ably elucidated by Mr. Mann. We subjoin a return showing the number of scholars and their proportion to the population at different periods. (See next column.)

Periods.	Population at each Period.	Number of Scholars at each Period.		Proportion of Scholars to Population.	
		Day Scholars	Sunday Scholars.	Day Scholars.	Sunday Scholars
				One in	One in
1818	11,642,683	674,883	477,225	17·25	24·40
1833	14,386,415	1,276,947	1,548,890	11·27	9·28
1851	17,927,609	2,144,378	2,407,642	8·36	7·45

It is sometimes said that, speaking generally, education in England is of an inferior description; and that, in point of quality, it is below the standard of Prussia, Holland, and some other countries; but we doubt whether this be the fact; though at the same time we concur with those who think that it is to the freedom of our institutions, and the scope given to talent and enterprise to elevate their possessor in the scale of wealth and distinction, and not to our educational systems, that the progress made by Englishmen, and the triumphs they have achieved in all departments of industry, science, and literature, are to be ascribed.

The superior grammar schools, and the two great universities of Oxford and Cambridge, are especially appropriated to the education of the higher classes. We have given some account of them under the articles CAMBRIDGE, ETON, OXFORD, &c. The London University is merely a board authorised to examine individuals educated at certain specified places, and to grant degrees to qualified parties.

A compulsory provision for the support of the poor has long existed in England. It grew out of the impotent attempts made in the reigns of Henry VIII., Edward VI., and the earlier part of that of Elizabeth, to suppress mendicancy, and at the same time to provide for the poor by voluntary contributions. At length, the earlier statues on the subject were consolidated, and the principle of compulsory provision carried to the fullest extent by the famous statute of the 43 Eliz. c. 2., which enacted, that all maimed and impotent persons should be provided for at the expense of their respective parishes, and that employment should be found for the unemployed able-bodied poor. From this remote period, the law of England has regarded every parish in the light of a family, the richer members of which were bound to provide for those who, through inability, misfortune, or want of work, could not provide for themselves. This, also, is the principle embodied in the law of Scotland with respect to the poor; and provided the means for carrying it into effect be so contrived that indigence and suffering may be relieved, without at the same time encouraging indolence and vice, the system would seem to be quite unexceptionable. Practically, however, this has been found to be a problem of exceedingly difficult solution, and not a few have concluded that, however administered, all systematic attempts to relieve the poor are necessarily, in the end, productive of increased want and misery.

The poor, no doubt, are naturally anxious that the compulsory provision for their support should be raised to the highest limit, and that their necessities should not only be relieved, but that they should be able, without molestation, to eat the bread of idleness. But wherever the assessment and administration of the provision for their support is left to the care of those on whom the burden of its payment really falls, this tendency to abuse is not long in being effectually provided against; and the sustaining and beneficial influence of the system alone remains. The complicated code of laws respecting settlements, and the establishment of workhouses, owes its origin to this principle — to the wish of the legislature to relieve the poor, and, at the same

time, to prevent the abuse of the rates; and there is unquestionable evidence to show, that, from the establishment of the system in 1603, down to about 1780, the devices in question were effectual for their object; and that while poverty was relieved, no encouragement was given to sloth, or to early and improvident unions. But soon after this period various innovations were made on the old law, which broke down most of the securities against the abuse of the rates; and, in 1795, the pernicious principle was adopted of mixing together wages and poor-rates, and of eking out what was supposed to be a deficiency in the former by payments from the latter! In consequence of this subversion of the principle on which the poor rates had been previously administered, they began rapidly to increase, and threatened to swallow up the whole, or, at least, a very large part of the surplus produce of the land. Various devices were resorted to, in the view of checking the evil; but, unaccountable as it may appear, not one of them had for its object to revert to those practices and mode of administering the law, which the experience of more than 250 years had shown were fully effectual for the prevention of abuse. At length the Poor Law Amendment Act was passed in 1834, which introduced a totally new system for the administration of the poor laws. Under this act the country has been divided into unions of more or fewer parishes, according to circumstances, the administration of all matters relating to the poor in these unions being intrusted to a board of guardians elected by the rate payers. But these guardians are themselves controlled by, and, in fact, are merely the executive officers of a central board of three commissioners established in London, who have power to issue rules and regulations as to the management of the poor, which all guardians, and other inferior officers, are bound to obey. The central board is assisted by deputy commissioners, who attend at meetings of guardians, explain the law, and adjudicate or report upon extraordinary cases, and see that the rules laid down by the central board are complied with. We have elsewhere stated our opinion as to the policy and probable operation of this new system. (See *Wealth of Nations*, M'Culloch's ed. 1 vol. 8vo. note xxii.) The whole that can be said in its favour is, that the poor rates have been materially reduced since its introduction; but we incline to think that the reduction would have been about as great, had the system for the regulation of the compulsory provision that prevailed in the reign of George II. been revived, with a few alterations; while many pernicious consequences, inseparable from the existing system, would have been avoided.

We subjoin a table of the sums expended for the relief and maintenance of the poor of England and Wales at different periods since 1748, with an estimate of the pop. at these periods:—

Years.	Sums expended on Poor.	Population.
Average.	£	
1748, 1749, 1750	689,971	6,000,000
1775, 1776	1,530,800	7,000,000
1783, 1784, 1785	2,004,239	8,000,000
1801	4,017,871	8,872,000
1813	6,656,100	10,160,000
1821	6,959,249	11,978,000
1831	6,798,888	13,897,000
1841	4,760,929	15,770,000
1849	5,792,963	17,531,000

Public Amusements. — There are few ways, probably, in which national character and habits are displayed more truthfully than in popular sports and amusements; and though none of these be in any way associated amongst us with civil or religious polity, as in ancient Greece and Rome, and some modern Catholic nations, they are still of sufficient importance to justify and require a short notice. Field sports comprised almost the whole pastimes indulged in during the early period of our history: they were materially modified by the game laws introduced at the Norman period, and which have descended down to our own times. Many generations have passed since the chase was mimicry of noble war; but so far as danger and excitement are concerned, fox-hunting and steeple chases may be considered as excellent substitutes for the chase of the wolf and the boar. Archery ranked amongst the most popular and important of the old English sports, and constituted the peculiar boast of the ancient yeomanry: but we must refer the reader to the ballads, that form so peculiar and valuable a portion of our earlier literature, for the most faithful and striking illustrations of this and other matters connected with the habits and manners of the commonalty. By their means the fame of the outlaw, Robin Hood, has already outlived that of many a legitimate hero, and bids fair to outlive that of many more. The wild boar was an object of the chase down to the Stuarts, and deer may, in a limited sense, be still considered as such. The fox, hare, and otter are at present the only wild animals that can in a general sense be said to perpetuate the chase. Fox-hunting may, in fact, be said to be in an especial manner the out-door sport of the country gentlemen of England at the present day; and it is not to be denied, that it is highly exciting, manly, and invigorating. Coursing and falconry were sports restricted to those of gentle blood; the latter has long been obsolete, in any popular sense, though, like archery, it is indulged in by a few individuals. Partridge and grouse shooting are universally popular amongst the country gentlemen; and fishing is also extensively practised. Amongst the lower classes wrestling is one of the most popular of the out-door sports: it is followed principally in the northern and western cos., but the modes are essentially distinct, that of the former more nearly resembling the fashion of the ancient athletæ. Quarter staff and boxing must also be considered as peculiarly English in their character: luckily, prize-fighting appears of late years to have got quite out of fashion, and the same may be said of bull-baiting and cock-fighting, once so general, with other sports of a like brutalising character. Horse races are of comparatively modern origin, and have attained to the acme of popularity with all classes, from the highest to the lowest. The races at Epsom, Doncaster, Ascot, &c., attract vast crowds of visiters; and no where is there to be seen such a display of magnificence, numbers, good humour, and love of enjoyment, as may be witnessed at these meetings. Cricket grounds and bowling greens maintain their popularity amongst the more respectable classes, as those for skittle playing do amongst the lower. Boat-racing may be noticed as a popular amusement that seems to be gaining ground; and the *regattas*, or boat-matches, that are now annually got up in several sea-port towns, are very well attended. The holyday fair or wake comprises most of the various amusements in vogue, and is usually annual: some of the more ancient of these appear to have had a religious origin, others had business, wholly or partly, in view: as popular festivals, they are all fast degenerating,

and bid fair to disappear altogether, at no very distant period. In-doors, billiards have replaced the ancient shuffle-board, and cards, though still pretty general, are rapidly giving way to music and conversation: many minor customs, once universal favourites, might be named, that have wholly disappeared, and though the holly and the mistletoe are still seen in the majority of houses at Christmas, few other of the older customs or sports can be said to survive, in any state of vigour: even blindman's buff, and hunt the slipper, are now but rarely practised, and never in genteel society. Dancing keeps its ground, changing its character according to the changes of fashion. The mutations that have occurred in dramatic representations from the time when they were associated with the festivals of religion, and chiefly limited to scriptural subjects, down to the allegorical masques of B. Jonson, which Milton's *Comus* shows lingered on to a later period, form a wide field for investigation. The Christmas mumming (that may still, perhaps, be witnessed in some remote corners, improving the stories of St. George and the Dragon, or Fair Rosamond,) seems a lineal descendant of the old mysteries; the mountebank and his merry Andrew, and Punch and Joan, appear to have made their final exit from the scene. It would require far more space than can be afforded, to mark the various changes in what has been called the legitimate drama, whose masterpieces were produced in the earlier part of its career during the reigns of Elizabeth and James I. The two great London theatres of Covent Garden and Drury Lane have lost the greater part of their predominating influence, for which two very sufficient causes may be assigned: they have ceased, owing to the greater lateness of the dinner hour, to be the resort of fashion, whose influence in England is all but omnipotent; and they are monopolies which, in the long run, always have a deteriorating influence over literature as well as industry.

In so far as the metropolis may be considered an index to the community at large, music would seem to be rapidly advancing in popular favour; nor can it escape notice, that the means taken to popularise sculpture and painting are fast neutralising the propensities which naturally resulted from want of perception and sympathy with works of art. The results of all this are sufficiently obvious, in the more tranquil and refined tone that pervades most places of public resort, and in the greater taste for country excursions, reading, &c. Gin-drinking is still, no doubt, very widely diffused; but, as already stated, there has been in this, as in most other respects, a material improvement within the present century. The influence of gas in making our streets almost as brilliant by night as by day, has powerfully contributed to repress crimes and disorders.

The *English Language*, the use of which is now universal in all parts of the country, is principally of Anglo-Saxon origin. The Gothic or Belgic occupants of the lower and more fertile parts of the country, at the epoch of the Roman invasion, and the Saxons by whom the country was overrun subsequently to the withdrawal of the Romans, were congenerous races; so that the language of the latter easily became that of the people generally. (*Statistics of British Empire*, i. 396.) After the conquest of the kingdom by William Duke of Normandy, the Norman language became that of the court, the nobility, and the courts of law; but the influx of Norman settlers was too inconsiderable to have any material influence over the language of the bulk of the people, which continued to be essentially Saxon. In the course of time, the prejudices of the English monarchs of the Norman line in favour of their continental dominions and subjects, lost much of their influence, and being bred in England, they began to become familiar with, and use the language of, their English subjects. In 1216, Henry III. issued a writ in the Anglo-Saxon tongue. Not long after, English was substituted instead of French, in *vivâ voce* proceedings in the courts of law; and though written proceedings in courts were carried on for a considerable period longer in a barbarous jargon, half French and half English, the latter was ordered by statute, in the reign of Edward III., to be thenceforth exclusively used in the courts. It is curious, however, that, notwithstanding this enactment, the statutes continued to be promulgated in French down to the reign of Richard III.

During all this period the Anglo Saxon was gradually acquiring the distinctive characters of the English language. A great many French (and consequently Latin) words, through our long-continued connection with France, successively found their way into the language; and it also was enriched by words derived from the Greek and other tongues. Wycliffe and Geoffrey Chaucer, who flourished in the 14th century, may be regarded the one as the father of English prose, and the other of English poetry. During the 15th century, the language advanced but little; but previously to the close of the 16th century, it had, in a great measure, attained to the form and standard which it now exhibits. During the reigns of Mary and Elizabeth, many additional French, and some Italian and Spanish words were introduced. Still, however, of about 38,000 words, which, excluding the preterites and participles of verbs, the English language is supposed to comprise, about 23,000 are of Anglo-Saxon origin; and the remainder Latin, Greek, French, &c., in different but uncertain proportions.

It is foreign to our subject to enter into any details as to the works that have been written in English. Suffice it to say, that there is no department of literature, philosophy, or science, in which English writers have not attained to high, and in not a few instances, to unrivalled excellence. For a lengthened period, our philosophical and political literature has had much more of a practical than of a theoretical or speculative character; and the taste for metaphysical inquiry has almost entirely disappeared. Within the last few years the great object has been to diffuse literature, and to secure the suffrages of a wide, rather than of a select circle of readers. The influence of this change on the character of our literature, and the taste of the public, cannot yet be fairly appreciated; perhaps the former will gain in clearness and lose in depth; and it is not impossible that a lower standard may be formed of philosophical and literary eminence.

Condition of the People. — We have already made some statements illustrative of the improved condition of the great bulk of the people in the present times, as compared with their condition at more remote periods (*antè*, p. 457.). Speaking generally, all classes are now incomparably better fed, better lodged, and better clothed, than at any former epoch in our history. The increase in the consumption of butchers' meat since 1770 has been more than double as compared with the increase of the population; and the increase in the consumption of

tea, sugar, coffee, &c., since the same period, has been quite unprecedented. In fact, the poorest individuals are now in the daily enjoyment of many descriptions of luxuries that were, no further back than the 17th century, unattainable even by the richest lords. Tea and sugar are now become necessaries of life; every cottage is well furnished with glass windows; and maids of all work are now quite as well and neatly dressed as the duchesses that figured at the court of Queen Anne.

It is not, however, to be denied, that, notwithstanding this signal increase of prosperity, considerable distress exists among certain classes — especially among the hand-loom weavers and the agricultural labourers in a few districts. The depressed condition of the former is no doubt owing to the extensive introduction of power-looms, and the facility with which their business may be learned; and that of the latter to the abuse of the poor laws, and the too great multiplication of cottages. But, provided nothing occur to check our progress in manufactures, the hand-loom weavers will gradually be absorbed into other businesses, and their employment and distress will cease to be heard of; and the judicious administration of the poor laws will, at no distant period, get rid of whatever distress may exist in certain agricultural districts. The continued importation of crowds of immigrants from Ireland is an evil less easily dealt with, and which certainly has a very injurious influence over the pop. of England. But this may also be expected to diminish; so that, provided tranquillity, good order, and that perfect security essential to all great undertakings, be maintained at home, the fair presumption is, that the prosperity of the country will go on increasing for a very long period, and that England will indefinitely maintain the proud distinction of being the richest, most industrious, and happy of European nations.

Historical Sketch. — After all the discussions which have taken place respecting the history and character of those native tribes which occupied Britain at the period when the Romans first reached its shores, thus much only appears to have been determined with any degree of probability, that they belonged partly to that great family of the human race called the Celtic, and partly to another great family called the Gothic. To the former belonged the Cymry, or inhabitants of Wales, and of the Western, and, perhaps, also, the Northern counties: to the latter, or Goths, belonged the Belgæ, who, having emigrated from the Continent, occupied the eastern, lower, and most fertile portion of the country.

The visit of Julius Cæsar to Britain occurred 55 years before Christ. From that time it remained unmolested by the Romans for nearly 90 years. In A. D. 43, Aulus Plautius, despatched by the emperor Claudius, began its conquest, which, in the space of about 40 years, was completed, with the exception of the northern part of Scotland, into which the Romans scarcely penetrated.

The Romans introduced, to a great extent, their arts and civilisation into this remote province. Thirty-three large towns, and many military stations, were connected together by magnificent roads, constructed by the labour of the Roman soldiers and provincials. It is probable that, between these several centres of civilisation, much of the country remained in that state of forest in which the Romans had found it. Still the population of Roman Britain must have been large, and its progress in refinement considerable, for two centuries after the conquest. After that time, the declining power of Rome yielded to the fierce attacks of the northern tribes of the island, and Britain became, to a certain extent, independent of the empire, but only to suffer the more from these fierce assailants.

Of the history of the long period which elapsed between the retirement of the Roman armies from our island, and its conquest by the Saxons, we possess no memorials sufficiently authentic to form a connected narrative. It appears probable that the hereditary chiefs of the ancient British tribes, who had lost their authority during the period of colonial government, resumed it to a certain extent; that in the larger towns, the clerical order, together with a council of magistrates and citizens, exercised almost republican authority. The exact æra of separation from the empire of Rome cannot be fixed; it seems to have been effected A. D. 409, when the letters of the emperor Honorius commanded the cities of Britain to "provide for their own defence." About 40 years later, we find no distinct trace of municipal government left; the country under the government of a number of petty chieftains or kings, and overrun even to the extreme south by the incursions of the Caledonian tribes. At this period (A. D. 449), Hengist and Horsa, Saxon leaders, ranging the coast of the British Channel with three of their piratical vessels, were invited by Gwrtheyrn (Vortigern), a British prince of Kent, to serve against these northern invaders. Five thousand auxiliaries soon arrived; quarrels arose between the Britons and their guests; and (A. D. 457) the latter conquered Kent for themselves. Such are the outlines of the ancient story recorded by Gildas. In our critical times some have contended, that the names of the leaders (both signifying a horse) prove that those personages are themselves as fabulous as the well-known tale with which they are connected, of the marriage and dowry of the beautiful Rowena, the defeat of the Saxons, their return, and the treacherous seizure of Vortigern; all of which are mentioned only by later British writers.

The conquest of the greater part of Britain by the Saxons, Jutes, and Angles, occupied a space of about 130 years, from the landing of Hengist. Five British states, Strath-Clyde, Cumbria, North and South Wales, and Cornwall, maintained their existence for a somewhat longer time. Three Saxon kingdoms (Sussex, Wessex, Essex), one Jutish (Kent), four Anglian (Bernicia, Deira, East Anglia, Mercia), were formed in this period.

The Anglo-Saxons were a people divided into various castes. The kings, or ealdermen, reigned by a sort of hereditary right, without any strict adherence to the laws of succession, but all claimed descent from the original race of Odin. The nobility, "earls," "earlcundmen," or "thaneborn," were a class apart, like those of continental countries at the present day. The third class was that of the "ceorls," or ignoble; placed in a state of dependence on the nobility, yet freemen according to the law. Their rank, as compared with that of the nobles, was estimated by the different value of their compurgatory oaths, in giving evidence, and of their lives and persons, according to the "weregild," or legal compensation for blood; namely, one sixth. Every freeman was presumptively attached to some "lord," and designated as his "man." A class of these "earls," possessed of landed property, yet not "lords," seems to have occupied, like the equites

of the Romans, a sort of intermediate rank between the patricians and plebeians, under the various titles of sithcundmen, lesser thanes, &c. They seem to have had the privilege, denied to the ceorl, of choosing their own lords. The ceorls, on the other hand, were "bonde," attached to the glebe; and might be the subjects of gift or bequest along with it, not as slaves, but as appurtenant to the property. They took no part in the political government of the realm. Lastly, the theowes, or serfs, were slaves in the full import of the word.

The territorial division of England, under the Anglo-Saxons, into counties, hundreds, and tythings, is of very great antiquity, and formed the basis of their civil institutions. The earl, the hundreder, and the tything-man, presided respectively over these divisions. Each of these officers held a court of justice, which was attended by the landed proprietors: and by the well-known custom of "frank-pledge," the superior or noble was rendered responsible for the acts of his inferior or man; and the vicinage, collectively, for those of its members. The witenagemote, or assembly of the wise men, seems to have been, in its original nature, rather a high court of justice, for the redress of complaints by or against the great men of the realm, than a legislative assembly. The earls, aldermen, and higher prelates, attended it; and it is probable, though uncertain, that the burghs sent deputies to it. Together with the king, it constituted the sovereign power of the empire; the Saxon kings usually promulgated their laws, as enacted by themselves, with the advice of their "witan;" and the succession to the crown was fixed by their determination. The conversion of the Anglo-Saxons to Christianity was commenced by Augustine and his companions, missionaries despatched by Gregory VII. in the beginning of the seventh century, and proceeded with great rapidity to completion. Although the religion of Christ had been introduced for five centuries at least into the country among the Britons, it had sunk so completely into decay in the revolution which followed the fall of the Roman empire, that from the reconversion of the island under its Saxon masters, we date our episcopal succession, and the foundation of our religious establishments.

The first appearance of supremacy among the numerous chieftains of the Anglo-Saxons occurs in the instance of Ella, king of Sussex, who having, in consequence of a great victory, obtained a temporary authority over the Britons, assumed the title of Bretwalda (ruler of the Britons), about A. D. 491. During the long period of the Saxon conquest, several independent states were founded, of which the principal and best known are Wessex, Sussex, Kent, Essex, Deira, East Anglia, Northumberland; and hence has arisen the well-known term of heptarchy; which, however, is substantially erroneous, inasmuch as at no particular point of time did these seven states exist independently of each other. Several princes, who by connection or conquest obtained a superior power to the rest, assumed in succession the title of Bretwalda, which eventually (A. D. 830) was held by Egbert, king of Wessex, commonly regarded as the first king of England.

The accession of Egbert to this dignity was cotemporary with the first invasion of the Danes. For a century and a half from that time, their inroads were continually repeated. All substantial progress in civilisation was effectually arrested by this terrible evil. The Danes were always at hand: the intervals between their incursions, instead of being employed by the Anglo-Saxon princes and people in forming powerful combinations for defence, were spent in civil wars; and the weaker party habitually called upon this powerful foreign enemy for support. The reign of the great Alfred, the most brilliant in the Saxon annals, took place towards the middle of this age (871—901). Under his successors (Athelstan and Edmund) the Saxon sway was extended, both by the repulse of the Danes, and by the subjugation of the Britons of Cumbria and Devonshire. But the Danes again succeeded in overrunning almost the whole of England; and became, in fact, not only the chieftains, but the progenitors of a large proportion of the population of the country N. of the Humber, and of the coast between that river and the Wash (the ancient Danelage). At length, under Sweyne and Canute (A. D. 1017), the Danes became masters of the kingdom, which, however, they only held for 24 years, or till 1041, when the crown devolved on an Anglo-Saxon prince, Edward, surnamed the Confessor. Six powerful earls, Danes and Englishmen, divided the country between them, under his authority, which, during the greater part of his reign, was little more than nominal. At his death, Harold, one of these chieftains, disregarding both the claims of Edward's natural successors, and those of William duke of Normandy, his kinsman, to whom he had bequeathed the crown, seized it by force. William, having determined to vindicate his pretensions by force of arms, invaded England with a powerful army; and having defeated and killed Harold in the decisive battle of Hastings, on the 14th of October, 1066, succeeded to the throne.

The Norman conquest is the great æra to which reference is ordinarily made as the beginning of a new order of things in English history. The immediate change, however, consisted chiefly in the division of the lands of the kingdom into 60,000 knights' fees or estates, among the followers of the conqueror, as feudal lords. Feudality existed among the Saxons as well as the Normans. But the tie which connected the inferior with the superior was more one of personal service, and less strictly territorial in its nature; nor were the peculiar incidents of military tenure, as understood in France and Germany, known among the Anglo-Saxons. Soon after the Conquest, the greater part of the territory of England became in fact, as well as by the gift of the sovereign, the property of the Norman knights. But a large proportion still undoubtedly remained in the hands of Saxon and Danish thanes, who either kept possession of the lands in defiance or evasion of the royal grants, or by composition with the Normans to whom they had been assigned. The class immediately under the nobles,—the freemen or ceorls of the Anglo-Saxon period (if the *villani*, *bordarii*, and *cotarii* of Domesday Book be rightly considered as representing that class),—appears to have comprised the great bulk of the population: the *servi*, or slaves, mentioned in that record, amount only to about an eighth part of the former class. Eighty-two boroughs are named; and, allowing for those parts of England of which the survey is not preserved, the number was probably about 100. These boroughs appear to have been small, ill-fortified places, inhabited by a population partly governed by municipal customs, and partly under the protection of the king, or of some neighbouring noble or prelate, from whom, in after times, they

generally purchased their franchises. The population of England, at the end of the reign of William the Conqueror, has been estimated at about 2,000,000: and considering that the whole northern part lay almost waste, and that many towns, manors, &c. are mentioned as having lost half their inhabitants since the time of Edward the Confessor, through the calamities attending the invasion, it has been supposed that the pop. under that prince fell little short of 3,000,000; though we incline to think that this is considerably beyond the mark. It may, however, be inferred from other facts, that England, in that early time, was almost wholly reclaimed and cultivated, since nearly all the villages and hamlets with which its surface is so thickly strewn seem to derive their origin from the Saxon age.

From the Norman conquest to the accession of Edward I. (1066 to 1272), the principal circumstances which fix the attention of the reader of British history are — the disputes between the Norman and Plantagenet kings and their barons, together with the developement of the feudal system; the quarrel between the sovereigns and the church; and the foreign relations of England, arising out of the French provinces held by its kings as feudal lords. As, according to the principles of the feudal law, every superior lord had a court, consisting of all those who held land immediately of him, so the king's tenants in chief formed the highest court or common council of the realm. It consisted, consequently, not only of the greater barons, but of such inferior ones as were under no superior lord, but held directly of the king. But the former naturally acquired a preponderating share in it. Backed by the people, they contended with their sovereign for the rights which were finally established by Magna Charta, in 1215. The greater part of this celebrated instrument is directed against the abuses of the king's power as feudal lord: but it established the two great principles, that no one should undergo the consequences of a criminal act, unless by the judgment of his peers, from which, through a variety of changes, adapted to the necessities of particular times, we derive our modern trial by jury; and that no "scutage" (originally a pecuniary contribution assessed in lieu of military service) should be levied, except by consent of the great council of the realm. This provision, framed on behalf of the king's tenants in chief only, has become the basis of the popular right of taxation by representatives. Continued disputes respecting the extent of these privileges, and the pride of the nobility, led to the barons' war in the reign of Henry III., in which Simon de Montfort, Earl of Leicester, for a time governed the kingdom, and convened, as already stated, the first meeting of the great council, or "parliament," to which representatives of the commons distinctly appear to have been summoned (1265); though it is probable that they attended previously.

The two great points on which the clergy and the crown were at issue, from the reign of William Rufus to that of Henry III., were those of investitures, and of the jurisdiction over ecclesiastics. The first, in point of fact, involved the question, whether the temporalities annexed to the higher offices of the church (bishoprics and abbeys) should be in the gift of the crown or the pope; the second, whether clergymen, in criminal proceedings, should be subject to the royal courts or their own. Stephen conceded the point of investiture; but Henry II. strongly resisted the demands of the church, and, by the Constitutions of Clarendon (1164), abrogated many privileges which it had previously enjoyed, under pretence of restoring ancient laws. But the opposition and martyrdom of Becket turned the scale against the royal authority. Henry was forced to recede from his demands. The quarrel of investitures was again renewed in the reign of John; and that prince, pressed by the difficulties of his position, not only yielded the point, but owned the feudal superiority of the see of Rome. But the power of that church seemed suddenly to decay, after attaining the full recognition of her rights: in the long reign of Henry III. the jurisdiction of the royal courts was silently extended over ecclesiastics, and the prize of so protracted a struggle was partially yielded with little resistance.

William I. and his immediate successors possessed no continental dominions except Normandy, for which they owed fealty to the crown of France. But the house of Plantagenet, to which Henry II. belonged, were masters of the provinces of Anjou, Touraine, and Maine; to which that king added Guienne and Poictou by marriage, and Brittany by conquest; so that above a third part of France was under the immediate jurisdiction and sovereignty of the kings of England. Henry was succeeded by his eldest son, Richard, surnamed, for his bravery, *Cœur de Lion*. After greatly distinguishing himself, and adding to the glory of the English arms by his exploits in Palestine, he was arrested and imprisoned at Vienna, on his way home, and did not recover his freedom till he had agreed to pay an enormous ransom. He soon after died from the effects of a wound he received in an attack on a castle near Limoges.

Richard having no issue, was succeeded, in 1199, by his brother John, surnamed *Lackland*, whose reign is one of the most inglorious in the English annals. During its continuance, Philip Augustus, king of France, an able and politic prince, re-united to the French crown almost all those possessions in France that had been under the feudal sovereignty of the kings of England. But this loss was in some measure countervailed by the conquest of Ireland, commenced in 1172, by the Norman chieftains of Henry II. The subjugation of that island was not, however, completely accomplished till about 4 centuries after.

But the reign of John was chiefly remarkable for the concession of the *Great Charter* (*Magna Charta*), signed at Runnymede in 1215. In the following reign, under Henry III., the Commons, as already stated, were expressly summoned as constituent mems. of parliament. The foundations of the constitution were in this way laid; and means prepared for that gradual reduction of the realm under a more regular form of government, which was in great measure effected during the long reign of Edward I. (1272 to 1307), one of the ablest and most successful princes who ever sat on the throne of England. Under him, the great council of the realm assumed a form resembling that of the modern parliament, by the separation of the greater barons, from whom our modern peerage is derived, from the great body of the tenants in chief; the former being personally summoned to parliament, the latter ceasing to be summoned at all, and being present only through their representatives. These, however, continued for a lengthened period to yield a reluctant attendance, and seldom interfered in public affairs, except to vote or refuse the supplies demanded by the

sovereign. The commons and lords appear to have sat in separate bodies, at least occasionally, as early as this reign. The power of the great barons, at the expense of the lesser, was materially increased in consequence of the statute termed "*de donis*," which tended to create perpetuities in feudal estates; while, on the other hand, the statute "*quia emptores*," prevented the owners from increasing the number of their vassals by subinfeudation. The combined operation of the two tended to throw the land more extensively into large demesnes, and to diminish the number of the small feudal chieftains, retainers of the higher nobles. With the church Edward was generally at peace, though in his reign considerable steps were made towards the repression of its temporal usurpations, by the subordination of the ecclesiastical to the royal tribunals, and by laws of mortmain. In its foreign relations, the reign of Edward was eminently glorious, unjustifiable as many of his acts must be esteemed. He subdued Wales; interfered with dignity in the affairs of the Continent; and, taking part in the disputes respecting the succession to the throne of Scotland, nearly subjugated that country, on the borders of which he died, while engaged in the active prosecution of hostilities against it.

His son Edward II. lost, in a few unfortunate campaigns, the footing which his father had gained in Scotland; the crown of which was triumphantly worn by Robert Bruce, the conqueror of Bannockburn (1312). The rest of Edward's reign was occupied by a lengthened struggle in support of his favourites against the barons and his queen. In the end, he was dethroned, in 1327, by the prelates and nobles, who assumed the power of a parliament, and perished miserably in Berkeley Castle, shortly after his son Edward III. had been raised to the throne, at the age of fourteen.

The reign of this great prince is chiefly celebrated on account of his wars in France, which he conducted with so much valour and brilliant though only temporary success. The right which he asserted to the crown of France was derived through his mother Isabella, who stood nearest in the line of succession, but was herself excluded by the Salic law from its inheritance. It was maintained in favour of the claim of Edward, that a title derived through a female, though herself incapable of reigning, is valid. The nation, as in the wars of Edward I. against Scotland, was carried away by the excitement of foreign conquest, and for a long time aided its sovereign with subsidies, tallages, and loans, prodigally lavished in support of his pretensions. These wars lasted, with few interruptions, from 1337 to 1374: but, notwithstanding the great victories of Cressy (1346) and Poictiers (1364), the capture of a king of France, and the desolation of the greater part of that kingdom, Edward retained at their termination only Bordeaux, Bayonne, Calais, and an insignificant district of Gascony.

It was during these wars, and in the court of Edward, that the spirit of chivalry attained its highest point of exaltation. Although this characteristic of that brilliant æra was but of a temporary nature in itself (for the knights of Edward's court left no successors), yet it had very important results in modelling and refining the taste and character of the higher orders. Meanwhile the mass of the people was undergoing a still more important change, under the influence of different causes. The wars with France, for the first time since the battle of Hastings, thoroughly awakened the spirit of English nationality. The distinction between Norman and Saxon was thenceforth merged in the character of Englishman. The language rose cotemporaneously with the nation; for though the change of speech from Saxon to English was a very slow process (extending, at least, from the reign of Henry II. to that of Edward III.), the written dialect may be said to have passed at once from barbarism to a high degree of perfection in the poems of Chaucer, whose career began in this reign; a point from which it receded, rather than advanced, for a century afterwards. The royal prerogative declined during the latter part of this reign, owing chiefly to the necessities of the king, whose great expenditure rendered him dependent on his parliaments, which, for the first time, were now directed by statute to be summoned annually. The lowest class, on the other hand, greatly rose in importance.

The great pestilence that raged in England in 1349, is supposed to have cut off a half, or more, of the inhabitants. The services of those that survived having, in consequence, become more valuable, they demanded and received higher wages. This rise was, however, regarded as a grievous hardship: and the king, with the advice of "his prelates, nobles, and learned men," issued an edict, by which all labourers were, under severe penalties, ordered to work at their old occupation for the same wages that they received before the pestilence! But "the servants, having no regard to the said ordinance, but to their ease and singular covetize," refused to serve unless for higher wages than it allowed. In consequence of this resistance, the famous statute of the 21st Edward III. c. 1., commonly called the statute of labourers, was passed. It enacts, that every able-bodied person under 60 years of age, not having sufficient to live on, being required, shall be bound to serve him that doth require him, or else shall be committed to gaol till he finds surety to serve. If a servant or workman depart from service before the time agreed on, he shall be imprisoned; and if any artificer take more wages than were wont to be paid, he shall be committed to gaol. But the increase of wages having originated in natural causes, could not be checked by such enactments. Their inefficacy did not, however, lead to the adoption of a policy more consistent with justice or common sense. On the contrary, fresh efforts were made to give effect to the statute of labourers; and to prevent its being defeated by the peasantry taking refuge in towns, or emigrating to a distant part of the country, it was enacted by the 34th Edward III., that if any labourer or servant flee to any town, the chief officer shall deliver him up; and if they depart for another country, they shall be burned in the forehead with the letter F! The injustice done to the labourers by these oppressive statutes was the more glaring, as Edward, to obtain funds to prosecute his schemes of conquest in France, had had recourse to the disgraceful expedient of enfeebling the standard of the coin. Not only, therefore, did the regulations as to wages, so far at least as they were effectual, deprive the common people of that increased payment to which they were entitled from the diminution of their numbers, but they also hindered them from being compensated for the fraud practised on the coin. It was attempted, indeed, to obviate the effects of the diminution of the latter by fixing the prices of most articles; but this was only to bolster up one absurdity by another, and it is not possible that such limitations could have any material influence.

Notwithstanding the degradation and ignorance of the mass of the people, the oppressions to which they were subjected made them at length rise *en masse* against their oppressors. So long indeed as Edward III. lived, the public tranquillity was preserved, and the villeins and labourers submitted to the injustice of which they were the victims. But the increase of towns and manufactures, during the lengthened reign of this monarch, having materially increased the number of free labourers, a new spirit began to actuate the peasantry, who, contrasting their servile condition with the condition of the citizens, became sensible of their inferiority, and more alive to the oppressions they suffered. An attempt to enforce the provisions of the statute of labourers, in the reign of Richard II., was the ground work of the famous rebellion headed by Wat Tyler. The demands made by the peasantry show the grievances under which they laboured. They required the abolition of slavery, freedom of commerce in market-towns without tolls or imposts, and a fixed rent on lands, instead of the services due by villenage. The rebellion, after having attained to a formidable magnitude, was suppressed with much bloodshed. But though re-established, the servitude of the peasantry was relaxed, and the class of free labourers became gradually more numerous.

How far this national movement was aided by the religious excitement which began at the same time to prevail, has been much debated. About 1360, Wycliffe began his attacks upon the mendicant friars, and upon many abuses of the church as it then existed. He was supported in the royal council by Edward's third son, John of Gaunt, and by some of the principal nobility, through jealousy of the prelates: but his chief reliance for the propagation of his tenets was on the people, among whom he distributed the Scriptures in the vulgar tongue; and despatched the disciples, called his "poor priests," who appealed to their homely sense in their own idiom, and by arguments suited to their capacities. He died in 1384: his followers were soon distinguished by the title of heretics; and the increasing prevalence of their opinions was fully testified, in 1400, by the enactment of the statute "*de heretico comburendo*," the commencement of a long series of persecutions directed against them.

Richard II. was dethroned in 1399 by Henry of Bolingbroke, his cousin, and murdered shortly afterwards. The usurping monarch, Henry IV., was chiefly occupied, during his reign, with domestic troubles, which were with difficulty overcome by his great abilities; but it is remarkable for two important events in the developement of the constitution, though not much noticed at the time — the fixing, by statute, of the parliamentary right of election for counties in *all* freeholders, afterwards restrained, under Henry VI., to those who were worth 40*s*. per annum; — and the recognition of the two houses as bodies possessing distinct privileges, not to be interfered with by each other.

Henry V., son of Henry IV., renewed the claims of his ancestor to the crown of France, and gained the great victory of Agincourt, in 1415, which laid most of that kingdom at his mercy. But this success was productive of no real advantage. France, indeed, was reduced to a state of great distress, but England participated largely in the mischiefs she inflicted on her neighbour. The draughts of men and money required for the reinforcement and maintenance of the armies in France, and the licence given to all sorts of disorders at home, by the absence of the sovereign, could not fail of having a most mischievous influence. A statute of the 9th of Henry V. recites, that "whereas at the making of the act of the 14th of Edward III. (1340) there were sufficient of proper men in each county to execute every office; but that owing to pestilence and wars, there are not now (1421) a sufficiency of responsible persons to act as sheriffs, coroners, and escheators." The laurels, as Mr. Barrington has justly observed, which were gained by Henry V. are well known; but it is not so well known that he has left us, in the above statute, irrefragable proof that they were not obtained, but at the dearest price—the impoverishment and depopulation of the country.

The success of the French arms under the celebrated Joan of Arc and Count Dunois, during the minority of Henry VI., at length put a period to the attempts of the English to conquer France. Unfortunately, however, the tranquillity they enjoyed subsequently to the termination of the French wars, was but of short duration; as England soon after became the theatre of civil war.

Henry IV. was the son of John of Gaunt, third son of Edward III. The title which he set up against Richard II. was derived through his mother, great-granddaughter of Edward, Earl of Lancaster, whom a popular tradition represented as the eldest son of Henry III., and excluded from the succession on account of deformity. On the other hand, the Duke of Clarence, second son of Edward III., had also female descendants. Richard, Duke of York, through one of these, acquired a title clearly preferable to that of the descendants of Henry IV., if their apocryphal claim through the Earl of Lancaster were rejected. The partisans of the house of Lancaster assumed (it is said) the red rose for their symbol; those of York, the white. The parties attached to the rival factions were pretty equally balanced, and for nearly 40 years, with the exception of a few short intervals, one half the nation may be said to have turned its arms against the other. Richard, Duke of York, fell in the field, leaving his claims to Edward IV., who, after various changes of fortune, dethroned Henry VI. in 1461. His son, Edward V., a minor, is believed, though, perhaps, without sufficient grounds, to have been murdered in the Tower, after a reign of 13 days, by his uncle, the Duke of Gloucester, afterwards Richard III. This able but sanguinary prince lost his crown and his life in the decisive battle of Bosworth Field, gained in 1485, by Henry Tudor, Earl of Richmond. This event put a period to the civil wars; the victor uniting in his person the title of Lancaster through his mother, Margaret Beaufort, and that of York acquired through his marriage with Elizabeth, daughter of Edward IV.

The reign of Henry VII. is one of the most important in the history of the country. This politic and able prince completely destroyed the power and influence of the feudal aristocracy. From a very remote period, the great lords had been accustomed to maintain vast numbers of servants and retainers, partly for the purpose of displaying their grandeur, and partly as the means of security and of attack. The retainers generally lived on the estates of their masters, who supplied them with badges and liveries, and with provisions while in service. These persons were not only ready upon all occasions, when called upon, to support the cause of their lords,

to execute their orders, and to give evidence for them in courts of law, but, trusting to their influence to screen them from justice, they scrupled not, whenever an opportunity offered, to attack those they considered as their master's enemies! The predatory habits acquired in such a mode of life could not be easily laid aside; and when dismissed from service, or not employed by their masters, they generally supported themselves by theft and robbery. Many statutes had been passed for repressing so enormous an abuse, but without any perceptible effect; and during the civil wars the evil attained to a frightful excess. No provision being made for disbanded soldiers or retainers, it was not unusual to expose liveries for sale, and the competition for them amongst idle and disorderly persons was such that they occasionally brought considerable sums. Henry VII. determined to abate this nuisance; and his sagacity and firmness, and the circumstances under which he was placed, enabled him to succeed. Many of the principal nobles had perished in the struggles terminated by the battle of Bosworth; and their power had been impaired by repeated confiscations, and by the extraordinary expenses they had had to sustain. They were, therefore, but ill-fitted to defend their privileges against so able and powerful a prince as Henry, who perceived and made use of his advantage. The laws against giving badges and liveries, and employing retainers, were renewed and enforced with a rigour that none could expect to elude. At the same time, too, that the barons were compelled to lay aside their feudal pomp, and to dismiss their vassals, the improved and more luxurious habits that began to be diffused throughout the nation disposed them to receive money payments, instead of personal services, from their tenants and dependants; and the lower ranks of people being thus, as it were, abandoned by their feudal superiors, were obliged, instead of trusting to them for support and protection, to resort to some species of industry, and to respect those laws they could no longer trample upon with impunity. The change that was thus effected was of the greatest importance, and had the most decisive and beneficial influence on all ranks and orders. Had the practice of maintaining crowds of retainers continued, order and tranquillity could never have been established.

The power of the great lords was undermined by another law, which, though less felt at the time, has been hardly less important perhaps in its consequences than any other passed in the reign of Henry VII. This was the legitimation of the practice, introduced in the reign of Edward IV., of breaking entails by a fine and recovery. "By means of this law," says Hume, "joined to the beginning luxury and refinement of the age, the great fortunes of the barons were gradually dissipated, and the property of the commons increased in England. It is probable that Henry foresaw and intended this consequence; because the constant scheme of his policy consisted in depressing the great, and exalting the churchmen, lawyers, and men of mean families, who were more dependent on himself." But, however this may be, the depression of the higher classes having taken place before the increasing influence of the Commons, formed a sufficient counterpoise to the power of the crown. Henry VII. was long previously to his death the most powerful of the English monarchs; and left to his son, Henry VIII., a power which was but feebly, if at all, controlled by the popular branch of the legislature.

The great event for which that king's reign is memorable, prepared by many causes, was immediately brought about by his passions. Unable to procure from the see of Rome a consent to his divorce from his wife, Catherine of Aragon, Henry involved the kingdom in a rupture with the pope, and assumed the title of "Head of the Church." During a century of occasional persecution, the Lollards, or sectaries of Wycliffe, had continued to exist, probably in considerable numbers. Thus the Reformation, when first it broke out in Germany and Switzerland, found in England ready adherents among the lower classes; while the more learned part of the clergy, connected by various ties with the continental reformers, readily embraced it; and finally, the quarrel of the king with Rome drew over the timid and subservient, while the powerful were gratified with the plunder of abbeys and other ecclesiastical establishments. Not that Henry himself embraced the peculiar doctrines of the Reformation; on the contrary, during great part of his reign, belief in them was occasionally punished as a crime: but by assuming the headship of the church, and rejecting all spiritual domination, he made ready the way for the transition of the nation from Popery to Protestantism. At the commencement of his reign Henry was popular; but his passions were violent, and being little restrained in their indulgence, he degenerated into an impetuous, sanguinary, worthless tyrant.

His only son, Edward VI., succeeded in 1547, at the age of 9 years. Being educated in the care of divines strongly attached to Protestantism, the Reformation, in his reign, tended towards the extreme side; and had it been prolonged, it is probable that the Church of England would have approximated much more, both in doctrine and discipline, to that established at a later period by Calvin and his disciples, than it eventually did. He died, however, in 1553; and after an unsuccessful attempt to place Lady Jane Grey, heiress to the house of Suffolk, on the throne, the Princess Mary, eldest daughter of Henry VIII., and a bigoted Catholic, was proclaimed without opposition. She immediately restored the Roman Catholic religion, and her reign was distinguished by a fierce persecution of Protestants, of whom more than 200 suffered at the stake. She married Philip II., king of Spain, but happily died without issue, in 1558. During her reign, in 1547, Calais, the last possession of the English in France, was taken by the Duke of Guise.

On the death of Mary, her half sister, the Princess Elizabeth, daughter of Henry VIII. by the unfortunate Anne Boleyn, succeeded to the throne. Attached, originally, to the doctrines of Protestantism, this able princess was, nevertheless, disinclined towards the more violent reformers, who had possessed so much influence in the reign of her brother Edward; and, resuming the headship of the church, she succeeded in creating an establishment, dependent rather on the state for support than exercising a control over it. The Roman Catholics, on their part, did not find it necessary to secede from the national church until about 1570; from which period they formed a sect apart. The early part of Elizabeth's reign was prosperous, notwithstanding some discontent on the part of the lower classes. In fact, besides the heats occasioned by the religious changes, the government of that century had social difficulties of a serious nature to struggle with. The suppression of monasteries deprived a num-

ber of mendicants, and of the poorest classes, of their ordinary dependence. The decay of the feudal system rendered the great landlords less desirous than heretofore of multiplying their tenantry, and more anxious to enrich themselves; and from this, among other causes, inclosures multiplied, and much arable land was thrown into pasturage, producing complaints of poverty and depopulation. But by far the most important source of change, though at the time the least observed, was the extraordinary diminution of the value of money, occasioned by the discovery of the mines of America. This was followed by a rapid rise of prices; and though wages ultimately rose, their rise was comparatively slow, and much distress accompanied the transition. This great crisis produced numerous enactments for the relief of the poor, which ended in the well-known statute of the 43d of Elizabeth (1602).

The disputes between Elizabeth and the court of Rome grew daily more inveterate, and led to some of the most glorious, and one of the most melancholy, events in our history — the war with Spain and defeat of the Spanish armada in 1588, and the execution of Mary Queen of Scotland, next in succession to the throne. Being a Catholic, the cause of Mary, who having sought an asylum in England, had been imprisoned by Elizabeth, was embraced by most of the Roman Catholics of the country, and produced various unsuccessful plots and conspiracies; but this, though it explains, and in part palliates, never can justify the execution of Mary, which will always remain a dark blot on the character of Elizabeth and her advisers. During this reign, England was joined in alliance, first with the Protestants of France, afterwards, and more closely, with those of the Low Countries; and when Henry IV. ascended the throne of the former country, the combination against the power of Spain and Rome had been completely and successfully organised. Ireland was, also, reduced to a state of greater submission than at any previous period. The taste for naval enterprise was fully awakened, and the commerce and naval power of the country grew rapidly into importance. The last years of the long reign of this illustrious princess, were darkened by the intrigues of the court, the rebellion of her favourite Essex, and her unavailing sorrow for his death.

James VI. of Scotland, the son of the unfortunate Mary, being next in succession to the crown, ascended the English throne on the decease of Elizabeth, without opposition. His peaceful, but inglorious reign of 24 years, appears to have been a period of considerable national prosperity; and in it were laid the foundations of that colonial empire in the new world that subsequently attained to so vast a magnitude. But through this whole reign, the struggle was preparing between the rising power of parliament (which in the latter years of Elizabeth had already begun to assume some degree of independence) and that of the crown. The Puritans were the most zealous and steady supporters, at this period, of the authority of parliament. This sect, or rather class (for dissent was not yet recognised by law), originated in the reign of Elizabeth; being composed, in great measure, of the disciples of the more zealous divines of Edward VI.'s reign, and approximating in opinion to the Protestants of Holland and Switzerland. Episcopal government, and the ceremonies of the church, were particularly opposed by them. They continued to increase throughout the reign of James, especially in the larger towns; and in some parts, as the eastern counties, they also became numerous among the country population.

Charles I., who succeeded his father in March, 1625, ascended the throne under the complicated disadvantages of a union with a Roman Catholic princess; the dominion of an unpopular favourite, the Duke of Buckingham; and an exchequer much disordered by the prodigalities of his predecessor. To these adverse circumstances have to be added a want of sincerity and directness of purpose. But his great defect, and the grand source of the disasters he entailed on himself and the country, consisted in his arbitrary principles of government. He could not brook the growing power and influence of parliament; and was infatuated enough to suppose that a nation so rich, populous, and enlightened as England now was, and which had long possessed a representative assembly, would submit to be governed in the same way as in the reigns of Henry VIII. and Elizabeth. An ill-conducted war with France added to his difficulties. Three parliaments were summoned and dissolved during the first four years of his reign: after which he governed for 11 years (1630 to 1640) without a parliament. During this lengthened period, the discontent of the popular party was continually increasing; especially in consequence of the efforts of the higher clergy, under Archbishop Laud, to suppress the preaching of Puritan ministers, and the spread of their opinions. Devotion to the views of this party involved the king, in 1638, in a war with his Scotch subjects, on whom he had endeavoured to impose episcopacy. The difficulties that grew out of this quarrel compelled Charles, in 1640, to summon that parliament, afterwards so famous in English history by the name of the Long Parliament. The Presbyterians, having gained an ascendancy in this body, forced Charles to retract the unconstitutional acts of his former government; expelled the bishops from the House of Lords; and impeached and procured the execution of the Earl of Strafford, his ablest minister. At length the breach became irreconcilable, and both parties prepared for war. This eventful struggle commenced in 1642. It was waged for some time with doubtful advantage on either side, till Cromwell and Fairfax, leaders of the Independent party, obtained the command. With the assistance of the Scotch, they defeated the royal armies at Marston Moor (1644) and Naseby (1645). Charles soon afterwards fell into the hands of the army, and after a variety of intrigues and negotiations between that body, the parliament, and the king, he was condemned and executed by warrant of judges nominated by the parliament, on the 30th Jan. 1649. A republican government was next formed, styled the Commonwealth of England, which ended in the protectorate of Cromwell (1651). That able and successful usurper died in 1658; and a short period of turbulence and intrigues was closed by the restoration of Charles II., son of the executed monarch, in May, 1660.

The restoration was effected amidst the universal joy of the people; and the first movements of national feeling set strongly in favour of monarchy and the church. Several of the regicides were punished with death; and the ministers of the Presbyterian persuasion who refused to comply with the Act of Uniformity, were universally ejected from their benefices. The test and corporation acts, long considered as the bulwarks of the church, were also enacted in this reign. But after a few years had elapsed, it was evident that the sudden impulse of loy-

alty which had accompanied the restoration was not congenial with the habitual feelings of the country. Since the accession of Charles I. every thing had been changed: those fundamental notions of rights and duties, both on the part of the sovereign and the people, which now constitute what are termed the principles of the constitution, grew and ripened in this reign into a consistent code, which was ratified at the Revolution. The private life of the king, his vices, and, still more, his follies, and his mean and mercenary dependence on France, were among the causes of his unpopularity. Sanguinary wars with the Dutch served only to exercise the warlike and naval spirit of England, without producing any direct benefit or acquisition. It was about the year 1673, that the houses of Lords and Commons came, for the first time in English history, into a state of *permanent* collision and opposition; the first containing a majority attached to the court, the latter being governed by its opponents. In 1679, for the first time, we find the names of whig and tory used to designate the two great parties which then divided the kingdom, and which have ever since found sucessors in name, if not in spirit. The violent conduct of the commons, in the matter of the Popish plot, and their interference with the succession, by entertaining measures for the exclusion of the Duke of York, the king's brother, on account of his religion, produced at last a re-action in favour of the crown. Lord Russell and Algernon Sydney were the victims of this re-action, being executed for participation in an alleged plot; and the king, by proceeding against the corporation of the city of London for the alleged abuse of its franchise, brought all bodies similarly circumstanced throughout the kingdom to a state of submission. The charters were surrendered, and new ones granted on a more oligarchical model. Charles II. died during these temporary successes, in 1685.

He was succeeded by his brother, James II., an avowed Papist, and strongly attached to his religion, to which it was his continual endeavour to obtain proselytes. This circumstance, even more than his steps towards the assumption of absolute power, roused against him a spirit of almost universal discontent. An unsuccessful rebellion, headed by the Duke of Monmouth, a natural son of the late king (who perished on the scaffold), served for a while to strengthen his authority; but the extreme severity with which those who had engaged in it were punished, greatly increased his unpopularity. Having dissolved, in the first year of his reign, that parliament which had proved so favourable to the views of his predecessor, he obtained from the judges an acknowledgment of his right to dispense with acts of parliament, which, in effect, amounted to a recognition of arbitrary power. But happily the servile, time-serving opinions of the judges were heartily repudiated by the nation at large. His other proceedings were of a still more violent and despotical character, till at last he succeeded in disgusting and alienating his entire Protestant subjects. Some of the principal persons in the country retired to Holland, where they found a secure asylum from William, Prince of Orange, son-in-law of James. Had the latter succeeded in establishing arbitrary power in England, his subserviency to Louis XIV., then in the zenith of his power, would have been of the most serious consequence to Holland; and to avert this danger, and strengthen the Protestant party, William resolved on the invasion of England. No project was ever more completely successful. James, deserted by his subjects, and by the army on which he had mainly depended, fled to France. The Convention Parliament (so called from its assembling, of necessity, without the royal summons) declared that James had *abdicated* the crown, and raised our great deliverer, and his consort Mary, to the throne.

A solemn seal was set on the proceedings of the Revolution by the Bill of Rights (see *antè*, p. 776.), which recited and ratified the constitutional liberties of the country, and the Act of Settlement, which excluded James and the greater part of his family from the succession, and fixed it, eventually, in the Protestant line of Hanover. Such was the end of that fifty years struggle which commenced with the meeting of the Long Parliament in 1640. That the popular party advanced on some occasions unjustifiable pretensions, and that their conduct was sometimes subversive of the principles by which they pretended to be actuated, is most true. But after every allowance is made for their faults, follies, and errors, they are still entitled to the warmest gratitude and respect, not merely of Englishmen, but of the whole human race. They successfully vindicated the supremacy of the nation, and the sacred right of resistance to unconstitutional power. Their example has had a powerful influence in all civilised countries, and the form of polity that they established has been introduced into the United States, France, and various other important states. Its influence in England has been beneficial beyond all that could have been reasonably anticipated; and we are mainly indebted for by far the larger part of our superior comforts and wealth, and for the distinguished place we occupy among the nations of the earth, to the triumph of those free principles of government that were consolidated by the Revolution. From this period, English domestic history assumes a new aspect: the conflict of parties succeeds to that of principles. It is true that, for some time after the Revolution, speculative opinions respecting the royal prerogative continued to vary; and the adherence of a considerable body to the cause of the exiled family, although generally passive, placed the state in constant danger: but the fundamental doctrines of the inviolability of the sovereign, the responsibility of ministers, and the supremacy of parliament, were never afterwards practically contested. Force was abandoned; and government, maintained in ordinary times by influence, was controlled in crises of importance by public opinion.

In the reign of William III., England was involved, in a more serious manner than before, in the politics of the Continent, by becoming a party to the general coalition provoked by the ambition of Louis XIV.; and the feelings of the English people, excited by that prince's persecution of his Protestant subjects, coincided with the continental interests of the king, and made the war be vigorously prosecuted. Louis, on the other hand, gave support and countenance to the exiled family. The peace of Ryswick (1697) put a stop for a short period to these hostilities.

In order to provide for his military expenditure, William III. was forced to have recourse to the system of loans; and by so doing he engaged, to a great extent, the mercantile interest of the country in the support of the revolutionary establishment. That interest, though long powerful in England, may be said to have now come prominently forward, for the first time, as a distinct and powerful element in the state. Its increase during the 17th century, relatively to that of the

other classes, may be partly judged of by the fact, that London, which, in all probability, possessed about 250,000 inhabitants at the end of the reign of Elizabeth, had more than half a million in that of William; while there is reason to believe that the number of inhabitants of the whole country (almost five millions and a half in the latter reign) had undergone but a slight augmentation. The Bank of England was founded in 1694.

Hostilities recommenced shortly after the accession of Anne, the surviving daughter of James II., in 1702, and continued until 1713, with a vast accession of glory to the British arms, directed by the Duke of Marlborough. The peace of Utrecht, by which they were concluded, was brought about by the return of the tory party to power. England obtained by it little except some extension of territory in North America, and Minorca and Gibraltar in Europe. The union with Scotland (1706) was the great domestic event of the reign.

The accession of George I., Elector of Hanover, to the throne, according to the limitations contained in the Act of Settlement (1715), again threw power into the hands of the whigs, or party of the Revolution; and the suppression of a Scotch rebellion strengthened his authority. The Septennial Act, passed in the same year, extended the duration of parliament to seven years, at which term it has since remained fixed. Their power being confirmed by this enactment, the whigs maintained the ascendancy to the end of the reign; and the tranquillity of the country was undisturbed, except by the excitement produced by the famous South Sea scheme (1721), and the violent though temporary mercantile distress which followed. The peace of Western Europe was guaranteed by the alliance of the new line of English sovereigns with France; first under the regency, and afterwards under the peaceful administration of Cardinal Fleury: a short war between Spain and Great Britain, in 1727, alone interrupted it.

In that year George I. died, and his son, George II., ascended the throne. This event made no change in the politics of the government, the new king being equally with his father attached to Sir Robert Walpole, the most powerful minister the country has ever known, and also one of the ablest. For twelve years longer he continued to maintain peace; but public clamour, excited by his political enemies, drove him, in 1739, into hostilities with Spain. This war was wholly of a commercial character, and had its origin in the desire of the British merchants to participate in the trade with those vast American provinces, which the policy of Spain kept closed against foreign commercial enterprise. It proved the ruin of Walpole, who was driven from power, in 1742, by a combination of seceding whigs, tories, and Jacobites. About the same time the interests of the sovereign, as elector of Hanover, involved the nation in war with France as well as Spain. In 1745, Charles Edward, grandson of the expelled James II., landed in Scotland, and was immediately joined by the greater number of the Highland clans. At the outset he met with some extraordinary successes, and advanced at the head of a body of Highlanders as far south as Derby. But being joined by but few Englishmen, and having received no support from France, he was obliged to retreat to Scotland, where the battle of Culloden terminated his ill-starred enterprise, and the last civil war that has taken place in Great Britain. The measures that were adopted, in consequence of this outbreak, for abolishing clanship in the Highlands, and putting an end to hereditary jurisdictions in Scotland, were of great advantage to that part of the kingdom.

In 1748, this desultory war was closed by the peace of Aix la Chapelle. The combinations in which England had engaged on the Continent had been in general unsuccessful: nor were the terms of the peace particularly favourable to her interests. But she may be said to have attained in it, what she has never since lost, a decided maritime supremacy over all the other powers of Europe. She entered it as a competitor, and closed it as mistress of the sea. Thenceforward she has fought to preserve, rather than extend, her naval dominion.

At this period France was peculiarly anxious to recover her lost maritime power, in consequence of that desire for extended colonial conquest which then swayed her councils, and seems, indeed, to have been the most active principle of European politics towards the middle of last century. Disputes in the E. Indies, and in N. America, together with the continental quarrels of Prussia and Austria, brought about the great contest which commenced in 1756, commonly called the Seven Years' War. Fortunately for England, the management of her affairs soon afterwards fell into the hands of one of those extraordinary men whose influence over their age, from their power of inspiring and directing enthusiasm, is far greater than the highest talents, aided by the most powerful connections, but destitute of this peculiar faculty, have ever acquired. Under the guidance of Pitt (Lord Chatham), her arms triumphed in every quarter of the globe. George II. died in the middle of this war (1760), and was succeeded by George III. This prince, ill-educated, obstinate, and strongly imbued with anti-popular prejudices, withdrew his confidence from the ministry of his grandfather. Pitt, unable any longer to carry his measures, retired from the cabinet. A new ministry succeeded; and a glorious war was terminated by an inglorious peace, which, however, secured to England the possession of Canada, and some other inferior acquisitions.

The foreign dominions for which the seven years' war had been undertaken had now acquired an enormous extension, and were increasing rapidly in population and importance. Founded partly by commercial adventurers, partly by religious and political refugees, the colonies of England on the main-land of America, exclusive of Canada, part of Louisiana, and Nova Scotia, acquired from the French, were divided into 13 provinces or states, and had 2½ millions of inhabs. In the West Indies, England possessed Jamaica, then the most fertile and best cultivated of the W. Indian islands, and a number of smaller colonies. In Hindostan, Lord Clive had laid the foundation of our empire, by the acquisition of the important prov. of Bengal in 1757. Such was the extent of the realms, to the government of which George III. succeeded.

The internal history of England, during the reigns of George I. and II., evinces a gradual and steady increase of national prosperity, without rapid change. Little of the violent political and social emotions which had agitated the preceding age, and were again to agitate the next, was then felt by the community. The Jacobite party wore gradually out, and was, in fact, nearly extinct in England before the Scottish outbreak of 1745. The laws against dissenters, which still remained on the statute-book, were so modified by usage, that little political distinction remained in practice between them and members of the church. This period has been regarded by some

writers, though probably on no sufficient grounds, as being, on the whole, the most favourable on record as respects the economical condition of the lower classes. Its beneficial influence, in this respect, was probably owing in part to the extraordinary circumstance of a long and steady continuance of productive years: — in 50 years, from 1715 to 1765, only five deficient harvests are said to have occurred; and the price of wheat was generally little more than half what it had been in the middle of the 17th century. The population of the country increased only at a moderate rate, or from 5,300,000 in 1720, to 6,400,000 in 1760; and the labouring classes consequently reaped the full benefit of this prosperity in the shape of high wages. The poor-laws, as managed at that time, certainly contributed to prevent a more rapid augmentation. Moral and orderly habits, on the whole, characterised the period: the violence of earlier times had disappeared; and the peculiar vices attending on great wealth and manufacturing industry had scarcely, as yet, begun to prevail.

A novel order of things began with the accession of George III. New moral and social impulses, arising at the same time with an extraordinary spread of wealth and industry, materially altered, in a few years, the character of the community. The disputes respecting the expulsion of the demagogue Wilkes from parliament, though unimportant in themselves, were the precursors of great events: they, for the first time (at least since the commonwealth), brought into action a democratic party in the state, hostile to the old aristocratic legislature. This party spread most widely and rapidly in the trans-Atlantic dominions of Great Britain. Exasperated by attempts, on the part of the mother country, to impose on them a system of taxation, and incited by the sympathy of a considerable party in England, the thirteen provinces of N. America revolted in 1776, and openly proclaimed their independence. Notwithstanding a gallant resistance, they would probably have been subdued, had not France, Spain, and Holland, espoused their quarrel. England was again involved in war with the chief continental nations, and maintained, even against that formidable combination, her maritime supremacy. But she was forced to relinquish her dominion over her revolted colonies, which the peace of 1783 raised to the dignity of an independent federal republic. In India, the arms of Great Britain continued to make a sure and gradual progress.

The close of the American war was followed by ministerial changes of unusual importance. A coalition was formed between Lord North, the unpopular minister, who had conducted the war, and Charles James Fox, who had been its most violent opponent, which embraced most of those great family interests that had, for a series of years, predominated in parliament. The king disliked, however, the coalition ministry; and an attempt to invade his prerogative, by a bill which threatened to transfer the government of India, in some measure, to parliament, afforded a pretext for its dismissal. William Pitt, younger son of the Earl of Chatham, was then called to the direction of affairs, at the early age of 24. He had to contend at the outset with a hostile majority in the H. of C., but the country, in which the coalition was exceedingly unpopular, was decidedly in his favour; and this and the declared support of the court enabled him to dissolve parliament, and to secure a great majority in the new H. of C. Pitt now became the most powerful minister who had swayed the cabinet since Walpole. He called to his assistance new interests, and a new school of politicians; the members of the old oligarchy either came gradually into his views, or continued in permanent opposition. The country continued in the enjoyment of peace, and in a state of great prosperity, during the first 10 years of his administration. But, in 1793, it was involved in war with France, then in the crisis of a tremendous revolution.

Between 1750 and 1770, the great system of canals, which now intersects the whole of England, was commenced, and carried a considerable way towards completion. In 1767, the first great step was made in the manufacture of cotton by the invention of Hargreave's spinning jenny. Watt's first patent for improvements in the steam-engine was taken out in 1769; which is also the date of Arkwright's patent. These great steps in practical industry, taking place about the same time, may be regarded at once as causes and effects of the sudden spread of commercial activity. At the accession of George III., the exports of England amounted to about 15,000,000*l.*; at the breaking out of the revolutionary war, to 25,000,000*l.* During the same period, the national debt had more than doubled, chiefly in consequence of the heavy expense of the American war.

The events of the three and twenty years, between the commencement of the revolutionary war and its final conclusion in 1815, are far too varied and manifold to be more than alluded to in this brief summary. It was divided into two periods by the peace of Amiens (1800 to 1803). In the first of these, the British navy obtained the undisputed sovereignty of the seas; and most of the remaining colonies of France and Holland fell into our hands. But our military operations on the Continent, and the combinations which we formed, in conjunction with the great European powers, in opposition to the French, were almost uniformly unfortunate. Pitt, suffering from the ill success of his measures, and determined not to make overtures to France, retired from office: his place was supplied by a ministry which was broken up by the renewal of hostilities, in 1803, and he returned once more to power. The last great act of his first ministry was the union with Ireland; a measure long contemplated, but hastened by the unfortunate insurrection that broke out in that country in 1798. The union abolished the separate legislature of Ireland; and introduced 100 new members for Ireland into the Imperial H. of C., and the representative peers of Ireland into the H. of Lords.

The renewed war was but little successful at the outset, except that the fleets of Spain and France were totally destroyed by Nelson, at Trafalgar. Pitt died in 1806, after the last of the great continental confederacies had been dissolved by the battle of Austerlitz. But, shortly afterwards, affairs took a favourable turn. Napoleon, whose ambition was as boundless as his genius was transcendent, having prevailed on the Bourbon princes of Spain to abdicate the crown, resolved to place his brother Joseph on the Spanish throne. But in doing this, he provoked a resistance that could hardly have been anticipated. Though the abdicated princes were the merest imbeciles, and their government a tissue of abuses, the Spaniards took arms in defence of their rights, and of the independence of the nation thus wantonly violated. The English fanned the flame that had thus been excited; and threw supplies of money and ammunition and powerful armies into Spain. At

first these had but little success; but no sooner had their command been entrusted to the Duke (then General Wellesley) of Wellington, than the whole aspect of affairs was changed. Possessing in an almost unprecedented degree all those qualities that go to form a consummate commander, the duke successively baffled and defeated all the French generals that were opposed to him; and finally expelled the French from the Peninsula.

Meanwhile the colossal power of Napoleon, which had so long triumphed over every combination formed for its overthrow, was irretrievably broken by the frosts and snows of Russia. The invasion of France by the allies in 1814, was followed by Napoleon's abdication; and his short reign after his return from Elba was terminated by the battle of Waterloo, which raised the glory of the English arms and of the English general to the highest pinnacle.

The treaty of Vienna restored, in as far as the altered circumstances of the world would permit, Europe to its state previously to the breaking out of the French Revolution. Except the important advantage of being secured against the danger of attack by a too formidable neighbour, England gained little by the war. She restored Java, and most of the foreign colonial possessions that had fallen into her hands during its progress, retaining only Malta, the protectorate of the Ionian Islands, the Cape of Good Hope, Demerara, Trinidad, and some other places in the West Indies. In India, the conquest of Mysore in 1799, and successful wars with the Maharattas, left her mistress of the whole peninsula of Hindostan, either in direct sovereignty, or as protector of the native princes.

The sacrifices made by the British nation during this protracted struggle were on the most gigantic scale. During its latter years the public revenue amounted to nearly 60,000,000*l.* a year, and nearly 500,000 men were employed in the national service by sea and land: and in addition to the sums raised by taxation, above 600,000,000*l.* were added to the national debt during the course of the contest. Still, however, the whole period, from 1803 to 1815, was one of great and rapidly increasing national prosperity. But the truth is, as we have elsewhere endeavoured to show, that this prosperity is in part to be ascribed to that very increase of our burdens which the war occasioned: and the rest is to be mainly accounted for by the influence of that wonderful career of discovery and improvement in machinery and manufactures, which, having begun previously to the war, continued to gain new strength throughout the whole contest.

The reign of George III., the longest in our annals, ended in 1820. For several years before his death, he had laboured under mental alienation, the royal authority being exercised by his son, with the title of prince regent. During the 10 years of the reign of George IV., perhaps the most selfish and sensual of our monarchs, the peace of Europe, in as far as Great Britain was concerned, was interrupted only by the short hostilities of 1827 against the Turks, in behalf of the insurgent Greeks. At home, the country was agitated by the unsuccessful effort made by the king to procure a divorce from his wife, Caroline of Brunswick, and by a continued struggle between the two great whig and tory parties, taking the terms in their widest acceptation. But the progress of the country — the vast increase of manufactures and commerce, and consequently of the town population, since the commencement of the French war, in 1793,— had greatly strengthened the whig, or popular party. Civil disabilities of all kinds were loudly objected to; the abuses incident to the nomination, or, as it was called, rotten borough system, were denounced; and a demand for a remodelling of the elective system and of the H. of C. was raised, which, being supported by the great bulk of the town pop., and being, also, in itself just and reasonable, could not be long resisted. In 1828, the Test Act, which, though obsolete in fact, still imposed nominal disabilities on Protestant dissenters, was repealed; and in 1829, the barriers which had so long excluded Rom. Catholics from the legislature were removed. These changes, by increasing the popular influence, paved the way for that great change in the constitution of the H. of C. which will long distinguish the reign of William IV. An outline of the Reform Act, and an estimate of the alterations which it introduced into the character of the legislature, are given under the head "Constitution." The emancipation of slaves throughout the British dominions, and the introduction of the new system for the administration of the Poor-laws, are the only other measures of importance in this reign, which terminated on the 20th of June, 1837; when the Princess Victoria, daughter of the Duke of Kent, and grand-daughter of George III., succeeded to the crown.

TABLE, showing the Commencement, Length, and Termination of the Reigns of the various Kings and Queens of England, since the Conquest, with the Date of their respective Birth, and their Ages.

Kings and Queens.	Born.	Reigns began.	Reigned. Y.	M.	D.	Reigns ended.	Age.
Norman Monarchs.							
Will. Conq.	1027	1066 Dec. 25.	20	8	15	1087 Sept. 9.	60
Will. Rufus	1057	1087 Sept. 26.	12	10	7	1100 Aug. 2.	43
Henry I. -	1068	1100 Aug. 5.	35	3	27	1135 Dec. 1.	67
Stephen -	1105	1135 Dec. 26.	18	10	0	1154 Oct. 25.	49
House of Plantagenet.							
Henry II. -	1133	1154 Dec. 19.	34	6	18	1189 July 6.	56
Richard I. -	1156	1189 Sept. 3.	9	7	3	1199 April 6.	43
John - -	1165	1199 May 27.	17	4	23	1216 Oct. 19.	60
Henry III. -	1207	1216 Oct. 28.	56	0	19	1272 Nov. 16.	65
Edward I. -	1239	1272 Nov. 20.	37	7	17	1307 July 7.	67
Edward II.	1284	1307 July 8.	19	6	12	1327 Jan. 20.	43
Edward III.	1312	1327 Jan. 25.	50	4	27	1377 June 21.	65
Richard II.	1367	1377 June 22.	22	3	7	1399 Sept. 29.	33
House of Lancaster.							
Henry IV. -	1367	1399 Sept. 30.	13	5	20	1413 Mar. 20.	46
Henry V. -	1389	1413 Mar. 21.	9	5	10	1422 Aug. 31.	33
Henry VI. -	1421	1422 Sept. 1.	38	6	3	1461 Mar. 4.	49
House of York.							
Edward IV.	1442	1461 Mar. 4.	22	1	5	1483 April 9.	41
Edward V. -	1471	1483 April 9.	0	2	16	1483 June 25.	12
Richard III.	1443	1483 June 26.	2	1	26	1485 Aug. 22.	42
Houses of Lancaster and York united.							
Henry VII.	1456	1485 Aug. 22.	23	7	30	1509 April 21.	52
Henry VIII.	1492	1509 April 22.	37	9	6	1547 Jan. 28.	55
Edward VI.	1537	1547 Jan. 28.	6	5	9	1553 July 6.	15
Q. Mary -	1516	1553 July 6.	5	4	11	1558 Nov. 17.	42
Q. Elizabeth	1533	1558 Nov. 17.	44	4	7	1603 Mar. 24.	69
House of Stuart.							
James I. -	1566	1603 Mar. 24.	22	0	3	1625 Mar. 27.	[illegible]
Charles I. -	1600	1625 Mar. 27.	23	10	3	1649 Jan. 30.	[illegible]
Commonwealth.							
		1649 Jan. 30.	11	3	29	1660 May 29.	
House of Stuart restored.							
Charles II.	1630	1649 Jan. 30.	36	0	7	1685 Feb. 6.	[illegible]
James II. -	1633	1685 Feb. 6.	3	10	5	1688 Dec. 11.	[illegible]
Houses of Orange and Stuart.							
William III.	1650 }	1689 Feb. 13.	13	0	20	1702 Mar. 8. {	[illegible]
Mary II. -	1662 }						[illegible]
Q. Anne -	1665	1702 Mar. 8.	12	4	24	1714 Aug. 1.	[illegible]
House of Hanover.							
George I. -	1660	1714 Aug. 1.	12	10	10	1727 June 11.	[illegible]
George II. -	1683	1727 June 11.	33	4	14	1760 Oct. 25.	[illegible]
George III.	1738	1760 Oct. 25.	59	3	4	1820 Jan. 29.	[illegible]
George IV. -	1762	1820 Jan. 29.	10	4	28	1830 June 26.	[illegible]
William IV.	1765	1830 June 26.	6	11	25	1837 June 20.	[illegible]
Victoria -	1819	1837 June 20.					

ENKHUYSEN, or ENKHUIZEN, a sea-port town of Holland, prov. N. Holland, cap. cant., on a small peninsula in the Zuyder-Zee, 27 m. N. E. Amsterdam. Pop. 7,000. It is fortified on the land side, and has a harbour formerly much frequented by trading vessels, but which is now nearly useless, from having been filled up with sand. The town contains several churches, a fine town-hall, and a large cannon foundry; and, by means of a canal, it still commands a considerable trade, particularly in salt fish. During the 16th and 17th centuries, the herring fisheries employed many of the inhabitants, whose number at that time amounted to 12,000. Enkhuysen was founded in 1200; in 1514 it was all but destroyed by an inundation. (*Gautier*, *&c.*)

ENNIS, an inland town and parl. bor. of Ireland, co. Clare, of which it is the cap.; prov. Munster, on the Fergus, which is here crossed by three bridges, 20 m. N.W. Limerick. Pop. in 1821, 6,701; in 1831, 7,711; but the new parl. bor., which includes an area of 484 acres, had in 1841 a pop. of 9,318. Catholics are to Protestants in the proportion of about 5 to 1. It is meanly and irregularly built, and most part of the houses in the suburbs are mere cabins. In fact, of 1,390 houses in the bor. no fewer than 826 are thatched: the streets are only partially paved and lighted. The public buildings are the parish church, an extensive R. Cath. chapel, used as the cathedral for the diocese of Killaloe, 2 convents, meeting-houses for Independents and Methodists, a school on the foundation of Erasmus Smith, a Catholic college, a national school, the county court-house, gaol, infirmary, fever hospital, a house of industry, and a barrack. The union workhouse, opened in 1841, has accommodation for 1,200 inmates. The constabulary and the revenue police have stations here. Races are held annually in the neighbourhood. Under the charter of James I. of 1612, the corporation consisted of a provost and 12 free burgesses. This body returned 2 mems. for the bor. to the Irish H. of C. down to the Union; and it subsequently returned 1 mem. to the Imp. H. of C. till the Reform Act, when the limits of the bor. were enlarged, as already stated, and the 10*l.* freeholders admitted to the franchise. The corporation has now become extinct, and its functions are exercised by commissioners. Bor. revenue in 1847, 336*l.* Registered electors in 1849-50, 118. The assizes for the co. are held here: as are general sessions in Jan., April, and Oct., petty sessions on Fridays, and a manor court in the suburb of Clonroad occasionally for pleas to the amount of 10*l.* The co. prison, built on the radiating plan, contains 73 cells, and 12 other prison rooms. There are no manufactures, but there is a distillery near the town, and a considerable trade in agricultural produce, most part of which is conveyed down the river by lighters to Clare, 2 m. distant, where the river becomes navigable, and is thence shipped for England and other parts. The value of the exports in 1836 amounted to 16,617*l.* Markets are held on Tuesdays and Saturdays, and fairs on 9th April, 9th May, 1st Aug., 3d Sept., 14th Oct., and 3d Dec. Post-office revenue in 1848, 867*l.* Branches of the Provincial and National banks were opened in 1834-35-36. There is one newspaper in Ennis, — "The Clare Journal," — published twice a week. (*Boundary Report*; *Railway Rep.*; *Thom's Almanac*.)

ENNISCORTHY, a thriving inland town of Ireland, co. Wexford, prov. Leinster, on the Slaney, 13 m. N.N.W. Wexford. Pop., in 1821, 3,557; in 1831, 5,955. It is romantically situated on the declivities of steep hills on each side the river, that is here crossed by a bridge; it is navigable by large barges, to facilitate the loading and unloading of which extensive quays have been constructed. It is well built. The public buildings are the parish church, R. Cath. chapel, convent, meeting-houses for Quakers and Methodists, a large school, almshouses, a fever hospital and dispensary, a market-house, and a court-house: the ancient castle is still standing. The corporation, under a charter of James I., in 1611, consists of a portreeve, 12 burgesses, and a commonalty: it sent 2 mems. to the Irish H. of C. till the Union, when it was disfranchised. General sessions are held at Easter and Michaelmas, and petty sessions on Thursdays. The town is a constabulary station. There is here an earthenware manufactory, tan-yards, breweries, a rope-walk, flour-mills, and a distillery. Duty was paid in 1836 on 73,896 bushels of malt, and 14,777 gallons of whisky. A brisk trade is kept up with Wexford by the river. Markets on Thursdays and Saturdays; fairs on 20th Jan., 21st Feb., 21st March, 25th April, 10th May, 7 June, 5th July, 26th Aug., 19th Sept., 10th Oct., 15th Nov., and 21st Dec. Post-office revenue in 1830, 839*l.*; in 1836 1,096*l.* Branches of the Agricultural and National banks were opened in 1835.

Enniscorthy owes its origin to the castle, still in good preservation, built here by Raymond le Gros, who married a sister of Strongbow. In 1649 it was taken by Cromwell. On the 28th of May 1798, it fell, after a sanguinary conflict, into the hands of the rebels. The latter afterwards established their head-quarters on Vinegar Hill, which commands the town. Here they were attacked, and driven from their position with great loss by the royal forces under Lord Lake on the 21st of June, 1798. (*Stat. Surv.*; *Railway Rep.*; *Plowden's Ireland*, ii. 456—479, 8vo. ed.)

ENNISKILLEN, an inland town and parl. bor. of Ireland, co. Fermanagh, of which it is the cap., prov. Ulster, beautifully situated on an island in the river or strait connecting the two principal divisions of Lough Erne, 85 m. N. N. W. Dublin. Pop. in 1831, 6,116; but the limits of the parl. bor., as fixed by the Boundary Act, extend beyond the island, embracing in all an area of 129 acres, and a pop., in 1841, of 5,686. It has suburbs on its E. and W. sides, on the mainland, with which it communicates by 2 handsome bridges: it consists principally of a main street, and is pretty well built. "It has increased much of late years, and is still enlarging rapidly, and improving. There is an excellent market, and corn in considerable quantities is sold here. House-rent is exceedingly high, much more so even than in Dublin, particularly in the lower class of houses in the main street; some of which, that in ordinary situations in other towns, would not bring more than 4*l.* or 5*l.*, are here let at from 11*l.* to 12*l.*, or guineas, a year." (*Boundary Report.*) Under a charter of James I., in 1613, the corporation consisted of a provost, 14 burgesses, and a commonalty; but it is now extinct, and the town property is vested in commissioners. The bor. sent 2 mems. to the Irish H. of C., and since the Union has sent 1 mem. to the Imperial H. of C. Registered electors in 1849-50, 269. A bor. court is held on Thursday for the recovery of small sums. The co. assizes are held here, as are the general and petty sessions. The public buildings are the parish church, a R. Cath. chapel, meeting-houses for Presbyterians and Methodists, an infirmary, with a dispensary, a linen-hall, barracks, and the co. court-house and prison. The prison, on the radiating plan, has 36 single cells, and 10 other rooms for prisoners. The union workhouse, opened in 1845, has accommodation for 1270 inmates. Leather is manufactured to a small extent, and there are 2 distilleries and a brewery. The trade consists in timber, coal, and slate, brought by water from Beleek, having been previously carried there from Ballyshannon by land. Markets are held on Tuesdays and Thursdays, fairs on the 10th of every month, except March, May, and August. Post-office revenue, in 1848, 1,032*l.* A branch of the provincial bank was opened in 1831, and a branch of the Ulster bank in 1836. A savings' bank opened in 1825 had, on the 20th of Nov. 1848, 40,027*l.* of deposits. Two newspapers are published in the town.

Mr. Inglis speaks in the most favourable terms of the beauty of the country round Enniskillen, and of the town itself. "I found it one of the most respectable towns I had seen in Ireland; and its population by far the most respectable-looking that I had anywhere yet seen. It abounds in respectable shops; and I never saw shops better filled than they were on the market-day. I understand that many of the tradespeople are wealthy, and that the retail trade is brisk and profitable. The town stands almost wholly on the estate of Lord Enniskillen." (*Inglis's Ireland*, ii. 152.) The corporation revenue, derived principally from tolls, amounts to about 600*l.* a year.

From its position, the possession of Enniskillen has always been of importance in Irish contests. It distinguished itself during the war of 1689, by its attachment to the liberal side, and by its resisting and defeating a superior force sent to reduce it by James II. Part of the brave defenders of Enniskillen were subsequently formed into a regiment of cavalry, which still retains the name of the Enniskillen dragoons. (*Boundary Report*; *Thom's Almanac*, *&c.*)

ENNS, or ENS, a town of Upper Austria, circ. Traun, on the Enns, near its junction with the Danube, 10 m. S. E. Linz. Pop. 3,418. The town, which is placed upon a steep hill, is well built, and contains a lofty tower erected by the Emperor Maximilian. The expense of building the old walls of Enns was defrayed by a part of the ransom of Richard I. of England. Enns possesses some linen, steel, and hardware manufactories, and breweries. It is supposed to stand upon or near the site of the an. *Lauriacum*, where a persecution of the Christians took place under Galerius in 304. Many Roman antiquities have been found in its vicinity.

ENOS (an. *Ænos*), a marit. town of Turkey in Europe, sanjiac of Gallipoli, at the extremity of a long, low, narrow tongue of land forming the S. boundary of the Gulf of Enos, 36 m. N. W. Gallipoli, lat. 40° 41′ 58″ N., long. 25° 58′ 44″ E. Pop. 7,000.? Being situated near the mouth of the Maritza, it is, in fact, the sea-port of Adrianople, and is very advantageously situated for commerce; but "owing to the blind and stupid indifference of the Turks, a sand-bank, which increases every year, has been allowed to form at the entrance to the port. The consequence is, that the town stands in pools and swamps of water, which not only produce

pestilential fevers that extend to Adrianople, but are the greatest impediments to trade. Formerly, large vessels used to enter the port; but now even the small craft from Smyrna are obliged to unload outside the bank." (*Keppel's Journey across the Balkhans*, i. 253.) The Maritza is navigable up to Adrianople in winter and spring for vessels of considerable burden, but in summer the sea craft only ascend as far as Demotica. (*See* ADRIANOPLE.)

ENTRE DOURO E MINHO, a prov. of Portugal, which see.

EPERIES, a fortified town of Upper Hungary, co. Saros, of which it is the cap., on the Tarcza, an affluent of the Theiss, and near the Carpathians, 140 m. N.E. Pesth; lat. 48° 58′ 45″ N., long. 21° 15′ 49″ E. Pop., with its suburbs, 7,656. It is one of the best built towns in this part of Hungary, and contains 4 Catholic churches, a Lutheran church, chapter-house, synagogue, co. and town halls; a Catholic gymnasium and high school, Lutheran college, episcopal library, and a place of resort for the religious termed "Calvary." It is the residence of a bishop of the United Greek church, and the seat of the board of government for Hungary on this side the Theiss. Its inhab. manufacture linen fabrics, for which this town is noted, woollen and hempen cloths, earthenware, and beer; and have a considerable trade in wine, corn, and cattle. Eperies is surrounded with gardens, and a great deal of flax is raised in its vicinity. The town is ill supplied with water for drinking; near it are some warm chalybeate springs used as baths; and at no great distance is the royal salt mine of Soovár. (*Oester. Nat. Encycl.*; *Berghaus.*)

EPERNAY (an. *Aquæ Perennes*), a town of France, dép. Marne, cap. arrond., near the Marne, which is here crossed by a handsome stone bridge of 7 arches, 20 m. W.N.W. Chalons. Pop. (1836) 5,444. It was formerly a place of some strength; but its walls and ditch are now fallen into a state of decay. Though irregular, it is neat and well built. In one of its open spaces is a handsome new church, of the Doric order. Epernay has a theatre, a communal college, and a public library, containing 10,000 vols.; and is the seat of a sub-prefecture and of tribunals of primary jurisdiction and commerce. But the grand distinction of Epernay consists in its being the principal *entrepôt* for the wines of Champagne, the best of which are produced in its immediate vicinity. Its celebrated wine vaults are excavated in the chalk rock on which the town is built. They are admirably fitted for the stowage and improvement of the wine, are of vast extent, and as solid as if they were supported by arches. The wines are classed *par treilles*, that is, *par crus*, or growths. Few travellers pass through Epernay without visiting these vaults. This, however, is not always free from danger, especially with newly bottled wine, in the months of June and August, when the vine is in blossom, and when the grape begins to ripen. At such periods the bottles frequently explode with great violence; and fatal accidents have in consequence happened to workmen and visiters, who have neglected to use the precaution of covering themselves with iron masks provided for the purpose.

Epernay has sustained several sieges, especially that in which it was taken by Henry IV. in 1592. Previously to that period it had been burnt by Francis I., to prevent its falling into the hands of Charles V. (*Hugo*, art. *Marne*; *Dict. Géograph.*, *&c.*; *Official Tables*, 1837.)

EPHESUS, an ancient and now ruined city of Asia Minor, called by Pliny the light of Asia—*lumen Asiæ* (*Hist. Nat.* lib. v. § 29.), and famous alike in sacred and profane history, on the S. side of the Cayster, near its embouchure on the W. coast of Ionia, and near the modern village of Aisaluck, 38 m. S.S.E. Smyrna. The epoch of its foundation is very remote, being ascribed by some to the Amazons; but it subsequently received a colony of Ionian Greeks under Androclus, the son of Codrus; and thenceforth occupied a distinguished place among the twelve confederated Ionian cities of Asia Minor. From the remotest period, Ephesus was celebrated for a temple of Diana, hence called the Ephesian goddess, in its immediate vicinity; and on being besieged by Crœsus, the inhab. made an offering of their city to Diana, uniting it to her temple by a rope 7 stadia (7-8ths m.) in length. (*Herod.* lib. i. § 26.) Subsequently to this period the original city was gradually abandoned, and a new one grew up round the temple; but its situation was again changed, especially by the interference of Lysimachus, who is said to have compelled a portion of the inhab. to resort to a new town he had built on higher ground. Ephesus, Miletus, and the other Ionian cities, were early distinguished by their commerce, and became among the greatest emporiums of the ancient world. The wealth they had thus accumulated enabled the Ionians to erect at their joint expense (*factum a totâ Asiâ*, Plin. lib. xxxvi. § 21.) a noble temple in honour of Diana, in which was placed her image in ivory, said to have been sent down from heaven by Jupiter, but which was really the work of an artist named Canitia. (*Plin.* lib. xix. § 4.) This sacred edifice, accounted one of the finest structures of its time, escaped that destruction in which all the other Greek temples of Asia Minor were involved through the impotent fury of Xerxes, after his expulsion from Greece. But it soon after fell a sacrifice to the insane rage for notoriety of an obscure individual of the name of Herostratus, who, to perpetuate his memory, set fire to the temple! (*Val. Max.* lib. viii. § 14.)* This event is said to have occurred on the night in which Alexander the Great was born. (*Cicero de Nat. Deorum*, lib. ii. § 27.) At a subsequent period, Alexander offered to rebuild the temple, provided he were allowed to inscribe his name on the front; but this was declined by the Ephesians, who, principally at their own cost, but partly, also, by the voluntary contributions of others, raised a new temple to the goddess far transcending its predecessor, and such as entitled it to be ranked among the seven wonders of the world. To lessen the risk of injury from earthquakes, it was built on the margin of a marsh, its foundations costing an immense expense. It was 425 ft. in length, 220 do. in breadth, and adorned by 127 columns of the Ionic order, each 60 ft. in height. (*Plin. Hist. Nat.* lib. xxxvi. § 14.) The altar was the work of Praxiteles; the famous sculptor Scopas also contributed to the embellishment of the fane, which, among other *chefs-d'œuvre* of art, could boast of a noble picture of Alexander the Great, by Apelles, a native of the city. An extensive sanctuary was attached to the temple; but this privilege was annulled by Tiberius, on account of the abuses to which it led.

The worship of Diana was intrusted to the care of a number of priests (*Estiatores and Essenes*), and a select band of virgin priestesses; and to prevent the chance of any breach of that chastity so dear to the goddess, the former were emasculated. (*Strabo*, lib. xiv. p. 641.) A great festival in honour of Diana was annually celebrated at Ephesus, under the presidency of *Asiarchs*, or deputies sent by the different Ionian cities, which was resorted to not only by crowds of visiters from all parts of Ionia, but also from all parts of Greece and Magna Grecia, or S. Italy. Games were then celebrated with extraordinary magnificence; and the city was crowded with the votaries of pleasure and traffic, as well as of religion.

Owing to the gradual filling up of the harbour by the deposits brought down by the river, the commerce of the city was laid under considerable difficulties; but every one knows that, though it had undergone many vicissitudes, it had lost nothing of its ancient fame and celebrity when it was visited by St. Paul. Although, however, the cry then was, "Great is Diana of the Ephesians!" (Acts, xix. 28. 34.) her worship was doomed speedily to decline. St. Paul resided here for 3 years; and founded a church that became, as it were, the metropolis of Asia. (Acts, xx. 31.) Among his other enormities, Nero is said to have despoiled the temple of Diana of several of its sacred offerings, and of a large amount of treasure. But it recovered, in some degree, from this attack; and continued to attract some portion of its ancient veneration, till it was finally burned by the Goths in the reign of Gallienus. Besides Apelles, his great rival Parrhasius, Heraclitus the philosopher, Hipponax the poet, Artemidorus the geographer, &c. were natives of Ephesus; but its inhab. were distinguished more by their voluptuousness, refinement, and traffic, than by their taste for learning or philosophy. They are also said to have been addicted to sorcery, and such like arts. What were called the *Ephesian letters*, appear to have been magical symbols inscribed on the crown, girdle, and feet of the statue of Diana, in the great temple; and it was believed that whoever pronounced them, had forthwith all that he desired! (*Gibbon*, cap. 10.; *Dictionnaire de Trevoux*, art. *Ephèse*.)

The walls, which may be still traced, embrace, according to Pococke, a circuit of about 4 m. Besides its temple, Ephesus had many noble buildings, among which may still be traced the ruins of a circus, a theatre, gymnasium, &c.; but the ravages of earthquakes and other convulsions of nature, have completed the ruin of this once famous city; and her ancient magnificence is indicated by the extent, rather than the preservation of, her remains. The ancient aqueduct, of which a portion still exists, is ascribed to the Greek emperors. Her "candlestick has been removed out of his place." (Rev. ii. 5.) In 1764, when Ephesus was visited by Dr. Chandler, "its population consisted of a few Greek peasants, living in extreme wretchedness, dependence, and insensibility; the representatives of an illustrious people, and inhabiting the wreck of their greatness; some the substructure of the glorious edifices which they raised; some beneath the vaults of the stadium, once the crowded scene of their diversions; and some in the

* The Grand Council of Ionia endeavoured to disappoint the incendiary, by passing a decree that his name should not be mentioned. (*Aul. Gell. Noct. Attic.* lib. ii. sec. 6.) But it was divulged by the historian Theopompus. (*Val. Max. ubi supra.*)

abrupt precipice, in the sepulchres which received their ashes. * * * Such are the present citizens of Ephesus, and such is the condition to which that renowned city has been gradually reduced. It was a ruinous place when the Emperor Justinian filled Constantinople with its statues, and raised the church of St. Sophia on its columns. Since then it has been almost quite exhausted. Its streets are obscured, and overgrown. A herd of goats was driven to it for shelter from the sun at noon; and a noisy flight of crows from the quarries seemed to insult its silence. We heard the partridge call in the area of the theatre and of the stadium. The glorious pomp of its heathen worship is no longer remembered; and Christianity, which was there nursed by apostles, and fostered by general councils, until it increased to fulness of stature, barely lingers on in an existence hardly visible." (*Tour in Asia Minor*, p. 150. 4to ed.; see also the *Antiquities of Ionia by the Dilettante Society*, where plates and measurements are given of the principal extant ruins; *Tournefort*, ii. 513—523.; *Ancient Universal History*, vii. 416. 8vo. ed.; *Cramer's Asia Minor*, i. 363, &c.)

EPINAL, a town of France, dép. Vosges, of which it is the cap., on both banks of the Moselle, 36 m. S.S.E. Nancy, 65 m. N.N.E. Besançon, and 293 m. E.S.E. Paris; lat. 48° 10′ 53″ N., long. 6° 27′ 12″ E. Pop. (1836) 8,742. It was formerly fortified with ramparts, and defended by a castle; but of these, only the ruins of the latter now remain. It is tolerably well built, and though ill paved, is clean: it has quays and fine promenades along the river. The principal public buildings are the barracks, hotel of the prefecture, 2 hospitals, the church, theatre, public library with 17,000 vols., and a museum of paintings and antiquities. Epinal is the seat of a tribunal of primary jurisdiction, a chamber of manufactures, and a communal college. It has a society of emulation, schools of linear design and music, and a gratuitous course of midwifery; manufactures of embroidery and lace, linens, stockings, pottery, paper, and oil; and some trade in corn, cattle, iron, deals, and other timber. It is said to have been founded in the 10th century; in 1466, it came into the possession of John, Duke of Lorraine, who granted it many privileges; in 1670 it was taken by the French. (*Hugo*, art. *Vosges*; *Dict. Géog.*, &c.)

EREKLI. *See* HERACLEA.

ERFURTH, a fortified town in a nearly isolated portion of the Prussian dominion, prov. Saxony, formerly a free imperial city, and now the cap. of a reg. and circ. of same name, on the Gera, a tributary of the Unstrutt, about midway between Gotha and Weimar; lat. 50° 58′ 45″ N., long. 11° 2′ 26″ E. Pop. (1838) 24,308. Berghaus says that it is "tolerably well built, and has broad streets, and large squares;" whereas the *Encyc. des Gens du Monde* says, that it is very irregularly laid out, and has no street or square worthy of notice, except the market-place, with a small obelisk, erected in honour of one of the last electors of Mayence, and the *Gradenplatz*, leading to the cathedral. This building, originally a fine Gothic structure, has been seriously injured by the hostile attacks to which the town has been exposed; but considerable sums have recently been expended on its repair: in its tower is a bell 10¼ in. thick, 10 ft. high, about 32 ft. in circumference, and weighing 275 cwt. There are 14 other churches: an Ursuline convent, to which a girl's school is attached: the Augustine convent, in which Luther passed several years of his life, is now converted into an orphan asylum; but the apartment of the Reformer is preserved as nearly as possible in its original condition, and contains his Bible, portrait, and other relics. The town has another orphan asylum, with institutions for the blind; the deaf and dumb; a school for poor children, and a house of correction. Its university, founded in 1392, and suppressed in 1816, has been replaced by gymnasiums for Catholics and Protestants: it has, besides, a teachers' seminary, an academy of sciences, with a library; and a botanic garden with a library of 40,000 vols., which formerly belonged to the university. There are also schools for drawing, mathematics, architecture, commerce, and midwifery; several scientific and literary associations, and cabinets of natural history, medals, other objects of the arts, &c. The Pharmacenic Institute was abolished in 1828. Erfurth is a fortress of the second class, and important from its position on the high road between Frankfort and Leipzic. In addition to its outer ramparts and ditches, it is defended by the fort of Petersberg, built on a hill in its interior, and that of Cyriaksberg without its walls, on a height about 800 ft. in elevation. It has a garrison of 4,000 men. In the time of Charlemagne, Erfurth was one of the chief commercial cities of Germany, and so late as the end of the 16th century, it is said to have had as many as 58,000 inhab. The business of shoemaking is extensively carried on, and it has manufactures of woollen and cotton cloths, silk ribands and other fabrics, vermicelli, pearl-barley, liqueurs, vinegar, and leather; some breweries, &c. It is the seat of a local government for its reg. and circle, a board of taxation council and tribunal for the town and circle, but not of a judicial court for its distr. or reg. It first formed part of the Prussian dom. in 1803; from 1807 to 1813 it was occupied by the French, and in 1808 a memorable interview took place in it between Napoleon and Alexander, Emperor of Russia. It was restored to Prussia in 1814. (*Berghaus, Allg. Länder, &c.; Murray's Hand Book.*)

ERIE (LAKE), one of the five great lakes of N. America, between Canada and the U. States, included in the middle portion of the basin of the St. Lawrence. It lies between lat. 41° 22′ and 42° 52′ N., and long. 79° and 85° W., having N. the fertile peninsula of Upper Canada, and S. and E. the states of Ohio, Pennsylvania, and New York. Its shape is elliptical; length S.W. to N.E. about 265 m.; breadth varying from 10 m. to about 63 m. in its centre. Its area is estimated in the *American Cyclopædia* at 12,000, but by Darby at only 8,030 sq. m. It receives near its W. extremity the superabundant waters of the lakes St. Clair, Huron, and the upper lakes by the Detroit river, its own surplus waters being conveyed to Lake Ontario by means of the Niagara, celebrated for its stupendous waterfall. Its mean height above the level of the ocean is estimated at 565 ft., being about 52 ft. below that of Lakes Michigan and Huron, and 322 ft. above that of Ontario. Its depth, which is less than that of any of the other great lakes of the St. Lawrence Basin, is no where more than 270 ft., and in most parts is considerably under 200 ft. It is also said to be gradually becoming shallower; and in proof of this it is stated in a late Buffalo journal, that Long Point had in 3 years gained 3 m. on the water, and that the land is also rapidly gaining along its S. shore. Its bottom appears to be composed of an alluvial deposit of sand and mud, resting on secondary schistose sandstone. (*Darby*.) Its N. shore is rocky and dangerous; the opposite one has also long lines of rock; and, except at either extremity, none of its shore-harbours affords a safe and steady entrance of 7 ft. water (*Darby*.) In addition to other impediments to navigation, a current, not perceptible in the other great lakes of the St. Lawrence system, sets constantly W., and N.W. or S.W. winds continually prevail; besides which, in consequence of its shallowness, a part of Lake Erie is frozen over every winter, and traffic on it is obstructed by ice for some weeks in the spring after the navigation of the other lakes is open and unimpeded. Towards the W. extremity, there are several groups of small islands, and one—Cunningham Island, belonging to the U. States—has an excellent harbour called Put-in-Bay, with 12 ft. water. On the N. shore, several promontories stretch into the lake, the principal of which are the N. and S. Forelands, and Point Land guard. Except the Detroit, Lake Erie receives few rivers of any consequence, and all, without exception, have bars at their mouths. The Ouse or Welland, which unites with its E. extremity, is its principal affluent, and has been taken advantage of for the construction of the Welland canal, of which it forms a part, connecting the Lakes Erie and Ontario, and avoiding the Falls of Niagara. (*See* CANADA.) The Erie canal, 363 m. in length, runs from the town of Buffalo to the Hudson river; the Ohio canal, 334 m. in length, extends from Cleveland at the mouth of the Cuyahoga to the Scioto, a little S. of Columbus. The former of these canals places Lake Erie in communication with the Atlantic; the latter connects it with the Gulph of Florida. (For further particulars respecting these important canals, *see* CLEVELAND, UNITED STATES, NEW YORK, and OHIO.) Buffalo, Dunkirk, Ashtabula, Erie, Cleveland, Sandusky, Portland, and Detroit are the principal towns on Lake Erie, within the territories of the U. States, and Port Talbot, Dover, and Sherbrooke in those belonging to Great Britain. We subjoin an extract from a number of the *Buffalo Commercial Advertiser*, for 1838, which sets the extraordinary increase of navigation on this lake in the most striking point of view:—

"There are now building at different ports on Lake Erie, 17 steam-boats, averaging each 350 tons. These boats will all be ready for business at the opening of navigation or soon after. According to a table which we published a short time since, the registered tonnage on this lake was 24,045. To this add the increase from new steam-boats, 5,950, and we shall have a total tonnage next season of 29,995 tons. The number of new sloops, schooners, and other sailing vessels which will be ready by the opening of navigation, we have no means of ascertaining. We have perhaps underrated the number of steam-boats. On referring to the files of the *Buffalo Gazette* for 1818, we find that the whole tonnage of Lake Erie, including American and Canadian, was only 980 tons. The great increase that has taken place within a few years, while the whole country bordering the lakes is yet in its infancy, is very gratifying, and affords the surest guarantee of future prosperity and greatness." (*Stevenson's Civil Engineering of N. America*, pp. 50—

52.; *Darby's View of the U. States*, pp. 206—216. 448.; *Encycl. Americana*.)

ERIVAN, or IRWAN, a town of Asiatic Russia, being the cap. of Russian Armenia, on the Zengûi, an affluent of the Araxes, 34 m. N.N.E. Mount Ararat, and 106 m. S. by W. Teflis. Pop. (1834) 11,284, mostly Armenians. It contains about 2,000 houses, interspersed with numerous gardens, and ruins of various dates, the whole fortified, and protected by a citadel placed on a steep rock, more than 600 ft. in height, overhanging the river. This fortress, which is about 2,000 yds. in circuit, is encompassed by a double rampart of earth flanked with towers; it contains the ancient palace of the khans, now the residence of the governor; a fine mosque, a cannon foundry, barracks, &c. The houses in the town are mostly mean, and irregularly built. Erivan has, however, a large and handsome *caravanserai*, with 760 shops, besides 4 Armenian churches, one Russo-Greek ditto; an Armenian convent, 3 mosques, some aqueducts of a curious construction, and a good stone bridge of several arches, across the river. An old tower, described by Chardin, has since been pulled down, and its materials used for building. The town has some manufactures of cotton stuffs, leather, and earthenware. It is a station for caravans from Teflis, Erzeroum, &c., and has a considerable trade with Russia and Turkey. The epoch of the foundation of Erivan is unknown. It was taken by the Persians from the Turks in 1635. The latter retook it in 1724; but it was again taken by the Persians, under Nadir Shah, in 1748. The Russians were repulsed in an attempt to take it in 1808; but they succeeded in 1827, and were confirmed in its possession by the treaty with Persia of the following year. (*Kinneir's Pers. Emp.*, &c.; *Encyc. des Gens du Monde*.)

ERLANGEN, a town of Bavaria, circ. Central Franconia, on the Regnitz, 23 m. S. Bamberg. Pop. 8,800. It is walled and divided into the old and new towns: the latter, which is one of the best-built towns of Germany, was founded by Christian Ernest, Margrave of Bayreuth, in 1686; it contains the celebrated Protestant university, the only one in the kingdom, established 1743, and usually attended by about 280 students. This institution occupies the ancient palace of the Margraves of Bayreuth, and has connected with it schools of theology, moral philosophy, midwifery, medicine, and the fine arts, a polytechnic school, a gymnasium, general and lying-in hospitals, cabinets of natural history, &c., a botanic garden, and a library of 100,000 vols. The palace gardens are very handsomely laid out, and adorned with statues. Woollen goods, stockings, hats, leather and leathern articles, gloves, &c. are made in the town; which has also a large plate-glass manufactory, and a brewery, besides some trade in cattle. Most of the pop. are Protestants. Many French refugees settled in Erlangen after the revocation of the edict of Nantes, and in 1666 the first learned society in Germany was established in it. (*Berghaus, Allg. Lander*, &c. iv. 145.; *Murray's Handbook for S. German*.)

ERLAU (Hung. *Eger*, Slav. *Jager*), a fortified town of Hungary, co. Heves, of which it is the cap., on both sides the Erlau, an affluent of the Theiss, 65 m. N.E. Pesth. Pop. 18,247, most of whom are Catholics. It has 2 suburbs; is entered by 6 gates; and contains a cathedral and 6 other churches, an archbishop's palace, lyceum, with a library and observatory, an archiepiscopal seminary, gymnasium, Catholic high school, conventual hospital, asylum for infirm clergymen, and various other public institutions, a co. hall, &c. The neighbourhood of Erlau is very fertile and highly cultivated; it produces from 180,000 to 200,000 *eimers* of fine red wines annually, and the best tobacco in Hungary. The culture of these articles, together with manufactures of woollen and linen fabrics, leather and leathern goods, combs, &c., employ most of the inhab., and supply the principal kinds of merchandise found in the markets of Erlau. (*Oesterr. Nat. Encyc.*; *Berghaus*, &c.)

ERNE (LOUGH), a celebrated lake of Ireland, co. Fermanagh, which it divides into two nearly equal portions. It consists of two principal lakes, the Upper and Lower, connected by a broad winding channel. It contains in all an area of about 40,000 acres; and stretches N.W. and S.E. 30 or 35 m. The lower lake is the largest; and both it and the upper lake are full of islands, some of them large and thickly inhabited, many of them well wooded, and the whole so disposed and accompanied by such a diversity of coast, as to form a vast number of rich and interesting prospects. Enniskillen stands on an island in the channel between the upper and lower lakes; and on another island is the magnificent seat of the Marquis of Ely. The lake is elevated about 140 ft. above the level of the sea. It receives the Erne and several other rivers; and discharges itself at its N.W. extremity by a rapid current of about 9 m., which, after falling over many ledges of obstructing rocks, precipitates itself down a grand cataract into the sea at Ballyshannon. It has been proposed to open a navigable channel from the sea to the lake by means of a canal, which would certainly be of material service. (*Stat. Account of Brit. Empire*, i. 337. 2d edit.)

ERZEROUM or ERZ-RUM (Arab. *Arzen-el-Roum*), an important city of Turkish Armenia, cap. of an extensive pachalic of the same name, and residence of a seraskier-pacha; in a plain at the foot of the Tcheldir mountains, near the sources of the N. arm of the Euphrates, from 6,000 to 7,000 ft. above the level of the sea, 134 m. S.E. Trebizond, 144 m. N.E. by E. Diarbekr, and 156 m. W.N.W. M. Ararat; lat. 39° 59′ 30″ N.; lon. 41° 46′ 15″ E. Its pop. has been variously estimated at different periods; but previously to the ravages of the plague some years ago, it perhaps amounted to near 100,000, and at the time of the Russian invasion in 1829 it is supposed to have been about 70,000 or 80,000. But having been abandoned by most Armenian families, previously to its being again delivered up to the Turks, it had not, in 1835, according to Mr. Brant, above 15,000 inhab. (*Geog. Journal*, vi. 201.) Probably, however, this estimate was below the mark, and the pop. has since increased.

"Only the citadel, which occupies a low eminence within the city, is now fortified. A trench and two walls once surrounded it; but the inner wall only is now entire. It is solidly built of stone, and does not suffer in comparison with Turkish fortresses in general. Besides the bazaars, the principal mosques, and many private dwelling-houses, it formerly enclosed the palace of the pacha; but that extensive building was demolished by the Russians." (*Missionary Researches in Armenia*, pp. 63, 64.) According to Mr. Kinneir (*Asia Minor*, p. 356.) the citadel is 3 or 4 m. in circ. Capt. Wilbraham entered it by a strong and massive gateway, flanked by two mutilated though still beautiful minarets. Most of the Turkish inhab. reside within the citadel. The streets of the city, which may be regarded as a suburb attached to the citadel, are narrow, crooked, filthy, and infested with troops of hungry dogs. The houses are mostly constructed of mud, wood, or sun-dried bricks, being, in general, only one story high. A green sward has grown over the terraces of dirt, by which, instead of roofs, they are all covered, and gives them, when viewed from an eminence above, almost as much the aspect of a meadow as of a city. The environs are singularly destitute of trees, the dried fæces of the cattle being the *only fuel*. Water is good and abundant, but wine, according to Tournefort, is execrable. (*Lettres du Levant*, ii. 259. 4th ed.) Erzeroum has 2 Armenian churches, a Greek church, and about 40 mosques, the largest of which will accommodate 3,000 people. It has an extensive custom-house, and 36 *khans* or inns, many of which are large and solidly constructed. Its bazaars are poor and small, though its markets appear to be well supplied with provisions; and a great many oxen are killed weekly. The city is well situated for trade, on the high road between Asia Minor, Georgia, and N. Persia; and it was once the thoroughfare for most part of the over-land commerce between Europe and the East, which survived the discovery of the passage round the Cape of Good Hope. Recently its commerce has been diminished from a variety of causes; but mainly from the emigration of its Christian inhab., who were its mechanics and tradesmen, to the adjacent possessions of Russia. The manufacture of copper utensils, which once formed the principal branch of industry, is now almost abandoned; but it still continues to have some trade in furs, galls, &c. The amount of goods that passes through Erzeroum, *in transitu*, is very considerable; and Capt. Wilbraham, who visited the city in 1837, says that it had materially increased since the establishment of steam-boats on the Black Sea. From the E., the shawls of Cashmere and Persia, silk, cotton, tobacco, rice, indigo, madder, rhubarb, and a variety of drugs, are brought to Erzeroum; and from the W., broad-cloths, chintzes, shawls, and cutlery. Little, however, is seen of any of these goods, except at the custom-house and in the khans: so much is this the case, that, according to Tournefort, a person might die for want of a few grains of rhubarb at the very moment that there are bales of it in the town. (*Ubi supra*, p. 261.) The limited extent and meanness of the bazaars evince the small importance of the retail trade.

This city is a principal halting-station for caravans of pilgrims from Tehran and elsewhere, to Mecca. Of its 80,000 inhab. previously to 1829, it was estimated that 23,000 were Armenians, and the rest principally Turks, with about 250 Greeks. The city had no Jewish inhab. Of the Armenians, about 4,000 belonged to the Rom. Cath., and 19,000 to the Armenian church. The diocese of the Armenian bishop includes the whole pachalic of Erzeroum, which since the late war has been much extended, and now comprises the former pachalic of Kars. There was in 1829 an Armenian grammar school in the city, with 6 or 7 teachers, and from 500 to 600 scholars, besides a seminary for the instruction of the Armenian clergy; and a comparatively large proportion of the pop. were then reported to possess the rudiments of education.

Owing to the elevation of the place, the winters are long and severe. In the neighbourhood, however, cattle, sheep, horses, &c., of superior kinds, are reared in great numbers; and in the adjacent plain, corn of a very excellent quality is grown, which forms one of the principal articles of export.

Erzeroum was founded about 415, by a Byzantine general of Theodosius II., after whom it was named *Theodosiopolis*. It derives its present name from the an. *Arze* or *Ardzen*, a populous city which stood not far to the E., but which having been destroyed by the Seljúkians, the surviving inhab. transferred their residence and the commerce and name of their city to the present site. (*Missionary Researches in Armenia*, 68.) This was anciently the strongest of the Armenian possessions of the Lower Empire; and it is at present considered the bulwark of those belonging to Turkey.

ESCURIAL, or ESCORIAL, a celebrated palace, convent, church, and mausoleum of the sovereigns of Spain, Old Castile, prov. Segovia, 25 m. N.W. Madrid. Its name, according to Casiri, is of Arabic origin, signifying a place *full of rocks*; though others derive it from a Spanish word implying the *scoriæ*, or scum of melted metal, some iron mines having been formerly wrought in the locality. Its situation certainly bears out the former etymology. It has a most gloomy site, surrounded by the bare crags of the Sierra Guaderrama. The view from it, though extensive, is not pleasing; and the facility of procuring stone for its construction would seem to have been the only inducement to the choice of its site. It was commenced in 1563 by Philip II., and finished in 22 years, under the superintendence of two architects. It is one of the largest and most magnificent edifices in Europe, though far from being externally the most elegant. It is dedicated to St. Lawrence; "and as this saint is said to have been broiled alive on a gridiron, in the 3d century, the founder chose to have the building on the plan of that culinary instrument, the bars of which form several courts, while the handle contains the royal apartments." (*Twiss*, p. 99.) The handle is about 460 Spanish ft. in length; the principal front of the main portion of the building is 657 ft. (740 *Span.*) broad; the sides 494 ft. (580 *Span.*) in depth; and the general height of the edifice is about 60 ft.; a square tower, about 200 ft. in height, flanking each angle. It is wholly built of a grey stone, called Berroqueña, resembling a kind of granite, though not so hard. The Doric order prevails in its architecture. The most striking part of the Escurial is the church in its centre. It is built with a cupola and two towers, after the manner of St. Peter's at Rome: its dome is 330 ft. high. Mr. Inglis, who visited it in 1830, observes that its interior exceeded in richness and magnificence any thing that he had previously imagined. "It is quite impossible," he says, "to enter into minute descriptions of all that composes this magnificence: the riches of Spain, and her ancient colonies, are exhausted in the materials; marbles, porphyries, jaspers, of infinite variety, and of the most extraordinary beauty, —gold, silver, and precious stones; and the splendid effect of the whole is not lessened on a nearer inspection; there is no deception, no glitter,—all is real. The whole of the altar-piece in the *Capilla Moyor*, upwards of 90 ft. high and 50 broad, is one mass of jasper, porphyry, marble, and bronze, gilded; the 18 pillars that adorn it, each 18 ft. high, are of deep red and green jasper, and the intervals are of porphyry and marble of the most exquisite polish, and the greatest variety of colour." (*Inglis*, i. 265.) The celebrated crucifix of Benvenuto Cellini, formerly in the possession of the Medici family, is, or was, in this church. The ceiling is covered with the admirable frescos of L. Giordano, comprising a consecutive history of the Christian religion and other subjects, and which are considered to be excelled only by the works of M. Angelo. The sacristy, for its decorations, equals in beauty any part of the Escurial; and contains some of the choicest works of the most illustrious painters. Of the 42 pictures that adorn the sacristy, it may be said, what can rarely be said of any collection, that "there is not one that is not a *chef-d'œuvre*." There are three of Raphael, including the celebrated *La Perla*, and the *Madonna della Pesce*, 2 of Leonardo da Vinci, 6 of Titian, and many of Tintoretto, Guido, Paul Veronese, &c. The reliquary of the convent, contains, of course, an abundance of relics. The library of printed books contains about 24,000 vols., many of which are very scarce. The manuscript library, more valuable than the former, comprises about 4000 MSS., in Arabic, Latin, Greek, Hebrew, &c., including several of the 9th and 10th centuries. This library suffered greatly from a fire in 1661. The royal mausoleum beneath the church is a most magnificent sepulchre. It is of a circular form; the walls of jasper and black marble; and in rows, one over another, are ranged the coffins of the sovereigns of Spain. Here are the urns of 8 kings and 8 queens, on opposite sides of the mausoleum; the former including the emperor Charles V. and his son Philip II.: numerous other royal personages are buried in a chapel in the Escurial, called the Pantheon of the Infantas. The palace adjoining the monastery would any where else be considered a splendid edifice, but here it is comparatively little worthy of notice, from its inferiority to the rest of the Escurial. The total expense of raising this immense pile of building is said to have amounted to 6,000,000 piastres. The French carried away a great quantity of gold, silver, gems, and other valuables from the Escurial; but, on the whole, they treated the edifice with greater forbearance than might have been anticipated. When Mr. Inglis visited it in 1830 there were about 100 resident monks of St. Jerome living, not as ascetics, but in a state of luxurious indulgence. The revenues of the monastery formerly amounted to 12,000*l.* a year. A straggling village of 2000 inhab., called Escurial, or San Lorenzo, adjoins this wonder of Spain. (For an elaborate and excellent account of the curiosities of the Escurial, see *Twiss's Travels in Spain*, 98—138.; *Inglis's Spain in* 1830, 262—281.; *Miñano; Swinburne; Townsend*, ii. 119—122, &c.)

ESKI-SAGRA (an. *Beræa?*), a town of Turkey in Europe, prov. Roumelia, on a tributary of the Tundja, near the S. foot of the Balkhans, on the high road from Constantinople, and Adrianople, to Widin, 68 m. N.W. Adrianople, and 76 m. S.E. Shumla. Pop. 20,000.? It is finely situated on the declivity of some well cultivated hills; but is very indifferently built, with narrow dirty streets: it is surrounded by a rampart of earth, has eight mosques, with manufactures of carpets and coarse cloth, leather, &c. There are numerous orchards in its vicinity, and, at a short distance, are some well-frequented warm mineral baths. (*Dict. Géog.*; *Mitchell's Journey from Moscow to Constantinople*, 142.)

ESNEH (the *Latopolis* of the Greeks), a town of the Thebaid or Upper Egypt, on the W. bank of the Nile; 28 m. S. Thebes: lat. 25° 17′ 38″ N., long. 32° 29′ 56″ E. The valley of the Nile is here about 4 m. in width; it is, however, too much elevated to be covered by the inundation; and the canals by which it had been irrigated having been allowed to fill up, it had become in a great degree barren. But Mehemet Ali has succeeded in reopening these canals, so that the ancient fertility of the district has been in part recovered, and it has become the seat of extensive cotton plantations. The town, seated on a mound of *débris*, 30 ft. in height, is the principal commercial place in Upper Egypt. It is the entrepôt for the Sennaar caravan; while the Ababdie camel breeders of the desert bring their camels, and the Berbers from Nubia their commodities, to sell in its markets. It has also some manufactures, particularly of *malayeh* or cotton shawls, much worn in the country, and pottery. It is the seat of a Coptic bishop, and numbers among its inhab. from 300 to 400 Christian families, who have two churches, and a third further up the country. There is a Coptic monastery to the S. of the town. (*Ritter's Africa*, iii. § 26.; *Jowett's Christian Researches*.)

In the centre of the town is a famous temple, built of sandstone, and of colossal magnitude. Having been made a magazine for the warehousing of the cotton of the surrounding district, it has fortunately escaped the destruction that has lately overwhelmed some of the finest Egyptian monuments. The walls of this temple are covered (*crêpi*) with the mud of the Nile; and it is so encumbered with mud walls, sand, filth, and cotton, that it is difficult to form a correct idea of its form and vast size. It has a zodiac somewhat resembling that at Denderah; and from the mode of interpreting the figures on it, this temple was long supposed to be the most ancient in Egypt; but so far from this being the case, it is, according to Champollion, *le plus moderne de ceux qui existent encore en Egypte; car les bas-reliefs qui le décorent, et les hiéroglyphes surtout, sont d'un style tellement grossier et tourmenté, qu'on y aperçoit, au premier coup d'œil, le point extrême de la décadence de l'art.* (*Lettres*, 199.) This conclusion is established by the hieroglyphic inscriptions, which show that the oldest part of the temple, a small portion of the pronaos or portico, was built by Ptolemy Epiphanes; but that the portico was principally constructed by the Emperor Claudius; and that the other parts of the structure belong to a still later æra, or to that of various Roman emperors, from Claudius to Septimius Severus and Geta. It appears, however, notwithstanding the comparative lateness of the temple, that Esneh had been a place of much importance under the Pharaohs, fragments of edifices having been discovered bearing hieroglyphical inscriptions that refer to their æra. Champollion supposes that these ancient edifices had been destroyed during the Persian invasion.

Immediately opposite to Esneh, on the opposite side of the river, at what was called *Contra Lato*, was a small temple; but this interesting relict no longer exists. It was demolished about a fortnight before Champollion visited the place, and its stones carried off to repair the quay at Esneh. Truly, whatever Mehemet Ali may be in other respects, he is a very Turk in so far as respects his treatment of monuments. (*Lettres*, 107.)

ESSECK, or ESSEGG, (Slav. *Oszick*; an. *Mursia*, or *Mursa*), one of the most strongly fortified towns in the Austrian empire, the cap. of Slavonia, and seat of the government of that prov., on the Drave, 13 m. from its confluence with the Danube, 63 m. W.N.W. Peterwardein, and 134 m. S. by W. Buda; lat. 45° 34′ 13″ N., long. 18° 42′ 5″ E. Pop., including its suburbs, 11,077, principally of German descent. The modern fortress was erected upon the site of a previous one, by the Emperor Leopold I., between 1712 and 1719; it is not extensive, but is well constructed, contains an arsenal and barracks capable of accommodating 30,000 men, and is strengthened by a *tête de pont* on the opposite side of the river: the houses and other buildings within it are generally lofty and massive. It is surrounded by a broad glacis, and communicates on the N.W., by a long avenue, with the *Ober-Varos*, or upper town; on its E. side is the *Unter-Varos*, or lower town, on the site of the an. *Mursia*, and on the W. the *Meierhöfe*, or new town, in which suburb most of the trade is conducted. Esseck has a fine military parade, and contains five Catholic churches, a united Greek church, four chapels, a town council house, county hall, engineers' college (*Ingenieurshaus*), military school, Catholic gymnasium, high and other schools, and various other public establishments. In the arsenal, numerous banners and other trophies taken at different times from the Turks, are exhibited. The Drave, and the swampy country on the side opposite the town, are crossed by a long wooden bridge. It has manufactures of silk stuffs and twist; but the chief commercial importance of Esseck is derived from its large and well-frequented fairs for corn, horses, cattle, hides, &c., held four times a year.

Mursia was founded by Hadrian, anno 125, and became the Roman cap. of Lower Pannonia; it was erected into a bishopric by Constantine. (*Oesterr. Nat. Encycl.*; *Berghaus, Allg. Länder, &c.* iv. 935.)

ESSEN, a town of Rhenish Prussia, distr. Dusseldorf, circ. Duisburg, on the Berne, 18 m. N.E. Dusseldorf, and 42 m. S.E. Cleves. Pop. 5,784. It is walled, and has 2 Catholic and 2 Lutheran churches, a Capuchin convent, a gymnasium, hospital, workhouse, and orphan asylum. It is the seat of a municipal court of justice, and the mining board for the towns of Essen and Werden; as it was formerly of the diets of the Rhenish princes, and other distinguished assemblies. The inhab. of this industrious and thriving town are employed in a great many different manufactures, including those of woollen and linen goods, leather, vitriol, arms, cast-iron and steel articles, gas apparatus, and steam-engines, as well as in dyeing woollen-stuffs, and coal mines in the vicinity. (*Berghaus, Allg. Länder, &c.* iv. 676.; *Von Zedlitz der Preuss. Staat.*)

ESSEQUIBO. *See* GUIANA.

ESSEX, a marit. co. of England, having E. and S. the German Ocean and the Thames, N. the cos. of Suffolk and Cambridge, and W. Herts and Middlesex. Area, 981,120 acres, of which about 900,000 are arable, meadow, and pasture. Surface generally flat, but in parts undulating. Soil mostly loam, and extremely fertile; but in the N.W. part of the co. there is some chalk land; the low grounds along the Thames and the sea are in parts marshy and very rich. In parts of the coast the land is indented by arms of the sea, forming a series of islets and peninsulas: some salt marshes along the shore are protected from inundation by embankments. The low grounds are subject to fever and ague, but otherwise the co. is sufficiently healthy. Tillage husbandry in an advanced state. Wheat and barley are the principal corn crops; the ground is in most parts unsuitable for turnips, and fallowing is very extensively practised: beans, however, are frequently substituted for fallows on the heavy loams; and this practice is gaining ground. Potatoes are extensively cultivated. The quality of Essex wheat is very superior. The suckling of calves for the London markets, and the grazing and dairy business, are both carried on to a considerable extent. The district of Epping is celebrated for its butter, which is probably superior to that of any other part of England. The total stock of sheep is estimated at between 500,000 and 550,000 head, and the annual produce of wool at between 8,000 and 9,000 packs. Estates of all sizes, from 5*l.* to 20,000*l.* a year. Many small and moderate sized farms occupied by their owners. Some of the hired farms in this co. are amongst the largest of any devoted to tillage in the empire. Leases when granted are usually for 7 and 14 years; but they are not so common now as formerly. Average rent of land, in 1810, 18*s.* 5½*d.* an acre. Minerals, with the exception of the lime and chalk quarries at Purfleet, unimportant. Manufactures, principally of baize and other woollen stuffs, were formerly carried on at Colchester, Coggeshall, and other places, but they have now nearly disappeared. Principal rivers, Roding, Crouch, Chelmer, Blackwater, Colne, which intersect the co., exclusive of the Thames, Lea, and Stour, which bound it on the S.W. and N. Oysters are raised in large quantities in the Essex rivers, especially the Crouch and Blackwater. Principal towns, Colchester, Chelmsford, Maldon, and Harwich. Essex contains 14 hunds., 5 half hund., a royal liberty, and 406 parishes. It sends 10 mems. to the H. of C., viz. 4 for the co., and 2 each for the bors. of Colchester, Harwich, and Maldon. Registered electors for the co., in 1838-39, 11,466, being 5,919 for the N. and 5,547 for the S. division. In 1831 Essex had 57,152 inhab. houses, 63,819 families, and 317,507 inhab., of whom 159,015 were males, and 158,492 females. Sum paid to the relief of the poor, in 1838-39, 161,019*l.* Annual value of real property, in 1815, 1,584,108*l.* Profits of trade and professions in do. 603,935*l.*

ESSLING, a village of Lower Austria, on the left bank of the Danube, about 7 m. below Vienna, opposite the island of Lobau. This and the contiguous village of Aspern were the scene of a tremendous engagement of two days' duration (21st and 22d May, 1809), between the grand French army under Napoleon, and the Austrians, under the Archduke Charles. (*See* ASPERN.)

ESSLINGEN, a town of Wirtemburg, circle Neckar, cap. of a distr., on the Neckar, in a fertile plain, 6 m. E.S.E. Stuttgard. Pop. 6,500. It is walled, and is ill built; it has 5 suburbs, and 5 churches, one of which, a Gothic edifice built in 1440, has a tower 230 ft. high; a handsome town-hall, a court of justice, a richly endowed hospital, with a high school, teachers' seminary, &c. The Neckar here divides into 2 arms, and is crossed by 2 bridges; on the island which it incloses, one of the suburbs is placed. An old castle above the town commands a fine view of the surrounding country. There are manufactures of woollen cloth and other stuffs, cotton and woollen yarn, lacquered tin ware, and glue; there are also some breweries, and a factory for bleaching. Vineyards, orchards, and kitchen gardens are numerous in the vicinity. Esslingen is a very ancient town, and previously to 1803 ranked as one of the free cities of the German empire. (*Berghaus, Allg. Länder*, iv. 266.)

ESTAMPES, a town of France, dép. Seine-et-Oise, cap. arrond., in a fertile valley, on the banks of two small rivers, 23 m. S. Versailles. Pop. (1836) 7,899. It is well built, and consists, together with its suburbs, of one street, extending for 2 m. along the road between Paris and Orleans. It has 4 par. churches, an hospital, a theatre, and a tower, the only remains of an ancient castle. It is the seat of a sub-prefecture, a tribunal of primary jurisdiction, and a communal college; has straw-hat, soap, leather, and woollen manufactures, many flour mills, and a large trade in corn. In middle-age Latin this town was called *Stampæ*: anno 604, Thierry II. defeated his uncle Clotaire near it in a sanguinary battle. (*Hugo*, art. *Seine-et-Oise*.)

ESTE (an. *Ateste*), a town of Austrian Italy, deleg. Padua, cap. of a distr. at the foot of the Euganean Hills, on the Restara canal, 15 m. S.W. Padua, and 42 m. S.E. by Verona. Pop. 6,300. (*Berghaus.*) It is well built, has a fine market-place, several handsome edifices, numerous churches, an hospital, and a large barrack; with manufactures of silk-twist, hats, &c.; but it is chiefly known from its having given its name to the illustrious family of Este, allied with the Guelphs, different branches of which, now fill the thrones of Great Britain, Brunswick, and Modena. (*Encycl. des Gens du Monde.*)

ESTELLA, a city of Spain, prov. Navarre, 25 m. S.W. Pampeluna, on the Ega, a little below its confluence with the Amescua. Pop. 6,000. It is situated in a pleasant valley, surrounded by hills clothed with vines and olives, and producing wheat, barley, oats, maize, and other grain, with hemp, flax, &c. Streets ill-paved and dirty. It has 8 churches, 7 convents, and an hospital. In former times it had a castle that was deemed impregnable, and was the head quarters of the military force of the k. of Navarre. There were formerly 4 bridges over the river; but one of them was swept away in 1801. In its centre is a handsome promenade, planted with elms, limes, and poplars. It has manufactures of woollen cloths and cassimeres, with oil presses and brandy distilleries. A fair is held here from the 11th to the 30th of November. At a short distance from the town is the university of Larche, which has the same privileges as those of Salamanca and Valladolid. (*Miñano*, iv. 92.; v. 58.; xi. 272.)

ESTEPA (an. *Astapa*), a town of Spain, prov. Seville, cap. of a dep., on a hill surrounded by plains, planted with olive trees, 16 m. W. Osuna, and 50 m. W. city of Seville. Pop. 10,270. It is regularly built, and the houses are in tolerable condition. It has 2 churches, 3 convents, an hospital, a public granary, and a palace of the marquises of the same name. *Astapa* was a place of importance in the time of the Romans, and was burnt by its inhab. when besieged by Scipio's generals.

ESTEPONA, a sea-port town of Spain, prov. Granada, on the Mediterranean, 24 m. N.E. Gibraltar. Pop. 9,000. It is tolerably well built; has a church, an hospital, a public granary, and a castle. The chief support of the place is its coasting trade; it exports raisins, figs, sweet potatoes, oranges, lemons, and wine; for which it receives wheat and other grain. In this way it employs

100 vessels. (*Miñano.*) It has also a productive fishery of Sardines.

ESTERHAZY (Hung. *Esterhaz*), a village of Lower Hungary, co. Oedenburg, near the S. E. extremity of the Neusiedl lake, 14 m. S. E. Oedenburg, and 38 m. S. by W. Presburg. It is celebrated for a magnificent, but now unoccupied, palace, belonging to Prince Esterhazy, built in 1700, in the florid Italian style. It comprises 162 different apartments, and is surrounded by a gallery adorned with numerous vases, statues, &c. "Its marble halls, brilliant with gold and painting, are still fresh as when first built. The chamber of Maria Theresa is unchanged since the great queen reposed there; the whole interior is in such a state that it might be rendered habitable to-morrow." It formerly contained fine collections of paintings, engravings, Chinese porcelain, a library, &c.; but most of these have been removed. It has attached to it an observatory, riding school, stabling for 100, and an opera-house, in which the incident occurred which opened to the musical composer Haydn his subsequent career of celebrity. The palace is surrounded by a noble park, and has an orangery, numerous fountains, fish-ponds, a pheasantry, &c.; but the gardens are overgrown with weeds; and the numberless pleasure-houses with which the grounds are crowded are fast falling into decay, the family having, for the most part, abandoned this noble seat for that of Eisenstadt. This, which also adjoins the lake, is, like Esterhazy, in the Italian style, of large dimensions, and well fitted for a princely residence. It was rebuilt in 1805, and is situated 24 m. N.W. Esterhazy. The grand ball-room is a noble apartment. The present prince was here installed Lord Lieutenant of the county of Oedenburg, an office hereditary in his family, with more than regal magnificence. Its park and gardens are much admired; and the botanical collections in the large hot-houses of the latter are surpassed by few in Europe; they comprise no less than 70,000 exotics, and are particularly rich in Australian species. The Leopoldine temple in the park has a statue of the Princess of Lichtenstein, by Canova.

The estates of Prince Esterhazy are said to equal the kingdom of Wirtemburg in size; and contain 130 villages, 40 towns, and 34 castles! But the annual revenue from such vast possessions is said not to exceed 150,000*l.* per annum, though it is capable of considerable increase. "The encumbrances at the present time are greater than with most other Hungarian magnates, few of whom are indebted to a less amount than half their incomes." (*Paget, Hungary, and Transylv.* i. 45.). The family of Esterhazy professes to trace its descent from Attila. It is divided into three branches, of which that of Frakno or Forchtenstein had granted it by the Emperor of Austria, in 1087, the title of Princes of the Empire, with the privileges of coining money, conferring nobility, and exercising judicial power thoughout its own domains. The strong castle of Forchtenstein, accordingly, serves as a prison for Prince Esterhazy's peasantry, and as a place of deposit for the equipments of his troops, and the treasures of his family, including the famous Esterhazy jewels, &c. The present head of this noble family has been for several years ambassador from Austria to the court of Great Britain, and is highly esteemed by all who have the honour of his acquaintance. (*Oesterr. Nat. Encycl.; Paget, Hungary and Transylvania, &c.*)

ESTHONIA, or REVEL, a marit. gov. of Russia in Europe, in the N.W. part of which it is situated, forming one of the Baltic provs. It lies between lat. 58° 20′ and 59° 30′ N., and long. 23° 20′ and 28° 20′ E., having E. the gov. of Petersburg, S. the lake Peipus and the gov. of Riga, W. the Baltic, and N. the gulph of Finland. Area, inclusive of the islands belonging to it, about 6,870 sq. m. Pop. 230,000. (*Schnitzler.*) Surface generally flat, but diversified in parts with undulating hills; it contains many small lakes and streams, but has no navigable river: its shores are bold and rocky, climate rigorous, the winters are long, and fogs and violent winds are common throughout the year. Soil in great part sandy, and rather infertile: the cultivable lands are supposed to be to the unproductive, forests, &c., as 1 to 3. Agriculture is the chief employment of the pop., and more corn is produced than is sufficient for home consumption: it is principally rye, barley, and oats; but wheat and buckwheat, besides flax, hemp, hops, and tobacco, are also raised. Most part of the corn not required for food, is set aside for the purpose of distillation. Different species of pulse are extensively cultivated, and form a large proportion of the nourishment of the peasantry. Fruit trees are neglected; but certain wild fruits are very abundant. The pine, fir, &c. are the most common forest trees; but the oak, elm, and beech, &c. are met with. A good many head of live stock are reared, and some are driven into this prov. from distant ones, to be fattened for the Petersburg markets. The oxen and horses of Esthonia are very indifferent, as well as the sheep, goats, &c., though active endeavours have been made to improve the breed of the latter. Poultry is abundant. The bear, wolf, badger, fox, &c. inhabit the forests, and there are a few elks. The lakes do not contain many fish; but the fisheries on the coasts are of importance to the inhabs. A few mineral products are obtained, but they are of no great consequence. Nearly all the manufactures are domestic, the peasantry weave their own coarse woollens, and some very tolerable linen stuffs. In the islands, the building of boats is a principal employment; distilleries are common in every part of the country, the free use of stills being one of the most important of their ancient privileges that the Esthonians preserve. The chief exports are corn, spirits, salt-fish, and hides; amongst the chief imports are herrings and salt. Revel (which see) is the centre of the trade of the government. The prov. is under the political superintendence of the governor-general of Riga; but has its own provincial council, judicial court, &c. Nearly all the inhab. are Lutherans; only about 1 in 148 of the pop. is educated. The upper classes, both in the towns and the country, are mostly of German or Danish descent. The Esthonians are of the Finnish stock, and having been in a state of slavery till a recent period, have, it is alleged, contracted most of the vices incident to such a state. This country was sold by the Danes to the Teutonic knights in 1347, conquered by Sweden in 1561, and finally annexed to Russia by Peter the Great in 1710. (*Schnitzler, La Russie; Dict. Géogr.*)

ESTREMADURA, an extensive prov. of Spain, lying between 37° 54′ and 40° 38′ N. lat., and 4° 50′ and 7° 24′ W. long. It has Salamanca, and part of Avila, on the N.; Toledo, La Mancha, and part of Cordova, on the E.; Seville, on the S.; and Alentejo and Beira, in Portugal, on the W. Its length, from N. to S., is 188 m.; and mean breadth, from W. to E., about 80 m. Area, about 14,750 sq. m. Miñano estimated the pop. in 1826 at 667,690, which gives 45 to the sq. m.; but there can be no doubt that it was formerly much more populous. It consists of immense plains, terminated on the N. by the Sierras de Gredos, de Bejar, and de Gata; and, on the S., by those of Constantina, a continuation of the Sierra Morena. Another branch of the latter chain runs along the boundary N. from the confines of Seville and Cordova to the river Guadiana, from which a branch of the mountains of Guadalupe again extends as far as the Tagus. These two rivers, each of which is here joined by several affluents, cross the prov. from E. to W., and an extension of the Castilian or Toledo mountains, under the names of the Sierras de Guadalupe, San Benito, and San Pedro, lying in the same direction, divides it into two nearly equal parts, the N. (Estremadura Alta) being in the basin of the Tagus, and the S. (Estremadura Baja) in that of the Guadiana. The summers are hot; there is then but little rain; the nights, however, are cool, and the dew, which is abundant, is sufficient to moisten the ground. Although the high mountains are covered with snow at the end of November, the winter is not severe. In summer, the heat often brings on epidemic fevers, particularly with strangers. The soil is very fertile, and might be rendered highly productive by a proper use of the water of the many rivers that intersect it. Miñano says it might be made to support a third part of the pop. of Spain; but a combination of causes, at the head of which are to be placed bad government and bad institutions, have extinguished all industry. Agriculture is wholly neglected; and the noble plains, that might yield abundance of all sorts of products, are devoted to pasturage only. It is stated that about 4 millions of Merino sheep come every year from other parts to winter in the plains, according to the ancient institution of the *Mesta* (*see* SPAIN), besides those that belong to the country, and immense herds of swine. The produce of corn, wine, oil, hemp, and flax is insufficient for the consumption; but there is an abundance of chestnuts, from which the population of this naturally fine country derive a considerable part of its scanty subsistence. The plains of Placentia, the vicinities of Coria, and La Serena, and the territory between Badajos and Llerena, are the best peopled and most productive, and show what the rest might be under any thing like a good system of husbandry. Immense plains are found all over the prov. covered with various species of buckthorn, myrtle, marjoram, and other medicinal and odoriferous plants, which are good for nothing unless it be to feed great numbers of bees. Here and there woods of noble evergreen oaks are met with, whose acorns feed the herds of swine whose flesh is so highly esteemed throughout Spain. It has mines of lead, copper, silver, and iron, but they are all, or mostly all, neglected. (*Miñano.*)

The manufactures of Estremadura are hardly worth notice. Hats are made at Badajos and Zafra, and there are a good many tanneries in the latter place and at El Casar de Caceres.

A country that produces little, and manufactures less, cannot have much commerce; the chief article of export is the flesh of its hogs, its trade in cattle and sheep with Madrid and Andalusia being of slight consideration. The state of the roads, and the want of internal navigation,

would, in fact, be all but insuperable obstacles to traffic. There is not a single road in even tolerable repair; and in bad weather, most of them are impassable. The inns, like the roads, are as bad as possible: they abound in filth and vermin, and are deficient in every thing else.

The prov. is governed by a captain-general, with various subaltern military governors; its ecclesiastical jurisdiction is divided into 3 bishoprics, those of Badajos, Placentia, and Coria.

The people, according to *Miñano*, are, perhaps, the most taciturn and grave of any in Spain; and, from living in a country having little intercourse with any other, uneducated, and subjected to the most vicious laws and regulations, it is not surprising that they should be sunk in indolence. But it is said that, when excited by hope, or any other stimulus, they are persevering and indefatigable. They are robust and vigorous, frank, honourable, and honest; slow to receive an impression, but firm in following it up.

Cortes, the conqueror of Mexico, the two Pizarros, the Almagros, and other adventurers, were natives of Estremadura. It anciently formed part of the kingdom of Leon. (*Miñano; Bowles; Géogr. Physique de l'Espagne*, p. 134. *et seq.*; *Dict. Géographique*.)

Estremadura, a prov. of Portugal, which see.

ESTREMEZ, a town of Portugal, prov. Alentejo, partly in a plain, and partly on the slope of a hill, and in a well cultivated country, 22 m. W. Elvas, 26 m. N.E. Evora. Pop. 5,270. It is ill built, but has a large open square in the centre, and is strongly fortified with an ancient castle on a commanding eminence, an arsenal, and quarters for a regiment of cavalry. There are also 4 parish churches, 5 convents, an hospital with a church attached, and a house of charity. Though Evora is the nominal capital of the prov., the authorities have lately been removed thither, on account of the protection afforded by the fortress of Elvas. (*Penny Mag.* vi. 316.) It has manufactures of Delftware, especially of water coolers, and has some trade in hardware. (*Miñano; Link's Travels in Portugal*, p. 144.; *Dict. Géogr.*)

ETIENNE (ST.), a celebrated manufacturing town of France, dép. Loire, cap. arrond., on the torrent of the Furens, an affluent of the Loire, 20 m. S.E. Montbrison, and 31 m. S.W. Lyons. Pop. (1836) 41,534. It is generally well built: streets wide and straight; houses good, though blackened with the smoke of its numerous coal fires. It has no public edifice worthy much notice; it contains 4 churches, one of which dates from the 6th century; a town-hall, court of justice, theatre, public library, cabinet of natural history, and several benevolent institutions. A handsome fountain in the form of an obelisk ornaments the principal square. A railroad 36¼ m. in length runs from Lyons to St. Etienne, and there communicates with another, 54 m. in length, from St. Etienne to Andrezieux and Roanne. The manufactures are very various; they include those of arms, (in a royal manufactory originally established in 1585, besides some private establishments,) hardware, cutlery, nails, files, and other tools, numerous kinds of steel articles, &c. These manufactures, if they do not owe their origin, are, no doubt, mainly indebted for their rapid extension to the supplies of coal and iron-stone found in the vicinity. The waters of the Furens, which are said to be particularly well adapted for the tempering of steel, supply a great many factories. Exclusive of hardware, silk fabrics are largely manufactured; and lace, embroidered muslins, *tulles*, cotton yarn, eau-de-Cologne, and lamp black are produced. There are, besides, some bleaching and dyeing establishments, with tanneries, and glass and paper factories. The silk, and especially the silk-riband manufacturers, who comprise a large proportion of the whole, have of late years, for the most part, removed from the town of St. Etienne into the adjacent country, where their fabrics are uninjured by the smoky atmosphere, and the weavers live cheaper and better, by avoiding the *octrois*, or town duties. St. Etienne, with its adjacent district, is estimated to contain 60,000 inhab., of whom about a half are believed to be connected with the riband or silk haberdashery trade. The quantity of silk consumed annually in the riband manufacture is estimated at about 400,000 kilogr., principally of the superior qualities. The whole produce of the distr. was, in 1835, estimated at 350,000 ells a day, or about 130,000,000 yards a year, of an average value of about 82,000,000 fr. Nearly 60 artists are employed by the riband manufacturers in drawing patterns, and 3-4ths of the produce are exported. The price of labour at St. Etienne is in general less than at Lyons, and said to be about equal to 3-4ths of that at Coventry; but it is very difficult to institute any comparison between them, except by comparing the cost of the work performed in each. The wages of the riband weaver vary from 1*s*. to 3*s*. 8*d*. a day; but the average may be about 1*s*. 8*d*. This average is less than that earned in most of the other trades at St. Etienne; the reason assigned being that the riband weavers, not residing in the town itself, mostly divide their time between the manufacture and agriculture. The proprietors of 18,000 single hand-looms in the mountainous distr. round St. Etienne, St. Chamond, &c. are, in reality, little farmers. Few cottages are without one or more looms, at which the inmates work when not employed in the business of the small farm. This arrangement, which gives the peasantry a double resource, is, however, unfavourable to the manufacture; and it will, most likely, in the end, share the fate of the Irish linen manufacture. Its improvement is an object of much greater solicitude to the *passementiers*, or small master weavers, also a tolerably numerous class, who possess from 2 to 5, and sometimes 10 or 12 looms each, and devote themselves entirely to the manufacture. Mr. Villermé's observations go to show that the condition of the weavers of St. Etienne is, upon the whole, much better than that of those of Lyons. There is, at St. Etienne, an establishment called a *Condition*, in which silks are submitted to a temp. of from 72° to 77° Fah., to test their quality, and bring them into a certain state of dryness. The average quantity of silk sent to this establishment annually is estimated at 3,970 bales, or 596,000 lbs.; that sold without passing through the *Condition* amounts to about 1,780 bales, or 267,000 lbs. per annum. The latter consist chiefly of foreign silks, which supply the factories of St. Etienne in the proportion of nearly 1 to 2 of French silk.

Some authors have supposed that this town occupies the site of the ancient *Furanum*, built by the Romans anno 65 B.C.: but this is very doubtful; and no annals of St. Etienne go farther back than the 10th century. In 1441, the town consisted of only 200 indifferent houses, which Charles VII., a few years afterwards, suffered the inhabitants to surround with a wall to protect them against the incursions of the English. A few vestiges of this wall still exist; but it did not prevent St. Etienne from suffering greatly in the religious wars of the 16th century. The plague destroyed 7,000 of its inhab. in 1585, and 8,000 in 1628-29. Since the peace of 1815, it has increased rapidly both in pop. and wealth. (*Villermé; Encyc. des Gens du Monde; Bowring's 2d Rep.*, pp. 40—47.)

ETNA (Lat. *Ætna*, Ital. *Mongibello*), a mountain and volcano of Sicily, by far the most celebrated in both respects, either in ancient or modern times, rising from the E. shore of the island, prov. Catania, between the river Alcantara on the N. and the Giaretta on the S., the crater being in lat. 37° 40′ 31″ N., long. 15° E. It is entirely distinct from, and independent of, any other mountain range. Its base is about 87 m. in circ., but its lavas have extended over a much larger space. It consists of a congeries of mountains rising one above another. Not only is it the highest mountain of Sicily, but it is also one of the highest in Europe, being, according to Sir J. F. Herschel, with which Captain Smyth's measurement almost exactly coincides, 10,874 ft. above the level of the sea. Its largest diameter runs from E. to W. The ascent is very various on its different sides; that from Catania being about 24 m., from Linguagrossa 18, and from Randazzo scarcely 12. The extent of the base gives so easy an inclination to the sides, in most places, as greatly to facilitate the ascent; but at the same time it diminishes the grandeur of its aspect at first sight, and its commanding elevation is scarcely perceived, until the traveller has got nearly half way up, and begins to look down on the rest of Sicily, while the summit still seems as far from him as at first; then, indeed, the mountain assumes an appearance so noble, majestic, and imposing, that, associated with the considerations of its cause and effects, it excites the most intense interest, mixed with a degree of awe that elevates the mind, and inspires sublime feelings. (*Smyth's Memoir*, p. 146.)

The multitude of minor cones distributed over its flanks, and which are most abundant in the woody region, is, according to Mr. Lyell, "a grand and original feature in the physiognomy of Etna. These, although they appear but trifling irregularities, when viewed from a distance as subordinate parts of so imposing and colossal a mountain, would, nevertheless, be deemed hills of considerable altitude in almost any other region. There are about 80 of these secondary volcanos, of considerable dimensions; 52 on the W. and N., and 27 on the E. side of Etna. One of the largest, called Monte Minardo, near Bronte, is upwards of 700 ft. in height; and a double hill near Nicolosi, called Monti Rossi, formed in 1669, is 450 ft. high, and the base 2 m. in circ.; yet it ranks only as a cone of the second magnitude amongst those produced by the lateral eruptions of Etna. On looking down from the lower borders of the desert region, these volcanos present us with one of the most beautiful and characteristic scenes in Europe. They afford every variety of height and size, and are arranged in beautiful and picturesque groups. However uniform they may appear when seen from the sea or the plains below, nothing can be more diversified than their shape when we look from above into their craters, one side of which is generally broken down. There are, indeed, few objects

in nature more picturesque than a wooded volcanic crater. The cones situated in the higher parts of the forest zone are chiefly clothed with lofty pines; while those at a lower elevation are adorned with chestnuts, oak, beech, and holm." (*Principles of Geology*, ii. 112. 3d ed.)

The mountain is, in general, of a symmetrical form, but is broken on its E. side by a deep and extraordinary valley, called the *Val del Bove*, which, commencing near the summit of the mountain, descends into the woody region, and is thence continued by other and smaller valleys to the confines of the fertile region. The Val del Bove is 4 or 5 m. across, and is surrounded by nearly vertical precipices from 1,000 to 5,000 ft. in height. This gigantic chasm has been repeatedly traversed by torrents of lava; and in 1755 it was swept by a tremendous inundation caused by the melting of the snows near the summit of the mountain. It has a singularly dreary and blasted appearance.

The structure of Etna is chiefly of the tertiary period antecedent to the present epoch; it consists partly of volcanic, partly of sedimentary rocks; but to what extent is not known, they being so much covered by modern lavas, interstratified with layers of tufa and breccia: around its base is a line of hills formed of bluish marl, and clays enclosing marine shells and yellowish sand, from 800 to 1,000 ft. above the level of the sea; about Paterno, and elsewhere, these are capped with basalt, tufa, and volcanic conglomerates.

The mineral products of Etna are chrysolite, zeolite, selenite, copper, mercury, alum, nitre, vitriol, specular iron, amianth, pozzolana, and a fine potter's earth: there are many hot, chalybeate, and sulphurous mineral springs; but no rivers, except what are subterraneous, descend from this region, owing to the rapid absorption of the soil. (*See* SICILY.)

The mountain is naturally divided into 3 regions or zones, viz. the Fertile (*La Regione culta* or *Piemontana*), the Woody (*Nemorosa* or *Sylvosa*), and the Desert (*La Regione Deserta* or *Scoperta*); to which might be added the Fiery region (*Regione di Fuoco*), consisting of the central cone and crater. These regions differ widely from each other in their products and general character. The lower, or *fertile*, zone varies greatly in width, being 11 m. broad above Catania, but no more than 1¼ m. on the N. side. It is composed almost entirely of lava, which, in the course of ages, has been decomposed and converted into a very fertile soil. It is comparatively well cultivated and peopled. All travellers speak in the highest terms of the beauty and fertility of this region. "No language," says Mr. Hughes, "can do justice to the scenery and luxuriant fertility of this tract; whose bosom, heated by subterranean fires, and situated in the most favourable climate, teems with every flower, and plant, and tree, that can delight the eye, and every species of fruit that can gratify the palate; fields covered with golden grain, or the purple vine, villages, and convents embosomed in groves of chestnuts, and oriental plains, mossy fountains, and transparent streams; exhausted craters covered with a canopy of foliage, and numberless other beauties, invite the tourist to those charming scenes. Here, also, the sportsman will meet with every species of game that he can desire; and the botanist or mineralogist find inexhaustible sources of amusement." (*Travels*, i. 113. 8vo. ed.) But here, as in most parts of Italy and Sicily, there is a painful contrast between the richness and beauty of the country, and the appearance and condition of the inhab. The latter are squalid, slovenly, and dirty: this is a consequence, as Captain Smyth states, of the ashes and dust that pervade the air, soil their persons, and injure their eyes; and of the want of water, which is absorbed, as soon as it falls, by the porous soil. These circumstances, combined with the constant danger of eruptions, would seem, after all, to render this Sicilian paradise any thing but a desirable residence.

The woody region is 6 or 7 m. in width, and reaches to about 6,400 ft. perpendicular height; it begins and terminates abruptly: in the lower parts the trees are principally oak and chestnut; in the middle they are almost entirely oaks, some of them attaining to an immense size; in the upper part the oaks decrease in size, and are intermixed with pines (*Pinus tæda*); as we ascend the mountain the oaks nearly disappear, the firs become stunted, and at length all vegetation ceases, and we enter on the desert. The ground in the greater part of the woody region is covered with aromatic plants and fern. Tillage soon ceases; there are no corn fields, but here and there a few vineyards, and very rich pasture land on which numerous flocks of sheep are fed. In this region, near Carpinetto, stands the celebrated chestnut tree, *Castagno di cento cavalli*, so called from its being supposed capable of sheltering 100 horses under its boughs. It consists of five great arms, which, however, are all united in a single stem a little below the surface. The estimates of the size of this enormous tree vary considerably, probably from their not being taken in the same way. Swinburne makes it 196 ft., and Smyth 163 ft. in circ. close above ground. A house of ample dimensions for the accommodation of travellers has been constructed in the interior of the tree. Several other large chestnut trees grow in the vicinity, the principal of which is 57 ft. round. The products of the woody zone are chiefly tar, honey, cantharides, and charcoal; and its inhab. are herdsmen and charcoal burners.

It has been already seen that the minor volcanic cones abound principally in this region. Caverns are numerous; and one of them, the *Grotto dei Capri*, or grotto of the goats, from its affording shelter to these animals, was formerly resorted to by travellers, as a resting place in their ascent. In the vicinity are deep reservoirs of snow, whence Catania and other cities derive their supplies of that article, which is there really a necessary of life: being packed in straw, it is carried to a great distance on mules and asses. (*Hughes*, i. 117.) Wild boars, wolves, badgers, wild goats, deer, martens, and all kinds of game, eagles, vultures, falcons, &c., belong to this region.

The desert region, or zone, is a dismal tract, full of gloomy and rocky hollows and immense chasms, formed of black lava, scoriæ, ashes, and volcanic sand; covered, for the greater part of the year, with snow and ice, which are always to be found in the hollows. "In this lofty region the air is chill and piercing; every sign of life and vegetation ceases; not an insect crawls over the cold surface of the ground, not a lichen adheres to the grey masses of the lava; not even the eagle's wing soars so high, to disturb the awful solitude of nature: here only the thunder and the tempest, or the still more tremendous explosions of the volcano, are heard." (*Hughes*, i. 113.) In the midst of this gloomy region the principal cone, forming the summit of the mountain, rises to the height of about 1,100 ft.: it is very precipitous, and as it consists of loose scoriæ, and ashes, which frequently yield under foot, the ascent is extremely laborious. At the foot of the cone is a house, with rooms and stabling, erected in 1811, at the expense of the British officers then in Sicily, for the accommodation of travellers, to whom it is a very great convenience. The cone at its base is from 7 to 8 m. in circumference; but at its summit its circ. is reduced to about 4 m. It consists of a horizontal plain, with a vast central crater, or *barathron*, 2½ m. round, agreeing in this respect with the dimensions assigned to it by Pliny: "*Crater ejus patet ambitu stadia xx.*" (*Nat. Hist.*, lib. iii. § 8.) The view from the summit is superb beyond description. Sicily is spread out like a carpet at the spectator's feet, who traces every river through all its windings from its source to the sea. The strait that separates Italy and Sicily, the Calabrian shores, and the Lipari Islands, are distinguishing features in this magnificent panorama, which it is said sometimes extends to Vesuvius on the one hand, and Malta on the other. The wonderful extent of view, and the unequalled sublimity of the scene, is owing partly to the great altitude of the mountain, partly to the highly interesting nature of the objects, but more than all to Etna being "alone in its glory," and having no other mountain in its vicinity to detract from its grandeur, or to interrupt the immensity of the prospect.

The enjoyment of the spectacle of sunrise is the grand object of travellers who ascend to the summit of the mountain. Brydone has described it in terms not unworthy of the glorious scene, though doubts have been entertained whether he really saw what he depicted, or trusted to the reports of others. It is probably the grandest of all the spectacles that it is possible to behold. Not the least interesting portion of this extraordinary prospect is the distinct image of the mountain itself, seen at the extremity of the shadow that it projects across the island. (*Brydone*, *Letter* x.; *Hughes*, i. 120.)

The crater, when Captain Smyth visited the mountain, was of an oval form, directed from N.E. to S.W., its conjugate diameter being about 493 yards; but its size and form are perpetually varying, from the accumulation and falling in of volcanic matter: its interior is encrusted with extensive efflorescences of ammonia, sulphur, and vitriolic salts, to the depth of 100 yards on the E., but less on the W. side; those of an orange colour are the most common. Its bottom is flat, and tolerably hard; near its centre are two mounds of scoriæ, and ashes, surrounded by several fissures, "whence," says Captain Smyth, "at intervals issue volumes of thick smoke, with a rumbling noise, and hissing sound. There is also a light thin vapour occasionally oozing from the bottom and sides of the huge amphitheatre in every direction. I endeavoured," he adds, "to look into the principal chasm; but the rapid ejection of the cinders, and the strong sulphureous vapours that exuded, prevented me from attaining my object." (*Memoir*, p. 151.) Mr. Hughes, however, has supplied a more minute account of the principal spiraculum, or funnel; it has three stages of descent: the

first, which extended only a few hundred yards, terminated in a shelf or ridge of cinders; the second, more precipitous than the first, extended to a similar shelf; the third being the perpendicular and unfathomable abyss. Between the two principal spiracula are several smaller conical mounds constantly smoking. The ground here is so hot round the crater that visiters are obliged constantly to shift their places, and yet even here, in the interior of the crater, snow is seen in immense ridges, "disputing, as it were, the pre-eminence of fire, in the very centre of its dominions."

Before eruptions local earthquakes are felt, hollow intonations heard, irregular clouds of smoke burst forth, and *ferilli*, or volcanic lightnings, are seen darting from the top of the mountain: the agitations increase, till at length, either from the great crater, or from some other part of the mountain, a terrific discharge of red-hot stones, flakes of fire, ashes, sand, or other substances, accompanied with vast volumes of smoke, suddenly takes place with tremendous violence.

—— Horrificis juxta tonat Ætna ruinis,
Interdumque atram prorumpit ad æthera nubem,
Turbine fumantem piceo et candente favilla;
Attollitque globos flammarum, et sidera lambit:
Interdum scopulos avolsaque viscera montis
Erigit eructans, liquefactaque saxa sub auras
Cum gemitu glomerat, fundoque exæstuat imo.
Æneid. iii. lin. 571.

Some of the matters thrown up during an eruption are occasionally projected to an immense distance. They not unfrequently rise to the height of 5,000 or 6,000 ft. above the summit; stones of 13 oz. weight have fallen 15 m. from the crater; and in the great eruption of 1669 a stone 50 cubic ft. in size was ejected with such prodigious force that it fell a mile from the crater! Ashes have sometimes fallen in Malta, about 130 m. distant! These eruptions are generally followed or accompanied by the outbreak of a torrent of lava. If this current of liquid fire be stopped by inequalities of ground, a portion cools, and the rest topples over it; sometimes it overwhelms whole cities, villages, and tracts of country: the torrent of lava that partly destroyed Catania in 1669, was stopped by the city walls, 60 feet in height; but the burning flood accumulated till it rose to the top of the rampart, and then fell over it in a fiery cascade. This mass was so enormous that it was eight years in cooling!

Generally, however, it soon congeals, and when mixed with scoriæ, cracks, decomposes, and forms an extremely fertile soil. Sometimes inundations of boiling water occur, through the melting of the snow in the upper regions by contact with the lava; and the strange phenomenon has also occurred of a body of snow and ice being covered with a layer of ashes, and then with a torrent of burning lava, and so preserved for an indefinite period. (*Lyell*, ii. 123.) About one eruption in three takes place from the principal crater, and these are generally the least dangerous, the lava being mostly retained in the immense hollows of the upper region.

Though Homer has made Sicily the scene of some of the most interesting adventures in the travels of Ulysses, and has described the island and the strait of Scylla and Charybdis, he does not so much as allude to Etna. It has thence been inferred that the mountain had not then been an active volcano; for it can hardly be supposed, had it been such, that so careful an observer would have failed to notice it, and to avail himself of the means which it afforded of embellishing his verses by a topic so well suited to the dignity of epic poetry. No doubt it is very difficult to reconcile the silence of Homer, with the fact of the mountain being at the time eruptive, though it would be rash thence to conclude positively that it was not; it had, then, perhaps, been long quiescent, and its eruptions forgotten. Pindar is the oldest extant author (about 500 years B.C.) who takes any notice of the eruptions of Etna; and his account is peculiarly interesting, inasmuch as it appears from his representing its summit as supporting the heavens, and being covered with perpetual snows and frost, that it must then have been about as high as at present. According to the ancient poets, Jupiter, after the overthrow of the giants, buried the hundred-headed Typhœus under this mountain; and its earthquakes and eruptions were said to be occasioned by the struggles of the monster. The passage in which Pindar alludes to Etna has been rendered by West as follows:—

Now under sulph'rous Cuma's sea-bound coast,
And vast Sicilia lies his shaggy breast;
By snowy Etna, nurse of endless frost,
The pillar'd prop of heav'n, for ever press'd:
Forth from whose nitrous caverns issuing rise
Pure liquid fountains of tempestuous fire,
And veil in ruddy mists the noon-day skies,
While wrapt in smoke the eddying flames aspire;
Or, gleaming through the night with hideous roar,
Far o'er the red'ning main huge rocky fragments pour.
First Pythian Ode, decad. 5.

Thucydides mentions three eruptions of Mount Etna, but he leaves the date of the first uncertain; the second occurred 4 or 5 years previously to the period when Pindar wrote the above ode. Since then, there have been a great many eruptions, both in antiquity and in modern times. One of the most tremendous occurred in 1669, when the hill of Monti Rossi was formed; but the most extraordinary phenomenon in this eruption, was the opening of a fissure about 6 feet wide, and of unknown depth, which stretched from the plain of S. Lio to within a mile of the summit of the mountain, a distance of 12 m.: it emitted an intensely vivid light. Five other parallel fissures also opened, and gave out tremendous noises. The lava that burst forth on this occasion, overwhelmed 14 towns and villages, filled up the port of Ulysses, and, as already stated, partly destroyed Catania. About 27,000 persons are supposed to have lost their lives in this convulsion. The last great eruption occurred in 1832, when the town of Bronte narrowly escaped being overwhelmed by a current of lava. (Besides the authorities already referred to, a host of works have been written on Etna; one of the best is *Ferrara, Storia Generale dell' Etna*, 8vo., Catania, 1793.)

ETON, a town and par. of England, co. Bucks, hund. Stoke, on the N. bank of the Thames, immediately opposite to Windsor, with which it is connected by a neat iron bridge, 23 m. S.S.E. Aylesbury, and 21 m. W. London. Pop. (1841) 3,609. It consists principally of a single street, well paved and lighted, and which of late years has been much improved, many of the houses having been rebuilt. The establishment to which Eton owes all its importance is its college, founded by Henry VI. in 1440. That monarch, by whom it was liberally endowed, intended it principally for the education of "poor and indigent boys," destined for the church. By his second charter, dated Oct. 21. 1441, the foundation consisted of a provost, 10 priests or fellows, 4 clerks, 6 choristers, a master, 25 scholars, and 25 alms or beads men; but about 1443, the date of the college statutes, he increased the number of scholars from 25 to 70, added an usher, clerk, and two choristers, and reduced the number of beadsmen to 13. Various changes were made in the succeeding reigns, and the establishment suffered considerable spoliation, especially from Edward IV.; but it was particularly excepted in the Act of Parliament for the dissolution of colleges and chantries in the reign of Henry VIII. The foundation at present consists of a provost, appointed by the crown; 7 fellows, one of whom acts as vice-provost; 2 chaplains, called conducts; 2 lay-clerks, 10 choristers, 2 masters (each of whom has 4 assistant masters), and 70 scholars, who since the reign of George III. have been called "king's scholars." Besides the latter, the different masters have a number of stipendiary pupils, not on the foundation; but who receive instruction in the college. These are called *oppidans*, and generally consist of members of families, superior in rank or wealth to those of the king's scholars. Their number is variable, but at an average may be estimated at about 350. Under a recent head master, the number of boys at Eton, of both classes, at one time exceeded 600. The buildings of the college surround 2 quadrangles: the outer quadrangle, or school-yard, is enclosed by the chapel schools, dormitories of the scholars, and masters' chambers; and has in its centre a bronze statue of the royal founder of the college. The inner or lesser quadrangle is bounded by the cloisters, containing the residences of the fellows, the library, hall, and various offices. Between the two are the provost's lodge, &c., appertaining to which is an ancient tower and a gateway in the centre, connecting the two courts. The chapel, on the S. side of the outer court, is a handsome Gothic edifice, 175 ft. in length, including the ante-chapel, and in its style and ornaments greatly resembles the chapel of King's College, Cambridge. The par. church of Eton having fallen to decay, the inhabitants attend public worship in the college chapel, the provost having archdiaconal jurisdiction in the par.; but there is also a chapel of ease in the town, at which one of the conducts officiates. The college library contains a large and valuable collection of books, engravings, drawings from the antique, medals, &c.; it is a fine apartment, and fitted up in a superior style. The dining hall for the scholars on the foundation is spacious, but little ornamented; it contains, however, two large ancient pieces of tapestry. The upper school, on the W. side of the outer court, was designed by Sir C. Wren, and is supported by an arcade with double columns of the Doric order. The school-room is spacious and of fine proportions, but fitted up in a plain manner. The school-room of the lower school is of considerable length, but not of a proportional height, with a range of ancient oak arches on either side, and the seats of the scholars behind them. It is beneath a part of the principal dormitory, called the *long chamber*. To the E. of the cloisters are the college gardens; to the N. the playing fields, and adjacent to the latter the shooting fields, in which cricket matches, &c. are played.

The scholars on the foundation are lodged and boarded by the establishment. They are eligible from the ages of 8 to 15, and are elected separately by the individuals of a body composed of the provosts of Eton and King's College, Cambridge, the vice-provost and master of Eton, and 2 posers (M.A.'s) of King's College. This body meets on the last Monday in July of every year, when usually 24 boys are nominated to fill up vacancies as they may occur in Eton Lower School, and 12 of the head boys in the same establishment are nominated in a similar manner to King's College, Cambridge, according to the statutes of the founder. Those who go to King's are, after 3 years, entitled to fellowships. Eton College also sends 2 scholars to Merton College, Oxford, where they are called *Portionistæ*, or, by corruption, postmasters. Failing an appointment to either university, Eton collegians are superannuated at 18 or 19, and for scholars so superannuated there are a few exhibitions, and some other means of slightly augmenting their income in the gift of the college. By statute, the education of King's scholars should be gratuitous; but some innovation has taken place on this head, and the average annual expense to the parents of such (including travelling expenses, &c.) is estimated at 60*l*.

The *oppidans* board either in the houses of the lower master or assistants, or at a somewhat lower charge in the boarding houses attached to the school; some few, chiefly of noble birth, in private lodgings, under the care of private tutors. The total expenses of a boy educated as an *oppidan* may perhaps average from 150*l*. to 200*l*. a year. Without the boundaries of the college, the *oppidans* are comparatively little under the control of the college functionaries; but within its walls they are in no respect distinguished from the King's scholars, and mix with them in the same classes. The entire school is divided into Upper and Lower. The latter comprises, together with the junior classes, the 3d and 4th forms, each consisting of 3 subdivisions, or removes. Each of these is under the control of a separate assistant master; and as boys of various ages come to Eton, they are placed at the bottom of whatever remove in the lower school they may seem fit for by their previous acquirements and age, passing into the superior ones according to their proficiency. The upper school consists of the 5th and 6th forms, and is under the immediate control of the head master. The number of boys in the 6th form is limited to 22; and of these the 10 highest are styled monitors, and act in some measure as assistants to the masters. The head of the whole school, who arrives at his post by seniority, is called the "captain."

The course of instruction at Eton is almost wholly classical. The only entire works read are those of Homer, Virgil, and Horace, but extracts from those of numerous others are occasionally made use of. The well-known Eton Latin and Greek Grammars, committed to memory, form the basis of grammatical instruction. In the Upper School the boys are engaged in writing Latin and Greek themes and verses, for the best of which rewards are given; and a play of some Greek author is usually in the course of reading. Mathematics form a part, but a very small one, of the school discipline; and though there are masters in French, writing, arithmetic, &c., such studies are wholly unconnected with the general business of the school, and only attended at extra hours. All the boys attend chapel twice on Sundays, and once on saints' days and holidays; and, in addition, the collegers attend prayers every evening, after which they are confined to their several dormitories. The system of *fagging*, by which the boys of the Lower School are *fags*, or servants, to those of the Upper, out of school hours, prevails; but its supposed severity and degradation have been much exaggerated.

A triennial ceremony peculiar to this school, the *Montem*, took place on Whit-Tuesday. It consisted of a procession of the boys in a kind of military order, with flags and music, and headed by their "captain," to a small tumulus about 1½ m. distant on the Bath road, which acquired the name of Salt-hill from the circumstance that the scholars upon this occasion collected "salt," or contributions from the spectators, and even from casual travellers on the road. Those meetings were usually attended by a great concourse of people, and were sometimes honoured by the presence of royalty. The sum collected has sometimes exceeded 1,000*l*.; the surplus, after deducting certain expenses, becoming the property of the "captain" of the school. But this practice, being in many respects of a very questionable description, after being long objected to, has latterly been discontinued.

Eton College has in its gift nearly 40 ecclesiastical preferments, besides several presentations, &c. The provost, though as rector he derives no emolument from the par., has very extensive powers within it; for, by an act passed in 25 Henry VI., no inhabitant is allowed to take a lodger without his permission, under penalty of 10*l*., which fine may also be levied upon the individual engaging lodgings without such permission. In 1452 a charter was granted to Eton for a market on Wednesdays, with considerable privileges, but this has been long discontinued. There were formerly also two fairs, but only one is now kept up—that on Ash Wednesday for horses and cattle. (*Carlisle's Endowed Grammar-schools*, pp. 48—93.; *Journ. of Education*, vol. viii.; *Statist. of the British Empire*, ii. 445—448.)

EU, an inland town of France, dép. Seine Inférieure, cap. cant., on the Bresle, about 2 m. from its mouth in the British Channel, 16 m. N.E. Dieppe, and 43 m. N.N.E. Rouen. Pop. (1836) 3,490. It is generally well built, and has a fine square; it has several churches, one of which, a fine Gothic edifice, is remarkable for a subterraneous chapel, a college, and an hospital. In its neighbourhood, in a noble park surrounded by gardens, is the magnificent *Château Royal d'Eu*, belonging to Louis Philippe: it contains the finest collection of historical portraits in France. (*Hugo*.) There are several Roman remains in and about Eu. This town is the seat of a tribunal of commerce; has manufactures of lace, serges, linseed oil, soap, &c.; is an *entrepôt* for the corn of the Somme, and has some trade in hemp, flax, timber, and linens, exported at Treport at the mouth of the river. A large forest, which takes its name from the town, extends to the E. and S. Eu was burnt by Louis XI. in 1445, to prevent its falling into the hands of the English, who meditated a descent into Normandy: it is said never to have recovered its original prosperity. (*Hugo*, art. *Seine Inférieure*.)

EUPATORIA, or KOSLOFF, a sea-port town of Russia in Europe, W. coast of the Crimea, lat. 45° 9′ N., long. 33° 9′ 20″ E. Pop. nearly 8,000. It has a considerable trade; exporting salt, wheat, barley, hides, lambskins, &c. The houses, with the exception of a very small number built in the European style, are altogether of Asiatic architecture. The roadstead is a sandy circular bay, and affords no shelter with the winds at S. and E. (*Hagemeister on the Black Sea*, p. 66. *Eng. trans.*)

EUPEN, a town of Rhenish Prussia, immediately within its W. border, cap. circle of same name; on the Weege or Vesder, a tributary of the Meuse, 7 m. S. by W. Aix-la-Chapelle. Pop. (1838) 11,678. It is principally inhabited by the descendants of French Protestants who took refuge here subsequently to the revocation of the edict of Nantes; and is one of the principal manufacturing towns in the Prussian dom., having some very extensive broad cloth and kerseymere factories, with others of nitric acid, chicory, &c. It is the seat of a council for the circle, and of a court of primary jurisdiction; and has a superior citizens' school. (*Cannabich, Berghaus*.)

EUPHRATES and TIGRIS, two famous rivers of Turkey in Asia, which, rising in Armenia, flow generally parallel to each other in a S.E. direction, and finally unite in lat. 31° 0′ 28″ N. and long. 47° 40′ E., in the *Shat-ul-Arab*, or "River of Arabia," which discharges itself into the bottom of the Persian Gulph.

The *Euphrates* (Gr. Εὐφράτης), so called from εὐφραίνω, to exhilarate or make glad, because its waters, like those of the Nile, fertilise the adjacent lands; is the most considerable river of W. Asia, and its basin, exclusive of that of the Tigris, is supposed to comprise about 109,000 sq. geog. m. After watering on either side the territories belonging to Turkey as far S. as near lat. 36°, it forms, from that point to about lat. 33° 30′, the boundary between them and the newly acquired Asiatic dominions of the pacha of Egypt; it next divides Turkey from Arabia, and lastly, from its union with the Tigris to its mouth in the Persian Gulph, about lat. 30° and long. 48° 30′, it separates Arabia and Persia.

It is singular that the ancients should have had no correct information respecting the sources either of the Euphrates or the Tigris; and there is the greatest obscurity and discrepancy in the statements they have put forth respecting them. The popular opinion seems to have been that their sources were identical! (*Lucan*, lib. iii. v. 257.); and though this notion was rejected by Strabo, Mela, Pliny, &c., none of them appears to have had any precise information on the subject. (See *Cellarii Notit. Orbis Antiqui*, ii. 378.)

Both rivers have their sources in the table-land of Armenia. The Euphrates rises in the pachalic of Erzeroum, and is formed by the junction of two great arms—the Frat and the Morad. The former, which is also the most N., has its principal sources about 20 m. N.E. from Erzeroum, in the Tcheldir mountains, near the sources of the Araxes: the Morad has its sources on the N. declivity of the Arghi-dagh mountains, 45 m. N.E. from the nearest point of Lake Van. Both these rivers pursue a W. course, inclining to the S., till they unite near Kebban, in about the 39th deg. of lat. and 39° 25′ E. long. The united stream thence flows S.W. to Samisat (*Samosata*) in lat. 37° 31′, long. 38° 23′, having received on the right the Kara-su, and forced a

passage for itself through the main range of Taurus, and formed a double cataract 15 m. above Samisat. From the latter point the river pursues a nearly S. course to Rajik, about 50 m. E. from Aleppo, its course being thence almost uniformly S.E. At its source the Frat, or N. arm of the Euphrates, is only 90 m. from the Black Sea, but a very mountainous country intervenes between them. During its S. course, the Euphrates approaches within 122 m. of the Mediterranean, and as the interjacent country is for the most part level or undulating, it would, perhaps, present no very serious obstacles to the formation of canals or carriage roads. From Hillah (*Babylon*) to its mouth it flows through a perfectly level country, which was anciently intersected by numerous canals. At Bir, 107 m. N.E. Antioch, the Euphrates is 628 ft. above the level of the Mediterranean (*Ainsworth*, p. 109.), the rate of inclination from which being estimated to average only about 6½ inches a mile. The total length of the river, measured from the sources of the Morad, is estimated at about 1,800 m. (*Geogr. Journal*, iii. 243.); its breadth at Malatia is 100 yds., and at Bir 130 yds. At Ul Der (an. *Thapsacus*) (*Kinneir's Memoir on the Persian Empire*, p. 9.) the Euphrates is 800 yds. wide; at Hillah its bed is contracted to about 200 yds.; but below the latter it frequently spreads out to a considerable breadth, and the *Shat-ul-Arab* ranks amongst the noblest rivers of the Asiatic continent. The Euphrates is navigable to the cataract above Samisat; at Hillah it has seldom less than 18 ft. water, even in the lowest season, and a vessel drawing 15 ft. water may ascend to Korna, where it is joined by the Tigris. The principal tributary of the Euphrates is the Tigris, which, indeed, is but little inferior to itself; its next greatest tributaries are the Kara-su, Khabûr (an. *Chaboras*), and Kerah, which joins the *Shat-ul-Arab*.

The banks of the Euphrates were in antiquity the seat of many noble cities. The small mean town of Hillah occupies a minute portion of the site of the once mighty Babylon, "the glory of kingdoms, the beauty of the Chaldee's excellency;" Hit (an. *Is* or *Acopolis*), Anna (an. *Anetho*), Kerkisiya (*Cercusium*), and Bir, are amongst the other towns on its banks; but Bussorah or Basra, on the *Shat-ul-Arab*, is at present the only large city on the Euphrates.

The *Tigris* is throughout its whole course comprised within the Turkish dom. It rises in the pachalic of Diarbekr, from numerous sources on the S. side of the Taurus chain, by which it is separated from the Morad, in about lat. 38° 40′ N., and at an elevation of about 5,050 ft. above the level of the sea. (*Ainsworth*, p. 110.) Its course, to its junction with the Euphrates, is, with very little deviation, S.E. It runs at first through a mountainous country, with great rapidity; at Mosul it is no more than 353 ft. above the level of the Persian Gulph; from Bagdad it flows, with a moderate current, through a nearly level plain. Its distance from the Euphrates varies from 18 to 95 m.; the two rivers enclose the province in antiquity called, from that circumstance, Mesopotamia. The entire length of the Tigris is estimated at 1,146 m. At Mosul it is 100 yds. wide; between Bagdad and Korna its average breadth is 200 yards. It brings down great quantities of mud, which it deposits in shoals and islands in the lower part of its course; and between Mosul and Bagdad it passes over several ledges of rock, which form rapids of more or less difficulty. It is neither so deep nor so suitable for navigation as the Euphrates. It is, however, navigable for vessels drawing 4 ft. water as far as the ruins of Opis near the mouth of the Adhaym (*Lynch*, in *Geogr. Journ.*); and in Dec., 1836, it was ascended considerably above Bagdad by Col. Chesney's steamer "Euphrates." Its principal affluents are the Kaboor, the Great and Little Zab (an. *Zabatus* and *Zabus Minor*), the Adhaym (an. *Physcus?*), the Diala (an. *Delos* or *Arba*). In antiquity its banks were studded with cities of the first rank, as Nineveh, Seleucia, Ctesiphon, Opis, &c. Bagdad may be considered as the modern representative of Seleucia and Ctesiphon, as Mosul is that of Nineveh, opposite the site of which it is placed. Diarbekr is the only other important town on its banks.

The Tigris derives its name from the rapidity of its course, the term Tigris signifying "an arrow" in the language of the Medes and Armenians. So late as the age of Alexander the Great, the Tigris did not unite with the Euphrates, and each river preserved a separate course to the sea. But they not long after became united; and have since found their way to the sea in a collective stream. The ground in the lower part of their course being soft and alluvial, and their waters being also diverted into new channels by means of canals, the courses of both rivers must necessarily have differed materially at different periods. (*Rennell's Geog. of Herodotus*, i. 265.)

The Euphrates and Tigris run through chalky formations of a very friable nature, easily disintegrated by the action of the elements. Both rivers have their regular inundations, rising twice a year — first, in Dec., in consequence of the autumnal rains; and next, from March till June, owing to the melting of the mountain snows. (*Rich*, p. 54.) They bring down immense quantities of alluvium; and the extent of land covered by their deposits is supposed to exceed 32,000 sq. m.! The ancient writers have not failed to notice this resemblance between the Euphrates and the Nile. Cicero says, — *Mesopotamiam fertilem efficit Euphrates, in quam quotannis quasi novos agros invehit.* (*De Nat. Deorum*, lib. ii.) And Lucan —

> ——— Sparsus in agros
> Fertilis Euphrates, Phariæ vice fungitur undæ.
> Lib. iii. v. 259.

Mr. Ainsworth found the maximum of sediment mechanically suspended in the waters of the Euphrates, in Dec. and Jan. 1836 (in which months most mud is brought down), to be equal to 1-80th part of the bulk of the fluid. A good deal of this mud is deposited in the marshes of Lemlûm (an. *Paludes Babylonicæ*), a swampy tract, about 40 m. long by as many broad, commencing 50 m. S.W. of Babylon, and which has existed from the remotest period to the present day. The quantity of mud brought down by the Tigris was found, in Jan. 1837, to be equivalent to 1-100th part of the suspending fluid; but as it is not dispersed in marshes, more is carried down by this than by the Euphrates to the mouth of the Shat-ul-Arab. The rapidity of the Upper Tigris frequently causes it to break down its banks: Mr. Rich says, that when at its height it has a current of near seven knots an hour. In the alluvial plain, however, it averages only 1½ m. an hour throughout, and in many places it is less than 1 m. The Euphrates above Samisat is, perhaps, as rapid as the Tigris; and at Hillah, where its bed is narrowed, its rate is from 3 to 4 m. an hour; but in the low plain this rate is diminished to about 1 or 1½ m.

Lower Mesopotamia, or Babylonia, was, as already stated, anciently intersected by canals in every direction, for the purposes both of navigation and irrigation. Many connected the Tigris with the Euphrates; those which still exist are especially numerous near Bagdad, where the rivers approach within 25 m. of each other; and some, as the *Nahr Malcha*, might be easily repaired. (*Rich's Babylon, &c.* p. 57.) In fact, the Euphrates steamer passed from the Euphrates to the Tigris by the *Isa canal*, which leaves the former a few miles above Feluga, and enters the latter a short way below Bagdad. The Shat-el-Hie, which connects the two rivers, is also navigable in spring by large boats. The most celebrated of the ancient canals, that of *Pallacopas*, cut by the earliest Assyrian monarchs, partly through solid rock, extended for a very considerable distance parallel to the Euphrates on its S.W. side. Niebuhr supposed it had commenced at Hit. It may still be traced, almost continuously, from a little below Babylon to its probable mouth in the Persian Gulph (*Khore Abdallah*). Remains of aqueducts and towns, and various other ruins, abound in this region; and the ancient Median wall which ran from Macepracta on the Euphrates, to near the site of Opis on the Tigris, is still clearly traceable. (See *Messrs. Ross and Lynch*, in *Geog. Journ.* vol. ix.)

The steam navigation of the Euphrates is of considerable importance; and Colonel Chesney has proved that it may be navigated, as high as Bir, by steamers drawing 4 ft. water. Certainly however, we have no idea that it ever can be made available as an ordinary channel of communication between Europe and India; and are, indeed, surprised that any such notion should ever have been entertained: but its navigation would confer the greatest advantages on the vast and fertile countries through which it flows, should they be ever emancipated from the barbarism under which they have so long groaned.

EURE, a dép. of France, in the N. part of the kingd., being one of the five comprised in the ancient prov. of Normandy; between lat. 48° 39′ and 49° 29′ N., and long. 0° 15′ and 1° 45′ E.; having N. the æstuary of the Seine and the dep. Seine Inférieure, E. the deps. Oise and Seine-et-Oise, S. and S.W. Eure-et-Loir and Orne, and W. Calvados. Length E. to W. 65 m., breadth varying from 26 to 52 m. Area 582,127 hectares. Pop. (1836) 424,762. Surface nearly flat. There are a few ranges of low hills, principally in the N., none of them reaching an elevation of more than 330 ft. These ranges divide the dep. into several distinct plateaux, presenting a great variety of aspect. It is well watered; the Seine flows through its E. portion, and along its N.E. border. The Eure, whence it derives its name, rises in Orne, and after running at first E. and then N. falls into the Seine 6 m. N. Louviers. The Iton, Rille, and Charentonne are the other principal streams. Climate mild, but damp and variable: W. winds are the most prevalent. Soil chiefly calcareous or marly; but on the banks of the Seine it is sandy, and rather sterile. Iron ore is abundant, and there are numerous mines. According to the official tables, the arable lands comprised, in 1834, 358,863 hectares; pastures, 23,310 h.; orchards, 34,732 h.; and forests, 111,045 h. Property is less sub-

divided in this than in most other deps.; still, however, of 181,517 properties, subject to the *contribution foncière*, in 1835, no fewer than 89,449 were assessed at less than 5 fr., and 33,524 at between 5 and 10 fr.; but at the same time, 1,232 properties were assessed at from 300 to 500 fr., 828 at from 500 to 1,000, and 502 at 1,000 fr. and upwards, being very much above the average proportion of large estates in the kingdom. Previously to the Revolution the estates were much larger, but most of them have since been repeatedly subdivided by the operation of the law of equal succession. (*See* FRANCE.) Farms vary in size from 20 to 150 hectares. Agriculture, though more improved than in many other parts of France, is still very backward. The farm-buildings and cottages of the peasantry are in many instances of the very worst description, being frequently ill situated, built of wood, thatched with stubble, and surrounded by dunghills and filth. The fences are not well kept: but, notwithstanding these drawbacks, the country has, on the whole, a considerable resemblance to England. Wheat, oats, maslin, and rye are the principal kinds of grain cultivated. The total produce of corn in 1835 was estimated at 3,526,112 hectolitres. In some parts flax is grown; in others, hemp, pulse, woad, &c. Little wine is made, but apples and pears are very plentiful, and cider and perry are the ordinary drink of the pop. The stock of sheep is estimated at about 435,000 head, producing annually about 420,000 kilogs. of wool. The mining and manufacturing establishments of this dep. rank amongst the most extensive and important in France. The various works for smelting and working iron, copper, and other metals, employed in 1834 about 30,000 hands: the copper and zinc works at Romilly are very extensive. The cotton and woollen manufactures are also important. The broad cloths of Louviers are justly celebrated in foreign countries as well as in France, and in addition to them, cottons, flannels, druggets, baize, velvets, glass, paper, and leather are largely manufactured. This is one of the very few deps. of which the pop. has been latterly decreasing. It is divided into five arronds., and sends 7 mems. to the ch. of dep. No. of electors (1838-9), 3,621. Chief towns, Evreux the cap., Louviers, and Bernay. Total public revenue (1831), 13,830,221 fr. The women of this dep., as in other parts of Normandy, are good-looking and *tidy*; they wear dresses of remarkably bright colours, and lofty pyramidal caps, called *bonnets cauchoises*, ornamented with a great quantity of lace. Eure contains some Celtic, and many Roman antiquities; but those of the middle ages were mostly destroyed during the Revolution. (*Hugo*, art. *Eure*; *Encycl. des Gens du Monde*, &c.)

EURE-ET-LOIR, a dép. of France, in the N. part of the kingdom, between lat. 47° 57′ and 48° 57′ N. and long. 0° 44′ and 1° 59′ E., having N. the dep. Eure, E. those of Seine-et-Oise and Loiret, S. the last named and Loir-et-Cher, and W. Sarthe and Orne. Length N. to S. 60 m., greatest breadth about 55 m.; area 548,304 hectares. Pop. (1836) 285,058. There are only a few scattered heights in this dep., nearly the whole of which consists of an undulating plain. Principal rivers, the Eure towards the N., and the Loir in the S. Small lakes are numerous. Climate temperate and healthy. As much as 310,000 hectares of the surface consists of rich alluvial soil, and this dep. contains a greater extent of cultivable and less waste land than any other in the kingdom. In 1835, of 140,901 properties subject to the *contribution foncière*, 46,025 were assessed at less than 5 fr., and 37,597 at from 5 to 10 fr.; the number of considerable estates is, however, above the average of the deps. This is especially a corn-growing dep., and in 1835 produced altogether 4,531,910 hectol. of grain, principally wheat and oats. Good flax and hemp, pulse, turnips, onions, melons, woad, &c. are grown, but few potatoes. In some cantons the vine is cultivated, and in ordinary years about 200,000 hectolitres of inferior wine are made, as well as about the same quantity of cider. In 1830, 48,245 hectares of the surface consisted of pasture land, and the dep. contained 86,000 oxen and 700,000 sheep; the latter furnishing about 1,000,000 kilog. a year of wool. There are some iron mines, but they are little wrought. Manufactures of no great importance; the chief are those of ironware, earthenware, paper, cotton and woollen fabrics, beet-root sugar, and leather. This dep. is divided into 4 arrond., and sends 4 mems. to the ch. of dep. No. of electors (1838-9) 2,410. Chief towns, Chartres the cap., Chateaudun, Dreux, and Nogent-le-Rotreau. Total public rev. (1831) 9,363,627 fr. (*Encyc. des Gens du Monde*; *French Official Tables*.)

EUROPE*. This, with the exception of Australia, is the least of all the great divisions of the globe, being only about a fifth part of the size of Asia or America, and a third part of that of Africa. But, though thus inferior in point of size, Europe is immeasurably superior to the other continents in the enterprise, intelligence, and civilisation of her inhabitants, and perhaps also in her physical advantages. *Altrice victoris omnium gentium populi, longeque terrarum pulcherrima.* (Plin. Hist. Nat. lib. iii. § 1.) Europe is mostly situated within the temperate zone, and no part of her surface approaches within many degrees of the intertropical regions. The climate is, therefore, rather inclined to cold; but it is comparatively temperate, and is neither so cold in winter nor so hot in summer as the countries in the corresponding latitudes of Asia and America; so that while comfortable lodging and warm clothing are indispensable, the exertions of the inhabitants are not impeded by the too great intensity of cold on the one hand, or of heat on the other. The surface, too, of the country is infinitely varied and picturesque; and it has the advantage of being more intersected than any other continent by great arms of the sea, supplying facilities to internal and foreign commerce, that are all but wholly denied to Asia, Africa, and Australia, and not enjoyed in an equal degree even by America. The soil of Europe seems also to be of the quality best suited to stimulate and reward the efforts of the husbandman; for though it be nowhere so fertile as to produce crops without laborious diligence, and, consequently, does not foster indolence or a want of attention, it never fails liberally to reward the efforts of the industrious and skilful cultivator. Hence it is that this continent has every thing that seems best fitted to call forth and develope human genius and resources. But the advanced civilisation and superior influence of Europe in the affairs of the world seems, after all, to be owing in no small degree to the superior capacity of her inhabitants, as evinced in their superior enterprise, invention, perseverance, and power of combination. In all these respects they seem to be decidedly in advance of the most improved Asiatic nations; while the difference between them and the most improved native nations of Africa, America, and Australia, appears almost as great as the difference between man and the least advanced of the lower animals. Europe is the only part of the world in which civilisation and the arts have, generally speaking, been uniformly progressive. Important discoveries have been made, at remote periods, in China, India, and other Asiatic countries, but these would seem to have been the result of accident only, and, at all events, have had comparatively little influence: it is here only that they have been appreciated, improved, and perfected, and made instrumental in the production of further discoveries. It is characteristic of the European that he is never satisfied with what he has achieved; he is always pressing forward with unabated ardour in the career of industry and invention; and is as anxious to advance himself at this moment as his semi-barbarous ancestors 3,000 or 4,000 years ago. How much of this distinctive character and superiority of the European is to be ascribed to different and favourable circumstances, and how much to difference of race, is an inquiry foreign to our subject and incompatible with our limits. Most probably a good deal is ascribable to both causes; but, at all events, his superiority is alike great and obvious. It would seem, too, that he is destined to extend his dominion over every other part of the world, with the exception, perhaps, of the bulk of the African continent. The European is already master of by far the largest

* For a concise account of the various derivations of the word Europe, see *Facciolati Lexicon*, voce *Europa*.

portion of America; he has also laid the foundations of settlements in Australia that will, no doubt, at no very distant period, spread over every part of that remote and barbarous continent; and some of the oldest, most extensive, and richest countries of Asia are already in his power; and the fair presumption seems to be that he will in the end extend his conquests over every part of that great continent! Hence the prodigious preponderance of Europe in a moral and political point of view! It is to the world at large what Rome was to Italy, or Athens to Greece — the favoured land *unde humanitas, doctrina, religio, fruges, jura, leges ortæ atque in omnes terras distributæ putantur.*

Situation and Limits of Europe. — Europe forms the N.W. portion of the old or E. continent, having Asia on its E. and partly on its S. border; Africa, parted from it by the Mediterranean Sea, on the S.; the Atlantic Ocean, separating it from America, on the W.; and the Arctic Ocean on the N. Its limits are extremely well defined upon the S. and W., but in other directions doubts exist as to what is or is not Europe. Had the early Greek geographers, indeed, been aware that for more than 1,500 m. it was joined to Asia, the probability is that no name would have been imposed to distinguish it from that division of the world; but the first observers on the shores of Greece and Asia Minor, having adopted terms to designate the countries N. and S. of the narrow seas in that quarter, the subsequent discoverers applied the same as generic appellations to all the lands which gradually became known to them. Believing themselves to be permanently separated by the sea, the European naturally included in his Europe, and the Asiatic in his Asia, the discoveries made by each along the N. and S. shores of the Euxine; till, in their progress, they met on the banks of the Phasis, which thence became the first arbitrarily assumed line of demarcation. (*Herodotus Mel.* 37, 38.) Even in the time of Herodotus, however, this division was growing uncertain (*Mel.* 45.), and a line, formed by the Cimmerian Bosphorus, the Palus Mœotis, and the Tanais (Strait of Yenikalé, Sea of Azoph, and Don) was superseding it. This line was subsequently adopted universally as the E. limit of Europe. (*Strabo*, ii. 127.; *Pliny*, iii. 1.; *Ptolemy*, iii. 5, 6. v. 9.; *Pomponius Mela*, i. 2.) Little or nothing was known of this region during the middle ages; and when the arms of Russia laid it open to observation, the winding course of the Don, with which the ancients were but very vaguely acquainted, betrayed the geographers of the last century, in their anxiety to accommodate their systems with those of the Greeks, into an inextricable labyrinth of contradictions and absurdities. At length the academy of St. Petersburgh having, with great judgment, fixed the Oural Mountains as the N.E. limit of Europe, proposed to continue the line of demarcation, upon their meridian, by the river Jaik or Oural, as far S. as the commencement of the great salt plains N. of the Caspian: thence the boundary was an imaginary line running S.W. to Zarcsin, where the Wolga approaches nearest to the Don; crossing the former river at that point, and then following the old limit, along the bank of the Catta, to the Sea of Azoph. (*Acta Acad. Pet.* 1778, p. 6.; *Pallas' Observations on Mountains*, p. 28.) But the latter part of this boundary has two obvious defects: it is not sufficiently marked by natural features, and it divides the sources of three great rivers, the Oural, Wolga, and Don, leaving a part of each in Europe and a part in Asia. Malte-Brun (*Abrégé de Géographie*, p. 174.) proposes to follow the Oural to its mouth, and then to take the Caspian for his E. border, as far as the outlet of the Kuma; thence, to follow that river and the Manytch across the Caucasian plain to the junction of the latter with the Don, the lower course of which he also leaves in possession of its old destination. He considers this line as preferable to that which would follow the Terek and Kuban, because its depression is somewhat greater; but this line is hardly less arbitrary than that of the Russian academicians, and, like theirs, it is not marked by any grand natural feature. It is, indeed, not a little extraordinary, that neither looked to the gigantic chain of the Caucasus for a boundary: but it is evident that it forms one that is in all respects unexceptionable. It divides, as if by a wall (*Strabo*, lib. xi. p. 342.), the isthmus between the Euxine and Caspian seas, stretching between Anapé on the former and Cape Abscharon on the latter, forming a well-defined and indestructible barrier between Europe and Asia. It would not, in fact, be more absurd to extend the boundaries of France to the Ebro, or of Spain to the Garonne, losing sight of the Pyrenees, than it is to fix the limits of Asia and Europe either to the S. or N. of Caucasus. Nature has obviously intended that that great chain should be the limit between the two continents, and by adopting it all difficulties as to their boundaries vanish. The S.E. and E. frontiers of Europe are then marked by the shores of the Egean Sea, the Hellespont, the Propontis, or Sea of Marmara, the Bosphorus of Thrace, the Euxine, round to the Caucasus, and the ridge of that mountain system to the Caspian, thence along the shore of that sea to the Oural (from its mouth to its source) and the Oural Mountains, which, being continued to the Frozen Ocean and even further, in the high lands of Nova Zembla, complete the outline in this direction. Still it is evident that Europe is so connected with Asia, being in fact nothing but a peninsular prolongation of the larger mass of land, that no division can be quite satisfactory on physical principles; and, were it not for the vast difference in the races by which they are inhabited, we might perhaps be disposed to agree with Herodotus, who objects to giving different names to what is substantially one and the same continent. (*Melpom.* p. 45.)

It might appear that Nature had marked the limits of Europe too strongly towards the N. to admit of any doubt regarding them; but Iceland having been discovered and colonised long before the voyage of Columbus, was considered as belonging to Europe; though, as it lies much nearer to the American coast, or rather to that mass of land beginning with Greenland, which appears to be divided from the American main by Baffin's Bay and Barrow's Strait, it is properly an American island. On the other hand, Spitzbergen has been sometimes considered as belonging to America, though lying on the meridian (the 20th), which passes through the very heart of Europe; and Nova Zembla has been, in like manner, included in Asia, notwithstanding the comparatively wide sea of Kara flows between it and that continent, while it is parted from Europe merely by a strait, which is moreover broken by an island (Vaigatz) of some size. According to the principle, then, which considers as belonging to a continent those islands which lie nearest to it, Nova Zembla and Spitzbergen should be included in Europe, and Iceland in America; and the same arrangement, perhaps, requires that the Azores, though very distant, should also be included in Europe. According to this distribution, Europe and its islands extend from the rock of Cufonisa, S. of Crete, in lat. 34° 49′ N., to Little Table Island, the most N. of the Spitzbergen group, in 80° 48′ 21″ N.; and from Flores, the most W. of the Azores, in long. 31° W., to Jelania Noss or Cape Desire, the most E. point of Nova Zembla, in 77° E. The continental portion lies in much narrower limits, its extremes in lat. being the Tarifa Rock, W. of Gibraltar, in 36° N., and Nordkun in Finmark, 71° N. In long. the European continent extends from Cape Da Rocca, near Lisbon, 9° 30′ W., to the mouth of the Kara River, 66° E. (*Admiralty Charts; Great Russian Map*, 1800; *Parry's Fourth Voyage*, p. 42.; *Arrowsmith's Atlas*, pl. 3., &c.) Its extreme length, E.N.E. to W.S.W., from the Ouralian Mountains near Orsk in Russia to Cape St. Vincent in Portugal, is nearly 3,400 m.; its greatest breadth, N. to S., from the North Cape to Cape Matapan in Greece, 2,450 m. Its area, pop., subdivisions, &c. will be stated hereafter.

Physical Geography. General Aspect. — Europe, as already stated, is distinguished from all the other continents of the globe by the great irregularities of its shape and surface, and by the great number of its inland seas, gulphs, harbours, peninsulas, promontories, and headlands. This circumstance tends not only to influence very materially the climate and natural products of this continent, but to promote commerce and navigation.

Seas. — The great indentations in the boundaries of Europe, especially on its N.W. and S. sides, being its most important natural feature, the seas, on which these indentations depend, deserve the first place in our description. These, however, are by no means so extensive as is commonly supposed. The Mediterranean, the noblest of all inland seas, for example, is sometimes reckoned among the strictly European seas; but it would be quite as correct to describe it as belonging to Africa or Asia as to Europe. It is obviously common to them all; and cannot justly be said to belong to one more than another. This also is nearly the case with the Black Sea and the Caspian; though, as they are mostly surrounded by countries belonging to Asia, they must be considered as belonging rather to that continent than to Europe. The great arm of the Mediterranean called the Adriatic, and the Sea of Azoph, being almost wholly encircled by European countries, are most properly said to be European seas. The Baltic, however, is the real Mediterranean of Europe; and has, including its gulphs and bays, an immense extent of coast. The Zuydersee and the White Sea are also nearly landlocked by European countries, and consequently add to the number of European seas.

Bays and Gulphs. — The chief of these are the Gulph or Sea of Kara in N. Russia, the Bays of Archangel and Onega, belonging to the White Sea; the Gulphs of Bothnia, Finland, and Riga, belonging to the Baltic; the Bay of Biscay, forming a part of the Atlantic; the Gulph

of Lyons, in the S. of France; those of Genoa, Naples, Taranto, Venice (head of the Adriatic), and Trieste, in Italy; of Arta, Lepanto, Egina, Volo, and Saloniki, in Greece.

Peninsulas, Capes, &c. — Having so irregular an outline, Europe necessarily presents numerous peninsulas and headlands. In the S. the principal peninsulas are, Spain, with Portugal; Italy, with its sub-peninsulas of Calabria and Otranto; Turkey, with Greece, which includes the sub-peninsulas of the Morea and Salonica, and the Crimea. In the N. of Europe, the great Scandinavian peninsula, and those of Lapland and Jutland, are the principal; and in the W. are the much less considerable ones of Brittany and Cotentin in France, and that including the counties of Devon and Cornwall in England. The principal capes or headlands, proceeding from N. to S., are — Cape Gelania, in Nova Zembla; the North Cape and the Naze, in Norway; Cape Skagen, in Denmark; Cape Wrath, in Scotland; the Land's End, in England; Cape Clear, in Ireland; Capes La Hogue and Finisterre, in France; Roca, St. Vincent, and the rock of Gibraltar, in Spain and Portugal; Spartivento and Leuca, in Italy; Passaro, in Sicily; and Matapan and Colonna, in Greece. (*Malte-Brun, L'Europe*, pp. 444—451.; *Balbi, Abrégé de Géogr.* pp. 81—84.)

Islands.—The principal, forming part of Europe (Iceland being excluded) are — Great Britain and Ireland, with their dependent groups in the Atlantic and North Sea; Sicily, Sardinia, Corsica, Candia, the Cyclades and Sporades, the Ionian Islands, Dalmatian Archipelago, Malta, Elba, Majorca, Minorca, Ivica, the Lipari Isles, &c., in the Mediterranean and its cognate seas; Zealand, Funen, Laland, Bornholm, Oland, Gottland, Oesel Dagg, and the Aland Archipelago, in the Baltic; the Loffoden and other islands, on the coast of Norway; Spitsbergen and Nova Zembla, in the Arctic Ocean; Jersey, Guernsey, Alderney, &c., in the British Channel; Ushant, Belleisle, and a few others, on the W. coast of France; and perhaps the Azores in the Atlantic, and Lampedusa, Linosa, &c., in the Mediterranean.

Mountains. — The European mountains are divided by Bruguière, in his *Orographie de l'Europe*, into seven distinct systems — the Hesperic, Alpine, Sardo-Corsican, Tauric, Sarmatian, British and Hibernian, and Scandinavian. The Ouralian and Caucasian chains are omitted in this enumeration, being bounding ridges between Europe and Asia, and consequently belonging as much to the latter as to the former. We have already, however, briefly noticed Caucasus (see *antè*, p. 176.); and both it and the Oural are fully described in separate articles. The Alps compose the great central table-land of Europe, over a sixth part of which their ramifications are estimated to extend. (*Malte-Brun, Europe*, p. 454.) The summits of the Alpine system yield in elevation only to those of the Caucasus; Mont Blanc, in Savoy, the culminating point is 15,732 ft. in height. (*Bruguière.*) The Alps divide into 9 principal branches, which spread over Switzerland, France, Germany, the Austrian empire, Turkey, Greece, and Italy; the Apennines, Carpathians, Balkhan, &c. all belong to, or are intimately connected with, this system. The next in order is the Hesperic or Pyrenean system, which extends throughout Spain, Portugal, and a part of France. Its ranges, for the most part, run E. to W., through the Iberian peninsula: its culminating point is the *Cerro de Mulhacen* in the *Sierra Nevada*, 11,660 ft. high. (*Bruguière; Malte-Brun.*) The Sardo-Corsican system is confined, as its name implies, to the islands of Sardinia and Corsica: its highest summit appears to be that of Monte Rotondo, in Corsica, 9,068 ft. above the level of the sea. The Tauric system is comprised within the Crimea; its greatest elevation is 5,052 ft. The British and Irish system has but few summits of any considerable height: the principal are — in England, in Wales, Snowdon, 3,555 ft., and Cader-Idris, 3,550 ft.; in Scotland, Ben Nevis (Inverness-shire), 4,370 ft., and Ben Macdhu and Cairntoul (Aberdeenshire), 4,327 and 4,245; and in Ireland, Carran Tual (co. Kerry), 3,410 ft. in height. The Scandinavian system is spread over Norway, Sweden, Lapland, and Finland: its principal chains run mostly N. and S.: its highest point, the *Snechaetta*, is 8,120 ft. in elevation. The Sarmatian system consists of a few scattered hill chains in Russia, Poland, and the N.E. part of Prussia: its greatest elevation in the plateau of Valdaï does not, however, reach more than 1,118 ft. above the level of the sea. (*Bruguière, L'Orographie de l'Europe.*)

Plains and Valleys. — The whole of Lower Europe, — by which may be understood the entire extent of country from the Ouralian mountains and Astrakhan W. to the longitudes of Paris and London; including the greater part of Russia in Europe and Poland, Prussia Proper, the N. of Germany, Holland, Belgium, the N. of France, and the E. part of England, consists of an immense plain, interspersed only here and there with a few detached hill ranges of no great magnitude. This plain is very little elevated above the level of the sea; and we have elsewhere shown (*see* BALTIC), that it may be certainly concluded that at a comparatively recent period in the history of our planet, it formed part of the bed of a vast ocean, of which the Baltic is now the only considerable remaining portion. The innumerable shallow lakes in the N. of Germany, and between the Baltic and the White Sea, are smaller remnants of this great ocean; and independently of this, the morasses, abounding in marine plants, and the sands of N. Germany and Prussia, are incontestable evidences of the former submersion of the land. The more inland and easterly parts of this plain, which seem to have first emerged from the sea, particularly in the Russian governments of Kiev, Poltawa, Kharkov, Koursk, Orel, Kalouga, Toula, Tambof, Voroneje, &c., are covered with a rich vegetable soil, varying from 3 to 5 ft. in depth: this highly fertile region, whose vast capabilities are as yet but little known, has been estimated to comprise an extent of surface equal to that of France and Austria united! Next to this great plain, rank those watered by the Lower Danube (Wallachia and Bulgaria), the Middle Danube (the Greater and Less Hungarian plains), and the Upper Danube (the plain of Bavaria); the plain watered by the Lower Rhine, that of Lombardy, and the Bohemian Basin. The valleys of Europe generally are but insignificant, compared with those of Asia; but those of the Rhine, Upper Rhone, and Drave, deserve notice, as well for their extent as their picturesque beauty. Those of Norway and Scotland are commonly long and narrow, and their bottoms are often occupied by lakes, having the appearance of rivers.

Europe has no *desert* at all similar to those of the other great divisions of the globe. There are, however, some very extensive heaths or wastes. The principal are the *steppes* of Ryn, between the Wolga and Oural, and of the Wolga, between that river and the Don; the *puztas* of Hungary, the wilds of Sweden, Norway, and Lapland, the sterile districts of Stade, Hanover, Luneburg, and Zell, in the kingdom of Hanover; and of Pomerania, Brandenburg, &c. in Prussia. The greater portion of the deps. Landes and Gironde, in France, are covered with unproductive heaths, as is also a considerable part of the Terra di Bari in Italy.

Rivers. — The great watershed of Europe, or the ridge dividing the waters which flow into the Mediterranean, or Black Sea, from those which flow into the Baltic and North Sea, runs through the continent in the general direction of N.E. and S.W. The courses of the principal rivers are, therefore, for the most part, S.E. or N.W.; of the six largest, the Wolga, Danube, Dniepr, Don, Rhine, and Dwina, the four first flow in the former, and the two last in the latter direction. The chief rivers of Europe may be classed according to the seas into which they discharge themselves. The Wolga (with the Kama) and the Oural, fall into the Caspian; the Don, Dniepr, Dniestr, and Danube, into the Black Sea, and Sea of Azoff; the Petchora and Dwina into the Arctic Ocean and White Sea; the Neva, Duna, Niemen, Vistula, and Oder (Russia, Poland, and Prussia), into the Baltic and its gulphs; the Elbe, Weser, Rhine, Meuse, Scheldt (N. Germany), into the North Sea; the Loire, Garonne, Douro, Tagus, and Guadalquivir, into the Atlantic; and the Ebro, Rhone, and Po, into the Mediterranean and its gulphs. Nearly all the great rivers are in the E. and N.E. parts of the Continent. Western Europe has but few rivers that have a course of more than 500 or 600 m. Still, however, this part of the Continent is extremely well watered; and some of the shortest rivers, as the Thames and Shannon, afford the greatest facilities to internal navigation and commerce. If the length of the Danube be represented by 100 parts, the length of the other principal rivers will be, Wolga 130, Dniepr 72, Don 69, Rhine 49, Elbe 42, Vistula 41, Loire 37, Tagus 32, Rhone 38, Po 21, Tiber 10, and Thames 9, of these parts.

Lakes. — Are situated chiefly in Russia, Finland, Sweden, Switzerland, Italy, Hungary, Austria, Prussia, Scotland, Ireland, and Greece. Among the principal are the following: —

	Sq. M.		Sq. M
Lake Ladoga (Russia)	6,330	Lake of Geneva (Switzerland) -	240
Onega (do.) -	3,280	Constance (do.) -	200
Wener (Sweden)	2,135	Garda (Italy) -	180
Wetter (do.) -	840	Maggiore (do.) -	150
Moelarn (do.) -	760	Balaton (Hungary) - -	150
Saima (Finland)	1,600		
Enara (Lapland	685		

Lagunes are numerous along the S. coasts of the Baltic, and some parts of the Mediterranean and Adriatic shores; and Holland is full of dykes and pools. The coasts of Norway and a part of Sweden abound with inlets of the sea, which often stretch a long distance inland; these, however, do not consist of stagnant waters. There are some extensive swamps in Europe,

as that occupying nearly all the basin of the Prièpec in Poland, those along the courses of the Danube and the Theiss in Hungary, and at the mouths of the Danube, Po, and other rivers. Many of minor extent are to be found in the great plain of the continent, in the E. part of England, Touraine in France, Italy (in particular the Pontine marshes), Sicily, Western Greece, and on the shores of the Black Sea. (*Malte-Brun*, *Balbi*, *&c.*)

Climate. — The whole of Europe, with the exception of parts of Lapland, Sweden, Norway, and N. Russia, being situated within the temperate zone, it suffers but little from the extremes either of cold or heat. Its average temperature is higher than that of those parts of Asia or America, situated within the same latitudes. This circumstance is probably owing to various causes — as the fact of its general elevation being less than that of Central Asia; its being surrounded by seas, the waters of which are warmer than those of the oceans which surround the other continents; the agency of the gulph-stream in the Atlantic, which not only brings towards Europe a continual warm current from the torrid zone, but prevents the ice of the Arctic Ocean reaching its shores; and the powerful influence of civilisation and culture exhibited in the drainage of marshes, &c. But within the limits of Europe, there are vast differences of climate, and independent of the changes consequent on difference of latitude, the temperature diminishes so much in proportion as we proceed eastward, that the inhabitants of Turkey, in lat. 42°, often experience a degree of cold unknown in the N. of England in lat. 54°. The hottest part of Europe is its S.W. extremity: in Portugal the heat is often very oppressive. The S. of Europe, shut off from the cold N. and E. winds by the great Alpine ranges, has generally a warm climate, and occasionally suffers from the influence of the *scirocco*. Humidity is the chief characteristic of the atmosphere in the W. of Europe, as frigidity is of that in the E. With respect to the duration of the different seasons of the year, Europe may be divided into 3 zones. Southward of lat. 45° the winter is mostly confined to rainy weather from Oct. or Nov. to Jan. or Feb.; snow rarely falls, and vegetation is scarcely impeded: the spring lasts from the latter months till April or May; and the summer, during which the temperature often rises to 107° (Fahr.), and autumn, the remainder of the year. Between lat. 45° and 55° the winter is the longest season, lasting generally from Nov. to March or April: the spring continues from the latter month till June; the summer, the heats of which frequently rise to 92° Fahr., lasts till Sept.; the autumn is the shortest season of all. North of lat. 55° the seasons are for the most part confined to two — winter and summer. In the more northern parts of this zone, the snow lies on the ground, and the rivers are frozen for more than 6 months of the year. Beyond the Arctic circle, mercury freezes in the thermometer in Sept.; and the desolation of winter is broken only by two or three months of intense heat, during which the sun is perpetually above the horizon. The absence of this luminary for the rest of the year is compensated for by the magnificent phenomenon of the *aurora borealis*, which shines in these regions with the utmost brilliancy. (See *Malte-Brun*, *Géogr. de l'Europe*, pp. 455—461.; *Balbi*, *Abrégé*, *&c.*, p. 94.)

The following table is taken from Humboldt (*Annals of Philos.*, xi. 188.): the *first* division shows the temperature of the year, and of the various seasons in places having the same latitude; the *second* shows the different distribution of heat through the various seasons in places having the same mean annual temperature.

Places.			Mean Temperature. Of the Year.	Winter.	Spring.	Summer.	Autumn.	Warmest Mon.	Coldest Month.
I.		Lat. 56°							
Edinburgh	-	—	47·8	38·6	46·4	58·2	48·4	59·4	38·3
Copenhagen	-	—	45·6	30·8	41·2	62·6	48·4	65·0	27·2
Moscow	-	—	40·2	10·8	44·0	67·1	38·3	70·6	6·0
		Lat. 48°							
St. Malo	-	—	54·4	44·2	52·2	66·0	55·8	67·0	41·8
Vienna	-	—	50 6	32·8	51·2	69·2	50·6	70·6	26·6
II.		Lat.							
Dublin	-	53° 21′	49·2	39·2	47·3	59·6	50·0		
Prague	-	50° 5′	49·4	31·4	47·6	63·9	50·2		

Geology. — According to the map in Lyell's *Principles of Geology* (i. 209.), the following parts of Europe consist chiefly of primitive or transition formations: the Ouralian mountains; Lapland; nearly all Sweden, Finland, and Norway; most part of Scotland; the W. part of Wales; about the half of Ireland; the N.W. cos., and those of Devon and Cornwall in England; Brittany, the W. of Normandy, and a great portion of the centre and N.E. parts of France; the high ranges of the Alps; Corsica; most of Sardinia; the shore of Tuscany, Calabria Ultra, and the N.E. parts of Sicily; Bohemia; Carinthia; Styria; parts of Hungary and Transylvania; the E. half of Turkey and Greece; and the central chain of the Caucasus. Those parts principally occupied by secondary formations are: the lowlands of Scotland; the central half of Ireland; the N.E., central, and most of the S. cos of England; most part of France, and W. Germany; the loftiest summits of the Pyrenees; the country on either side of the central chain of the Alps; central, and S. Italy; the N. of Sicily; Istria; Dalmatia; the W. half of Turkey and Greece; Galicia, and the E. parts of Transylvania; some considerable tracts on the Wolga and Kami; and the N. declivity of the Caucasus. The rest of Europe, comprising nearly the whole of Russia, Poland, and the Prussian dominions; a large extent of country on both sides of the Gulph of Bothnia; all Denmark, N.W. Germany, and Holland: a great part of Belgium; the E. and many of the W. cos of England; the basins of Paris, and of the Rhone, Loire, and Garonne in France; the N. part of Switzerland; the plains of Lombardy, Hungary, Wallachia, and Bulgaria; most of Apulia; and the S. and W. parts of Sicily; is composed chiefly of tertiary, alluvial or diluvial formations; and has been obviously submerged at no very remote geological period. (*Lyell*, pp. 209—214.) Among the chief primary rocks of the great table-land of Europe, are granite, gneiss, and sienite. In the alpine ranges W. of St. Gothard, calcareous rocks abound, often intermixed with clay-slate and mica-slate; E. of St. Gothard the central chain is accompanied by lofty calcareous ranges, full of caverns. Granite is abundant in most European countries, where primary formations are met with; gneiss is the rock in which the Saxon, Bohemian, and Austrian metallic mines are principally situated. Transition limestone, which furnishes some of the best ornamental marbles, occurs in the N. and W. of England, S. of France, Harz, Alps, and Pyrenees; *grauwacké*, in which numerous metallic ores reside, abounds in Germany, Transylvania, the N.W. parts of Italy, &c. Coal exists extensively in the British islands, Sweden, France, Germany, Bohemia, &c.; chalk is a formation almost peculiar to Europe, extending throughout a great part of England, the N. of France, and parts of Poland, Russia, Sweden, Ireland, and Spain. Tertiary beds, containing a great number of fossils, have been discovered in various parts of Europe; the most noted of these are the London and Paris basins. The volcanic region of Europe (Iceland being excepted) appears to be principally included within the limits of Italy and its islands. There are three active volcanoes, Ætna, Vesuvius, and Stromboli; but of these, only one, Vesuvius, is situated on the continent. There are, however, obvious traces of former volcanic activity in France, Greece, and some other countries; and a considerable part of central Italy is geologically composed chiefly of volcanic products. Mineral springs in great variety abound in Europe.

The reader is referred, for more copious details with respect to European geology, to our articles on the different countries which it comprises.

Natural Products. Minerals. — If nature have denied to Europe the precious metals in any very great quantity, their absence has been fully countervailed by the presence of iron, coal, salt, copper, tin, lead, and mercury, in greater abundance, perhaps, than in any other region of similar extent. Iron and salt are pretty universally diffused; coal, the most important of all the minerals, is most plentiful in W. Europe, and especially in Great Britain. Copper abounds chiefly in the N. and W.; in Sweden, and the extreme W. counties of England; and the tin mines of Cornwall are not only the most productive, but probably also the most ancient in the world, since it is nearly certain that they were wrought in the time of the Phœnicians. Lead is most plentiful in Spain and England: the quicksilver mines of Idria in the Austrian empire are extremely rich. Gold, silver, and platina, are found; the first chiefly in Transylvania, Hungary, and Russia; the second in various parts of central and W. Europe; and the last has been recently discovered in the Caucasian and Ouralian mountains. Zinc, cobalt, arsenic, and nearly all the other metals with which we are acquainted, are found within the limits of Europe, with almost every variety of precious stones. North Italy yields the finest statuary marble, and the south part of the same country and Sicily supply immense quantities of sulphur, vitriol, sal-ammoniac, and various other volcanic products. Nitre is found in great quantities in Hungary. Beside these products, Europe furnishes the finest granite and building stone of various kinds, serpentine, slate, porcelain clay, rock crystal, alabaster, amianthus, and most of the minerals that are in the highest degree useful to man. (*Balbi*; *Tableau Minéralogique in Abrégé de Géogr.*, &c. p. 95.)

Vegetable Products. — The *Flora* of the extreme south-

ern parts of Europe has a great analogy with that of the contiguous parts of Africa. In Sicily, the date, palm, sugar-cane, and cotton plant (*Gossypium herbaceum*), several euphorbias, rare in this continent, the prickly pear, American aloe (*Agave americana*), and castor oil plant (*Ricinus africanus*), flourish. The same plants are met with in the S. parts of Spain and Portugal, in which peninsula many common to the Azores, and others, originally natives of America, grow freely without culture. In Greece, Turkey, and the S. of Russia, a large intermixture of Asiatic plants is found. The orange and lemon grow to perfection in the sheltered valleys of W. Europe, as far N. as 43° 30′; the olive ceases at about 44°; but the vine affords excellent wine in the W. as high as 48°, and its fruit comes to tolerable perfection in the open air for several degrees beyond that point in France and England. Where the vine, however, begins to fail, apple and pear trees begin to flourish, and cider occupies an important place as a beverage in the region in which wine has ceased, and beer is not in general use. The mulberry, pistachio, pomegranates, melons, &c., abound in the S.; peaches preserve their full flavour in the open air to lat. 50°, and the fig grows a little further N. Rice is cultivated to about 47°, but it requires a peculiar soil and climate; maize has nearly the same range. The limits of the culture of the common cerealia, or bread corns, are not very well defined, as the necessities of man oblige him to raise corn under the most unfavourable circumstances. Generally, however, the parallel of 57° or 58° may be regarded as the N. limit of the cultivation of wheat in Europe; though in some favoured spots of Finland it is raised as far N. as 60° or 61°. The hardier grains, as rye, oats, and barley, are cultivated in some sheltered situations on the coast of Norway as high as the lat. of 69° 30′; but farther E. in Russia their cultivation has not been found practicable beyond 67° or 68°. The introduction of potatoes, which are now widely diffused over almost all parts of Europe, promises to be of peculiar advantage to the N. regions, as they are said to be extremely prolific in parts where corn will hardly ripen. (*Encyc. Britannica*, art. *Europe*.) In ancient times, nearly the whole surface of Europe was covered with dense forests; these, however, have in a great measure disappeared in the better cultivated and more populous countries. Germany, Poland, Russia, Sweden, Norway, and some parts of the Austrian empire, are at present almost the only parts of Europe which contain forests of any very great extent. The natural orders of *Amentaceæ* and *Coniferæ*, comprise the greatest number of the noblest trees in the woods of Northern and Central Europe. In these regions, the oak (*Quercus pedunculata* and *sessiflora*) is the lord of the forest, and often attains to an enormous size. It disappears about lat. 60°; the ash does the same at 62°; the beech and lime are seldom found farther N. than 63°, or firs and pines beyond 70°. The tree that grows in the highest lat. is the dwarf birch (*Betula alba*); and the last plant met with towards the pole in Europe, is considered to be the "red snow" (*Palmella nivalis*), a cryptogamic species. The vegetable products of the N. of Europe are, however, by no means confined exclusively to that region. On the Alps, the Pyrenees, and other elevated mountain ranges in Central and S. Europe, similar products are met with at the different degrees of elevation, the temperature of which corresponds with that which the various plants require; and on the declivity of Etna, at different heights, the *flora* of the torrid zone, and that of the Arctic circle, are both met with. But a marked difference from that of the rest of Europe takes place in the vegetation S. of about lat. 44°. The mountains there are covered with chestnut woods; evergreens take the place of oaks, and the maritime and stone pines of other *coniferæ*: the plane tree, flowering ash, carob, laurels, lentisks, oleanders, cistus, and a host of dyeing, medicinal, and aromatic plants, abound, and the surface of the earth is almost continually covered with a carpet of brilliant and odorous flowers. (*Balbi*; *Malte-Brun*; *Dict. Géogr.*)

The superficial extent of Europe may be estimated at about 3,650,000 sq. m. If we draw a curved line from a point in the Ouralian mountains, about the lat. of 60° or 61°, to the W. coast of Norway, in the lat. of 69°, passing through the Lake Onega, and a little to the N. of the Gulph of Bothnia, this line will mark the extreme limits of cultivation, and will cut off a space equal to about 550,000 sq. m., or about 1-7th part of the entire surface of Europe. The culture of rye, oats, and barley, is confined to the region S. of this line, and includes more than 5-6ths of Europe; but in the N. parts of this zone only a very small proportion of the land will bear corn. The region adapted to the cultivation of wheat comprises about 4-7ths of Europe, and includes all the densely peopled parts. The region of the vine extends over 3-7ths of Europe. (*Encyc. Brit.*, art. *Europe*.)

Animals.— The numbers of the higher classes of animated beings are less numerous and varied in Europe than in either Asia or Africa. Some of those species known to the ancients as inhabiting this continent, as the *urus* and *auroch*, or bison, have become extinct, or nearly so; and the great increase of population and cultivation, the clearing of forests, &c., which have been going on from an early period, have greatly checked the increase, and diminished the numbers of those which at present exist. According to Cuvier, the total number of the species of *mammalia* inhabiting this portion of the earth, is only 150, and of this number only 58 are peculiar to Europe. The most formidable wild animals are the white bear, confined to the Arctic circle; the brown bear, which was once common in England (though long since extirpated), and is so still in the Alps, Pyrenees, and other remote mountainous and wooded regions; the wolf, still inhabiting many parts of Europe, and the wild boar. The largest animals, exclusive of whales, the walrus, &c., which inhabit the northern seas, are the elk and rein-deer, the latter of which is of the most essential service to the inhabitants of the north: these kinds of deer give place, in Central Europe, to the red-deer and roebuck; and the latter again, in the Alpine regions, to the chamois, and ibex. The other principal wild animals are, the lynx, met with chiefly in the S.; the wild cat, fox, marten, otter, beaver, polecat, glutton, porcupine, hedgehog, various kinds of weasels, squirrels, hares, rabbits, rats, mice, &c.

The domestic animals deserve more notice. The black cattle of Europe have attained to the highest perfection: their size is in general dependent on the goodness of the pasture. The sheep, so universally diffused, is believed by some to have originated from the *moufflon*, or *musmon*, a wild animal now confined to the mountainous districts of Sardinia, and a few other Mediterranean islands. According to other writers, it was originally introduced from Asia by way of Africa; but certain ancient authorities bear testimony to the existence at one period of an indigenous breed of sheep in Great Britain. The chief races of sheep at present existing are the Spanish *merino*, Cretan, Wallachian, and English. The merinos are the most celebrated for their wool; but, taken altogether, the various English breeds are the most valuable, since *the whole* of the products they furnish bear a high character for excellence. The domestic goat was believed by Cuvier to have been derived from the *Capra ægagros*, a wild species inhabiting the Alps and Illyria: the domestic hog is evidently the descendant of the European wild boar. The European horse has been supposed by some naturalists to be of Tartar origin; but no satisfactory reasons have been assigned for this opinion, which, is, most probably, entirely unfounded. The English heavy horses are unrivalled for draught, and the race-horses for speed and bottom: the latter, and the hunters, have been crossed with Arab horses, the first of which was imported so late as the reign of James I. The ass degenerates in the colder parts of Europe, but in the S. it is a fine animal, and greatly valued for the breeding of mules, the sure-footedness and hardiness of which render them highly valuable. Dogs are more numerous in Europe than any where else; and by frequent crossings, very numerous varieties have been produced. The domestic cat appears to be the lineal descendant of the wild species. The birds are much more various than the quadrupeds of Europe; as many as 400 different species have been enumerated; more, of them, however, are birds of passage than in other continents. Four species of vultures inhabit the Alpine ranges, but are seldom seen in higher latitudes; in the rocky and mountainous parts of the N., their places are supplied by enormous eagles, falcons, large owls, and other birds of prey. Most of the birds in the Arctic regions are aquatic; in the S. there is a great intermixture of the birds of Africa and Asia, as the Balearic crane, pelican, flamingo, &c. The common sorts of game are generally diffused throughout Europe; but the red grouse is confined to Scotland, and is said to be the only species peculiar to Great Britain. Bustards abound in some parts of Turkey and Greece. In general, the European birds cannot boast of very brilliant plumage, but they excel all others in melody. Reptiles are not numerous, and few are either large or venomous. In the Mediterranean a very delicate species of turtle (*Testudo caretta*) is found; and in some of the Austrian lakes, the *Proteus anguinus*, a singular link between reptiles and fishes. Of the latter-named class of animals, the principal are the herring, cod, whiting, mackerel, haddock, mullet, anchovy, and tunny, in the ocean and seas; and the salmon, pike, trout, carp, perch, &c., in fresh waters. The anchovy and tunny are almost confined to the Mediterranean, where their capture forms a valuable branch of industry. *Crustacea* are particularly numerous in the N., and *mollusca* in the S.; the latter are especially abundant and various in the Gulph of Taranto, anciently so famous for the *murex*, affording the Tyrian dye. In

the same part of Europe, scorpions and tarantulas are sometimes troublesome; musquitoes infest the S.; and Europe generally is considered by naturalists as the grand region of butterflies. The European *annelides* include the medicinal leech, so plentiful in the pools of Germany and Poland. Radiated animals, *zoophytes*, &c., are particularly abundant on the S. coasts, where some of them, as *actinias*, are used for food, and where the coral fisheries employ many hands. (*Murray's Encycl. of Geography; Malte-Brun; Balbi*, 98—100.; *Dict. Géographique*.)

Races of Men. — To trace and define the original races of mankind, and to describe their generic and specific characters as we do those of the lower animals, is every where most difficult in consequence of the nice shades of distinction which prevail among some of those that approach nearest each other. But this difficulty is, perhaps, greatest of all in Europe, where, from the superior enterprise of the people, intermixture of blood, through conquest and emigration, has taken place to a greater extent than in any other part of the world. The great mass of the people of Europe belongs to the race which Blumenbach, and after him Cuvier, have called the *Caucasian*, under the idea not only that its type is best exhibited in the inhabitants of the Caucasian range, but that this was its original seat, and that the race thence spread itself throughout Europe! But this last supposition is wholly without foundation. The inhabitants of the Caucasus have been, in all ages, unenterprising semi-barbarians, who have never emigrated beyond their own bounds; nor, through the medium of language, can a trace of them be discovered in any part of Europe. Even language, our best guide elsewhere, often fails us wholly in this part of the world. Thus, through the greater part of the southern portion of Europe, the foundation of all the modern languages is Latin, originally the language of an inconsiderable nation of central Italy; but spread by conquest, and the destruction, or absorption of the local idioms, to its present wide extent. In the same manner we have the German language extending from the northern confines of France and Italy, through the central part of Europe, comprising its whole north-west portion as far as the North Cape, and including Iceland and the greater portion of the British islands, to say nothing of the modern diffusion of the same language in America, and elsewhere.

The farther we go back in history, the greater number of distinct families of the European race will be discovered, and consequently the greater number of languages will be found to exist. In Italy, and its islands, where but one language is now spoken, there were in ancient times, but after the people had made considerable advances in civilisation, six distinct native tongues, which had each a written character and a literature, besides foreign dialects; and Strabo enumerates, in all, not less than forty Italian nations, each of which, in all probability, had its own peculiar language, or at least dialect. In France, where there are now but two spoken languages, Cæsar describes three as existing in the indedependent part, exclusive of one, at least, in the Roman province, while Strabo enumerates no fewer than 70 different nations as inhabiting it. Within the Alps the same author gives us the names of at least 30 tribes; and in the Spanish peninsula, where there is now but two languages, he enumerates 22 nations. In perusing such statements, we rather fancy ourselves reading of American, Malay, or Hindoo nations, and tribes, than of the people of Europe. The ancients were incurious both in regard to language and physical form, except their own; but comparing the few facts known to us, with the present condition of nations in a rude state of society, the probability is that 2,000 years ago. the inhabitants of Europe, like the people now referred to, had a great diversity of languages, and might be distinguished by much difference of physical form, which in the intermixture of families can be no longer satisfactorily traced. Even in the early period alluded to, and, indeed, in a far earlier one, the intermixture of families and languages must have already made considerable progress. The Greeks had settled in Italy and its islands. The inhabitants of Gaul had colonised a considerable portion of northern Italy. The Italians, in their turn, had settled and colonised in the south of France; and the Germans, by whole tribes, had formed settlements in Gaul and Britain.

It does not seem likely, however, notwithstanding the extinction of some languages and the substitution of others, that any conquered European nation was ever exterminated; and it seems probable, that the greatest change that took place through conquest, was in those cases in which the conquerors being more numerous than the conquered, a mixed race was the result, bearing a nearer resemblance to the first than to the last. Of this the Saxon conquest of our own country, or, at all events, the German conquest of a portion of it, which preceded the arrival of the Romans, affords the most striking example. In the great revolutions now referred to, the near approach in physical forms of the European families, and their approximation, moreover, in manners and customs, would make amalgamation a matter of little difficulty, — very different, in short, from what would have been the case had there existed a wide discrepancy, as we see in the case of the Turks and Greeks, and still more strikingly in the case of the African and European races in the New World.

The European race is distinguished from the African, Mongolian, Semitic, Tartar, Hindoo, Indo-Chinese, Chinese, Malayan, and American, by traits so obvious and distinct as not to be mistaken. The skin is white, and the colouring matter of the *rete mucosum* so small in amount, that in the cheeks, and some other parts of the body where the skin is thinnest, it can be seen through, and hence blushing, or, rather, visible blushing, is peculiar to the European. The hair varies in colour in different individuals, and, for the most part, is of a soft texture and undulating; the eyes also vary in colour from a light blue, or light grey, up to a dark blue or dark brown. These three characters of the skin, the hair, and the eyes, are peculiar to the European, and never to be found in any other race of mankind. Variety, at least in complexion, if not in features also, is the peculiar physical characteristic of the European race, as distinguished from the other inhabitants of the globe considered by classes. The intellectual powers, as they have been developed in this race in all periods of their history, from their first emanation from the woods down to the highest point of the civilisation of Greece and Rome, or of modern Europe, exhibit a singular superiority over the other races. They display a higher degree of energy, intrepidity, enterprise, and invention, than any other. They are the only race that has as yet exhibited, in the highest degree, the peculiar prerogative of mankind, that of always continuing to accumulate knowledge, and who, notwithstanding many oscillations in their history, still continue to advance. Other races have continued stationary, or retrograded: but, as

previously stated, it is a distinctive trait of the European race to have constantly moved onwards, and gained in civilisation in periods when it appeared to be retrograding: for even in the dark ages, when the fine arts, and science, and polite literature were nearly lost, the foundations were being laid of a far better constitution of society and of government. The very mixture of races certainly conduced to our intellectual advancement, and, most probably, contributed, as it is known to do with the lower animals, to our physical improvement. It is in vain, therefore, that naturalists class the Semitic, Tartar, and Hindoo races, along with Europeans, merely because the form of their skulls, and the shape of their faces, do not materially differ. There are other, and quite as important characteristics, that show them to be essentially different.

Another characteristic of the European race is the greater size of the hand, the greater rigidity of the muscular fibre throughout, and, collectively, the superiority of muscular strength, and greater capacity of perseverance in physical labour, which distinguish it above all the other races.

In attempting the following classification, we shall take it for granted, that emigration and conquest have not so completely altered the physical form of the different families of men now inhabiting Europe, but that they are still, in some considerable degree, to be distinguished by the form which belonged to each in its original locality:

1. Beginning from the south-west, the first family which occurs is the Spanish or Iberian, including the whole inhabitants of the Peninsula, the Portuguese and Basques, as well as the true Spaniards. Notwithstanding the double admixture in this case of Semitic blood, and of Italian and Gothic, this family is sufficiently distinguished by colour, features, and intellectual character, from its neighbours across the Pyrenees, and those farther up the Mediterranean. They have displayed the peculiar characteristics of the European race in their resistance to and final conquest of the Arabs, in their conquest and settlement of South America, in their progress in the fine arts, and in the production of such a genius as Cervantes.

2. The next race is the Italian: its ancient type has been well preserved, notwithstanding much admixture of Greek and German blood: this is to be found in the numerous, and obviously faithful representations of its men and women of the classical ages, which exist in the statues of the Vatican and Capitol; and which do not appear to differ in any material respect from the well-formed and handsome peasantry of Italy in the present day. We may refer, as examples of the highest order of the Italian form, to the statues of Augustus and of Napoleon, which, by the way, so much resemble each other, that the likeness can hardly escape the most inattentive observer. Of the distinguished men produced by this family it is almost needless to speak; suffice it to mention the names of Cæsar and Cicero, of Dante, Raphael, Columbus, and Napoleon.

3. Proceeding eastward, we come to the Greek family. This comprises the inhabitants of the Grecian continent and islands, including the Illyrians, Albanians, Thessalians, &c. The *ideal* type of these is to be found in the Apollo, the Venus de Medici, and other fine remains of antiquity; and the reality in the statues of great men in the museums of Italy, and in the modern Greeks. Notwithstanding a subjugation of nearly 4 centuries, the Greeks have mixed very little with their conquerors; and have preserved their language and physical form wonderfully distinct, and are now, as of old, remarkable for personal beauty. It would be idle to speak of the genius of the family which produced Homer and Demosthenes, Themistocles and Epaminondas; which routed and expelled from Europe the hordes of Asia, carried its conquests to the Indus, diffused arts and civilisation over western Europe, and is the parent of all rational literature and sound science.

4. The next family, proceeding eastward, is the Turkish or Tartar, the only oriental race that ever succeeded in forming by conquest a great permanent establishment in Europe. Though with a considerable mixture of Semitic and European blood, they still closely resemble their brethren who inhabit Transoxiana. Invariably dark eyes, and dark hair of a coarse texture, with a squatter form and an intellectual listlessness, distinguish them from all the genuine European families. The empire they have founded in Europe, is tottering to its downfall; and but for the jealousies of the European powers, it would long since have been annihilated.

5. Turning again to the W., we find N. of Spain, and N.W., of the Mediterranean, the Celtic family, inhabiting France, Belgium, a part of Switzerland, and a part of the British islands. Physically and intellectually, the general character of this people (allowance being made for the influence of civilisation) is probably, in most essential particulars, the same as that of the Gauls, of Cæsar, and of the Caledonians, and Silures of Tacitus. They are distinguished from the German race by darker complexions, a far greater prevalence of brown hair and dark eyes; and intellectually by superior vivacity, as exemplified in the French and Irish; but at the same time, perhaps, by less constancy and assiduity. The statues of Voltaire, and the portraits of Francis I. and Sully, may be taken as examples of this family in modern times; while the dying gladiator, now commonly considered a Gaul, may be held as representing it in antiquity. Language affords no test in regard to this family; for we know nothing of the ancient dialects of France, while the modern language is formed on that of the Roman conquerors, with the exception of about two millions of people inhabiting Brittany, who still speak a tongue which is, in reality, the same as the Welsh. The Welsh, again, is as remote from the Erse of Scotland or the Irish of Ireland, as the languages of any two American, Oceanic, or Indian tribes, a hundred miles apart from each other; while the Celtic dialects of Scotland and Ireland are, in fact, nearly identical. It must, indeed, be admitted, that there are great, if not insuperable, difficulties, even in a physical point of view, in classing all the nations now enumerated under one head; the Welsh and Scotch Highlanders being short in stature, and the French not tall, while the Irish are remarkable for their stature.

6. We come next to the German family, at present the most powerful and possessing the greatest influence of any in Europe, though two thousand years ago it was almost unknown. This family is characterised by the great prevalence of blue eyes, yellow or flaxen hair, and a very fair skin. It embraces the Swedes, Norwegians, Danes, Dutch, all the inhabitants of Germany, with the exception of a few Bohemians, and the great bulk of the Scotch

and English. Along the banks of the Rhine, and in Britain, there has been much admixture of Celtic, and probably also, of Italian blood; and it is only in the northern parts of Europe, as in Sweden and Denmark, that the peculiar characteristics of the German race are still found pure and unmixed. Generally speaking, however, the German family, in its native seat, is less intermixed with foreign blood than any other European family. Its own country has never been conquered; while the Germans have been the most extensive and permanent of all conquerors, as is shown by their conquests of France, England, Italy, and Spain, and by the still more extensive conquests they are now achieving across the Atlantic, and in Australia. The German family has probably exhibited greater enterprise, perseverance, and even invention, than any other family, as evinced by its discoveries in arts and sciences, its military enterprises, and its political institutions. For the last two thousand years, and probably even before it was known to the rest of the world, it has gone on steadily advancing in civilisation, and in the accumulation of knowledge. The portraits of Luther, Milton, and Newton, are favourable representations of this family, and those of Gustavus Adolphus and Charles XII. exhibit its ruder and more vulgar form.

We may here observe, that there are really no grounds whatever for the common and favourite hypothesis of the German or Gothic family having emigrated at some remote period from Asia. This is a purely gratuitous and, apparently, most unfounded supposition. There is not, in fact, so much as the shadow of any kind of evidence to prove that the Germans described by Tacitus were not the original occupants of the country they then occupied; and the fair presumption is, that such was really the case. At all events, if they ever inhabited any part of Asia, their emigration must have been of the most effectual description, as not a trace of any cognate people is now to be found in that continent.

7. The next great family is the Slavonic, embracing the Russians, Poles, Lithuanians, and a portion of the Bohemians, the Wends, Dalmatians, Croatians, Slavonians, Bosnians, Servians, and Bulgarians. Swarthy complexions, as compared with the German family, dark brown hair, with a light reddish beard, a round face, high cheek bones, and eyes somewhat Mongolian, characterise this family, which, as yet, though greatly superior in energy, enterprise, and power of combination, to any Asiatic people, has made no very remarkable progress in civilisation. Peter the Great is, perhaps, the most remarkable man that this family has produced, and his portrait is a favourable specimen of it.

8. The Finnish is another family, comprising chiefly the Finns and Laplanders, with some smaller nations, the whole extending from the Gulph of Finland to the Ouralian mountains. This family is short in stature, of a strong and robust make, with a flat face, high cheek bones, light brown hair, and a thin beard. It is said to be of oriental origin, but apparently with no good foundation. The Finns have made little progress in civilisation, and many of them are to this day in the nomadic state. The whole number of this family is not estimated at above three millions.

9. Hungary, Transylvania, Wallachia, Moldavia, and Bessarabia, are inhabited by a variety of races not very easily classified. The ancient inhabitants were the Pannonians and Dacians, whose robust and manly forms are well represented in the statues of their kings and warriors, many of which are still to be found among the ancient remains which exist in Rome, and other cities of Italy. The genuine Hungarians of the present day are tall and handsome, with dark complexions, and brown or black hair. They are said to be descended from the Magyars, who are themselves represented as emigrants from central Asia; but if the ancestors of the Hungarians really emigrated from any country E. of the Wolga, it is certain that there is now nothing oriental in their descendants either in mind or body.

10. The N.E. portion of Europe is inhabited by a portion of the Mongolian race, either in a nomadic, or other rude state, such as the Samoyedes, the Soiyanes, Permiens, Wojuls, Wotyaks, Kalmuks, and Kirghises. The Jews, a portion of the Semitic family, are found dispersed throughout all Europe, but are most numerous in some of the rudest parts of it, as Poland and Russia. It is probable, indeed, that their numbers at present far exceed what they ever amounted to before their conquest and dispersion, and when they were an independent nation. The dark complexion, black eyes, and black hair, with aquiline nose, show generally to what extent the purity of the original race has been preserved. Still as we find not unfrequently among them, especially when living among the German family, fair hair and blue eyes, which no Asiatic ever possessed, it admits of little question that a considerable intermixture of blood has taken place.

Population. — The progress of population in Europe in modern times has been vastly greater than in any other quarter of the world, except those parts of America and Australia that are occupied by Europeans. This increase has been at once a consequence and a cause of the increase of industry; and it has, accordingly, been greatest in those countries in which industry has been most developed, — in Great Britain, Germany, Russia, and France; and nearly stationary where industry has been stationary, as in the Peninsula and Turkey. In some countries, however, there has been a considerable increase of population without any corresponding increase of industry. Ireland is a case in point: the almost unprecedented increase of population that took place in it between 1784 and 1830 having been wholly, or almost wholly, a consequence of the endless division and subdivision of the land — that is, of the operation of that principle to which the poverty and barbarism of the country, as well as its dense population, are mainly to be ascribed. (*See* Ireland.) We are also disposed to believe that the division of the land in Prussia, resulting from the innovations introduced by Stein, has had a considerable influence over the extraordinary increase of population in that kingdom (*see* Prussia); and there can be no doubt that the operation of the law of equal succession has contributed to bring about the same result in France. (*See* France.) But, however it may have been brought about, it does not appear that the increase of population has been any where accompanied by a deterioration in the condition of the inhab. On the contrary, it has been in most countries signally improved. In Great Britain, France, Germany, Russia, &c., the great bulk of the inhab. are now better fed, better clothed, and better lodged than at any former period. The rate of mortality has been also very materially diminished; so that there has been almost every where not only a great increase of comfort and enjoyment, but also of health and longevity. It may be further observed, that the extensive intercourse that now prevails among different coun-

tries has almost wholly nullified the influence of those scarcities in particular countries that used now and then to sweep off a large proportion of their inhab. Scarcities are never general; and it is always found, that when the crops are deficient in one quarter they are unusually productive in quarters having a different soil and climate. And commerce, by setting the surplus of one country against the deficiency of another, produces, as it were, perpetual plenty; and exempts civilised nations from those vicissitudes in respect to the supply of food that are so destructive in rude societies.

Government. — Very various forms of government may be found in Europe; but, speaking generally, they may all be distributed into the three great classes of *absolute* and *limited* monarchies, and *republics.* It is necessary, however, to observe, that by the first, or absolute monarchies, is not meant governments where the sovereign is really absolute, or may act as his judgment or caprice may dictate. There is no such government in any part of Europe, not even in Turkey. All that is here meant by an absolute monarchy, is a government where the legislative and executive functions are administered by the sovereign, without his being subject to the control of any legally constituted or recognised public body. But every country in Europe has laws and institutions which the sovereign must respect; and public opinion has every where vast influence: the most absolute of the European monarchs are aware of its power, and all of them are exceedingly chary about adopting any line o' conduct that they suppose would be likely to be disapproved by any considerable proportion of their subjects. The checks on the power of the sovereign in the different limited monarchies to be found in Europe, are extremely different both in kind and degree. They mostly, however, consist of organised bodies that share, to a greater or less extent, in the legislative authority. In some countries, as in the United Kingdom, one of the bodies that shares in the legislative authority is elected for a specified period by a pretty widely diffused system of suffrage, and has, consequently, very great influence. The distribution of power in republics is, as every one knows, quite as various as in monarchies.

Political Division. — Europe is divided at present (1850) into about 55 independent states, which, with their area, pop., &c., are mostly specified in the following table. At the head of these states are Great Britain, Russia, France, Austria, and Prussia, called, *par excellence*, the five great powers. The states of the second rank are Spain, Sweden, and Turkey; those of the third, Holland, Belgium, Portugal, Naples, Bavar a, Sardinia, Denmark, Saxony, Wirtemberg, Hanover, and the Swiss Confederation; and those of the fourth comprise the remainder.

States and their Designation.	Area in sq. m. English.	Population. (Latest returns.)		Pop. to the sq. m.	Capitals.
Russian empire (incl. Poland) - - -	2,000,000		60,362,315	30·1	Petersburg
Austrian empire (incl. Lombardy, &c.) -	257,368	(1846)	36,950,401	143·5	Vienna
France, incl. Corsica (kingdom) - - -	203,736	(1846)	35,400,486	173·7	Paris
Great Britain and Ireland (kingdom) -	120,562	(1841)	26,895,518	223·0	London
Isle of Man, Channel I., Malta, &c. - -	1,214	—	238,539	196·4	
Prussia, inc. Neufchatel (kingdom) - -	107,921		16,171,564	149·7	Berlin
Spain (kingdom) -	182,270		12,286,941	66·9	Madrid
Turkish empire (incl. Servia, Wallachia, and Moldavia) -	210,585		9,545,000	45·3	Constantinople
Sweden and Norway (kingdom) - -	291,164	(1840)	4,354,767	14·7	Stockholm
Belgium, incl. parts of Limburg and Luxemburg (kingdom) -	13,214	(1846)	4,335,319	328·0	Brussels
Portugal (kingdom) -	36,510	(1842)	3,412,500	93·4	Lisbon
Holland, incl. parts of Limburg and Luxemburg (kingdom) -	13,598	(1844)	3,128,841	230·0	Amsterdam
Denmark, incl. Holstein, Lauenburg, and Iceland (kingdom) -	21,856	(1845)	2,296,171	105·0	Copenhagen
Germany.					
Bavaria (kingdom) -	29,637	(1843)	4,440,327	149·8	Munich
Hanover (kingdom) -	14,734	(1842)	1,755,592	119·1	Hanover
Wirtemberg (kingdom)	7,640	(1841)	1,701,726	222·7	Stuttgard
Saxony (kingdom) -	5,759	(1843)	1,757,800	305·2	Dresden
Baden (grand duchy) -	5,901	(1843)	1,335,200	226·2	Carlsruhe
Hesse-Cassel (electorate)	4,430	(1843)	732,073	165·2	Cassel
— Darmstadt (grand duchy) - - -	3,240	(1843)	834,711	257·6	Darmstadt
Mecklenburg Schwerin (grand duchy) - -	4,833	(1843)	504,527	104·6	Schwerin
Oldenburg (gd. duchy)	2,417	(1843)	276,291	114·3	Oldenburg
Nassau (duchy) - -	1,753	(1843)	412,298	235·1	Weisbaden
Other German States -	10,282	(1843)	2,052,477	199·6	
Italy.					
Naples and Sicily (kgd.)	42,132	(1844)	8,320,217	199·8	Naples
Sardinia and Piedmont, incl. Monaco (kgd.) -	29,130	(1839)	4,650,368	159·6	Turin
Papal State (popedom)	17,210	(1843)	2,908,115	168·9	Rome
Tuscany (gd. duchy) -	9,150	(1844)	1,699,938	208·8	Florence
Parma (duchy) - -	2,268	(1842)	485,826	214·2	Parma
Modena (duchy) - -	2,317		580,619	250·6	Modena
San Marino (republic) -	22		7,600	345·4	San Marino
Swiss Confederation, excluding Neufchatel (republic) - - -	14,950	(1842)	2,113,248	141·3	
Greece (kingdom)	17,900		700,000	39·1	Athens
Ionian Islands (repub.)	999		210,000	210·2	Corfu
Andore - - - - -	200		7,500	37·5	
Total - -	3,685,902		252,864,845	68·8	

The foregoing table shows that Russia comprises the greatest actual amount both of extent and pop.; though, as to density of pop., in proportion to the sq. m., it ranks last but one. The indep. state with the least amount of pop. is the principality of Lichtenstein; that with the least extent of surface is the republic of San Marino; and that with the greatest density of pop. is the free city of Frankfort on the Mayn. The pop. of Sweden and Norway is the least dense. The pop. to the sq. m. in Spain nearly represents that of Europe at large.

Religion. — In the *Weimar Almanac* for 1836, the pop. of Europe is estimated at 228 millions *, distributed as follows among the different religious creeds: —

Christians	Roman Catholics -	121,743,000
	Protestants - -	52,340,000
	Greek Church -	43,300,000
Mohammedans - - - -		8,050,000
Jews - - - -		1,752,000
Other faiths - - - -		815,000
Total - -		228,000,000

Hence it appears that more than 19-20ths of the whole pop. are Christians. In an enlarged point of view, the Roman Catholic faith prevails chiefly in the S., Protestantism in the N., and the Greek church in the E. Mohammedanism is confined to Turkey and the extreme S. part of Russia. The Jews are scattered over the whole of Europe, but are especially numerous in Poland. The nomadic Kalmuc tribes in the S. provs. of Russia profess Buddhism or Lamism; Sabeism, or the worship of the celestial bodies, &c., prevails amongst some Caucasian tribes; the wandering Gypsey races have a religion peculiar to themselves; and Feticism, including various kinds of idolatrous worship, still exists amongst some of the Finnic and Ostiak tribes of Lapland, Sweden, N. Russia, &c. (*Balbi*, 103, &c.)

Languages. — The principal at present spoken in Europe may be classed as follows: —

1. Greco-Latin Family:
   - *a.* Modern Greek.
   - *b.* Italian, Spanish, Portuguese, French, Moldavian, and Wallachian.
2. Celtic Family:
   - *a.* Gaelic of Scotland, Erse or Irish Gaelic.

* The discrepancy between this and the number given above is occasioned partly by the increase of population in the interval, and partly by our having extended the limits of Europe, so as to make it include the governments of Astrakhan, Orenburg, the Caucasus, &c., which the *Weimar Almanac* includes in Asia.

b. Welsh, Armorican (Brittany). Cornish (allied to the two latter dialects) extinct.

3. TEUTONIC FAMILY:
   a. High German, Low German, (Dutch, &c.) Swedish, Danish and Norwegian, Icelandic.
   b. English and Lowland Scotch, very mixed, especially the former, but founded on the old Anglo-Saxon or other Teutonic dialects.
4. SLAVONIC FAMILY:
   Russian, Polish, Bohemian, Servian, Sorab or Wendish, two dialects spoken in E. Saxony, Croatian, Bosnian, Bulgarian, &c.
5. OURALIAN FAMILY:
   a. Finnish, Lappish, Esthonian, Carelian.
   b. Magyar or Hungarian.
   c. Turkish (?)
6. PECULIAR LANGUAGES:
   a. Basque, spoken in Pyrenean districts of Spain and France — quite unlike any other European tongue.
   b. Albanian, belonging to neither the Slavonian nor Greek family, but intermixed with both.
   c. Lithuanian, Lettish, Livonian, Samogitian, quite peculiar, though containing many Slavonic words.

Civilisation. — Though the least civilised state of Europe is certainly more advanced in all that respects mental cultivation and improvement in the arts, than the most improved native state founded in any other part of the world, there is a wide difference in the degrees of civilisation that obtain among the different European communities. The Italian republics were the first to emerge through the barbarism that involved Europe after the Roman empire had fallen a prey to the attacks of the Germans and other Northern invaders. It was in them that commerce, arts, and literature again rose to such excellence as to rival or excel their state in the most brilliant periods in the annals of Greece and Rome. The invention of printing in the 15th century gave to the moderns a power of diffusing, increasing, and perpetuating information of which the ancients were wholly destitute, and which has contributed incomparably more than any thing else to accelerate the progress of civilisation. It is, perhaps, not going too far to say, that we are indebted to the invention of printing for the Reformation — that great event which restored to mankind the right of thinking and judging for themselves on matters of religious belief; and broke to pieces the shackles which churchmen and bigots had forged to enchain and weigh down the energies of the human mind. But though the invention of printing and the Reformation have every where had a powerful influence, it has been much greater in some countries than in others. Only a very short time elapsed after books began to be multiplied, till governments, beginningto be sensible of the importance of this new power, endeavoured to make it subservient to their views, by enacting laws for its regulation, and preventing any work from being published without a licence, or till it had been revised by a censor: and it was not till Holland had emancipated herself from the blind and brutal despotism of old Spain, and the Stuarts had been expelled from England, that the press began to be really free; and that periodical literature, and especially newspapers, began to acquire some portion of the vast importance to which they have since attained. But the jealousy of the doctrines broached by the early Reformers was still greater than that of the freedom of the press. They attacked principles that had been long regarded as sacred, and which, in fact, had been looked upon by most persons as part and parcel of the Christian faith. In addition to this religious feeling, most princes believed that the government derived a strong support from the church; and that, were its foundations unsettled, the whole frame-work of society would, most likely, be shaken to pieces, and their power and authority might fall to the ground. We need not, therefore, be surprised that almost all the great sovereigns of Europe, as the kings of France and Spain, the emperor of Austria, &c., were determined enemies of the Reformation. In England, the unbridled licentiousness of Henry VIII. luckily effected a separation from the church of Rome, which otherwise it might have been impossible, or, at all events, very difficult to bring about: and in France, the extinction of the line of Valois by the death of Henry III. in 1589, and the elevation of Henry IV. to the throne, secured to the country the advantages of a toleration that could not be obliterated, even by the revocation of the edict of Nantes. But in the Peninsula, Austria, and Italy, the efforts of the enemies of the Reformation prevailed. Philip II., though he failed in his attempt to extirpate the principles of civil and religious liberty in the Low Countries, completely succeeded in Spain and Portugal; where he not only consigned every adherent of the new doctrines to the stake, and established the formidable tribunal of the Inquisition, but also suppressed the free institutions that had previously existed in Aragon and other Spanish kingdoms. The result has been such as might have been anticipated: Spain, deprived of those means of instruction and improvement that she once possessed, and which have been enjoyed by other countries, has not merely been outstripped by her rivals in the career of wealth and improvement, but has positively retrograded; and is infinitely less industrious and civilised at this moment than in the reign of Charles V. She has been, *in fact*, a prey to every species of misgovernment; and affords a striking and impressive example of the incalculable injury that an enfeebling and degrading superstition and an irresponsible government may entail upon a people. In no other country has the freedom of the press and of religious opinion been so completely rooted out as in Spain; and none, consequently, has fallen into such a deplorable state of weakness and decrepitude. In general, it may be affirmed of the different countries of Europe, that their civilisation is proportioned to the amount of freedom they have practically enjoyed. Other things have, no doubt, had a material influence in advancing and retarding their progress; but it has, notwithstanding, mainly depended on the freedom of the press and of opinion.

Of the secondary causes that have influenced the progress and diffusion of civilisation, commerce has undoubtedly been by far the most powerful. An extensive commerce is only another name for an extensive intercourse with foreigners; and it is impossible that this should take place without partially, at least, obliterating local and national prejudices, and expanding the mind. Commerce is also a powerful means of promoting industry and invention. An agricultural people having little communication with their neighbours, may be either stationary or but slowly progressive; but such cannot be the case with a commercial people. They necessarily become acquainted with all the arts and inventions of those with whom they carry on trade, and with the endless variety of their peculiar products and modes of enjoyment. The motives which excite, and the means of rewarding superior industry and ingenuity, are thus prodigiously augmented. The home producers exert themselves to increase their supplies of disposable articles, that they may exchange them for those of other countries and

climates. And the merchant, finding a ready demand for such articles, is stimulated to import a greater variety, to find out cheaper markets, and thus constantly to supply new incentives to the vanity and ambition, and consequently to the industry, of his customers. Every power of the mind and body is thus called into action; and the passion for foreign commodities — a passion which some shallow moralists have ignorantly censured — becomes one of the most efficient causes of industry, wealth, and civilisation.

Commerce, and the manufactures to which it gives rise, and by which again it is indefinitely extended, are always most advantageously carried on in great towns; which, consequently, are uniformly most numerous in commercial countries. These great towns are the grand sources of civilisation. The competition that takes place in them, the excitement that is constantly kept up, the collision of so many minds brought into immediate contact, and all endeavouring to outstrip each other in their respective departments, develops all the resources of the human mind, and renders a great city a perpetually radiating focus of intelligence and invention.

At no former period in the history of the world has commerce been nearly so extensive as at present; and it is all but certain that it will continue to increase, with the increase of intelligence, population, and wealth, all over the world. But the tendency of an extensive commercial intercourse among different nations is to diffuse the advantages of civilisation equally amongst them all; and the fair presumption seems to be, that the differences that now exist in the social condition of the people of the various European states, except in so far as they may depend on differences of soil or climate, or such like natural causes, will gradually decrease, and, perhaps, in the long run, nearly disappear.

EUSTATIUS (ST.), one of the Caribbee or W. India islands in the group called the Leeward islands, belonging to the Dutch, in lat. 17° 30′ N., long. 67° 40′ W., between St. Christopher's and Saba, about 9 m. N.W. the former, and 15 m. S.E. the latter island. Area, 189 sq. m. Pop. 13,700, including slaves. (*Weimar Almanac.*) This island is evidently an extinct volcano; it rises out of the ocean in a pyramidal form, and has a depression in its centre, apparently its ancient crater, which now furnishes a plentiful cover for numerous wild animals. The coast is almost wholly inaccessible, except on the S.W., where the town of St. Eustatius has been built. Climate generally healthy; but terrific hurricanes and earthquakes are frequent. The island suffers also the great drawback of a deficiency of spring water. Soil very fertile, and the industry of the Dutch has brought almost every portion of it into culture. Tobacco, which is the principal product, is raised on the sides of the pyramid to its very summit. Sugar, cotton, indigo, coffee, maize, yams, potatoes, &c., are also grown; and hogs, kids, rabbits, and all kinds of poultry, being reared in much greater numbers than required for the use of the pop., the isl. furnishes them to others. But we have no accurate information respecting the amount or value of the annual produce, or of the export or import trade. Formerly it used to be the seat of an extensive contraband traffic with the adjacent islands and the continent of S. America. This island was taken possession of by the Dutch, early in the 17th century; it has, since then, several times changed hands between them, the French, and the English; it was finally given up to Holland in 1814. (*Dict. Géog.; Cannabich, &c.*)

EUXINE. *See* BLACK SEA.

EVESHAM, a parl. bor. and market town of England, co. Worcester, hund. Blakenhorst, in the fertile vale of Evesham, on the Avon, 13 m. S.E. Worcester, and 14 m. N. by E. Cheltenham. The bor. extends over 3 parishes, comprising in all an area of 2,150 acres Pop. in 1841, 4,245. The limits of the bor. were not affected by the Boundary Act. It is situated on both sides the river, the communication between its two divisions being kept up by a bridge of 7 arches. This is a very ancient town, a monastery having been founded here anno 709. It was a mitred abbey, and at the dissolution its revenues amounted to 1183*l.* a year. Few vestiges of the building now remain, with the exception of a magnificent tower, now used as a belfry, built not long before the dissolution. This tower is a square, 22 ft. by 22, and 117 ft. in height: it is reckoned the finest extant specimen of the pointed ecclesiastical style of the 16th century. The town consists principally of a main street in the line of the bridge, and of another nearly at right angles to it. "The appearance of the town is that of a flourishing and improving place. Many houses have been recently rebuilt, and several new ones added." (*Boundary Report.*) It is paved and lighted under the provisions of a local act, which also provides for the watching of the town, and the care of the bridge. There are 3 churches, with chapels for Baptists, Wesleyans, Unitarians, and Quakers. It has a well endowed free grammar school, Archdeacon Deacle's charity school, with national, infant, and Sunday schools, an apprentice fund, and sundry benefactions to the poor. The stocking manufacture is carried on to some extent; parchment is also made; but gardening is the principal business of the inhabs. Evesham claims to be a bor. by prescription; it sent 2 mems. to the parl. holden in the 21st of Edward I., but it was not again represented till the early part of the reign of James I., who gave a charter to the bor. Since then it has continued to send 2 mems. to the H. of C. Previously to the Reform Act, the right of voting was in the mayor, aldermen, capital, and other burgesses, members of the corporation. Registered electors in 1849-50, 352. The corporation revenue amounts to near 250*l.* a year, mostly derived from bor. rates, tolls, and dues. The mayor and 4 senior aldermen of the old corporation were justices of the peace, and had power to hold sessions of oyer and terminer, and to try and punish all crimes other than high treason. So late as 1740, a woman was burned here for petty treason.

Near Evesham was fought, on the 4th of August, 1265, the battle between Edward, Prince of Wales, afterwards Edward I., and the confederated barons under Simon de Montfort, earl of Leicester: the latter were totally defeated, and their leader and his eldest son killed. (*Tindal's Evesham, passim; Boundary Reports, &c.*)

EVREUX (an. *Mediolanum*, and subsequently *Eburovices*), a town of France, dép. Eure, of which it is the cap., on the Iton, an affluent of the Seine, 28 m. S. Rouen, and 51 m. W.N.W. Paris; lat. 48° 55′ 30″ N., long. 1° 9′ 19″ E. Pop. (1836) 7,852. It is generally well built; but the streets are rather narrow, and its houses have an antiquated appearance; it is surrounded by fine promenades, and is well supplied with water. The chief public building is the cathedral, one of the most ancient and curious in France; it is in the figure of a cross, its centre surmounted by an octagonal dome and pyramid, the summit of which is 255¼ ft. above the ground; 16 pillars on either side separate the nave and choir from the lateral part of the building; the left entrance, which is flanked by 2 octagonal towers, is greatly admired. The other principal structures are the church of St. Saurin, probably as ancient as the cathedral; the great clock-tower, built in 1417; the town-hall, hôtel de préfecture, Episcopal palace, prison, theatre, and public library, with 10,000 vols. Evreux is the seat of a court of assize, of tribunals of primary jurisdiction and commerce, of a bishopric, which had its origin as early as the 3d century, a chamber of manufactures, a departmental college, and a primary normal school. It has a fine botanic garden, societies of agriculture, science, and arts, and of medicine; and various courses of lectures. Its situation on one of the principal roads in France greatly facilitates its trade, and affords ready outlets for its manufactures of woollen and cotton cloths, leather, tickings, satinettes, &c. Evreux has suffered many vicissitudes. It was frequently in possession of the English; and has been repeatedly sacked by them and by the French. It was assigned by Richelieu to the duc de Bouillon in exchange for the principality of Sedan. (*Hugo*, art. *Eure; Guide du Voyageur.*)

EXETER, a city, co. of itself, sea-port, and parl. bor. of England, co. Devon, hund. Wonford on the Exe, 9 m. N.W. from its embouchure in the English Channel, 157 m. W. S.W. London; lat. 50° 43′ N., long. 3° 32′ 30″ W. Area of city and co. 4,056 acres. Pop. of do. in 1821, 23,479; in 1841, 31,312. It is built on the acclivity and summit of a hill rising from the E. bank of the river, amidst a remarkably broken and irregular, but fertile district. The 2 principal lines of street (each nearly 2 m. in length) cross at right angles near the centre of the city; numerous smaller ones intersect these and each other in various directions: these are for the most part narrow, with many ancient houses. The principal street, leading in a direction from E. to W., is broad, and has lofty modern houses, and handsome shops; it is connected with an ancient suburb on the opposite side of the river by a fine bridge of 3 arches, built in 1776. Bedford Circus, the terraces of Northernhay and Southernhay (forming part of the city), and the suburbs, espe-

cially those of Heavitree and St. Leonard's on the E. and S., consist also of elegant modern residences: in these directions, terraces of a similar character, and detached *villas*, are fast increasing; the beauty of the immediate neighbourhood, the contiguity of several favourite watering places, and the excellent markets, inducing the residence of many wealthy and respectable families. The city is well paved, lighted by gas, and supplied with water by a company with a capital of 30,000*l.*: under an act passed in 1831, between 60,000*l.* and 70,000*l.* have been expended in the general improvement of the city; and upwards of 64,000*l.* in the erection of two splendid market-places. Exeter is the seat of a bishopric, founded in 1249. The cathedral, begun in 1280, is one of the finest in the kingdom: it is in the pointed style of different periods, with 2 massive Norman towers. The W. front has a façade, with numerous statues of saints and kings in niches adorned with a profusion of tracery: over it is a magnificent painted window; a corresponding one at the E. end, and those of the aisles and transepts also, display great diversity and beauty. The interior is very striking, from its exquisite proportions and simple grandeur; a richly ornamented screen parts the nave from the choir, and is surmounted by a very large organ; St. Mary's chapel, the chapter-house, the bishop's throne, and several ancient monuments are also worthy of especial notice. There is a valuable ancient library, in which, amongst other muniments, is the *Exeter Domesday Book*, published by the Record Commissioners in a supplementary vol. to the great *Domesday*. The cathedral suffered much during the last civil war, but has been carefully renovated. The bishop's palace (of the reign of Edward IV.) adjoins it on the S. E. The other buildings in the close are modern, obstructing the view of the cathedral on the W. and S.; on the other sides is an open area, planted with trees. At an average of the three years ending with 1831, the revenue of the see of Exeter amounted to 2,713*l.* a year. The total average revenue of the dean and chapter during the 7 years ending with 1834, amounted to 9,839*l.* a year. There are 24 other churches and Episcopal chapels in the city and suburbs; the only one requiring notice is the modern church of St. Sidwell, in the pointed style, which, with its spire, forms a conspicuous ornament on the N. side of the city. It has also a Catholic and several dissenting chapels, and a synagogue. The principal charitable institutions are, the Devon and Exeter hospital, established in 1743, and accommodating above 200 patients; a deaf and dumb institution for poor children of any of the 4 W. counties, who are maintained, educated, and taught various trades; a lunatic asylum, a blind asylum, an eye infirmary, city dispensary, and several sets of endowed almshouses; a female penitentiary, humane society, and numerous others. There is a free grammar-school, founded in 1633, with a revenue of about 800*l.* a year, and 6 exhibitions of 36*l.* each, 1 of 32*l.*, 3 of 25*l.*, and 6 of 8*l.* a year each to either university; a blue-coat school, founded in 1661, for 32 boys and 4 girls, and 80 day scholars; St. Mary Arches school, founded in 1686, and now educating 52 boys on Bell's plan, of whom 30 are partly clothed; the Episcopal charity school, established 1709, and now clothing and instructing 180 boys and 130 girls; the ladies' school, for 40 girls; the national or Bell's school, for 562 boys and 360 girls; an infant school; a dissenting charity school, for 55 children; and many large Sunday schools. The Devon and Exeter scientific and literary institution (supported by shares and annual subscr.) has a valuable library and museum: there is also an athenæum; public subscription rooms, for balls, concerts, &c.; public baths; a good theatre, usually open in winter, and during the county assizes; and an ancient guildhall, near the centre of the High Street. Annual races take place in August, on Haldon Hill, 6 m. S. W. of the city. On the site of the ancient Norman castle (of which the remains of the ancient gateway are still preserved) is a modern county sessions-house, where the assizes, &c. are held; and in the large area before it, the election of members for S. Devon, and other public meetings, take place. It is surrounded amphitheatrewise by the old ramparts, the slopes of which are planted with trees. N. of the ramparts is a fine public avenue, near which are the county gaol and bridewell, and also those of the city: all of them are well-built modern structures; near the former are large cavalry barracks, and on the S. side of the city still more extensive ones for artillery. The principal market is on Friday for corn, cattle, woollen goods, and general provisions; a smaller one on Tuesday for the last named, of which there is also a considerable daily supply, especially on Saturday; a great cattle market on the 2d Friday in each month; and annual fairs the 3d Wednesday in February, May, and July, and the 2d Wednesday in December, chiefly for cattle. At Alphington, about 1 m. from the city, a large horse fair is held yearly in October. Woollen goods formed the ancient staple of Exeter, and during last century it exported large quantities to the peninsula, and various parts of the Mediterranean; but this trade has wholly ceased. The cotton and shawl manufacture, introduced more recently, has also been given up; and though the weekly meetings of the woollen manufactures of Devon are still held at Exeter, the work executed there is limited to serges. There are several large breweries and iron-foundries in the city; and tan-yards and paper-mills, employing many hands, in the immediate neighbourhood. Its chief business originates in its being the provincial capital, where the public business of the co. is transacted, as well as the daily concerns of the populous and fertile districts immediately round it. It is also a great thoroughfare; and has derived the greatest advantage from the opening of the Bristol and Exeter railway, by which it is brought within 5 or 6 hours' travelling of the metropolis. Some of the inns are on a first-rate scale. It has 3 joint-stock banks, a savings' and 3 private banks, and 5 weekly newspapers. The custom-house, quays, bonding and other warehouses connected with the shipping trade, are at the S. W. end of the city; where the river, confined by a weir, forms a floating haven connected with a ship canal excavated in 1673, and originally 3 m. long; this has recently been deepened and extended 2 m. lower, so that vessels of 300 tons now ascend to the city: a large floating basin has also been formed, in addition to the haven, and is the terminus of the Bristol and Exeter railway. These improvements have cost the city corporation upwards of 100,000*l.*; hitherto, however, there has been no proportional increase of trade, and the heavy port dues are much complained of. The sea entrance to the harbour has a shifting bar, and is narrow and intricate, but it is well buoyed, and within the narrow neck of land, between it and the English Channel, is a spacious and safe anchorage called the Bight. There belonged to the port on the 1st of Jan. 1850, 185 ships, of the burden of 18,272 tons.

Exeter is a corporation by prescription. Its earliest charter was granted by Henry II.; its last in the 25th George III. The city is now divided into 6 wards, and is governed by a recorder, mayor, 12 aldermen, and 36 councillors. The annual revenue of the corporation amounts to about 10,000*l.*, derived partly from lands and houses, but chiefly from market, town, and canal dues. Its debt (upwards of two thirds of which was incurred on the canal) amounts to above 150,000*l.* The charities in the city are divided into "church" and "general charities," and are governed by two distinct bodies of trustees, selected from lists submitted to the Lord Chancellor. Exeter has returned 2 mems. to the H. of C. since 1286; the right of election, previously to the Reform Act, being in freeholders and in freemen by heirship, servitude, and presentation. The Boundary Act extended the limits of the parl. bor., so as to embrace the suburbs of Heavitree and St. Thomas, and some other districts, having a pop. of 5,267, and making the total pop. of the parl. bor. in 1841, 37,231. Registered electors in 1849-50, 3,511. The limits of the municipal bor. now coincide with those of the parl. bor. The courts of justice, or quarter sessions for the city, have jurisdiction, under the powers given by the Municipal Reform Act: they are held 4 times a year; the recorder presides, and barristers plead in them. There are 4 courts of civil jurisdiction, the provost's court having jurisdiction to any amount. A court of requests, for debts under 40*s.*, established in 13th George III., is held once a fortnight, and much resorted to. The general sessions and assizes for Devonshire are also held here. The city poor are under a corporation established in the reign of William III. The rates average upwards of 8,000*l.* a year, and the amount raised by assessment under the Improvements Act, in 1838-39, exceeded 7,000*l.* The annual value of rateable property, in 1847, was estimated at 119,109*l.*

Exeter is the *Isca Damniorum* of the Roman period, and is first mentioned in the second century: numerous coins and other relics of that people have been discovered. During the Saxon period it was for some time the capital of Wessex, and was noted for the number of its religious establishments. It has undergone several sieges. Archbishop Baldwin, Sir T. Bodley, founder of the Bodleian Library, Lord Chancellor King, Lord Gifford, Sir V. Gibbs, were natives of Exeter: it gives the titles of Marquis and Earl to the Cecil family. (*Parl. Reports* and *Private Information*.)

EYE, a bor. town and par. of England, co. Suffolk, rape Pevensey, hund. Hartismere, in a low fertile tract, intersected by several streams, about 2 m. from the main line of road from London to Norwich, 75 m. N. E. London. Area, 2,370 acres. Pop. (1841) 2,493. "It is of some importance to the neighbourhood as a market town, but has no pretensions to be considered as a place of trade. The white-washed houses, thatched roofs, and unpaved streets, give it the appearance of a large handsome agricultural village." (*Boundary Report*.) The church is a spacious cruciform structure, with a noble tower in the later Gothic style; there are also 2 dissenting chapels; an almshouse for 4 poor women; a free grammar-school (with 2 exhib. to the university of

Cambridge), at present educating 20 boys; a national school, supported by subscription; a house of industry, adjoining which is a handsome modern guildhall. Market, Tuesday for corn; Saturday for general provisions. The inhab. are chiefly employed in agriculture; formerly, hand-made lace employed a majority of the females, but since the introduction of machinery for the purpose, this has declined. It claims to be a bor. by prescription; the earliest charter was granted in the reign of John, and subsequently 8 others were conferred. It returned 2 mems. to the H. of C. from the earliest period down to the passing of the Reform Act, by which it was deprived of *one* mem. The right of voting was formerly in the burgesses, bailiffs, and commonalty. The Boundary Act extended the limits of the parl. bor. so as to include 10 additional parishes, comprising an area of 15,150 acres; and a pop., in 1841, of 7,347. Registered electors in 1849-50, 351. According to the Municipal Act, the limits of the bor. for municipal purposes are restricted to about 150 acres; and it is governed by 4 aldermen and 12 councillors. Corporation revenue about 300*l.* a year, chiefly derived from rents.

EYEMOUTH, a market town, and the only sea-port in Berwickshire, Scotland, on the German Ocean, at the mouth of the small river Eye, 7 m. N. Berwick-upon-Tweed, and 42 E. by S. Edinburgh. Pop. 1831, 1,106; the parish is confined almost solely to the burgh, only 75 persons residing in its landward portion. The town has generally a thriving and respectable appearance, but the only public building worth notice is the parish church. It carries on some fishery business; but latterly it has greatly fallen off. A successful attempt has lately (1832) been made to make Eyemouth a weekly grain market. In 1832, grain to the amount of 20,000*l.* was sold in it; and the market has increased since. This result is owing to the excellence of the harbour, and the cheapness of the port charges. The harbour of Eyemouth lies at the corner of a bay, into which ships may work in and out at all times of the tide, or lie at anchor, secure from all winds, except from the N. or N. E. Spacious granaries have been erected, in connection with the corn trade, on the quay; and a large building, once used as barracks for soldiers, has also been employed as a granary. A branch of the Commercial Bank of Scotland has been introduced. The vessels, of all descriptions, which arrived and sailed in 1833, were 201; in 1834, 198. Owing to its near vicinity to England, being the first harbour on the Scotch side, Eyemouth was long famous for smuggling; but illicit traffic has long disappeared.

Eyemouth is a place of considerable antiquity; but the most important fact in its history is, that the Duke of Somerset, in his expedition against Scotland in 1547, caused a fort to be erected on a bold promontory to the N. of the town, the remains of which can still be traced. The great Duke of Marlborough, though not otherwise connected with this place, was created Baron Eyemouth by William III.; but the title being limited to heirs male, is now extinct. (*Redpath's Border Hist.*, p. 560.; *New Statist. Account of Scotland*, § *Berwick*, pp. 318—336.)

F.

FABBRIANO, a city of central Italy, Papal States, deleg. Macerata, at the E. foot of the Apennines, 30 m. W.S.W. Ancona. Pop. 8,500. It has a cathedral and numerous convents. Felt cloth of good quality, for printers, distillers, paper-makers, &c., is produced here; and it is celebrated for its paper and parchment: it has been supposed, indeed, that this was one of the first places at which paper from linen rags was manufactured. Glue, and some other articles, are also produced. It has 3 annual fairs, and markets twice a week. (*Rampoldi*; *Bowring's Report*.)

FAENZA (an. *Faventia*), a town of central Italy, Papal States, deleg. Ravenna, on the Emilian Way, at the junction of the canal of Zanelli with the Lamone, 9 m. N.W. Forli, and 30 m. S. E. Bologna. Pop. (1832) 18,500. It is surrounded with walls, and defended by a citadel. It has 4 well-built streets leading to a square in its centre, in which are the cathedral, town-hall, new theatre, and many handsome private residences (*palazzi*), with a fine marble fountain in the middle. The rest of the town consists of miserable courts and lanes. There are 26 churches, 15 convents, 2 schools of painting, a lyceum, hospital, and 2 orphan asylums. The manufacture of a kind of porcelain which has derived its name (*fayence*) from this town, still continues to be carried on, but to a much less extent than formerly. There are some factories for silk fabrics and twist, paper-mills, &c. Its trade, which is said to be tolerably active, is facilitated by the canal, which leads to the Po-di-Primaro. Faenza was sacked by the Goths in the sixth century; nearly ruined by the Emperor Frederick II.; and annexed to the popedom by Julius II. in 1509. It was the residence of Torricelli, the inventor of the barometer. (*Rampoldi*; *Dict. Géog.*)

FALAISE, a town of France, dép. Calvados, cap. arrond., on the Anté, 21 m. S.S.E. Caen. Pop. (1836) 9,396. It is built on the declivity of a hill, the summit of which is crowned by its castle, now in part a ruin, but anciently the residence of the dukes of Normandy, and the birthplace of William the Conqueror. The town was formerly pretty well fortified, and is still surrounded with walls. It is clean and well built; has 3 long streets, 4 squares adorned with modern fountains, 3 churches, 2 hospitals, a theatre, and a public library with 4,000 vols. Falaise has a tribunal of original jurisdiction, and a communal college. Its manufactures consist of lace, tulles, cotton fabrics, &c. Its suburb of Guibray is celebrated for a large fair held in it each year, from the 10th to the 25th August, which Hugo says "is for the N.W. of France, what the fair of Beaucaire is for the S." The value of the commodities disposed of at this fair has been estimated at 15,000,000 fr. (600,000*l.*) (*Hugo*, art. *Calvados*, *Guide du Voyageur*, *&c.*)

FALKIRK, a market town, parl. bor., and par. of Scotland, co. Stirling, on an eminence, 3 m. S. S.W. Frith of Forth, at Grangemouth, at the S. W. extremity of the fertile tract of land called "the Carse of Falkirk," 23 m. W. by N. Edinburgh, and 10 m. S. by E. Stirling. Pop. of the town and parish, in 1801, 8,988; in 1841, pop. of the town 8,209, of par. 15,621. There are two other villages within less than a mile each of the town, namely, Camelon on the W., and Lauriston on the E. The Carron Iron-Works (*see* CARRON) are within 2 m. of the town. Grangemouth, situated at the junction of the Forth and Clyde canal with the river Carron, about ½ m. from the Forth, forms the port of Falkirk. The canal in question runs past the N. extremity of Bainsford village, and is joined by the Union canal from Edinburgh, at Lock 16., within less than a m. of Falkirk. (*See* GRANGEMOUTH.) The Edinburgh and Glasgow and the Scottish Central railways pass within a short distance of the borough.

Falkirk consists of one well-built street, about ½ m. in length, with various cross lanes, and of Grahamston and Bainsford, which stretch in a continuous line 1 m. to the N. The only public buildings are the parish church, built in 1811, with a steeple 130 ft. in height; the town-house, and chapels belonging to the Free Church, the Relief, Associate Synod (2), and the Baptists. There were no fewer than 32 schools (in 1840), male and female, in the parish, of which 22 belonged to the town. The aggregate average number of scholars in the town is about 1000; in the whole parish, 1,500: in other words, about a *ninth* part of the whole pop. are being instructed. The English parochial school is regarded by good judges as a good model school. There is, also, a flourishing school of arts, in which courses of lectures on different branches of science are delivered every winter. A newspaper, the Falkirk Herald, is published on the 2nd Thursday of each month. A legal assessment for the poor obtains in Falkirk. Under the old system, the average number of permanent and occasional poor united, was 400 for three years previously to 1837. Average annual assessment for their support during the same time, 469*l.* 3*s.* 4*d.*, in addition to 62*l.* 1*s.* 3*d.*, the average annual collections at church-doors. (*Report by General Assembly on Poor in Scotland*, 1839.) The assessment in 1847 amounted to 1,122*l.* 19*s.* 10*d.*, the total number of paupers relieved during the same year being 418. The increase has been occasioned partly and principally by the increase of pauperism, and partly by the better provision made for necessitous persons.

Falkirk can hardly be said to possess any manufactures. There are sundry printing presses, 4 tanneries, which employ about 50 hands, several breweries, of which only one employs so many as 30 men, 2 small manufactories of pyroligneous acid, with a few muslin weavers who work for Glasgow manufacturers, and weave linen or cloth from yarn spun by families in the district. But the neighbourhood of the town teems with manufactures and other sources of employment. In addition to the Carron Works, there is the Falkirk Foundry, at the N. extremity of Bainsford, in which about 500 persons, young and old, are engaged. There are 2 distilleries, one at Camelon and the other at Bonnybridge; and various extensive collieries (for example, the Duke of Hamilton's at Redding), which not only supply the district, but furnish, to a considerable extent, the Edinburgh market. There are, also, saw-mills, several flour-mills, and a small ship-building yard at Lock 16., the point where the two canals unite. Camelon is principally occupied by nailers, their number varying from 240 to 250. The wages of a first-rate hand are about 14*s.* per week. There are 4 branch banks in the town, and a savings' bank, which had on the 20th Nov. 1848, 2,644*l.* of deposits. Bainsford is almost exclusively inhabited by the workmen belonging to the Carron Works and to the Falkirk Foundry.

But Falkirk is celebrated chiefly for its *trysts*, which are the greatest fairs or markets for cattle of any in Scotland. There are three trysts annually, beginning respectively on the 2d Tuesday of Aug., Sept., and Oct.; the last being by far the largest. They continue at least two days each time, and sometimes for nearly a week. The cattle are chiefly from the Highlands, and sold for feeding in the S. of Scotland, or in England. In the tryst for Oct., 1838, there were present 60,000 head of sheep, 50,000 do. black cattle, 2,700 horses, chiefly Highland ponies, and, it is said, 40,000 men, though this we take to be a gross exaggeration. As this tryst, generally speaking, is equal to those of Aug. and Sept. united, if we treble the numbers just given, we will have a pretty correct idea of the extent and importance of the Falkirk trysts. (*Edinburgh Chronicle* of 13th Oct., 1838.) The entire value of the stock annually disposed of at these trysts cannot be much, if at all, under 1,000,000*l*. These trysts were established upwards of 200 years ago.

This town is of considerable antiquity. The old church, on the site of which the new one was built in 1811, was founded by Malcolm Caenmore in 1057. In the valley between Falkirk and the Carron, a battle was fought by the Scotch, under Sir William Wallace, against the English, under Edward I., in which the latter prevailed; and Sir John Graham and Sir John Stewart fell. The tomb of Graham, which the gratitude of his countrymen has thrice renewed, is to be seen in the church-yard of Falkirk. On a moor, within ½ m. of the town on the S.W., Charles Stuart, the Pretender, in 1746, gained a victory over the royal army, under General Hawley. Camelon was once a Roman station; and near this the famous Roman wall began, commonly called "Graham's Dyke," which was erected anno 140, in the reign of the Emperor Antoninus Pius, and which extended across the island from the Carron to the Clyde. Falkirk was a burgh of barony till the year 1833, when it obtained a constitution from parliament; and it is now governed by a provost, three bailies, a treasurer, and seven counsellors. It returns a mem. to the H. of C., in union with the burghs of Linlithgow, Lanark, Hamilton, and Airdrie, and in 1849-50 had 527 registered voters. (*Nimmo's Hist. of Stirlingshire*. edit. 1817; *Chalmers's Caledonia*, i. 117, 118, &c.; *Boundary Reports; Private Information*.)

FALKLAND, an ancient bor. of regality of Scotland, co. Fife, at the N. base of the East Lomond Hill, 21 m. N. by W. Edinburgh. The hill in question so far overshadows it, that the rays of the sun cannot reach it for about 10 weeks in the middle of winter. Pop., in 1831, 1,142. The town consists of a single street with some cross lanes; the houses being in many cases thatched, and of an antique primitive description. Though it has 13 fairs for cattle, sheep, &c. annually, yet it is a place of comparatively little traffic; but weaving in connection with the Dunfermline manufacturers gives employment to a considerable number of the inhabitants. Falkland is remarkable only for its having been a royal residence, and for the many historical recollections connected with it. The palace, which was originally a stronghold belonging to the Macduffs, thanes of Fife, was attached to the crown in 1424, on the forfeiture of that ancient house, and became a hunting seat of the Scottish monarchs. It stood on the E. of the town; and the present, which is but a fragment of the original building, was erected by James V. This monarch died here in 1542. It was a favourite residence of his grandson, James VI. The last sovereign who visited it was Charles II. in 1650. It was afterwards allowed to fall into decay; but what remained of it has recently been renovated and fitted up, so that it now forms the residence of O. T. Bruce, Esq., heritable keeper of the palace. In 1715, after the battle of Sheriff-Muir, the famous Rob Roy M'Gregor seized on and garrisoned the palace with a party of the M'Gregors, and successfully laid the burgh and country in the vicinity under contribution. Falkland was erected into a royal burgh by James II. in 1458; but it is one of four royal burghs in Scotland (viz. Elie, Earlsferry, Newburgh, and Falkland,) that were excused, on their own application, from sending representatives to parliament, owing to their poverty, or inability to afford the necessary expense of an election, and of supporting their members when elected. They still, however, enjoy all the other privileges of royal burghs. "Falkland Wood," the royal park, has long disappeared. Falkland gives the title of Viscount to the noble family of Carey, Lord Hunsdon. (*Forsyth's Beauties of Scot.* § *Fife; Sir R. Sibbald's Hist. of Fife; Chambers's Gaz. of Scot.; Pennant's Tour in Scot.*)

FALKLAND ISLANDS (Fr. *Malouines*, Span. *Malvinas*), a group in the S. Atlantic belonging to Great Britain, consisting of about 90, or according to some authorities as many as 200, large and small islands, between lat. 51° and 52° 45′ S., and long. 57° 20′ and 61° 46′ W., about 1,000 m. S.S.W. from the æstuary of the La Plata, 240 m. N.E. Tierra del Fuego, and about 7,000 m. distant from London, the voyage occupying from eight to nine weeks. Only two of these islands are of any considerable size,—the E. and W. Falklands. The greatest length of the former, N.E. to S.W., is nearly 130 m.; greatest breadth, about 80 m. The latter is about 100 m. in length, by 50 m. in its greatest breadth, in the same directions. Their united area is estimated at 13,000 sq. m. Between the two main islands is Falkland Sound, whence the whole archipelago has derived its name; this channel is from 7 to 12 m. in breadth, and navigable for ships of any class; many of the smaller islands are situated in it. Next to E. and W. Falkland, the principal islands are, the Great Swan Island on the W., Saunders, Keppel, and Pebble islands on the N., and the Jason isles at the N.W. extremity of the group. A small English garrison is stationed at Port Louis, at the head of Berkley Sound, towards the N.E. extremity of E. Falkland; and the islands are further occupied by a few Buenos Ayrean gauchos, Indians brought from the S. American continent, and Europeans; and frequented by numerous American, English, and French whalers and sealers: but most of them are uninhabited, and the pop. of the others is variable and uncertain.

The shores of these islands are for the most part low, except on the W. side of the group, where there are many high precipitous cliffs and ridges of rocky hills about 1,000 ft. in elevation. The average height of the W. is greater than that of the E. island; though the highest hills seem to be in the latter, where they rise to about 1,700 ft. above the sea. All the Falklands are of a very irregular shape, and much indented with bays and inlets. Excellent harbours, easy of access, affording good shelter, with the very best holding ground, abound among them, and, with due care, offer ample protection from the frequent gales. (*Fitzroy*, p. 246.) The sea around the Falklands is mostly deep; but in general much deeper near the S. and W. shores than on those of the N. The climate is variable, but not so much so as that of England, and it is said to be quite as healthy. The thermometer at Port Louis rarely rises in summer above 70° Fah., or sinks in winter below 30°: snow seldom remains on the ground more than 48 hours, except on the mountain tops, and it never freezes so hard as to produce ice capable of sustaining any weight. Excess of wind is the principal evil: a region more *subject* to its violence, both in summer and winter, it would be difficult to mention. The winds generally freshen as the sun rises, and die away with sunset; the nights are in general calm, and as beautifully clear and starlight as in tropical countries. The prevalent winds are westerly; E. winds are not frequent; gales and squalls come principally from the S. Rain falls more frequently than in England; but the showers are lighter, and the evaporation is quicker. Thunder-storms are unusual. Falkland is the island that has been the most explored. Its more elevated parts are composed of a compact quartz rock. In the lower country, clay-slate and sandstone are intermixed, and are often covered by excellent clay fit for making bricks and earthenware. In many places very solid peat in layers, varying in depth from 2 to 10 feet, has been discovered; and this valuable product appears to be plentiful throughout the whole of the Archipelago, where it may for ages supply the deficiency of timber. The soil consists principally of a black mould, from 6 in. to 2 ft. in depth; in many places, and especially near the foot of the hill ranges, there are extensive bogs. Fresh water is good and plentiful; there are plenty of ponds and small lakes, but no rivulets worthy of note. Copper and iron have been discovered.

The aspect of these islands is unprepossessing; but it is said that the barrenness is only apparent; that most of the land is abundantly fertile, and covered with a coarse, long, and brown, but sweet grass; while, in the interior, there are numerous sheltered valleys, feeding large herds of wild cattle. In various parts along the seashore, a tall sedgy grass called *tussock*, growing to 6, or sometimes nearly 10 ft. in height, is plentiful; of this the cattle are very fond, and it is also well adapted for thatching buildings, and for the manufacture of mats and baskets. Timber of all kinds is wanting; and though the contrary has been affirmed, we believe that there is but little chance of its succeeding were the attempt made to plant it. Generally, both the soil and climate are unsuitable for corn, though it has been raised in some sheltered spots near Port Louis, where potatoes, onions, turnips, carrots, and other vegetables have also been raised.

Should these islands ever become the seat of a considerable colony, its wealth will probably be derived chiefly from breeding and rearing live stock. For this the country is well adapted. The French, and afterwards the Spanish colonists, turned loose upon E. Falkland a number of black cattle, horses, pigs, and rabbits, and goats and pigs have been landed upon the smaller islands at different periods. These animals have multiplied exceedingly; and though they have been killed indiscriminately by the crews of vessels, as well as by

settlers (who sometimes kill a wild cow merely to get the tongue), there are still many thousand head of all kinds. The wild bulls and horses are very fierce, and apt to attack individuals, who are never secure unless they be well armed, or protected by well-trained dogs. All the wild cattle are very large and fat. The horses are lightly built, and average about 14 hands 2 in. in height. The only formidable wild land animal is the warrah, or wolf-fox. This is as large as an English mastiff, and very fierce; according to Captain Fitzroy, however, it appears to be only a variety of the Patagonian fox. Sea-elephants and seals (both fur and hair seals) abound on the shores in great numbers, and whales are frequent around the coasts. Birds and fish are amazingly numerous.

Amerigo Vespucci has been commonly reputed the discoverer of these islands, but it is most probable that he never saw them. They were in reality discovered by Davis in 1592; Hawkins sailed along their N. shores in 1594; and Strong, in 1690, anchored between the two large islands in the channel, which he called Falkland Sound. In 1600, the Jason or Sebald Islands were discovered by the Dutch. The Falklands were visited during the first half of the 18th century by many French vessels; and in 1763 they were taken possession of by France, who established a colony at Port Louis on the E. island, from which, however, they were in 1765–67 expelled by the Spaniards. About the same period the English settled at Port Egmont, Saunders' Island, though in 1770 they also were obliged to evacuate the Falklands by the Spaniards. A war with the latter was nearly the consequence of this proceeding; but in 1771 Spain gave up the sovereignty of the islands to Great Britain. Not having been colonised by us, in 1820 the republic of Buenos Ayres assumed a right to the Falklands, and a colony from that country settled at Port Louis, which increased rapidly, until, owing to a dispute with the Americans, the settlement was destroyed by the latter in 1831. In 1833 the British flag was again hoisted both at Port Louis and Port Egmont, and a British officer has since been continually resident at the former station, which, however, now comprises only a ruined fort, state house, and a few other houses, gardens, &c., and about 45 settlers (Oct. 1839).

The possession of the Falkland Islands undoubtedly offers us some advantages. They are situated in a part of the world where we have no other colony intermediate between England and Australia and New Zealand; their harbours are good and easy of approach, and they go far to command the passage round Cape Horn. They are capable of affording a plentiful supply of live stock and good water to ships touching at them. But it seems idle to suppose that they should ever become an intrinsically valuable colony. (See *Fitzroy's Voyage of the Adventure and Beagle*, ii. 227—281.; *Mackinnon's Falk. Islands; Whitington's Falk. Islands; Weddell's Voyage, &c.*)

FALMOUTH, a parl. bor. and sea-port town of England, co. Cornwall, S.W. division, hund. Kerrier, on the W. side of Falmouth harbour, about 2 m. from Penryn, and 15 m. N.N.E. the Lizard Point; lat. 50° 8′ N., long. 5° 2′ 45″ W. Area of old bor. 40 acres: pop. of do. in 1841, 4,844; but the old bor. did not include much more than half the town, which extends about 1 m. along the sea, partly in the par. of Falmouth and partly in that of Buddock; in both of which "extensive streets have been built, containing houses of a description superior to those within the old bor." (*Boundary Report.*) It is, speaking generally, well built; is lighted with gas; its entire pop., in 1841, might be about 7,500. It has a church, dedicated to Charles the Martyr, with chapels belonging to the Baptists, Wesleyans, Bryanites, Friends, Unitarians, and Rom. Cath.; a Jews' synagogue, a market-house, town hall, a gaol, built in 1831, good public rooms, a fine hall, belonging to the Cornwall Polytechnic Society, a custom house, a good quay, and numerous schools and charitable institutions. It is lighted with gas, and has with its environs a cheerful and picturesque appearance. The inlet of the sea, called Falmouth Harbour, is one of the finest asylums for shipping in England. Its entrance, between St. Anthony's Head on the E. and Pendennis Castle on the W., is about 1 m. in width, and it thence stretches inland about 5½ m. Falmouth is situated on a creek on its W. and St. Mawes on its E. side, immediately within St. Anthony's Head. It has deep water, and excellent anchorage ground for the largest ships; they may also anchor without the harbour, having it in their power to retreat into it should the wind come to blow from the S., which gives a great facility to ships getting to sea. Ships of large burden unload at the quay at Falmouth. Near the middle of the entrance to the harbour is a large rock covered at high water; but a beacon has been erected upon it to point it out: the usual entrance is between this rock and St. Anthony's Head, on which is a lighthouse. The harbour is defended by Pendennis Castle on its W., and that of St. Mawes on its E. side. The former is constructed on a rock more than 300 ft. above the sea. They were built by Henry VIII.; but have since been much improved and strengthened. "The advantage of being the principal station for the packets to the W. Indies, N. and S. America, Spain, Portugal, the S. of Europe, &c., has clearly contributed to the increase of the town. Villas, also, have been built in various parts of the par. of Falmouth, by persons who have retired from the service, or who are still employed in it." (*Boundary Report.*) The mail-packets for the Mediterranean, Spain, the W. Indies, and S. America, were despatched from Falmouth for about a century and a half, but of late years they have been, for the most part, despatched from Southampton, which has now, in fact, become as it were an out-port of the metropolis. The exports from Falmouth include copper, tin, tin-plates, woollen goods, pilchards, and other fish, &c.; a considerable coasting trade is carried on between Falmouth and London, Plymouth, Jersey, Bristol, &c. In January 1850, Falmouth had 115 registered vessels of the aggregate burden of 7,393 tons. Market-day, Thursday, for provisions generally.

Previously to the late Municipal Reform Act, the bor. was limited to the old town, which comprises only about half the modern town; but its limits were then extended so as to embrace the whole town and some adjacent territory, with Pendennis Castle. For parliamentary purposes, the Reform Act added Falmouth to the bor. of Penryn. The united borough sends 2 members to the House of Commons, and had, in 1849-50, 898 reg. electors.

It is governed by a mayor, 4 aldermen, and 12 counsellors. Corporation revenue about 400*l.* a year. In the early part of the 17th century, Falmouth consisted only of a few fishermen's huts: it owes its subsequent rise to the patronage of the Killigrew family and the establishment of the packets; which last was a consequence of the excellence of its harbour, and its situation so near the Land's End. (*Boundary and Municipal Reports.*)

FALSTER, one of the Danish islands in the Baltic, separated by narrow straits from Zealand on the N., Moen on the N.E., and Laland on the W. Length, N. to S., 27 m.; breadth very variable. Area, 180 sq. miles. Pop. 19,400. (*Möller.*) The surface is almost entirely flat, but it is considerably elevated above the sea, and is comparatively healthy. It is well watered, though it has no stream deserving notice. Its S. portion, a projecting tongue of land, is mostly occupied by the lagoon of Bottöe. It is the pleasantest of all the Danish islands; is richly wooded, fertile, and well cultivated, and produces so much fruit that it is called the "Orchard of Denmark." More corn is grown than is required for home consumption; and flax, hemp, hops, &c. are cultivated. Cattle, hogs, and poultry are plentiful; bee-hives are numerous, honey and wax being important articles of produce. Turf, chalk, and building stone are found. Some vessels are built, but the few manufactures of the island are wholly domestic. Nykiobing, on its W. side, is the principal town; it has a cathedral, an ancient castle, and 1,400 inhab. (*Dict. Géog.; Bremner's Denmark and Norway, &c.*)

FAMAGUSTA, a sea-port town of Cyprus, in what is now a bleak and barren district on the E. shore of the island, a little S. from the mouth of the Pedæa, and 40 m. E. Nicosia; lat. 35° 7′ 40″ N., long. 33° 59′ E. It was formerly well fortified; and its works, which are now dismantled, cover a circ. of about 2 m., and consist of a rampart and bastions, defended on the land side by a broad ditch hewn out of the rock. The entrance to the harbour, which appears not to be more than from 80 to 100 yards across, is defended on one side by a bastion, and on the other by a ruined tower. This port once admitted vessels of a considerable draught of water; but since its conquest by the Turks, sand and rubbish have been suffered to accumulate to such an extent, that none but small craft now enter it in safety. The town, which is poor and in ruins, has numerous deserted and choked up streets and decayed churches; indeed, for the number of the latter, Kinneir says it might be compared to Old Goa, though not on so superb a scale. In its centre are the remains of the Venetian palace, near the cathedral of St. Sophia, a respectable Gothic building, in ruins, and in part converted into a mosque. Only a few Turkish families are found in Famagusta, most of its inhab. being Greeks. During the Venetian régime, it was one of the most populous, commercial, and richest towns in the Levant. Its ruin was completed by an earthquake in 1735. About 5 m. N.E. are the ruins of Constantia, occupying the site of the ancient Salamis, now called Eski, or Old Famagusta. These ruins consist of the foundation of the ancient walls, about 3 or 4 m. in circuit; with cisterns, broken columns, the foundations of buildings, &c., which lie scattered along the sea-shore, and near the mouth of the Pedæa.

Guy of Lusignan was here crowned king of Cyprus, by order of Richard I., in 1191. It remained in the possession of his family till 1460, and then successively belonged to the house of Savoy, and the Venetians. So-

lim II. took it after a long and memorable siege, in 1571, when its gallant governor Bregadino met with the treacherous and inhuman treatment already noticed. (*See* CYPRUS, and *Kinneir's Asia Minor, &c.*)

FANO (an. *Fanum Fortunæ*, from a temple dedicated to the goddess Fortune), a sea-port town of central Italy, Papal States, deleg. Urbino, on the Adriatic, at the mouth of the Metauro, and on the Emilian Way, 7 m. S.E. Pesaro, and 29 m. N.W. by W. Ancona; lat. 43° 51′ 16″ N., long. 13° 1′ 20″ E. Pop. 8,000. It presents a lofty bastioned wall towards the sea; and has a large square ornamented with a fountain and a bronze figure emblematic of the town; a cathedral in an enriched style of architecture, which, like some of its other churches, contains paintings by Domenichino, &c.; many convents, a college of Jesuits, public school, public library, and a theatre, said to be one of the most elegant in Italy. On the road to Fossombrone is a triumphal arch, erected in honour of the Emperor Augustus, besides some other remains of antiquity. Fano has some fabrics of silk stuffs and twist, and some trade in corn, oil, &c.; but its harbour admits only small vessels. It received a colony under Augustus: in its vicinity the Romans gained an important victory over Asdrubal, anno 207 B.C. It had some extensive suburbs destroyed by the Turks in 1487. (*Rampoldi; Dict. Géog.*)

FAREHAM, a market-town and par. of England, co. Hants, Portsdown div., hund. of Fareham. The town is situated on a creek at the N.W. extremity of Portsmouth Harbour, 4 m. N.N.W. Gosport, and 64 m. S.E. London. Area of par. 6,670 acres. Pop. (1831) 4,402. The town consists principally of one broad street; and has a church and 2 dissenting chapels. During the summer months, it is resorted to for sea-bathing, and has every accommodation for the convenience of visiters. It has manufactures of sacking, and ropes for shipping, which are sent to Portsmouth, and vessels of large burden are built. Market, Wednesday. The government is vested in a bailiff, 2 constables, and 2 ale-conners.

FARINGDON (GREAT), a town and par. of England, co. Berks, partly in hund. Faringdon, partly in that of Shrivenham, at the base of Faringdon Hill, in the vale of the White Horse, about 2 m. from the Isis, and 67 m. W. by N. London. Area of par., 6,910 acres. Pop. (1831) 3,033. It is a very neat town, paved, lighted, and amply supplied with water from the noted spring of Portwell. The church is an interesting structure; its E. end is of great antiquity; the remainder is in the Gothic style of different periods: its spire was destroyed during the last civil war. There is also a chapel of ease at Coxwell, in the par., and a dissenting chapel in the town; a national school for 200 children, and an infant school. Market, Tuesday, a large one for corn; fairs, February 13., Whit-Tuesday, October 29., for horses, fat cattle, and pigs. Statute fairs are also held the Tuesday before and after Old Michaelmas day. The chief trade of the town is in bacon, several thousand pigs being annually killed by its butchers. Its position at the junction of 2 main lines of road also occasions a good deal of business and activity. The line of the Great Western Railway passes within 3 m. of the town.

FARNHAM, a town and par. of England, co. Surrey, hund. Farnham; 38 m. S.W. London. Area of par., 10,510 acres. Pop. of ditto (1831), 5,858. The town, situated near the Wey, on the main line of road from London to Southampton, consists of 2 principal streets, with a market-place at their intersection, and some smaller streets. It is paved, lighted, and well supplied with water, from springs in the neighbouring hills, conveyed by pipes to a large reservoir in the town. The church, a spacious building in the later Gothic style, was formerly a chapel belonging to Waverley Abbey, in the vicinity. There are also 2 dissenting chapels; almshouses for 8 poor people, founded in 1619, and endowed with lands now producing 80*l.* a year; a free grammar-school, with an endowment producing 30*l.* a year, and a national school supported by subscription. Market, Thursday; it was formerly one of the largest corn markets in the kingdom, and is still a considerable oat market. Fairs, Holy Thursday, June 24., and November 13., for horses, cattle, sheep, and pigs. The town was anciently noted for its cloth manufacture, but this is quite extinct. It is now celebrated principally for its hops, those produced in the vicinity being of a very superior quality. On the Wey are several large flour mills, whose produce is mostly sent to the metropolis by the Basingstoke canal, which passes within 4 m. of the town; and the line of the Southampton railway is about 5 m. N. from it. Farnham, which was a bor. by prescription, returned 2 mems. to the H. of C., from 4 Edward II. to 38 Henry VI., subsequent to which the privilege has not been exercised: it received two charters from the bishop of Winchester, but virtually lost the distinction of being a bor. from about 1790, or earlier. Petty sessions for the div. are held in Farnham, and there is also a court for recovery of debts under 40*s.*, which sits every third week. Farnham Castle, on a hill N. of the town, is a residence of the bishops of Winchester, and contains a good library and some valuable paintings: it is surrounded by an extensive park, in which is an avenue nearly 1 m. in length, commanding a fine prospect, and much resorted to as a public promenade. It stands on the site of a castle built during the reign of king Stephen, by his brother Henry of Blois, and was built subsequently to the Restoration. Some interesting remains also exist in the vicinity of the abbey of Waverley, founded in 1128, for Cistertian monks, and subsisting till the general dissolution under Henry VIII., when its annual revenue was estimated at 174*l.* 8*s.* 3*d.* There is a handsome modern mansion contiguous to the site, amidst fine park scenery.

FARO, a sea-port city of Portugal, on the S. coast of the prov. of Algarve, cap. comarca of same name; on the Valfermosa, near its mouth, 45 m. E.S.E. Lagos, and 20 m. W.S.W. Tavira; lat. 36° 59′ 24″ N., long. 12° 31′ 18″ E. Pop. 8,440. (*Miñano*, 1826.) It is surrounded with walls, said to have been constructed by the Moors; and is well built, the streets being wide, and the houses good, and, to appearance, mostly new. It has a cathedral, four convents, a house of charity, seminary, military hospital, custom-house, and arsenal. It is the seat of a *corregidor* for the comarca, a military governor, of a bishopric, transferred thither from Silves in 1580; and of town and district judicial courts. The harbour is shallow and inconvenient; but it has a good roadstead, formed by three islands, opposite the mouth of the river. It exports figs, raisins, almonds, dates, and other dried fruits, oranges, lemons, wines, cork (the produce of its territory), sumach, baskets, and anchovies. Many of the inhab. are fishermen. This town received its first pop. from the city of Osonova, which stood not far distant, destroyed by the Moors on their entrance into the country. It was raised to the rank of a city by John III. in the 16th century. (*Miñano, Diccionario*, iv. 128.; *Balbi, Portugal*, i. 221.)

FAROE, FEROE, or FÆROE ISLANDS, a group of 22 isl. belonging to Denmark, in the Northern Ocean, between lat. 61° 15′ and 62° 21′ N., and long. 6° and 8° W., about 185 m. N.W. the Zetland Isles, and 320 m. S.E. Iceland. The principal island, Stromoe, in the centre, is 27 m. long by about 7 broad; the other chief islands are Osteroe, Vaagoe, Bordoe, Sandoe, and Suderoe. Total area, 495 sq. m. Pop. about 7,000. Only 17 islands of the group are inhabited. The shores are every where bold and precipitous; and though there are numerous harbours, most of them are beset with rocks, or exposed to the violence of the winds and waves, so that they afford safe anchorage only in the summer. The whole surface of the land is a succession of hills, the highest of which, Skœlling in Stromoe, is 2,240 ft. in elevation. (*Landt.*) There are no valleys of any extent, neither are there any streams but such as are generally fordable throughout the year; small fresh-water lakes exist in several of the islands, the largest of which, in Vaagoe, is about 2 m. in circ. Climate very variable; but, notwithstanding the height of the lat., it is said to be milder and more equable throughout the year than in the S. provs. of Denmark, the snow seldom lying for more than eight days at a time. Rain and fogs are very prevalent, and the islands suffer greatly from the violence of the winds and storms. Principal rocks, granitic trap, felspar, clay-slate, &c.; basalt in columns is frequent, peat and coal are abundant, and traces of iron, copper, and some other metals, besides opal, chalcedony, zeolite, &c. are found. Soil very thin, being no more than 4 ft. in depth even at the bottoms of the valleys, and, to render it productive, it must generally be manured pretty highly; the proportion of cultivated to uncultivated land is only about 1 to 60. Some barley is grown, but neither oats nor rye will come to much perfection; and what corn is grown has to be dried under cover by means of fires. Most of the supply of corn is therefore brought from Denmark. Turnips and potatoes succeed pretty well, and are important articles of food. As might be expected, agriculture is very backward, and is principally carried on by the spade. Hay is one of the chief vegetable products; there is no timber of any description. The chief wealth of the inhab. is in their flocks of sheep, of which a peasant often possesses from 200 to 300 head; next to their flesh, they are chiefly valuable for their wool and fat; the ewes are never milked. The wool, which is coarse, is principally used in the domestic manufacture of hose and cloth. The cows are small, and no care is taken to improve the breed; every peasant is the owner of at least one. The horses are small, and used only for burdens, the steepness of the country not admitting of their being employed for draught. Hogs are rarely kept. As great numbers of sea-fowl, valuable alike for their flesh and their feathers, build round the coast, fowling is an important pursuit. It is also an extremely hazardous one, and requires great nerve and dexterity. The rocks are in many parts so precipitous that the fowlers have to be let down from the summit by a rope 100 or 200 fathom

in length. In the most inaccessible places the fowls are frequently so tame that they may be taken by the hand; but elsewhere they are taken by a net thrown over them by the fowler. Sealing, whaling, and fishing also employ a good many hands in the season. Manufactures almost wholly domestic; the chief are those of coarse woollen fabrics, woven by a loom of the rudest kind, and knit woollen stockings. Hats, combs, furniture, and other articles of prime necessity are made, and good boats built in many places; dyeing, fulling, tanning, &c., are also conducted in the country. Principal exports, — hose, tallow, fish, train oil, feathers, skins, and butter: imports, — corn, pulse, bread, malt, spirits, colonial produce, iron, lead, gunpowder, lime, bricks, timber, tar, glass, linen cloth, shoes, books, &c. About 100,000 pairs of hose are exported annually. Barley bread, dried meat, fish, soup of oatmeal, fat, and water, milk, and turnips, compose the chief articles of food. The people are of Scandinavian origin, and speak a dialect similar to old Danish.

These islands have a civil governor, called *amtmann*, a judge or *landrogt*, and a provost with superior authority in religious matters. The country is divided into 7 parishes, and 39 congregations. The only town is Thorshavn, at the S.E. end of Stromoe, which is defended by a fort, and has about 1,600 inhab. The land partly belongs to the inhab., and partly to the crown; the public revenue, derived from the royal domains, quit rents, taxes on flocks, fisheries, &c., is paid mostly in kind. There are no schools, except one in Thorshavn; but most of the pop. possess the rudiments of education. The Faroe isles are supposed to have been discovered by the Norwegians in the 9th century; since the union of Norway with Denmark, in the 14th century, they have belonged to the latter country. (*Landt's Feroe Islands, &c.*)

FARS, or FARSISTAN, a prov. of Persia, which, by the change of the *s* into *p*, has, in European languages, given its name to the whole country in the S. part of which it is situated, between lat. 27° 40′ and 32° N., and long. 49° 30′ and 55° E., having N. the prov. Irak, E. that of Kerman, S. Laristan and the Persian Gulf, and W. the latter sea and Khuzistan: length, N. to S., nearly 300 m.; breadth, 200 m. Area, perhaps about 55,000 sq. m. Pop. uncertain. A mountain chain, which is a continuation of Mount Zagros, extends, from N.W. to S.E., through this prov., dividing it into the hot and cold regions (*Germaseer* and *Sirhud*); the former of which, the smaller division, extends with a variable breadth inland along the whole coast; while the latter comprises most of the N., E., and mountainous parts of the prov. The mountain ranges in some places rise to from 2,500 to 3,000 ft. above the sea; they are interspersed with numerous plains from 15 to 100 m. in length, though seldom more than from 8 to 10 m. in breadth. These plains are in general fertile, sufficiently well watered, and afford abundance of pasturage and wood; some of them are tolerably well cultivated, but they are, for the most part, and particularly to the N. and W., destitute of inhabitants. In the E. part of the prov. the plains are of greater extent, the soil is more sandy, and water is less plentiful. The central mountain chain divides the rivers into those which flow into the Persian Gulf, and those discharging themselves into Lake Bakteghan. The principal of the former is the Tab (an. *Arosis*), and of the latter the Bendermeer, or rather Bund-emeer (an. the Cyrus or *Araxes*).

Besides the Lake Bakteghan, which is 70 m. in circ., there are several other lakes, the chief of which is in the neighbourhood of Shiraz. These, as well as some of the rivers, are salt, the soil of Fars being strongly impregnated with that mineral; and the bed of the lake Bakteghan affords in summer, when it is nearly dry, great quantities of fine salt. The climate of the hot region is unhealthy; fevers, ophthalmia, and other diseases are prevalent; famine for want of rain is not uncommon, and the people are poor, and live wretchedly in mud huts. In the cold region, on the contrary, the climate is temperate and healthy, and agriculture is not in so bad a state as in some other provs. of Persia. The E., though less highly favoured than some other parts of Fars, is that best cultivated; and great quantities of the finest tobacco are raised there. A great deal of corn, and especially rice, dates, raisins, and various other fine fruits; opium, saffron, hemp, cotton, &c., are among the chief agricultural products; silk is produced; the *cactus* feeding the cochineal is plentiful; and great numbers of roses are cultivated for the manufacture of *attar*. The wine is of a rather superior quality, and that of Shiraz has attained, perhaps, more celebrity than it deserves. Many cattle and sheep are reared; the horses, asses, and camels are good; fish, game, and other wild animals, are abundant. There are said to be mines of lead and iron, and quarries of marble and alabaster; borax is obtained, and there are some very productive springs of naphtha. The inhab. are, generally speaking, among the most civilised and industrious in Persia. They manufacture fine woollen, silk, and cotton stuffs, camel skins, &c., for exportation. The trade is principally with Hindostan. Chief towns, Shiraz, the cap., Bushire, Firozabad, Darab-jerd, Kazeroun, Bender-rigk, &c. In this prov. are also the ruins of Persepolis, Pasarga, and Shakpoor. Fars was the ancient patrimony and kingdom of Cyrus the Great, previously to his foundation of the Persian empire. (*Kinneir, Mod. Trav.; Dict. Géographique.*)

FAVERSHAM, a bor., par., and sea-port town of England, co. Kent, lathe of Scray, hund. Faversham, 45 m. S.E. by S. Lond. Area of par., 2,270 acres. Pop. (1831) 4,429. The town, situated near a branch of the Swale, and within ½ m. of the main road from London to Dover, consists chiefly of two irregular streets, crossing at right angles, with a market-place and town-hall at the point of intersection. A suburb called Brent Town consists of cottages built within a recent period; and Ospringe Street, on the above line of road, is another suburb, that will probably be ere long united to the town. The village of Preston is also quite contiguous. Faversham is paved and lighted. The church, a spacious structure, with a fine tower and spire, was rebuilt in 1755, on the site of a structure of the reign of Edward II. There are also two dissenting chapels; a free grammar school, founded by Elizabeth, for 8 boys; and 2 other free schools, one for 12 boys, the other for a like number of girls; almshouses for 12 poor people; a theatre, and assembly rooms. Market, Wednesday and Saturday; fairs, Feb. 25., Aug. 12. There are gunpowder-mills in the vicinity belonging to private individuals, but the government mills have been discontinued. At present the oyster fishery forms the most important staple of the place, and is conducted by a privileged company, admission to which is obtained by birth, or apprenticeship to a member; but the claimant must be a married man. There belonged to the port, in 1836, 229 vessels, of the burden of 8,270 tons, besides a great number of half-decked craft and open boats. Since the Municipal Reform Act it is governed by 4 aldermen and 12 counsellors. Average annual corporation revenue, 1,000*l*. The limits of the old borough (which did not comprise the entire town) have been extended so as to include that, and the whole of Ospring Street. There is a court of requests for debts under 40*s*., and a union workhouse has recently been built in the parish.

FAYAL, one of the Azores, which see.

FAYOUM*, a famous valley and prov. of Central Egypt, anciently the nome of Arsinoë. At about 15 m. W.S.W. Benisouef: there is a depression in the Libyan or most westerly of the two chains, which accompany the Nile out of Nubia. From this gorge — about 6 m. in length — the hills diverge, making a circular bend to the W. and N., and enclose the valley of Faïoum; which is of an oval figure, and forms a low table-land, gradually sloping towards the N. and S.; the N. depression occupied by the *Birket-el-Kerûn* (the lake Mœris of the ancients), and the S. depression by lake Garah. Thus, unlike other basins, the valley of Faïoum has its greatest depressions, not in the middle, but at the sides; its central portion forming a low, slightly convex plateau, extending towards the W. Upon this culminating line runs an arm of the great canal of Egypt, the *Bahr Iusef* (given out at the narrow pass mentioned above), which at a short distance from *Medinet-el-Faïoum*, the capital of the province, spreads out into various small branches, and gives a fertility to the valley which, though comparatively great, has been much overrated by some travellers. Faïoum is about 40 m. in length from E. to W., and 30 m. in breadth from N. to S.

Towns, villages, and canals. — At the entrance of the ravine, which affords the only communication between this isolated province and the Nile, stand the village of *Illahoun*, on the N.E. bank of the canal, and the town of *Hawarah-el-Kebyr*, on its S.W. bank, connected by a bridge of three arches, and provided with a number of reservoirs to regulate the masses of water during the inundation. Near Illahoun is a dilapidated pyramid 60 ft. high, with a base of 197 ft. square, consisting of calcareous stone, that supports a pile of unbaked bricks. At the other extremity of the gorge, where the valley fairly opens, is *Hawarah-el-Sogair*, near to which two ancient branches of the *Bahr Iusef* diverge in opposite directions. The waters of the main canal are turned into these branches by means of bridge-dykes, built upon foundations *above* the ordinary level of the stream, so that at high Nile the current continues its course through the arches; but these canals are so encumbered with mud that their waters never reach the lake except during the inundation. Between El Sogair and Medinet-el Faïoum are strewed the remains of the celebrated Labyrinth, consisting of, first, a brick pyramid, 122 yds. square and 197 ft. high; under

* *Phiom*, "the sea," (*Quatremère, Recherches*, vol. i. pp. 391. 416.) probably so called from its inland sea, the lake Mœris, the *Piom* of Champollion. Thus the name Faïoum, or Fayoum, now retained by the Arabs, is but a slight modification of the ancient Egyptian appellation. (*Encycl. Britannica*, art. *Egypt*.)

which the French discovered a subterranean passage, a sarcophagus, and a salt spring; secondly, the remains of a temple to the E. of the pyramid, presenting the fragments of huge columns of granite, with several sepulchral excavations. A large mass of ruins are buried in earth and rubbish, and have never been explored; the whole forming an oblong parallelogram 984 ft. in length, with nearly as great a breadth. Among another series of ruins, to the N. of Medinet, and occupying an area of about 2¼ m., Belzoni found two immense stone pedestals, to which the name of "Pharaoh's feet" have been given; various granite statues, some wrought iron, and a quantity of half melted glass. At some distance from these stands a syenite obelisk with a circular top, and though 43 ft. high, is covered with a profusion of sculptures. A portion of these remains are believed to have belonged to the Labyrinth, but most of them to the ancient city of Arsinöe, now replaced by *Medinet-el-Faioum*. This capital is divided by a branch of the Bahr-el-Wady into two parts, connected by five bridges, and much of it is built of the remains of the ancient city. In 1824 Medinet contained 5,000 inhab., partly Copts and partly Moslems. It is the residence of the provincial governor. Some ruins at a short distance from the E. point of Birket-el-Kerûn accord very nearly with the ancient Bacchis or Banchis. 18 m. W.N.W. of the village of *Nazleh*, and 3 m. from the lake, stands a temple, known as Kasr-Kerûn, 94 ft. long, and 63 ft. high, with 14 chambers, having on either side a long passage whose end wall is divided into 3 narrow cells. (*Wilkinson's Topog. of Thebes*, pp. 352, 353.) Jomard penetrated one of these avenues, and, finding it skilfully adapted for the conveyance of the voice, inferred that it was designed for the utterance of oracles. This temple is manifestly of Roman origin, as is a smaller one 130 paces to the S.E. of it. We pass over the less noticeable villages of Faioum, of which there are altogether not quite 70. (*Encycl. Britannica*, art. *Egypt*; *Ritter's Africa*, vol. iii. p.35—50., French edition; *Letronne's Nouv. Annales des Voyages*, vi. pp. 133—154.; *Belzoni's Researches*, &c. ii. 145., &c.)

Lake Mœris. — According to the statement of Herodotus, confirmed by that of other historians, this lake occupied in his time a large proportion of the valley, having a circumference of 450 m. (3,600 stadia), and a maximum depth of 150 ft. The basin was filled by the waters of the Nile conducted to it by canals, for it had no springs. The statement as to the size of the lake in antiquity is not inconsistent with its present contracted dimensions: the supply of water has been gradually lessened by the raising of the bed of the Nile, and by the filling up of the lakes and canals, so that very little reaches it at present, even during the inundation; not enough to countervail the copious evaporation which in this hot climate is continually going on. Hence, last century, the lake was 50 m. long and 10 m. broad (*Pococke's Travels*, i. 62.), whereas it is now only 30 m. long and 6 m. broad in the middle or widest part. Herodotus states that the Lake Mœris was artificially excavated by order of the king whose name it bears; but by this he no doubt referred to the excavation of the canals by which the lake was filled, and perhaps also to some excavations made in the lake itself. He says that for six months the waters flowed from the Nile to the lake, and that during the other six months they flowed from the lake to the river; but the level of the lake must always have been too low for the waters to have *returned* to the Nile; while that of the canals does so to this day. (*Herod.* lib. ii. § 149.; *Encyc. Brit.*, art. *Egypt*; *Wilkinson's Topog.*, *Thebes*, p. 351.)

The Labyrinth. — This extraordinary structure is said by Herodotus, by whom it was visited, to have surpassed all the works of the Greeks, including the temples of Ephesus and of Samos, and to have been superior even to the pyramids. (Lib. ii. § 148.) It was divided into 12 courts, corresponding to the 12 *nomes* or provinces into which Egypt was then distributed, and is said to have contained 3,000 apartments, 1,500 above, and as many below ground. Herodotus visited those above ground, and speaks of them from his own observation but he was refused admittance to the others, and informed that they were used as sepulchres for the sacred crocodiles, and the kings who had constructed the edifice. (*Ubi suprà.*) The different chambers were connected by an infinite number of winding passages, so artfully contrived as to give the structure its name. The ceilings, walls, and pillars were of the whitest marble, all adorned with sculpture. In fact, one's belief is almost staggered by the accounts of this extraordinary edifice; and nothing less than the authority of the venerable father of history could have made us believe in the existence of such a structure. For farther information as to this extraordinary plan, see the notes to Larcher's *Herodotus*, tom. ii. 494—506., 2d ed. There can be little question that the ruins strewed about near Medinet, and between it and El Sogair, are those of the Labyrinth, though the position of Kasr Kerûn was assigned to it by early European travellers.

Faïoum is chiefly inhabited by two branches of the Sammaton tribe of Arabs from the W. states of Barbary, who were able at the end of the last century to supply 2,970 soldiers. (*Girard*, "*sur les Habits de Faïoum*," *Desc. de l'Egypte*, tome iii. p. 350.) Near the capital large quantities of roses are cultivated, which are converted into rose water of a highly esteemed quality. The land capable of cultivation in Faïoum has been estimated at 450 sq. m., of which scarcely the half is at present tilled.

FECAMP, a sea-port town of France, dép. Seine Inférieure, cap. cant., between two ranges of hills, at the mouth of a small river of the same name, 48 m. N.W. Rouen; lat. 49° 45′ 24″ N., long. 0° 23′ 3″ E. Pop. (1836) 8,350. It consists of little more than a main street, not well built, but upwards of 2 m. in length from the church to the port. Its church, a handsome edifice, is the sole remaining part of a celebrated abbey, founded by Richard I., duke of Normandy, in 988, and destroyed during the revolution. Fecamp has an exchange, hospital, chamber of commerce, and a gratuitous school of navigation. Its port, though small, is one of the best on the Channel; and latterly it has been very greatly improved by the construction of an inner port, with a fine quay, a magnificent lighthouse, &c. It has two roadsteads: the *Great Road*, lying opposite to Cricquebœuf, about 2 m. off shore, with 13 fathoms, and a good clay bottom, mixed with sand; the *Little Road* lies off the W. side of the harbour, and has from 10 to 7 fathoms. It manufactures cotton yarn, linen fabrics, seamen's shoes, hardware, rapeseed-oil, candles, and soda; and has sugar refineries, tanneries, and building-docks. It also fits out vessels for the cod, mackerel, and herring fisheries, and is an *entrepôt* for colonial produce, salt, brandy, &c. The air of this town is celebrated for its purity, its men for their healthy appearance, and its women for their beauty. (*Hugo*, art. *Seine Inférieure*; *Purdy's English Channel*, &c.)

FELEGYHAZA, a town of Hungary, between the Danube and Theiss, cap. distr. of Little Cumania, on the road between Pesth and Temeswar, 65 m. S.E. the former. Pop. 15,000. It has a Roman Catholic church, and gymnasium; and a court of justice, in which the archives of the distr. are preserved. Some Roman antiquities have been discovered in its neighbourhood. The country round produces corn, wine, fruit, &c., and large cattle markets are held in the town. (*Oesterr. Nat. Encyc.*)

FELIPE-SAN, formerly JATIVA, or XATIVA, (an. *Sætabis*), a town of Spain, Valencia, cap. prov. of same name, on the declivity of a hill, near the confluence of the Montesa and Albayda, 44 m. S. by W. Valencia, and 195 m. S.E. Madrid. Pop. about 12,000. It is well built, and well supplied with public fountains, and fine public walks. It has a cathedral, 3 par. churches, 10 convents, an hospital, and an asylum for widows. The ancient city stood on the summit of the hill, near the foot of which the modern town is built. It had a strong fortress; and having been a Roman station, contained some Roman edifices, as well as others erected by the Moors, all of which are now in ruins. Inglis, speaking of the latter, says, "The magnificence and extent of the Moorish remains struck me with astonishment, even after having seen the Alhambra. These crown the hill that rises immediately behind the city; this hill is twice the height of that upon which the Alhambra stands, and the remains at San-Felipe are also greatly more extensive. They are not, indeed, like the Alhambra, in preservation, nor do they present the terraces, and arches, and columns, that at once point out its Moorish origin; but they are seen covering the summit of a mountain ridge, 1,000 or 1,200 ft. high, and presenting in fine relief, against the sky, an irregular line of not less than 2 miles in extent of massive and imposing ruins." (*Spain in* 1830, ii. 248.) In 1706, during the war of the succession, Xativa, after it had held out a long time against the French, was taken and burned; it was rebuilt on its present site by Philip V., who gave it his own name. The Moorish style, however, which prevailed in the former city, seems to characterise the edifices and manners of the present one. "Passing along the streets, I observed many signs of Moorish days, more than either in Seville or Granada: in a court yard which I entered, mistaking it for that of the posada, I noticed that the walls were arabesque; and looking in at the doors of the shops and houses, I scarcely saw a single person seated upon a chair, or even upon a stool; every one was squatted upon a mat." (*Inglis*, *ubi suprà.*) San Felipe has no manufactures; all its inhabitants are said to find employment and subsistence from its contiguous *huerta*, or irrigated valley. (*Inglis's Spain*, vol. ii.; *Swinburne*, *Mod. Trav.*, vol. xviii.; *Dict. Géog.*)

FELIPE (SAN), a town of the repub. of Venezuela, Colombia, dep. Venezuela, on the Yragui, not far from the Gulph of Triste, and 136 m. W. by S. Caracas. Pop. 7,000.? It is regularly laid out with wide and straight streets, and has a good parish church. Cocoa, cotton,

indigo, coffee, &c., grow abundantly in its neighbourhood, and are the chief articles of export. Its climate is, however, oppressive, damp, and unhealthy. (*Dict. Géogr.*)

FELTRE (an. *Feltria*), a town of Austrian Italy, deleg. Belluno, on a hill at the foot of the Alps, and near the junction of the Colmeda with the Piave, 16 m. S.W. Belluno. Pop. 5,500. It is partially fortified, and is tolerably well built; streets broad and well paved. It has a handsome market-place, a cathedral, many other churches, an Episcopal gymnasium, a seminary of theology and philosophy, an hospital, and an orphan asylum. It has silk twist, and some wax-bleaching factories; and trades in silk, wine, oil, &c., the produce of the adjacent territory. (*Rampoldi; Oest. Nat. Encyc.*)

FERMANAGH, an inland co. of Ireland, prov. Ulster, having S. Cavan, E. and N. Monaghan, Tyrone, and Donegal, and W. Leitrim. Area, 471,348 imp. acres; of which 101,952 are unimproved bog and mountain, and 48,797 water, principally consisting of Lough Erne. This, which properly consists of two lakes, joined by a deep and winding channel, is a noble sheet of water. It stretches the whole length of the co., which it divides into two nearly equal portions. *See* ERNE (LOUGH). Surface varied, and in general better wooded than most Irish cos. Farms of all sizes; but the great majority very small. In the N. part of this co., agriculture is in pretty forward state; but elsewhere, it is very backward: a good many cattle are bred on the high grounds. Mr. Inglis says that he found the occupiers of land in this co. in a better condition than in most other parts of Ireland. Oats, barley, wheat, flax, and potatoes are the principal crops. Average rent of land, 12*s*. 3*d*. an acre. Iron ore is found in different places. Manufactures unimportant. Fermanagh contains 8 baronies, and 18 parishes, and sends 3 mems. to the imperial parliament, viz. 2 for the co., and 1 for the bor. of Enniskillen, which is the principal. In 1831, Fermanagh had 25,781 inhab. houses, 28,132 families, and 149,763 persons, of whom 73,117 were males, and 76,646 females.

FERMO (an. *Firmum Picenum*), a city of central Italy, Papal States, cap. deleg. of same name; on a hill, about 3 m. from the Adriatic, and 32 m. S.S.E. Ancona; lat. 43° 10′ N., long. 13° 43′ E. Pop. 19,000, chiefly in the suburbs. It is surrounded by a wall, of little importance as a means of defence; and has a cathedral, 10 other churches, 15 convents, a palace, built by Jerome Bonaparte, a university founded in 850, and 2 fine collections of statuary and paintings. The harbour on the Adriatic, called *Porto di Fermo*, is small, and frequented only by a few trading vessels. The exports consist chiefly of corn, silk, and woollen cloth: it has an annual fair, lasting from August 18. to Sept. 5. Fermo is the seat of the delegate, of an archbishopric, and of a court of primary jurisdiction, with appeal to a superior tribunal at Macerata. It was founded by the Sabines, before Rome existed; and colonised by the Romans towards the beginning of the first Punic war, and has been plundered by Alaric, Attila, and other barbarian chiefs; it, however, continued during a blockade of 11 years to hold out against Alboin, and was only obliged, through famine, to yield to his successor, Antharis. Since the 8th century it has, with few intermissions, belonged to the see of Rome. Lactantius and Galeazzo Sforza were both natives of Fermo. (*Rampoldi; Dict. Géogr., &c.*)

FERMOY, an inland town of Ireland, co. Cork, prov. Munster, on the Blackwater, 118 m. S.W. Dublin. Pop. in 1831, 6,976; the Cath. being to the Protest. in the proportion of about 8 to 1. The town which, till 1791, when Mr. Anderson commenced his improvements, was but a station for carriers, consists of a square, and several well-built streets on each side the river, which is here crossed by a fine bridge: its rapid improvement is owing to its having been made a military *dépôt* during the last war with France. It has a par. church and a R. Cath. chapel, both spacious and elegant buildings, a convent, a Methodist meeting-house, several large schools, and a court-house; a workhouse, which was formerly barracks for 3,000 men, cavalry, infantry, &c. Races are held annually in the neighbourhood. There are here extensive flour-mills; and a considerable trade in flour and agricultural produce, mostly sent to Youghal, whence coal and other produce is received in return. There are also 2 paper-mills, and a brewery; duty was paid in 1836 on 22,055 bushels of malt, and the town is the centre of a considerable retail trade. Markets on Saturdays; fairs on 21st June, 20th August, and 7th November. General sessions are held in January; petty sessions every Monday. Post-office revenue in 1830, 922*l*.; in 1836, 1,186*l*. Branches of the Agricultural and National banks were opened in 1835. (*Stat. Surv.; Railway Report.*)

FERNANDEZ. *See* JUAN FERNANDEZ.

FERNANDO-DE-APURE (SAN), a town of the repub. Venezuela, Columbia, dep. Orinoco, on the Apure, near its junction with the Portuguesa, 164 m. E. by N. Varinas. Pop. 6,000. ?

FERNANDO-PO, an island in the Bight of Biafra, 20 m. from the African coast, about 40 m. in length by 20 m. in breadth, now abandoned, but formerly occupied by Great Britain, it having been selected as a military and naval station from its supposed salubrity and from the facilities afforded by its situation for the suppression of the illicit slave trade. "It is about 120 m. in circ., and, like the adjacent part of the mainland, is exceedingly mountainous; Clarence Peak, the most elevated point, attaining the height of several thousand feet (10,700 ft.). The S. extremity is also intersected by several steep mountains, varying from 1,000 to 3,000 ft., which, with the intervening valleys, are covered with dense forests of large and valuable timber, and watered by numerous rivulets. The wet season commences at the latter end of May, and continues till the end of November: the annual quantity of rain and the temperature are much the same as at the other stations on the coast. The sea breeze is regular, but the land breeze generally deficient, being intercepted by the high range of mountains on the mainland.

"Clarence Town, the principal settlement (on the N. side of the island), lies in lat. 3° 53′ N., long. 7° 40′ E., and is built close to the sea upon an elevated plain from 100 to 200 ft. in height, embracing two small peninsulas, Point William and Point Adelaide, with a semicircular space extending about a mile in length, and forming a cove well adapted for shipping. All the ground in the immediate vicinity is covered with forest trees and jungle, except to the extent of about 6 sq. m., which was partially cleared on the formation of the settlement. The soil, which is generally argillaceous, resting on a bed of freestone, gives proofs of abundant fertility when cultivated. The water, both of spring and brook, is of the best quality, and there are no marshes in the vicinity, the hilly nature of the ground not admitting of their formation." At this settlement part of a company of black troops, belonging to the Royal African corps, was stationed with some civil officers of government, in 1827-28; and a number of European mechanics went out in those and the succeeding years to aid in the erection of barracks and other buildings, &c. But the climate was soon found to be quite as pestiferous as that of the other settlements on this part of the African coast. Most Europeans were attacked by fever, and the instances of recovery were very rare. We are glad, therefore, to have to state, that in 1834 the detachment of troops was withdrawn, and that this pest-house has ceased to be a military station. (*Tulloch's Report on the Sickness, &c. of the Troops in Western Africa*, p. 21.)

FERNEY, a village of France, dep. Ain, 6 m. S.S.E. Gex, and 5 m. N.W. Geneva. Pop. 1,000.? This village is indebted not merely for its celebrity, but even existence, to its having been for a lengthened period the residence of by far the greatest *littérateur* of modern times. Voltaire purchased this estate in 1758. The seigniory enjoyed an exemption from all public taxes and burdens; but it would seem that Voltaire wished to establish himself in this retreat, not so much from its enjoying the privilege now mentioned, and its agreeable situation, as from the facility which its vicinity to Geneva afforded of placing himself in a safe asylum in the event of any measures being taken to interfere with his freedom. Voltaire conferred the greatest advantages on Ferney. Instead of a paltry village, consisting of a few miserable cottages, he constructed a neat little town, in which he established a colony of industrious artizans, principally consisting of watchmakers, from Geneva; he also rebuilt the church; drained and planted the adjoining grounds; defended his vassals in their contests with the revenue officers and the church, and did all that a rich, enlightened, and really benevolent landlord could do to promote the comfort and happiness of those around him. The *château*, to which a neat little theatre was attached, was fitted up in a style of elegant simplicity; and his hospitalities were on the most liberal scale. Voltaire resided here with little interruption for more than 20 years. During the whole of this period, Ferney was to the literary and refined what Mecca is to the Mohammedan world; and the most distinguished personages of the time eagerly resorted to Ferney from all parts of Europe, to pay their respects to its illustrious master. Voltaire quitted Ferney for the last time on the 6th of February, 1778. His château is, or was not long since, preserved nearly in the state in which he left it. He expired at Paris on the 30th May, 1778. (See *Condorcet, Vie de Voltaire*, 203.; *Biographie Universelle*, art. *Voltaire, &c.*)

FERRARA, a famous city of Italy, N. part of the Papal States, cap. deleg. of same name, formerly an independent duchy, in a low marshy plain, on the left bank of the Volano, 5 m. S. from the Po, to which it is united by a canal, and 26 m. N.N.E. Bologna; lat. 44° 49′ 56″ N., long. 11° 36′ 25″ E. Pop. 25,000, including about 1,800 Jews. It is the most N. city belonging to the pope; is well fortified and defended on its W. side by a strong pentagonal citadel, garrisoned, conformably to the treaty of Vienna, by Austrian troops. While it was under its native princes of the house of Esté, Ferrara was

the seat of one of the most polished and refined of the Italian courts, and is said to have had from 70,000 to 100,000 inhab. But it has long been in a state of decay: its "wide and grass-grown" streets are all but deserted, and numbers of its splendid palaces are uninhabited, and without either doors or windows. In the principal square, or *Piazza Nuova*, are bronze statues of two of the dukes of Ferrara. The old ducal palace, now occupied by the legate of the pope, "stands moated and flanked with towers, in the heart of the subjugated town, like a tyrant entrenched among slaves." (*Forsyth*, p. 329.) The *duomo*, or cathedral, was consecrated in 1135: it is a vast but tasteless edifice. It has an immense number of other churches, mostly in a state of decay; but several of them, as well as of the palaces, have good pictures. It has, or recently had, no fewer than 22 convents. Its university, or rather college, founded in 1390, and revived by Pope Leo XII., has two faculties of law and medicine, but it is not well attended. The public library, founded so recently as 1740, has 80,000 volumes and a museum of antiquities; but its most valuable treasures are the manuscripts of the immortal works of Ariosto and Tasso, with other relics of the former. There is here, also, a botanical garden, an anatomical theatre, several charitable establishments, and one of the finest theatres in Italy. The manufactures and trade of the town are inconsiderable; and, owing to the want of drainage, it is unhealthy in summer.

The celebrity of Ferrara is almost wholly derived from its being intimately at least, if not honourably, associated with the history of some of the greatest names in the literature of Italy, or indeed of Europe. Ariosto, though born at Reggio, in Modena, resided for a lengthened period in Ferrara: here, in 1516, appeared the first edition of the *Orlando;* and here, on the 5th of June, 1533, the poet breathed his last. The house in which he lived is still kept up. He was buried in the church of the Benedictines; and it is a curious fact, that the bust on his tomb, being struck by lightning towards the middle of last century, the iron laurels that wreathed the brows of the poet were melted. Lord Byron has alluded to this circumstance as follows: —

"The lightning rent from Ariosto's bust
The iron crown of laurel's mimic'd leaves;
Nor was the ominous element unjust,
For the true laurel wreath which glory weaves
Is of the tree no bolt of thunder cleaves,
And the false semblance but disgraced his brow;
Yet still, if fondly superstition grieves,
Know that the lightning sanctifies below
Whate'er it strikes; — yon head is doubly sacred now."
Childe Harold, iv. s. 41.

In 1801, the remains and tomb of Ariosto were conveyed with great pomp to the public library; and here, also, are his manuscripts, arm-chair, and inkstand.

Tasso is another of the glories, but he is also the shame, of Ferrara. A cell in the lunatic hospital of Sta. Anna, about 9 paces by 5 or 6, and 7 ft. high, lighted by a grated window, is shown as that in which the author of the *Gerusalemme Liberata* was immured from March, 1579, to December, 1580, when he was removed to a contiguous and larger apartment. In 1584 his prison was again enlarged; but it was not till 1586 that he was set at liberty, at the intercession of the duke of Mantua. It is difficult to ascertain the real cause of this ignominious treatment of, perhaps, the greatest of the Italian poets. The apologists of the house of Esté, or rather of the duke Alphonso, by whom, though the pretended patron of Tasso, he was imprisoned, have stated that it was occasioned by his extravagances, and that in shutting him up Alphonso really consulted the safety and honour of the prisoner! (*Tiraboschi*, vii. 1267. Modena, 1792.) But, though the subject be not quite free from difficulty, there can be very little doubt that the imprisonment of Tasso is ascribable to the vindictive malignity of the duke, who took this method of avenging some unguarded expressions of the poet, provoked by the ungenerous treatment he had received. (See *Serassi*, *Vita di Tasso*, p. 282.; and the *Extracts from Tasso's Letters*, p. 283.: see also the learned essay on the imprisonment of Tasso in Sir John Hobhouse's *Illustrations of Childe Harold*, pp. 5—32.)

Guarini, author of the *Pastor Fido*, the cardinal Bentivoglio, and several other distinguished persons, were, also, natives of Ferrara.

From a small town Ferrara became a walled city, A. D. 670. The family of Esté possessed it first as chief magistrates, and afterwards as hereditary sovereigns, from about 1050 to 1597; when, on the death of its last duke, and the extinction of the male line of the family, it was taken possession of by the pope. Under the French régime it was the cap. of the dep. of Basso Po.

FERROL, a sea-port town of Spain, on the N.W. coast of Galicia, prov. Betanzos, cap. of a jurisdiction of same name, and of one of the 3 naval departments of the kingdom, on the N. arm of the Bay of Betanzos, or Corunna, 11 m. N.E. the latter, and 25 m. S.W. Cape Ortegal; lat. 43° 29′ 30″ N., long. 8° 15′ W. Pop. 13,384. (*Miñano*, 1826.) The harbour of Ferrol is one of the very best in Europe in point of depth, capacity, and safety. It is approached by a strait about 2 m. in length, and in its narrowest part not quite a quarter of a m. broad; this channel, which has from 8 to 11 fathoms water, will only admit one ship at a time, and is commanded by strong forts on either side. The tides in it run so strong that it is advisable to enter or leave the harbour an hour before high or low water. The town is protected on the land side by strong fortifications; it is well laid out, the streets mostly intersecting each other at right angles: but in some parts they are less regular; the ground enclosed by the fortifications being very uneven. It has 2 hospitals, 3 large churches, a monastery, consistory, a good prison, academies of navigation and mathematics for pilots, &c., and a school for the naval education of seamen; and contains the residences of the captain and auditor-general, intendant, and superior financial officer of the department, and of the military commandant, who is also the superintendant of police in the jurisdiction, which comprises the adjacent town of La Graña. On the E. side of the town are the royal arsenal and dockyard; the former is the first and largest in Spain, and used to be furnished with all necessary stores for the construction of the navy: the docks rank amongst the finest in Europe. The basin, in which the ships are laid up, is of great extent and solid workmanship, and every ship has its separate storehouse. The naval barracks occupy a large and handsome building, and afford accommodation for 6,000 men. Six hundred galley-slaves are (or were) employed in the most laborious works of the harbour. This port being intended solely for the royal navy, general commerce and all foreign merchant ships are excluded. There are, however, some manufactures of hats, paper, leather, naval stores, hardware, &c.; and corn, wine, brandy, vinegar, pilchards, and herrings, the produce of its own fisheries, &c., are exported; and salted meat, French, English, Irish, Dutch, &c. woollen, linen, and other fabrics imported; besides *indianas* from Catalonia, and silks from Valencia. But the trade of the town is principally limited to the supply of the inhab., the navy, and the government officers. Prior to 1752, Ferrol was only a fishing hamlet, frequented by coasting vessels; but, owing to the advantages of its situation, it has since been made the chief naval station of Spain. (*Miñano*, *Diccionario Geog. de España*, *&c.* iv. 143, 144.; *Tofiño; Mod. Trav.*, *&c.*)

FEVERSHAM. *See* FAVERSHAM.

FEZ (properly *Fas*), a city of Morocco, and, next to Morocco and Mequinez, the principal in that empire, cap. of the prov., as it formerly was of the independent kingdom of the same name, and residence of a *kaid* or governor. It is singularly and beautifully situated in a funnel-shaped valley open only to the N. and N.E., the sloping sides of which are covered with fields, gardens, orange-groves, and orchards, 98 m. from the Atlantic, 225 m. N.E. Morocco, and 80 m. S.E. Tangier; lat. 34° 6′ 3″ N., long. 5° 1′ 19″ W. Its pop. has been very variously estimated; but, according to Count Graberg de Hemso, the resident pop. may be estimated at about 88,000, of whom 65,000 are Moors and Arabs, 10,000 Berbers and cognate tribes, 9,000 Jews, and 4,000 Negroes. It consists of two separate towns, Old and New Fez; the latter standing on a height and overlooking the former. They are surrounded by decayed walls, which include a large space; and at both its E. and W. extremities are castles, in one of which the governor at present resides. The *Wad-el-Jubor* (River of Pearls), an affluent of the Seboo, winds through the valley, irrigating a large portion of its surface and turning a great number of mills, and after entering Fez, divides into two arms, which furnish water in abundance to the houses and mosques. The Old City is built on sloping ground; its streets are narrow and dark, unpaved, and in wet weather excessively dirty. The houses are lofty, flat-roofed, and built around court-yards; their different stories are surrounded with galleries supported on colonnades. Their cracked, leaning, and bulging walls are propped up by others which stretch at different intervals across the streets. These cross-walls are perforated by arched passages, not over wide; and these being closed at night, the city becomes divided into different quarters, all communication between which is effectually cut off. The New City, called also *Medinat-al-beida*, or "the White City," founded in the 13th century, is somewhat better laid out and built than the old, and is surrounded by fine gardens: it contains several palaces, among which is that of the emperor, some public baths, and several tolerable modern houses. The imperial palace covers a considerable extent of ground; it has a great number of court-yards, some of which are only half finished, while others are half dilapidated. Its interior does not exhibit much splendour. Ali Bey, early in the present century, reports that the cabinet in which the sultan used to receive visiters was but a poorly

furnished room 15 ft. square, while the office of the minister was a miserable, low, damp apartment at the bottom of a small staircase, about 5 ft. long by 8 ft. wide, and without any other furniture than an old carpet! The Jews are confined to the New City, where they have a synagogue, and are obliged to keep within their own quarter at night. According to Leo Africanus, Fez is said in the 16th century to have contained as many as 700 mosques; but this would appear to be a gross exaggeration: at present the city contains only about 100. All are built on a uniform model: they consist of a court-yard surrounded with arcades, and on the S. side a covered square, in the middle of the wall bounding which there is a niche, where the *imam* places himself to direct the prayers, and on the left hand side of the latter a pulpit. The chief mosque, called *El Carubin*, was erected soon after the foundation of the city. It has a greater number of arches than the large mosque of Tangier, many gates, and upwards of 300 pillars, and in its court there are 2 handsome fountains. This mosque can boast of the singularity of having a covered place for women who may choose to participate in the public prayers — a circumstance unique in Mohammedan places of worship. It has been said to be one of the most remarkable edifices of its kind in Africa; but Ali Bey says, that it is upon the whole a heavy and mean structure, and far inferior to the great mosque of Cordova. Its minaret contains some clocks, globes, and astronomical instruments, brought from Europe nearly a century and a half ago, — and a library; but, from having been abandoned to dust and damp, most of the instruments and books have become useless. The most frequented mosque is that of Muley Edris, the founder of Fez: it contains the sepulchre of that prince, and the sanctity with which it is thereby invested is so great, that it affords perfect security to a criminal guilty of even high treason. Its minaret is the finest and highest in the city; it contains many European articles of mechanism. Public baths are numerous in Fez, and some of them are very good. There are also some tolerably convenient inns, though their outward appearance is not prepossessing. The number of shops, viewed externally, would almost warrant the belief that Fez contained 4 times its actual pop.; but most of them are mere "stalls with just room enough for a sedentary Moor, who never moves; and for the packets that are heaped round him, to which he points as passengers arrive." (*Chenier*, i. 77.) Each street is devoted to a separate trade; and it is seldom that more than one species of goods is sold in a single shop. The markets are plentifully supplied; and provisions are both good and cheap. The climate is oppressively hot in summer; in the winter the thermometer often falls to 40° Fahr., and the average height of the barometer is 27 in. The atmosphere is almost always damp and misty; and the situation is considered unhealthy (*Chenier*); the New City is, however, much less so than the Old.

During the struggle with the Moors in Spain, and especially on their expulsion from that kingdom, many Mohammedans sought an asylum at Fez, taking with them new manners, arts, and knowledge. They introduced the Spanish method of dressing and dyeing goat and sheep skins red and yellow (forming the leather then called Cordovan, but now Morocco), as well as the manufacture of milled woollen fabrics. The foregoing articles are still manufactured at Fez, and, in addition, gauzes, silks, sashes, gold and silver stuffs, jewellery, slippers, girdles, saddlery, woollen *haiks*, fine carpets, coarse linen fabrics, arms, copper goods, and earthenware. The trade with the adjacent country is brisk; and twice a year caravans go from this city across the desert to Timbuctoo.

Fez has been always considered one of the principal seats of Mohammedan learning. There are schools attached to many of the mosques: of these, seven are considered superior to the rest; and in these a mixed jargon of religion, morality, legislation, physics, metaphysics, geometry, astrology, alchemy, and medicine is taught, principally out of the Koran, and the works of Euclid, Ptolemy, and Aristotle. There are several hospitals, the largest of which is appropriated to lunatics. The military government of the city is in the hands of the *kaid*; the civil and judicial authority is exercised by a *cadi*; and a minister, entitled *al motassen*, fixes the price of provisions, and decides all points that arise on this branch of the public service.

Old Fez was founded in 793 by Edris II., a descendant of Mohammed, and continued the cap. of an indep. kingdom till 1548, when it was, together with its territory, conquered, and annexed to Morocco. After a period of decline, it again rose to prosperity on the ruins of the Moorish kingdom of Cordova; and its pop. became afterwards still farther augmented, by reason of the edicts of Philip II. against the Mohammedans. It has been always held so sacred by the Arabs and others, that when the pilgrimages to Mecca were interrupted in the 10th century, the western Moslems journeyed to Fez, as the eastern did to Jerusalem; and even now none but the faithful can enter Fez without express leave from the emperor. (*Graberg af Hemso; Specchio dell' Imp. di Marocco*, pp. 47—49.; *Chenier, Morocco*, vol. i.; *Mod. Trav.*, vol. xxi., *&c.*)

FEZZAN (an. *Phasania Regio*, and the country of the *Garamantes*), a country of Central Africa, immediately S. of Tripoli, to which pachalic it is tributary. It is supposed to reach from about 23½ to 31 deg. N. lat., and from about the 12th to the 16th deg. E. long. But its boundaries are ill defined, and its area and pop. are alike uncertain. The latter, however, has been estimated by Horneman at no more than from 70,000 to 75,000. Fezzan is, as far as we know, the largest *oasis*, or cultivable tract, in the Great African Desert, by which it is surrounded on all sides; having W. the country of the Tuaricks, and S. and E. that of the Tibboos. A portion of it consists of an extensive valley bounded by an irregular circle of mountains on all sides except the W., where it opens into the desert; but a great part of the mountainous region to the E., as well as of the desert to the W. and S., are nominally included in its territory. The Gib-el-Assond, or Black Haratsch, mountains (an. *Mons Ater*), the White Haratsch, and other ranges, intersect the country generally in the direction of N.W. to S.E. None of these ranges, however, is of any remarkable height; the first named, in the N. of Fezzan, is no more than about 1,200 or 1,500 ft. in elevation, and the hills elsewhere for the most part appear to be only from 400 to 600 ft. high. Their tops are in general tabular; a few only have conical peaks. Basalt is one of their principal constituents, and especially in the Black Mountains; where, however, the lower stratum of all the hills is invariably limestone, mixed with a reddish clay. Calcareous formations, containing many shells, are generally predominant; the other chief geological rocks are porphyritic clay slate, aluminous schist, and sandstone, frequently intermixed with beds of clay. A large portion of the surface is covered with sand, beneath which, in some places, volcanic substances have been found. Salt and nitre frequently effloresce on the soil, and impregnate many of the small lakes. There is no river or rivulet throughout the country; fresh water is procured by digging to variable depths, but at most to about 8 or 10 feet under ground, when a plentiful supply is obtained. Rain is very rare, and descends only in small quantities. The heat in summer is oppressive in the highest degree, not only to foreigners but to the natives, rising sometimes to 133° Fahr.; the cold in winter is also sharper than might be expected from the latitude, the thermometer descending occasionally to below 50°, and accompanied with piercing blasts from the N.; added to which, furious tempests frequently occur, overwhelming caravans of travellers with the sands of the desert. The climate of Mourzouk and various other places is decidedly unhealthy. Only a small portion of the surface is under culture, and that only in the valleys, where sufficiently watered. Wheat is raised; but maize and barley are the grains on which the inhabitants chiefly depend for subsistence, and these are not grown in sufficient quantities for their supply. Pot herbs and garden vegetables are plentiful, particularly carrots, cucumbers, onions, and garlic; these, however, as well as most of the corn, are raised only in gardens near the towns, which are watered with great labour from brackish wells. Dates are the staple product, and the tax on the date trees is an important source of the public revenue. Figs, pomegranates, jujubes, &c., are also grown. The rearing of domestic animals is little attended to: goats are the most numerous; and in the S. there are flocks of hairy broad-tailed sheep, of a light brown colour. Horned cattle are to be found in the most fertile districts, and there only in small numbers: beef is rarely eaten, except by the rich. Horses are few, the most laborious kinds of work being chiefly performed by asses. Camels are used for travelling and the conveyance of goods; but these animals are dear, and only kept by large merchants, or other wealthy individuals. Dates form the principal food of all domestic animals. They also compose the chief nourishment of the pop., the luxuries of life, even in the cap., being very limited; and, in fact, the necessaries of life, generally speaking, are so scanty, that, to designate a rich man, the common expression is, "he eats bread and meat every day." This state of things is, of course, mainly owing to the apathy of the inhab., many of whom do not, for months together, taste corn: when obtained, they make it into a paste called *aseeda*. Bread is badly made, and baked in ovens of clay, planted in holes in the earth, and heated by burning embers. Fowls, geese, ducks, &c., are scarce, in consequence of the sovereign having appropriated all he could lay his hands on for his own use. Butter is brought in goats' skins from Tripoli, and is very dear. Tobacco, mixed with *trona*, is very generally chewed by the women, as well as by the men: smoking is rather confined to the opulent, mild tobacco and pipes being dear; but all the men, though professedly Moham-

medans, drink largely of intoxicating liquors, obtained from dates. The principal wild animals met with in the country are the lion, panther, hyena, jackal, tiger cat, immense herds of buffaloes, &c.; and among birds, vultures, falcons and other rapacious species, ostriches, and bustards. From the products of the animal kingdom, which supply its commerce, are derived a great part of what wealth Fezzan possesses. There are a few manufactures of agricultural implements, coarse woollen fabrics, carpets, and Morocco leather; but Horneman could not find throughout Mourzouk a single artificer skilful in any trade or work. "The smith fashions without distinction every metal into every form: the same man who forges shoes for the sultan's horses, makes rings for his princesses." Capt. Lyon, however, remarks that some work in gold and silver is executed with much skill, considering the badness of their tools; and every man is capable of acting as a carpenter or mason. The wood being that of the date tree, and the houses being built of mud, little taste or skill are displayed. Much deference is paid to the artists in leather or metals, who are called, *par excellence*, *sta*, or master, as, iron-master, leather-master, &c. The shuttle is unknown, and woollen cloths are made by the women with the hand only. The chief occupation of the people is commerce and the conveyance of goods. Fezzan derives its chief importance from its situation, which renders it a grand dépôt for the commerce carried on between N. and Central Africa. The communication of Egypt as well as Barbary with the vast countries to the E. and S. of the Niger, centres almost entirely in Mourzouk. Thither an annual caravan sets out (or did in the time of Horneman) from Cairo, reaching its destination in about 40 days. From Tripoli to Mourzouk the journey usually occupies about 25 or 27 days. Of the caravans to the S., the principal are those to Bornou, with which country Fezzan maintains a regular and extensive communication, and the cap. of which travellers reach in about 50 days. Other caravans go to Cassina, which journey occupies 60 days; and a few proceed still further S., crossing the mountains to Ashantee. "The arrival of the great caravans forms a sort of jubilee in the cities of Fezzan; and on reaching Mourzouk, they find the sovereign seated on a chair of state, outside the city, to receive them." Male and female slaves from Bornou and the adjacent S. countries, gold dust from the banks of the Niger, copper, senna from Agadez, civet, tiger-skins, dyed leather, and some kinds of cotton manufactures, are the chief imports from the interior of Africa; which, together with ivory, ostrich feathers, &c., are forwarded to Barbary and Egypt to be exchanged for provisions, and the manufactures of Europe and the East. Many of the latter are re-exported to the S., including fire-arms, gunpowder, sabres, knives, glass, paper, beads, imitations of coral, toys, and European manufactures of a great variety of kinds, tobacco, snuff, &c. The articles of clothing imported from the N. are principally muslins (partly from India), striped, blue, and white calicoes, woollen cloth, and worsted caps. Salt and dates are, however, the principal articles exported to the S.; the quantity of the former being estimated at 300 or 400 camel loads.

The People are very mixed; in the N. many are Arabs, in the S. they are chiefly Negroes. The Fezzaneers, who compose the mass of the pop., appear intermediate between the two, though more inclining to the latter type. Their colour is black; they are, according to most authorities, tolerably well formed; but neither sex has handsome features. They have a very peculiar cast of countenance, which distinguishes them from other blacks; their cheek-bones are higher and more prominent, faces flatter, noses less depressed, and more peaked at the tip than in the negro; eyes generally small; lips protuberant, and somewhat thick; teeth good; hair inclined to be woolly, but not completely frizzled. They are said to be cheerful, and fond of dancing and music, and not prone to sudden anger, nor revengeful; but are at the same time selfish, devoid of hospitality, insincere, and wholly destitute of either physical or mental energy or enterprise. The Arabs, in person and disposition, are much the same as elsewhere; and are greatly superior to the Fezzaneers in activity and cleanliness. In Mourzouk there are some white families, descended from the Mamelukes, whose designation they are very proud of preserving. The court, and upper classes of Fezzan dress mostly in the costume of Tripoli; the lower orders wear a large shirt of white or blue cotton, with long loose sleeves, trousers of the same, and sandals of camel's hide; and on Fridays they perhaps add a turban, and appear in yellow slippers. The women plait their hair, often mixing it with black wool; they use great quantities of oil and perfumes; and those who can afford it, load themselves profusely with armlets, anklets, and other ponderous ornaments of gold, silver, copper, iron, ivory, glass, horn, &c., together with cornelians, agates, beads, coral, &c. Both sexes have a singular custom of stuffing their nostrils with a twisted leaf of onions or clover. The habits of all classes are said to be debauched and profligate in the extreme.

The Government is in the hands of a chief who exercises unlimited power within his own territory, where he has the title of *sultan*, though in addressing his superior, the pacha of Tripoli, he assumes only that of *sheik*. His revenues are derived from taxes on slaves, merchandize, date plantations, gardens, and other cltivated lands; from fines and requisitions, duties on foreign trade, and the crown domains, salt pools, natron lakes, &c. For every slave, great or small, he receives, on their entering his dominions, 2 Spanish dollars; and in some years the number of slaves amount to 4,000. On the sale of every slave, 1-4th of the purchase money goes to the sultan, in addition to which he receives a dollar and a half per head, which, at the rate of 4,000, gives alone 6,000 dollars annually. The tax on a camel's load of oil or butter entering the country, is 7 dollars; on a load of beads, copper, or hardware, 4 dollars; and on one of clothing, 3 dollars. All Arabs who buy dates, pay 1 dollar duty on each load; and above 3,000 loads are annually sold to them. Date-trees (with a few exceptions) are taxed at 1 dollar for every 200, and those in the vicinity of the cap. alone yield the sultan an annual profit of 10,000 dollars. The trees, which are his private property, produce about 6,000 camel-loads of dates, each load about 400 lbs. weight, and which may be estimated to fetch 18,000 dollars. He is entitled to 1-5th of all sheep or goats; every garden pays 1-10th of the corn it produces. Each town pays a certain sum which, altogether, may be averaged at 4,000 dollars. He sends out private parties for slaves; and has alone the privilege to sell horses, which he buys at a cheap rate from the Arabs, and realises a large profit from, by obtaining slaves for them in exchange. If a man die childless, the sultan inherits a great part of his property. There are various other ways in which he extorts money. The *cadi*, and other state officers, the ministers of religion, &c., are supported by lands set apart for the purpose. All the servants of the sultan are maintained by the public; and he has no money to pay, except to the pasha of Tripoli. The tribute was to the amount of about 15,000 dollars a year, till a quarrel between the two sovereigns broke out some years ago; since which, it has been much less. It is paid in gold, senna, slaves, &c., and an embassy is annually sent for it by the pacha. The armed force of Fezzan may usually amount to 5,000 men; but in time of war, all who are able to bear arms are called out, and in this way a tumultuary force of from 15,000 to 20,000 men has sometimes been raised.

The cities and towns of Fezzan are said to exceed 100; but the largest has not more, perhaps, than 3,000 inhab. The principal are Mourzouk the cap., Sockna, Sebha, Hoon, Wadan, &c. Mourzouk stands in lat. 25° 54′ N., long. 15° 52′ E. It is surrounded with well-built mud walls, at least 20 ft. high, with round buttresses, loopholes for musketry, and gates wide enough to admit a laden camel. Pop. about 2,500. The street of entrance is about 300 yards long, by 100 broad, and leads to the sultan's castle, an immense, but irregular edifice, built of mud, in the middle of the city. In Mourzouk there are said to be 16 mosques; but most of them are small. Sockna is situated in a plain, on the road between the cap. and Tripoli. It is walled, and may contain 3,000 inhab. Germa has been considered, but without sufficient evidence, to be the an. *Garama*. No antiquities have been discovered in it; though, in various parts of the country, remains belonging to the Roman and subsequent periods are frequently met with.

The country of the Garamantes was conquered by the Romans under Cornelius Balbus, soon after the Christian æra. In the 7th century it fell under the dominion of the Arabs; but in 1300 a portion of it was tributary to the Soudan state of Kanem. Soon afterwards a family of the *Sherifs* (descendants of Mohammed) took possession of it, and held it till 1811, when the bey Mukni usurped the throne. (*Denham & Clapperton*, *Trav. in Africa; Oudney*, *Lyon*, *Ritchie*, *Horneman*, *&c.*)

FIESOLE (an. *Fæsulæ*), in antiquity a considerable city of Etruria; now a small though celebrated village of Central Italy, grand duchy of Tuscany, prov. Florence, on a precipitously steep hill commanding a fine view of the *Val d'Arno*, 4 m. N.E. Florence. The face of the hill is cut into a gradation of narrow terraces, enclosed in a trellis of vines, and faced with loose stone walls. It has a cathedral, a seminary, and numerous country houses belonging to the citizens of the Tuscan capital. It is first noticed by Polybius in his account of the early wars between the Gauls and the Romans. It was the head-quarters of Catiline, who retired thither after the discovery of his conspiracy. Near it, in 405, was fought the last great battle gained by the Romans in Italy, in which Stilicho defeated Radagaisus and the Huns. In 1010, the Florentines dismantled and ruined Fiesole, and enlarged their own city with some of its materials; but the ruins of a few of its ancient buildings are still visible,

particularly those of its Etruscan walls, and of a vast amphitheatre supposed to be of Roman origin. (*Rampoldi*, ii. 44.; *Cramer's An. Italy*, i. 177.)

FIFE, a marit. co. of Scotland, consisting of the peninsula lying between the Frith of Forth on the S., the German Ocean on the E., and the Frith of Tay on the N.; having on the W. the cos. of Perth, Kinross, and Clackmannan. Area, 300,800 acres, of which more than two thirds are cultivated. This is one of the best situated and most beautiful of the Scotch counties, exhibiting every variety of surface and soil, from the mountain to the level plain, and from moss and gravel to the finest loams. The Lomond hills, on its W. border, attain to an elevation of about 1720 ft. above the level of the sea. The E. and S.E. parts of the county are comparatively level and fertile; and the district, called the "How of Fife," traversed by the Eden, is particularly well cultivated and productive. There is a good deal of moor land in the W. parts of the county along the E. and S. borders of Kinross-shire, and between the latter and Dunfermline; but it is gradually being brought under tillage. Climate dry and good, having been materially improved by drainage and extended cultivation. Generally speaking, the soil is superior; and both arable and stock husbandry are well understood and successfully practised. All the new improvements in drainage and in agriculture have been introduced into the county, which has, in consequence, been wonderfully improved. "By the new system of agriculture, and especially by the liberal employment of draining, the land has been brought into the highest state of cultivation; and grounds, which 40 years ago would have been thought good for nothing, are now seen waving with the richest harvests. The houses of the peasantry are now equal to what those of the farmers were then; and the mansions of the latter surpass, both in appearance and comfort, such as the smaller proprietors formerly possessed. The condition of the people is much improved. Tea has become a new article of consumption. Their superior clothing forms another striking proof of the improvement of the peasantry." (*New Statist. Acc. of Scotland*, § *Fife*, pp. 294. 314.) The Fife breed of cattle is well known, and is one of the most valuable of the Scotch breeds. Property is more subdivided in this than in most Scotch counties. Farms vary in size from 50 to 500 acres: leases for 19 years, and corn rents, general: average rent of land, in 1843, 25*s.* 6*d.* an acre. No county affords finer situations for building, or is better wooded, or has a greater number of gentlemen's seats. Coal and lime are both abundant, and are largely exported. The linen manufacture is carried on very extensively at Dunfermline, Kirkcaldy, Dysart, and other towns. A considerable number of people in the smaller towns round the coast derive a subsistence from fishing. Principal rivers, Eden and Leven. Principal towns, Dunfermline, Kirkcaldy, St. Andrew's (a city), &c. Fife contains 13 royal burghs, 61 parishes, and a university, St. Andrew's. It may be said to return 4 mems. to the H. of C., viz., 1 for the county, 1 for the E. district of boroughs, or those of Cupar, St. Andrews, &c.; 1 for the Dysart district, including those of Dysart, Kircaldy, &c.; and 1 for the W. district of boroughs, including Inverkeithing, Dunfermline, Queensferry, Culross, and Stirling, of which the last two do not belong to the county. Registered electors for the county, in 1849-50, 2,659. In 1841, Fife had 29,036 inhab. houses, and 140,140 inhab., of whom 65,715 were males, and 74,425 females.

FIGEAC, a town of France, dép. Lot, cap. arrond., on a declivity beside the Célé, 31 m. N.E. Cahors. Pop. (1836) 4,650. It is surrounded by an amphitheatre of wooded and vine-clad hills, interspersed with numerous habitations and abrupt rocky heights; but the town is generally ill-built, and its streets narrow, crooked, and dirty. It was formerly encompassed by ramparts and ditches, but these were demolished in 1622, and only some traces of them exist. It is said to owe its origin to a Benedictine monastery, established here in 755 by Pepin le Bref. The church of this ancient abbey is remarkable for the singularity of its architecture; it has a dome surmounted by a spire, together upwards of 256 ft. in height. At the S. and W. extremities of the town are two obelisks, called *aiguilles*, as to the origin of which several fabulous stories are afloat. These are octagonal, and upwards of 50 ft. in height; and appear to have been intended to support lanterns. Figeac contains numerous ancient buildings, among which is the castle of Baleine, an edifice of great extent and solidity, and originally a place of some strength; it is now used as a hall of justice. It has a court of primary jurisdiction, a communal college, and a school of design; and has manufactures of linen and cotton fabrics, dyeing-houses, tanneries, &c., and some trade in wines and cattle. It suffered greatly in the religious wars of the 16th century. It was the birth-place of Champollion, the Egyptian traveller. (*Hugo*, art. *Lot*, &c.)

FIGUERAS, a town of Spain, near the N.E. extremity of the kingdom, Catalonia, prov. Gerona, on the road between Perpignan and Barcelona, 71 m. N.N.E. the latter: lat. 42° 16′ 1″ N.; long. 2° 57′ 39″ E. Pop. 7,422. (*Miñano*, 1826.) It is "an ugly straggling town," situated in the middle of a plain on which an abundance of olive trees are grown. Like almost all Spanish towns, it has its square (*plaza*); the streets are tolerably wide, but the houses ill-built. It has a parish church, three convents, an hospital, barracks, with a small garrison, custom-house, post-house, &c. There are two inns; but Mr. Inglis says of the one which he visited in 1830:—"It is singular that in a town so near the frontier, it should still be, in all respects, the Spanish *posada*—it is just as little French as the posada of Murcia or Andalusia: the fire still blazes in the middle of the floor; coffee and tea are unattainable; and meat is to be found, not in the inn, but in the market." (ii. pp. 305, 306.) About three furlongs W.N.W. of the town is the citadel, or castle of San Fernando, constructed at an immense cost, about the middle of the last century, and reckoned one of the finest fortresses in Europe; it stands on a little eminence, commanding the whole plain; all the approaches to it are undermined, and every building within it is bomb-proof. Its form is an irregular pentagon; the walls are of free-stone, and very thick; the moats deep and wide; its ramparts, magazines, stables, cellars, barracks, and hospital, are defended by a casemate; and the firm, bare rock on which it is built has been turned to so great advantage, that trenches can scarcely be opened on any side, the ground being every where stony. It will serve as an intrenched camp for from 16,000 to 17,000 men. It has, however, been several times captured: the French took it in 1808; the Spaniards recovered it in 1811; but it was retaken in the same year by the French, who kept possession of it till 1814. They took it again in 1823.

This fortress has a military governor, whose jurisdiction extends over the town. Figueras is the seat of a subdelegation of police: it has some trade with France, manufactures of leather, paper, &c., mills of various kinds, and a large market every Thursday. Iron and black marble are obtained in its vicinity. (*Miñano; Inglis's Spain*, ii.; *Mod. Trav.* xviii. 54.)

FILIPPO D'ARGIRO (SAN) (an. *Agyrium*), a town of Sicily, not far from the centre of the island, Val di Catania, cap. cant., on a hill near the Trachino, 34 m. W. by N. Catania. Pop., in 1831 (*inc. cant.*), 7,156. It has several churches and convents. The best saffron in Sicily is grown in its environs. Agyrium was of great antiquity, and is celebrated as being the birthplace of Diodorus Siculus.

FINALE, a town of N. Italy, duchy of Modena, cap. distr., on an island in the Panaro, 10 m. from its confluence with the Po, 21 m. N.E. Modena, and 16 m. W. Ferrara. Pop. 7,600. It derives its name from its being the last town to the E. in the Modenese dom. It is surrounded by a wall, and has some wide streets, fine bridges, and a college. It has manufactures of silk and woollen fabrics, and some trade in corn, wine, and hemp. In 1822 it suffered much damage from an inundation of the Panaro. (*Rampoldi*, &c.)

FINDHORN, a village and sea-port of Scotland, co. Moray, on the river of that name, at its mouth, and in the par. of Kinloss, 3 m. N. by E. Forres, and 10 m. W. by N. Elgin. The Findhorn, which falls into the Moray Frith, and which, near its mouth, flows into a loch or arm of the sea, upwards of 1 m. in length by ½ m. in breadth, is rendered famous by its inundation in the disastrous floods of August, 1829. (*Sir Tho. D. Lauder's Morayshire Floods.*) Pop. 670; but, during the herring fishing season, there is an increase of about 700. The number of boats, decked and undecked, employed in the herring fishery in 1839, was 163, manned by 739 persons. There were 99 coopers and 329 individuals employed in gutting, cleaning, packing, &c. the fish, as also 16 labourers. Number of fish-curers, 18. Some salmon are also caught here. A considerable quantity of grain is shipped from Findhorn. About 9 m. S. from the village stood the Abbey of Kinloss, belonging to the Cistertian order of monks. (*Keith's Cat. of Scot. Bishops*, Edin. 1824, p. 418.)

FINDON, or FINNAN, a fishing village of Scotland, co. Kincardine, on the sea-coast, in the par. of Banchory Devenick, 6 m. S. Aberdeen. Pop. 450. It is a poor place, but has long been celebrated for its preparation of smoked haddocks, known by the name of "Finnan haddocks." This village was at one time unrivalled for the whole process,—for gutting, cleaning, splitting, and smoking the fish; but it is admitted that the several white-fishing stations on the coasts of Kincardine and Aberdeen, are now about equal to it in this respect. Dunbar and various towns on the Frith of Forth have tried to rival Finnan, but in vain. The most delicate part of the process is the smoking, which should be done by the green branches of fir, particularly spruce, thus communicating to the fish its peculiar odour and bright yellow colour. A somewhat similar result may be effected by the use of pyroligneous acid, but nothing but the fir has ever been used for the purpose at Finnan and

the neighbouring coast. The genuine Finnan haddock should never be kept above two or at farthest three days after it has been cured, should be roasted by a very quick fire, and served up immediately. The inhabitants of Finnan, like those of many other fishing towns on the E. coast of Scotland, are supposed to have had a foreign, most likely a Danish, origin; their physical aspect, dress, manners, language, being peculiar, and remaining unchanged from generation to generation. (*The Book of Bon-Accord*, Aberdeen, 1839, pp. 17, 18. 270.; *Meg Dods' Cookery*, p. 17.; *Boswell's Life of Johnson*, by Croker, ii. 343.)

FINISTERE, or FINISTERRE, the extreme W. dep. of France, formerly a part of the prov. Brittany, between lat. 47° 45′ and 48° 45′ N., and long. 3° 26′ and 4° 50′ W., surrounded on three sides by the ocean and British Channel, and having E. the déps. Cotes-du-Nord and Morbihan. Length, N. to S., 65 m.; breadth about 55 m.: area, 666,705 hectares. Pop. (1836) 546,955. The coasts of this dep. are generally steep, rocky, and indented with many bays and harbours, some of which, as that of Brest, are of the first excellence. Ushant, and many groups of small rocky islands, are situated near the shores. Two hill-chains run through this dep. E. to W., one terminating near Brest, and the other in the opposite peninsula of Crozon. Both chains are granitic, but the summits of neither rise above 990 ft. Rivers numerous; the principal are the Aulne, Landerneau, Odet, &c.: there are also a great many small lakes. Climate mild, but humid; fogs are common; W. winds are most prevalent, and violent storms often occur.

In the Official Tables, the extent of rich land in the dep. is set down at 259,890 hectares; arable lands occupy 273,210 hect.; and heath and waste lands no fewer than 268,573 hect. In 1835, out of 84,396 properties subject to the *contribution foncière*, 32,026 were assessed at less than 5 fr., and 13,092 at between 5 and 10 fr.: there are but few large properties. Agriculture is in a very backward state, and the land is capable of yielding a much larger return if better methods of husbandry were followed: still, however, more corn is produced than is required for home consumption; it consists chiefly of oats, rye, wheat, and barley, in the order now stated. The corn produced in 1835 amounted to 3,140,540 hectolitres, to which produce may be added 1,296,000 hectol. of potatoes. In accordance with a singular superstition, which has prevailed from a remote period, one corner of every ploughed field is left fallow, and designated the *part du diable*! and it is believed that any attempt to convert this portion to a productive use would be productive of loss! Flax, hemp, and pulse of a good quality are grown: the vine is not raised; but about 70,000 hectol. a year of cider are made. Pasturage is excellent, and three hay harvests are sometimes obtained in a year. Many cattle are reared, principally oxen, cows, &c.; their number in 1830 being about 180,500 head. In the same year there were about 70,000 goats, but only 47,300 sheep. Hogs are numerous, and bees are largely reared — honey and wax being important articles in the commerce of the dep. The *terres froides*, or thin and poor soils, are sown with broom or furze, which furnish at the same time forage, fuel, and manure. According to a report by the British consul at Brest in 1834, the farms in that part of the dep. vary in size principally between 5 and 40 or 45 acres. The larger farms are commonly let on leases of 9 years, the rent being paid in money at Michaelmas. The rent of poor lands varies from about 5*s*. to 11*s*.; and of *terres chaudes*, or rich lands, from 17*s*. to about 30*s*. an acre. The amount of assessment varies very considerably in different communes; in that of Conquet it is charged on the rent in the proportion of about 1*s*. in the pound; but in the commune of Plousané it is as high as 5*s*. in the pound: the *octroi* duties are also much higher in the latter commune. Farm servants board and lodge with their employers: men's wages vary from 2*l*. 8*s*. to 4*l*. 10*s*., and the women's from about 1*l*. 16*s*. to 3*l*. per annum. Adjoining Brest, wages are higher. Pork, beef, cabbage soup, oatmeal porridge, potatoes, bread, butter, and pudding, comprise the chief articles of food. A family of 12 persons is estimated to consume 700 or 800 lbs. of pork, and from 100 to 500 lbs. of beef or veal annually. The women spin, and assist in field labour. Clothing is cheaper than in England; and the condition of the farmers is said to be prosperous. The pilchard and other fisheries are important; they employ about 880 boats, and 4,400 hands, and are estimated to realise a gross produce of about 2,100,000 fr. a year.

Finistere is rich in metallic products, especially lead. The mines of Pouillaouen and Huelgoet are, perhaps, the largest of any in France. The first employs 300 miners, and yields annually 7,500,000 kilogr. of lead ore, from which 660,000 kilogr. of smelted metal are obtained. The second employs 280 miners, and yields 4,600,000 kilogr. of ore yearly, which ultimately give 370,000 kilogr. of raw metal. The lead is argentiferous; and about 700 kilogr. of silver a year are extracted at an average. Iron, zinc, and bismuth are, amongst the other metals, procured in the dep. There are also numerous granite, porphyry, slate, serpentine, and marble quarries, and beds of coal, potters' earth, &c. The manufactures are principally those of linen and woollen fabrics, sail-cloth, paper, earthenware, cordage, leather, wax-candles, soap, chemical products, &c. Morlaix has a brisk trade in litharge, butter, &c. The exports generally exceed the imports in value; the latter are chiefly the produce of the more S. deps., as wines, brandy, oil, &c. Finisterre is divided into 6 arronds., and sends 6 mems. to the cham. of dep. Chief towns, Quimper, the cap., Brest, and Morlaix. (*Hugo*, art. *Finisterre*; *Encyc. des Gens du Monde*; *Parl. Rep. on Agric.*, 1836; and *Official Tables*.)

FINLAND, called by the inhab. *Suomen-maa*, or Land of Lakes or Marshes, a country of N. Europe, inc., with the exception of part of Lapland, the extreme N. W. portion of the Russian empire. It lies between lat. 59° 50′ and 60° 25′ N., and long. 21° and 32½° E.; having N. Russian Lapland; E. the governments of Archangel and Olonetz; S. the Lake Ladoga, the government of Petersburg, and the Gulph of Finland; and W. Sweden and the Gulph of Bothnia. Length, N. N. E. and S.S.W., 600 m.; average breadth about 240 m. Area about 140,000 sq. m. Pop. (1852) 1,636,915. It consists principally of a table land from 400 to 600 feet above the level of the sea, and interspersed with hills of no great elevation. In the N., however, the Manselka mountains have an average height of between 3,000 and 4,000 ft. The coasts, particularly on the S., are surrounded by a vast number of rocky islets, separated from the main land and from each other by intricate and narrow channels, rendering the shores of Finland easy of defence in case of hostile attack by sea. But the chief natural feature of the country is its myriads of lakes, which spread like a network over a large proportion of its surface; some of them being of very considerable size. The greater number of these are in the S. and E.; they have frequent communications with each other, and generally abound with islands. There are numerous rivers, but none of much importance. Climate rigorous. Even in the S. the winter lasts from 6 to 7 months, and in the N. from 8 to 9 months. Dense fogs are very frequent; heavy rains take place in autumn, and in May and June the thaws nearly put a stop to all travelling. In the N. the sun is absent during Dec. and Jan.; but during the short summer, while that luminary is almost perpetually above the horizon, the heat is often very great; and near Uleaborg, in about the 65th deg. lat., the corn is sown and reaped within 6 or 7 weeks. Crops, in all parts of the duchy, are exposed to the double danger of being destroyed by sudden frosts, and by the ravages of a variety of caterpillar called *turila* by the natives. The principal geological formations are granite, which very easily disintegrates, hard limestone, and slate. Soil for the most part stony and poor; but how barren soever, Finland is more productive than the opposite part of the Scandinavian peninsula, and when it belonged to the Swedish crown, it furnished a good deal more corn than was necessary for its own consumption, and was termed the granary of Sweden. Rye and barley are the kinds of grain chiefly cultivated, the rye of Vasa being celebrated for its excellence: wheat is but little grown, but oats are raised in considerable quantities. The peasants are obliged, from the humidity of the atmosphere, to kiln-dry all the grain, after which it will keep for 15 or 18 years. Pulse, hops, hemp, flax, and a little tobacco are raised. Potatoes were introduced about 1762, and are now in pretty general use. Only a small proportion of the surface is under culture. The land requires a large quantity of manure, and that in common

use is wood ashes, procured by setting fire to the forests and underwood, after which operation, heavy crops are sometimes obtained. The natural poverty of the soil is such that, excepting in the S. prov. of Tavastehus, where it is deprived of a continued supply of artificial stimulus, the crops rapidly fall of, and the cleared land is soon abandoned for another portion of soil, the wood on which is purposely destroyed. This plan of manuring the land, though well enough adapted to bring fens covered with brushwood into cultivation, is highly injurious to the forests, and consequently to one of the chief sources of national wealth. The forests, which are very extensive, and stretch to the N. limits of the duchy, consist principally of pine and fir; but contain also beech, elm, poplar, oak, ash, birch, &c. Timber, deals, potash, pitch, tar, and rosin, are amongst the most important products of Finland. Cherries and apples ripen at Vasa, and a species of crab-apple grows wild in the W.; but other fruits, except a few kinds of berries, are rare. Next to agriculture, cattle-breeding and fishing are the chief occupations of the people. The meadows and pastures, though but little attention is paid to them, are, in general, very good; and furnish, with leaves and straw, an abundant supply of food for (in 1852) nearly 900,000 head of cattle, 835,000 sheep, with considerable numbers of hogs and goats. Horses, of which there are about 235,000, are small, strong, and hardy. In the N. the peasants possess large herds of rein-deer. Bears, wolves, elks, deer, foxes, beavers, polecats, and various kinds of game, abound. Seal and herring fisheries are established on many parts of the coast; and the salmon and stræmling (*Clupea harengus*) are caught in great quantities in the lakes, supplying the inhabitants with an important part of their food. Iron mines were formerly wrought, but at present only bog-iron is procured. Lead, sulphur, arsenic, nitre, tin, and copper are met with; the last two, but especially copper, being produced in considerable quantities; salt is very scarce, and is one of the chief articles of import. Manufactures, except the products of a few cotton factories (the result of the prohibitive system), iron forges, glass works, sail-cloth, and hose factories, are entirely domestic. The peasant prepares his own tar, potash, and charcoal; constructs his own boat furniture, and wooden utensils; and weaves at home the coarse woollen and other fabrics he uses. He often lives 100 miles from any town, and is, therefore, thrown for the most part upon his own resources and ingenuity, for the supply of his wants. In some districts the inhab. never repair to a town but to obtain salt. The exports, of the value of about 3,000,000 silver roubles a year, consist of timber, butcher's meat, butter, skins, potash, tar, and fish, to Russia and Sweden, with which countries the principal intercourse is maintained. In 1852 the export trade employed 467 vessels of 107,000 tons, and the coasting trade about 900 vessels of 50,000 tons. There are a few good roads, made by the Swedes while they were in possession of the country; but they do not extend far into the interior. Post horses are furnished, as in Sweden, by the adjacent farmers. In commercial dealings, the Russian is the currency established by law; but Swedish paper money is also in circulation.

Since 1831, Finland has been divided into 8 *läns*, or governments, of very unequal magnitude, the most northerly, Uleaborg, being about as large as all the others; but this is a consequence of the wildness and sterility of the country, the absolute amount of its population and its density, especially the latter, being far below the average of the more southerly governments. The *läns* are subdivided into *fogderier*, or districts, *hærades*, &c. Chief towns, Helsingfors, the present cap.; Abo, the former cap.; Tavastehus, Vasa, Uleaborg, and Torneo. A Russian military governor resides at Helsingfors. Finland has a diet composed of the orders of the nobility, clergy, citizens, and peasantry, and a code of laws and judicial system similar to that of Sweden; but the diet is rarely convoked, except to consent to the imposition of fresh taxes, a senate more recently established having replaced it in the exercise of its functions. The annual revenue derived by the crown from Finland is estimated at about 1,500,000 silver roubles (about 237,000*l*.); the whole of it is, however, expended in the country. Among their privileges is the one that none but a native Finlander can hold any office of trust in the country. The Finnish troops, amounting in time of peace to about 3,000 men, are not intermixed with the ordinary Russian troops. At present (1854) they are serving in Poland, and Polish troops in Finland. The Finnish fleet, by far the best manned portion of the Russian naval force, forms a distinct squadron under the national flag. Sveaborg, on some small islands, in the Gulph of Finland, at a little distance from Helsingfors, is a principal station of the Russian fleet, and is very strongly fortified. Almost all the pop. are Lutherans, under the bishops of Abo and Borgo; except in the government of Wyborg, where they belong to the Russian church. Public education is very backward. There is, however, a university at Helsingfors, with 5 academies, and 12 superior schools. A society for the encouragement of the Finnish language and literature has been warmly patronised by the Russian government, in the view, perhaps, of conciliating the public sympathies.

People. — On the W. coast, and in the Aland Archipelago (which is included in Finland), the inhab. are mostly of Swedish, and in the S. E. of Russian descent; but the great majority of the pop. are Finns. The latter have, by many geographers, been identified with the *Fenni* of Tacitus, and the *Phinni* of Ptolemy. There are, however, circumstances which give rise to considerable doubt respecting such identity. The Finns call themselves *Sonomalaisetlo*, or "inhabitants of the marshes." They have no analogy with the Slavonian or Teutonic races. They are of middle height, robust, flat-faced, with prominent cheek-bones, light, reddish, or yellowish brown hair, grey eyes, little beard, and a dull sallow complexion. They are courageous, hospitable, and honest; but obstinate in the extreme, indolent, dirty, and it is said revengeful. They are grave and rather unsocial. Almost every one is a poet or musician. But they have no taste for dancing, or indeed, knowledge of the art, or of games of chance, except in the towns, where they have been introduced by the Swedes. Their amusements consist principally in feats of bodily strength and activity. The customs and habits of the Finns have been handed down time immemorial, and their costume forcibly brought their supposed E. origin to the mind of Mr. Elliot, who observes in his letters from the N. of Europe, "I could fancy myself in Asia. The peasants wear long loose robes of a coarse woollen manufacture, secured by a silken ceinture like the *kummerbund* of the Mussulmans. Their dress, except the European hat, resembles that of the Beoparries, of Caboul. In Russian or Old Finland, the peasants wear a cloak or caftan, sometimes called a *khalaat*, resembling in form, as well as in name, the E. dress." (pp. 251—259.) The Finns make frequent use of hot vapour baths, and Malte-Brun supposes that they communicated the custom to their Russian conquerors.

History. — The Finns were Pagans, living under their own independent kings till the 12th century; about the middle of which Finland was conquered by the Swedes, who introduced Christianity. The province of Wyborg was conquered and annexed to Russia by Peter the Great, in 1721; the remainder of the country became part of the Russian dominions (also by conquest) in 1809. And since that period the Russian government has endeavoured, by conciliating the Finnish party, and promoting objects of national importance, to attach the bulk of the population to its interests; and in this it is said to have been eminently successful. (*Schnitzler, La Russie*, pp. 606–624.; *Vsévolojski, Dict. Geog. et Hist. de la Russie; Elliott's Letters from the N. of Europe*, pp. 245—265.; art. in *Times*, 7 June, 1854.)

FIORENZOLA, a town of N. Italy, duchy of Parma, district Borgo San Donnino, on the Lardi, 15 m. S. E. Piacenza. Pop. 3,000. It was the native place of Cardinal Alberoni. About 8 m. S., on the right bank of the Mira, stood the ancient city of Veleia, buried in the fourth century by the fall of the mountain at the foot of which it was situated, and not discovered till 1761. The remains of antiquity that have been dug out of its ruins are more numerous and perfect than in any other ancient city of Italy, with the exception of Herculaneum and Pompeii. (*Cramer's An. Italy, &c.*)

FIUME, a sea-port town of Austria, situated on the Gulph of Quarnero, at the N. E. extremity of the Adriatic Sea; lat. 45° 19′ 39″ N., long. 14° 26′ 45″ E. Pop. 9,000. It is the chief town and seat of government of the distr. called the Hungarian "Litorale," and, with the minor adjacent harbours of Buccari, Porto Re, and Martinschizza, is the point of contact for the rich and powerful kingdom of Hungary with the Mediterranean. The importance of Fiume was recognised at an early period by the emperor Charles VI., who constructed a magnificent road about 75 m. in length, leading to this port from Carlstadt in Croatia, the spot where the inland navigation by means of the rivers Save and Culpa terminates. This road was called, after its founder, the "Carolina;" but the difficult task of traversing the Julian Alps was found to be but imperfectly accomplished by its means, and the emperor Joseph II. laid down another line of road to the coast, between Carlstadt and Zeng, in the military frontier, which was named the "Josephina." In 1809, a third line of road, one of the finest undertakings of the kind in Europe, was opened at the expense of a joint-stock company, the shareholders in which were chiefly magnates of Hungary. This road was named the "Louisa," after the empress Maria Louisa; and on account of its comparatively gentle declivity, is the most frequented. Notwithstanding these exertions, and the outlay of a considerable sum of money in an endeavour to render the Culpa navigable above

Carlstadt, the trade carried on here is not very considerable, excepting in years when there is a large exportation of grain to Great Britain, France, &c.

The branch of the Louisa road which leads to Buccari is chiefly used for the transport of timber and staves. The oak timber of Carniola, and the Littorale, is of the best quality; and the ships built at Trieste, Fiume, and other ports, being strong, handsome, and well fitted out, and their crews expert and temperate, are much sought after and bring high freights. There are some manufactures at Fiume of linen, coarse cloths, leather, and rosoglio; also a wax-bleaching establishment, and a sugar refinery. The harbour is small, being only the entrance to a mountain-stream of a few miles in length, which it is very difficult to keep clear. Large vessels lie in the roadstead, at a few hundred paces off shore, where the water is deep enough, and where the high land of the coast shelters them tolerably well from the effects of the *bora*, or N. E. wind.

FLAMBOROUGH HEAD, a bold promontory of England on the Yorkshire coast, projecting a considerable distance into the sea; lat. 54° 7′ N., long. 0° 5′ W. This is at once the most striking and most celebrated headland on the E. coast of the kingdom. Its high, white, perpendicular, limestone cliffs render it a most conspicuous object. Many of the rocks of which it is composed are insulated, of a pyramidal form, and soar to a great height. Most of them have solid bases, but others are pierced through and arched. On the N. side are vast caverns, leading into the body of the Head, the retreat of immense numbers of sea-fowl and wild pigeons. A light-house, with a revolving light, having the lantern elevated 214 ft. above the level of the sea, was erected on this head in 1806.

FLANDERS, the name of a fertile and well-cultivated district of Belgium, divided into the provinces of E. and W. Flanders. *See* BELGIUM.

FLECHE (LA), a town of France, dép. Sarthe, cap. arrond., on the Loire, 24 m. S. W. Le Mans. Pop. (1851) 6,543. It is generally well built; streets broad, clean, and ornamented with fountains supplied by an aqueduct upwards of ½ m. in length. Its chief public building is a royal military college, formerly a celebrated Jesuits' college, founded, in 1603, by Henry IV. It is very extensive, and well laid out; contains an elegant church, a public library with 14,000 vols., a picture-gallery, &c.; and has attached to it a fine park, and gardens. The church of St. Thomas, town-hall, hall of justice, hospital, &c. are the other principal edifices. La Flèche, though advantageously placed on a navigable river, is remarkably deficient in manufactures and trade. It is the seat of a sub-prefecture, and court of original jurisdiction. Its environs are exceedingly agreeable. Previously to the 10th century, it was called *Fissa*; it owes its present name to the spire (*flèche*), placed in the 12th century on the tower of St. Thomas's church. The greatest of Scotch philosophers, the celebrated David Hume, resided at La Flèche in 1735 and 1736, where he composed the greater portion of his earliest work, the "Treatise of Human Nature." (*Hugo.* art. *Sarthe; Guide du Voyageur, &c.*)

FLENSBORG, a see-port town of Denmark, cap. of a bailiwick, on the E. coast of Sleswick, at the bottom of a deep fiord or bay, 19 m. N.N.W. Sleswick. Lat. 54° 47′ 14″ N., long. 9° 27′ E. Pop. in 1847, 16,500. It is ancient, well built, clean, and thriving. The harbour has water sufficient to float the largest ships. There are sugar-houses and distilleries, with manufactures of cloth, cotton, paper, soap, tobacco, &c.; but it is chiefly celebrated for the tiles made in its immediate vicinity, of which large quantities are exported. About 250 vessels belong to, and several are built at the port.

FLINT, a marit. co. of N. Wales, consisting of two separate portions, the largest and most important of which is bounded on the N. by the Irish Sea, on the E. by the æstuary of the Dee and the Dee itself, and on the S. and W. by Denbighshire; the other and smaller portion lies along the S. bank of the Dee, between Cheshire and Salop. Area, 156,160 acres, being the least of the Welsh counties. The surface is considerably diversified. The N. part is mostly flat, and consists in great part of a portion of the vale of Clwyd. The vale of Mold is also flat and highly productive, as is the detached portion to the S. of the Dee. A ridge of hills runs through the whole extent of the county, mostly parallel to the Dee and its æstuary, which, though externally barren, are valuable from their mines of lead and other minerals; but, on the whole, there is a larger proportion of good land in this than in any other Welsh county. Besides the Dee and the Clwyd, the county is watered by the Alyn and other streams. Agriculture, though still rather backward, has been materially improved, and many parts are well cultivated. There has, also, within the present century, been a great improvement in the farm buildings and cottages, and in the implements and stock. Average rent of land, in 1810-11, 15*s.* 2½*d.*, being nearly double that of any other co. in Wales. Manufactures have been introduced into Flintshire, especially that of cotton, which is carried on to some extent at Mold. But the principal branch of industry carried on in this co., next to agriculture, is that of mining: its lead mines are at present the most extensive of any in the empire; those of copper are also of considerable value; and beds of coal exist all along the shore of the Dee, large quantities of which are used in smelting works, in addition to those that are exported. The smelting works in the vicinity of Holywell are very extensive, and employ from 600 to 700 hands. Flint returns 2 mems. to the H. of C., viz. 1 for the co. and 1 for the town of Flint and its contributory bors. Registered electors for the co., in 1838-39, 2,221. It is divided into 5 hundreds and 28 parishes; and in 1831 had 11,716 inhabited houses; 12,138 families; and 60,012 inhab., of whom 29,924 were males and 30,088 females. Sum contributed to the relief of the poor in 1838-39, 16,641*l.*

FLINT, a parl. bor. and sea-port town of N. Wales, co. Flint, hund. Coleshill, on the æstuary of the Dee, 11 m. N. W. Chester. The borough, the limits of which were not changed by the Boundary Act, includes the parish of Flint, and the township of Coleshill-Fawr, and had, in 1831, a pop. of 2,216. It is situated within a large quadrangular space, surrounded, on the principle of a Roman encampment, by ramparts, and a deep intrenchment, having at the N. E. extremity its ancient castle. Two main streets cross at right angles, and are similarly intersected by smaller streets, the frequent gaps and broken walls in which give the town a dilapidated, deserted aspect. It has a small chapel of ease, in which the service is performed alternately in Welsh and English; a Rom. Catholic and three dissenting chapels; a national school for 140 children, several Sunday-schools, and a guildhall. The assizes, formerly held here, have been long since removed to Mold, to which the county gaol has also been more recently transferred. The coal works and lead mines in the vicinity employ the chief part of the pop. Of late years, in consequence of obstructions in the channel of the Dee, Flint has become, to a considerable extent, the port of Chester; and here the larger vessels (especially those with timber) discharge into lighters, or rafts are formed and floated up to that city. The wharfs, which have been much improved and extended of late years, are accessible to vessels of 300 tons, at any time of tide. Railways lead from the wharfs to the mines. The exports consist chiefly of coals to Ireland and coastwise; and lead, in pigs, sheets, &c., from the works in the vicinity. During the summer season Flint is a place of some resort for sea-bathing: there are also hot baths for the accommodation of visitors. The castle, now in a state of rapid decay, is a square building, with round towers at three of the angles, and at the fourth is a much larger tower at a little distance from the castle, but originally joined to it by a drawbridge. Formerly the Dee flowed beneath the walls, and rings were fastened in them, to which ships were moored; but it has now receded to some distance. The foundation of this castle is ascribed to Henry II. Flint received its first charter in 1283. Since the 27th Henry VIII. it returned 1 mem. to the H. of C., along with the contributory bors of Rhydlan, Overton, Caerwis, and Caergwle; to these the Reform Act added St. Asaph, Holywell, and Mold: the right of voting previously to the Reform Act was vested in the inhab. paying poor and church rates. Registered voters for Flint and its contributory bors. in 1838-39, 1,297. The municipal bor. is restricted to a small space round the town, and is governed by 4 aldermen and 12 counsellors. The numerous relics in the vicinity make it probable that Flint was a Roman station: and the remains of smelting-places and washes on the ancient plan, prove that the lead mines had been worked at a remote period. (*Boundary Report; Pennant's Tour*, i 58, &c.)

FLODDEN, a village of England, co. Northumberland, 5 m. S. E. Coldstream, memorable as the scene of one of the most destructive conflicts recorded in British history. James IV., king of Scotland, having invaded England with a large force, was encountered here, on the 9th of Sept., 1513, by an English army under the Earl of Surrey. James, who was destitute of every quality of a general, except bravery, was killed, and his army totally defeated. The loss on the part of the Scotch was extremely great. Besides the king, no fewer than 12 earls, 13 lords, and 5 eldest sons of peers, with a vast number of gentlemen and persons of distinction, and probably about 10,000 common soldiers, were left on the field. The loss on the part of the English was comparatively inconsiderable. This is by far the most calamitous defeat in the Scottish annals, and as there was hardly a family of distinction in the kingdom who did not lose one or more members in it, the whole nation was involved in mourning and despair. (See *Tytler, Pinkerton, &c., Histories of Scotland:* Sir Walter Scott has given a vivid and generally just account of this great battle in his *Marmion.*)

FLORENCE (Ital. *Firenze*, an. *Florentia Tuscorum*), a city of Central Italy, and cap. of the grand duchy of Tus-

cany, on both sides the Arno, 63 m. S. by W. Bologna, 68 m. E.N.E. Leghorn, and 187 m. N.W. Rome; lat. 43° 46′ 41″ N., long. 11° 15′ 45″ E. Pop. (1836) 97,548. It stands in a rich, well wooded, well cultivated, and beautiful valley, encircled by the Apennines, and though rather dull, is well built and agreeable. Its shape is nearly a square, the sides of which almost correspond with the cardinal points; the Arno intersects it from S.E. to N.W., 3 of the quarters into which it is divided being situated on the right, and the fourth on the left bank of the river. It is enclosed by an old wall about 5 m. in circuit, flanked with towers and pierced by 7 gates, which, besides being useless as a means of defence, is injurious, by preventing the free ingress and egress of the citizens, and checking the circulation of the air. The communication between the opposite sides of the river is maintained by means of 4 bridges. Florence contains a great number of magnificent edifices, and squares, generally adorned with statues, columns, or fountains; and they reckon no fewer than 170 churches, 89 convents, 2 ducal, and many other palaces, 12 hospitals, and 8 great and small theatres. "To this hour," remarks Mr. Bell, "Florence bears the aspect of a city filled with nobles and their domestics — a city of bridges, churches, and palaces. Every building has a superb and architectural form. Each angle of a street presents an architectural view, fit to be drawn for a scene in a theatre." Many of the houses are palaces; and a palace in Florence is a magnificent pile, venerable from its antiquity, of a square and bulky form, with a plain front, extending from two to three hundred feet, built of huge dark grey stones, in a massive, gloomy, and impressive style. The roof is flat, with a deep cornice, and bold projected soffits, which gives a grand, square, and magnificent appearance to the edifice. The chimneys are grouped into stacks, the tops of which, increasing in bulk as they rise in height, resemble a crown. Many of these palaces are fitted up with great magnificence, and some of them contain valuable galleries of pictures, that are mostly open to the public. The streets, though in parts narrow, winding, and angular, are mostly wide and straight; and they are admirably paved, after the manner of the old Roman roads, with angular blocks of trap, or sandstone. The houses generally are substantial, more so, apparently, than those of Rome. The *Piazza Gran' Ducale* is the largest square; it has a fine marble fountain, and an equestrian statue in bronze of Cosmo I. by John of Bologna: the *Piazza dell' Annunziata* is surrounded by arcades, and has two fine bronze fountains, and an equestrian statue of the grand duke Ferdinand I. The *Piazza del Mercato Vecchio*, exactly in the middle of the city, has a marble column from which it is a mile to each extremity. The Arno is decidedly superior to the Tiber at Rome. The bridge *S. Trinità*, built of marble in 1557 by Ammanati, is designed in a style of elegance and simplicity unrivalled by the most successful efforts of modern artists. The *Ponte Vecchio*, built in 1345, has the houses of the street continued over it, so that it is not till they arrive at an open arcade in the centre that passengers become aware of their situation. The bridges, and the handsome though not spacious quays by which it is bordered, afford fine views of the river Florence, being in this respect much superior to the "Eternal City." The cathedral, or *Duomo*, a vast edifice, coated with marble, about 500 ft. in length, and 384 ft. in height to the top of the cross, stands in a spacious square. It was begun by Arnolfo di Lapo in 1296, and finished by Brunelleschi in 1426; its cupola is said to have suggested to Michael Angelo the first idea of that of St. Peter's. It has been usual to speak in high terms of commendation of this edifice, but M. Simond and Mr. Maclaren appear to have estimated it at its just value. It is built of brick, and veneered, as it were, with various-coloured marble slabs, arranged in narrow strips or panels. "There is something," says M. Simond, "imposing in the name of a marble edifice, but not so in the reality: polished marble is worse than rough marble, which, again, is inferior to sandstone or granite; but coloured marble (particoloured especially) is worse than all. The *Duomo* of Florence, built in defiance of all the orders of architecture, is neither Grecian nor Gothic, although of the age of the latter style; and its dimensions alone give it greatness. The interior is very striking, but spoiled by a circular screen of Grecian columns round the altar." (p. 102.) Mr. Maclaren says, that this cathedral is to St. Peter's what harlequin is to a Roman senator. The *Campanile*, or belfry, adjoining the *Duomo*, but detached from it, is a fine tower 288 ft. in height. Charles V. was so well pleased with it, that he used to say it should be kept in a glass case. With the exception of the *Duomo*, the other churches have little worth notice in their architecture; and many of them are unfinished, mean, and poor. That of Santa Croce, however, called the Pantheon of Florence, is interesting from its containing the remains and tombs of four of the greatest men of modern Italy, or indeed of modern times, — Michael Angelo, Galileo, Machiavelli, and Alfieri. The church of San Lorenzo contains the mausoleum of the Medici family, said by Lord Byron to be a "tawdry, glaring, and unfinished chapel," and admitted by less severe critics to be ostentatious, and in bad taste. In a cloister, attached to this church, is the Laurentian library, containing a peculiarly valuable collection of above 6,000 manuscripts, and 120,000 vols.

Among the palaces are the *Palazzo Vecchio*, or old palace, inhabited by the Medici, when citizens of Florence. It was begun in 1298, and finished in 1550. It is in a massive, severe, and gloomy style, and has a noble tower 268 ft. in height, which commands a fine view of the surrounding country. This palace is now occupied with the principal public offices. The *Palazzo Pitti*, erected in 1440, the ordinary residence of the grand duke, is a vast and heavy structure; it is furnished in the most costly manner, and is enriched with a great number of fine statues, busts, and pictures, and an excellent library. Attached to the Pitti palace are the Boboli gardens, laid out by Cosmo I. in 1550, in the pure classical style; that is, says M. Simond, "in rectangular walks, flanked with cut trees fashioned into a wall or arched over-head, and furnished with a due quantity of stone steps, stone walls, and stone statues." Connected with these gardens is the botanical garden, a museum of natural history, a splendid anatomical collection modelled in wax by the Abbé Fontana, occupying 15 apartments, and a fine library. Another fine palace, the Riccardi, was built in 1440, after a design by Michelozzo. It has a noble gallery, with a ceiling painted by Luca Giordano, and a select library with 40,000 vols., open to the public. It was purchased by the government in 1814, and is now occupied by the *Accademia della Crusca* and some public departments. But the great glory of Florence is its grand gallery: it occupies the upper floor of the *Uffizi*, a building erected after a design of Vasari by Cosmo I., consisting of two parallel corridors or galleries, each 448 ft. in length, and 72 ft. apart, united at one end by a third corridor *, the choicest and most valuable specimens of art being preserved in saloons opening from the corridors on each side. This gallery contains some *chefs-d'œuvre* of statuary, at the head of which, by universal consent, is placed the *Venus de Medici*, the goddess who "lives and loves in stone." This matchless statue was discovered in the 16th century, in the Villa Hadriana, near Tivoli; and being acquired by the Medici family, was placed in their palace in Rome, whence it was conveyed to Florence by order of Cosmo III. The whole of the left arm, and a part of the right, are modern, having been restored by Bandinelli. An inscription on the base intimates that it is the work of an Athenian artist, called Cleomenes; this, however, is generally discredited. But, whoever may be the sculptor, it is certainly worthy to rank with the famous statue of Venus sold by Praxiteles to the Cnidians, respecting which some rather curious particulars may be seen in Pliny. (*Hist. Nat.* lib. xxxvi. § 5.) The attitude of the *Venus de Medici* corresponds with the verses of Ovid, who perhaps had this very statue in his eye: —

> Ipsa Venus pubem, quoties velamina ponit,
> Protegitur læva semi-reducta manu.
> *De Arte Amand.*, ii. v. 614.

Addison says of this famous statue, that "the softness of the flesh, the delicacy of the shape, air and posture, and the correctness of the design, are inexpressible." (*Travels*, art. *Florence*.) And, according to Byron,

> —— The goddess loves in stone, and fills
> The air around with beauty.

Among the other *chefs-d'œuvre*, the best perhaps are, the Knife-grinder, the Fawn, the Wrestlers, and Niobe and her Children. The collection of paintings comprises superb specimens of all the best schools, and is said to surpass even that of the Vatican. When speaking of this gallery, Mr. Maclaren observes: — "Persons like myself, with no pretensions to connoisseurship, will feel how poor and vulgar the pictures of the *tramontane* artists are when placed beside the works of the great Italian masters in this gallery. Among those who admire the Dutch and Flemish painters for their correct and faithful representation of individual nature, and their skill in chiaroscuro, there are few, I venture to think, whose taste, after some weeks spent in perambulating the picture galleries of Rome or Florence, will not undergo a metamorphosis — few who will not feel a strong preference for what is called the 'ideal' or 'grand style' — for the saints, prophets, Madonnas, holy families, sybils, and goddesses of the Roman, Florentine, and Lombard artists, which are in truth impersonations of the noblest attributes of humanity, — maternal love, heroic fortitude, intellectual energy, sublime benevolence, and rapt devotion. The same probation will probably also create a predilection in sculpture for the naked figure, and induce a belief that the artist's labour is thrown away upon togas and tunics, however gracefully folded, — that it is the kernel,

* These measurements are taken from the plan of the Museum given in *Hakewill's Picturesque Tour in Italy*.

not the husk,—the man, not his drapery, which is the well-spring of beauty and the recipient of character. Such at least was my own experience. The study of the works of the great Italian masters has this fine moral effect, that it ennobles our conceptions of the capabilities and destiny of man. It puts the doctrine of immortality on canvass, and presents it to the eye. I was delighted with Guido's female heads, which seemed to me radiant with grace and sweetness, purity and beauty, even beyond those of Raphael. The Italian schools are less rich in landscape, yet in this department who can surpass Salvator? I had no adequate idea of this great artist's genius till I saw nearly a dozen of his large pieces in the Pitti and Corsini palaces in Florence. They seemed to have all the splendour of Claude's, with the addition of that lofty, bold mountain scenery which a Scotsman is apt to consider as essential to the highest class of landscape." The great gallery communicates by a covered passage not only with the *Palazzo Vecchio*, separated from it by a street, but also with the Pitti palace, though on the other side of the river, being carried over the latter by the *Ponte Vecchio*, or old bridge.

Besides the Riccardi and Laurentian libraries, the Magliabecchi library, containing a rare, extensive, and valuable collection of books, is open to the public: it is placed below the grand gallery.

Florence is subject to fogs in the winter; but in spring and autumn it is a delightful residence, well provided with every thing that can gratify the man of taste and science, or the voluptuary. It has manufactures of silks, straw hats, articles of alabaster, scagliola and *pietre dure*, perfumery, jewellery, artificial flowers, porcelain, engravings, and other objects of the fine arts, &c. The literary and educational institutions are numerous and important. At the head of these is the academy *Della Crusca*, established in 1582, to which has been united the ancient university of Florence. The name *Crusca* (chaff, or husk of corn) has been assumed by this academy, in allusion to the grand object of its institution, the sifting or purifying of the Italian language. This academy published, in 1612, in 1 vol. folio, the first edition of the celebrated lexicon, entitled *Vocabolario della Crusca*, the fourth and last edition of which appeared in 6 vols. in 1729-38; a work which, though perhaps not quite perfect, has been generally admitted to be the standard of the Italian language. (*Tiraboschi, Storia della Litteratura Italiana*, viii. 511. edit. 1793.) An edition of the *Vocabolario della Crusca*, including numerous words selected from the authors quoted by the academy, but omitted by them, was published at Naples in 1746, in 6 vols. folio. This is preferred by some to the genuine *Vocabolario*. (*Tiraboschi, ubi supra.*) Besides this famous academy, there are in Florence a *Scuola di Belle Arti*, or school of the fine arts, a medico-chirurgical school, an athenæum, and a number of other literary societies. A school was opened in 1820 for the instruction of the poorer classes, on the principle of mutual instruction; and an institution was founded in 1823, under the especial patronage of the grand duke, for the instruction of girls from 7 to 12 years of age; they are educated with great care, and are said to be instructed in all that has a tendency to make them active and provident mothers. There are a great number of other schools and institutions for the instruction of students in the higher branches of education. The charitable institutions are numerous, extensive, and well conducted. Among others, is the *Monte di Pietà*, founded in 1495; a foundling hospital; a workhouse, on a large scale, established by the French government, &c. The *Fraternità della Misericordia* is an institution in which the higher classes undertake various duties in relation to the poor. The *Palazzo del Podestà*, the ancient government-house, is now converted into a prison.

The common people of Florence are well clothed, and have a comfortable-like appearance; and there are, as compared with most other Italian towns, few beggars, priests, and monks. The citizens are said to be friendly, cheerful, and hospitable. The mild and liberal government of its present princes, the good police they have established, and the encouragement given to all sorts of learning, have conferred advantages on Florence unknown in most other parts of Italy. All sorts of foreign publications are met with here; and the facilities it affords for gratifying a taste for the fine arts, the beauty and security of the town and environs, and its salubrity and cheapness, make it, on the whole, a more desirable residence than Rome, and have attracted to it a great number of English families.

The origin of Florence is not clearly ascertained; but it owed its first distinction to Sylla, who planted in it a Roman colony. In the reign of Tiberius it was one of the principal cities of Italy, and was distinguished by its writers and orators. In 541 it was almost wholly destroyed by Totila king of the Goths. About 250 years afterwards it was restored by Charlemagne. It then became the chief city of a famous republic; and was for a lengthened period in Italy what Athens had been in Greece in the days of Xenophon and Thucydides. At length, in 1537, the Medici, from being the first of the citizens, became the sovereigns of Florence. Her fate has been thence identified with that of Tuscany.

Florence has produced more celebrated men than any other town of Italy, or perhaps of Europe: among others, may be specified Dante, Petrarch, Boccaccio, Villani, Cosmo, and Lorenzo de Medici; Galileo, M. Angelo, Leonardo da Vinci, Benvenuto Cellini, Alberti, Lapo Brunelleschi, Giotto, Andrea-del-Sarto, Macchiavelli; Popes Leo X. and XI., Clement VII., VIII., and XII., &c. (Besides the authorities already referred to, see *Conder's Italy*, ii. 320, &c.; *Wright's Travels*, 393, &c.)

FLORIDA, an extensive peninsula of N. America, stretching S. from the 30th to the 25th deg. of lat., forming the extreme S.W. territory of the U. States: but, exclusive of the peninsula, the territory includes a tract adjoining it on the N. and W., and is comprised between lat. 25° and 31° N., and long. 80° and 87° 35′ W.; having N. Alabama and Georgia, E. the Atlantic, S. the channel of Florida, and W. the Gulph of Mexico, and a small portion of Alabama. Length N.W. to S.E. about 650 m.; average breadth about 84 m.; area, 54,500 sq. m. Pop. (1830) 34,730; (1838) 48,223.

The Gulph stream which sets from the Gulph of Mexico round the S. and S.E. coasts, has in the course of ages worn away the land, and formed the low sandy islands generally known by the name of the "Florida Keys," or Martyrs, separated from the main land by a navigable channel which, however, is both difficult and dangerous. There are a few good harbours, the best of which are those of Pensacola and Tampa on the W., and of St. Augustine, and St. Mary's on the E. coast. Florida is naturally divided into two different zones, about the 28th deg. of lat. The surface of the portion N. of this parallel, is more elevated, broken, and wooded, than that on its S. side, which is generally level and marshy, and may be termed the true palm-tree section of the U. States. The centre rises into hills of no great elevation, which slope gradually towards the Gulph of Mexico and the Atlantic, and N.W. towards the body of the Continent; but as we proceed towards the S., the whole surface becomes a dead, flat, and, in great part, indurated plain, terminating at the extreme point of the peninsula in heaps of sharp rocks, partially covered with shrubby pines.

The chief rivers are the St. John's, Appalachicola, Suwanee, St. Mark's, and Conecuh. The St. John's partakes more of the character of an inlet or sound than of a river, from the number of lakes formed by its enlargements. Its chief branch, the Ocklawaha, appears to rise near the centre of the peninsula, and flows in a N.W. direction for about 80 m., when it unites with the St. John's proper, which rises within a few miles of the ocean, and the united water, after a tortuous course of 130 m., falls into the Atlantic, near the N.E. extremity of the territory. It is a curious fact, that though a fresh-water stream at its mouth, it is often rendered brackish towards its head from the waters of the Gulph of Mexico being driven by the winds into the lagoons and marshes among which it has its sources. Both branches of this river are navigable for some distance above their junction, but have little commercial value. The Appalachicola has its æstuary in that portion of the territory W. of the peninsula. It has a course of about 100 m. N. to S. within the territory, but does not possess a depth of water proportionate to its magnitude. This river is considered to form the boundary between E. and W. Florida. There are several lakes, of which the Macao, near the centre of S. Florida, and Lake St. George, an enlargement of the St. John's river, are the principal.

The whole peninsula appears to rest upon a base of shell-limestone of comparatively recent formation and different degrees of hardness. The soil on the banks of the rivers is often very fertile; but the proportion of good land is, notwithstanding, believed to be but small. In the N. part of E. and in W. Florida, there are many finely variegated and fertile tracts, and the country is often richly wooded. The most valuable district of the territory is a tract of about 150 m. in length by 30 m. in breadth in W. Florida, nearly in the centre of which is Tallahassee, the capital. There are some very extensive swamps and savannahs, particularly the swamp of Okefonoco, half in Florida and half in Georgia; and there are also some very extensive marshes.

The climate of the N. parts, though hot, has been represented as good, and the air as being always elastic and pure. The winters are so mild that it is never necessary to house cattle. In the S. snow never falls, and frost, although it sometimes occurs, is rare. During July, August, and September, the heat is very oppressive, and fevers are prevalent. But St. Augustine, however, in the N.E., has a healthy climate, and is resorted to by invalids.

The chief agricultural products are — rice, Indian corn, tobacco, indigo, cotton, and hemp; the olive, vine, lime, shaddock, and other tropical fruits, are successfully cultivated, and in some of the occupied maritime districts the sugar-cane and coffee. Large herds of cattle are reared.

Much fine timber, besides pitch, tar, and turpentine, are obtained from the forests; the coasts and rivers produce a great variety of fish and *testaceæ*.

In 1838, the value of the exports of all kinds was 122,532 doll., and that of the imports, 168,690 doll.

The territory is divided into 4 districts and 20 counties. Tallahassee is the capital. Pensacola, St. Augustine, and Jacksonville, are the other chief towns: all of these are in the N. In 1838, there were 11 banks in the territory, with a united capital of 13,800,000 doll. From the St. Mary's river, which divides Florida at its N.E. angle from Georgia, a canal, 250 m. in length, extends N.E. to S.W., across the peninsula to Appalachicola Bay. A railroad, 12 m. in length, between Lake Wimico and St. Joseph's, was completed in 1836, and another from Jacksonville to St. Mark's, 160 m. in length, is in the course of being constructed.

Neither the settlement nor the pop. of Florida has advanced so rapidly as might have been expected. This has been occasioned by a variety of causes, among which may be specified the unhealthiness of the climate, the inferiority of a great deal of the soil, and the attacks of the Indians. A contest with the latter, conducted under circumstances of great barbarity on both sides, has been carried on for a few years past. But, notwithstanding the protection afforded them by the nature of the country, there can be little doubt that the Indians will be finally exterminated, or forced to emigrate to some other quarter.

The legislature is vested in a council of 27 members, elected annually in October, which meets at Tallahassee, where the governor resides. The county courts are held half-yearly, by judges who have a limited civil jurisdiction, and original jurisdiction in matters regarding property. A court of appeals is held annually at Tallahassee. The whole territory sends one delegate to congress.

Florida derives its name from *Pasqua Florida*, or Palm Sunday, the day on which it was discovered by Juan Ponce de Leon, in 1512. Its name was for some length of time applied by the Spaniards and Italians to the whole W. coast of N. America. It remained a Spanish possession until 1763, when it was ceded to the British, soon after which it was divided into E. and W. Florida. In 1783 the whole territory was restored to Spain. In 1819 negotiations were opened for the transfer of Florida to the United States; and in 1821 a treaty was ratified by which it became a part of the union, but has not yet been received as a state. (*Darby's View of the U. S.; American Encyclopædia; American Almanac*, 1836-39, &c.)

FLOUR (ST.), a town of France, dép. Cantal, cap. arrond., on a basaltic plateau, 42 m. E.N.E. Aurillac. Pop. 4,980. It is ill-built; streets narrow and gloomy. Its public edifices are, however, generally handsome. Among these are a cathedral, episcopal palace, diocesan seminary, Jacobin convent, Jesuit college, hospital, sub-prefecture, &c. It is well furnished with water. It is the seat of the departmental court of assize, and of tribunals of original jurisdiction and commerce. (*Hugo*, art. *Cantal*; *Guide du Voyageur*.)

FLUSHING (Dut. *Vliessingen*), a fortified sea-port town of Holland, prov. Zealand, on the W. Scheldt, near the S. extremity of the isl. Walcheren, 4 m. S.S.W. Middleburg; lat. 51° 26′ 42″ N., long. 3° 34′ 57″ E. Pop., according to some authorities, 7,000; but the *Encyc. des Gens du Monde* makes it only 4,600. It is strongly fortified; besides its own ramparts, it is defended, together with its fine harbour, by several adjacent forts, and provided with sluices, by means of which the surrounding country may be inundated. The town is well built, but presents little worthy of notice, most of its best public buildings having been destroyed during the bombardment by the English in 1809. Its port is extensive, safe, and has deep water. Two canals, communicating with it, enable the largest merchant-vessels to penetrate into the town, and unload on the quays close to the warehouses. A strong wall of masonry protects the town against the sea; the side facing the Scheldt is embanked with great care, and kept in repair at an enormous expense. Flushing has a dock-yard, and a naval arsenal; and is the seat of an admiralty board. It has a somewhat extensive trade with both the E. and W. Indies, and continual communication, by means of packet-boats, with the other sea-port towns of Holland; it has also a considerable trade with England, and is the *entrepôt* where the Geneva intended to be smuggled into this country is principally laid up. Few towns have suffered so severely from war and inundations. It hoisted the standard of revolt against the Spaniards, immediately after the capture of the Briel in 1572. Together with some other towns, it was given to England by the Prince of Orange in 1585, and remained in our possession till 1616. From 1809 to 1814 it belonged to the French. Since 1809 its fortifications have been greatly improved, and, in conjunction with the Fort of Rammekens to the E. and those of Breskens on the opposite side of the river, it now completely commands the mouth of the W. Scheldt, or *Hont*. Flushing was the birth-place of the celebrated Dutch admiral, De Ruyter. (*Barrow; Cannabich; Murray's Hand-Book, &c.*)

FOCHABERS, a village of Scotland, co. Moray, and par. of Ballie, on a rising ground on the Spey, 4 m. from its embouchure in the Moray Frith, 8 m. E. Elgin, and 60 m. N.W. Aberdeen. Pop. 1,060. The town consists of two wide streets, crossing each other at right angles, and having a square in the middle. The par. church and a Rom.Cath. chapel are the only public buildings belonging to it. An elegant bridge which spans the Spey was partly swept away by the great floods of 1829, but has since been rebuilt. Indeed, the whole district through which the river flows suffered severely from these inundations. The bridge in question, which was erected in 1801 at a cost of 15,000*l*., has four arches, of which the two smallest have each a span of 75 ft., and the two in the middle a span each of 95 ft. Gordon Castle, the splendid residence of the ancient house of Gordon, and now the property of the Duke of Richmond, is in the immediate vicinity of Fochabers; a circumstance to which the town owes its origin and any importance that may attach to it. Fochabers is a burgh of barony, governed by a baron-bailie nominated by the noble proprietor of Gordon Castle. (*Forsyth's Beauties of Scotland*, iv. 463.)

FOGGIA (so called from its corn magazines, *fosse*), a city of S. Italy, k. Naples, prov. Capitanata, of which it is the cap. and seat of its governor; almost in the centre of the great Apulian plain, 46 m. E. by S. Campobasso, 21½ m. S.W. Manfredonia, and 80 m. N.E. by E. Naples. Pop. (1832) 20,687.* It is "well built and paved; the streets are wide and clean; the shops large and well supplied; and the whole has an air of opulence, prosperity, and population, which, in spite of its ill-chosen situation and bad air, gives it a more animated appearance than any other city in the whole kingdom, after the capital." (*Craven's Tour, &c.*, p. 62.) It has a handsome *intendenza*, or palace, where the governor resides; many excellent private houses, a Gothic cathedral, and about twenty other churches; a good custom-house and theatre; and the remains of a palace which, together with a large well, was constructed by the Emperor Frederick II. The corn magazines, for which Foggia is noted, are very extensive; they stretch under all the large streets and open squares, consisting of vaults lined with masonry, and their orifices closed up with boards and earth. Being situated in a fruitful country, and traversed by roads leading to Naples, Bovino, Brindisi, Manfredonia, Pescara, &c. Foggia has a considerable trade, principally in corn, wool, cheese, cattle, wine, oil, capers, and other agricultural produce. Its consequence always has been, and still is, owing to its being a staple market for corn and wool, and the place at which is collected the toll upon the sheep annually passing into the Capitanata. The *dogana*, or register-office, at Foggia has the distribution of a fixed assessment upon the numerous flocks of sheep that descend in autumn from the mountains of Abruzzo into the plains of Puglia, where they winter, and in May return to the high country. (*See* ABRUZZO.) This duty, which is one of the richest sources of revenue of the crown of Naples, originated with the ancient Romans, when they obtained possession of the country. It continued uninterruptedly to be collected till the 13th century, after which, for about two centuries, the passage appears to have been open without fee to all shepherds who chose to bring down their flocks. Under Alphonso I., however, the crown resumed its rights; and having purchased a considerable extent of pasture land, formed the *tavoliere*. (*See* APULIA.) The Abruzzi shepherds, who came down with their flocks into the *tavoliere*, paid a fixed rate per head for their sheep; but had not the power to dispose of their wool, lambs, cheese, or any other commodity produced during their winter residence, in any fair but that of Foggia, where they were to be deposited in the royal magazines, and not touched without a permit. By way of compensation on the part of the crown, besides other privileges, no wools in the kingdom are suffered to be brought to market, till those at Foggia are vended, the duties paid, and the tribunal satisfied of all its demands. (*Swinburne*, i. 136—145.) In consequence of these oppressive and absurd regulations, the fair of Foggia, holden from the 8th to the 20th of May, is an important mart, and attended by a great number of commercial and other visiters. Foggia is the seat of the superior criminal court for the prov., and of the tribunal of commerce for Apulia.

This city appears to have been founded in the 9th century, and peopled from *Arpi* or *Argyrippa*, an ancient city 4 m. distant, said to have been founded by Diomed, which surrendered to Hannibal after the battle of Cannæ, and of which some faint vestiges are still extant. Foggia was greatly enriched by the Suabian princes of Naples. It was sacked in 1268 by Charles of Anjou, who died there in 1286. It was nearly destroyed by the earth-

* The *Dict. Géog.* says it is a fortress of the 4th class. Swinburne, in 1777, says it is "without walls, citadel, or gates!"

quake of 1731. (*Rampoldi*, ii. 69.; *Swinburne; Craven's Tour in the S. Provs. of Naples*, pp. 61—63.)

FOLDVAR (an. *Lussunium*), a town of Hungary, co. Tolna, on the summit and declivity of a hill, on the right bank of the Danube, 49 m. S. Buda. Pop. 8,980. It has a Rom. Cath. high school, and a prison; it belongs, together with its lordship, to the university of Pesth.

FOLIGNO (an. *Fulginium*), a town of Central Italy, Papal States, deleg. Perugia, in the Val-Spoletano, and on the Flaminian Way, 20 m. S.E. Perugia, and 14 m. N. by W. Spoleto. Pop. (1832) 15,400. It is walled, but its ramparts and bastions now serve only for public promenades. Its streets generally intersect each other at right angles. There are few public buildings worthy of notice. The cathedral, commenced in the last century, is still unfinished: there are 8 other churches, 20 convents, a town-hall, and a cabinet of antiquities. There are numerous paper-mills turned by the Topino; and the town has manufactures of woollen cloth, silks, parchment, and bleached wax, and a considerable trade in cattle. The vicinity abounds with vineyards, and olive and mulberry plantations. This city appears to have been anciently of some importance: it was considerably augmented on the destruction of the adjacent town of *Forum Flaminii*, by the Lombards, in 740. It was united to the see of Rome in 1439. (*Rampoldi; Cramer's An. Italy*, i. 268.; *Bowring's Report*.)

FOLKESTONE, a bor., sea-port town, and par. of England, co. Kent, lathe Shepway, hund. Folkestone; on the Straits of Dover, 62 m. S.E. by E. London, and 7 m. W. by S. Dover. Lat. 51° 5′ N., long. 1° 9′ E. Area of par., 4,360 acres. Pop. of do., in 1831, 4,296. The town is built between two precipitous chalk cliffs, on ground rising gradually from the coast: and consists chiefly of 3 narrow and irregular streets, principally extending up the acclivities of the W. cliff, on the summit of which is the church, in the early Gothic style, with a tower from the centre. There are also 3 dissenting chapels, and a free school for 20 poor children, founded in 1674. Market, Thurs., in a commodious market-house, built within a recent period by the Earl of Radnor. The chief employment of the inhabitants is fishing; but this has considerably fallen off, and the town at present is far from being in a flourishing state. There is a pier-harbour, formed at an expence of upwards of 50,000*l.*; but it is so choked up with shingle, as to be accessible only to small coasting vessels. The beach is favourable for bathing, and in summer a few visiters resort thither for that purpose. The village of Sandgate, 2 m. W. of it, is, however, a far more favourite and frequented place. The S.E. Counties' Railway from the metropolis to Dover is being conducted through the parish, partly by means of tunnelling and excavations. There is a strong modern battery on the heights, and the line of coast is defended by 3 Martello towers. Folkestone has been a member of the cinque port of Dover from a period previous to the reign of Henry I. Average annual corporation revenue 234*l.* 16*s.* Under the Municipal Reform Act it is governed by 4 aldermen and 12 counsellors: and its limits, which extended along the coast 2¼ m. on the E. side of the town, and to Sandgate on the other, being at the same time considerably contracted in those directions and extended inland, so as to include the Hamlet of Ford, on the line of road to Canterbury, and about ¼ m. from Folkstone. The Reform Act associated Folkstone with the bor. of Hythe in the privilege of returning 1 m. to the H. of C. The town has suffered much at different periods from encroachments of the sea. William Harvey, the discoverer of the circulation of the blood, was a native of Folkstone, having been born here on the 1st of April, 1578: the charity school, endowed by his nephew, was built from a bequest left by him for the purpose.

FONDI (an. *Fundi*), a town of S. Italy, k. Naples, prov. Terra di Lavoro, on the high road between Naples and Rome, near the confines of the Papal States, and on the Appian Way, which now forms its principal street; 11 m. N.E. Terracina, and the same N.W. Gaeta. Pop. 5,000. All travellers agree in speaking in dispraise of Fondi. It is a miserable town, near a pestiferous lake (the an. *Lacus Fundanus*), which renders the air unwholesome; and its inhab. generally are in a wretched condition, though the neighbourhood is abundantly fertile in every kind of produce. This, in fact, is the *Cæcubus ager*, anciently so famous for its wine—

> Cæcubam, et prelo domitam Caleno
> Tu bibes uvam. *Hor.* i. Od. 20.

(See also ii. Od. 14.; and *Martial*, xiii. Ep. 15.) But, like the town, the wine has sadly degenerated, and is now quite unworthy the encomiums lavished on its ancient growths.

Fondi is surrounded by the remains of walls of a Cyclopean structure, particularly described by Swinburne (i. 507, 508.). It has a Gothic cathedral, a college, and 2 houses of charity. It obtained the privileges of a Roman city, A. U. C. 417. In 1222, it was burnt by the adherents of the Emperor Fred. II. It has several times suffered from invasions by the Turks, especially in 1534, when they made an unsuccessful attempt to carry off Julia Gonzaga, Countess of Fondi. (*Rampoldi; Swinburne; Cramer's Anc. Ital.*, ii. 122—124.)

FONTAINEBLEAU, a town of France, dép. Seine-et-Marne, cap. arrond., near the Seine, in the forest of the same name, and on the high road between Paris and Lyons, 32 m. S.S.E. the former city, and 8 m. S. by E. Melun. Pop. (1836) 8,021. It is well built; streets wide, straight, well paved and clean; but, excepting the principal ones, they are dull. It has several good churches and other public buildings, two excellent cavalry barracks, a hospital founded by Anne of Austria, an asylum for girls established by Mad. de Montespan, a college, public library with 28,000 vols., public baths, a large reservoir; and at its S. extremity an obelisk erected in 1786, on occasion of the marriage of Louis XVI. and Marie Antoinette. The town has manufactures of porcelain and other earthenware; but it owes all its celebrity, and indeed origin, to the palace or *château* of Fontainebleau, a favourite residence of the kings of France. The precise date of the foundation of the palace is uncertain. It would appear that Robert-le-Pieux erected a small house of retirement on the spot towards the end of the 10th century; which edifice, having fallen to decay, was rebuilt in the 12th century by Louis VII. Philip Augustus, Louis IX., and other sovereigns, added to it, and it was in particular enlarged and embellished by Francis I. It grew rapidly under the hands of his successors: Henry IV. expended 2,440,850 liv. on it; Louis XIII., XIV., and XV. added to and improved it; Napoleon is said to have spent 6,242,000 fr. on it between 1804 and 1813; and it has been farther enlarged and embellished by his present majesty Louis Philippe. It is, in consequence, a vast pile, with little harmony among its parts, being, in fact, rather a collection of palaces of different epochs, and in different styles of architecture, than a single edifice. Saracenic, Tuscan, and Greek orders are intermixed and interspersed with the most *bizarre* and dissimilar ornaments; yet, upon the whole, the building has a striking air of grandeur and majesty, and is a fine royal residence. Six palaces are united by galleries, and enclose six principal courts:—the *Cours du Cheval-blanc; des Fontaines; Ovale*, or *du Donjon; de l'Orangerie; des Princes;* and *des Cuisines*. The largest is the *Cour du Cheval-blanc*, which forms also the principal entrance from the W., and derives its name from an equestrian statue in plaster, erected by Catherine de Medici, but no longer existing. At its upper end there is a remarkably fine flight of stone steps, under which a passage leads to a chapel remarkable for the elegance of its architecture and decorations. It was in this court that Napoleon bade adieu to his guard previously to his departure for Elba in 1814. The *Cour des Fontaines* has on one side the suite of apartments occupied by Charles V. in 1539. The buildings surrounding the *Cour Ovale* are the most ancient of all; they comprise the ball-room, adorned with paintings by Primaticcio, Nicolo, &c., the library, the king's and queen's apartments, the throne, and council-halls, &c. In one of these rooms the small round table is still shown on which Napoleon signed his act of abdication in 1814. The *Cour de l'Orangerie* is also called the *Cour de Diane*, from a fine bronze statue of Diana in its centre; in the *Galerie des Cerfs*, one of the buildings surrounding it, Monaldeschi was assassinated by order of Christina of Sweden. The *Cour des Princes*, the smallest of all, is surrounded by the apartments occupied by Queen Christina. The *Cour des Cuisines* is large, regular, and enclosed with buildings erected by Henri IV. The palace contains a great number of ancient and modern paintings; it is surrounded, especially on the S. side, by fine gardens, ornamented with fountains and fish-ponds, and traversed by a canal nearly 3-4ths of a mile in length. The forest of Fontainebleau comprises 32,877 arpents, or about 34,200 acres, a part being on the opposite side of the Seine. Its surface is very varied, and in parts very picturesque. It supplies Paris with a small portion of its wood-fuel, and with a considerable part of its paving stone.

The château of Fontainebleau has been the scene of many historical events: Philip IV., Henr III., and Louis XIII. were born in it; and the first monarch died there. It was visited by Peter the Great; Louis XV. espoused the daughter of the king of Poland in this palace; Pope Pius VII. was confined within its walls for 18 months; and it is intimately connected with the history of Napoleon. It was comparatively neglected by Louis XVIII. and Charles X.; but Louis Philippe has restored it to even more than its ancient grandeur. In 1837 the nuptials of the duke of Orleans were celebrated here with great pomp. (*Hugo*, art. *Seine-et-Marne; Guide du Voyageur; Encyc. des Gens du Monde*).

FONTARABIA (properly *Fuenterrabia*), a fortified frontier and sea-port town of Spain, Biscay, prov. Gui-

puzcoa, on a small peninsula on the left bank of the Bidassoa, at its mouth, 20 m. W. by S. Bayonne. Pop. 2,035. It used to be reckoned one of the keys of Spain; but its walls were levelled by the British troops in 1813. On the side of the sea it is, however, defended by Fort St. Elme, and on the land side covered by a lofty hill. It has a royal palace, now occupied by the military governor and the civil superintendent, a town-hall, hospital, convent, and a fine par. church dating from the 15th century. On the N.E. side of the town is the harbour, which is shallow, and admits only barks of 40 or 50 tons' burden. The principal occupation of the inhab. is fishing. Fontarabia has sustained numerous sieges: its fortifications were greatly augmented by the emperor Charles V.: under Philip IV. it received the rank and title of a city. The auxiliary British legion under General Evans had some severe fighting with the Carlist forces in the vicinity of this town, which they took in 1837. (*Miñano; Mod. Trav.*, *&c.*)

FONTENAY, a town of France, dép. Vendée, cap. arrond., on the Vendée, at the point where it becomes navigable, 42 m. S.E. Bourbon-Vendée. Pop. (1836) 6,389. With the exception of some modern houses, the town is very ill-built; streets narrow, ill-paved, and dirty. The church, with a spire 311 ft. in height, is the object most worthy of notice. The town was originally fortified, and had a castle belonging to the counts of Poitiers, some ruins of which may still be seen. Fontenay is the seat of a sub-prefecture, a court of original jurisdiction, and a communal college: it has linen and cotton cloth factories, tanneries and breweries, and some trade in timber, charcoal, Bordeaux and other wines, &c. (*Hugo*, art. *Vendée*, &c.)

FONTENOY, a village of Belgium, prov. Hainault, 4 m. S.E. Tournay. Here, on the 30th of April, 1745, a battle was fought between the allied English, Hanoverian, and Dutch forces, under the Duke of Cumberland, and the French, under Marshal Saxe, Louis XV. and the Dauphin being also with the army. The contest was obstinate and severe. At one time victory seemed to have declared in favour of the allies; and if the English had been properly supported by the Dutch, such would probably have been the case. In the end, however, the French were victorious. "*Les Anglais*," says Voltaire, "*se rallièrent, mais ils cédèrent; ils quittèrent le champ de bataille sans tumulte, sans confusion, et furent vaincus avec honneur.*" (*Siècle de Louis* XV., cap. 15.)

The allies lost about 7,000 men killed and wounded, and 2,000 prisoners, on this occasion. The loss of the French amounted to nearly 6,000 men killed and wounded.*

FORELANDS (NORTH AND SOUTH), two headlands on the E. coast of the co. of Kent: the first, or N. Foreland, forms the N.E. angle of the co.; it projects into the sea in the form of a bastion, and consists of chalky cliffs nearly 200 ft. in height. A lighthouse of the first class, having a fixed light, elevated 340 ft. above the level of the sea, was erected on this headland in 1688. This lighthouse is in lat. 51° 22′ 25″ N., long. 1° 27′ W. The S. Foreland, about 16 m. S. from the latter, consists of chalky cliffs. Two lighthouses, with fixed lights, have been erected on this headland, to warn ships coming from the S. of their approach to the Goodwin Sands. The N. Foreland is made by act of parliament the S.E. extremity of the port of London.

FORFAR, or ANGUS, a marit. co. on the E. coast of Scotland, having E. the German Ocean, S. the Frith of Tay and the co. Perth, W. the latter, N. Aberdeen, and N.E. Kincardine. It is of a quadrangular shape, and comprises 570,880 acres. It is naturally divided into four districts, whereof the *first* and most extensive, called the "Braes of Angus," comprises all the S. slope of the Grampians, from the summit of the ridge till it loses itself in the valley of Strathmore. The mountains in this division are mostly rounded and tame, but in parts they exhibit bold, terrific precipices. The *second* division consists of that portion of the valley of Strathmore that lies in this co. between the foot of the Grampians and the Sidlaw hills (*How of Angus*), and is for the most part a finely diversified, well cultivated country. The *third* division consists of a portion of the range called the Sidlaw hills, parallel to the Grampians, and attaining to a height of 1,200 or 1,400 ft. Some of them are conical, detached, and covered with heath, while others are wholly cultivated. "Dunsinnan Hill" is found in this group. The *fourth* and last division consists of the rich, low-lying, level land between the Sidlaw hills and the sea and the Frith of Tay. Principal rivers N. and S. Esks and Isla. No where, perhaps, in Great Britain has agriculture and the appearance of the country been more rapidly improved than in this co. The progress made in this respect during the last 40 years has been quite extraordinary. "At the time of the last statistical account much of the land in the parish (Oathlaw, in Strathmore, and the same is true of the rest of the co.) was in a state of waste, the appearance of the country was bare and bleak, the climate cold and damp, owing to the quantity of water on the land. Most of the houses were at that time of the rudest and meanest kind, built of unhewn stone, and covered with thatch; scarcely one of mason work, or covered with slates. *Now* the farms are all laid out and enclosed, draining is carried to great perfection, and farm-houses and offices are neatly built and covered. Thriving woods and belts of plantations are rising up, and giving a rich and clothed appearance to the co. Along with all this it is gratifying to observe that the habits of the people are improving. There is a greater neatness and cleanliness in their dwellings, and a greater share of the comforts of life amongst them; and though last, not least, there is evidently an increasing desire of information, and, generally speaking, a higher and better tone of moral feeling." (*New Statistical Account of Scotland*, No 5. 310.) The vicious practice of holding land in *run-rig* (see ARGYLE), that formerly prevailed in all the hill districts of this co., is now comparatively rare; and improvements are beginning to be made, where certainly they were much wanted, even in the cottages among the Grampians. There are some great estates, but property is, notwithstanding, a good deal subdivided. Average rent of land, in 1843, 10*s.* 11¾*d.* an acre. Excepting limestone, minerals are of no importance. This co. has recently become the principal seat of the manufacture of coarse linens, which is carried on to a great extent at Dundee, Arbroath, Forfar, Montrose and other towns. Forfar contains 5 royal bors. and 56 parishes, and returns 3 mems. to the H. of C.: viz., 1 for the co., 1 for the town of Dundee, and 1 for Montrose and its contributory boroughs. Registered electors for the co., in 1849-50, 2,702. In 1841, Forfar had 36,184 inhab. houses, and 170,520 inhab., of whom 79,375 were males, and 91,145 females. Valued rent, 171,240*l.* Scotch. Annual value of real property, in 1815, 361,241*l.*, do. in 1843, 502,841*l.*

FORFAR, a parl. and royal bor. and par. of Scotland, cap. of the above co., in the *How of Angus*, or valley of Strathmore, 14 m. N. Dundee. Pop. (1841) 7,981. It consists principally of one long street, and of a shorter one at right angles to it. "Forfar is a bor. of considerable antiquity, and is likely to continue a thriving place, being in the centre of a well-cultivated county, and having excellent communications on all sides. The command of water power is not sufficient for machinery; hence, though a great proportion of its inhab. are engaged in weaving, it is chiefly in connection with other towns, and not under the regulation of any very extensive establishment upon the spot. Its chief trade is the weaving of Osnaburgs and coarse linens. It has long been famous for the manufacture of a particular kind of shoes called 'brogues,' excellently adapted for the use of a Highland district. The streets are well built, and many new houses are in progress; the tendency of the manufacturer who works at home being to convert his earnings, as soon as possible, into a new feu, or the property of a piece of land. These new acquirements are laid out in a neat and substantial way, and bespeak the appearance of comfort at least, if not of wealth. Fuel is water-borne, and the nearest sea-port is Dundee, 14 m. distant. There are valuable quarries here, the products of which are all sent round to a great distance. On the whole, the present circumstances of this town seem to present every appearance of a regular and steady advancement in its population, trade, and agricultural improvement." (*Bound. Rep.*) There were, in 1838, 2,830 looms in the town, of which 2,560 were at work. Most of the public buildings in the town, including a new church and spire and county buildings, an episcopal chapel, &c., have been erected within these few years: there are, also, several dissenting chapels. The means of education are extensive and good; the town having an academy for languages, geography, &c., a parish school, a mechanics' institute, Sunday schools, a large infant school, &c.: here also is a subscription news-room, a subscription library, a mechanics' reading-room, &c. Forfar is now connected by a railway with Arbroath. It is governed by a provost, 2 bailies, and 16 counsellors. Corporation revenue in 1839, 1,350*l.* Forfar unites with Montrose, Arbroath, Brechin, and Bervie, in sending 1 m. to the H. of C. Registered parl. electors, in 1849-50, 245; municipal ditto, 245.

FORIA, or FORIO, a sea-port town of the Neapolitan dom., on the W. shore of the island of Ischia, cap. distr. of same name. Pop. 6,000. Streets very narrow, but the houses are solidly built, and there are 3 good churches, all very much decorated. It has a good harbour, and some trade with Naples, Leghorn, Genoa, &c. In its vicinity there are some hot mineral springs, used as baths.

FORLI (an. *Forum Livii*), a town of Central Italy, Papal States, cap. leg. of same name, in a fertile plain between the Montone and Ronco, on the Emilian Way, 38 m. S.E. Bologna, and 15 m. S.W. Ravenna; lat.

* The account of this battle by Voltaire, referred to above, is extremely interesting: but such is not the case with his poem entitled *La Bataille de Fontenoy*; it is wholly destitute of interest and imagination, and deserves the name given to it of a *gazette rimée*.

44° 13′ 25″ N., long. 12° 1′ 30″ E. Pop. (1852) 16,000. It is surrounded by old walls; is generally well built; has 4 spacious streets; a square, in which there are several fine buildings; a cathedral; 9 other churches; and numerous convents. Many of the private residences are built of marble, and the streets are ornamented with arcades. The ceiling in the council-chamber of the town-hall was painted by Raphael. Forli is the seat of a cardinal-legate, and a court of primary jurisdiction dependent on a superior court at Bologna. It has manufactures of plain silk riband and silk twist, and of oil-cloth, woollen fabrics, wax, nitre, and refined sulphur. It also trades in corn, wines, oil, hemp, and aniseed, which, as well as its manufactures, is considerably facilitated by a canal from Acquaviva. There is here a college, a public library, and some learned societies. Forli was founded anno 205 B.C. It was annexed to the see of Rome by Pope Julius II. In 1797, the French made it the cap. of the dep. of the Rubicon. It was reunited to the Roman dom. in 1815. (*Rampoldi; Dict. Géog.; Bowring.*)

FORLINPOPOLI (an. *Forum Popilii*), a town of Central Italy, Papal States, leg. Forli, 5 m. S.E. that town. Pop. 4,000.? It has an ancient castle, a cathedral, 2 parish churches, and several convents. This and the other forums in different parts of Italy, are supposed by Sigonius to have been all *conventi*, or assize towns; but the proximity of those on the Emilian Way, particularly of Forli and Forlinpopoli, seems, as Mr. Forsyth has remarked, to contradict that opinion. (*Forsyth's Italy*, p. 460.)

FORMOSA, (Chin. *Tae-wan*, or "Terrace Bay,") an island in the Chinese Sea, belonging partly to China, between lat. 22° and 25° 30′ N., and long. 120° 30′ and 122° E.; about 80 m. from the Chinese coast, from which it is separated by the Channel of Fo-kien, and 170 m. N. Luzon, the chief of the Philippine islands. Length, N. to S., about 250 m.; breadth, in its centre, about 80 m. Area, 15,000 sq. m.? Pop. uncertain, but perhaps between 2,000,000 and 3,000,000. (*Canton Register*, 1833.)

A chain of mountains runs through the island in its entire length, forming, in general, the barrier between the Chinese on the W., and the independent natives of the unexplored country on the E. side. On many of its summits, snow remains during most part of the summer, and Humboldt has supposed that a portion of it reaches an absolute elevation of upwards of 12,000 ft. It exhibits distinct evidence of former volcanic action in some extinct craters; in other parts flames, mephitic gases, &c. burst out of the earth; and sulphur, naphtha, and other volcanic products are abundant. Some parts of the coast present bold headlands, but all the W. shore is flat, and surrounded with rocks and quicksands. Its harbours, which were formerly very good, have become nearly useless, except to junks of very small tonnage, from the rapid increase of the land on the sea; so that, at present, Formosa has but one good port, that of Ke-lung, at its N. extremity.

"That portion of Formosa which is possessed by the Chinese well deserves its name; the air is wholesome, and the soil very fruitful. The numerous rivulets from the mountains fertilise the extensive plains which spread below; but throughout the island the water is unwholesome, and, to unacclimated strangers, it is often very injurious. All the large plain of the S. resembles a vast well-cultivated garden. Almost all grains and fruits may be produced on one part of the island or another; but rice, sugar, camphor, tobacco, &c. are the chief productions. Formosa has long been familiarly known as the granary of the Chinese maritime provinces. If wars intervene, or violent storms prevent the shipment of rice to the coast, a scarcity immediately ensues, and extensive distress, with another sure result—multiplied piracies by the destitute Chinese. The quantity of rice exported from Formosa to Fuh-keen and Che-keang is very considerable, and employs more than 300 junks. Of sugar there annually arrive at the single port of Teen-tsin (in China) upwards of 70 laden junks. The exportation of camphor is likewise by no means small. Much of the camphor in the Canton market is supplied from Formosa." (*Chinese Repository*, ii. 419, 420.) Besides the foregoing products, wheat, maize, millet, kitchen vegetables of many kinds, truffles, &c.; *colocasia*, a kind of arum, the root of which is a chief article of food in the interior; oranges, bananas, cocoa and areca nuts, peaches, figs, melons, and numerous other European and Asiatic fruits are are cultivated. Chestnut woods are plentiful; and in the N. especially, a good deal of timber for ship-buildingis obtained. Pepper, aloes, coffee, a kind of green tea, but different from the Chinese, cotton, hemp, and silk, are other important articles of culture. The ox and buffalo are used for tillage and draught; horses, asses, sheep, goats, and hogs are abundant. The leopard, tiger, wolf, &c. inhabit the island, but do not infest its cultivated portion; pheasants, hares, and other kinds of game are very numerous. Gold is supposed to be found in the E. part of Formosa, as it is seen in the hands of the inhab.; but the chief minerals are salt and sulphur, of which latter a good deal has been sent to China since 1819, for the manufacture of gunpowder.

The Chinese colonists of the island are mostly from the opposite prov. of Fo-kien, and have emigrated principally from poverty. They are a laborious and industrious race, well-disposed towards foreigners, but very turbulent in respect to the home authorities, who maintain only a very precarious sway over them, — the Formosans having frequently risen in open rebellion against their mother-country. The greater part of them are cultivators of the soil; but many of the Amoy men (from which district a great number of the emigrants have come) are merchants, fishermen, and sailors. The trade with China is very extensive: the chief exports to that country have been mentioned; the principal imports thence are tea, silk, and woollen, and other kinds of manufactured goods. The trade is mostly in the hands of Fo-kien merchants, who have also advanced the chief part of the capital necessary for the cultivation of the soil. As many as 100 junks a month are estimated to leave Fo-kien for the W. coast of Formosa; where, however, they are obliged to lie at a great distance from the shore, while carts with wheels, destitute of spokes, drawn by buffaloes, are used to carry the cargoes to them through the water. There are no junks strictly belonging to the island; all the shipping is the property of the Amoy merchants. (*Gutzlaff.*)

The native inhab. of the E. of Formosa bear no resemblance to the Chinese; but they have apparently an alliance with the Malay or Polynesian tribes. "They are of a slender shape, olive complexion, wear long hair, are clad with a piece of cloth from the waist to the knees, blacken the teeth, and wear ear-rings and collars. In the S., those who are not civilised live in cottages of bamboo and straw, raised on a kind of terrace 3 or 4 ft. high, built like an inverted funnel; and from 15 to 40 ft. in diameter. In these they have neither chair, table, bed, nor any moveable. They tattoo their skin. In the N. they clothe themselves with deer-skins. . . . They have no books, or written language; neither have they any king or common head, but petty chiefs and councils of elders, and distinguished men, much like the N. American Indians. It does not appear whether they have any separate priesthood, but it is probable that there is none beyond the conjurers and enchanters of all savage tribes, nor any ancient and fixed ceremonies of divine worship, or system of superstition. They are represented by the Chinese as free from theft and deception among themselves, and just towards each other, but excessively revengeful when outraged." (*Chinese Repository*, ii. 419.) The Chinese territory in Formosa having, for a lengthened period, been gradually extending, the really independent tribes have receded towards the E. coast; some of the others have become partially civilised, settled in villages, and intermixed with the border Chinese.

Formosa, together with the Pang-hoo islands, composes a *foo*, or department, under the prov. Fo-kien, and immediately subject to its governor. It is divided into five *heens*, or districts. The cap., Tae-wan, is described as ranking among Chinese cities of the first class in the variety and richness of its merchandise, and in pop. It stands on the W. coast, in about lat. 23° N., and long. 120° 32′ E., surrounded by a wall and ditch. Its principal streets are from 30 to 40 ft. broad, and for many months of the year are covered with awnings to keep off the sun. On a small island opposite the city the Dutch, in 1634, built Fort Zealand, which commanded the harbour, the entrance to which is now choked up. The Chinese garrison, in Tae-wan, amounts to about 10,000 men; the total armed force usually stationed in the island may be estimated at about double that number, all infantry. The revenue derived by China from Formosa amounted, in 1820, to 11,240 bushels of corn, and 7,341 oz. of silver; the public expenditure to 482 bushels of corn, and 5,000 oz. of silver.

The Chinese appear not to have been acquainted with Formosa till about 1430, after which its coasts became the resort successively of several Chinese pirates. The Japanese had planted colonies in the N., and at one period the greater part of the island belonged to them; but the Dutch, having been allowed to settle on the W. coast, gradually dislodged all their opponents, including the Spanish and Portuguese (both of whom tried to gain a footing), and became sole masters of the island about 1632. After the conquest of China by the Tartars, in 1644, a Chinese chief, with an army of Chinese refugees, determined to conquer Formosa, and finally expelled the Dutch from it in 1662. In 1683, however, the new dynasty was overthrown by the continental Chinese, aided by the Dutch; and the authority of China has been ever since maintained over the island, though assailed by repeated insurrections. (*Ritter, Asien Erdkunde*, iii. 856—881.; *Klaproth; La Perouse; Gutzlaff; Chinese Repository*, &c.)

FORRES, a royal and parl. bor., town and par. of Scotland, co. Moray. The town is situated on the E. side

of the burn of Forres, about 2½ m. E. from the Findhorn, and 2½ m. N. from the loch or inlet of the sea which receives the Findhorn, and 11 m. W. Elgin. Pop. of par. (1831) 3,895, of which the town had 3,424. "The town consists of one principal street, with the town-house in its centre, through which the great road to Inverness passes, with several smaller streets branching off from it. It possesses an excellent academy, called Anderson's Institution (from its founder, a private gentleman of that name), which, together with the salubrious climate and cheapness of living, induce many families to reside here. Several villas have been erected in the neighbourhood of the town, which may be considered likely to increase. Forres has no manufactures. Findhorn is the sea-port of the bor. and of the surrounding district." (*Boundary Report.*) Besides the academy, there is a good parish school, an elementary school, and a ladies' seminary. On a hill, at the W. end of the town, are the poor remains of the ancient castle of Forres. About ½ m. N.E. from the town, is a remarkable granite obelisk, called Sueno's Pillar, consisting of a single stone 23 ft. above ground, 3 ft. 10 in. broad, and 1 ft. 3 in. thick. One side is rudely sculptured. It appears to have been erected by the Scotch in memory of some victory over the Danes. A pillar was erected in memory of Lord Nelson by public subscription on a hill to the E. of the town. A bridge of 4 arches over the Findhorn, near this town, was swept away by the great flood in that river in Aug. 1829. Forres unites with Inverness, Fortrose, and Nairn in sending 1 m. to the H. of C. Registered electors in Forres, in 1849-50, 165. Municipal do., 142. It is governed by a provost, 2 bailies, and 14 counsellors. Corporation revenue, 592*l*.

FORT AUGUSTUS, a fortress of Scotland, co. Inverness, the centre one of the three forts erected along the great glen of Scotland, now the line of the Caledonian Canal, beautifully situated at the W. extremity of Loch Ness, 31 m. S.W. Inverness, and 29½ m. N.E. Fort William. Fort Augustus was built in 1730, and was so named in honour of the Prince of Wales, father of George III. It is a regular fortification, with four bastions, and barracks capable of containing 400 soldiers, with proper lodgings for the governor and officers. It was taken by the Highlanders in 1746, but abandoned after having been partially demolished. Here the Duke of Cumberland established his camp after the battle of Culloden; and the ruins of a turf-house which he occupied are still to be seen. The fort was ordered to be demolished in 1818; and is now occupied by three or four veteran artillerymen. In its immediate neighbourhood is a village, originally called Kilcummin, from its having been the burial-place of the ancient and powerful family of Cummin; but now it bears the same name as the fort. Pop. about 240. The village is meanly and irregularly built, and forms a contrast to the beautiful situation in which it is placed. (*Mr. Grant's Letters from the Highlands; Home's Hist. of the Rebellion; Garnett's Tour*, ii. 318.; *Forsyth's Beauties*, § *Inverness*.)

FORT GEORGE, a fortress of Scotland, co. Inverness, 11 m. N.E. Inverness, on a low sandy peninsula jutting into the Moray Frith, and forming the most E. of the three forts erected along the great glen of Scotland. It is esteemed the most complete fortification in Britain, and not being commanded by any part of the adjacent country, may bid defiance to assault. The work was erected so as to command the entrance to the Moray Frith. The ramparts on three sides rise almost out of the sea, the waters of which may at pleasure be introduced into the fosse, which skirts the fourth side. It has four bastions, mounted with 80 cannon; a bomb-proof magazine, &c., and accommodation for 3,000 men. The buildings are remarkably neat, and disposed in handsome squares, with a fine walk round the ramparts. The fort occupies no less than 15 acres. It was begun to be built in 1747, under the direction of General Skinner, and cost upwards of 160,000*l*. It was partially used as a state prison during the late war. Though Fort Augustus and Fort William, the other forts on the line of the Caledonian canal, have been dismantled since the peace. Fort George is kept in good order, and has a governor and a garrison. (*Forsyth's Beauties of Scotland*, § *Inverness; Stoddart's Remarks on Scotland; Pennant's Tour.*)

FORT WILLIAM, a fortress of Scotland, co. Inverness, at the E. extremity of Loch Linnhe, and the W. end of the Caledonian Canal. This fort, Fort Augustus in the centre, and Fort George at the E. extremity of the great glen in the line of this canal, were built at different times for supporting the authority of the general government, and curbing the turbulence of the Highland clans. It was originally built of turf, by General Monck, in the time of the Commonwealth, being so large as to contain a garrison of 2,000 men. It was called the Garrison of Inverlochy, owing to its situation at the mouth of the Lochy, a stream which falls into Loch Linnhe. In the reign of William and Mary, it was rebuilt of stone, but on so small a scale as to afford accommodation to only 800 men. It then received the name, which it has since retained, of Fort William. It is of a triangular form, with two bastions. In the rebellion of 1715, the Highlanders made an unsuccessful attack on it; and in 1746 it stood a siege of five weeks by the adherents of Prince Charles Stuart, who at the end of that time were forced to retreat. The fort was ordered to be dismantled in 1818; and is now tenanted by about a dozen invalids, in order to keep it from becoming a complete ruin. Within 1½ m. W. of the fort, and on the edge of Loch Linnhe, is the town of Fort William, originally called Maryburgh, and now more generally Gordonsburgh. Pop. about 600, who are chiefly engaged in the herring and other fishery. Ben Nevis, the highest mountain in Britain, being 4,370 ft. high, is in the immediate vicinity of the fort and the town, both of them being placed at its base. Gordonsburgh is the only village or town in this district of Inverness-shire, and is 29½ m. distant from Fort Augustus, the village nearest to it. (*Forsyth's Beauties of Scotland*, § *Inverness; Pennant's Tour; Garnett's Tour through the Highlands*, i. 302—305.; *Home's Hist. of the Rebellion.*)

FORTH, a river of Scotland, which originates in several mountain streams that have their sources on the E. side of Ben Lomond, in Stirlingshire. Its course is E., with many sinuosities, by Aberfoyle, Stirling, and Alloa, till it unites with the arm of the sea, called the Frith of Forth, at Alloa. The Teith, its most important tributary, has its sources a little more to the N., and pursuing a S.E. course past Callender and Doune, joins the Forth a little above Stirling, bringing to it a volume of water but little inferior to its own. Its other most important affluents are the Allan, flowing S. from Perthshire; and the Devon, flowing W. from Kinross-shire. During the latter part of its course, the Forth flows with many windings through a low, level, and very rich country: in fact, though the distance from Stirling to Alloa by the road be only about 7 m., it is no fewer than 23 by water. Steam-boats ascend to Stirling, and ships of 300 tons burden come up to Alloa, which may be regarded as its port.

FORTROSE, a sea-port, royal and parl. bor. of Scotland, co. Ross, on a gentle eminence on the N. bank of the Moray Frith, nearly opposite Fort George, from which it is 2½ m. distant, 8 m. N.E. Inverness. There is a regular ferry between Fort George and this bor. Fortrose was formerly known by the name of Chanonry, so called from its being the chanonry of Ross, where the bishop resided, and the members of the chapter. About a mile to the W. stands the small town of Rosemarkie; and the two places were united by a charter granted by James II. in 1444, under the common name of Fortross, now softened into Fortrose; which charter was ratified by James VI., in 1592. Pop. of the united bor. and parish, in 1838, 1,813, embracing 358 families, and 331 inhabited houses. Rosemarkie is a meaner place than Fortrose, but is reckoned the parochial capital, inasmuch as it is the site of the parish church. A handsome Episcopal chapel, however, has within the last few years been erected at Fortrose. The Academy there is the first seminary of the kind established in the N. of Scotland, and is supported by donations and subscriptions. The late Sir James Mackintosh received his elementary education here. There are two other schools at Fortrose, and two also at Rosemarkie. There are no manufactures in the place. The salmon and white sea fishery gives considerable employment. No mail or stage coach passes through the parish; but the steam vessels plying in the frith call at Fortrose; and it is by them that salmon and other articles are conveyed thence to Aberdeen, Leith, and London.

The Bishop of Ross resided at Chanonry, and was termed "*Episcopus Rosemarkiensis.*" This Episcopal see was founded by David I. in the 12th century. Only a small part of the cathedral now remains. Some of the bishops of Ross were men of literary emmence, particularly John Maxwell, author of *Sacro-Sancta Regum Majestas*, who died in 1646, archbishop of Tuam in Ireland. Fortrose unites with Inverness, Forres, and Nairn, in sending a mem. to the H. of C.; and in 1849-50 had 52 registered voters. (*Keith's Cat. of Scot. Bishops*, Edin. 1824, pp. 184—204.; *New Stat. Acc. of Scot.*, § *Ross*, p. 349.)

FOSSOMBRONE (an. *Forum Sempronii*), a town of Central Italy, Papal States, leg. Urbino, on the Metauro, in a fertile district, 7 m. E.S.E. Urbino. Pop. 5,000, chiefly employed in the manufacture of silk, said to be the finest in Italy. It has an old fortress; a fine cathedral, containing many good paintings and interesting inscriptions; 3 other churches, 6 convents, a handsome one-arched bridge, and the ruins of an ancient theatre. Near this town was fought, anno 194 B.C., the great battle between the Carthaginians under Asdrubal, the brother of Hannibal, and the Romans, in which the former were totally defeated, and their general killed. Tradition has preserved the memory of the event in the name of a hill

in the vicinity, called *Monte d'Asdrubale*. This victory may be said to have determined the fate of the long-contested struggle between the Romans and Carthaginians in favour of the former. Fossombrone was destroyed by the Goths, and again by the Lombards, but rebuilt by the Malatesti. That family sold it in 1440 to the Duke of Urbino, with whose territories it was afterwards transferred to the see of Rome. (*Rampoldi; Ancient Universal Hist.* xviii. 51. 8vo. edit.)

FOUAH, a town in the Delta of Egypt, on the E. bank of the Rosetta branch of the Nile, prov. Gharbieh. Though still a considerable village, it lost its importance in the 16th century, when the trade of which it was the seat was transferred to Rosetta. Fouah is most agreeably situated amidst a great number of flourishing villages and productive fields. The river flows past it through one of the widest and most picturesque portions of its channels and banks. (*Champollion, Lettres écrites d'Egypte*, p. 50.)

FOUGÈRES, a town of France, dép. Ille-et-Vilaine, cap. arrond., on a hill near the Nançon, 27 m. N.E. Rennes. Pop. (1836) 8,974. It is well built, has a fine promenade, and is altogether a very agreeable town. A chalybeate spring attracts to it numerous visiters.

Fougères was a strong town in the 15th century, and was considered one of the keys of Brittany till that prov. was united to the French crown. During the last century it suffered from four destructive fires, on which account few of its ancient buildings exist, excepting the ruins of a Gothic castle, which form a very picturesque object. There are here large manufactures of sailcloth and hempen fabrics, flannels of excellent quality, hats, leather, dye-houses, &c. It is the seat of a sub-prefecture, a court of primary jurisdiction, and a communal college. (*Hugo*, art. *Ille-et-Vilaine*.)

FRAMLINGHAM, a town and par. of England, co. Suffolk, hund. Loes, on an eminence, near one of the sources of the Alde, 14 m. N.E. Ipswich. Area of par., 4,470 acres. Pop. of ditto in 1831, 2,445. Here is an old church, with a tower 96 ft. high; a free school, and several sets of almshouses. Here, also, are the ruins of a magnificent castle, which was a place of importance in the Saxon times, and to which the Princess Mary repaired during the attempt made by the partisans of Lady Jane Grey to place the latter on the throne.

FRANCAVILLA, a town of S. Italy, k. of Naples, prov. Otranto, cap. distr., on a hill, in a fertile but unhealthy territory, 23½ m. W.S.W. Brindisi, and 17 m. E.N.E. Taranto. Pop. 11,180. "It is large and regularly built; the streets wide and straight; the houses showy, though in a heavy style of architecture. Since the year 1734, when a considerable part of the town was thrown down by an earthquake, the dwellings have not been raised more than one story above the ground floor. The main street would be thought handsome even in a capital city. The avenues to the gates are well planted, and afford a pleasant shade. The college is a large edifice, with many handsome halls and galleries. The principal par. church is gay and well lighted; but so stuccoed, festooned, and flowery, that the whole decoration is a mere chaos." (*Swinburne*, i. 214.) There are 2 hospitals, a charitable asylum, a *mont-de-piété*, and several convents; with manufactures of woollen stuffs, cotton stockings, earthenware, and a kind of snuff similar to that made in Spain. Francavilla was founded in the 14th century, and owes its name to an exemption from taxation for 10 years, granted to all persons who settled in it. (*Swinburne's Travels in the Two Sicilies*, vol. i.; *Rampoldi*.)

FRANCE (REPUBLIC OF), one of the richest, most important, and powerful of the states of Europe, in the W. part of which it is advantageously situated, between lat. 42° 20′ and 51° 5′ N., and long. 4° 50′ W. and 8° 20′ E.; having N.W. and N. the English Channel (*La Manche*), the Straits of Dover (*Pas de Calais*), and the North Sea; N. E. Belgium, Dutch Luxemburg, and the Rhenish provs. of Prussia and Bavaria; E. the territories of Baden, Switzerland, and the Sardinian States; S. the Mediterranean and Spain; and W. the Bay of Biscay and the Atlantic. Except on its N. E. frontier, its actual are identical with its natural boundaries; being on the E. the Rhine from the influx of the Lauter to Basle, the Jura mountains, and the Alps to the Mediterranean; the latter and the Pyrenees on the S.; and N. W. and W. the English Channel and the ocean. The shape of France is somewhat hexagonal. Its greatest length N.W. to S.E. (from the extremity of the dép. Finisterre to the peninsula of Antibes) is 664 m.; its greatest breadth (a line crossing the former nearly at right angles) is 620 m. Length, N. to S., Dunkirk to Perpignan, nearly 600 m.; greatest breadth E. to W. (a line passing from near Lauterburg to Brest, through Paris) about the same; least breadth E. to W. about its centre 335 m. Inclusive of Corsica, which, though belonging naturally to Italy, forms a dep. of France, the total area is estimated, in the official tables published by the French government, at 52,768,618 hectares, or 203,736 sq. m. The pop., which in 1801 was 27,349,000, had increased in 1821 to 30,461,875, in 1831 to 32,569,223, in 1836 to 33,540,910, and in 1846 to 35,400,486. (*French Official Tables; St. Fargeau, Aperçu Statistique de la France; Patria, &c.*)

Physical Geography. Position, Frontiers, Coasts, and Islands. — France is indebted not only to her large population, and the active spirit of her people, but in a great measure to her admirable geographical position, for her commanding influence in European affairs. Unlike any of the other states of Central Europe, she has the command of three seas, including those which wash both the N. and the S. shores of that continent. Her entire line of frontier, by sea and land, is estimated at about 2,840 m. (*Aperçu Statist.* p. 19.) Of this extent, 1,355 m. are on the land side; and being for upwards of 900 m. of that distance enclosed by strong and well-marked natural barriers, the country is in so far well secured and easy to defend against foreign aggression. Of the 1,485 m. of sea-coast, about 360 m. are on the Mediterranean, 565 on the Atlantic, and 560 on the English Channel and North Sea. The N.W. coast presents the two considerable peninsulas of Brittany and Cotentin, the bay of St. Malo between them, the æstuaries of the Seine, and the harbours of Morlaix, Cherbourg, Havre, Boulogne, Calais, Dunkirk, &c. From Dunkirk to Calais the shore is bordered by sandy downs. From the latter point to the mouth of the Seine, the coast is chiefly characterised by chalk and marl cliffs; farther W., granitic cliffs alternate with low shelving shores. There is seldom deep water near the shore on this coast; the bay of Cancale near Avranches, for instance, is in a great measure left dry at ebb-tide, and passengers at such times go from the mainland to Mont St. Michel, across the sands, in carriages. The W. part of this coast is beset with rocks; these are especially numerous between the mouths of the Seine and the Vire. Good harbours are few, and navigation is rendered dangerous by violent tides, the force of which is attested by numerous salt marshes along the shore, produced by irruptions of the sea. The W. coast, formed in part by the peninsula of Brittany, is at first elevated, bold, and rocky, but as it proceeds S. it gradually declines, and from the mouth of the Gironde to the foot of the Pyrenees, it presents an unbroken line of sandy downs interspersed with marshes. Besides the Gironde, the Loire disembogues on this coast, which is farther indented by numerous bays. The S. coast, except in its E. part, is generally low, sandy, and bordered, where it surrounds the Gulph of Lyons, by numerous lagoons; and its harbours are in general neither well sheltered nor easy of access, though this is by no means the case with Toulon and one or two more. Exclusive of those at the mouth of the Rhone, the islands round France, and belonging to her, are of comparatively little importance: they lie mostly along the W. coast: Oleron, Ré, Yeu, Noirmoutiers, Belle-île, and Ouessant (Ushant) being the chief. Those in the Mediterranean are the isles of Hieres, Ratoneau, Pomègue, &c., near Marseilles; and the only ones in the Channel are Brehat, and a few rocky groups in the bay of St. Malo, of which that of Chausey is the principal. Guernsey, Jersey, Alderney, &c. belong to England, and are the only remains of the extensive dominions the English sovereigns once possessed in France. (*Hugo, France Pittoresque; Dict. Géogr.; Aperçu Statist., &c.*)

Mountains, &c. — According to Bruguière (*Orographie de l'Europe*), these belong wholly to the Alpine and Pyrenean systems, the line of separation between which is the valley traversed by the canal of Languedoc. The ramifications of the Alpine system in France are therefore far more extensive than those of the Pyrenean; they comprise the mountain ranges throughout the country, except in the S.W. The principal mountain chain, or great watershed of France, intersects the country under the names of the Faucilles, plateau of Langres, Côte d'Or, Cevennes, &c., in a general direction N.E. to S.W.; but running much nearer to the S.E. than the N.W. extremity of the kingdom, which is thereby divided into two very unequal parts. On the N. and W. sides of this chain several considerable branches are given off, as

the Vosges, Moselle, and Argonne ranges, the plateau d'Orléans, and Morvan mountains, which stretch to the extremities of Normandy and Brittany, &c. These ranges separate the principal river basins, those of the Rhine, Moselle, Meuse, Seine, and Loire, from each other; the basin of the Rhone is on the S.E. side of the Cevennes, enclosed between them and the Alps. Connected by ramifications with the Cevennes, there is a group of mountains of volcanic origin scattered over Puy de Dôme, Cantal, and some adjacent deps. in the centre and S. of France. This group, which Balbi and other geographers regard as a separate system, under the title of *Gallo-Francique*, separates the basin of the Loire from that of the Garonne. The highest points of this group have a somewhat greater elevation than those of the Faucilles and Cevennes chain. The Pic-de-Sancy (M. Doré) is estimated to be 6,223 ft. in height, and the Plomb-de-Cantal, 6,095 ft.*; while Mezenc, the loftiest of the Cevennes, is only 5,918 ft. high; Le Reculet (Jura), 5,633 ft., and the Ballon de Sulz (Vosges), 4,688 ft. The Pyrenees send off numerous lateral branches through the S. E. deps.; their loftiest summit within the French territory is M. Perdu, 10,894 ft. in height. But the culminating point in France belongs to the Alps, and is probably M. Olan, 4,214 mètres (*Hugo*), or 13,825 ft. high; next to which is the Pic-des-Ecrins, 13,468 ft. in elevation.

Rivers. — Leaving out of view the Rhine, which can scarcely be called a French river, since it merely runs for about 100 m. along a portion of its E. frontier, France possesses no river to rank with the Wolga or the Danube. The principal are the Loire, Rhone, Garonne, Seine, Meuse, and Moselle. Except the Rhone, which has for the most part a southerly course, all the above-named run in a N. or W. direction. The Loire, which is the largest, and traverses the centre of the kingdom, rises in the mountains of the Vivarais (Ardèche), near Mezenc. It runs generally N.W. as far as Orleans, and thence mostly W.S.W., with a somewhat tortuous course to its mouth in the Atlantic. The length of its entire course is about 620 m., of which about 510 m. are navigable. It receives from the N. the Arroux, the Maine (formed by the Mayenne and Sarthe), and the Eudre; and from the S. the Allier, Cher, Indre, Vienne, Sevre-Nantaise, &c. Nevers, Orleans, Blois, Tours, Saumur, and Nantes are situated upon its banks. The Rhone rises in Switzerland, beyond the Simplon, and after traversing the Lake of Geneva, and forcing for itself a passage through the Alps, not far from Chambery, enters France S. of the Jura range, forming the entire S. and almost all the W. boundary of the dep. of Ain. From Lyons, where it receives the Saône, the direction of the Rhone is nearly due S. to Arles, where its delta commences; and it falls into the Mediterranean by a double set of mouths, after a course of 530 m. within the French dom., more than 310 of which are navigable. Its principal affluent is the Saône, which runs through Franche-Comté and Burgundy, with an entire course of about 213 m., of which about 165 are navigable. Besides the Saône, the Rhone receives from the N. the Ain; it is joined from the E. by the Isère, Drôme, and Durance, famous for its rapidity; and from the W. it receives the Erieux, Ardèche, Gardon, &c. Lyons, Valence, Montelimart, Avignon, Tarascon, and Arles are the chief cities and towns on the Rhone: upon the Saône (which river is augmented by the Doubs), Gray, Chalons-sur-Saône, and Macon are situated. The Garonne rises in the Spanish Pyrenees, near M. Maladetta, and runs at first N.E. as far as Thoulouse, but thence onward its course is generally N.W. to its mouth, (or rather the mouth of its æstuary, which bears the name of the Gironde,) in the Bay of Biscay, about 56 m. N.N.W. Bordeaux, and 120 m. S.S.E. the mouth of the Loire. The entire length of its course, including the Gironde, is estimated at about 350 m., nearly 294 of which are navigable. It receives some considerable tributaries; as the Tarn, which is navigable for a distance of 90 m.; the Lot, navigable for 190 m.; and the Dordogne, navigable for 120 m. from the E., and from the S. in the earlier part of its course; the Save, Gimone, Gers, Baise, &c. Thoulouse, Agen, and Bordeaux are situated on the Garonne. The Seine rises in Burgundy, about 18 m. N.W. Dijon: its general course is N.W., but it is exceedingly tortuous, and though in a direct line its course is no more than about 250 m., from its mouth in the British Channel, the windings of the river make its total length as much as 500 m. It enters the channel by a wide and capacious mouth, on the N. side of which is the town of Havre; its æstuary, and the lower part of its course, is subject to the phenomenon of the *bore*, which sometimes occasions considerable damage. (*See* AMAZON, SOLWAY FRITH, &c.) The principal affluent of the Seine is the Marne; besides which, it receives from the E. the Aube and Oise; and from the S. and W. the Yonne, Juine, Eure, Rille, &c. Paris, Chatillon, Troyes, Melun, St. Denis, St. Germains, Andely Elbeuf, Rouen, Honfleur, and Havre are situated upon its banks. The Marne, which runs chiefly through Champagne, has a navigable course of 215 m.: it receives the Blais, Ornain, Ourcq, &c.; Chalons-sur-Marne Epernay, Chateau-Thierry, and Meaux are seated on it. Both the Meuse and the Moselle run N. to join the Rhine beyond the French dom.: the former has a navigable course of 162 m., and the latter one of about 72 m. within France. These rivers, however, as well as those of the Escaut (Scheldt), Lys, Sambre, and others, belong more properly to Belgium than to France. The Charente, the basin of which lies between those of the Loire and the Dordogne, has a navigable length of about 120 m.; and the Adour, which traverses the deps. of the Pyrenees and Landes, has a great number of tributaries, including the Midouze, Pau, Oleron, &c., and a course generally W., which is navigable for 77 m. The other rivers worthy of any notice, as the Somme, Orne, Aisne, Meurthe, Rance, Vilaine, Ariege, Herault, Var, &c., are referred to under the deps. to which they give their name, or in which their course is chiefly situated. (*Hugo; Aperçu Statist.; Dict. Géog.; Official Tables.*)

Lakes, Marshes, &c. — Of the former there are remarkably few, and those quite insignificant in point of size. The largest is that of Grand Lieu, in the dép. Loire Inférieure; but it is only 6 m. across. There are a few small lakes amongst the Jura ranges, and others occupy extinct craters in the volcanic district. In Ain and Loire-et-Cher marshes are numerous. The extensive lagunes on the S. and S.W. coasts and elsewhere have been already alluded to; they are too shallow to be used otherwise than for fishing and salt-works.

Geology, Soil, and Minerals. — Geologically, the whole of France may be considered as one extensive basin, the circumference and centre of which consist of primitive formations, the intermediate space being filled with those of a secondary and tertiary kind. Primitive rocks abound most in the Alps, the Pyrenees, the peninsula of Brittany, and the mountains of the so-called *Gallo-Francique* system in the centre of France. They are, however, met with in a part of Maine and Normandy, in Vendée, in Ardennes, where they are conterminous with a chain of primitive rocks which extend into N.W. Germany, in the Vosges, in Dauphiny (Isère), and on the S. coast E. of Marseilles. The most widely diffused primary rocks are granite, gneiss, micaceous and argillaceous schists, and primitive limestone. In Vendée, to the foregoing may be added a great number of others, including porphyry, diorite, eclogite, and serpentines; and in the Dauphiny Alps and the Pyrenees the rocks are said to present a still greater diversity. In the latter mountains calcareous rocks are very abundant; and some of a transition kind contain a great number of organic remains, even at an elevation of 1,600 toises, or 10,230 ft.! (*Dict. Géogr.*) Argillaceous schist, also containing numerous organic remains, is prevalent throughout a part of Brittany; granitic rocks predominate at the extremity of that peninsula. Porphyry of various kinds, some of which exhibit great beauty, is the prevailing rock in the Vosges mountains. In the central group of Limousin, Auvergne, &c., gneiss, granites, and micaceous schists are abundant, but differ greatly in their characters from those of the surrounding mountain chains. The Puy de Dôme and some other adjacent mountains have a base of trachite, and in the Vivarais (Ardèche), especially, groups of gigantic basaltic columns are frequently met with in some places alternating with calcareous strata containing fresh-water shells. These rocks, together with the traces of extinct craters, the existence of lava streams, and other volcanic products, clearly point to a time of volcanic activity in this region, which has probably had place at no very remote period in the history of our planet. It may here be mentioned that traces of volcanic action have also been met with on the banks of the Rhine, in the Vosges, and in the dép. Var.

The interval between the primitive formations of the centre and circumference of France is almost entirely occupied by secondary formations. These are nearly every where calcareous or marly, generally compact, and often contain a vast number of shells, madrepores, and other organic remains. They compose many long hill-ranges, of no great height, but frequently steep and bare, or covered only by a thin vegetable soil. All Lorraine, and a great part of Franche-Comté and Burgundy consist of these formations. It is on this kind of land that the growths yielding the finest Burgundy wines are raised in the Côte d'Or. The secondary formations extend through Dauphiny, and on the left bank of the Rhone as far as the Mediterranean, through Languedoc with the Cevennes quite to the Pyrenees; and surrounding the Paris basin, they reach the sea both on the N. and W. coast.

The tertiary deposits of France are highly interesting: they are mostly calcareous, enclosing great quantities of

* According to Bruguière (*Orographie de l'Europe*). The *Encyc. des Gens du Monde* gives to the Plomb-de-Cantal an elevation of 6,338 ft., and makes the Pic-de-Sancy 6,187 ft., and Mezenc 4,820 ft. high.

shells and the remains of fossil mammalia of large size. The most remarkable of the tertiary formations is what is called the "Paris Basin," which occupies a somewhat circular area nearly bounded by a line passing through Blois, Orleans, Montargis, Provins, Epernay, Laon, Beauvais, Pontoise, and Chartres. A still larger tertiary district is found at the foot of the Pyrenees, including almost all the valleys of the Adour and Garonne, the déps. Landes, Gironde, &c. There are others in the valleys of the Loire, Rhine, Allier, &c. The most extensive alluvial district is that around the mouth of the Rhone.

The soil of France is, speaking generally, very superior. No doubt she has large tracts of mountainous, heathy, and unproductive land; but her productive soil bears, notwithstanding, a larger proportion to the entire extent of the country than in most other European states. According to the official returns, the total surface of France, including Corsica, was, in 1837, distributed as follows:—

Surface.	Hectares.	Surface.	Hectares.
Mountainous	4,268,750	Stony -	6,612,348
Heath land -	5,676,088	Sandy -	5,921,377
Rich soil -	7,276,368	Clayey -	2,232,885
Calcareous -	9,788,197	Marshy -	281,454
Gravelly -	3,417,893	Various -	7,290,240
Total - 52,763,600 hectares, or 203,736 sq. m.			

The greatest extent of mountainous surface is found in the deps. of the Alps and Pyrenees, and those of Ariège, Côte d'Or, Drôme, Doubs, Haute Loire, and Haute Marne; heath land prevails most in Basses Alpes, Landes, Gironde, Finisterre, and Herault; calcareous chiefly in Oise, Basses Alpes, Dordogne, Marne, and Vienne; sandy soils in Cher, Haute Loire, Loiret, and Puy de Dôme; and rich lands in Gers, Aisne, Eure-et-Loire, Eure, Marne, Nord, Tarn, and Yonne. France has considerable mineral wealth. The metal most abundant is iron; in 1837 it was obtained in 64 of the 86 deps. Those in which it is most plentifully produced, are Haute-Marne, Haute Saone, Nièvre, Côte d'Or, Dordogne, Orne, Meuse, Moselle, Ardennes, Isère, Cher, Aude, Pyrénées Orientales, Ariège, and Haute Vienne. Two gold mines were formerly wrought, one in the dép. Bas Rhin, and the other in Isère, but both have long been abandoned. There are also two silver mines, one in each of the above deps., but only that of Allemonte (Isère) is at present wrought. Silver is, however, frequently found in the lead mines, which are chiefly abundant in Finisterre, and the Rhenish, Alpine, and some of the S. deps. Copper, mercury, zinc, tin, antimony, and manganese, both in large quantities, arsenic, bismuth, cobalt, chrome, &c., are met with; and amongst the rarer metals molybdenum and tungsten, *titanium* in Haute Vienne, and *uranium* near Autun. Coal is very widely diffused. The principal coal-field is in the dép. du Nord, where it forms part of a coal-district 50 leagues in length by 2 broad, extending into Rhenish Prussia. Others exist in the deps. on the Upper Loire, in Aveyron, &c.; coal mines are particularly numerous around St. Etienne. The salt beds discovered about 20 years since in Lorraine, are supposed to extend beneath a surface of 30 square leagues, and will fully supply France for ages. Turf in the N., asphaltum in the E. and elsewhere, naphtha and sulphur in the S., vitriol, alum, nitre, plaster of Paris, porcelain and other clays, graphite, asbestos, jet, and some gems, lithographic, mill, and building stone, excellent marble, slate, granite, &c., are amongst the valuable mineral products. Mining industry will be treated of hereafter.

There are no fewer than 700 (or, according to Hugo, upwards of 1,000) mineral springs, of a medicinal character, though only about 90 of these are frequented by visiters, of whom there are perhaps in all about 30,000 yearly. The principal are the warm sulphureous springs of Barèges, Cauterets, Bagnères-de-Bigorre, and de Luchon, in the Pyrenees; the saline springs of Aix, the chalybeates of Bourbon l'Archambault (Vosges), and Plombières; the cold springs of Enghien, &c.

The *climate* of France is not excelled by that of any other part of Europe. The air is generally pure, and the winters mild; though the differences of latitude, elevation, soil, exposure, &c. occasion, in this respect, very material differences. Generally, France may be divided into 4 regions. The 1st, or most S.—the region of the olive—is bounded N. and W. by a line passing diagonally from Bagnères-de-Luchon in the Pyrenees, to Die in Drôme. The 2d, or region through which the cultivation of maize extends, stretches as far N. as a line drawn from the mouth of the Gironde to the N. extremity of Alsace. The 3d region, which terminates together with the culture of the vine, has, for its N. limit, a line extending from the mouth of the Loire to Mezières in Ardennes. The 4th, or N. zone, comprises the rest of the country. The mean annual temperature of different parts of France has been estimated as follows, by Humboldt; at Toulon 62° (Fahr.); at Marseilles 59·5°, at Bordeaux 56°, at Nantes 55·2°, at Paris 51·2°, and at Dunkirk 50·5°. More rain appears to fall during the year on the S.E. than on the N.W. side of the great watershed, the average being, in Isère 32 inches, in Haut Rhin from 28 to 32 in., at Lyons 29 in., and at Montpelier 28 in.; while at Paris the fall is only 19 in., in Orne 20 in., and in Ille-et-Vilaine 21 in. But notwithstanding this result, the sky is generally bright, and the atmosphere clear in the S.E., and there are at least one-third fewer rainy days than in the N.W., where the atmosphere is almost constantly charged with moisture brought by the W. winds which commonly prevail, and the weather is more or less cold for half the year. The centre of the country enjoys a happy medium of temperature and climate; in the S. the summers are long, dry, and hot. The departments around the Gulph of Lyons are subject to a violent N. wind called, in Provencal, the *bise*, the *circius* of ancient writers. According to Mr. Inglis, "this wind is the curse of all these provs., and it is scarcely possible, in travelling through this country, to meet with a greater misfortune than a *bise* wind, especially if the word 'meet' be interpreted literally. . . . Its effect upon the frame is singularly disagreeable; it parches the mouth and throat, creates a feeling of suffocation, and seems to dry up the whole juices of the body." (*Inglis's Switzerland, &c.* p. 108.; *Aperçu Statistique, &c.*)

The *vegetable products* of France are said by Hugo to comprise upwards of 830 *genera*, and 6,000 species. All these, however, are not indigenous, and many new plants have been introduced within the last two centuries. The most richly wooded parts are the mountainous districts, particularly the Vosges, the plateaux of Langres and Orleans, the Cevennes, and the mountains of Auvergne and Limousin. The Alps and Pyrenees, Provence, the S. part of Languedoc, and the W. of France, are but indifferently wooded. The principal forest trees are the oak, elm, beech, maple, ash, walnut, chestnut, birch, poplar, larch, pine, fir, box, cornel, &c. In the Vosges and Jura mountains, Brittany, and the *Landes*, there are extensive forests of fir; the chestnut woods are very fine in Haute Loire. The olive, orange, lemon, pistachio, and carob grow wild in the S., but there only; and the fruits of all are inferior to those of warmer climates. The caper (*Capparis spinosa*), diffused over Provence, furnishes a well-known article of export. Cherries, apples, and several other fruits grow wild: apples and pears are largely cultivated in the N. departments, and prunes in the centre of France. The culture of these and other fruits will be adverted to in a subsequent section.

Mr. Inglis, who travelled through many countries of Europe *on foot*, has the following remarks on the scenery of France:—"All panegyric upon the loveliness and laughing fertility of France is rhodomontade. There is more of the beautiful and the picturesque in many a single county of England, or even of Scotland, than in all the scattered beauties of France, were they concentrated within a ring-fence; excepting always the Pyrenees, which I cannot help looking upon as a kind of separate territory—the mere boundary between France and Spain; but at all events the Pyrenees must be excepted. I have travelled through almost every part of France; and truly, I have found its beauties thinly sown. If the banks of some of its rivers be excepted—the Seine, the Loire, the Rhone, and the Garonne,—some parts of Normandy, and the departments of the Pyrenees, France is an unromantic, uninteresting, unlovely land. And even in these favoured parts, such as the vaunted Orléannois, where shall we find the green meadows that lie along the banks of our Thames, or Avon, or Severn; or upon which of them shall we pause to admire those romantic views—that charming variety of rock, wood, and mountain—that characterise the banks of the Tamar, the Wye, the Derwent, the Swale, the Wharff, or the Dove? These are nowhere to be found. . . . I pity the man who crosses France in any direction. Thousands know how *ennuyant* is the journey from Calais to Paris; but they who never travel farther, suppose that lovely France, panegyrised by so many, lies beyond. No such thing. Let them continue their journey by whichever road they please, and they will find but little improvement. * * * Châteaux also we have in these provinces (those of the S.), but oh! how different from the châteaux of which we read in the romance writers, and which never existed but in their imaginations! The châteaux are for the most part *boxes* upon a large scale; staring houses with wings, and a parapet wall in front, covered with vases of flowers. In short, we find the whole a delusion; and our minds revert to the green acclivities of our own hills, our oak forests, our lakes and rivers, and the beauty and fertility that, along with the picturesque, mingle in an English landscape." But if the indiscriminating panegyrists of France have gone too far on the one hand, we suspect that Mr. Inglis has as much overshot the mark on the

other. Mr. Maclaren, than whom there can be no better authority, says that from Châlons-sur-Marne to Avignon the Rhone flows through one of the most beautiful, picturesque, and delightful regions in the world. And there are many other districts in France the scenery of which will bear a comparison with that of any other country.

Animals. — The bear, wolf, and wild boar are the only formidable wild animals now inhabiting France, and the numbers of these have been greatly thinned by the increase of pop. and of civilisation. The black bear (*Ursus Pyrenaicus*) is confined to the higher ranges of the Alps and Pyrenees, where the isard, chamois, and wild goat are also found. Notwithstanding an active war of extermination carried on against the wolves, those animals are still very numerous in some departments, as in Morbihan, Sarthe, Vendée, Landes, and the central mountainous departments. In the Cevennes, the lynx is sometimes found, though rarely. The wild boar, roebuck, and fox abound in all well-wooded parts. The red and fallow deer, formerly so plentiful in the royal parks, have become rare; hares and rabbits are extremely abundant. Several kinds of squirrels, the polecat, weasel, otter, marten, hedgehog, and the other small wild animals common throughout Europe, are as numerous in France as elsewhere; in addition to which, the desman (*Mus moschiferus*), an aquatic quadruped, inhabits the neighbourhood of Tarbes, as some beavers do the islands at the mouth of the Rhone. Seals, dolphins, and sometimes whales, are met with on the coasts.

Birds are very numerous. They include two kinds of eagles and a species of vulture. Several birds, not elsewhere met with, are found on the shores of the Mediterranean, as the flamingo, roller, wasp-eater, beccafica, ortolan, &c. Bustards, large and small, in-

Table showing the Departments into which France is divided; their Population in 1846, with their Subdivisions; the Number of Properties in each in 1835; the Amount of Taxes paid in each in 1844, &c.

Departments.	Area in Hectares.	Population in 1846.	Arrondissements.	Cantons.	Communes.	Properties in 1835.	Rev. of each Dep. in 1844, in fr.	Capitals of Departments, and Pop. of ditto in 1842, including Communes.	
1. Ain - - -	584,822	367,362	5	35	442	142,176	7,650,772	Bourg - -	9,039
2. Aisne - -	742,457	557,122	5	37	840	209,256	18,825,191	Laon - -	7,700
3. Allier - -	580,997	329,540	4	26	320	61,886	7,267,047	Moulins -	13,854
4. Alpes (Basses) -	729,598	156,675	5	30	256	52,437	3,237,103	Digne - -	3,992
5. Alpes (Hautes) -	545,293	133,100	3	24	189	39,979	2,505,137	Gap - -	7,764
6. Ardèche - -	548,423	379,614	3	31	331	89,808	6,056,977	Privas - -	4,417
7. Ardennes - -	506,835	326,823	5	31	479	122,583	11,439,917	Mézières -	3,707
8. Ariége - -	568,964	270,535	3	20	336	83,149	3,649,447	Foix - -	4,714
9. Aube - -	605,025	261,881	5	26	447	154,338	8,427,286	Troyes - -	24,463
10. Aude - -	631,683	289,661	4	31	433	87,819	10,093,130	Carcassone -	17,779
11. Aveyron - -	882,171	389,121	5	42	259	116,012	6,781,039	Rodez - -	8,176
12. Bouches-du-Rhone -	506,817	413,918	3	27	106	90,635	59,104,275	Marseilles -	147,191
13. Calvados - -	557,663	498,385	6	37	796	168,799	23,818,813	Caen - -	37,836
14. Cantal - -	512,037	260,479	4	23	260	58,821	4,977,981	Aurillac -	9,981
15. Charente - -	588,243	379,031	5	29	453	155,539	8,141,930	Augoulême -	16,533
16. Charente Inférieure -	608,050	468,103	6	39	480	230,942	16,293,417	La Rochelle -	13,882
17. Cher - - -	713,317	291,540	3	29	293	80,200	7,389,753	Bourges -	20,447
18. Corrèze - -	575,600	317,569	3	29	292	67,013	4,801,028	Tulle - -	9,669
19. Corse - -	874,741	230,271	5	61	355	58,731	2,065,009	Ajaccio -	9,834
20. Côte d'Or - -	871,087	396,524	4	36	726	157,860	14,621,174	Dijon - -	26,184
21. Côtes-du-Nord -	744,074	628,526	5	48	376	159,716	11,195,321	Saint Brieux -	11,266
22. Creuse - -	532,234	285,680	4	25	266	69,618	4,210,376	Guéret - -	4,332
23. Dordogne - -	911,406	503,557	5	47	583	144,282	9,756,389	Périgeux -	10,596
24. Doubs - -	547,357	292,347	4	27	640	96,078	9,899,915	Besançon -	24,965
25. Drôme - -	656,998	320,075	4	28	360	95,559	7,706,042	Valence -	11,076
26. Eure - - -	581,102	423,247	5	36	791	181,517	16,654,513	Evreux - -	10,263
27. Eure-et-Loire -	602,752	292,337	4	24	435	140,901	11,188,250	Chartres -	14,753
28. Finisterre - -	693,384	612,151	5	43	282	84,596	13,715,379	Quimper -	9,058
29. Gard - -	592,725	400,381	4	38	345	114,393	13,351,414	Nismes - -	41,180
30. Garonne (Haute) -	671,071	481,938	4	39	593	132,236	16,388,614	Toulouse -	76,965
31. Gers - - -	615,186	311,885	5	29	470	104,479	6,552,552	Auch - -	9,099
32. Gironde - -	1,024,927	602,444	6	48	544	178,272	36,526,888	Bordeaux -	99,512
33. Herault - -	623,899	386,020	4	36	320	115,048	17,020,996	Montpelier -	35,628
34. Ille-et-Vilaine -	635,699	562,958	6	43	347	143,550	13,822,062	Rennes - -	32,407
35. Indre - -	701,661	263,977	4	23	248	83,276	5,978,831	Châteauroux -	13,019
36. Indre-et-Loire -	643,219	312,100	3	24	282	114,801	9,210,418	Tours - -	24,722
37. Isère - -	831,661	598,192	4	45	556	195,450	14,547,040	Grenoble -	25,526
38. Jura - -	503,304	316,150	4	32	580	122,241	10,166,679	Lons-le-Saulnier	7,923
39. Landes - -	909,289	298,220	3	28	339	40,446	4,319,037	Mont de-Marsan	4,169
40. Loire-et-Cher -	639,666	256,833	3	24	296	95,051	7,282,657	Blois - -	14,573
41. Loire - -	462,236	453,786	3	28	315	94,732	9,935,807	Montbrison -	5,762
42. Loire (Haute) -	495,784	307,161	3	28	265	93,858	4,985,459	Le Puy - -	13,594
43. Loire Inférieure -	609,708	517,265	5	45	206	128,089	26,971,970	Nantes - -	76,870
44. Loiret - -	705,138	331,623	4	31	348	118,143	15,629,034	Orleans - -	39,023
45. Lot - - -	521,114	294,566	3	29	307	111,948	5,409,014	Cahors - -	11,432
46. Lot-et-Garonne -	479,657	346,260	4	35	312	122,558	9,182,227	Agen - -	14,161
47. Lozère - -	509,478	143,331	3	24	193	43,847	2,508,860	Mende - -	5,126
48. Maine-et-Loire -	723,008	504,963	5	34	376	140,411	13,183,971	Angers - -	36,531
49. Manche - -	602,981	604,024	6	48	640	192,038	17,922,162	Saint Lô -	8,312
50. Marne - -	806,789	367,309	5	32	684	179,318	14,403,023	Châlons - -	13,163
51. Marne (Haute) -	622,899	262,079	3	28	550	124,714	7,097,598	Chaumont -	6,037
52. Mayenne - -	518,127	368,439	3	27	275	86,503	7,888,863	Laval - -	16,028
53. Meurthe - -	557,274	445,991	5	29	714	171,682	20,116,950	Nancy - -	35,901
54. Meuse - -	604,634	325,710	4	28	588	157,180	10,412,024	Bar-le-Duc -	12,230
55. Morbihan - -	712,587	472,773	4	37	232	96,602	9,685,127	Vannes - -	10,732
56. Moselle - -	672,143	448,087	4	27	612	153,968	16,978,211	Metz - -	39,767
57. Nièvre - -	662,106	322,262	4	25	616	83,861	8,420,265	Nevers - -	13,995
58. Nord - -	561,206	1,132,980	7	60	661	221,552	59,368,394	Lille - -	63,063
59. Oise - - -	589,821	406,028	4	35	699	211,149	16,114,450	Beauvais -	12,221
60. Orne - -	561,053	442,107	4	36	513	147,135	12,128,686	Alençon -	13,104
61. Pas-de-Calais -	669,924	695,756	6	43	903	232,002	25,894,757	Arras - -	20,451
62. Puy-de-Dôme -	809,933	601,594	5	50	445	225,172	11,519,780	Clermont-Ferrand	27,448
63. Pyrénées (Basses) -	763,990	457,832	5	40	630	94,843	11,675,140	Pau - -	12,434
64. Pyrénées (Hautes) -	463,000	251,265	3	26	489	78,713	3,873,563	Tarbes - -	11,065
65. Pyrénées (Orientales) -	405,052	180,794	3	17	227	54,906	4,047,929	Perpignan -	18,193
66. Rhin (Bas) - -	417,500	580,373	4	33	543	231,956	18,911,388	Strasbourg -	61,150
67. Rhin (Haut) - -	384,973	487,208	3	29	490	174,015	13,664,588	Colmar - -	18,619
68. Rhône - -	279,922	545,635	2	25	265	81,044	30,409,377	Lyons - -	143,977
69. Saône (Haut) - -	519,233	347,096	3	28	581	158,724	10,243,397	Vesoul - -	5,930
70. Saône-et-Loire -	857,098	565,019	5	48	593	129,312	14,398,536	Mâcon - -	11,293
71. Sarthe - -	639,553	474,876	4	33	392	124,521	11,812,262	Lemans - -	22,393
72. Seine - -	47,298	1,364,467	3	20	81	66,897	149,076,612	Paris - -	875,495
73. Seine-Inférieure -	595,439	340,212	5	50	759	134,071	69,779,571	Rouen - -	90,380
74. Seine-et-Marne -	[illegible]	474,965	5	29	539	172,606	15,309,584	Melun - -	6,790
75. Seine-et-Oise - -	549,236	757,990	6	36	684	217,344	22,814,841	Versailles -	29,641
76. Sèvres (Dieux) -	585,273	320,685	4	31	355	127,912	6,585,289	Niort - -	17,056
77. Somme - -	604,466	570,529	5	41	832	248,927	21,229,273	Amiens - -	44,400
78. Tarn - -	[illegible]	360,679	4	35	319	94,479	7,742,288	Albi - -	11,643
79. Tarn-et-Garonne -	[illegible]	242,498	3	24	192	86,711	6,457,207	Montauban -	21,752
80. Var - - -	[illegible]	349,859	4	35	203	109,560	12,732,561	Draguignan -	7,942
81. Vaucluse - -	[illegible]	250,154	4	22	148	81,240	7,054,171	Avignon - -	32,109
82. Vendée - -	[illegible]	376,184	3	30	294	124,113	8,220,678	Bourbon Vendée -	5,164
83. Vienne - -	[illegible]	308,391	5	31	299	120,518	7,127,269	Poitiers - -	22,376
84. Vienne (Haute) -	[illegible]	314,739	4	27	199	59,733	6,237,237	Limoges -	[illegible]
85. Vosges - -	498,917	427,994	5	30	548	148,699	10,229,902	Epinal - -	10,018
86. Yonne - -	720,372	374,856	5	37	482	190,786	11,382,666	Auxerre -	11,168
Totals -	52,780,713	35,400,486	363	2,846	37,040	10,893,528	1,273,714,850		2,089,174

habit the deps. of the N.W. and centre. The cock-of-the-wood, and red and grey partridges, are the principal winged game. Water-fowl are particularly numerous in Vendée and Charente-Inférieure: in cold winters the wild swan visits the country.

Reptiles are few; there are but two venomous serpents. A kind of gecko inhabits the S. shores; the salamander, large green lizard, mud-tortoise, and *Bufo obstetricans*, are the other most remarkable animals of this class. In some deps. frogs are reared in large numbers as articles of food. The fisheries of turbot, sole, ray, mackerel, herring, pilchard, mullet, &c. in the N. and W. seas, and of the tunny and anchovy in the Mediterranean, furnish employment to numerous families. Oysters are very abundant on the N. and W. coasts, as well as mussels and lobsters. Leeches are exported in large quantities. There are two species of scorpion. Cantharides and the cochineal insect are met with in the S. (*Hugo, France Pittoresque; Aperçu Statistique; Dict. Géog.*)

Population. — The information with respect to the pop. of France previously to 1784 is exceedingly imperfect. But according to the most authoritative statements, it amounted, in 1700, to 19,669,000, and in 1762 to 21,769,000, including Corsica. In 1784, it was estimated by Necker at 24,800,000.

The official returns give the following numbers for the undermentioned years: —

1801 - -	27,349,003	1836 - -	33,540,910
1806 - -	29,107,425	1842 - -	34,213,929
1821 - -	30,461,875	1846 - -	35,400,486
1831 - -	32,569,223		

It appears, therefore, supposing the statement for 1801 to be correct, that the increase of population, in the 45 years ending with 1846, had been 8,051,483, being at the rate of about 177,000 a year. The proportion of legitimate to illegitimate births is nearly as 13 to 1. We subjoin a statement of the

Mean Annual Movement of the Population of France from 1817 to 1843, and in 1845.

Periods.	Births.				Total of Births.	Deaths.		Total of Deaths.	Increase of Population.	Marriages.
	Legitimate.		Natural.							
	Males.	Females.	Males.	Females.		Males.	Females.			
1817 to 1820 - -	458,414	429,515	32,420	30,859	951,208	386,827	377,896	764,723	186,485	210,552
1821 to 1825 - -	465,758	436,412	35,549	33,944	971,663	386,167	379,779	765,946	205,717	241,317
1826 to 1830 - -	466,187	439,162	35,918	34,591	976,457	411,069	404,373	815,442	161,015	233,592
1831 to 1835 - -	466,181	437,085	36,665	35,109	975,040	431,553	425,104	856,657	118,384	259,754
1836 to 1840 - -	457,337	430,801	36,001	34,803	958,941	411,981	406,756	818,737	140,203	272,452
1841 to 1843 - -	469,397	441,472	35,495	34,613	980,997	412,853	404,597	817,450	163,528	283,233
1845 - - -	922,803		69,230		992,033			754,701	237,332	281,266

If the return for 1845 be accurate, it shows a great decrease in the mortality for that year. In 1846 and 1847, however, owing to the scarcity and high price of food, occasioned by the failure of the potato, and the deficiency in the other crops, it would, there is little doubt, be very materially increased; and that also will, we apprehend, be found to be the case with the present year (1848). Whatever may be the ultimate influence of the late revolution, it has, in the first instance, seriously diminished the employment and means of subsistence of the work-people.

At an average the births are to the population of France nearly as 1 to 33·37, the deaths as 1 to 40, and the marriages as 1 to 128. There are in France 3·94, or almost 4 births to a marriage, being, despite the statements to the contrary, very near the proportion that obtains in England. In 1842, the subdivisions of the pop. were as follow: —

Children and unmarried persons - -	18,915,065
Married - - - - - - -	12,940,961
Widowed - - - - - - -	2,357,903
Total - -	34,213,929

There are about 1800 suicides annually committed in France, which gives one for about every 18,700 inhab. They are more frequent in the N. than in the S., and especially in Paris, where they often originate in the despair resulting from losses at gambling. France has but few very large towns, but it has a great number with a pop. varying from 5000 to 30,000. Of the total pop. 4-5ths are estimated to reside in the rural districts, and but 1-5th part in towns of more than 1500 inhabit.

Distribution of Landed Property — Agriculture. — In France, previously to the revolution, the property of persons dying intestate was subject, in different parts of the kingdom, to different regulations; but every where estates could be disposed of by will, and settled by entail. At the revolution a nearly total change was made in these respects; the same regulations for the distribution of property were established in all parts of the kingdom; and the power of disposing of property by will was confined within the narrowest limits. Thus it was enacted, 1. That the property of persons dying intestate shall be equally divided among their children, without respect to sex or seniority; and, 2. That when a person possessed of property wishes to make a will, he shall be permitted, provided he have only one child, to dispose of a moiety of his property, the child inheriting the other moiety as matter of right; if the testator have two children, he is allowed to dispose of a third part of his property; and if four children, of a fourth: and so on, the rest being equally divided among the children.

This law was intended to subvert the foundations of that old feudal aristocracy, whose usurpations and oppressive privileges had entailed much misery on the country; and there can be no doubt that it was well fitted to accomplish this object. No doubt, however, this might have been attained otherwise, and without occasioning the pernicious results inseparable from this law. By interfering to so extreme an extent in the disposal of a man's property, it lessens the motives to accumulation; while, by rendering the children in great measure independent, it weakens the parental authority, and has the same injurious operation in reference to an entire family, that the Scotch law of entail has in reference to a single child. But its worst effect consists in its inevitable tendency to reduce landed property into minute portions, incapable of being cultivated in the best manner, and in the consequent stimulus it gives to the increase of a pauper agricultural population.

That the condition of the agriculturists of France has been materially improved since the revolution, is true. But it is not true that this improvement has been in any respect owing to the law of equal inheritance. It has taken place, not in consequence, but in despite, of that law. The abolition of the game laws and feudal privileges of the nobility and clergy, and of the gabelle, corvées, and other oppressive and partial burdens imposts, was of the greatest service to proprietors and farmers; and, in addition to these advantages, a large extent of common lands was divided, and a great part of the vast possessions belonging to the church and to the emigrants came into their hands at extremely low prices, so that while small properties were generally augmented, farmers were, at the same time, in very many instances, changed into landlords. No wonder, therefore, that fresh energy was given to agricultural pursuits, and that a great improvement has been effected.

Still, however, it is certain that the rapid division of landed property, and the continually increasing excess of the agricultural population, caused by the existing law of succession, have gone far to neutralise the effects of these advantageous circumstances, and form at this moment the prominent evils in the social condition of the people of France. "The population of that country," says Mr. Birkbeck, "seems to be arranged thus: a town depends for subsistence on the lands immediately around it. The cultivators individually have not much to spare; because, as their husbandry is a sort of gardening, it requires a large country population, and has, in proportion, less superfluity of produce. Thus is formed a numerous but poor country population. The cultivator receives payment for his surplus produce in sous, and he expends only sous. The tradesman is on a par with the farmer; as they receive so they expend; and thus 50,000 persons may inhabit a district, with a town of 10,000 inhabitants in the centre of it, bartering the superfluity of the country for the arts and manufactures of the town. Poor from generation to generation, and growing continually poorer as they increase in numbers; in the country by the division and subdivision of property, in the town by the division and subdivision of trades and professions; such a people, instead of proceeding from the necessaries to the comforts of life, and then to the luxuries, as is the order of things in England, are rather retrograde than progressive. There is no advancement in French society, no improvement, nor hope of it." (*Tour in France*, 4th ed. p. 34.)

In his *Tour in France*, Mr. J. P. Cobbett makes the following observations with respect to the influence of

the law of equal succession in Normandy: — "I hear, on all sides here in Normandy, great lamentations on account of the effects of this revolutionary law. They tell me, that it has dispersed thousands upon thousands of families who had been on the same spot for centuries; that it is daily operating in the same way; that it has, in a great degree, changed the state of the farm buildings; that it has caused the land to be worse cultivated; that it has caused great havoc amongst timber trees; and there are persons who do not scruple to assert, that society in France will become degraded in the extreme, unless the law be changed in this respect." (P. 169.)

The best French writers concur in the view now given of the operation of this law, and its operation in occasioning the endless division and subdivision of the land. "*dont l'action funeste dévore le sol de nos compagnes avec une affligeante rapidité.*" But the official returns published by the French government supply the best illustration of the extreme subdivision of landed property in France. In 1815, for example, there were 10,083,751 properties, great and small, charged separately to the land tax, or *contribution foncière*. In 1842, this number had increased to 11,511,841, being an increase of no fewer than 1,428,090 properties in the interval! This statement does not, however, show the number of proprietors, as many of the latter hold properties in different communes, and pay taxes in each; and as it further includes all house properties separately assessed to the *contribution foncière*. But, after allowing for these circumstances, the best authorities are of opinion that there are at least from 4,000,000 to 4,500,000 landed proprietors in France. Hence, taking the latter at 4,250,000, it follows, from the greater number of these being heads of families, consisting of about 5 persons each, that the proprietary class in France must comprise from 17,000,000 to 18,000,000 individuals! And exclusive of this class, the persons occupying lands as tenants, and the class of agricultural labourers, are supposed to amount together to about a sixth part of the population of the country, or to between 5,000,000 and 6,000,000 individuals. Hence, of the entire population of France, amounting to 35,400,000, about a half belongs to the class of proprietors, and about two thirds are either engaged in the business of agriculture, or depend directly on it for support. In no other European country is there such a vast body of proprietors; and, except where agriculture is the only employment, there is none where so large a portion of the population is immediately dependent on the soil.

People in England being accustomed to associate ideas of great wealth and respectability with the possession of landed property, are apt to conclude that a country where almost every second person you meet is a proprietor, must be in a peculiarly prosperous condition. But the reverse is the fact. Many of the so called proprietors do not possess above one or two acres, and some not so much; and in most departments the majority of properties vary from 5 to 10, 30 and 40 acres. The single department of the Bouches du Rhone contains three times as many proprietors as are to be found in Scotland.

The *contribution foncière*, though there are great inequalities in its pressure, amounts, at an average, to about a fifth or a sixth part of the rent of the land; and the official returns show that it was assessed in 1835 and 1842 as follows, viz.: —

	1835.	1842.
Properties assessed at less than 5 fr. a year	5,205,411	5,440,580
— from 5 fr. to 10 fr. —	1,751,994	1,818,474
— 10 — 20 —	1,514,251	1,614,897
— 20 — 30 —	739,206	791,711
— 30 — 50 —	684,165	744,911
— 50 — 100 —	553,230	607,956
— 100 — 500 —	398,714	440,104
— 500 — 1000 —	33,196	36,862
— 1000 and upwards —	13,361	16,346
	10,893,528	11,511,841

It appears from this table that of the whole number of properties in France, nearly a half are assessed at less than 5 fr. a year; so that, taking the assessment, not at one-fifth or one-sixth, but only at one tenth part of the rent, it follows that about half the properties in France are not worth more than 50 fr., or 40*s*. a year! And as such house properties as are separately assessed usually exceed this amount, the necessary inference is, that the greater portion of these small properties consist of parcels of land, with or without cottages. It further appears that of the whole properties of France in 1842, amounting to 11,511,841, no fewer than 11,018,532 were assessed at less than 100 fr. a year; whence, taking as above the assessment at only a tenth part of the rent, it follows that 11 out of every 11½ properties are worth less than 40*l*. a year! And it also appears that there are only 53,208 properties in France assessed at upwards of 500 fr., or which are worth more than 200*l*. a year!

These returns are decisive in regard to the extreme subdivision of property in France; and the statements of those who are most attached to the existing law of succession, and least disposed to exaggerate its influence in parcelling the soil into minute portions, conclusively show that such has been its effect. Of the parties now alluded to, M. Rossi is one of the ablest; and in the 2d ed. of his *Cours d'Economie Politique*, published in 1843, he gives the following details with respect to the extent to which subdivision has been carried: —

"We may, without the risk of falling into any considerable error, divide the proprietors of our soil into three classes, viz.: —

"1st. The small proprietors, of whom there are about 3,500,000, possess half the productive soil of the country, each proprietor having, at an average, about 6 hectares, or 14·827 (nearly 15) acres.

"2d. The middling class of proprietors, which may be estimated at about 350,000, possess about half as much land as the smaller proprietors, that is, about one-fourth part of the kingdom; and have, at an average, 30 hectares, or 74·134 acres each.

"3. The great proprietors, who may be estimated at about 90,000, divide among themselves the remaining fourth part of the land, and possess, at an average, 120 hectares, or 296½ acres each." *

Such, according to M. Rossi, is the distribution of property in France. He further affirms (*ubi suprà*) that it has no longer either large, or even medium, estates, *ni grande ni moyenne propriété*. But this is overstating the case; for of the 16,346 properties assessed at above 1000 fr. a year, some are extensive and valuable; though, when compared with the vast numbers of small and middle-sized properties, and with the extent of ground which they occupy, the large estates are so few and limited in their range, that they may safely be left out of view in most speculations having reference to the country generally.

M. Lullin de Chateauvieux, a well-informed agricultural and statistical writer, has given the following estimate of the distribution of the landed property of France†: —

Distribution of the Territorial Property belonging to Individuals. ‡

Description of Properties.	Minimum of Land Tax.	No. of Proprietors.		Average Extent of Properties.	Total Extent of Properties.	Aggregate Total.
	Fr.		Hect.	Acres.	Acres.	Acres.
Large Properties	1000	8,000	355	877·256	7,018,048	42,819,930
	500	15,000	180	444·806	6,672,090	
	500	67,000	84	207·576	13,907,552	
	200	110,000	56	138·384	15,222,240	
Middling Properties	125	220,000	35	86·490	19,027,800	35,633,880
	50	480,000	14	34·596	16,606,080	
Small Properties	25	- -	- -	- -	11,105,767	35,173,200
	0·05	3,900,000	3·65	9·018	24,067,433	
		4,800,000	- -	- -	- -	113,627,010

This estimate, which refers to a period a little antecedent to that of M. Rossi, differs but little from his. M. de Chateauvieux includes under the head of "large properties" 110,000, the average size of which is only 138⅓ acres! Nothing can evince more clearly than this classification the different sense attached to the epithet "large" as applied to properties in France and in England. Here no one would think of calling an estate of less than 2,500 or 3,000 acres a "large propoetry;" whereas in France a moderate sized farm of 138 acres goes by that name, and one of 34 or 35 acres is called a middle-sized property.

We should mistake, however, if we supposed that the subdivision of the land is truly represented by the number of properties separately assessed to the land-

* Vol. II. p. 70. We have turned the hectares into acres.

† We have substituted acres for hectares in the last three columns of the table; but that is the only change made in it.

‡ This excludes the land occupied by forests, &c., belonging to the state, and that occupied by roads, rivers, commons, and so forth.

tax; for it must be kept in mind that these properties are not always, nor perhaps most commonly, integral or united. Very many proprietors have parts of their lands in more than one arrondissement; and the divisions of properties situated in the same cantons and communes are often extremely numerous and perplexing. A property, for example, which has been divided between two or three heirs, may not, after its division, consist of only two or three distinct portions, but may, very probably, be distributed into six, eight, or a dozen such. This arises from the fact of the coheirs being all anxious, where the land is of various qualities, and devoted to different purposes, to have a share of each variety, that is, to have equal portions of rich land, meadow, woodland, vineyard, &c. The extent to which this sort of subdivision is sometimes carried would hardly be credited, except upon the highest authority. It appears, for example, from the returns under the *cadastre* (official survey) that the commune of Argenteuil, in the dep. of Seine and Oise, comprising 1,550 hectares (3,830¼ acres), is distributed into the extraordinary number of 36,883 separate parcels! This, we presume, may be taken as a specimen of what M. de Tocqueville calls "grinding the land into the impalpable powder of democracy."

It is, therefore, apparent that the law of compulsory division has inflicted on France a system equivalent to the *run-dale* and *run-rig* systems of England and Scotland, and the joint-tenancy system of Ireland. Under these systems the lands included in a farm are distributed as equally as possible, quantity and quality taken together, among a number of tenants, who sometimes cultivate their lots separately, and sometimes jointly, or partly in the one mode and partly in the other. But owing to the distribution of the land into so many detached parcels, each tenant having a portion of the different varieties of soil in the farm, and the number of divisions, there is a great waste both of land and labour, and an all but total impossibility of turning either to the best account, or of making any improvement. Hence, in this country, the abolition of the rundale mode of occupancy has always been looked upon as indispensable as a preliminary step to the introduction of any thing like an efficient plan of husbandry, and, except in some districts of the Highlands, it is now all but extinct in Great Britain; and vigorous efforts are also being made to effect its suppression in Ireland. But France cannot escape from its pestilent influence. It is entailed upon her by a fundamental law; and, though something might, perhaps, be done to mitigate its effect, by facilitating and encouraging the re-union of dispersed properties, there are no grounds for supposing that the nuisance will be materially abated till its source has been dried up.*

Such being the case, we need not be surprised to learn that though, speaking generally, the small proprietors are industrious and economical, they are, at the same time, miserably poor, and strongly attached to routine practices; and that even if they had a knowledge of improved processes, the want of capital would be an insuperable obstacle to their carrying them into practice. It is customary at this moment, in several of the southern departments, as it was 3000 years ago, to thrash corn by treading it with horses! And in some districts the ploughs now in use are said to be the same as those described by Virgil! (*Hugo, France Pittoresque, &c.*, art. *Corrèze, &c.*) Many of the small proprietors rarely taste butcher's meat; they are overwhelmed with debts; and are too happy when they find an opportunity of eking out their narrow means by working at day wages on the larger properties, if there be any such, in their vicinity. Such proprietors are not near so well off as common labourers in England.

In a tract by M. Lafitte, on a proposal for reducing the interest on the public debt, published a few years since, he observes:—"Si en effet le manufacturier des nos grandes villes est aussi avisé, aussi adroit que l'homme doit être aujourd'hui, notre agriculteur est aussi ignorant, aussi pauvre que dans les siècles de la féodalité; et nous avons l'indigente France du quatorzième siècle pour consommer les produits de l'ingénieuse et riche France du dixneuvième siècle. Une partie considérable de la population ne mange ni pain ni viande, ne se nourit que de quelques grossiers légumes, et se couvre à peine de quelques misérables haillons!" And such is necessarily the condition of the agricultural population of every country in which the land is parcelled out into minute portions, which neither furnish sufficient employment nor subsistence to their occupiers. The latter, cut off from every hope of rising in the world, sink into a state of stupid apathy and are destitute alike of capital, intelligence, and enterprise.

* For some statements, strikingly illustrative of the disastrous influence of this subdivision of the same properties, the reader is referred to the treatise of Mounier, *De l'Agriculture en France*, i. 175—183.

In some departments the process of division and subdivision has not been carried so far as in others; but generally if a property exceed 100 or 200 acres, and in many instances if it exceed 50, it is divided and a portion let to a tenant. Unhappily, too, the mode of letting land in France prevalent in most departments is exceedingly objectionable. Leases when granted are in general much too short; and in more than half the kingdom land is let on the *métayer* principle, the landlord usually furnishing besides the land the stock or cattle, and the seed for the first crop, and receiving as rent a certain proportion, as a third or a half (generally the latter) of the gross produce of the farm. This system is subversive alike of industry and enterprise; and wherever it prevails agriculture is not stationary merely, but is in the most wretched state. The following extract from an able article on the Agriculture of France, in the *Révue Trimestrielle* (No. 2. art. 1.), shows the extent and influence of this system.

"Quand les propriétaires ne cultivent pas eux-mêmes leurs terres, la mode de leur loyer est la circonstance la plus influente sur l'état de leur culture. Ce mode en France est généralement détestable. A l'exception de la Flandre, et de ce très-petit nombre de provinces où le système de la culture alterne est suivi depuis très-long-temps, la durée des baux est beaucoup trop courte, pour que le fermier ait le temps de recouvrer les dépensés que nécessite l'établissement d'une nouvelle méthode de culture, et pour retirer quelques advantages de ce changement. Enfin, dans une très-grande partie du royaume, dans toutes les provinces du centre, les fermiers sont à peine connus. Les terres sont cultivés par de malheureux *métayers*, travailleurs à moitié fruit, qui se chargent pour trois ans de tous les travaux de la culture, et qui doivent rendre au propriétaire la moitié de ses produits bruts. Le métayer apporte ses bras, son ignorance et son bon appétit; le propriétaire lui confie un sol épuisé, tout le mobilier indispensable à sa chétive exploitation, le grain nécessaire au premier ensemencement, et même celui qui doit le faire subsister lui et sa famille, jusqu'à la première récolt. Le métayer laboure, sème, moissonne, et vit là-dessus. Lui et les siens repus, le propriétaire a la reste. Quelquefois, entre le propriétaire et le métayer, qui est un pauvre paysan, il s'interpose sous le nom de fermier un troisième individu, le plus souvent un petit bourgeois de village, très-rusé, qui assure au premier sur le produit du travail du second un petit revenu fixe et indépendant de l'abondance et du prix des récoltes. Cet homme ne prend aucune part active aux travaux de la culture, mais il assiste à tous les dépouillemens de récolte que fait le métayer, il le suit à tous les marchés pour s'emparer de la moitié qui lui est due de tous les produits; son habileté consiste à prendre au-delà de cette moitié sur la part du métayer; comme il sait lire et écrire, et qu'ordinairement le métayer ne le sait pas, il a beaucoup d'avantage sur lui pour embrouiller les comptes, et finalement le voler. Sous ce maître toujours présent, la condition du métayer est encore bien plus misérable. Ce fermier qui a généralement quelques avances, paie la rente du propriétaire avec assez de régularité: il fait de petites speculations sur la vente de ses denrées, et quelquefois il s'enrichit. Cette combinaison est assez commode pour le proprétaire qu'elle décharge de toute surveillance, et auquel elle offre quelque garantie de paiement: mais elle est ruineuse pour la culture parce qu'elle maintient dans une extrême misère le métayer qui cultiverait moins mal s'il pouvait faire quelques profits et quelques épargnes dans les années d'abondance; elle l'empêche de s'élever jamais à la condition de fermier-cultivateur; elle fait passer dans la poche de la ruse la récompense du travail."

Wherever agriculture is good or improving in France, estates and farms are comparatively large, and the latter are uniformly let at a fixed money rent. Wherever, on the contrary, estates and farms are small, and wherever the latter are let on the *métayer* system, agriculture is either stationary or declining; and is said by Hugo and other writers to make *peu de progrès*, and to be *fort arriérée*.

We subjoin the following official statements with respect to the distribution of the soil of France; the produce of the crops, and their consumption; and the average produce per hectare in different years.

In 1834 the surface of France is reported to have been occupied as follows:—

	Hectares.		*Hectares.*
Arable lands -	25,559,151	Brought forward	41,611,031
Pasture lands -	4,834,621	Heaths and wastes	7,799,672
Vineyards -	2,134,822	Buildings - -	241,811
Forests - -	7,422,314	Water - -	669,425
Orchards and gardens - -	643,699	Roads and open spaces - -	1,225,014
Willow-beds, &c.	64,490	Otherwise occupied	1,221,632
Variously cultivated	951,934		
Carry forward -	41,611,031	Total -	52,768,618

Estimated Produce of the Crops in 1818 and 1835; and of the Consumption in 1835. (From the *Official Tables*, published in 1837.)

Produce (in Hectolitres).			Consumption and Excess of Produce in 1835 (in Hectolitres).					
Species of Grain.	1818.	1835.	By Man.	By Horses, Cattle, &c.	Required for Seed.	Breweries, Distilleries, &c.	Total Consumption.	Excess of Produce over Consumption.
Wheat - -	52,697,927	71,697,484	50,887,798	79,700	10,990,402	262,830	62,220,730	9,476,754
Maslin - -	10,438,583	12,281,020	8,854,570	97,622	1,794,820	19,235	10,766,247	1,514,773
Rye - -	24,734,120	32,996,950	23,969,084	475,097	5,484,862	134,772	30,063,815	2,933,135
Barley - -	13,186,458	18,184,316	8,778,102	3,528,676	2,787,562	2,260,109	17,354,449	829,867
Buckwheat - -	3,363,098	5,175,933	4,901,483	1,018,769	690,121	400	6,610,773	
Maize and Millet -	6,101,552	6,951,179	4,916,449	1,372,707	241,406	1,487	6,532,049	419,130
Oats - - -	29,771,130	49,460,057	1,888,164	32,476,172	6,696,902	114,668	41,175,906	8,284,151
Pease and Beans -	1,470,493	3,318,691	2,746,139	634,827	454,438	17,210	3,852,614	
Other small Grains -	1,749,587	4,099,564	336,012	2,501,435	593,858	72,864	3,504,169	595,395
	143,512,918	201,165,194	107,277,801	42,185,005	29,734,371	2,883,575	182,080,752	21,053,205
Potatoes - -	29,231,867	71,982,811						
Chestnuts - -	2,829,073	1,813,540						

Average Produce of Grain per Hectare in the under-mentioned years, throughout France in Hectolitres, Litres, and Centilitres.

Species of Grain.	1815.			1820.			1825.			1830.			1833.		
	h.	l.	c.	h.	l.	c.	h.	l.	c.	h.	l.	c.	h.	l.	c.
Wheat - -	8	59	40	9	46	83	12	57	38	10	53	17	13	43	14
Maslin - -	9	52	99	10	51	92	12	82	19	11	39	30	14	4	70
Rye - -	7	64	53	6	41	97	9	79	93	9	9[illegible]	88	12	50	40
Barley - -	12	11	55	11	29	58	11	77	1	15	36	24	13	98	59
Buckwheat -	8	11	87	12	0	98	9	79	35	11	32	73	7	38	48
Maize and Millet - -	10	39	85	9	94	48	11	52	91	12	61	40	11	71	76
Oats - - -	14	58	41	16	31	11	12	95	4	19	1	0	17	41	53
Pease and Beans	8	18	13	9	40	17	7	90	44	11	64	28	10	46	63
Other small Grains - -	9	79	15	10	67	18	10	50	34	14	41	95	14	36	82

These returns corroborate all that has been previously stated with respect to the backward state of agriculture in France. The results stated are more striking than even the foregoing statements could have made us anticipate. In 1835, for example, which was a most unusually productive year, the average produce of wheat in France is stated to have been 13·43 hectolitres, the hectare being equal to only about 15·3 bushels the acre! And in 1830, which was a fair average year, the produce per hectare is stated at 10·53 hectolitres, equal to 11·7 bushels per acre! But the average produce of the crops of wheat in England and Wales in good years, has been carefully estimated at 32 bushels an acre, and is certainly not under 30 bushels. And as large portions of France are very fertile, and her soil is, speaking generally, believed to be about equal to that of England, this extraordinary discrepancy between the produce of the two countries must be wholly, or almost wholly, a consequence of the superior agriculture of the one compared with that of the other. The truth is, that owing to the extreme sub-division of the land, labour can neither be advantageously nor economically employed in France: and how extravagant soever the statement may at first sight appear, it is notwithstanding a fact, that one acre of land, one man, and one horse, produce about as much corn and other agricultural produce in England, as three acres of land, three men, and three horses in France! We submit that this result is completely decisive as to the depressed state of agriculture in France, which is mainly to be ascribed to the existing law of succession, and to the *métayer* system of letting. And the extraordinary interest attached to the subject, and the fact that more than three-fourths of the population of France depend on agriculture for their support, will, we hope, apologise for the length to which we have extended these remarks.

The best wheat is said to be that of the S. and S. E. provs.; but Flanders, Picardy, Normandy, the district of Beauce in Eure-et-Loir, Berri, Touraine, and the vicinity of the Puy-de-Dôme, furnish the greater quantity. Rye, like wheat, is grown in almost every part of the country; but it is principally cultivated in the N. E., in Isère, and on the thin soils of Puy-de-Dôme, Creuse, Haute-Vienne, Allier, Loire, &c. The culture of maize, though it extends as far N. as the banks of the Loire, is most prevalent in the S. W., where the grain is of the best quality. Barley and oats are raised principally in the N., buckwheat on the worst arable lands of the centre and S. The potato is not yet an article of so much importance as in England or the Low Countries; but within the last twenty years its cultivation has increased very rapidly. It is mostly grown where corn is the least cultivated, as in Lozère, the Vosges, &c., and in the déps. Meurthe and Moselle in the N. E., Aube, Côte d'Or, and Eure-et-Loir in the centre, and Bouches-du-Rhone, Vaucluse, and Ariège in the S.

The culture of beet-root for sugar is extensively pursued in the neighbourhood of the capital, and the déps. of the N. and E., and parts of the centre. It is sometimes grown on the same land for several years in succession, though, most commonly, wheat is sown alternately with it every third year, when it yields as much as if the ground had been previously fallowed. The produce of beet varies from 12,000 kilog. per hectare to double that quantity; in the déps. du Nord and Pas-de-Calais, from 25,000 to 30,000 kilog. are reckoned an average crop.

This branch of industry began during the exclusion of colonial products in the reign of Napoleon, and received a severe check at the return of peace, by the admission of West Indian sugars at a reasonable duty. It is probable, indeed, that it would long since have been entirely extinguished, but for the additions made to the duties on colonial and foreign sugars in 1820 and 1822. After the last-mentioned epoch, however, the production of beet-root sugar began rapidly to increase; and such was its progress, that though, in 1828, its produce did not exceed 4,000,000 kilogs., it amounted, in 1838, to 39,199,408 kilogs.! But this extension of cultivation, instead of being an advantage, entailed a heavy loss on the public, inasmuch as the beet-root growers sold their sugar, which paid no duty, at the same rate that the colonists sold theirs, which paid a large revenue to the treasury! It was not possible that such a system could be permanent. And the well-founded complaints of the colonists of the injustice of which they were the victims, enforced by the rapid decline of the revenue derived from sugar, which, indeed, was threatened with total extinction, occasioned the imposition, in 1838, of a duty of 16 fr. 50 cents per 100 kilogs. (about 6*s.* 9*d.* a cwt.) on beet-root sugar, which, in 1840, was increased to 27 fr. 50 cents. (about 11*s.* a cwt.). But even this last increase left a differential duty (or bounty) of 20 fr. per 100 kilogs. in favour of beet-root sugar, as compared with colonial sugar; so that, while the beet-root cultivators affirmed they would be ruined, the colonists vehemently complained of the preference given to the latter. It was, indeed, known, from the facility with which the beet-root growers had previously contrived to evade the duty, that its increase would not be so injurious to them as was supposed; but the manufacture sustained notwithstanding a check, and sundry plantations were abandoned.

But farther and still more considerable changes have since been made in the conditions under which the culture of beet-root is carried on. In 1842, it was proposed, in order to get rid of the difficulties in which it had involved the country, to grub up the plantations, paying the planters 40,000,000 fr. (1,600,000*l.*) as an indemnity for their loss! And, harsh as it may appear, this proposal was, perhaps, the best that could have been made, inasmuch as it would have secured the fair collection of the sugar duties, and have terminated the matter at once on an equitable principle. It was not, however, adopted; but in the course of next session it was resolved annually to raise the duty on beet-root sugar by 5 fr. per 100 kilogs. till the duty on it should be equalised with the duty on colonial sugar. This system came into operation on the 1st of August 1844; and in August 1848, the nominal equalisation of the duties was effected. It was supposed that this measure, if fully carried out, would go far to annihilate the growth of beet-root sugar. This, however, has not been the case, partly because of the important improvements that have been made in the growth of beet-root and its manufacture into sugar, and partly and principally because the duty on it has not been, and, perhaps, could not be, fairly collected. Latterly, indeed, it has been to a great extent evaded; and the beet-root plantations are now more extensive and flourishing than ever. In 1847 the total produce of beet-root sugar was estimated at above 80,000,000 kilogs., of which 63,759,566 kilogs. (62,621 tons), were brought to the change. Hence, this branch of industry may now be considered as firmly established; and it is one of the few which, haivng originated in the continental system, have survived its overthrow. The

refuse of the root, after the sugar is extracted, is employed to feed cattle.

Kitchen vegetables are universally grown, and are of excellent quality. In the N. and E. the wild cabbage, rape, and poppy, and other oleaginous products are extensively cultivated; the former especially in the dép. du Nord, where oil is a principal article of trade. Chicory is also raised in this part of France; truffles are cultivated in several parts, but especially in Dordogne, where they enter into the composition of the celebrated *pâtés*.

Hemp and flax are grown in most deps.; but, along with hops, they are principally raised in the N. The manufacture of tobacco is a government monopoly; its culture is restricted to the déps. du Nord, Haut and Bas Rhin, and Lot-et-Garonne. A clamour has long been raised against this monopoly, but apparently without any good foundation; for, were the culture free, it would be impossible to assess the duty. The better way would be, to grub up the tobacco plantations, and to collect the revenue by a customs duty on foreign tobacco, as is done in England.

Madder is extensively grown in Vaucluse and some parts of Alsace, and is a prominent article of export. Woad, saffron, and some other dyes, castor oil, &c., are among the other kinds of produce.

Wines. — The growth of these forms a distinctive feature in French agriculture, and would become a vast source of national wealth, were it not for oppressive duties, commercial prohibitions, and other restrictive regulations which tend to check the growth of this as well as of many other branches of industry. The wines of France, while they possess body, strength, flavour, and aroma, are without a superabundance of either sugar or alcohol; and not only rival, but, generally speaking, surpass the wines of all other countries. The vine is cultivated more or less throughout the whole kingdom, to the S. of Brittany, Normandy, Artois, and Flanders; with the exception of the dép. Creuse, in which, owing principally to the poverty of the rural pop., it is little or not at all grown. According to the *Patria* the total annual produce of wine in France may be estimated at about 37,000,000 hectol., of which 23,500,000 are absorbed by home consumption; the remaining 13,500,000 hectol. being either exported or used in the distilleries and vinegar factories. In 1837 (and it has not varied materially in the interval) the quantity of vineyard land in France was estimated at 1,736,056 hectares, equivalent to 4,265,000 English acres. The growers of wine were estimated at 1,800,000 persons; and the quantity produced at 36,783,000 hectol., or about 800,000,000 imperial gallons, worth 16,760,000*l.*, or about 5*d.* a gallon. The cost of wine to the people of France is estimated at about 12,000,000*l.*, which supposes it to cost, at an average, each individual of the pop. about 7*s.* a year. The duties paid on the wine consumed at home amount, at an average, to 2,900,000*l.* a year. Hence of all the products of France, next to wheat, wine is incomparably the most important. The vineyards occupy, at present, more than 1-26th part of the entire surface; at the same time that the duties laid on wine amount to nearly 1-3d part of the land tax, and to 1-10th part of the entire public revenue. In 1847 the export of wine amounted to 1,488,270 hectol., worth 47,013,388 fr.

The deps. in which the greatest extent of land is occupied by vineyards are the Gironde, Charente-Inférieure, Herault, Charente, Dordogne, Gers, Gard, Lot-et-Garonne, and Var; but the deps. of Marne, Aube, &c., forming the ancient prov. of Champagne, and those of Côte d'Or, Saône et Loire, &c., comprised in Burgundy, though yielding a less quantity of wine than many others, are highly distinguished for the superior quality of their products. Gironde, which furnishes the wines known in England by the name of *claret*, yields about 2,500,000 hectols. annually; Charente-Inférieure about 2,500,000 hectols., Charente 1,700,000 hectols., and Herault upwards of 2,000,000 hectols. A fifth part of the Bordelais wines is used for the distillation of brandy, exported chiefly to the U. States, England, Russia, Sweden, and Denmark; but they are inferior for this purpose to those of the Charente, which supply the famous Cognac brandy. For more minute details respecting the growth of the French wines, we refer to the arts devoted to the several deps.

Fruits, &c. — With these France is abundantly supplied. Where the culture of the vine ceases, that of apples and pears becomes of considerable importance; in the N. orchards replace vineyards, and cider and perry are the ordinary beverages of the inhab. The cider of the déps. la Manche and Calvados is the best, and some of it is drunk even in the wine deps. The *Pays de Caux* (Seine Inférieure) is noted for its numerous and excellent apple-orchards; and the dép. Eure, in which almost all the roads are bordered by a double or treble range of apple trees, exports large quantities of apples to England and elsewhere. Cider is sometimes used in the distillation of brandy. Several of the central and S. deps. are famous for their dried pears Aveyron, the Basses Alpes, and Indre-et-Loire for their prunes; and the Limagne (Auvergne) and the valley of Montmorency for their cherries. In the Vosges a small cherry abounds, which is extensively used in the manufacture of *kirscherwasser*.

Chestnuts are very abundant in some of the central and S. deps., where a portion of the rural pop. live almost entirely on them for half the year. The chestnut crops in Ardèche form a large part of its agricultural wealth. In Haute Vienne, chestnut woods occupy more than 1-14th part of the whole surface. The olive was formerly more cultivated than at present; the hard winter of 1789 destroyed many of the trees, and the climate even of the most favourably situated parts of France seems not altogether suitable for the plant. The oil of the neighbourhood of Aix, and of the dép. Bouches-du-Rhone, is the best. The culture of the mulberry tree, for the sake of the silk worm, is chiefly carried on in the S. In 1820, the total number of trees in the 18 deps. in which they were then planted, amounted to 9,631,674; and in 1834 their number in the same 18 deps. had increased to 14,879,400, being an augmentation of 5,269,730, exclusive of new plantations made in no fewer than 12 additional deps. The increase was greatest in the dép. du Gard, in which, and those of Drôme, Vaucluse, and Ardèche, the rearing of silk worms is most extensive. The quantity of silk cocoons obtained in 1835 amounted to 9,007,967 kilogr. Dr. Bowring mentions that, in 1780, a worm was imported from China, whose silk is of peculiar clearness and fineness. It is chiefly raised at Bourg, Argental, and Sorbière. Its silk is employed in the manufacture of blonde, and usually fetches about 50 fr. per lib., but has sometimes brought double that price. (*Official Tables; St. Fargeau, Aperçu; Encyc. des Gens du Monde.*)

Pasturages, Cattle, &c. — The mountainous districts of France, especially the Vosges, the mountains of Ardennes, Argonne, the Côte d'Or, and the central mountain system, have extensive natural pastures; the déps. Ardèche and Corrèze, and the entire prov. of Limousin, form together one continuous *prairie*, subdivided by mountain ranges, and interspersed, often *sparingly*, with fields of buckwheat and rye. Some of the best natural pasture grounds are in the maritime districts of Normandy and Flanders, and in the isle of Camargue, at the mouth of the Rhone. It has been already remarked that artificial pastures have increased of late years; the plants sown are chiefly lucerne, sainfoin, trefoil, and vetches.

At no very distant period France possessed various superior breeds of horses; but, from want of attention, many of them have deteriorated Government, however, has latterly been making active efforts to obviate this defect, by the establishment of *haras*, or studs, for the improvement of the breeds, in different parts of the country; and the expenditure for this object is about 1,500,000 fr. a year. Normandy furnishes the best carriage and cavalry horses and hunters. The horses of Brittany are the next in order; the Breton is not so handsome as the Norman horse, but it is stronger and hardier. The dép. du Nord furnishes a good breed for farm labour, and other heavy work; those of Anjou, Maine, Touraine, &c., are also especially suitable for draught. Proceeding southward, the breeds diminish in value, till we come to Limousin, which prov., with those of Auvergne, Périgord, Guienne, and Navarre, produces the best saddle horses. The purity of their blood and their excellence increase, the nearer we approach the Spanish frontier. Alsace, and some of the other E. provs., have a large breed of horses, analogous to those of the N. In Lorraine and Champagne there is a small breed, capable of resisting fatigue for a lengthened period, if well taken care of. Asses and mules are reared chiefly in the deps. of the centre, the W. and S. Those of Deux-Sèvres and Vienne are the best, and many are exported to Spain. The mules used in France are bred chiefly in Auvergne and Provence.

Throughout great part of France, and especially in the mountainous regions of the country, the ox is preferred to the horse for farm labour; and as it furnishes besides the principal supply of animal food, the rearing of horned cattle is everywhere pretty general. Many cows are kept along the banks of the Marne, Yonne, and Seine; in the mountains of Franche Comté (where they yield a great deal of milk, from which cheese similar to that of Gruyère is made); in the Forez mountains; and in Dauphiny, where also the cheese is much esteemed. Flanders, Normandy, Brittany, Alsace, Limousin, Auvergne, and the S.W. provs., are those in which the greatest number of black cattle are reared: many are sent out of Artois and Picardy to be fattened in the two first-named provs. The oxen of Gascony are the largest; their weight varies from 600 to 900 lbs.: the city of Bordeaux and the navy are en-

tirely provisioned from this species. Paris is in great measure supplied from Anjou. The best butter is made in the N. of France, and from Brittany, Normandy, and the vicinity of Boulogne, considerable quantities, both fresh and salted, are exported: the best cheese is made in the S.

According to Berghaus, the live stock of France amounted, in 1840, to 1,872,600 horses, 3,350,000 mules and asses, 6,793,400 head of black cattle, 39,000,000 sheep, 900,000 goats, and 4,500,000 hogs.

But it would appear from the estimate in the official tables that the stock of black cattle, in 1830, amounted to 9,130,600; so that, if Berghaus's estimate be nearly accurate, it follows that the stock of black cattle must have decreased, during the ten years ending with 1840, about 2,337,000 head, or about one-fourth part of the total amount! And we are inclined to think that this statement is not very wide of the mark. Previously to 1814 cattle, when imported, were exempted from all duty. In that year, however, a duty of 3 fr. was laid on each head of cattle imported; and had the duty been allowed to continue at this reasonable rate, it could not have been justly objected to. But in 1822 the duty of 3 fr. was suddenly raised to 55 fr.! and this inordinate increase, though it did not stop the importation of cattle, which is still carried on to a very considerable extent, has, no doubt, materially lessened its amount. We are not, however, to ascribe the extraordinary decrease that has taken place of late years in the supplies of butchers' meat, and in its consumption, either wholly or principally to the increase of the duties on the importation of cattle. Their influence has been comparatively trifling. The decrease in question is, in truth, mainly a consequence of the subdivision of the land, and of the inability of the small proprietors and occupiers to raise and fatten cattle. *Les chiffres que je viens de rappeller prouvent que la production du bétail a suivi une progression décroissante en raison du morcellement des terres. Le petit propriétaire, en effet, ne peut pas élever; il faut pour cela avoir des vastes prairies, et attendre long temps avant de rien recueiller.* (*Dupuynode sur la Propriété Territoriale*, p. 86.) The decline has certainly been most striking. In 1789 the average consumption of butchers' meat is estimated in the official returns at 13·13 kilogs. per head of the population, whereas in 1840 it is only estimated at 11 kilogs. per do. In Paris the decrease of late years has been quite extraordinary; the consumption, which the *octrois* give the means of ascertaining with considerable exactness, having been in 1789 at the rate of 75 kilogs. per head; in 1812, of 70 per do.; and in 1840, of no more than 22 per do.; showing that, in 1812, the inhabitants of the capital consumed at a medium more than three times the butchers' meat they consumed in 1840. At present (1848) the consumption of butchers' meat in France generally does not, compared to the population, amount to nearly a third part of its consumption in England.

Next to corn, wine, and silk, wool is the most important article of rural produce; and, according to Berghaus, its average annual produce for the 10 years ending with 1840 may be taken at 42,000,000 kilogs. It has, no doubt, become of greater value since the native breeds have been crossed with the Merino and others; but this improvement has hitherto proceeded to only a small extent, so much so, that it has been alleged that not more, perhaps, than 1-10th part of the entire stock of sheep has experienced its effects. The extreme subdivision of the soil is, in truth, but little less hostile to sheep, than it is to corn and cattle farming. In 1847 the imports of wool amounted to no less than 16,3?6,301 kilogs. valued at 39,847,223 fr. Most of the French wool is coarse and inferior: for the finer sorts the manufacturers are obliged to have recourse to Germany, Spain, and other countries.

Goats are most abundant in the Pyrenean and Alpine deps. In a small district near Lyons a great number are kept in troops of perhaps 60 each, and fed in winter on vine leaves plucked after the vintage, and preserved moist for the purpose. An attempt has been made to acclimate the Tibet goat (*Capra Ægagrus*), for the sake of its wool, so valuable in the shawl manufacture; but it is not possible, owing to the greater moisture of the French climate, that the experiment can succeed. Hogs are largely reared in the N. and E.; in Aisne they furnish almost the only animal food used by the rural pop. They are numerous in most parts of France, and in the E. deps. a considerable trade is carried on in them.

Poultry of all kinds is also plentiful, especially in Maine, Normandy, Guienne, and Languedoc. Geese are salted like pork: in the dep. Tarn there is a very large and fine species. Turkeys are also almost everywhere plentiful; and the *dindes aux truffes* are important articles of commerce in many towns of Dordogne and Lot. Ducks and fowls are very common: the value of the eggs exported to foreign countries in 1847 amounted to 4,231,550 fr. The importation of French eggs into Great Britain, — that is, into London and Brighton, amounts to the enormous quantity of about 80 millions a year.

Bees are reared, especially in the deps. of Calvados, Basses Alpes, Aude, some of those on the Loire, Sarthe, and Jura. In the deps. on the Loire it is a common practice to move the hives from one district to another, which is supposed both to augment the quantity and improve the quality of the products: this process is effected in the night, and in vehicles built for the purpose. The distance travelled over at a time is often upwards of 30 m., "and it is not unusual to see in the autumn as many as 3,000 strange bee-hives collected in a little village, where they remain for perhaps two months." (*Aperçu*, 69.) The best honey is that of Narbonne; but in several deps., as those of Jura, Basses Alps, and Calvados, the honey is but little inferior.

Fisheries. — From Dunkirk to St. Valery, the inhabs. of the coast derive a considerable part of their subsistence from the fisheries for sole, ray, turbot, mackerel, herring, &c. The sole and ray fishery lasts from about the beginning of January to that of May; the mackerel fishery then commences, and continues till about the end of July; the herring fishery, the head-quarters of which are at Dieppe, begins early in October, and ends towards the 20th of Dec. The pilchard fishery of Brittany employs, during its continuance, a large number of fishermen, besides a number of hands in curing and barrelling the fish. About 8,000 barrels of salted pilchards, the produce of this fishery, are sent into the market annually, and the inhabs. on the coast live in great part on fresh pilchards during the season. The pilchard fishery is also a branch of industry of some consequence along the coast of Charente-Inférieure and La Vendée, as that of the anchovy is on the Mediterranean coast, especially in the dep. du Var. Great numbers of oysters are sent to Paris from Cancale Bay and the mouth of the Seine. Except those already named, the fisheries on the French coast are of comparatively trifling importance, and have only a local interest. The French cod and whale fisheries in distant seas employed in 1836 — the former 406 vessels, with a united burden of 51,915 tons and 10,172 men; and the latter 35 vessels of the burden of 14,813 tons, having 1,183 men. (*Official Tables; Hugo, &c.*)

Mines and Mineral Products — These are in France of very considerable value and importance, and though far inferior to those of the U. Kingdom, are very superior to those of any other European country. The principal products are coal, iron, and salt, with alum, copper, lead, manganese, &c. Mining industry is placed, in a great degree, under the control of the government. The country is divided into six departments, each under an inspector-general, which six inspectors, together with the Minister of Public Works, compose the Council-general of Mines. There is a school of Mines in Paris, and a practical miners' school at Saint Etienne. The instruction in the latter is wholly gratuitous.

Coal in France is obtained from between 60 and 70 different coal-fields; but of these the greater number are extremely unimportant, and those in the deps. du Nord and Loire are the only ones of any considerable magnitude, or, at all events, they are the only ones that are wrought to any considerable extent. It appears from the subjoined table that the production of coal has increased very materially of late years. Still, however, it is but of very secondary importance compared with its production in this country or in the U. States. In 1842, for example, it amounted to 35,920,843 metrical quintals (100 kilogs. each), or to about 3,528,000 tons — a quantity not greater than 1-10th part of the produce of the British mines, and less, in fact, than the produce of the coal-fields in the single county of Lanark in Scotland! To suppose, after such a statement, that France can be distinguished generally in manufacturing industry, is to suppose what is all but contradictory and absurd. And not only is coal thus deficient in quantity, but it costs more than double its price in England.

Under these circumstances, the reader will be prepared to learn that foreign coals, especially those of England and Belgium, are largely imported into France. Four or five years ago, the steamers on the Rhone used English coal, and they are at present used almost exclusively by the steamers belonging to Havre, Rouen, Bordeaux, and other ports on the Atlantic. The following table shows the consumption of indigenous and foreign coal for a considerable period. And we may add that the imports of the latter have continued progressively to increase since 1842, and that in 1847 they amounted to 22,829,327 met. quint. It should be borne in mind that except in the principal towns, coal is rarely used as fuel in France. The peasantry and occupiers of land, and the inhab. of the smaller, with many also of those of the larger towns, use little save wood or turf for firing.

TABLE showing the Production, Importation, and Consumption of Coal in France, during each of the following Years.

Years.	Produce.	Imports.	Consumption.
	Quintals.	*Quintals.*	*Quintals.*
1787	2,150,000	1,885,919	4,035,919
1802	8,441,800	910,000	9,351,800
1811	7,736,941	900,000	8,636,941
1816	9,416,389	2,903,200	12,319,589
1821	11,347,111	2,471,286	13,818,397
1826	15,410,007	5,012,619	20,422,626
1831	17,603,857	5,378,261	22,982,118
1836	28,419,466	9,730,092	38,149,558
1841	34,101,996	15,696,925	49,798,921
1842	35,920,843	16,113,313	52,034,156

Iron works are carried on in various parts of France, and the total produce of pig iron amounted in 1845 to 4,389,690 m. q., that is, to about 430.000 tons, or nearly 1-4th part of the produce of the British works. Formerly iron in France was almost wholly made by means of wood; but of late years coal has been extensively substituted for the former, and at present (1848) about half the iron produced in the republic is smelted by its agency. But, despite this improvement and the increase of the manufacture, the iron of France is still comparatively high-priced, and insufficient for the home supply. The imports in 1847 amounted to 94,294,241 kilogs. of pig iron, valued at 13,201,194 fr., besides large quantities of bar and other iron. And hence it might be expected, seeing that iron is one of the most important means and instruments for the prosecution of manufacturing industry, that a country anxious for the increase of the latter would admit iron duty free. But such is by no means the case: on the contrary, a high duty is imposed on the imports of foreign iron; and the interests of the manufacturers and of the country in general are sacrificed to that of the forest proprietors, who are apprehensive, were foreign iron largely imported, that the price of timber might be reduced. In all, about 20,000 hands are supposed to be employed in the different works connected with the production of iron in France. The other metallic products raised in France, consisting of silver, lead, copper, manganese, &c., are of inconsiderable value and importance. The produce of salt exceeds 4,000,000 m. q., or above 398,000 tons.

Manufactures. — As respects the extent and value of her products, France ranks as a manufacturing country next to Great Britain. But a considerable part of her progress in this department is wholly factitious; and her natural and acquired capabilities for carrying on manufactures are very inferior to those enjoyed by this country. Speaking generally, there is a great want of capital in France, so that most establishments are conducted on a comparatively small scale: the means of internal communication, though much improved, are still far inferior to what they are in Great Britain or the U. States. Coal is found in many parts of France, but, as seen above, the supply is insufficient for the wants of the country, and is comparatively dear; and iron, a cheap and abundant supply of which is so indispensable to manufacturing eminence, is much higher priced than in England. In fact, with the exception of silk and a few other branches, manufacturing industry in France is in the most unsatisfactory condition. No doubt innumerable tables and statements are put forth to show its progress; but they are all, or mostly all, fallacious. The real question is, not whether a manufacture makes a progress when all competition is prevented, and a certain extent of market provided for its products by custom-house regulations, but whether it could withstand the competition of foreigners, and increase were it exposed to an open competition? In the latter case only is it an advantage: in the former it is obviously maintained at the public expense, and its increase occasions a corresponding increase of the burdens laid upon the public, without its bringing along with it any corresponding advantage.

Arms are principally made at Tulle, St. Etienne, Klingenthal, &c. Bronzes of a very superior quality are principally made in Paris. The trade in cutlery, which employs a great many hands, is principally carried on in Paris, Langres, Nogent-le Roi, Chatelherault, Thiers, &c. French cutlery is, speaking generally, very inferior to that of England. The ornamental jewellery trade centres chiefly in Paris; and there, and in other parts of the country, about 10,000 hands are supposed to be employed in watchmaking.

The number of steam engines in use in France has greatly increased of late years. At the close of 1845 there were in all 4,114, of 50,187 horse power. Of these 3,649 were of French manufacture. Most of them were employed in yarn factories, mines, foundries, and beet-root sugar establishments. There were besides in the same year 259 steam-boats of the aggregate power of 18,050 horses. There are upwards of 100 iron suspension bridges in France, though the first was erected no longer ago than 1821.

The silks of France are unrivalled among those of Europe, and are probably, indeed, superior to any produced in any other part of the world. At the close of last century, it was ascertained by a series of accurate experiments, that French organzined silk was 25 per cent. superior in elasticity to the best Piedmontese, and its tenacity as 26 to 21 or 20. (*Bowring's Second Report*, p. 4.) But besides this the French silks are distinguished by superior taste and elegance, and their excellence is sufficiently proved by the fact that 4-5ths of them are exported. According to the *Encyc. des Gens, &c.*, the number of silk looms amounted in 1839 to 85,000, employing 170,000 workmen, and producing silks worth 211,500,000 fr. a year. Lyons, Nimes, Avignon, Tours, Saint Jean-du-Gard, Alais, Le Vigan, Saint Etienne, Paris, &c., are the principal seats of this important and truly national manufacture, which will be found more particularly alluded to under those separate heads. The silk manufactures of Paris have received a great augmentation of late years.

The woollen manufacture of France is also of great value and importance; and is one of those that seems well adapted to the country. The total value of the woollen fabrics annually produced in France has been estimated, by French writers, at 420,000,000 fr.; but Berghaus reduces this estimate to 265,000,000 fr., and we have little doubt that his estimate comes nearest the mark. The chief seats of the woollen manufacture are Sedan, Louviers, Elbeuf, Rouen, Bernay, Caudebec, Darnetal, Clermont l'Hérault, Lodève, Carcassonne, Châteauroux, &c.; for carpets, Paris, Aubusson, Abbeville, and Amiens.

Most of the statements that have been put forth with respect to the progress of the cotton manufacture in France since 1815, have been fallacious. That the manufacture has rapidly advanced in the interim is most true; but this advance affords no proof of its being in a really flourishing condition, or of its being suitable to France. During the latter years of the war, the difficulties in the way of importing raw cotton into France were such that its price in Havre was usually twice or three times as great as its price in Liverpool. When, therefore, the return of peace enabled the French manufacturers to obtain supplies of cotton at the same rate that was paid for it by others, the manufacture could not fail rapidly to advance; and foreign cotton goods being excluded, it necessarily went on increasing till the home demand was pretty well supplied. But beyond this limit it has not been, and, it is most probable, it will not be materially advanced. The French excel in the brightness and durability of their dyes; but with this single exception, they are immeasurably behind us in all that is indispensable to success in this department. Their machinery is at once more expensive and less improved, as coal, which may be said to be the nerves and sinews of the business, costs double in Rouen what it costs in Manchester or Glasgow. It is idle, therefore, under these circumstances, to suppose that the French cotton manufacture can be really prosperous, or that its increase is any evidence of a proportional increase of wealth and employment. Previously to the Revolution little cotton yarn was spun by machinery; but since that epoch, or rather since the peace of 1815, machinery has been imported from England, and cotton spinning has become a principal branch of industry; and, excepting some of the highest numbers for the muslin factories of Tarare and St. Quentin, and the lace manufactures of Calais, Douai, &c., the country now supplies sufficient yarn for its own demand. The total annual value of the cotton manufactures of all kinds has been estimated by some French writers at no less than 600,000,000 fr., or 20,400,000*l.*; but there can be no doubt that this is a gross exaggeration. The consumption of raw cotton in France does not amount to a *third* part of its consumption in Britain; and if we estimate the value of the cotton goods produced in the latter at 34,000,000*l.* sterling, those produced in France cannot be reckoned, on any hypothesis, at above 10,000,000*l.* or 11,000,000*l.*; and as the French are unable to produce yarn of the finest quality, and a large proportion of their imports is appropriated to the manufacture of coarse fabrics, even this is, we believe, too high.

Linens are manufactured principally in the N. provinces, and in Brittany, Maine, Dauphiny, Auvergne, &c. Since 1837 there has been a very great increase in the imports of linen yarn spun by machinery from Great Britain: this has raised an outcry in France on the part of the spinners, and the duties on yarn have latterly been raised; but it has been found that while the importation of yarn has greatly increased, that of woven fabrics has diminished, and that consequently the weavers, as well as the public, have been benefited by the introduction of English yarns. The best cambrics and muslins are made, the former at St. Quentin, Va-

lenciennes, Cambrai and Solesmes; and the latter at Lyons, Alençon, &c. St. Quentin, Lille, Calais, Tarare, and Douai, are particularly noted for their *tulles* and *broderie;* but this latter branch of industry has been long in a very depressed state. Valenciennes, Lille, Dieppe, Alençon, St. Lô, and Avranches, are noted for their lace; and Caen, Bayen, Bayeux, Chantilly, and Le Puy, for their blondes. Kid gloves are made principally at Paris, Grenoble, Chaumont, Blois, Vendôme, &c. Other leathern articles, as shoes and saddlery, are, of course, made in large quantities. The French saddlery exported is worth about 2,000,000 fr. a year. The china of Sèvres, and other fine kinds of French porcelain, are much and justly esteemed. There are, in all, 12 manufactories of fine porcelain, at Paris, Sèvres, Limoges, Toulouse, &c., producing goods to the value of from 5,000,000 to 6,000,000 fr. a year, 2-3ds, perhaps, of which are exported. Glass to the value of above 20,000,000 fr., with bricks, tiles, furniture, mineral acids, and other chemical products, glue, sail-cloth, cordage, soap, musical instruments, liqueurs, paper, paper-hangings, hats, &c., are important articles of manufacture.

Ships are built principally at Brest, Rochefort, Cherbourg, Toulon, Marseilles, Bayonne, Bordeaux, &c.

We subjoin a table given by Berghaus, in which he gives an estimate of the value of the manufactured articles produced in France in 1839, and an account of the principal seats of each manufacture. We do not pretend to vouch for its correctness: but the statements in it are, speaking generally, more moderate than those in the greater number of French works, and appear to us to be, on that account, more deserving of credit. A tendency to exaggerate is, in fact, the besetting sin of most writers on statistics.

ESTIMATED VALUE of the Goods manufactured in France in 1839. (*Berghaus, Allgem. Länder und Volkerkunde*, v. 87—90.)

Articles.	Places where manufactured.	Value.
		Francs.
Raw silk - -	Lyons, St. Vallier, St. Donat, St. Remy, Roquevaire, Alais, Tain, Tours, Tonilles	300,000,000
Silk fabrics, &c. -	Lyons, Paris, Nîmes, Tours, Avignon - - -	
Woollen yarn -	Rheims, Paris, Autrecourt, near Sedan - - -	
Fine woollen cloth -	Sedan, Louviers, Beaumont-le-Roger, Elbeuf, Chalabre, Lodève, Vienne, St. Chinian, St. Pons, Carcassonne, Mazamet, Beaûvais, Vire -	
Coarser woollen cloth	Castres, Montluel, Tours, Montauban, Châteauroux, Abbeville - - -	265,000,000
Casimeres and *cuirs de laine* - -	Louviers, Castres, Amiens, Limoges, Buhl (Alsace) -	
Flannels & coverlets	Rheims, Orleans, Lisieux	
Napped cloth -	Villepreaux, near Versailles, Carcassonne, Rheims, Réthel, Mende, Montauban -	
Cashmere-woollen stuffs - -	Paris, Rheims, Lyons, St. Quentin, Mulhausen -	
Carpets - -	Paris, Aubusson, Beauvais -	
Linen and hempen fabrics - -	St. Quentin, Valenciennes, Cambray, Douai, Chauny, Guise, Beauvais, Rue St. Pierre, Laval, Rennes, Cholet, Lisieux - - -	260,000,000
Lace, blonde -	Alençon, Valenciennes, Chantilly, Bayeux, Caen, Nancy, Le Puy - - -	
Paper and paper hangings - -	Annonay, Sorel, Saussaye, Marais, Courtalin, Angoulême, Paris - - -	43,000,000
Pasteboard - -	Vienne, Montauban, Nîmes -	
Cotton thread, &c. -	Lille, Roubais, Gisors, St. Quentin, Rouval, Vast near Valognes, La Ferté-Aleps, Logerbach, Paris - -	
Calicoes, muslins, and other cotton goods	Tarare, St. Quentin, Alençon, Cateau-Cambresis, Paris, Tempieux, Rouen, Chemillé, Abbeville, Troyes -	225,000,000
Gold and silver lace	Paris, &c. - - -	7,500,000
Hats - - -	Do., &c. - - - -	30,000,000
Dyed goods - -	Lyons, Paris, Bapaume, Gentilly, Deville, Rouen, Bart -	45,000,000
Leather (tanned, &c.)	Paris, Sens, Longjumeau, Troyes, St. Mignan, Rennes	150,000,000
Soft do. for gloves, white leather, parchment, &c.	Paris, Grenoble, Niort, Mithau, Le Choylard - -	13 000,000
Morocco leather -	Paris, Toulouse - -	
Wrought iron goods	Gromoure, Vienne, St. Bonnet-le-Desert, Vierzon, &c.	
Steel wares - -	La Bérardiere near St. Etienne, Arc near Gray, Raveau near La Charité, Orléans, La Doué near La Charité, Foix, Bèse -	

Articles.	Places where manufactured.	Value.
		Francs.
Brass and zinc wares	Rouen, Paris - - -	
Tinned plate do. -	Imphy, Pont St. Ours, Montataire - - -	215,000,000
Wire, nails - -	Laigle, Lods, Morvillards, Remilly - - -	
Tools - - -	Amboise, Toulouse, Arc, Foy, Klingenthal - -	
Fire-arms - -	Tulle, Paris, St. Etienne -	
Other weapons -	Klingenthal, St. Etienne -	
Hardware - -	Paris, Strasburg, Châlons-sur-Marne, Thiers, Chatellerault, Langres - -	
Copper wares -	Romilly, Imphy, Rouen, Toulouse, Paris - -	16,200,000
Lead wares - -	Paris, Tours - - -	4,850,000
Antimony, tin, platina, mercury, &c. - -	Paris, &c. - - -	4,000,000
Goldsmiths' wares and jewellery -	Paris - - - -	64,000,000
Bronze goods -	Do. - - - -	35,000,000
Lacquered do. -	Do. - - - -	5,000,000
Watch machinery -	Beaucourt, St. Nicholas-d'Aliermont, Besançon, Montbéliard - - -	17,500,000
Watches - -	Paris - - - -	19,800,000
Musical instruments	Do. - - - -	2,000,000
Salt - - -	Salt-works in the E., Islands Oleron and Ré, Peccais, &c.	26,000,000
Alum - -	Paris, Pouilly, Montpellier -	6,000,000
Vitriol - -	Choisy-le-Roy, Mas d'Uzil -	3,000,000
Sulphuric acid -	Paris, &c. - - -	6,100,000
Hydrochloric do. -	Do. - - - -	240,000
Nitric do., and mineral waters -	Montpellier, Paris, &c. -	1,200,000
Hard soap - -	Paris, Marseilles - -	60,000,000
Soft do. - -	Lille, Amiens, Abbeville, St. Quentin - - -	7,500,000
Refined sugar -	Paris, and from beet-root in the N. deps. - - -	112,000,000
Molasses - -	Do. - - - -	11,300,000
Porcelain - -	Paris, Sèvres, Limoges -	5,500,000
Wedgwood ware -	Sarreguemines, Creil, Montereau - - -	6,400,000
Other earthenware -	Sarreguemines - -	16,750,000
Tiles and roofing slates - -	Lyons, Montet near Charolles Anisy, Nibelles - -	18,500,000
Gypsum and lime -	Neighbourhood of Paris, &c.	16,000,000
Mirrors and glass ware - -	St. Gobin, St. Quirin, Monthermé, Cirey, Montcénis, Baccarat - - -	21,510,000
Joiners' goods -	Paris - - - -	45,000,000
Books - -	Do., Lyons, Avignon -	35,000,000
Perfumery - -	The S. of France - -	15,000,000
Starch, fine meal, &c. - -	Paris - - - -	6,000,000
Cider and Perry -	Normandy, Brittany, Picardy	49,750,000
Beer - - -	The N. of France - -	60,000,000
Brandy - -	Cognac, Montpellier - -	75,000,000
Spirit of wine -	Nîmes - - - -	4,500,000
Total -	- - - - -	2,330,000,000

Previously to the reign of Philip Augustus, there were very few manufactures in France, other than domestic. But about that period the linen and woollen manufactures of Laval, Lille, Cambrai, Amiens, Rheims, Arras, Beauvais, &c. began to be established. Louis IX., Charles VII., and Louis XI. endeavoured to improve the commercial resources of the nation; and in the reign of the latter monarch, the culture of the mulberry was introduced, and the manufacture of silk established at Tours. The silk manufactures of Lyons date from the reign of Francis I.; under Henry IV. several other manufactures were introduced, and many pre-existing ones improved; and under Louis XIII. most branches of industry received a rapid extension. But the grand impulse to manufactures and commerce was given in the succeeding reign. Colbert, minister of finance under Louis XIV., invited numerous foreign artisans to settle in France, improved the great roads throughout the kingdom, excavated the canals of Languedoc and Burgundy, constructed several harbours, and gave a powerful stimulus to industry. But, notwithstanding his great merits, Colbert wanted sagacity to perceive that industry can make no really beneficial progress, except under a system of free competition; and that all attempts to bolster up manufactures are injurious to the general interests of the nation. Hence, it is not easy to decide whether the stimulus he gave to industry by the measures now alluded to, and the order and economy he introduced into the finances, was not more than countervailed by the regulations he established for the conduct of manufactures, and the numerous restrictions that he introduced. Colbert was, in fact, the Achilles of the mercantile system. Had he acted on the maxim, *Laissez-nous faire*, of the merchants he consulted, though his measures might not have been equally successful at the outset, they would have been incomparably more so in the end. The *prestige* that has attached to the name of Colbert has tended materially to prolong the mania for regulating in France, and consequently to enfeeble and paralyze the industry of the country.

In 1698, Marshal Vauban estimated that, of the total pop. of France, 1-10th was in the state of mendicancy, and 5 of the remaining 9ths in a condition but little

above it. He at the same epoch estimated the wages of the weaver at 12 sous a day, or about 108 fr. yearly (excluding fast-days, &c.). Arthur Young, 90 years afterwards, found that wages had risen to about 19 sous; but provisions had also increased in price. In 1827, M. Dupin estimated the average gains of an artisan and his wife, in a town, at 783 fr. a year; and in 1832, M. de Morogues estimated their united wages at 800 fr. The condition of the artisans has of late years been considerably improved. Rye flour, after supplanting buck-wheat and oatmeal, has in its turn been superseded, in many parts, by that of wheat; but it has also been in part superseded by potatoes; and there has been, as already seen, a great falling off in the consumption of butcher's meat. The dress of all classes has been improved by the more general use of woollens, cottons, &c.; and in most large towns, except those of the S., there is now little externally to distinguish the artisans and their families from the bourgeoisie, or lesser trading families. There are considerable differences in the condition and habits of the work-people in the different manufacturing towns; but, on the whole, their condition previously to the late revolution was decidededly preferable to what it had been in 1815.

Commerce. — Though of great extent and value, the commerce of France has not attained to the magnitude which it might have been expected to reach from her admirable situation; the great diversity and excellence of her silks, wines, brandies, and other products, and the number, enterprise, and ingenuity of her people. This depressed state of trade appears to be principally ascribable to an erroneous system of domestic economy; or to the attempt made by successive governments to render France independent of other countries, by bolstering up and protecting industry at home, and excluding foreign products. But a nation that adopts a policy of this kind, necessarily, by so doing, lays her foreign trade under the greatest difficulties. All commerce is founded on a principle of reciprocity; and those who will not buy, need not flatter themselves with the delusive idea that they will, notwithstanding, be able to sell. The prohibitions and heavy duties imposed on many descriptions of foreign produce, proportionally lessen the demand for it in France; and by consequence lessen, in a corresponding degree, the demand for the French products that must otherwise have been exported in payment of the imports. Luckily, however, the public seems to have become to a considerable degree aware of the mischief entailed on the country by a perseverance in this antisocial system; and, despite the powerful interests engaged in its support, it has already undergone several material modifications; and there can be little doubt that, in the end, it will be replaced by a more liberal and beneficial policy.

The revolution was of signal advantage to the internal trade of France. Previously to that event, the fiscal systems and duties in many of the provinces were peculiar, and differed widely from those in others: and their frontiers were, in consequence, as vigilantly guarded against the free importation of the commodities of the conterminous provinces, as if they had been so many independent and hostile states! The revolution made an end of these miserable distinctions; and by subjecting the whole kingdom to the same laws and the same duties, provided for the free transport of commodities throughout its whole extent.

The great articles of import consist of grain and flour, especially into the southern depts.; raw cotton; raw silk; sugar, coffee, and other colonial products; timber; olive oil and oil seeds; coal; wool; hides and skins; copper; tobacco; indigo and other dye stuffs; flax and thread; iron, &c. The articles of export consist of silk, cotton, and woollen goods; wines; hard goods, toys, pedlars' wares, and wooden goods; wrought skins; linens and canvass; paper; brandy; refined sugar; madder; tanned leather; perfumery; linen and linen goods, &c. &c. In 1847, the total real value of the imports into France, entered for consumption, amounted to 955·9 millions fr.; and that of articles, the growth and produce of France, exported during the same year, was 719·8 millions fr. Of these the articles specified above were in millions of fr. as follows: viz.: —

Imports.	Millions of Francs.	Exports.	Millions of Francs.
Grain and Flour - - -	209·0	Silk Goods - - -	149·0
Cotton - - - -	67·2	Cotton do. - - -	55·0
Silk - - - -	67·0	Woollen do. - - -	69·7
Sugar and Coffee - - -	80·0	Wines - - - -	47·0
Timber - - - -	60·7	Hard Goods - - -	30·8
Oil Seeds - - -	19·9	Wrought Skins - - -	34·8
Coal - - - -	32·6	Tissues of Flax and Hemp - -	20·8
Hides and Skins - - -	24·0	Paper - - - -	19·6
Indigo - - - -	13·3	Brandy - - - -	16·7
Wool - - - -	30·4	Refined Sugar - - -	11·0
Flax - - - -	17·4	Madder - - - -	13·9
Olive Oil - - - -	38·0	Metallic Goods - - -	12·7
Copper - - - -	18·2	Earthenware and Crystal - -	15·1
Cast Iron - - - -	13·4	Linen and Linen Goods - -	17·7
Tobacco - - - -	9.7	Tanned Leather - - -	8·8
Lead - - - -	9·1	Perfumery - - -	8·9

Owing to the scarcity of 1847 the imports of grain and flour in that year were unusually large. Horses and cattle are largely imported and exported; but the imports usually predominate. (For Table of Foreign Trade in 1847, see next page.)

Marseilles, Havre, Nantes, &c., are the grand seats of the commerce carried on by sea between France and foreign countries. The customs' duties collected at the principal emporia during 1847, were as follows; viz.: —

	Fr.		Fr.
Marseilles	- 34,742,000	Dunkirk	- 7,242,000
Havre -	- 26,002,000	Rouen -	- 5,933,000
Paris -	- 20,509,000	All other custom houses	- 75,792,000
Nantes -	- 15,918,000		
Bordeaux	- 14,957,000		

Ships and Tonnage.	1830.	1840.	1844.
	Ships.	*Ships.*	*Ships.*
Ships of 800 tons and upwards -	2		
700 to 800 tons - -	6	1	
600 — 700 - -	3	3	1
500 — 600 - -	14	4	6
400 — 500 - -	53	35	33
300 — 400 - -	201	150	179
200 — 300 - -	578	533	433
100 — 200 - -	1,345	1,365	1,275
60 — 100 - -	1,556	1,561	1,499
30 — 60 - -	1,101	1,301	1,353
30 and under - -	9,993	10,644	8,900
Total - -	14,852	15,600	13,679

Metrical System, Weights and Measures, &c. — By a law of the French National Assembly in 1795, a uniform system of weights and measures was introduced, all measures being derived by the decimal multiplication or division of the *mètre*, which is equal to the 10-millionth part of the distance between the equator and the pole. According to this data, the measures of length are —

The Millimètre	- =	0·039 inch Engl.
Centimètre	- =	0·394 do.
Decimètre	- =	3·937 do.
The Mètre -	- =	3 ft. 3·371 in.
Decamètre	- =	32 ft. 9·7 in.
Hectomètre	- =	109 yds. 1 ft. 1 in.
Kilomètre	- =	1093·633 yds.
Myriamètre	- =	10936·330 yds.

In like manner, the are (100 sq. mètres, or about 1-40th part of an Eng. acre) is multiplied into the hectare (2·741 acres), &c.; the litre (a cubic decimètre) and 0·264 of a gallon, or a little more than a quart Eng.) into the hectolitre (2·838 bushels), &c.; and the gramme (0·0353 of an oz. avoird.) into the kilogramme (2·206 lbs. avoird.), and other weights.

But, besides the foregoing, the ancient French measures are still in use: as the inch (equal to 1·066 Eng. in.); the foot (1 ft. 0·789 in. Eng.); aune (1·3 Eng. yds.); toise (6 ft. 4·735 in. Eng.); the league of 2,000 toises (2 miles 743 yds. yds.); the league of 25 to the degree (2 m. 1340 yds.), &c. The arpent is equivalent to 1·043 Eng. acres. The French pound is equal to 1·080 lbs. avoird.; the muid=1·14 hhds.; the boisseau=0·369 bushels.; and the setier=4·430 bushels.

Money. — Accounts are kept in francs, a silver coin worth 9·69*d.* Eng., which is divided into 10 décimes and 100 centimes. The *par* of exchange with England is very near 25 francs per pound, sterling.

Roads. — The aggregate length of the former throughout France, is about 55,000 m. The roads are divided into national, departmental, and communal; their expenses being respectively defrayed by the government, and the deps. or communes to which they belong. The national roads have a united extent of about 22,000 m., of which about one eleventh part is paved, and the rest macadamised, or constructed in the ordinary manner. They are commonly well made, and very direct; their construction and repair, as well as those of the departmental roads, being under the superintendence of the central board of bridges and public ways, which has a head engineer established in each dep. The communal roads, which are subject to no such control, are mostly in a deplorable state, and are often impracticable for carriages.

Railways. — Sundry railways, some of which are of great length and importance, have been constructed in different parts of France, and others are in the course

ACCOUNT of the Foreign Trade of France in 1847, specifying the Values of the Articles imported from and exported to different Countries, the Values of the former entered for Consumption, the Duties paid on them, etc.

Countries.	Imports.			Exports.	
	Total Imports.	Entered for Consumption.	Duties collected.	Total Exports.	Exports Produce of France.
EUROPE.	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*
Russia	102,164,768	102,477,548	3,637,988	19,978,522	16,231,634
Sweden	7,684,718	7,348,019	1,102,064	1,029,484	877,069
Norway	17,782,234	17,764,289	260,534	1,798,081	1,385,094
Denmark	3,988,371	3,866,957	73,822	1,803,701	1,662,873
England (U. K., Gibraltar, Malta, and Ionian Islands)	107,122,919	72,361,193	10,808,899	155,291,357	116,773,129
German Commercial Association	70,892,521	52,690,721	4,426,986	58,921,329	46,235,206
Mecklenburg	2,546,044	2,578,764	35,148	324,562	286,283
Hanseatic Towns	13,972,710	10,034,781	279,077	22,673,064	17,543,139
Hanover	159,257	159,257	2,149	249,591	247,904
Low Countries	23,816,199	11,378,080	1,517,054	14,205,290	9,499,947
Belgium	149,192,785	111,423,802	12,098,610	60,914,415	49,989,573
Switzerland	101,014,188	26,538,329	1,552,301	79,559,649	34,132,791
Portugal (incl. Madeira, Cape de Verde Islands and Azores)	2,629,051	1,798,966	212,398	2,430,486	1,308,798
Spain (incl. the Canary and Balearic Islands)	49,989,039	37,365,821	5,067,145	70,336,887	48,282,973
Austria (incl. Lombardy)	10,501,099	7,984,614	306,454	12,178,808	3,606,509
Sardinia (island and cont.)	88,048,563	77,652,941	3,601,851	59,554,807	35,165,699
Tuscany	13,400,913	11,039,771	1,315,909	17,629,857	10,406,541
Roman States, Lucca	4,101,265	3,640,716	316,846	4,272,844	2,894,645
Two Sicilies	33,271,197	28,150,717	2,210,575	16,697,271	10,370,952
Greece (incl. the islands in the Archipelago)	1,021,762	981,716	70,620	2,844,999	2,007,583
Turkey (incl. the islands in the Archipelago)	95,926,089	72,446,759	4,903,425	21,516,890	12,937,473
AFRICA.					
Egypt	15,605,093	11,873,510	1,144,614	5,800,808	3,105,869
States of Barbary and Morocco	9,369,179	8,437,146	1,314,919	3,139,155	1,400,574
W. coast (from Morocco to the C. of Good Hope, not incl. Senegal)	6,033,439	5,024,913	187,232	2,398,939	406,337
English possessions (C. of Good Hope, and I. Mauritius)	2,581	29,259	493	5,532,683	4,987,556
Other territories (incl. the Isle of Madagascar)	134,838	2,942	101	207,475	175,732
ASIA.					
India (English) and New South Wales	23,778,082	17,362,238	1,729,618	3,607,441	2,525,946
Ditto (Dutch) Java, Sumatra, &c.	6,409,098	5,536,288	3,506,146	953,857	810,251
Philippines	2,160,120	1,941,578	576,788	484,211	248,404
China, Cochin China, and Oceanica	2,247,595	1,475,575	263,134	770,936	510,388
AMERICA.					
United States	137,605,030	110,433,606	11,018,780	185,683,832	112,413,755
Mexico	1,355,961	1,862,017	119,459	2,923,148	2,511,943
Guatemala	835,388	566,485	137,291	114,170	117,965
New Granada	1,097,566	730,565	43,632	3,093,782	2,694,691
Venezuela	2,684,311	2,228,701	1,434,961	2,583,831	2,056,923
Brazil	18,861,889	7,658,164	4,045,274	28,758,375	17,537,470
Uruguay (Montevideo)	12,551,195	8,649,110	556,192	8,585,835	4,286,381
Rio de la Plata (B. Ayres)	471,086	199,574	15,246	974,384	868,350
Equator	233,965	101,028	44,826	317,885	295,392
Peru (Lower Peru)	1,816,431	1,408,370	54,730	6,275,092	5,621,958
Bolivia (Upper Peru)	27,646	26,563	112	78,347	78,347
Chili	5,811,154	5,291,998	249,152	9,741,471	8,383,808
Hayti	10,379,057	6,367,511	4,813,391	4,878,222	3,452,349
Spanish Colonies (Cuba, Porto Rico, &c.)	25,433,907	16,005,470	8,179,362	14,773,422	10,809,460
English „ (Canada, Antilles, Guiana, &c.)	36,062	41,683	1,859	354,941	339,918
Danish „ (St. Thomas, &c.)	179,522	145,846	88,564	4,577,463	3,341,143
Dutch „ (Guiana, St. Eustache, Curacoa)	—	—	—	108,390	73,515
FRENCH COLONIES, &c.					
Bourbon	20,692,561	19,271,225	10,762,344	7,576,907	7,581,614
Guiana	2,831,589	1,680,713	863,610	2,468,576	2,344,840
Martinique	22,614,362	18,185,574	13,238,764	15,534,615	15,420,298
Guadaloupe	27,208,656	23,730,820	17,692,018	14,374,636	14,359,379
Algiers	4,502,600	2,280,074	91,299	68,364,847	55,160,488
Senegal	5,169,414	3,868,355	195,006	11,398,234	6,333,930
French possessions in India	11,882,678	2,906,249	223,079	477,604	424,925
St. Pierre, Miquelon and French fisheries	10,662,924	10,587,382	16,888	8,194,919	7,283,156
Waifs and stray goods	394,858	244,732	17,805		
Totals	1,290,305,512	955,858,491	136,486,547	1,049,319,963	719,759,173

of being made. Of the former the principal are the lines leading from Paris to Belginm, Rouen, Strasbourg (nearly completed), Orleans, Versailles, &c., with those uniting Orleans and Tours, Strasbourg and Bale, St. Etienne and Lyons, Alais-Beaucaire and Grand-Combe, Rouen and Havre, Amiens and Boulogne, Bordeaux and Teste, Avignon and Marseilles, &c. The construction of the line from Paris to Lyons is far advanced; and but for the severe check given to these undertakings by the late revolution, some additional lines would have been in operation.

The French lines of railway are conceded to the companies by which they have been constructed only for a certain specified period, at the termination of which they become the property of the State; and in this respect their policy seems to be preferable to that which has been followed in this country.

Canals.—The entire length of the communications by means of navigable rivers and canals was, in 1837, estimated at 7.866 m., of which extent nearly five sevenths were contributed by the former. There were then 74 navigable canals complete; 16 more were in process of construction; and 14 others were projected. The principal existing are as follows:—the Canal *du Midi*, or the Languedoc Canal, which runs from Cette to Toulouse, where it joins the Garonne, and thus connects the Mediterranean with the Atlantic; the Canal of Charollais, or *du Centre*, connects the Loire with the Saône: the Canal of the Rhine and Rhone (*du Monsieur*) forms a communication between those rivers by connecting the Saône with the Doubs, and the latter with the Ille, a tributary of the Rhine; the Canal of Burgundy connects the Saône with the Yonne, and consequently the Seine with the Rhone and Rhine; the Canal of Briare, and that of Orléans, unite the Loire with the Loing, a tributary of the Seine: that of St. Quentin connects the Escaut with the Oise; that of Brittany, the longest of all, being upwards of 230 m. in length, runs between Nantes and Brest. Those of Berri, Ardennes, the Ille et Rance, Nivernais between the Loire and Yonne, d'Ourcq, which supplies Paris with water, and Somme, are the others most worthy of notice. (*Official Tables; Encyc. des Gens du Monde; Patria, &c.*)

Government.— Previously to the revolution of February, 1848, the government of France, as fixed by the Charter of 1830, was a limited monarchy, hereditary in the male line only, with a representative assembly of 459 members, chosen by the electoral class, and a house of peers. The latter, however, had little in common with the peers of this country, the peerage not being hereditary, and the peers being comparatively destitute of fortune. The preroga-

tives of the king were similar to those enjoyed by the sovereign of England; but as his throne possessed no traditional influence or respect, and was without the support of an aristocracy, it had no solid foundation on which to rest, and was overthrown with the utmost facility.

According to the present constitution, which was definitively voted on the 4th of November, 1848, France is a republic of an ultra-democratical character. The legislative power is vested in one assembly of 750 members, elected by universal suffrage, that is, by the votes of all Frenchmen of 21 years of age. All Frenchmen, who are 25 years of age, may be chosen for representatives, without property qualification or residence. Votes at elections are to be given by ballot; and the maximum duration of the assembly is limited to 3 years. The executive power of the state is to be vested in a president, elected for 4 years by universal suffrage. He is not re-eligible till after 4 years from the expiration of his former period of office. He is to be allowed a residence and a salary of 600,000 fr. a-year. He negotiates treaties, which, however, must be approved by the national assembly; and he can undertake no war without its concurrence.

Such are some of the more prominent and characteristic features in this new constitution, which is given at length in the Suppl. to this work. It would be idle to speculate upon its probable duration. We believe it is the twenty-second that has been proposed and accepted by the state since the revolution of 1789; and we see no grounds for supposing that it will be of a more permanent character than its predecessors. There do not, in truth, appear to be any elements in France out of which to construct a free system of government that shall have any pretensions to durability. Everything has been cast into the revolutionary matrix. Under the existing law of succession property cannot be retained in families: the formation of an aristocracy is, in consequence, impossible; and there is nothing to moderate or control the sudden impulses by which the population is so apt to be actuated. It would be visionary to expect that the president should keep the assembly in check. If he can do this much, he will do more. A popular and able president, especially if he had military talents, would, we incline to think, have little difficulty in suppressing the present order of things. The republic has been accepted, but assuredly it was not wished for by the bulk of the French people. And the insecurity and misery of which it has already been productive would dispose a large class to take refuge under any system that promised an increase of security. How that is to be obtained, except by the agency of a military dictator, if even by him, it is difficult to see.

Louis Napoleon Bonaparte, the son of Louis, late King of Holland, and the nephew of the Emperor, has been elected President of the republic by a vast majority of votes. This is the most striking proof that could have been given of the respect paid in France to the memory of Napoleon, and of the extraordinary *prestige* that still attaches to his name. Except as his relation Louis Napoleon had no recommendations of any kind whatever, and would not have obtained a single vote. He is the representative of his illustrious uncle, the *magni nominis umbra*, rather than the choice of the French people.

In the Chamber of Deputies, which sat under the charter of 1830, the particular clauses of a law were voted openly as in England; but the *ensemble* was voted by *ballot*; the *ayes* being indicated by white, and the *noes* by black balls, thrown into an urn. Hence it was comparatively difficult to predict the fate of any law as to which public opinion was divided; the deputies being able to vote according to their own sentiments with respect to it, and not being, as in England, forced to vote with their party. It is, however, difficult to say which plan is best fitted to promote the public interests.

The discussion upon the *ensemble* or *projet* of a law, is not carried on in the National Assembly as in the H. of C.; for the members who intend to speak in favour of and against the law, inscribe their names in a list, and being called upon by the President, or Speaker, deliver their opinions from the tribune, a place provided for them, in the order in which they are enrolled. This has led to the practice of delivering long written rhetorical harangues; which, however, are becoming unpopular. The discussion on the clauses of a law is carried on as in the H. of C.

The ministry under the late régime, was divided into 8 departments; those of Justice and Religion — Foreign Affairs — War — Marine and Colonies — the Interior — Commerce and Public Works — Public Instruction — and Finance. The ministers were assisted by a Council of State (Conseil d'Etat,) the members of which, as well as the ministers, were appointed and dismissed at the pleasure of the king.

The 86 deps. of France are subdivided into 363 arrondissements, and these again into 2,834 cantons, and 37,234 communes. Each dep. is governed by a prefect, with a salary varying from 10,000 to 40,000 fr. a year, except in the dép. Seine, where the salary of the prefect is 100,000 fr. (4,000*l.*). Each arrond. is superintended by a sub-prefect, with a salary of 4,000 fr. a year; and each commune by a mayor and other magistrates, whose services are gratuitous. The prefect is assisted by the council-general of the dep., which consists of a member from each canton, and meets once a year: a great deal of the internal administration of the dep., as the distribution of taxation, &c., is undertaken by this council. The sub-prefects and mayors are also aided by councils elected by the citizens. All the mayors were nominated by the king or the prefect; but the communes have certain rights and privileges of their own, which cannot be interfered with by the state, though the latter has perfect command over the administration of the deps. and arronds.

Justice. — The administration of justice in France, previously to the revolution, was, in the last degree, partial and corrupt. Justice, in fact, was, in the vast majority of cases, openly bought and sold; and a poor man without powerful protectors could never hope to succeed in any case. The institution of juries was unknown; and the criminal law was, if possible, in a still more vicious and degraded state than the civil. Happily, however, these things are now matter of history. The revolution swept off every vestige of the old system of jurisprudence, and of the endless and flagrant abuses that had grown up under it. The present civil and criminal law of France has been embodied in codes drawn up, under the auspices of Napoleon, with singular perspicuity and brevity; and is honestly and impartially administered.

The ordinary judicial tribunals are of 6 kinds, as follows: — Simple police courts, tribunals of justices of the peace, courts of original or primary jurisdiction (*tribunaux de première instance*), royal courts, courts of assize, and the court of cassation. The extraordinary tribunals are — citizens' benches, called *conseils des prud'hommes*, tribunals of commerce (the *cour des comptes*), courts martial, university and other special courts, and the chamber of peers and deputies. In each commune there is a police court in which the mayor presides; and in every canton there is at least one justice of the peace, formerly appointed by the king, with power to decide in civil causes under the value of 100 francs; his decisions in those under 50 francs being without appeal. There is in each arrond. a court of original jurisdiction to decide without appeal in causes not above the value of 1000 fr., as well as appeals from the simple police courts. These are composed of from 3 to 12 judges. Superior courts are established in the principal cities and towns, and have jurisdiction throughout a territory including from 1 to 7 deps. They are composed of a president, several vice-presidents, some legal functionaries, and from 20 to 60 counsellors; they are almost exclusively courts of appeal from the last-mentioned courts, and the tribunals of commerce. The courts of assize are temporary tribunals which take cognisance of criminal cases; one is holden at certain periods in each dep. In these, trial by jury is adopted; the juries are composed of 12 citizens above 30 years of age, who have hitherto been either taxed directly to the amount of 200 fr. yearly, or have belonged to certain professions. There are 3 judges, one of whom is a counsellor belonging to a royal court. The decisions of these courts are commonly without appeal, and can only be annulled by the court of cassation on the plea of informality. (*Aperçu Statist.*) The last-named tribunal is a superior court of appeal in both civil and criminal cases. It is composed of 49 members (including a first president and 3 others), appointed for life by the king. Each member must be at least 30 years of age, and have a legal diploma; but no member may practise in the legal profession, or exercise any public function, but such as may be connected with his duty in the court. The court of cassation is divided into 3 separate chambers of 15 members and a president each. It may suspend the functions of any subordinate judges, and summon them before the minister of justice to answer for their decisions; and it has the highest and most absolute au-

thority in all judicial matters. Arts. 91—100 of the new constitution relate to the formation and functions of a High Court of Justice for the trial of political offences.

The *cour des comptes* is established to audit and examine all accounts connected with the public revenue and expenditure. It ranks immediately after the court of cassation, and is organised in a similar manner. The *conseils des prud'hommes* and tribunals of commerce are established in the principal manufacturing and commercial towns, being composed chiefly of commercial men. The former tribunals determine disputes between the manufacturers and the workmen employed by them; the latter decide in cases to the value of 1000 fr., but do not themselves see their decisions enforced. (*Almanac National, &c.*)

According to the reports published by the minister of justice, the yearly average of heavy crimes committed in France during the 7 years ending with 1839 amounted to 7,304, viz., 2,053 against the person, and 5,251 against property. Female criminals compose about 1-5th of the whole. Crimes against the person are most common in the deps. of the centre and S.; their number being greatest in Corsica. Crimes against property abound most in the N. Creuse is the dep. in which there are fewest crimes.

The prisons are divided into the 4 classes of, 1st. departmental prisons; 2d. *maisons centrales de detention;* 3d. prisons for juvenile offenders; and, 4. *bagnes*, of which there are 3 at Brest, Rochefort, and Toulon, in which there are about 7,000 criminals. The *dépôts de mendicité*, of which there are 5, are also a species of prisons, or of *maisons de detention*. It is estimated that there are annually about 38,000 individuals under confinement, or the surveillance of the police. (See *Hugo*, p. 83.)

Religion. — Religious toleration exists in a widely extended degree. "Each citizen," says the Constitution, "professes freely his religion, and receives from the state for the exercise of his worship an equal protection. The clergymen of the creeds recognised by the law, have alone a right to receive a salary from the state." (Art. 7.) Hence, when it is said that the Rom. Catholic is the dominant religion in France, all that is meant is that it is the religion of the greatest number of the population. The creeds of both Protestants and Jews being recognised by law, their clergy receive public pensions. Since the revolution of 1789, the influence of the papal power has declined more in France than in any other Rom. Catholic country; and not only have the Rom. Catholic clergy greatly diminished in point of numbers and influence, but several sects have latterly arisen, who, while they hold the Rom. Catholic doctrines, repudiate the authority of the Pope. Before 1789, there were in France 18 archbishops, 108 bishops, and a number of inferior clergy, amounting in all to upwards of 400,000 individuals, who among them swallowed up 118,000,000 fr. a year of revenue! There are now 14 archbishops; 66 bishops, and about 40,000 subordinate clergymen. The total expense of the Rom. Catholic church, seminaries, &c., amounted in 1848 to 37,912,900 fr., exclusive of casual and accidental resources, which are of considerable importance. The estimates of the number of dissenters have differed extremely. M. de St. Fargeau, in the *Aperçu Statisque*, estimated the number of Calvinists and Lutherans at no fewer than 5,000,000. But the *Encycl. des Gens du Monde* estimated the entire body of dissenters at only 2,100,000; and the well informed authors of *Patria* (p. 2564.) go still lower, and state that there are not in France above 1,000,000 dissenters from the Rom. Cath. faith, of whom about 600,000 are Calvinists, 300,000 Lutherans, and 100,000 Jews. The Protestants have in all above 700 pastors, and the Jews 110 rabbis; the former received in 1848 an allowance of 1,287,050 fr., and the latter, of 122,883 fr. from the state. The Lutherans are found principally in the Rhenish and N. depts. Strasbourg is the seat of their superintending directory and chief theological seminary. The Calvinists reside mostly in Gard and other S. depts. Their principal seminary is at Mantauban.

Public Instruction. — The proportion of individuals receiving education to the whole pop. was in 1820 estimated at 1 in 27, and in 1830 at 1 in 20: it is now about 1 in 10. At the end of 1843, the total number of schools, public and private, throughout France, was 59,435. The number of pupils at the same period was 3,144,577, of whom the boys were to the girls nearly as 3 to 2. Instruction is primary, secondary, or superior. To afford the first, every commune is obliged by law to support at least one primary school, either of its own, or in conjunction with neighbouring communes. In 1829, 14,230 communes were without primary schools; in 1837, this number was reduced to 7,682; and in 1843, it was further reduced to 2,460. The want of schools is chiefly experienced in the S. and W. deps. Reading, writing, the French language, the first rules of arithmetic, weights and measures, the first lines of geography, and history and drawing, are the principal branches of education in these schools: they are afforded gratuitously. But besides the communal schools, since 1837 infant schools have been established for the children of the poor from 2 to 6 years of age. There were 1,489 of these schools in 1843, attended by 96,192 children. There are also schools for working men; and normal schools for the education of primary teachers, the course of study and practice in which lasts 2 years. Secondary instruction was supplied in 1841-42 by 31 communal colleges, 46 royal colleges, and 1,016 private academies, under the superintendence of the university, to which they pay a fee of 5 per cent. of the sum received with each pupil. These establishments had in all 60,341 pupils. There are 26 academies for superior instruction, one in each of the cities and towns in which there is a royal court of justice, excepting Ajaccio. Each of these academies is governed by a rector and has 2 inspectors, who visit in turn all the schools, both private and public, within their separate jurisdictions. The faculties of these academies are empowered to grant the degrees of doctor, licentiate, and bachelor. There is in Paris an *école normale*, or academy for the education of professors for the colleges throughout the kingdom, the institution of which has been of the greatest service. The whole of the foregoing establishments constitute the university of France, which is presided over by the minister of public instruction and a council of 9 members; under whose authority 12 inspectors-general visit all parts of France, to ascertain the state of education. There are some establishments, however, which are beyond the jurisdiction of the university. Such are the College of France, the Museum of Natural History, the *Ecole des Chartes*, School of Oriental Languages, &c., the Institute, the most celebrated literary association in Europe, and an abundance of societies of all kinds for the advancement of knowledge. The College of France, founded by Francis I. in 1530, enjoys a high celebrity. It is wholly devoted to the pursuit of the highest branches of art and science; none of its courses of instruction are elementary. It had, in 1845, 28 professors. The public libraries in the deps. are said to contain nearly 4,500,000 vols. (*Patria*, p. 1406.): those of Paris (8 in number) in addition to the foregoing, contain 1,333,000 vols. At many of the institutions in the cap., lectures on most branches of science are delivered gratuitously by professors of acknowledged eminence.

Public Charitable and other Institutions. — The amount of pauperism varies in different years with the varying state of the crops, the prosperous or unprosperous condition of commerce, and the facilities for obtaining employment. So much is this the case, that the numbers soliciting relief, and depending in great measure on charity, are sometimes twice or three times as great in one year as in another. Mendicancy, notwithstanding the efforts made for its suppression, is still very frequent. The establishments for the relief of pauperism consist of hospitals, *hospices* (asylums), and *bureaux de bienfaisance*. Their funds are partly derived from the state, and partly from their own landed or other property, endowments and donations of individuals. There were, in 1845, 1,338 hospitals and asylums, which, during that year, had an ordinary revenue of 53,632,993 fr. In 1841 there were 7,482 *bureaux de bienfaisance*, which gave in-door and out-door relief to 807,000 individuals, at an expense of 10,000,000 fr. There are several lunatic asylums, a royal institution, and a royal hospital for the blind in Paris, deaf and dumb establishments at Paris and Bordeaux, maternity societies, others for the assistance of prisoners, the sick, &c., and a vast number of philanthropic societies of all kinds dispersed throughout the country.

It has been estimated that the proportion of foundlings to the total number of births is about 34 to 1,000. In 1836-40, the mean number of children in the foundling hospitals of France was about 100,000. The annual expense of the foundling hospitals varies from 8 to 10 millions fr.; though much reduced, the mortality amongst the foundlings is still very heavy. Ille-et-Vilaine had the fewest foundlings; Yonne the greatest number. In 1841, there were 46 *monts-de-piété* (government pawnbroking establishments throughout France). They are situated in the chief towns; some, as that at Montpellier, lend money without interest; while that of Paris receives an interest of 12 per cent. on money advanced. In Hautes Alpes there are some similar institutions for the benefit of the agriculturists, in which the pledges received and the interest due are both paid in corn.

The spirit of moral improvement has gained strength in Paris during the last twenty years. Insurance against the casualties of life, savings' banks, and other useful or philanthropic institutions, have all made progress, and

some of them have advanced rapidly. According to official documents, there were, in 1844, 347 savings' banks in France, of which 25 had been established in the preceding year. These institutions now exist in almost all the 86 departments. The number of depositors at the end of 1844 was 627,306, the amount of the deposits 385,000,000 fr. Of the above sum 104,800,000 was in the savings' bank of Paris.

There are several institutions for mutual assurance; one of which has been established upon a grand scale, under the title of *Banque Philantropique*, which, from its superior solidity, promises to be productive of much benefit. Its leading object is, to supply a provision for children on their reaching a certain age; but it also comprises other objects, such as insurance against the conscription. Already 12,000 families have insured in it, and the subscriptions amount to 600,000*l*. It has 1,500 agents in France, Savoy, and Belgium.

Armed Force. — Abstract Statement of the Effective French Army in 1845.

	France.			Algeria.			Totals.		
	Officers.	Petty Officers and Soldiers.	Horses.	Officers.	Petty Officers and Soldiers.	Horses.	Officers.	Petty Officers and Soldiers.	Horses.
Etat-major	2,219	1,432	- -	183	92	434	2,402	1,5[illegible]	434
Infantry	7,186	163,706	- -	1,541	37,992	520	8,727	201,[illegible]	[illegible]
Cavalry	2,430	50,420	43,234	264	4,876	4,860	2,694	55,296	[illegible]
Artillery	1,299	25,208	13,032	86	3,551	1,637	1,385	28,759	14,[illegible]
Engineers	186	5,737	206	68	2,738	708	254	8,475	914
Gendarmerie	738	18,750	11,836	22	686	448	760	19,436	12,[illegible]
Veterans	174	4,822	- -	- -	- -	- -	134	4,822	
Troupes de l'Administration	113	3,389	1,338	135	5,688	5,089	248	9,077	6,427
Services Administratifs	1168	1,900	- -	738	1,340	200	1,906	3,240	200
Native Corps of Africa	- -	- -	- -	273	6,161	3,675	213	6,161	3,675
Totals of the army	15,473	275,364	69,646	3,310	63,124	17,571	18,783	338,488	87,217

The army is recruited by an annual contingent of nearly 80,000 men, either volunteers or conscripts, above 20 years of age. The conscripts are chosen by ballot for a 7 years' term of service. The exemptions from service are, natural infirmity, the being under the height of 5 ft. 1 4-5th in. (Engl.), the eldest of a family of orphans, the only son of a widow or of a father blind or 70 years of age, the brother of a soldier living or dead, and certain analogous circumstances. About 11,000 or 12,000 of those enlisted annually are volunteers. The average cost to the state of each soldier (officers and men) is estimated by Dr. Bowring at 23*l*. 16*s*. 8*d*. When not in active service, the daily pay of a captain of fusileers is equal to from 3*s*. 5*d*. to 4*s*. 5*d*., of a lieutenant from 2*s*. 6*d*. to 2*s*. 9*d*., of a corporal 6*d*., and of a private 3¼*d*. On the march, the pay is raised at least one third, and the average of pay and rations seems to be about 5½*d*. a day to the infantry soldier. Officers are far more generally promoted from the ranks than in England: and how objectionable soever in other respects, it must be admitted that conscription brings into the army a higher class of persons as common soldiers, than if it were wholly raised by voluntary enlistment. No officer can be promoted to a superior rank without having served 4 years in the rank immediately below. The wounded, &c. have a claim to pensions of retreat, but the pensions of a lieutenant-general, colonel, captain, and private, are respectively, no more than 160*l*. 96*l*., 48*l*., and 8*l*. a year, after 30 years' service, increasing 1-20th, however, each succeeding year.

France is divided into 20 military divisions; each under the command of a lieutenant-general. The latter is the highest rank in the French army, excepting that of marshal, the numbers which attain to this dignity being, however, extremely limited. There are many fortresses, citadels, forts, and other military posts, and 6 military arsenals in the country. The principal military schools are. — those of engineers and artillery at Metz, the practical military and polytechnic schools at Paris, the schools of Saint-Cyr and La Flèche, and the cavalry school of Saumur. The Royal Hospital for Invalids, together with its branch at Avignon — an establishment similar to Chelsea College, instituted by Louis XIV., maintains about 5,000 old soldiers.

Independent of the foregoing regular troops, there is the National Guard. This body, which originated immediately on the taking of the Bastile in 1789, and was organised in the year following, comprises all the male pop. between the ages of 20 and 60 years, not disqualified by natural infirmities, by their professions, or by holding certain offices under the state. In 1832, the National Guard amounted to 5,729,052 men, of whom 3,781,206 were liable to active duty, and 1,947,846 formed a *corps de reserve*. Its total effective force was then estimated at about 2,000,000 men, being to the total pop. as 6 to 100. The National Guards directly choose their own officers below the rank of lieut.-colonels; the latter and the colonels being chosen by the chief of the state from a list of candidates submitted to him. The expense of the institution is borne jointly by the government, the departments, the communes, and the citizens themselves. The state expense is estimated at 60,000,000 fr., or about the same as the maintenance of 100,000 regular troops. But despite its magnitude and cost, we look upon the National Guard as being in almost all respects a worthless species of force. It is, as was seen in 1814, of little or no use in opposing an invasion of the country by foreign troops; and it is still more inefficient as a means of maintaining internal tranquilli y and security. The National Guard is a part of the public, and is animated by all the prejudices and feelings of the class to which it belongs. Hence, when riots and disturbances take place, whether originating in political or other causes, it is quite as likely that the National Guards should fraternise (as the phrase is) with the rioters, as that they should support the public authorities; and, in fact, they have been found over and over again to be the worst enemies of the government. We therefore are inclined to think that their dissolution would be a highly advantageous measure, and that it would conduce, in no ordinary degree, to the public well-being. An army always embodied, living in barracks apart from the people, and commanded by officers belonging to the higher classes, is the only species of force on which a government can safely place any reliance for protection against popular tumults or discontents. The Legion of Honour is an order which, in a practical point of view, may be said to be military. It has about 50,000 members of different ranks. (*Encycl. des Gens du Monde.*)

Navy. — According to an ordinance of 1st Feb. 1837, the naval force for the peace establishment consists of 40 ships of the line, 50 frigates, 180 other vessels rigged with sails, of regulated rates, and 40 steamers. One half of the ships of the line and steamers must be launched; the other half remaining on the stocks are to be forwarded to the extent of 22-24ths of preparation. The 40 steamers and the 180 sail-rigged vessels of inferior order are to be kept afloat.

The vessels afloat in 1844 were thus arranged, according to the budget for that year: —

Sail-rigged Vessels.

23 ships of the line:
- 4 of the 1st rate of 120 guns.
- 2 of the 2d rate, of 100 guns.
- 8 of the 3d rate: 3 of 90 guns; 5 of 86 guns.
- 9 of the 4th rate, of 82 guns.

29 frigates - -:
- 11 of the 1st rate, from 58 to 60 guns.
- 11 of the 2d rate, from 50 to 52 guns.
- 7 of the 3d rate, from 40 to 46 guns.

23 war corvettes of from 20 to 30 guns.
3 Aviso corvettes of 16 guns.
27 brigs of from 16 to 20 guns.
21 Aviso brigs, of 10 guns.
9 gun brigs of 4 guns.
16 galliots, cutters, &c., of 6 guns.
39 flotilla craft.

190 war vessels.

Vessels of Burden.

52:
- 16 corvettes of burden, or store ships.
- 36 gabares.

Steamers.

43:
- 3 frigates of 450 horse power
- 1 corvette of 320 —
- 6 ditto of 220 —
- 33 of - 160 — and downwards.

285 Total vessels.

There were to be added to the vessels kept at sea in 1841, a reserve of 24 vessels; viz., 8 disposable in roadstead, and 16 in commission in port. The composition of this reserve is to be as follows: —

Eight disposable in roads: — 2 ships of the line; 3 frigates; 1 war corvette; 2 brigs.

Sixteen in commission in port: — 5 ships of the line, and 7 frigates; 1 vessel of inferior rate; 3 steamers.

The effective of the crews required for the 285 vessels in active service in 1844, was 26,990 men. and for the reserve 3,882, making together 30,872 men.

The entire cost of the navy and naval departments, for 1848, is estimated at 92,079,706 fr.

In 1845, there were 2 admirals, 10 vice- and 20 rear admirals, 300 captains, and 600 lieutenants; the pay of a vice-admiral being from 4,000 to 6,000 fr., of the captains from 1,500 to 3,000 fr., of the lieutenants 800 to 1,600 fr., and of the seamen 200 to 300 fr. a year. The coasts are divided into 5 marine prefectures, those of Cherbourg, Brest, L'Orient, Rochefort, and Toulon. The principal naval ports, proceeding N. to S., are Dunkirk, Calais, Boulogne, Havre, Cherbourg, St. Malo, Morlaix, Brest, Nantes, L'Orient, Sables d'Olonne, La Rochelle, Rochfort, Bayonne, Port-Vendres, Marseilles, Toulon, and Frejus. The minister of marine is assisted by an admiralty-council, and a board of naval works. The principal naval schools are those of Toulon and L'Orient, and that on board a ship in Brest Roads; there are, besides, 44 inferior schools.

Colonies.—These, which are under the superintendence of the minister of marine, comprise the islands of Martinique and Guadaloupe, and some smaller ones, in the Antilles; French Guiana in S. America; the regency of Algiers, Senegal, and the isl. of Goree in Africa; the isles of Bourbon and St. Marie in the Eastern Ocean; and Pondichery, Chandernagor, Karikal, Mahé, and Yanaon in Hindostan. Their united pop., exclusive of Algiers, in 1836, was 562,570, of which number 258,956 in the W. Indian and African colonies were slaves, and 165,241 in the E. Hindoos. But since the late revolution the slaves have been emancipated. The 4 principal colonies, Martinique, Guadaloupe, Bourbon, and Guiana, have each a colonial council elected by the resident French above 25 years of age, and having certain property-qualifications. In every colony there is a governor appointed by the king as his representative, who convokes or dissolves the colonial councils at pleasure, and provisionally assents to, or suspends, the execution of the decrees passed by them. The French codes of laws are in force, and justice is administered in the colonies, as in France, in tribunals of the peace, of original jurisdiction, royal courts, and courts of assize. (For further particulars, see the separate articles as above, *Hugo, &c.*)

Taxes. — The system of taxation that existed in France previously to the revolution of 1789, had every possible defect. It consisted in great part of direct taxes laid on property, from which, however, that of the nobility and clergy, or of the richest classes, was exempted. The indirect taxes were also assessed on the most vicious principles; and the contributions of forced labour, or *corvées*, fell almost wholly on the peasantry. The collection of the taxes by farmers was also exceedingly unpopular; and, in fact, the whole system was one of partiality, preference, injustice, and oppression. The revolution made an end of these abuses, and established the sound principle embodied in the charter and the new constitution, that every citizen should contribute, without distinction, to the wants of the state in proportion to his means. But we are not sure that, practically, this principle has been carried into effect. The present land tax, or *contribution foncière*, should be assessed on all lands and houses in proportion to their nett rent; but, in point of fact, there are very great inequalities in the assessment, different departments, and different districts in the same department, being higher taxed than others. But though the tax were equally assessed, it would be in many respects objectionable. Its obvious tendency is to discourage the outlay of capital on the land; and, besides having this effect, it is also unjust. Two estates fetch the same rent, and would, therefore, be charged with the same amount of tax; but it may happen that the one is nearly in a state of nature, while a half or two thirds of the rent of the other is really derived from the outlay of the capital upon it; and, such being the case, nothing can be more unjust than to tax them both to the same extent. Variable taxes on land are, in fact, uniformly the greatest drawback on a country.

The *contribution personelle et mobilière* is a mixed tax. The first part being a sort of poll tax, rated at the value of two days' labour, and charged on *men* of 18 years and upwards: the *mobilière* is a tax on the occupiers of houses of a certain class, charged according to the rent. The *droits des patentes*, or license duties, are charged on all persons following a trade, profession, or business. They are assessed partly according to the rent of the house occupied by the patentee, and partly according to the pop. of the town in which he carries on business. In every department of France there is an office for the registry of deeds, the fees on which, besides the expenses of the establishment, which is highly useful, yield a considerable revenue to government. The other public taxes are nearly the same in France as in England.

Besides the public taxes, *octrois* or duties are levied on all articles entering towns of any considerable magnitude, the rate of the duties varying with the pop. of the towns. These duties are great obstructions to trade and industry; but as their produce is employed to defray indispensable local charges, including the expenses of hospitals, poor-houses, &c., it will be no easy matter to get rid of them. We subjoin two accounts, the first exhibiting the produce of the principal branches of the revenue in each year from 1816 to 1845, both inclusive, with the total annual expenditure during the same period; and the second, the account of the revenue and expenditure of 1848, as fixed by the budget of that year.

Account of the Produce of the different Branches of the Revenue of France in each Year from 1816 to 1845 both inclusive, with the total Annual Expenditure during the same Period in Millions and Tenths.

Years.	Direct Taxes.	Registration, Stamps, and Public Lands.	Forests and Fisheries.	Customs and Salt.	Indirect Taxes.		Postage.	All other ordinary Sources.	Extraordinary Resources.	Total Revenue.	Total Expenditure.
					Drinks, Tobacco, Gunpowder, &c.	Salt Works.					
	Fr.	Fr.	Fr.	Fr.	Fr.	Fr.	Fr.	Fr.	Fr.	Fr.	Fr.
1816	402·2	171·8	17·8	94·2	139·8	2·4	21·0	29·7	157·9	1,036·8	1,055·8
1817	402·9	180·6	21·6	109·6	154·8	2·4	21·4	15·5	361·5	1,270·3	1,189·3
1818	390·4	174·6	20·2	116·0	177·8	2·4	22·0	34·4	476·3	1,411·1	1,433·7
1819	368·5	160·1	18·3	112·3	186·3	2·4	23·0	24·5	41·3	936·7	896·0
1820	368·8	158·1	15·9	130·3	191·9	2·4	23·2	42·8	5·8	939·2	906·7
1821	354·7	164·9	20·2	128·6	191·0	2·4	23·9	38·9	7·1	934·7	908·3
1822	344·0	166·5	24·7	136·3	202·7	2·4	21·5	32·3	16·5	949·9	949·2
1823	343·3	165·6	23·2	129·3	196·4	2·4	25·4	33·2	124·0	1,042·8	1,118·0
1824	344·3	176·6	23·2	150·8	204·9	2·0	26·5	31·9	29·3	989·5	986·1
1825	346·7	178·8	28·2	146·3	212·2	2·0	27·6	37·0	- -	978·8	981·9
1826	341·2	180·3	31·6	158·8	213·6	1·7	27·6	27·9	- -	982·7	976·9
1827	323·3	178·8	27·0	153·0	209·6	1·7	27·5	27·5	- -	948·4	986·5
1828	325·7	185·3	29·3	163·5	212·3	1·2	30·5	30·0	51·0	1,028·8	1,021·1
1829	329·4	186·4	30·3	159·1	206·1	1·2	30·8	29·9	28·7	1,021·9	1,014·9
1830	332·2	186·5	24·9	154·2	202·7	1·4	33·7	28·5	67·8	1,031·9	1,095·1
1831	367·4	178·5	16·7	151·8	162·8	1·7	33·3	36·0	356·3	1,305·5	1,219·3
1832	357·5	199·7	21·4	159·7	166·1	1·4	34·2	45·7	77·4	1,063·1	1,171·4
1833	357·1	198·3	23·3	161·3	176·4	1·2	35·4	38·0	171·4	1,162·4	1,134·1
1834	363·4	196·9	22·8	159·6	184·2	1·5	36·2	40·2	30·0	1,038·8	1,063·6
1835	365·7	200·0	24·2	162·2	192·2	1·5	37·1	38·8	46·4	1,068·1	1,047·2
1836	368·6	211·8	31·0	165·8	201·6	1·6	39·0	35·4	17·4	1,072·2	1,065·9
1837	383·2	220·2	30·4	169·1	209·1	1·6	40·6	25·2	7·9	1,087·2	1,078·9
1838	387·2	224·8	34·6	173·5	218·2	1·7	42·4	28·9	0·4	1,111·7	1,136·2
1839	391·9	225·9	31·2	168·5	228·4	1·7	43·9	30·8	55·8	1,181·1	1,179·0
1840	395·7	230·4	33·2	174·4	237·9	1·9	46·1	37·1	73·7	1,234·4	1,363·7
1841	400·0	235·5	31·4	193·2	249·4	0·3	48·2	38·3	182·0	1,381·3	1,425·2
1842	406·6	249·5	35·4	204·6	261·1	6·1	48·9	40·3	79·5	1,331·0	1,440·9
1843	411·3	260·1	30·3	209·6	264·9	0·8	48·8	39·9	112·7	1,378·2	1,445·3
1844	413·9	260·9	31·8	215·8	272·8	0·04	50·4	45·2	94·0	1,384·8	1,428·1
1845	- -	- -	- -	- -	- -	- -	- -	- -	- -	1,408·8	1,521·8

Public Debt. — In 1848 the charge on account of the public debt of France consisted of the following items: —

	Francs.
Interest on 5 per cent. stock - - -	134,211,550
——— 4½ do. - - - -	895,302
——— 4 do. - - - -	10,523,860
——— 3 do. - - - -	28,153,508
Sinking fund, including dotation of do. -	117,503,731
Interest on loans for canals and public works	9,110,300
Interest *de capitaux de cautionnement* - -	7,000,000
Brought forward - -	307,398,251
Interest of floating debt - - -	22,000,000
Annuities or *rente viagere* - - -	2,000,000
Pensions - - - - - -	52,917,940
Total - - -	384,346,191

As the debt of France has been progressively increasing since 1815, the sinking fund, which makes so prominent a figure in the above statement, has been all the

while kept on foot by borrowed money, and must, therefore, instead of diminishing, have contributed to swell the amount of the public debt. In this country we have long been aware of the folly of attempting to reduce debt, except by increasing revenue or diminishing expenditure, or both. But this is one of the many practical discoveries which the French have yet to make.

Owing to the shock given to the industry and trade of the country by the revolution of this year, the revenue has fallen off very considerably, at the same time that there has been a large increase of expenditure in providing for the unemployed poor and other charges. The funds have, also, sustained a heavy fall; so that the present (December 1848) financial condition of France appears to be as bad as can easily be imagined. It is difficult, indeed, to conceive how a bankruptcy, either to a greater or less extent, should be avoided.

ACCOUNT of the Public Revenue and Expenditure, for 1848.

Revenue (1848).	Fr.	Fr.
DIRECT TAXES.		
Land tax, &c. (*contrib. foncière*)	279,456,080	
Personal and property taxes (*personelle et mobilière*)	59,313,060	
Assessed taxes (*portes et fenêtres*)	34,796,826	
Patents	46,310,100	
Frais d'avertissement	793,890	420,669,956
Registration, Stamps, Sale-duties.		
Registration, &c.	217,397,690	
Stamps	40,556,000	
Sale and auction duties	5,405,500	263,359,190
Forests and Fisheries.		
Timber and other forest produce	35,326,500	
Fishing duties	3,069,500	38,396,000
Excise Taxes, Customs, &c.		
Custom-house duties, &c.	163,959,000	
Taxes on salt	58,153,000	222,112,000
Excise on drinks, &c.	137,789,000	
Sale of tobacco	120,000,000	
Ditto of gunpowder	6,863,000	
Various	43,310,000	307,962,000
Post-office.		
Postage of letters	46,542,000	
Packets and other sources	5,196,000	51,738,000
Miscellaneous.		
Weights and measures, brevets, &c.	- -	19,685,400
Revenue derived from Algiers	17,825,000	
Ditto from India	1,050,000	
Ditto colonies	6,983,188	
Ditto universities	2,406,276	
Ditto departments	18,791,000	47,055,464
Total receipts	- -	1,370,978,010
Expenditure	- -	1,361,681,670
Surplus of ordinary receipts over expenditure	- -	9,296,340

Expenditure (1848).	Fr.	Fr.
Public Debts and Pensions.		
Interest, annuities, &c.	329,398,251	
Pensions of various kinds	54,947,940	384 346,191
Dotations.		
Civil list	13,600,000	
Chamber of peers and deputies	1,322,150	14,922,150
Ministry of Justice and Religion.		
Justice	- -	25,739,095
Religion { Rom. Catholic	38,154,900	
Religion { Not Rom. Catholic, &c.	1,409,935	39,564,835
Ministry of Foreign Affairs.		
Central and foreign admin.	6,034,922	
Various expenses	2,850,500	8,885,422
Ministry of Public Instruction.		
Administration and schools	- -	18,058,033
Ministry of the Interior.		
Administration and pub. institutions	- -	116,564,758
Ministry of Agriculture and Commerce.		
Central administration establish. &c.	- -	14,384,500
Ministry of Public Works, &c.		
Royal roads and bridges	32,590,000	
Ports and internal navigation	20,060,000	
Other expenses	10,962,050	63,522,050
Ministry of War.		
Expenditure in France	281,337,195	
African possessions	24,895,205	306,232,400
Ministry of Marine and Colonies.		
Pay of seamen and marines	62,733,794	
Ship-building and other works	29,345,912	
Colonies	22,861,157	
Various	4,698,014	119,638,877
Ministry of Finance.		
Administration, &c.	- -	17,765,136
Expenses of collection of taxes, &c.	- -	156,892,495
Reimbursements	- -	74,185,730
Total ordinary expenditure	- -	1,361,681,670

People, languages, &c. — It has been estimated that of the total pop., about 32,400,000 speak French, or various patois, having different degrees of analogy with that language; that 1,600,000 use German dialects, 1,250,000 the Breton, and 150,000 the Basque tongue. It is chiefly with reference to these languages that Balbi has divided the inhab. of France into four great families — the Greco-Latin or Gallic, Germanic, Celtic, and Basque; besides the Semitic, including the Jews, and some few individuals of Saracenic origin in the S. deps.; the Hindoo family, including the *gitanos*, or gypsies, &c. The Greco-Latin family, which comprises the great bulk of the pop. speaking dialects derived from the Latin, are probably for the most part descended from the ancient Celtic pop. by whom the country was principally inhabited at the period of the Roman conquest; and who, during the subsequent ages of Roman dominion, gradually adopted the Latin tongue, which forms the basis of the modern French. The Romans, no doubt, intermixed with the native pop., and the latter, in the S., may still have some infusion of Greek blood derived from the Greeks, who founded Marseilles, and other colonies on the Mediterranean coast; the French are also in part the offspring of the Visigoths, Burgundians, Alani, and Franks, who successively became masters of Gaul in the middle ages. But notwithstanding that the modern French are thus descended more or less from all these races, there can, we apprehend, be little doubt that the ancient Gallic or Celtic blood predominates, especially in the Central and S. W. provs. The intermixture of Roman and Greek blood could not have been very great; the Visigoths, Burgundians, Alani, and other barbarous tribes, swept over the country as conquerors, but maintained themselves in it too short a time to have any material influence on the native pop.; and the Franks, though, like the Normans in England, they established a martial supremacy, gave little to France but its name, and were in too small numbers to impress their own character on the nation, except perhaps in the N. E., where the population is less French than elsewhere.

" Enfin les traits principaux du caractère et des mœurs servent encore à faire reconnaître cette distinction primitive des races que les progrès de la civilisation doivent un jour effacer entièrement, et qui même n'est plus guère apparent que dans les campagnes. Au sein des villes, en effet, les communications, de jour en jour plus rapides et plus fréquentes entre les diverses parties du territoire, tendent à rendre parfaitement uniformes les mœurs de la classe riche et éclairée. Aussi ces qualifications proverbialement attribuées par nos pères aux populations respectives des anciennes provinces, la naïveté champenoise, la finesse Normande, l'entêtement Breton, l'hâblerie Gasconne, &c., peuvent-elles maintenant être considérés comme sans valeur en ce qui concerne une grande partie de la population? Dans le fait, on aurait peut-être une idée plus juste des différences que présente, sous les rapports les plus généraux, la masse de la nation, si l'on partageait la contrée en trois régions, dont les limites resteraient nécessairement assez vagues. On verrait dans la région du nord des hommes de haute taille, de forte complexion, participant davantage, à mesure qu'ils se rapprochent de la frontière, de l'humeur Allemande ou Belge, moins communicatifs, et un peu flegmatiques, mais francs et hospitaliers, et qui sont en possession, par un heureux privilege, de fournir les meilleurs soldats à nos armées, et les meilleurs ouvriers à nos fabriques et à nos champs. Dans la région du midi, on trouverait des hommes généralement plus petits, plus agiles, et plus actifs, prompts dans toutes leurs résolutions, portés à une gaieté insouciante, et chez lequels l'esprit supplée à la solidité qui distingue les habitants du nord. Au centre serait une population intermédiaire entre les deux autres, et qui leur est beaucoup inférieure. Là surtout, en effet, se trouve le paysan ignorant et apathique, ennemi de l'innovation, vivant de peu, et qui semblerait destiné à rester éternellement stationnaire, s'il n'avait sous les yeux l'exemple de ses frères des autres régions. En dehors de la classification que nous essayons de tracer doivent rester les populations montagnardes et maritimes, qui présentent partout des traits presque identiques, bien connus.

" Dans l'ensemble, le caractère national, formé du mélange des qualités et des défauts qui predominent dans les portions principales de la population, se distingue spécialement par une vivacité, par une fougue, portée en tout, et dont le correctif nécessaire est la mobilité.

C'est, en effet, parcequ'on a pris des résolutions irréfléchies et précipités qu'on en change brusquement. Le courage, la loyauté, le dé intéressement, sont encore des qualités qu'on ne refuse guère à cette nation, essentiellement sociable, et qui a, sans contredit, le plus contribué à imprimer à la civilisation Européene son elan actuel." (*Encyc. des Gens du Monde*, xi. 503, 504.)

Generally speaking, the French people, particularly those who have the greatest admixture of Celtic blood, are inferior in size to the English. In our army, 5 ft. 6 in. is the minimum size for recruits; but in the French army, the size is fixed at 5 ft. 1¼ in. English measure. One, in fact, is struck with surprise at the diminutive size of the soldiers in an ordinary French regiment; and this fact, and not any supposed want of bravery or resolution, sufficiently explains the fact of their little success in close fight with English troops.

It would be useless to enter into any lengthened details with respect to the language and literature of France. The former, though wanting in energy, possesses great clearness and precision, and is the favourite language of diplomatists and courtiers. It is not going too far to say, that the French have attained to high excellence in almost every branch of art, science, and literature; and though in some departments they may have to yield the palm to others, their literature is, probably, on the whole, the richest and most valuable of which any modern nation has to boast. The French writers are particularly distinguished by extreme perspicuity, good sense, an attachment to classical models, and, perhaps, also, by a deficiency of sentiment. Latterly, however, the public taste has apparently undergone some considerable modifications; and the literature and philosophy of their German neighbours appear to be materially influencing their tastes and pursuits. We doubt, however, whether this be any improvement. The depth and sentiment of the Germans are more apparent than real: the use of an ambiguous phraseology, and the want of clear and distinct ideas, often give an appearance of depth where there is really none. Had Paley been a less admirable writer, the probability is that he would have been considered a more profound thinker. And so, probably, it will be with the French: should they ever become as transcendental and unintelligible as the Germans, they will be supposed, by that very large class who admire most what they least understand, to have attained to a depth and capacity of thinking, to which Descartes and Malebranche were strangers.

History. — Before the time of Cæsar, the whole of this country was known to the Romans by the name of Transalpine Gaul; but after its conquest, it was divided into the four provinces of *Provincia Romanorum* (*Provence*), and *Gallia Aquitanica*, *Celtica*, and *Belgica*. In the 5th century it was subdivided into 17 provinces, inclusive of all the territory on the E. bank of the Rhine. At the latter epoch the Germanic nations began to pour in an irresistible torrent over Gaul. The Visigoths established themselves in the W. and S., from the Loire to the Pyrenees, where they established a kingdom that lasted till about 540. The Burgundians, in a similar manner, settled in the E., from the Lake of Geneva to the Rhine, and afterwards stretched along the Rhone to the Mediterranean; the independent sovereignty they erected lasted till about 532. The Franks, whose dominion swallowed up those of both the foregoing tribes, had been long settled in the N.; and Pharamond, their chief, in 420, is considered the founder of the French monarchy, as he was of the first or Merovingian race of Frankish kings. In 485 Clovis defeated Syagrius, the Roman general, at Soissons, and finally extinguished the Roman power in the W.; and in 507, by his victory over the Visigoths, he rendered himself master of all the country between the Loire and the Garonne. On the death of Clovis, in 511, his dominions were divided into four kingdoms — those of Paris, Metz, Soissons, and Orleans — each governed by one of his four sons: these, however, were re-united in 558. In 732 Charles Martel defeated the Saracens, who had effected the conquest of a great part of the S. of France, in a great battle; and ultimately succeeded in expelling them from the kingdom. In 751 the Carlovingian dynasty commenced in the person of Pepin le Bref, son of Charles Martel, and was carried to the summit of its power by Charlemagne, the son of Pepin.

Under the first race of kings the country was a prey to bloodshed, spoliation, and anarchy: industry and commerce were almost unknown, or extended only to the production and barter of a few indispensable articles. Nor was this condition much ameliorated during the rule of the succeeding race. Charlemagne, indeed, encouraged trade and manufactures in the towns, which before his reign were chiefly confined to the cloister, or practised by isolated individuals; but after his death, things returned to their original state of confusion. Under his immediate successor, France was again divided into four parts; and the Normans began to ravage its N. provinces; the power of the nobility also rapidly increased; and the last sovereign of the Carlovingian dynasty, Louis V., in 986-7, possessed only the town of Laon! His successor, Hugh Capet, count of Paris and Orleans, the founder of the third race of kings, governed only the Ile-de-France, Picardy, and the Orleannais. The dukes of Normandy, Brittany, Aquitaine, Gascony, Lorraine, and Burgundy, the counts of Flanders, Champagne, Vermandois, Toulouse, and several minor seigneurs, shared among them the rest of the modern kingdom. By degrees, however, all the great fiefs fell in various ways to the crown. Vermandois was united to it by Philip Augustus; Toulouse and Perche by Louis IX.; Champagne in 1274; the Lyonnais, Dauphiny, and Languedoc, in the 14th century; Berri, Normandy, Gascony, Burgundy, Anjou, Maine, and Provence, in the 15th; the Bourbonnais, Auvergne, Brittany, Lorraine, and considerable territories in the S.W., in the 16th; and Flanders, Artois, Franche-Comté and Alsace, in the 17th century. The names of the sovereigns of France, beginning with Hugh Capet, and the dates of their accession, are as follows: —

987	Hugh Capet.	1574	Henri III.
996	Robert (*le Sage*).	1589	Henri IV. (*le Grand*).
1031	Henri I.	1610	Louis XIII.
1060	Philippe I.	1643	Louis XIV. (*le Grand*).
1108	Louis VI. (*le Gros*).	1715	Louis XV.
1137	Louis VII. (*le Jeune*).	1774	Louis XVI.
1180	Philip Augustus.	1793	Louis XVI. guillotined and the Republic established.
1223	Louis VIII. (*Cœur de Lion*).	1799	Consuls appointed.
1226	Louis IX. (*St. Louis*).	1801	Napoleon raised to the throne with the title of Emperor.
1270	Philippe III. (*le Hardi*).	1814	On the abdication of Napoleon, Louis XVIII., brother of Louis XVI., ascended the throne. He is called Louis XVIII., because the son of Louis XVI. is supposed to have succeeded his father.
1285	Philippe IV. (*le Bel*).	1824	Charles X.
1314	Louis X. (*le Hutin*).	1830	Louis Philippe I.: He succeeded to the crown on the expulsion of Charles X.
1316	John I.	1848	Louis Philippe expelled, and the Republic established.
1316	Philippe V. (*le Long*).		
1322	Charles IV. (*le Bel*).		
1328	Philippe VI. (*de Valois*).		
1350	John II. (*le Bon*).		
1364	Charles V. (*le Sage*).		
1380	Charles VI.		
1422	Charles VII.		
1461	Louis XI.		
1483	Charles VIII.		
1498	Louis XII. (*Père du Peuple*).		
1515	Francis I.		
1547	Henri II.		
1559	Francis II.		
1560	Charles IX.		

While the monarchy gained in consistency and extent the regal power was making constant advances. The political rights and privileges which the nobles exercised under the feudal system were the objects of continued attacks on the part of the crown, which, though sometimes defeated, were, in most instances, successful. At length, under the administration of Richelieu, the nobles were stripped of all power; and there being no other body in the state, with the exception of the parliaments, which had degenerated into little else than courts of law, that enjoyed any constitutional privileges, the power of the crown was raised above control. Under the vigorous, and, for a lengthened period, prosperous government of Louis XIV., the royal prerogative arrived at a maximum. But the close of this reign was eminently unprosperous; and the wars in which Louis had been long engaged, the burdens they obliged him to impose on his subjects, and the vast debts he had contracted, produced not only great suffering and misery, but also great discontent. During the regency and the subsequent part of the reign of Louis XV., abuses of all sorts multiplied on all hands, and were no longer concealed by the dazzling splendour and magnificence of the preceding period; the most worthless parasites obtained a predominating influence at court; the command of fleets and armies was entrusted to the merest imbeciles; the finances were involved in the greatest disorder; and France and Europe were scandalised and disgusted by the gross sensuality and vulgar profligacy of the king and his intimate associates. Louis XVI., who ascended the throne in 1774, was actuated by the best intentions, but he wanted the firmness of purpose and capacity required in so desperate a crisis. The abuses that infected the whole frame of society, though destructive of the public interests, were either really advantageous, or believed to be so, to a vast number of persons, including the nobility and clergy; and it would have required a mind of a very different order from that of Louis to have frustrated the solicitations, intrigues, and cabals of such powerful parties, and to have safely carried through the reforms that had become indispensable. At length, after a variety of futile expedients had been in vain resorted to, it was resolved, in 1789, to hold a meeting of the States General, which had not been convened since 1614, for effecting the necessary changes, and averting a public bankruptcy. This was the commencement of that tremendous revolution which cost Louis his life, and destroyed every vestige of the government and institutions that existed when it broke out.

The atrocities connected with the Revolution have

been supposed to cast a dark shade over the French character; but we are not inclined to regard them in this point of view. They were the wild, but not unnatural, excesses of an uninstructed populace, that had suddenly been emancipated from a state of extreme degradation, and which had innumerable grievances to suppress, and wrongs to avenge. It unfortunately happened, that when the nobles were stripped of all political power, and rendered incapable of opposing any effectual resistance to the sovereign, they were, at the same time, left in full possession of their feudal privileges as landlords. These comprised an exemption from those direct taxes that fell with their full severity on every one else; the dispensation of justice in manorial courts; and a host of vexatious privileges connected with the game laws, the laws respecting mills, &c. The rental of very many estates consisted, previously to the Revolution, of little else than services and feudal tenures, by the baleful influence of which the industry of the occupiers was almost exterminated. The country population was every where, in fact, in a situation of predial slavery; and while the nobility and clergy threw the burden of the *taillecorvées*, and other oppressive imposts, wholly on the *tiers état*, they engrossed to themselves every situation of power and emolument; so that down to the Revolution, no individual, how meritorious soever, unless he obtained a patent of nobility, could be made an officer of the army, or be promoted to almost any public employment. Government deprived the nobility and landed aristocracy of all that could have rendered them useful, at the same time that it left them all that could render them little tyrants, and a curse to the country in which they lived. If we add to these grievances the fact, that the peasantry received no efficient protection from the government, and that the administration of justice in the king's courts was, speaking generally, partial, venal, and infamous, we shall be at no loss to understand why the aristocracy was so universally detested in France, and why the Revolution, which was indispensable, was so sweeping, bloody, and destructive.

The proscriptions and anarchy by which the Revolution was accompanied continued till Napoleon attained to the supreme direction of affairs. The talents of this extraordinary man were surpassed only by his ambition, which, by overstepping all bounds, precipitated him into enterprises that ultimately led to his overthrow. In 1814 the family of Bourbon was replaced on the throne; but the elder branch had profited as little as the Stuarts in England, under similar circumstances, by the lessons of adversity, and in 1830 they were re-expelled from the kingdom. The crown was then offered, under certain conditions, to Louis Philippe, Duke of Orleans, by whom it was accepted. He has the merit of having contributed, under very difficult circumstances, to maintain, for a lengthened period, the peace of France and of Europe. But he appears, notwithstanding his wealth, to have conducted himself more as the scheming father of a needy family than as the sovereign of a great nation; and disgusted the public by his plans for advancing and enriching his children; and by the corruption which pervaded every department of his government. And as his throne had nothing but public opinion on which to rely, his position became extremely critical whenever that began to be alienated. But it is very doubtful whether, in 1848, the provinces really desired a change of government; and whether the outbreak in Paris, which led to the revolution, might not have been suppressed had the king shown more firmness and decision, and fully availed himself of the force at his command. But however this may be, we have no idea that the new form of government will either provide better for the public interests, or be more permanent than that by which it has been preceded. There is nothing in France on which a constitutional government can rest; for there is no class that has that deep and abiding interest in the support of existing institutions, that is indispensable to protect such a government against sudden popular impulses, and to give it security and free action. Napoleon will, most probably, be found to have correctly appreciated the existing state of things when he declared that "the destruction of the aristocracy had proved fatal to all subsequent efforts for establishing a free government in France: the Revolution had attempted the solution of a problem as impossible as the direction of balloons. An aristocracy is the true support of a constitutional government; its moderator, its lever, its fulcrum. The state without it is a vessel without a rudder; a balloon in the air." (*Las Cases*, iii. 23.) Great prudence and caution on the part of those in authority may, no doubt, enable the present form of government to exist for an indefinite period, but it is notwithstanding of the most precarious character, and may be overturned in a moment.

FRANKFORT or FRANKFURT-ON-THE-MAYN, a celebrated commercial city of W. Germany, cap. of the republic of same name, and seat of the diet of the Germanic confederation, on the N. bank of the Mayn, 18 m. N.E. by E. from its confluence with the Rhine at Mayence, 49 m. S.E. Coblenz, 86 m. S.S.W. Cassel, and 17 m. N. by W. Darmstadt; lat. 50° 7′ 29″ N., long. 8° 36′ E. Pop. (1846), together with its suburb Sachsenhausen, 58,440. It is oval-shaped, and communicates with Sachsenhausen, on the opposite bank of the river, by a stone bridge, of 14 arches, being about 950 ft. long, by 11 broad. Its fortifications were demolished by the French, and their site is now occupied by public walks and gardens. The city is, however, still entered by 9 principal gateways, 2 of which are in Sachsenhausen; and some of them are remarkable for their elegant and classic style of architecture.

Frankfort presents many different varieties of aspect. The old town, with its narrow streets and quaint wooden buildings, with gables overhanging their basement stories, has an unprepossessing appearance, and the Jews' quarter is filthy. In the new town, however, the *Zeil*, the new Mayence-street, Allée, and especially the fine quay which stretches along the Mayn nearly the whole length of the city, are beautiful streets and promenades, and not a few of the houses in them are literally palaces. The streets are generally well paved, and lighted with gas. There are some good squares, several, as the Ross-market (Horse-market), being ornamented with fountains and avenues of trees. Frankfort possesses several interesting public buildings. The Römer, or council-house, is of uncertain origin, but was most probably built by the Frankish emperors. It possesses no architectural beauty, but is deserving of notice, as being the place where the emperors of Germany were elected. The election chamber, on the ground floor, now serves for the sittings of the senate of Frankfort. Above this apartment is the *Kaisers-saal* (imperial saloon), "a large dreary chamber, with a gloomy vaulted roof," but once the scene of the splendid pageant of the election banquet, at which the emperor was waited on at table by the high dignitaries of the empire. Its walls are surrounded by niches, in which are placed the portraits of the German emperors in the order of their succession, from Conrad I. to Francis II.; the latter, with whom the line of the emperors of Germany ceased, filling up the last vacant space. In this building is preserved the famous "Golden Bull," the deed by which Charles IV., in 1356, settled the mode of election of the German emperors, fixed the number of electors at seven, and determined their rights of voting. The present diet of the German confederation assembles in the former palace of the prince of Tours and Taxis, now the residence of the Austrian ambassador; a structure of the last century, containing 140 different apartments, and richly furnished. The cathedral, or church of St. Bartholomew, is an edifice of Gothic architecture, in the form of a cross, 246 German ft. long, by 216 broad. It is said to have been begun in the time of the Carlovingian princes: the greater part of it is, however, the work of the 13th and 14th centuries: the tower, which is 260 ft. in height, is still unfinished. This church has not much beauty; but it contains some curious monuments, especially that of the emperor Gunther of Schwarzburg, killed by his rival, Charles IV.; a fine painting of the Assumption by Rubens, and a Dying Magdalene by Brendel; and the chapel in which the German emperors were crowned. There are 14 other places of worship, including 6 Lutheran, 1 Calvinist, 1 French-Protestant, and 4 R. Cath. churches, besides 2 synagogues, one of which is a very handsome building. In the church of St. Catherine, there is a fine painting of "Jesus on the Mount of Olives," by Boss. The church of St. Leonard, near the river, occupies the site of a palace built by Charlemagne, but of which no traces exist. The *Saalhof*, a building of the last century, also near the Mayn, is erected on the site of another palace, built by Louis the son of Charlemagne, and which afterwards became the residence of the Carlovingian emperors of Germany. The modern edifice includes within it the chapel of the original one, which is probably the most ancient structure in Frankfort. The ancient palace of the Knights of the Teutonic Order, in Sachsenhausen, is in a state of decay, and now serves as a barrack for Austrian troops, who, in conjunction with Prussians, at present garrison Frankfort. The Haus zum Braunfels, or exchange, is a small neat quadrangle, surrounded by a range of warehouses and shops, thronged during the fair with merchants of all nations. The Städel Museum and Academy of Painting (so named after its founder, a rich banker and citizen, who in 1816 bequeathed a million of florins, together with a respectable collection of pictures and engravings, for its foundation,) occupies a handsome new building in Mayence-street. The gallery, without being first-rate, possesses several good specimens of art, chiefly of the Flemish and Dutch masters. Private collections of pictures are very numerous; and "there is scarcely a merchant or banker in Frankfort, of moderate affluence, who has not his little gallery, which, with his music, his calèche, and his pipe, forms his favourite recreation from the fatigue of business." (*Autumn near the Rhine*, p. 91.) The principal work in the fine arts

at Frankfort is, however, Danneker's celebrated statue of "Ariadne seated on a Tiger," in the garden of Mr. Bethmann. Most travellers rank this piece of sculpture among the most distinguished productions of modern art; but it unfortunately happens that the marble in which it is executed is covered with blue veins and spots. Danneker had this work in hand for 15 years, and received for it 15,000 florins. One of the most interesting public monuments is without the Friedberg-gate; it is a colossal mass of granite rocks grouped together, on one of which are inscribed the names of the Prince of Hesse Philipsthal and the Hessians, who fell on the spot defending Frankfort, the whole surmounted by a military device cast from cannon taken from the French, and surrounded by weeping willows. This memorial was erected by the King of Prussia. The Senkenberg Museum of National History, and Medical Institute, occupy an imposing building of the 14th century; the museum contains many rare specimens brought by the traveller Rüppell from N.E. Africa. The public library, with 80,000 vols.; 5 hospitals, the orphan asylum, lunatic asylum, theatre, with an illuminated clock over the stage, the casino, or principal reading club, and the new cemetery near the city, containing several works by Thorwaldsen, are the remaining objects most worthy of notice. The hotels in Frankfort are amongst its most magnificent edifices, and certainly rank among the first in Germany for elegance, accommodation, and moderate charges. Many of these are situated in the Zeil, and in some, during the fairs, 150 people daily dine together.

The chief manufactures are carpets, table-covers, oilcloth, woollen, cotton, and silk stuffs, woollen yarn, coloured paper, tobacco, playing-cards, gold and silver articles, and printers' black. Cannabich says there are 14 printing offices, besides several stereotype and lithographic establishments. But the principal sources of wealth to the merchants of Frankfort are commercial transactions, banking, and speculations in the funds. The inhab. of Sachsenhausen are mostly peasantry of Saxon descent, and distinguished from the rest of their fellow citizens in manners, customs, dress, and language, as well as occupations. They are generally employed in garden cultivation, fishing, &c., or as porters. Frankfort is one of the four great emporiums for the supply of Germany with all kinds of merchandise, and enjoys therefore a considerable proportion of transit and commission business. Its merchants commence business at 6 or 7 in the morning, and toil till 10 or 11 at night, "not having, as yet, attained to that methodical celerity, which in London despatches a hundred times the amount of affairs between the commodious hours of 9 and 6." Two large and celebrated fairs, at Easter and Michaelmas, are annually held in this city. These suffered materially during the occupation of the country by the French, and since the peace they have been affected by the improved communications established in all parts of the country, the greater diffusion of shops and magazines in all the principal towns, and, in short, by the concurrence of all those causes that tend, as civilisation advances, to lessen the importance of fairs. "In the Braunfells, which is set apart exclusively for the accommodation of merchants attending at the fairs, and arranged for that purpose, a large portion of the stalls were unoccupied at the last fair; and those who attended hardly sold goods sufficient to cover the expense incurred." (*Bowring's Report on the German Customs' Union*, p. 39.) Generally, however, a large amount of business is still transacted at the Frankfort fairs. Cotton twist and stuffs, cutlery, &c., are the British commodities best suited for them. This city is now included in the German customs' league.

The town and country civil and criminal tribunals, court of appeal, board of taxation, and most of the administrative establishments of the republic, are held in the city. There are a great many educational institutions, including a gymnasium; the medical institute, with a botanic garden; Normal, Jewish, drawing, deaf and dumb, and trades' schools, and numerous private seminaries; many learned and benevolent associations, as the Senhenberg society, the society for the encouragement of useful arts, and philosophical, Bible, and missionary societies. Few towns abound so largely with public charities. Some periodical publications are issued; but those of a political character, being subject to a censorship, are of little value. The authorities have evinced great illiberality in their treatment of the Jews, and even of some Christian sects.

Frankfort is one of the most ancient cities in Germany. Charlemagne held a council in it in 794, and it was fortified by Louis-le-Débonnaire in 838. In 843, it became the cap. of the kingdom of Austrasia, and not long afterwards, under Louis the German, its great fairs originated, and Frankfort became the commercial cap. of Germany. From this period the increase of its prosperity was rapid, and in 1154 it was made an independent free city. It acquired considerable privileges during the next two centuries; and in 1390 had obtained nearly its present extent of territory. From 1806 to 1810 it was the cap. of a prince-primacy, and from the latter year till the downfall of Napoleon it was the cap. of the grand duchy of Frankfort, which comprised a territory of nearly 2,000 sq. m. It was the native place of Goethe, born here in 1749, as well as of the family of the Rothschilds, one of whom has an elegant villa without the city. (*Berghaus*, iv. 483—486.; *Cannabich*, pp. 461, 462.; *Möller; Autumn near the Rhine*, pp. 67—98.; *Dict. Géog.; Murray's Hand-book, &c.*)

FRANKFORT-ON-THE-ODER, a town of the Prussian dominions, prov. Brandenburg, cap. government (*Regierungsbezirk*) of same name, circ. Lebus; on the Oder, about 116 ft. above the level of the Baltic, 50 miles E. by S. Berlin; lat. 52° 22′ 8″ N., long. 14° 23′ 15″ E. Pop. 23,370. (*Berghaus*.) Though no longer a fortress of any strength, it is surrounded by walls, with towers and a ditch. It is well built: the streets are straight and broad; the houses generally good; and many of the public edifices handsome. The town communicates with one of its three suburbs by a wooden bridge across the Oder. It has a good market-place, six Protestant churches, a Roman Catholic chapel, synagogue, government-house, council-house, new post-house, gymnasium, high school, school of midwifery, school for neglected children, and various other schools; an orphan asylum, two hospitals, a work-house, with a house of correction, and a theatre. A university established in it, in 1506, was, in 1810, removed to Breslau. It is the seat of the authorities for its government and circle, of a superior judicial tribunal for the former, and inferior courts for the latter and the town, a circle council, council of nobility (*Ritterschafts-Direction*), and boards of taxation, agriculture, canals, waterworks, &c. Being situated on the high road from Berlin to Silesia, and on a navigable river communicating, by canals, with the Vistula and the Elbe, it has a considerable trade; though, in commercial activity, it is far inferior to its namesake on the Mayn. It has manufactures of woollen and silk fabrics, stockings, gloves, leather, earthenware, wax, sugar, &c.; with brandy distilleries, and mustard-works, for which article it is celebrated. A good deal of wine is grown in its vicinity. Three large fairs are held here annually, in Feb., July, and Nov. They are attended by great numbers of merchants and dealers from foreign countries, as well as from Germany. Besides the woollens, linens, earthenware, silks, and other articles furnished by the town and its vicinity, and the various raw and manufactured products of the Prussian and other German states, very large quantities of British, French, Swiss, and other foreign goods, are disposed of at these fairs, partly for the supply of the surrounding country, but principally, perhaps, for exportation to Poland, Galicia, Russia, Bohemia, &c. Many of the inhab. are employed in navigating the Oder, and the communicating streams and canals to Dantzic, Warsaw, Magdeburg, Hamburg, &c. The village of Kunnersdorff, in the vicinity of this town, has been the scene of one of the most sanguinary contests in modern times. On the 12th of August, 1759, Frederick the Great attacked the entrenchments of the Austrians and Russians at that place; but after partially succeeding, and exhausting all the resources of skill and valour, he was compelled to retreat with immense loss; the approach of night having alone saved his army from being completely destroyed. (*Zedlitz, Der Preussische Staat*, ii. 209—211; *Berghaus; Cannabich, &c.*)

FRANKFORT (REPUBLIC OF), an independent state of W. Germany, and the smallest in Europe, though the most populous relatively to its extent; consisting of the city of Frankfort on the Mayn, and the country immediately around it, together with some detached portions of territory, the whole having an area of about 85 sq. m., and a pop. (1846) of 68,240; of whom about 3-4ths are Lutherans. The largest portion of territory belonging to Frankfort, being that in which the cap. is situated, lies on both sides the Mayn, having N.W. and N. the dom. of Nassau and Hesse Cassel; and S.E. and S. those of Hesse Darmstadt. It is quite level, and very productive and well cultivated, yielding corn, potatoes, pulse, fruit, and wine, and feeding many cattle. Much of it is, however, laid out in gardens; the environs of the city of Frankfort being completely studded with the country houses of merchants and others. The government is vested in a senate, a permanent chamber of citizens, and a legislative chamber. The senate, which exercises the executive power, consists of 42 members, divided into 3 ranks or benches; sheriffs, junior senators, and state counsellors. It annually chooses 2 presidents from the first and second ranks. The permanent chamber is an assembly of 51 members, chosen from among citizens of all ranks, and of whom at least 6 must be lawyers. The legislative chamber is composed of 20 senators, 20 members of the permanent chamber, 45 members chosen annually by the electoral college of Frankfort, and 9 deputies from the rural districts. This body meets every year in November for a session of 6

weeks. It has control over all legislative enactments, the amount of taxation, and the armed force, foreign relations, &c. Citizenship is a personal distinction, not obtained by birth alone; neither domestic servants nor foreigners enjoy the rights of citizens; and foreigners have to pay for permission to exercise any calling in the city. Appeal lies from the ordinary civil and criminal tribunals in the city to the senate, and from the latter to the superior court, for all the Hanse towns in Lubeck. Public education is well attended to, and there are many charitable institutions. The contingent furnished by Frankfort to the army of the German confederation is 479 men. The *landwehr*, or militia, comprises all the male pop. between the ages of 19 and 60. The public revenue varies from 430,000 to 460,000 rixdollars a year; the expenditure is less. The public debt exceeds 5,000,000 rixdollars. Frankfort maintains representatives in most of the principal neighbouring states of Germany, a minister at Paris, and consuls in London and some of the American capitals. It has one vote in the full council of the German confederation; and divides one in the lesser council, and the 17th place in the diet, with the other Hanse towns.

Frankfort, a town of the U. States of America, Kentucky, of which it is the cap., co. Franklin, on both sides the Kentucky, which is here crossed by a bridge, 63 m. W.S.W. Cincinnati. Pop., in 1835, about 4,000. The town is buried among steep hills, and the banks of the river are here precipitous, and from 400 to 500 ft. in height. Frankfort is well built, chiefly of stone, but many of the private as well as public buildings are of fine white marble. The principal public edifices, in 1835, were the state-house, with a fine Ionic portico; the penitentiary, having generally about 100 inmates; three churches, an academy, county court-house, and several manufacturing establishments, warehouses, &c. It is a place of some trade: steam vessels navigate the Kentucky river as far as this town, and at certain seasons three or four are kept in regular employ. (*Stuart's America; Hoffman's Winter in the West.*)

FRASCATI, (an. *Tusculum*), a town of Central Italy, Papal States, comarca di Roma, 11 m. S.E. Rome. Pop. usually about 4,300, but during summer this number is considerably increased by the influx of visiters. It is beautifully situated on the declivity of a hill commanding an extensive view of the surrounding country; but except the *piazza* in which the cathedral is situated, the town is dirty and inconvenient. Its ruins, and the surrounding villas, constitute its chief attraction; but the latter are now falling into neglect, the present fashion of the Roman nobility being to pass the summer at Albano. The principal villas are those of Counts Aldobrandini, Bracciano, Falconieri, and Ruffinelli, on the grounds of which last are the ruins of the ancient Tusculum. The splendid mansion of the Borghese family, Monte Dragone, is now neglected, and in a state of decay. Frascati has a public seminary, and numerous convents, churches, and public fountains. Its bishop is always one of the 5 members of the highest episcopal council. The ruins of Tusculum (*municipium clarissimum*, Cicero pro Fonteio, § 14.) comprise an amphitheatre, a theatre, an immense hall, supposed to have been attached to baths, fountains, &c. This was one of the most ancient cities of Italy, its foundation being ascribed to Telegonus the son of Circe. It was strong, as well by its position as by the walls by which it was surrounded, portions of which still exist. It was, also, one of the most faithful of the allies of Rome; and successfully resisted an attack by Hannibal. The top of the hill on which Tusculum was built, 2,079 French ft. above the level of the sea, was surmounted by a citadel, now wholly destroyed. Like Frascati, in modern times, Tusculum was crowded with the villas of distinguished Roman citizens, among which may be mentioned those of Lucullus and Mæcenas. But the fame of all the other villas has been wholly eclipsed by that of Cicero, so often mentioned in his works, and from which his beautiful ethical disquisitions, entitled the *Disputationes Tusculanæ*, have received their name. The attempts that have been made to identify the site of this famous villa have had but little success. (*Gell's Rome, &c.*, i. 453.; and ii. 283, &c.; *Cramer's Ancient Italy*, ii. 44, &c.)

FRASERBURGH, a sea-port and bor. of regality, Scotland, co. Aberdeen, on its N.E. coast, on a slight eminence S. side of Kinnaird Head, a bold promontory, on which are an old castle and light-house, 120 ft. above the level of the sea at high water; 18¼ m. E. Banff, and 37 m. N. by E. Aberdeen. Pop. (1836) 2,510; including the parish, 3,060: but during the herring fishery, which extends annually from July to September, there is an increase of not less than 1,200. (*New Statist. Account of Scotland*, § *Aberdeen*, p. 252.) The town is nearly square. Most of the streets cross each other at right angles. A considerable number of new houses have been built within these few years. The chief public buildings are the parish church, the Episcopal chapel, and the jail. The cross, which is of a hexagonal form, is reckoned a fine structure: the area of its base is 500 ft. There are (besides 8 Sunday-schools, attended by 300 children) no fewer than 10 schools in the parish, of which only one is endowed; 5 taught by male, and 5 by female, teachers: aggregate number of pupils, 500, or about a *sixth* part of the whole pop., are being instructed at the same time. (*Ib.* p. 257.) The harbour has been of late much enlarged and improved, partly at the expense of government. It embraces an area of upwards of 6 Scotch acres, nearly a half of which has been excavated along the piers and jetties. It is of easy access; and as it affords excellent anchorage for ships of every size, it has been found to be of great importance to the shipping interest in general on this coast. Eight vessels, from 45 to 153 tons, belong to the port. In 1839, the number of boats belonging to the town employed in the herring fishery, decked and undecked, was 145, which employed 692 fishermen, exclusive of coopers, gutters and cleaners, &c. During the same year, 52,251 barrels of herrings were cured at Fraserburgh. Dried and pickled cod are exported to the extent of about 2,000*l.* sterling; grain of various kinds, about 12,000 qrs.; potatoes, 6,000 bolls. The harbour dues were at one time so low as 65*l.* per annum: they were, in 1839, 1,100*l.* There are three branch banks in the town.

The town and harbour existed above two centuries ago, the former having been erected into a burgh of regality in 1613, called Fraserburgh, in honour of Sir Alexander Fraser of Philorth (now represented by Lord Saltoun), who obtained the charter. The government of the burgh is vested in Lord Saltoun, its superior, who enjoys the hereditary right and authority of provost, with power to nominate and appoint the magistrates and council, with the advice and consent of the old. The same Sir Alexander Fraser obtained a charter from the crown, in 1592, for the erection and endowment of a university; and at the west end of the town there is an old quadrangular tower of three stories, which formed part of a building originally intended for this seminary. In 1597, Mr. Charles Ferme, of the University of Edinburgh, was elected principal of this intended college; but from causes not explained, probably from want of funds, the plan was abandoned. (*New Stat. Acc. ut suprà; Crawfurd's Hist. of Univ. of Edin.*, p. 33.)

FREDERICKSHALL, a marit. town of Norway, gov. Aagerhuus, at the influx of a small river into the Ide-fiord, near the N.E. angle of the Skagerrack, 57 m. S.S.E. Christiania. Pop. about 4,000. It is an open town, but immediately above it, on a perpendicular rock, 400 ft. in height, overhanging the sea, is the strong fortress of Frederickstein, at the siege of which Charles XII., king of Sweden, was killed, on the 30th of November, 1718. It was doubted for a while whether the king met his death by a ball from the fortress, or had been assassinated; but there seems to be no good grounds for supposing that treachery had any thing to do with the matter.* Frederickshall spreads irregularly round the rock on which the castle is built; "it is a strange-looking little town, in which houses, rocks, and water are curiously mingled. One street is terminated by a perpendicular rock; another by a deep creek; and, as there are only 3 or 4 little streets in the town, it has at least the praise of being singularly picturesque." (*Inglis's Norway, &c.* p. 289.) The streets, though few, are wide and regular, presenting many handsome houses, generally 2 stories high; all of which appear to have been built since the conflagration, in 1759, by which nearly the whole place was laid in ashes. A considerable trade in timber is carried on, and there are a few manufactures of linens, tobacco, &c.

The castle of Frederickstein is one of the most inaccessible fortresses in Europe. The place suffered greatly by the fire alluded to above, and is now in a state of great neglect. An obelisk has been erected by the present king of Sweden (Bernadotte), on the place where Charles XII. fell. (*Coxe's N. of Europe*, v. 16. &c.; *Inglis*, p. 289. &c.)

FREIBERG, a town of the k. of Saxony, and cap. of its mining district, cir. Dresden; near the E. arm of the Mulde, 19 m. S.W. Dresden, and 50 m. S.E. Leipsic. Pop., with its suburbs, 11,259. It is an ancient imperial city, and is still surrounded by old walls and a ditch; but the greater part of its fortifications are now laid out in gardens and public walks. It is well built, paved, and lighted. It has a cathedral, a handsome Gothic edifice, with a richly ornamented portal, in the Byzantine style, called the *Golden Gate*; some curiously carved stone pulpits; the tomb of Werner the geologist, a chapel in which the Protestant princes of Saxony, from 1541 to 1694, were buried; and a remarkable monument with an alabaster statue of the Elector Maurice, who died of the wounds he received at the battle of Sievershausen, on the 9th of July, 1553, when he completely

* Johnson has availed himself of this suspicion, in his admirable character of Charles XII.: —

"His fall was destin'd to a barren strand,
A petty fortress, and a *dubious* hand.

defeated the army of the Margrave of Brandenburg. There are 4 other churches, one of which has a spire upwards of 210 ft. high; and an orphan asylum. Without the town is the old castle of Freudenstein, now used as a corn magazine. The rise and fall of Freiberg has been determined by the productiveness of its silver mines, to the discovery of which it owed its origin in the 12th century. In the height of its prosperity, before the 30 years' war, it is said to have had 32,000 inhabs. Its pop., together with the produce of its mines, has of late very much fallen off; owing to the richest veins being exhausted, or to the shafts having been driven so deep that it is next to impossible to drain off the water. Still, however, there are in the vicinity numerous mines of silver, copper, lead, and cobalt, employing altogether about 4,500 miners. The principal silver mine is called the *Himmelsfürst*, and is said to be the first in Europe, as well for the quantity of ore it furnishes, as for the excellence of its works. It has been wrought upwards of 400 years, and for 200 yielded silver to the annual amount of 95,000 crowns. This, however, is a very poor return; and if we may depend on the statements of the produce of the Freiberg mines given in the *Conversations Lexicon* and other works, they certainly would appear to be exceedingly unimportant in a commercial, however much they may be distinguished in a scientific, point of view. According to Breithaupt, they had been wrought for 640 years previously to 1825, during which time they are said to have yielded 82,000 quintals of fine silver, being under 130 quintals a year, or about 45,000*l.* a year, at an average. During the 49 years, from 1769 to 1815, the total produce is said to have amounted to 2,176 quintals, being, at an average, less than the inconsiderable quantity of 45 quintals a year. In 1833 their produce is said to have been worth 523,920 rix-dollars, or about 105,000*l.*; being about one fifth part of the value of the tin annually produced in Great Britain, and one thirteenth part of that of the copper!

The ore is smelted at the village of Halsbrucke, about 3 m. from Freiberg, where there are numerous furnaces, forges, &c., and where the process of amalgamation is conducted on scientific principles. Freiberg has manufactures of gold and silver lace, employing 700 hands; a woollen cloth and cassimere factory, in which, besides steam-engines, 110 hands are employed; manufactures of lace, cotton fabrics, and thread, white lead, litharge, vitriol, leather, copper ware, &c.; some extensive breweries; and a shot foundry, the only one in the kingdom. It is the seat of the high board of mines (*Oberbergamt*), and that of foundries (*Oberhüttenamt*), with supreme jurisdiction over all such establishments throughout the kingdom. It has a gymnasium with a good library; but its most celebrated establishment is its mining academy, founded in 1765. It owes its principal celebrity to Werner, appointed professor of mineralogy in it in 1775: his eloquence and the charm of his manner inspired the greatest enthusiasm into his pupils, and besides raising the school of Freiberg to the highest eminence, and attracting to it students from the most distant countries, gave a great stimulus to the science. It is not, however, to be denied that many of Werner's general conclusions were bottomed on the narrowest and most insufficient data. "He had merely explored a small portion of Germany, and conceived, and persuaded others to believe, that the whole surface of our planet, and all the mountain chains in the world, were made after the model of his own province, many of the most important appearances in which he had misinterpreted." (*Lyell's Geology*, i. 82. 3d ed.) Hence it is that most of the distinguishing principles of the Wernerian system of geology have been successively overturned; and it is now admitted that his merit consisted far more in the attention he drew to mineralogy and geology, than in his discoveries or theories. There are now about 10 professors in the school of Freiberg, who give instruction in the working of mines and of metals, and in chemistry, and all the accessory sciences. A specified number of Saxon pupils receive gratuitous instruction in this school, some of whom work as miners for a certain time each day, receiving higher wages than the ordinary miners. There is also a preparatory school to qualify pupils for the academy. Attached to the latter are many scientific collections, and among others the celebrated collection of precious stones amassed by Werner, and bequeathed by him to the academy.

Freiberg was long the residence of the Saxon princes, who bestowed on it many immunities and privileges. It suffered greatly during both the 30 years' and the 7 years' war. (*Berghaus; Möller; Murray's Handbook; Encycl. des Gens du Monde.*)

FREIBURG, or FRIBOURG, a canton of Switzerland, the ninth in rank in the confederation, in the W. part of which it is situated, between lat. 46° 27′ and 47° N. and long. 6° 45′ and 7° 22′ E.; having for the most part N. and E. the Bernese territory, and S. and W. that of Vaud. A detached portion to the W. has for its N.W. boundary the Lake of Neufchatel, and is every where else enclosed by the cant. Vaud. Its greatest length N. and S. is about 40 m., and its breadth varies from 8 to 26 m. Area, 564 sq. m. Pop. (1838) 91,145. Its N. part is almost a level plain, or at most only hilly; but proceeding S. the surface becomes more uneven, and the S. half of the canton is covered with mountains, appertaining partly to the Jura system and partly to the Bernese Alps, but none of their summits reach the limit of perpetual snow. The principal are the *Dent de Brenleyre*, 7,836 ft.; the *D. de Folliéran*, 7,667 ft.; and M. Moleson, 6,572 ft. high. Nearly the whole canton is included in the basin of the Aar, its centre being traversed by the Saane, or Sarine, an affluent of that river. The Broye is the other principal stream. The chief lake is that of Morat (*Murtensee*) in the N., through which the last-named river flows: it is 6 m. long by 2 m. broad, and very abundant in fish, particularly fine eels. Climate mild in the N., but rigorous in winter in the S. The highest mountains are composed principally of a coarse-grained limestone, containing many flints; those of inferior height of sandstone. A considerable proportion of the land is fertile: it has about 100,000 acres of arable land, 68,600 do. meadows, 20,000 do. of pasture land, 700 do. vineyards; and the forests are supposed to comprise 34,500 acres. Agriculture is the chief pursuit of the inhab. in the N., and cattle-rearing in the S. districts. Enough of corn is grown for home consumption, but the dairy husbandry is the most important branch of industry, and is in a more advanced state than in any other Swiss canton. The annual produce of cheese is estimated at 40,000 cwt., worth 1,200,000 fr. The famous Gruyère cheese, produced in the district of that name, in the valley of the Sarine, stands decidedly at the head of the Swiss cheese, and is highly prized in this and other countries. The average produce is about 25,000 cwt. a year, and its average price on the spot about 4*d.* per lb. About 10 years ago the stock of black cattle amounted to 48,000; horses to 13,000; and sheep, goats, hogs, &c. to 5,000. The breeds of horses and black cattle are considered the best in the confederation, and large markets for the sale of both are held at Romont, Bulle, and Freiburg. Gardens, orchards, vineyards, &c. are most numerous in the N. Tobacco, oleaginous plants, hemp, flax, &c. are grown, but in no great quantities. The produce of timber is important. Turf is procured in many places, coal only in the S., and to an inconsiderable amount. There is a glass factory at Semsales, employing 150 workmen. The other principal manufactures are those of straw-hats, leather, and paper, but they are quite insignificant. The chief article of export besides cheese is timber to France, from which about 22,000 or 23,000 cwt. of salt are imported yearly. The people generally are in comfortable circumstances. The public roads, which were formerly very bad, have been of late years greatly improved. The canton is divided into 13 circles or distr. Chief towns, Freiburg, the cap., Morat, Gruyères, Estavayer, Bulle, and Romont; but, except the first, none has 1,500 inhab. 7-8ths of the pop. are Rom. Cath.; the Protestants, about 8,400, reside chiefly in the district of Morat. German is spoken in the N.E., and a dialect of Romansche or Italian in the S.; but French is the language most universally employed in Fribourg, and has been recently adopted as that of all state proceedings. Since 1830, the government has been wholly democratic. It consists of a great and petty council; the former, which has the sole legislative power, consists of 86 members, or about one for every thousand of the inhab.; all males above 25 years of age, not servants or subject to foreign powers, have the right to vote in the appointment of the *electors* of the central body. The petty or executive council is composed of 13 members chosen by the legislative body, who also appoint for life the 13 judges of the supreme court of appeal. The great council is presided over by an *Avoyer*, who holds office for two years only; while the council itself exists for nine years. Each circle has its own local council, a governor called an *Oberamtmann*, and a court of justice with appeal to that in the cap. Personal freedom, the privilege of petitioning, and the abolition of feudal rights, torture, &c., have been guaranteed; as was the liberty of the press a few years since; but of late the latter has been placed under restraint. Education in this cant. was formerly in a lower state than in many others; but in 1829 there were 229 primary schools, attended by 12,835 children. The places for superior instruction are chiefly in the town of Freiburg (which see), and the Protestant college at Morat.

Freiburg furnishes a contingent of 1,240 men to the army of the Swiss confederation; and contributes 18,600 francs annually to its expenditure. Besides the above contingent, and an equally numerous *corps de reserve*, there is a militia of all the male pop. between 16 or 20 and 45 or 60. The total public revenue in 1833 amounted to 407,127 Swiss francs, and the expenditure to 406,539 do. Before the 11th century, this territory formed a part of the kingdom of Burgundy, but afterwards belonged to the

dukes of Zœhringen, and other feudal nobles. Its history, after the 15th century, is for the most part that of its cap.

FREIBURG, or FRIBOURG, a town of Switzerland, cap. of the above canton, on both sides the Sarine, 15 m. S.W. Bern, and 32 m. N.E. Lausanne; lat. 46° 48′ 30″ N., long. 7° 9′ 8″ E. Pop. 7,964. (*Kuenlin*, 1834.) Few towns are so singularly situated. It is naturally divided into the Upper and Lower town; the former built on the summits of a succession of rocky hills, and the latter in the narrow valley of the Sarine, which is here crossed by 2 bridges of wood, and one of stone. The upper town is the principal. "Many of its houses stand on the very edge of the precipice overhanging the river; and their quaint architecture, the long line of embattled walls stretching up hill and down dale, varied by the chain of feudal watch-towers and gateways of the ancient fortifications, which still exist in a perfect state, together with the singular and romantic features of the gorge of the Sarine, give the distant view of the town an aspect different from that of any other in Europe, which is at once imposing and highly picturesque. The narrow and dirty streets, and mean buildings of the interior, however, do not altogether correspond with these outward promises of interest." (*Murray's Handb.* pp. 113, 114.) The great glory of the town is its iron suspension bridge, the longest and finest in Europe. It is erected across the ravine through which the river flows, and is 905 ft. in length, 28 ft. in breadth, and 174 ft. in elevation; being more than one third longer, and nearly as much higher, than the Menai bridge between Anglesea and Carnarvonshire. "It is supported by four cables of iron wire, each containing 1,056 wires, the united strength of which is capable of supporting three times the weight which the bridge will be ever likely to bear." (*Murray.*) The materials of which it is composed are almost exclusively Swiss. It was completed in three years, at an expense of about 25,000*l.*, under M. Chaley, an engineer of Lyons; and was thrown open to the public in 1834. Freiburg has 9 convents, and 4 churches, besides numerous chapels. The principal church, that of St. Nicholas, is a rather handsome Gothic edifice, with a spire elevated 376 ft., being the highest in Switzerland. It has some curious bas-reliefs and paintings; and an organ with 7,800 pipes, reckoned one of the finest on the Continent. The Jesuits have a monastery at Freiburg, founded in 1584. It was suppressed previously to 1818, when it was restored by a decree of the great council of the canton. It supports 60 brothers, and has attached to it a college, in which between 300 and 400 pupils are educated, mostly the children of French and German R. Catholic families. The professors of the college also lecture at the lyceum, an institution with 12 professors, and which in 1829 had 586 pupils. There are various other schools under the direction of the religious bodies. The remaining objects most worthy of notice are the town-hall, on the site of an ancient castle of the dukes of Zœhringen, the hospital, orphan asylum, workhouse, house of correction, some public baths, several public libraries, and several learned societies. Freiburg is the seat of government, and of the court of appeal for the canton, and the residence of the R. Cath. bishop of Lausanne and Geneva. It has a few manufactories of straw-hats, porcelain, tobacco, chicory, paper, hats, and musical instruments, and dyeing houses, tanneries, and breweries. Most of its pop. are Catholics; and it is a singular circumstance that the inhab. of the upper town speak French, while those of the lower speak German; and many understand only one of those languages. The upper town was founded, in 1175, by duke Berchthold of Zœhringen; the lower town had existed previously. In 1277 Freiburg fell into the possession of Rodolph of Hapsburg; but in 1450 it became a free city of the empire. The duke of Savoy soon afterwards constituted himself its protector; but the Freiburgers having distinguished themselves in the contest against Charles the Bold of Burgundy, the city and its territory were received into the Swiss Confederation in 1481. In 1476, a celebrated Swiss diet sat within the walls of Freiburg, and in 1803 another, the latter being that at which the French Act of Mediation was accepted. (*Ebel; Cannabich; Kuenlin, Gemälde der Schweiz; Kaut, Freiburg; Helvetic Almanack, &c.*)

FREJUS (an. *Forum Julii*), a town of France, dép. Var, cap. cant., in a spacious plain, 1 m. from the Mediterranean, and 15 m. S.E. Draguignan. Pop. 2,800. Its present contrasts painfully with its ancient condition. Formerly it was a league in circ., was surrounded by strong walls flanked with towers, and had 40,000 inhab. Its amphitheatre, the outer circ. of which is 218¼ ft., still exists in a ruined state. Its port, which was under its walls, and communicated with the sea by means of a canal 1½ m. in length, was bordered by fine quays, the traces of which still exist; as well as part of a lighthouse, and a large triumphal arch, which formed the entrance from the port into the town. The sites of the port and canal are now occupied by gardens. The town and port were formerly supplied with water from the river Siagne, by means of a fine aqueduct, 18¾ m. in length; this noble work is in great part destroyed. Frejus has a church, and episcopal palace, both of which are of Gothic architecture, but in part constructed of the materials of Roman edifices. The chapel of the baptistery is an octagonal building, ornamented with eight ancient Corinthian columns. Numerous other remains of antiquity may be seen in the neighbourhood. It has a seminary and an hospital, both modern and handsome buildings. Frejus is the seat of a bishopric, and of a chamber of commerce; it has some bottle-cork factories, and waterworks for sawing timber; but its trade is now next to nothing, and its ancient fleets have dwindled down to a few boats.

This town was a place of importance in the time of Julius Cæsar, who gave it his own name. Augustus sent thither the 200 galleys taken from Antony at the battle of Actium, made *Forum Julii* a naval station of importance, and planted in it a colony of soldiers of the 8th legion. Agrippa further devoted his endeavours to increase the prosperity of the town. Its strong fortifications protected it for a considerable period against the barbarians; but about the year 940 it was destroyed by the Saracens, nor has it since recovered so much as the shadow of its former prosperity. At St. Raphael, a little fishing village about 1½ m. from Frejus, Napoleon disembarked on his return from Egypt, in 1799, and again embarked for Elba in 1814.

Frejus was the birthplace in antiquity of Julius Agricola, C. Gallus the poet, and Roscius the actor; and in modern times of the Abbé Sieyes. (*Hugo*, art. *Var*; *Guide du Voyageur; Dict. Géog.*)

FREYBURG, or FREIBOURG, a city of the grand duchy of Baden, circ. Upper Rhine, of which it is the cap., on the Dreysam, a tributary of the Rhine, within the skirts of the Black Forest, and at the entrance of the Höllenthal, 71½ m. S.S.W. Carlsruhe, and 32 m. N.N.E Basle. Pop. 12,200 (exclusive of the garrison, students, &c.). The town was originally fortified by its founder; but its fortifications were levelled by the French in 1754, and their place is now occupied by fine public walks and vineyards, from which excellent wine is obtained. It is generally well-built and lighted, contains several good squares, and has numerous public edifices. The principal of the latter is the *minster* or cathedral, one of the most perfect Gothic buildings in Germany, and remarkable alike for the delicate symmetry of its proportions, and the good taste of its decorations. It was begun by Conrad of Zœhringen in the 12th, but not completed till towards the end of the ensuing century. The whole edifice is built of red sandstone. The W. front, with a magnificent portal, and the tower and spire, 380 ft. high*, which surmount it, were the work of the celebrated Erwin of Steinbach, the architect of Strasburg cathedral. The spire is of the finest openwork tracery, all of stone, and of extreme boldness as well as lightness. The minster contains statues of Berchtold V., and the other dukes of Zœhringen who were buried in it; several tombs worthy of notice; a remarkable piece of sculpture of the Lord's Supper, by an artist of the 16th century; paintings by B. Grün, a famous artist also of the 16th century; and some stained glass windows of great beauty. The university, founded in 1454, is in a very flourishing state; it has about 600 students, their number having, for several years past, been on the increase. It is particularly famous as a school of theology, having united with it the high Rom. Cath. seminary of the grand duchy, removed thither from Mersburg. It possesses a good deal of landed property in Wirtemberg, Baden, and Switzerland; besides which it enjoys considerable government grants, endowments, &c. It has a library with upwards of 100,000 vols., a cabinet of nat. history, museum, fine collection of philosophical instruments, chemical laboratory, anatomical theatre, school for clinical instruction, and a botanic garden. In the church of the university, there are several paintings by Holbein. Freyburg has a grand-ducal, and an archiepiscopal palace, 3 hospitals, a custom-house, a venerable old Gothic building; a new archiepiscopal seminary and church, a Lutheran church, new museum, town-hall, theatre, house of correction, foundling and orphan asylums, many other benevolent institutions, a gymnasium, an *Industriegarten*, or school of forest and garden economy; Herder's institute of arts, for copperplate engraving, and printing and lithography; a geographical institute, teachers' seminary, school for girls kept by Ursuline nuns, and a great number of general and primary schools (including Sunday-schools, &c.). In the centre of the square called the fish-market, is a fountain surmounted by a statue of the founder of the city, Duke Berchtold III. of Zœhringen. Freyburg is the seat of an archbishopric, with jurisdiction over the whole of the grand-duchy, and the bishoprics of Mayence, Fulda, Rothenburg, and Limburg; of an aulic court, and the

* This is the statement of Schreiber and Berghaus. The *Encyc. des Gens du Monde*, and some other authorities, make its height 513 French (546¾ Eng.) ft., which would be 72 ft. Eng. higher than the spire of Strasburg, usually considered the loftiest in Europe.

superior courts of law, and government offices for the circle of the Upper Rhine. Its chief sources of prosperity are its university and other public establishments; but it has also manufactures of chicory, soap, starch, leather, tobacco, bells and other metallic articles, good musical and surgical instruments, earthenware, &c.; besides several paper-mills and dyeing-houses. In its vicinity are the fine gardens of Ludwigshohe, the ruins of the castle of Zœhringen, and many other spots admired for their picturesque beauty. Freyburg was founded in 1118, by Duke Berchtold III.; it was long the cap. of the landgraviate of Breisgau; belonged successively to the house of Austria and the Duke of Modena; and was finally ceded to Baden by the treaty of Presburg. (*Schreiber, Guide du Rhin*, pp. 26, 27.; *Cannabich, Lehrb.* p. 497.; *Berghaus, Encyc. des Gens du Monde, &c.*)

FRIESLAND, a prov. of Holland; which see.

FRIGENTO, or FRICENTO, a town of S. Italy, k. Naples, prov. Princip. Ultra, cap. cant., 17 m. E.N.E. Avellino. Pop. 3,000. Swinburne says, "It is a ruinous place, on a hill, most wretchedly built, and scantily provided with the necessaries of life." (i. 127.) When he was there (1777), it had not one tolerable inn. It has, however, a fine cathedral, containing some excellent paintings. (*Dict. Géog.*) Its inhab. subsist by the sale of sheep, hogs, and corn. This town is said by some antiquaries to occupy the site of the ancient *Frequentum*, and by others that of *Æculanum*, besieged by Sylla during the civil wars; but the probability is that it is different from either. Near it is a valley, supposed, apparently on good grounds, to be identical with the *Amsancti valles* of Virgil. It is narrow, and is pressed in on both sides by high ridges thickly covered with copses of oak. The bottom of the dell is bare and arid. In the lowest part, and close under one of the hills, is an oval pool, not 50 ft. in diameter, the water in which boils, and spouts up in *jets-d'eau*, at irregular intervals, to a height of several feet, with a hissing noise, accompanied by strong sulphureous and mephitic exhalations. (*Swinburne, ubi suprà.*)

It was through this orifice that the fury Alecto descended to Tartarus, and the appearance of the place perfectly corresponds with the admirable description given by Virgil:—

> Est locus Italiæ in medio sub montibus altis,
> Nobilis, et fama multis memoratus in oris,
> Amsancti valles. Densis hunc frondibus atrum
> Urget utrimque latus nemoris, medioque fragosus
> Dat sonitum saxis et torto vertice torrens.
> Hic specus horrendum, et sævi spiracula Ditis,
> Monstrantur, ruptoque ingens Acheronte vorago
> Pestiferas aperit fauces."
>
> *Æn id.* vii. lin. 563.

FROME, or FROME-SELWOOD, a parl. bor., town, and par. of England, co. Somerset, hund. Frome, near the W. border of the co., 11 m. S. by E. Bath. Area of par., 6,960 acres. Pop. of ditto in 1811, 11,849, of which the town might have about 10,500. It is situated on an irregular acclivity rising abruptly from the Frome, or stream whence it derives its name, and which is here crossed by a bridge of 5 arches. The principal street contains many well-built houses and a good modern market-place; between 30 and 40 other streets, mostly very narrow and irregular, being connected with it on either side. It is paved, lighted, and amply supplied with water. "It may be said to be in a prosperous state, though some considerable portion of its inhab. have no employment, the introduction of powerful machinery having superseded manual labour." (*Boundary Report.*) The church, a spacious structure in the later Gothic style, with a tower and fine octagonal spire 120 ft. in height, has four ancient chapels, and many interesting monuments; another church, built in 1817 by subscription, contains 400 free sittings; and a third, at Woodlands, about 3 m. from the town, was built and endowed in 1712. There are also five dissenting chapels; an asylum, for the maintenance, education, and apprenticing 40 poor girls; and an almshouse for 20 poor men, both comprised in a substantial quadrangular building erected in 1790, and endowed with funded property, whence an income of 800*l.* a year is derived for the above purposes; a free grammar school, founded in the reign of Edward VI.; there is a small endowment, but no scholars at present on the foundation; a charity school, in which 37 boys are clothed and educated for four years, and then apprenticed; an almshouse for 31 old women, founded at the same period as the charity school (Edw. IV.), and, connected with the same endowment, now producing 70*l.* a year. There is also a national school, for 200 boys and 150 girls; and several large Sunday schools. The chief market, Wednesday; a smaller one, Saturday. Fairs, chiefly for cattle and cheese, Feb. 24. and Nov. 25. The woollen manufacture is the ancient staple of the town, and furnishes the chief employment of the pop. The goods consist chiefly of the finer kinds of broad-cloth and kerseymeres. In 1838 there were 4 woollen mills, employing 343 males and 166 females, at work in the par.; and a silk mill, employing about 170 hands. Cards for dressing wool are also manufactured, though to a much less extent than formerly, when it supplied them to a great part of the kingdom. There is a canal hence to Stalbridge, with a branch to Wells and Bradford. The Reform Act conferred, for the first time, on Frome the privilege of sending 1 m. to the H. of C. The limits of the parl. bor. comprise a nearly square space, extending about 1 m. each way. Registered electors, in 1849-50, 401. The neighbourhood is fertile and picturesque, and contains many old family mansions. Frome has long been celebrated for its excellent ale. Two courts-leet are held, one by the Marquis of Bath, the other by the Earl of Cork, lords of the manor. Petty sessions for the division are also held in the town.

FROSINONE (an. *Frusino*), a town of S. Italy, Papal States, cap. deleg. of same name, at the foot of a high hill near the Cosa, and on the upper road between Rome and Naples; 47½ m. E.S.E. the former city. Pop. 6,500. It is very ill built, but has many churches and convents; is the seat of a bishopric, and the residence of a card. delegate. It has an annual fair, which begins at Whitsuntide, and lasts 20 days. Being near the confines of the Neapolitan territory, its neighbourhood is infamous for brigandage; to repress which a criminal tribunal, established in it, offers a reward for the heads of brigands. (*See* PAPAL STATES; *Rampoldi, &c.*)

FUERTE (EL), an inland city of Mexico, state of Sonora, of which it is the cap.; on a river of the same name, 350 m. N.W. by W. Durango, and 770 m. N.W. Mexico. Pop. (1835) 5,000. It was originally a military station, established by the Spaniards in their progress towards the N. It is now a commercial depôt for goods passing to and from the port of Guaymas; and being somewhat centrally situated, has been fixed on as the seat of the state congress, governor, and supreme tribunal of justice. Its importance is, however, wholly due to these circumstances; its local position being far from favourable. It stands on the N. ridge of a vast sandy plain, destitute of vegetation, except in the rainy season, or in spots where the vicinity of the mountains, or the confluence of two large streams, ensure a supply of water; added to which the heat in summer is almost insupportable. (*Ward's Mexico*, ii. 324, &c.)

FULDA, a town of W. Germany, cap. prov. Fulda, G. D. Hesse-Cassel, on the river of same name, which is here crossed by a handsome stone bridge, 62 m. S.S.E. Cassel, and 56 m. N.E. Frankfort-on-the-Mayn. Pop. inc. suburbs, 10,000. It is a pretty town in a very agreeable situation; has some good streets, and several squares; of the latter, that in which the cathedral stands is the principal, and is ornamented with two obelisks upwards of 40 ft. high. The cathedral is an elegant edifice, about 335 ft. long, by 213 ft. in breadth; it has a tower 190 ft., and a handsome cupola 180 ft. high, the latter raised upon 16 Ionic columns; a high altar and 15 others, 2 organs, the largest of which is one of the finest in Germany, and the tomb of St. Boniface. There are 3 other Rom. Cath. churches, a Lutheran church, and some other places of worship, a bishop's palace and garden, a Franciscan monastery, Benedictine convent, R. Cath. seminary, public library, gymnasium, lyceum, school of industry, and many other schools; several hospitals, an orphan asylum, various benevolent institutions, an arsenal, house of correction, workhouse, and *mont-de-piété*. Fulda is the residence of a R. Cath. bishop, with supreme ecclesiastical jurisdiction throughout Hesse-Cassel; and is the seat of the superior judicial court of the prov. It has factories of stockings, linen and woollen fabrics, tobacco, leather, &c.; dye-houses, and wax bleaching and saltpetre works. About a league S. of the town is Adolphseck, or the "Pheasantry," a country seat formerly belonging to the Prince-bishops of Fulda. (*Berghaus, Allg. Länder, &c.; Cannabich*, pp. 458, 459.; *Encycl. des Gens du Monde.*)

FUNCHAL, a town of Madeira, which see.

FUNEN, or FYEN, an island of the Danish Archipelago, the next in size after Zealand, lying between it and continental Denmark; separated from the former by the Great, and from the latter by the Little Belt. It extends between lat. 55° 2′ and 55° 38′ N., and long. 9° 42′ and 10° 53′ E. Length, N.E. to S.W., 50 m. Area, 1,187 sq. m. Pop., in 1834, 151,600. Surface generally undulating; there are a few hills in the S., but they rise to no considerable height. The shores are very much indented; and in the N.E. the Odensee-fiord extends inland for several miles. The chief river is that of Odensee, which runs through the centre of the island; rivulets, lakes, and marshes numerous. Climate humid, and variable; soil very productive. "Funen presents a less agreeable prospect than Zealand, owing not to its more scanty fertility, but to the greater paucity of trees. The crops seem equally abundant, and the flocks equally numerous; and, indeed, Funen is more an exporting country than Zealand, in both corn and cattle." (*Inglis, Norway, &c.*, 327-28.) Barley, oats, buckwheat, rye, and vegetables, are grown in quantities much beyond those required for home consumption; flax and hemp are

largely cultivated, and orchards are numerous. The honey is very superior, and an article of considerable export. Turf, clay, and chalk, are the only mineral products of value. There are a few manufactures of woollen and linen fabrics; and many domestic ones of stockings, and other articles. Besides corn, cattle, horses, and honey, the chief exports are fruit, lard, butter, leather, salted meat, and some manufactured goods; the trade is brisk, and chiefly with Norway and Sweden. Funen, together with the islands of Langeland, Taasing, &c., forms a prov. of Denmark. Chief towns, Odensee, the cap., Svendborg, and Nyeborg. (*Inglis, Norway, &c.; Dict. Géographique, &c.*)

FUNFKIRCHEN (Hungar. *Pecs*), one of the most an. towns of Hungary, co. Baranya, of which it is the cap., on the declivity of a hill in a rich country, 404 m. S.S.W. Buda, and 40 m. N.W. by N. Esseck. Pop. 11,322. Besides the cathedral, which is the oldest religious edifice in Hungary, and occupies the site of a Roman fortress, it has six churches, and several convents. There are also numerous remains of mosques, baths, and other Turkish edifices, Fünfkirchen having been in the possession of the Turks from 1543 to 1686. This town is the residence of a Rom. Cath. bishop, and has a seminary for the R. Cath. clergy, a gymnasium, normal and military schools, a library, and a cabinet of coins. It has also manufactures of woollen cloths, flannels, leather, and tobacco, and a considerable trade, principally in wine, tobacco, and gall-nuts, the produce of the adjacent country. The town is noted for warm mineral baths, and about 7 m. distant from it is a remarkable stalactite cavern. (*Berghaus; Oesterr. Nat. Encycl.*)

FURRUCKABAD, a distr. of Hindostan, prov. Agra, presid. Bengal, almost wholly included in the Doab; between lat. 27° and 28° N., and long. 78° 40′ and 79° 40′ E.; having N. the districts of Moradabad and Bareily, E. the dom. of Oude and the distr. of Cawnpore, and S. and W. those of Etawah and Alighur. Area, 1,850 sq. m. This distr. suffered greatly from the anarchy that prevailed in this part of India before the British rule was established; but in 1813 nearly 6-7ths of the ground fit for tillage were in cultivation, and the land revenue, 102,849*l*., was nearly all realised. In 1229-30, the land assessment amounted to 173,685*l*.

FURRUCKABAD (Farakhabad, *a happy residence*), an inland city of Hindostan, prov. Agra, cap. of the above district, near the S. bank of the Ganges, 82 m. E.N.E. Agra, 156 m. N.W. Allahabad, and 80 m. W.N.W. Lucknow. Pop. 70,000.? This city is considered the chief commercial emporium of the ceded and conquered provinces, and is said to be the common resort of needy and dissolute characters from the rest of Hindostan. It is surrounded by a wall, kept in tolerable repair: streets in parts wide, and many of the open spots and buildings shaded by trees; but, excepting in the principal thoroughfares, most of the houses are of mud. Here, in 1805, Lord Lake surprised and obtained a decisive victory over Holcar's cavalry. (*Hamilton's E. I. Gaz.* i. 550—552.; *Reports on E. I. Company's Affairs.*)

FURTH, a town of Bavaria, circ. Middle-Franconia, on the Regnitz, 20 m. N.E. Anspach. Pop. 15,000, of whom 2,500 are Jews, and the rest principally Lutherans. It is irregularly built, but contains many good houses; is the seat of a town and district judicial tribunal, and has two Lutheran churches, a Rom. Cath. church, several synagogues, Latin and numerous other schools, besides schools of industry, arts and trades, &c. The Jews, who are interdicted from settling in Nuremberg, enjoy in Furth privileges denied them elsewhere on the Continent; they have here a separate court of justice, a Hebrew college, and two printing presses, exclusively devoted to Hebrew publications. It is principally owing to their exertions that Furth has become, next to Nuremberg, the principal manufacturing town in the Bavarian dominion. It has numerous factories of mirrors, chandeliers, lacquered ware, spectacles, lead pencils, tobacco, gold and silver wire, gold leaf, turned brass, wood, horn, and bone wares, stockings and other woollen and cotton fabrics, leather, liqueurs, coloured paper, buttons, toys, trinkets, pipes, &c. These articles are exported principally to N. and S. America, the Levant, Holland, Spain, Italy, N. Germany, Denmark, and Sweden. Besides the foregoing, there is a considerable trade in other kinds of produce; and a large fair is annually held here. The first railroad for steam carriages in Germany was completed in 1835-36, between this town and Nuremberg, a distance of 4½ m., which is usually traversed in 15 minutes. About half way between the two towns, the canal, now in the course of being constructed, to unite the Danube with the Rhine, is carried over the railway. (*Murr. Handb. for S. Germ.*) Furth is first mentioned early in the 10th century. Gustavus Adolphus was defeated in 1632, in an attempt to carry the intrenchments of Wallenstein, in the neighbourhood of this city. It was not till 1818 that Furth obtained its municipal rights. (*Berghaus; Cannabich, &c.*)

FUTTEGHUR (Fataghur, *the fort of victory*), an inl. town of Hindostan, prov. Agra, on the W. bank of the Ganges, 3 m. E. Furruckabad; lat. 27° 21′ N., long. 79° 30′ E. It is a British military station, and the residence of the civil authorities of the Furruckabad collectorate, as well as of several European merchants. Most of the houses are built with mud walls, and a mud fort has been erected for the protection of the arsenal. The cantonments possess an elegant theatre. A government mint has been established here. Tents of a superior kind are manufactured in Futteghur. (*Hamilton*, i. 552., &c.)

FUTTEHPOOR, a large inland town of Hindostan, prov. Allahabad, cap. distr. of same name, on the high road from Bengal to the upper provinces, 60 m. N.W. Allahabad; lat. 25° 56′ N., long. 80° 45′ E. Some years since it appeared prosperous, and contained, besides several good houses, a recently built and elegant mosque. Like most towns in its vicinity, it is surrounded with tombs, and on one side of it is a large endowed *serai* or hotel for the gratuitous accommodation of travellers. (*Hamilton's E. I. Gaz.* i. 553.)

FUTTIPOOR SIKRA, an inland town of Hindostan, prov. Agra, on the British frontier, 19 m. W.S.W. Agra; lat. 26° 6′ N., long. 77° 34′ E. This town was the favourite residence of the emperor Acber, who built a stone wall of great extent, with battlements and towers round it, the area within which appears never to have been filled up. The town, which is but small, is built of stone. It contains the spacious and tolerably entire remains of Acber's palace, the tombs of several of his family, and of some Mohammedan saints and statesmen. (*Hamilton's E. I. Gaz.* i. 553.)

FYZABAD (*a beautiful residence*), an inland town of Hindostan, prov. Oude, of which it was formerly the cap., on the S. bank of the river Kalee, 60 m. E. Lucknow. It is still large and populous; it contains the remains of a fortress, and of the palace of Shuja ul Dowlah.

G.

GAETA (an. *Caieta*), a fortified sea-port town of S. Italy, k. Naples, prov. Terra-di-Lavoro, cap. distr. and cant., at the extremity of a peninsula on the W. shore of Italy, forming the N.W. boundary of the gulph to which it gives name, 4 m. S.S.W. Mola-di-Gaëta, 41 m. N.W. Naples, and 72 m. S.E. Rome; lat. 41° 12′ N., long. 13° 30′ E. Pop. 14,800, of whom 10,000 reside in the suburbs. It is regarded as one of the keys of the kingdom, being strong from its position, and defended by walls flanked with bastions and redoubts, and by a square castle situated on a rock. Its suburbs are, as their pop. shows, much more extensive than the town itself.

Gaeta is irregularly built; its streets are narrow and steep; those in the city are, however, greatly inferior to those in the suburbs. It has a cathedral with a fine tower, the construction of which is attributed to the emperor Frederic Barbarossa; nine other churches, several convents, a public seminary, an hospital, and a foundling asylum. On the isthmus connecting the citadel with the mainland stands the *Torre d'Orlando*, originally the tomb of Plancus; and near the suburb of Castellone is the *Tower of Cicero*. Its port, which has 7 fath. water, though not the largest, is one of the safest and best in Italy. This city is the seat of a bishopric, under the immediate superintendence of the pope. It is the centre of a considerable trade. Its neighbourhood is extremely beautiful, and covered with villas and country houses.

Caieta is very ancient. Virgil says it derived its name from the nurse of Æneas buried in it:—

> "Tu quoque littoribus nostris, Æneia nutrix
> Æternam moriens famam, Caieta, dedisti."
> *Æneid.* vii. 1

It became the residence of many opulent patrician families of Rome; and Cicero was put to death, by order of Antony, in its immediate vicinity. After the fall of the western empire, it had a republican form of government, at the head of which, however, was placed a duke, acknowledging the temporal supremacy of the pope. It coined its own money till 1191; in 1435, it was taken by Alphonso V. of Aragon; and since then has belonged to the crown of Naples. In modern times it has been repeatedly besieged; the last siege of any great note was in 1806, when it fell into the hands of the French. It, however, held out against the Austrians for some time both in 1815 and 1821. (*Rampoldi; Cramer's Anc. Italy*, ii. 124, 125.; *Dict. Géog.*)

GAILLAC, a town of France, dép. Tarn, cap. arrond., on the Tarn, 12 m. S.S.W. Alby. Pop. (1836) 5,881. It is ill built, but has been of late considerably improved, and is now also well lighted. It has extensive suburbs, a tribunal of primary jurisdiction, a communal college, a society of agriculture, two hospitals, and a small theatre. It is the seat of a sub-prefecture; and has manufactures of wine casks, hats, leather, and brandy; besides dyeing houses, and docks for building boats. Its neighbourhood

produces some very good strong-bodied, deep-coloured wines, which are said to bear sea-voyages perfectly well. These wines constitute the principal exports of Gaillac. (*Hugo*, art. *Tarn*; *Guide du Voyageur*, &c.)

GAINSBOROUGH, a market-town, river port, and par. of England, co. Lincoln, wap. Corringham in Lindsay, on the Trent, about 21 m. from its embouchure, in the æstuary of the Humber; 15 m. N. W. Lincoln, and 117 m. N. by W. London. Area of par. (including the hamlets of Morton, E. Stockwith, and Walkerith) 7,210 acres. Pop. of ditto in 1841, 7,860. The town, consisting chiefly of one long street, running parallel with the river, is clean, well-paved, and sufficiently lighted. The church is a neat modern building, erected by the inhab. in 1748; the living, a vicarage attached to one of the stalls in Lincoln cathedral. There are also several places of worship for dissenters of various denominations. The town-hall, which is used also as an assembly-room, is a convenient brick building; the lower part is used as a gaol, and for shops. There is a neat small theatre. The bridge over the Trent, at the N. extremity of the town, built in 1791, is of stone, with 3 elliptical arches. At the N.W. end of the town stands a very singular building, known as the Old Hall, and said to have been a palace of John of Gaunt; but its appearance shows it to be of later date. It is composed of oak timber framing, and forms 3 sides of a quadrangle, the N. side of which was a chapel: gardens were formerly attached, and a moat surrounded it. About ½ m. S. from the town, on the bank of the river, are the Castle hills, mounds supposed to have been erected during the civil wars under Charles I. The tide ascends the Trent as far as Gainsborough, which being reached by vessels of from 150 to 200 tons, has a considerable coasting and some foreign trade: and it possesses means of communicating with the interior by the Chesterfield and Fossdyke canals, &c. A large amount of British and foreign produce is transhipped here; and, in 1849, 294 ships, of the burden of 16,199 tons, entered inwards, and 458 ships, of the burden of 24,928 tons, cleared outwards. The inhabitants of Gainsborough are very desirous to have it made a bonding port, but hitherto this privilege has not been conceded. (*Report on Inland Warehousing*.) Vessels of considerable burden have been built here. A court is held here for the recovery of small debts. Markets on Tuesday, and fairs for cattle and toys on Easter Tuesday and October 20. It is the birth-place of Bishop Patrick, the well-known commentator on the Bible.

GALACZ, or GALATZ, a town of Moldavia, on the N. bank of the Danube, and a highly important commercial *entrepot*, between the confluence of the Sereth and the Pruth with that river, 80 m. (direct dist.) W. its Soulineh mouth; lat. 45° 24′ N., long. 28° E. Pop. 12,000.? The town, especially the older parts, is ill-built and filthy. "Picture to yourself, upon an eminence sloping rapidly to the water-side, a confused cluster of wooden huts, intersected by irregular streets, paved with trunks of trees, placed from one side to the other; when it is fine weather, a tremendous dust, — converted by rain into deep mud. Imagine these cabins, dark and sombre within; and without, filthy with mud; a sorry caravansera by way of inn, with apartments almost without furniture, and as full of dust as the streets; not the least appearance of order, cleanliness, or arrangement; a town constructed like an encampment — such is Old Galacz." (*St. M. Girardin.*) The houses are built of unpainted wood, and roofed with the same material. Most of them are limited to a single floor, with a front open towards the street; and goods exposed for sale are spread out on the ground. But considerable improvements have latterly been effected in all parts of the town; and within the last few years, a new and superior town has begun to grow up by the side of the former. It is seated on a hill which overlooks the Danube. The houses, 2 stories high, tiled and whitewashed, and furnished in good style, are occupied by the richer class of merchants, and by the consuls and other public functionaries resident in the place. About 1,000 of the inhabs. of Galacz are said to be immigrants from the Ionian Islands. It has, also, a considerable number of Jews and Armenians. Hitherto, however, the greater part of its trade has been carried on by Greek merchants; but latterly many English and other foreign houses have been established in it.

Galacz has of late years, or since the opening of the trade of the Danube in 1829, become an important emporium. It is the principal port of Moldavia, and along with Ibraila or Brahilow (*see* BRAHILOW), about 12 m. further up the river, is the grand *entrepôt* of the vast countries traversed by the Danube from Hungary to the Black Sea. Its great articles of export are wheat and Indian corn, rye, tallow, wool, butter, timber, staves, hides, wax, wine, skins, &c.; the principal imports being olive and other oils, manufactured goods, hardware, colonial produce, &c. The wheat shipped here is superior to that of Ibraila, and is in the proportion of 1-3rd hard to 2 3rds soft. At an average its price may be taken at from 27*s*. to 32*s*. a quarter. The expenses attending its importation to England amount to fully 16*s*. a quarter. It mostly goes to Constantinople, the Levant, Italy, and Marseilles. We subjoin

An Account of the Exports of Wheat and Indian Corn from Galacz during each of the 10 years ending with 1849.

Years.	Wheat.	Maize.	Total.
1840	230,568	189,037	419,606
1841	100,845	35,394	136,239
1842	151,675	93,531	245,206
1843	107,634	110,662	218,296
1844	166,535	174,023	340,558
1845	180,032	157,101	337,133
1846	110,902	336,627	447,529
1847	180,860	318,605	499,465
1848	113,605	143,727	257,332
1849	169,022	248,199	417,221

In 1849 there were also exported 62,113 qrs. of rye. In 1847 the total value of the exports from Galacz was estimated at 775,532*l*. During the same year, 662 loaded vessels left its port, of which 206 were English. The value of the exports from Ibraila in 1847 was about double the value of those from Galacz. (*Commercial Dictionary*; *Cunningham on the Trade of the Danube*, &c.)

GALASHIELS, a bor. of barony and manufacturing town of Scotland, partly in co. Selkirk, and partly in co. Roxburgh, on both sides the Gala, 1 m. from its influx into the Tweed, 27 m. S. S. E. Edinburgh, and 50 m. N. Carlisle, and on the line of road between these two towns. Pop. in 1801, 1,214; in 1831, 2,209; and 1841, 2,140. Though a place of considerable antiquity, most of the buildings are new, because manufactures, to which it owes its present importance and increased size, have only of late years been carried to any great extent. The town is somewhat irregularly built, but it has an interesting and picturesque appearance, being situated in the centre of a fine pastoral district, on the banks of a beautiful stream, and hemmed in by richly wooded hills, of considerable height. The opposite portions of the town are connected by three bridges, two of which (a chain or suspension and a wooden bridge) are for foot passengers only. There are no public buildings of importance, if we except the parish church, and a chapel belonging to the United Associate Synod. The Baptists and Independents have also chapels in the town. The schools are four in number; one of them parochial, the others not. There are two subscription libraries, a reading-room, and a mechanics' institution, in which lectures on science are occasionally delivered.

Galashiels is chiefly remarkable for its eminence in the woollen manufacture. Situated in the middle of a pastoral country, which yields abundance of wool, the inhabitants seem to have cultivated this manufacture at an early date, though it was long on a rude and limited scale. In 1774, only 722 stones of wool (24 lbs. each) were manufactured; in 1790 the quantity was 2,916 stones; while in 1832 it was 21,500; and in 1840, 24,000. Nearly half the raw material is manufactured into stockings and stocking yarn, flannels, blankets, shawls, and plaids; the remainder into narrow cloths, of various kinds and colours, and crumb cloths, of grey or mixed colours. To this narrow cloth the general name of *tweeds* was long given, because it was manufactured on the Tweed, or in its immediate vicinity; but the term is now confined to a particular species, of a mixed indefinite colour. Black and white checks, and tartans of various patterns, are made to a great extent. The tartans made at Bannockburn are of hard-spun yarn; those made in Galashiels are of soft-spun yarn; the two fabrics being altogether different in their texture and appearance. The cloths manufactured have generally been of a coarse kind, but of late a finer species has been produced; indeed, broad cloths of the finest quality have been attempted, and with no inconsiderable success. By the use of foreign wool, the flannels of this place have risen to a degree of fineness surpassing any made in Scotland, and not much inferior to the best produced in the sister kingdom. A new manufacture, called Indiana, for ladies' gowns, has been introduced, and promises to be of importance. The quality is so fine, that a lb. of wool yields a thread of more than 37 m. in length. (*New Stat. Acc. of Scot.* § *Galashiels*.) The shawls, when made of foreign wool, are exceedingly soft and elegant, as also what are called mufflers, or neckcloths, for gentlemen's

use. The quantity of fabrics made of foreign wool has increased much of late years.

The number of factories in Galashiels exceeds a dozen. With but few exceptions, the machinery is driven by water.

Tanning of leather is also carried on to a considerable extent in Galashiels. There are two branch banks and a savings' bank. The town lay under serious disadvantages as to coal, which is the only sort of fuel in use; and which could not be got at a less distance (Middleton) than 24 m. It was brought in carts; and its price was nearly as high as in the metropolis. But the construction of a railway from Edinburgh to Galashiels has obviated these inconveniences, and been of the greatest advantage to the town. This railway has been extended to Melrose, and is to unite with the Berwick and Kelso railway.

Galashiels was erected into a bor. of barony in 1599, at which date its pop. was 400. But it is mentioned in history nearly three centuries before this date. (*Hailes' Annals, apud annum* 1337.) Galashiels was once a royal hunting station, and was used as such when the king came to "the forest" (Selkirkshire) to enjoy the pleasures of the chase. The tower, called "the Peel," a rudely built square edifice, of two stories high, in which he resided, was demolished within the last 20 years. Gala-house, the residence of the feudal superior of the bor., is in its immediate vicinity. Abbotsford, the celebrated residence of Sir Walter Scott, is not above a mile distant, being on the opposite side of the Tweed, in the parish of Melrose. Gala is celebrated in song, "the braw, braw lads of Gala water:" as are also the Tweed, and its two tributaries in this neighbourhood, the Etterick and Yarrow.

GALICIA and LODOMERIA (KINGDOM OF), a prov. of the Austrian empire, forming its N.E. portion, between 47° 10′ and 50° 50′ N. lat., and 18° 50′ and 26° 36′ E. long. The name Galicia is derived from the Polish "Halicz," as Lodomeria is from "Wladimir," both being ancient principalities, forming a part of the present province, which also includes the territories of Poland which fell to Austria in the various partitions of that country, and the Bukowina, ceded by the Turks in 1774. Galicia lies to the N. of the Carpathian Mountains, by which it is separated from Hungary; on the N.W. Galicia is separated from Prussia, the state of Cracow, and a part of the kingdom of Poland, by the Vistula; on the N. and N.E. it is open, and has no well defined boundary; the E. frontier towards Volhynia is formed by the little stream Podhorce, which falls into the Dniestr. A range of heights divides the Bukowina from the Turkish part of Moldavia. On the W., the little stream Biala, a tributary of the Vistula, forms the boundary towards Austrian Silesia.

Surface of the country. — Lying on the N. and E. fall of the Carpathians, from their summits to the great N. plain into which they subside, Galicia is mountainous in the S., hilly in the centre, and in the N., and most extensive portion, a continued plain. For an account of the Carpathians, see that article.

Rivers. — Galicia is most advantageously supplied with rivers suited both to the purposes of commerce and irrigation. The Vistula (Vesela), which rises in Silesia, and flows N. to Dantzic, where it falls into the Baltic, enters the kingdom at Dziedit above Oswieczin, and forms the frontier as far as Zawychost, a short distance below its point of junction with the San. Blumenbach states the elevation of its bed above the level of the sea at its entrance into Galicia to be 747 ft., and at Cracow to be 549 ft. Notwithstanding this rapid fall, the Vistula is navigable from Oswieczin for barges, and at Cracow for larger vessels. In this part of its course the Vistula receives the Sola, Skawa, Dunajec, and San, the sources of which are in the northern Carpathian range. The San is the second river, of importance to Galicia from the length of its navigable course, which commences at Przemysl. The Bug, whose sources lie in the hills to the N. of Lemberg, leaves the kingdom before it becomes navigable. The sources of the Dniestr, which flows S.E. till it falls into the Black Sea, are situated in the Carpathians a little to the W. of those of the San. The course of the Dniestr is at first from S.W. to N.E., but at Koniaszki it changes to a general S.E. direction, which it preserves until it leaves the kingdom. The Dniestr is navigable from Koniaszki, within 26 m. of the San, where it is navigable; so that it would not be difficult, by uniting these rivers, to form a channel of communication between the Baltic on the one hand, and the Black Sea on the other; enabling the corn and other produce of the prov. to be sent to whichever offered the most profitable outlet. Several other important rivers, such as the Pruth and the Sereth, with the Suizuwa and the Moldawa, its tributaries, take their rise in the Bukowina, which, however, they leave before they attain any size.

Lakes. — If all the sheets of standing water which are denominated lakes be numbered, few countries can boast of so many as Galicia. Not only the plain at the foot of the hills, but the valleys that intersect the hilly country, and the shelvy declivities of the granite masses of the Tatra, are full of small lakes. Some of the last mentioned are most picturesquely situated, and furnish water to fine cascades. The most elevated is the Black Lake, of about 40 acres in extent, on the north side of the Krivan.

Climate. — The climate of Galicia is, with the exception of the Bukowina, tolerably equal, and in winter is very cold. The greatest heat is + 92° in summer, and the greatest cold is — 22° of Fahrenheit, according to Blumenbach, who states the mean temperature of Lemberg to be + 45°. In the Bukowina the climate is much milder, notwithstanding the mountainous nature of the country, and the mean temperature is several degrees higher, although not so high as at Vienna, which lies under nearly the same parallel of latitude as Czernowitz, the cap. of the Bukowina. The winds are violent, and thunder-storms, accompanied by hail and torrents of rain, are of frequent occurrence.

Soil. — The most generally fertile portion of the province is the hilly country which occupies its centre; the country rises towards the S., the summits of the mountains presenting little but bleak naked rocks. Towards the N. the fertility of the soil likewise diminishes as the hills subside into the sandy marshy plain. The valleys which intersect the hills are usually filled with swamps, of which such as are drained (and these are now the greater part) have a very fertile soil; but the richest portion of the province is that part of the valley of the Dniestr, which once formed a part of Podolia, including the circles of Stanislawow, Ozortkaw, Kolomea, and part of Bazezany. Some very fertile tracts are likewise found along the banks of the San.

Products. — The agricultural productions are the most important in point of value, although confined to the common grains and potatoes. Maize is only cultivated in the Bukowina. The forests are chiefly of fir flax and hemp are grown in great abundance. Of minerals, iron is found all through the range of the Carpathians, although but little mining is carried on: gold and lead, with silver, in small quantities, copper near Poszporita in the Bukowina, zinc and sulphur; but none of these minerals occur in a quantity proportioned to the riches of the other provinces of the empire. Salt alone is found in extensive, and almost inexhaustible beds, which stretch all along the range of the Carpathians. Coals are found in many places; marble and alabaster of middling qualities, and quartz in great abundance, which is used for the manufacture of glass; rock crystal, agate, jasper, and inferior qualities of opal, occur in the mountains. But as the greater part of the secondary formations are covered by the immense bed of sand which forms the Polish plain, it is not easy to ascertain their exact nature, and what minerals they contain.

Political divisions, &c. — Galicia is composed, as we have seen, partly of Polish and partly of Turkish territories. In the W. parts the duchies of Oswieczin and Zabor, though belonging, at the time of the partition, to the kingdom of Poland, were claimed as fiefs of the German empire, because anciently the Polish sovereigns occasionally did homage for these possessions. Between them and the San, a Polish race, the Mazurs, inhabit the hilly country, while the mostly level land beyond that river is tenanted by a Russian race, differing in language, manners, and appearance from their Polish, as well as from their Moldavian, neighbours in the Bukowina. The present division of the province is into 19 circles, whose extent and population were in 1837 as follows — [See top of opposite page.]

The population of this province amounted, according to Blumenbach, in 1776, to 2,480,885; in 1818 it amounted, according to official reports, to 3,760,319, and in 1837 to 4,599,631, showing an annual increase within the twenty preceding years of ·986 on 100 of the population. The rate of increase must, however, for ordinary years, be considered as much higher, for the ravages of the cholera, between 1831 and 1833, caused a serious diminution in the population, which the province did not recover until 1836.

The births, within the 20 years, from 1818 to 1837 inclusive, are officially given as follows. The specifications for some years are wanting.

Legitimate Males and Females.	Illegit. Males and Females.	Total Males.	Total Females.	Annual Average of Births.	Prop. of Legit. to Illegit.
3,403,950	243,737	1,875,077	1,772,610	182,384	13 to 1
Of these still born	-	11,269	7,806	953	

The number of deaths within the same period was reported as follows. Kinds of death specified in the lists of mortality: — Ordinary, 2,512,323; epidemics, 179,195; smallpox, 36,175; suicide, 2,373; hydrophobia, 298; murdered, 1,561; accident, 27,275; executed, 180. The total being 2,759,380, of which 1,386,467 were of males,

Circles.	Area in sq. m.	Towns.	Villages.	Houses.	Population. Families.	Males.	Females.	Total.	Pop. in sq. m.
Lemberg (city)	- -	1	-	2,510	11,718	28,569	30,159	58,728	
1. Lemberg	924	5	173	18,020	27,500	57,124	59,749	116,873	196
2. Wadowica	1,474	13	340	44,556	76,039	159,994	176,313	336,307	228
3. Bochnia	966	14	377	29,410	50,111	102,577	111,429	214,006	221
4. Sandec	1,694	13	387	30,521	52,938	113,169	122,914	236,083	139
5. Jaslo	1,276	17	383	32,705	55,725	116,706	127,812	244,518	191
6. Tarnow	1,496	14	468	33,830	55,985	110,925	120,001	230,926	154
7. Rzeszow	1,826	17	334	41,811	65,247	131,737	142,819	274,556	150
8. Sanok	1,892	20	434	36,492	65,047	128,618	135,393	261,011	134
9. Sambor	2,002	10	346	45,713	73,962	141,576	147,504	289,080	144
10. Przemysl	1,320	17	372	37,693	59,053	116,989	123,543	240,532	181
11. Zolkiew	2,002	21	267	36,496	52,843	101,843	108,200	210,043	109
12. Zloczow	2,222	26	325	37,721	57,180	114,166	118,498	232,964	105
13. Brzezan	1,716	17	318	32,371	50,891	103,398	107,612	211,010	116
14. Stry	2,640	12	304	32,739	53,685	106,944	110,972	217,916	82
15. Stanislawow	2,288	18	264	32,539	51,654	114,680	119,252	233,932	102
16. Kolomea	1,760	15	204	31,769	46,807	100,574	104,885	205,459	116
17. Tarnopol	1,408	13	250	33,017	49,918	97,660	99,987	197,647	141
18. Czortkow	1,452	22	242	33,760	45,925	94,182	95,530	189,712	126
19. Czernowitz	3,982	7	278	49,916	68,133	158,051	156,006	314,057	71
Military	- -	- -	- -	- -	- -	81,271	- -	81,271	
Total	34,340	289	6,056	676,619	1,073,391	2,281,053	2,318,578	4,599,631	131

and 1,372,913 of females. The increase of population was thus in the twenty years 888,307 souls. The marriages within the same period were 41,390 annually.

The male population is classified as follows for the year 1837: —

Clergy.	Nobles.	Civil Officers.	Tradesmen.	Peasants.	Children.	Undetermined.
4,511	32,190	4,965	2,076	349,807	1,085,175	753,095

The great number of nobles is explained by the fact of a double nobility existing in the greater part of the eastern circles, where the original inhabitants of Russian origin (Rusniaks) were obliged to submit to the Polish sway, and their lands were bestowed upon the conquerors. The unlimited divisibility of estates contributed to the increase of the noble families in the fertile countries, of whom one fourth part is found in the circle of Sambor.

Occupations of the People. — Agriculture is the principal source of wealth in this province, a great portion of which is very fertile. The amount of cultivated land in 1837 was given as follows: —

Arable Land.	Vineyards.	Meadows.	Commons.	Forests.	Total.
Eng. Acres.	*Acres.*	*Acres.*	*Acres.*	*Acres.*	*Acres.*
8,078,543	42	2,895,244	8,823,032	5,951,304	18,829,367

The official estimate of the produce calculated for the land tax was: —

Wheat.	Rye.	Barley.	Oats.	Wine	Hay.	Timber.
Im. Qrs.	*Imp. Qrs.*	*Imp. Qrs.*	*Imp. Qrs.*	*Gals.*	*Cwt.*	*Cub. toises*
591,329	1,593,496	2,221,252	3,100,252	2,873	27,968,400	2,423,363

But these returns are, in all probability, as is usual in such estimates, much below the truth. Of late years improved systems of agriculture have been introduced on nearly all the estates of the larger landed proprietors, and beet-root sugar factories are generally diffused. The great growth of barley and oats is explained by their immense consumption in distilleries, as whisky and potatoes may be said to be the principal beverage and food of the peasantry. Neither the amount of potatoes nor of beet-root cultivated, is given in the official returns; which, in fact, is little to be regretted, as no dependence can be placed on them. Agriculture is extremely backward. Nothing can be worse managed than the small grounds attached to the peasants' cottages, and for which, besides a small rent in money, and the tithe of the produce, they give a certain number of days' labour to the landlord. This service is named "robot," and is often made a source of oppression, though proceeding from a fair system of contract originally, and which may be even useful, in a country where there is no capital, and but little demand for the produce of the land. But, as the landlords assume the right of rejecting labour in unfavourable weather, and thus monopolising the days on which field work can be well done, the industry of the peasants is well nigh exterminated. This may be looked upon as the last remnant of the oppression formerly practised in Poland by the great lords upon their tenants, and which entailed ruin upon themselves and their nation. It is only due to the Austrian government to state that it has in every way ameliorated the situation of the peasants.

Cattle breeding has been very much improved of late years. Swiss and Tyrolese horned cattle, and merino sheep from Saxony and Silesia, have been introduced by improving proprietors, amongst whom Counts Alfred and Leo Potocki, Scarbeck, Mniszeck, and Prince Sangusko, may be specified. We subjoin a comparative statement of the stocks of cattle in the years 1829 and 1837: —

Year.	Horses.	Bulls and Oxen.	Cows.	Mules and Asses.	Sheep.
1829	478,800	550,392	1,006,710	209	761,263
1837	521,385	512,317	1,495,516	373	1,211,6 7

This great increase in the number of sheep is principally occasioned by the low price of corn, for which there is little demand for exportation. In the article AUSTRIA we have shown, by the statement of market prices in various parts of the empire, that the price of wheat remains invariable, often for years together, at 14*s.* 6*d.* or 15*s.* per quarter. The native breeds of all kinds of cattle are very bad, or have degenerated; the horses are small, but capable of great endurance; and the cows give but little milk. Great quantities of horned cattle are annually imported from Moldavia, but are mostly driven through to the great market at Olmutz, which supplies Vienna. Calves and heifers are, however, also bought of the Moldavians, and fattened either in the fine marsh pastures, which are very numerous, or by stall-feeding, which is in general practice upon large farms, and which is always connected with distilling. Turnips and clover are commonly grown where farming is good. Stallions are kept by the government at 72 stations throughout the prov.

Division of Property. — Though large, the estates of the Galician nobles are less extensive than those in other parts of Poland. According to the official returns, they were divided as follows in 1830: —

	Freehold Estates.
Estates belonging to the crown, 37; ditto belonging to foundations for religion and education, 14; estates with manorial jurisdictions	2,357
Estates without such	324,787
Total of Galicia, ex. Bukowina	327,195

The following is the official return of the total amount of labour and produce chargeable upon the peasant's holdings in the prov., exc. the Bukowina, not included in the return: —

	Days in the Year.
Hand labour	16,256,499½
With a waggon and four horses	1,377,700
Do. and two do.	5,221,132
Do. and four oxen	6,686,223

Of which, only 344,061 days were redeemed in money.

Of the rent payable in produce, the following are the most remarkable items: —

Oats	217,794 koretz.
Hops	7,505 do.
Hens	431,589 head.
Capons	171,489 do.
Eggs	2,061,295
Hemp	12,270 lbs.
Spinning	2,685,386 skeins of yarn.
Sheep	2,776 head.
Bees	11,170 hives.

Weights and Measures peculiar to Galicia.

The lb. weight and the foot are the same with those of Austria, corn measure.

The koretz = 122·99 litres = 3·3 imp. bushels, liquid measure.

The garnitz = 3·8 litres = ·88 imp. gallons.

Manufactures. — The manufacturing industry of the province is quite inconsiderable. After the distilleries already mentioned, and the breweries, both of which are united with farming on large estates, mining industry is the most considerable. Salt, which is found in a fossil state in the greatest abundance, is worked only on government account, it being a monopoly of the crown. The salt mines of Wieliczka (*see* art.) and Bochnia are celebrated for their wonderful extent. On the cession of these mines to Austria, a stipulation was made in favour of the kingdom of Poland, to which

these mines furnish annually any quantity required, at 2 fl. (4s.) per cwt. for rock salt, and the same price for 140 lbs. of boiled salt. A further contract on credit was made in 1821 for 11 years. The quantity of salt produced in Galicia in 1837 was as follows: — Wieliczka, 809,021 cwt.; Bochnia, 277,505 cwt.; from springs, 4,145 cwt.; total, 1,090,651 Austrian cwt. = 123 English lbs. The sulphur mines of Swosrowice are the only mining undertakings on government account, and produced, in 1837, 31,548 cwt. The private mines produced in the same year —

Silver Marks.	Copper.	Lead.	Iron. Cwt. = 123 lbs. English.	Litharge.
418	2,240	215	86,889	410

On the whole, mining may be said rather to decline than to increase. Flints for guns were formerly prepared in large quantities at Niznlow and Podgorre, but this manufacture is now transferred to the territory of Cracow.

The manufacturing industry of Silesia has spread partially into the neighbouring parts of Galicia, and both woollen and cotton spinning-mills and factories are established in the circle of Wadowice. Glass is made in several parts of the province, but does not rival that of Bohemia in quality.

Trades. — If we deduct the distilleries, the number of mining establishments and factories is 165, being about a third part of the industrial establishments of the same kind in Bohemia, and one sixth of the number registered for Lombardy and Venice; the pop. in each of these three provinces exceeding 4,000,000. The total number of trades of all descriptions in 1837 was registered at 47,662, in which 27,052 apprentices and workmen were employed. A great deal of linen is, however, woven by the peasantry, who are not registered as workmen, and it is not unusual both for the peasants to pay a portion of their rent in linen, and for servants to receive linen in part payment of their wages. Salaries of bailiffs and superior officers of large households are also in part paid in kind, and this is often the case with the allowances of the clergy, schoolmasters, and even of many civil officers employed by government.

Commerce. — The new roads from Brody to Biala, and that along the mountains through Dukla to Stanislawow, which unites with the high road from Lemberg to Czernowitz, have all been constructed since Galicia came under the Austrian sceptre, and have conferred the highest possible benefit on the country. From the fairs of Leipzig, Breslau, and Frankfort on the Oder, manufactured goods from Western Europe, and colonial wares, are transported along these roads to the E. part of Europe, and a considerable traffic is kept up by their means with Odessa and the Black Sea. The fine navigable rivers which water Galicia are but little used, if we except the San and the Vistula, when the exportations from Dantzic are sufficiently extensive to affect this part of the country.

The Dniestr is the only river concerning the navigation of which any details have been published: the *Vienna Gazette* states the traffic upon this river to have been as follows, in 1837, from Galicia to the sea: —

22 decked barges, 12 open barges, 3 barks, 122 rafts, constructed with 9,015 fir, and 67 oak, trunks.

The whole were loaded with timber, laths, and charcoal.

The boats on the upper Vistula are small, carrying from 30 to 60 tons. On the San the Uldnow boats carry the lesser burdens. The Dunajec, Poprad, Wysloka, and Bug, are navigable for rafts, as are also the Pruth, Szereth, and other rivers. The little river Stry, which falls into the Dniestr, is navigable for rafts for nearly 50 miles, and its valley offers a good pass across the Carpathians into Hungary, the distance from the Stry to the Theiss in Hungary, not exceeding 70 miles. Under the circumstances of the greater portion of the courses of the Vistula and Dniestr being in the power of foreign potentates, this cheap means of communication with the Danube and the Adriatic Sea ought not to be overlooked. The iron railway now in progress of being constructed between Vienna and Bochnia, promises to open a most advantageous line of communication between this province and the capital.

The entries at the custom-house of goods imported from, and exported to, foreign countries, in 1836 and 1837 were: —

	Fl.		Fl.
Imports, 1836	5,491,884	Exports,	7,435,035
1837	5,677,937		7,645,778

The imports consist chiefly of cattle from Moldavia, and Turkish wares for inland consumption and for the transit trade from Odessa. Furs, hare-skins, wax, and honey are imported from the Russian provinces; the exports consist of corn, timber, linen, hemp and flax, salt, lime, and other articles. But the trade with the other provinces of the empire is of more importance than the foreign trade, as it includes the colonial wares, wine, metals, and manufactured articles consumed by the inhabitants.

The pop. is nearly equally divided between the Rom. Cath. and United Greek Church. The professors of the various religious creeds were in 1837 as follows: —

R. Cath.	United Greek.	Schismatic Greek.	Lutherans.	Calvinists.	Other Sects.	Jews.
2,001,082	1,990,375	240,561	23,203	2,391	1,644	259,104

The Rom. Catholics are chiefly the Polish inhabs. of the circles to the W. of the San: the Rusniak inhabs. of the E. circles profess the Greek creed, and have an archbishop in Lemberg and a bishop in Przemysl. The Rom. Catholics have likewise an archbishop at Lemberg, under whom are the bishops of Tarnow and Przemysl. Lemberg has likewise an Armenian archbishop. The Schismatic Greek Church, the professors of which are chiefly the Moldavian inhabs. of the Bukowina, have a bishop at Czernowitz. Galicia has 73 monasteries, with 306 priests and 285 alumni and lay brothers. In 15 monasteries there are 185 nuns. The parochial clergy are, for the 2,690 Cath. and Greek united parishes, 3,353; and the clergy of other confessions, for 322 parishes, 362 in number. The Jesuits have, for many years, conducted a college at Tarnopol.

Although the institutions for education have been much improved by the care of the Austrian government, yet Galicia is not as well organised in this respect as the W. provinces of the empire. The Greek clergy profess to educate the poor, and their number swells the list of elementary schools, but the lower classes may be said to be every where uneducated; though the Polish peasants are distinguished for quickness of talent, and goodness of disposition. The little instruction spread amongst the people is chiefly confined to the Jews, who, by promoting trade, may be said, at present, to represent the middle class, and who, though badly treated and much abused, are, in the present neglected condition of the lower orders, useful and almost indispensable both to the highest and the lowest classes. They are not only subject to a high property tax, but their religious rites, which are somewhat less circumscribed than in other countries in their celebration, are made a source of revenue to the crown. The meat killed by their butchers, and the lights with which they celebrate the sabbath, are both heavily taxed. In 1837 the number of educational institutions was, —

1 university (Lemberg)	- 1,321	scholars.	
7 colleges - -	- 672	—	(Lycea).
13 grammar schools	- 3,661	—	(Gymnasia).
3 private schools -	- 88	—	
24 boarding schools	- 1,150	—	(3 military, 1 clerical)
1,845 elementary schools	- 67,958	—	from a number of 518,?25 children returned as able to attend school.

The Sunday-schools were 595 in number, attended by 29,080 children.

The charitable institutions consist of 17 hospitals, with (1837) 11,051 patients, besides 28 belonging to the military, which counted 35,386 patients; 1 mad-house; 1 foundling hospital; and 292 alms-houses with 1,978 inmates. The 11 institutions for the relief of the poor, had 4,329 claimants in 1837.

In its government Galicia is placed on a similar footing to the German provinces and Bohemia. The seat of the highest authorities is at Lemberg (Polish *Lwów*), where the courts of justice, both civil and criminal, of last resort are stationed. For nobles, the Landrecht courts of Lemberg, Tarnow, Stanislawów, and Czernowitz, and for citizens, the magistracy of the larger towns, distribute justice; and the peasants are amenable to 2,558 manorial courts, of which 2,519 are held by the officers of landed proprietors, and 39 by the crown. Criminal courts are held at Lemberg, Wismeiz, Sambor, Stanislawów, Rzezow, and Czernowitz. The Bukowina has no manorial courts, the judiciary power being solely vested in the crown.

The inland position of this province, which the partition of Poland cut off from its natural communication with the sea by means of the Vistula and the Dniestr, is the greatest impediment to its rapid advance in point of prosperity. A new opening for the exportation of its rich produce is looked forward to when the completion of the iron railway from Bochnia to Vienna shall take place. The land carriage traffic, to which allusion has been made above as being actively carried on between Odessa and Brody, shows how natural a line of trade might be established on the Dniestr between the countries of the N.E. portion of Europe and the Asiatic provinces of Turkey and Persia.

GALICIA, a prov. of Spain, situated at the N.W. extremity of that peninsula, lying between lat. 41° 52′ and 43° 47′ N., and between long. 7° 17′ and 9° 14′ W. It is bounded N. and W. by the Atlantic, S. by Portugal, and E. by the Spanish provs. of Leon and Asturias. Area, 15,960 sq. m.

Pop., according to Miñano, 1,795,200. The country is in general very mountainous, being intersected by the branches of the Asturian mountains, which separate at the Sierra de Peñamarella, and form three ranges running W.S.W. and S.S.W. through the prov. In this prov. there are numerous depressions or valleys in every direction, of which those inclining W. and S.W. are extensive and fertile, especially those of the Minho, Sil, and Ulla. The rivers, which follow the course of these valleys, and generally give them their names, are neither long nor important, except the Minho, which rises in the Sierra de Mondonedo, in the N.E. part of the prov., and flowing S., with numerous affluents by Lugo, receives the Sil from the mountains of Astorga, and then passing by Orense, Ribadavia and Tuy, enters the Atlantic in lat. 41° 52′ N., after a course of 166 m. The next in importance are the Tambro, running E. into the Bay of Noya, the Ulla running E.S.E. into the Bay of Arosa, and the Lima, which enters Portugal near Lindoso. The coast of Galicia, especially on the W. side, is abrupt and much indented, forming numerous capes and bays. Of the former, C. Ortegal and Finisterre are best known; of the latter the Bays of Ferrol, Betanzos, Coruña, Pontevedra, and Vigo, are the most extensive. The temperature varies greatly; in the N. and among the mountains, cold, damp, and rainy; warm and moist on the coast; but warm, dry, and genial in the S.W. part of the prov. Although fog and moisture prevail more here than in most other parts of Spain, the climate is not unhealthy, and the people are robust, and capable of heavy and continuous labour. The high lands produce abundance of good forest timber, adapted for ship-building. There is good pasturage for cattle, sheep, and horses, which are kept in small quantities by even the lowest classes of the rural population, and sold at monthly fairs for removal to other parts of Spain. The produce of the valleys consists of wine, maize, wheat, barley, flax, and potatoes, a part of which are shipped off to Alicante, Malaga, and Barcelona. The sweet chestnut grows abundantly, and may be justly called the bread of the Galicians, as it constitutes their common and favourite food. The mineral productions consist of copper, lead, antimony, and tin; white marble and jasper are found in the mountains of the N. part. There are several mineral springs; one is at Orense. Along the coast are anchovy fisheries, chiefly conducted by Catalonians.

The pop. is principally agricultural, and landed property is usually divided into small possessions, so that there are few rich proprietors, but many occupiers tilling their own land and rearing their small stocks of cattle. Manufactures are but little followed, coarse woollens, linens, and sail-cloth being the only articles produced. The Galicians, or *Gallegos*, are a quiet, simple, hospitable, and industrious people, grave, sober, and trustworthy: the men are hardy, and patient under fatigue or privation; the women are dark, but handsome, cheerful, and fond of singing their national airs. Like the Swiss, they leave their country in great numbers, sometimes 90,000 in a year, to seek employment in other parts of Spain and Portugal, where labour is better rewarded. The best servants in Madrid and other principal towns come from Galicia, and they are preferred for fidelity and obedience; and the porters and water-carriers of Madrid, Lisbon, and Seville, are usually natives of this prov. Indeed, so much more effective are the Galicians in getting in the harvest and vintages than the Castilian and Portuguese peasants, that a failure is considered as a necessary consequence of their absence from the work. They make also the best soldiers in the Spanish army. The language spoken in this prov. is the old Castilian (which much resembles Portuguese) mixed with low Latin.

Galicia is divided into 7 provs., and subdivided into 656 jurisdictions. Principal towns, St. Iago, the cap., Coruña, and Orense. The whole is governed by 38 magistrates. The church discipline is conducted by an archbishop and four bishops.

The Callaici, the ancient inhab. of this district, were first conquered by Decimus Junius Brutus, and wholly subjugated by Augustus, who included the country in the prov. of *Tarraconensis*. The Visigoths took the country from the Romans, and were in their turn driven from it by the Moors. The princes of Asturias retook it from the Moors, and annexed it to their kingdom, which was united with Castile in 1029. (*Miñano.*)

GALL (ST.), a canton of Switzerland, in the E. part of which it is situated, occupying the 14th place in the Swiss confederation. It has E. a portion of the Austrian dom. (the Vorarlberg and Lichtenstein), from which it is separated by the Rhine; S.E. and S. the Grisons; W. the cantons Glarus, Schwytz, and Zürich, with its lake; and N. Thurgau, and the Lake of Constance. Length, N. to S., about 40 m.; breadth varying from 11 to nearly 35 m. Area, 747 sq. m. Pop. (1838) 158,853. Surface greatly diversified: in the N. there is an inconsiderable portion of plain country, but the central and S. parts are almost wholly covered with Alpine ranges, the summits of some of which rise above the limit of perpetual snow. Mount Scheibe, at the S.W. extremity, is estimated to be 10,188 ft. above the level of the sea, and Kameckberg 7,614 ft.; the Speer, a mountain near the centre of the canton, is 6,305 ft. in elevation. (*Bruguière, Orographie.*) There are, however, several extensive and fertile valleys, as that of Toggenburg, watered by the Thur, 36 m. in length, those of the Rhine, &c.; and others noted for their wild and picturesque character. Next to the Rhine, the chief rivers are the Thur, Sitter, Serz, and Tamina; all, except the last, have generally a N.W. direction. The principal lake is that of Wallenstadt, mostly comprised within this cant. The plains and valleys are in many parts well cultivated; but the corn produced is insufficient for home consumption. Potatoes are extensively grown. Fruit is largely cultivated, especially in the N. Cider is the ordinary drink of the people; and in the mountainous parts of the country a good deal of *kirscherwasser* is made. There are vineyards in many of the districts, in which a red wine is made; and the wine of Bouchberg, in the valley of the Rhine, is esteemed the best of German Switzerland. But the principal branch of rural industry is the rearing of cattle. Artificial meadows are well kept in the mountainous parts, but not generally so in the lower parts of the country. The number of horned cattle is very great; and in the S. there are many sheep, goats, and hogs. Every spring considerable flocks of sheep are bought in the Grisons, kept during the summer in St. Gall, and sold in the autumn. Dairy husbandry is not so well attended to in this as in many other cantons; but though the cheese be of an inferior quality, the butter is superior. The forests in the S. are extensive, consisting principally of pine and fir, with some beech trees, and a few oaks. But, at present, the forests are almost useless; since, from the want of roads, and the mountainous nature of the country, it is in most places very difficult to bring the timber to market. There are some iron mines near Sargans, and coal and turf are met with elsewhere. Mineral springs are numerous; amongst them are the celebrated baths of the Pfeffers in the S. (*See* PFEFFERS.) St. Gall is one of the principal Swiss manufacturing cantons; as many as 60,000 of its inhab. being supposed to be employed in its manufactures. These are chiefly of cotton fabrics and thread, especially muslins, and linen cloth, which was formerly the principal. Muslins of extreme fineness are woven in large quantities in the town of St. Gall, and are embroidered by the women in most of the districts. Cotton thread is spun mostly in the S., but also in the valley of Toggenburg, where many cotton handkerchiefs and other fabrics are made. There are some good cloth bleaching establishments at St. Gall, Rorschach, &c., and a few glass and wax-bleaching factories; but the manufactures of the canton have generally diminished since the peace. External commerce is chiefly confined to the import of corn and other provisions, and of raw materials for the manufactures; and to the export of manufactured goods, raw hides, and cattle. The transit trade is inconsiderable, except on the Wallenstadt lake and Linth canal, which form part of the main channel of communication between Zürich and Italy. St. Gall is divided into eight districts, and has no town, St. Gall, the cap., excepted, with 2,000 inhab. The government is one of the most democratic in Switzerland. It is composed of a grand and a petty council: the first consists of 150 members (84 Rom. Cath. and 66 Protestants), chosen in the different circles and communes by the suffrage of those citizens above 21 years of age who are neither bankrupt, receiving aid from public charities, nor against whom a criminal judgment has been pronounced; and who pay taxes on property to the amount of 200 Swiss francs. In 1831, 32,980 citizens were entitled to vote. Members of the grand council must be above 30 years of age; they are elected for three years, but are always re-eligible. The petty council, which has the executive power, consists of nine members, chosen from among the grand council, each of whom must pay taxes on property to the amount of 6,000 fr. The grand council passes or rejects laws proposed to it by the petty council; has the superintendence of all the state accounts; appoints all public functionaries, and fixes their salaries; exercises the right of granting pardons; and nominates the president of the petty council, as well as its own, who are called *landamanns*, one being a Catholic and the other a Protestant, and who alternately preside in either assembly for a year. The people at large have, however, the privilege of a *veto* on any law passed by the councils, if that privilege be exerted within 45 days from the time of its passing. Each commune has a council, composed of from 4 to 12 members, and a syndic, to which the local administration is confided. Members must be 25 years of age, and pay taxes on property of 50 fr. value. There are communal and district judicial courts, and appeal from the latter to a supreme court in the cap., consisting of 13 judges, whose qualifications are similar to those of members of the petty council. The total pop. consists of

about 100,000 Catholics and 58,000 Protestants: the latter reside chiefly in the cap., and the valleys of Toggenburg and the Rhine. They exhibit more activity and intelligence than the Catholics; but the greatest harmony exists between the two persuasions, and in the various public schools teachers belonging to either are indiscriminately employed. Education was till lately very backward, but primary and secondary schools are now established in every district. There are some high schools in the cap. German is the language of the cant. St. Gall furnishes a contingent of 2,630 men to the army, and 39,450 Swiss fr. to the treasury of the Swiss confederation. Public revenue (1835), 305,597 florins; expenditure, 274,054 fl. This canton was first formed in 1798, by the union of the territories of the city and abbey of St. Gall with those of other districts, previously subject to the Swiss confederation, and administered by bailiffs.

Gall (St.), a town of Switzerland, cap. of the above cant., on the Steinach, in a narrow and elevated valley, 6½ m. S.W. the Lake of Constance, and 39 m. E. by N. Zürich; lat. 47° 25′ 40″ N., long. 9° 22′ 15″ E. Pop. (1838) 10,500. It is surrounded by old walls and a dry ditch, now converted into gardens; and has three suburbs. It is well built, and has broad streets, the remains of a celebrated abbey, 6 churches, an arsenal, hospital, orphan asylum, a Catholic gymnasium with 11 professors, a Protestant college with 14; many learned and benevolent societies, public and private libraries, collections of natural history, and a *casino* or public reading-room. A magnificent abbey was erected over the tomb of a monk, called Gallus, said to have belonged at one time to Iona, under the auspices of Pepin l'Heristal. This abbey was one of the oldest ecclesiastical establishments in Germany. It became the asylum of learning during the dark ages, and was one of the most celebrated schools in Europe between the 8th and 10th centuries. Here the works of the authors of Rome and Greece were not only read but copied, and we owe to the labour of these obscure monks some of the most valuable classical authors; Quintilian, Petronius Arbiter, Silius Italicus, and Valerius Flaccus having been printed from MSS. found here in 1413. Several of its most valuable MSS. having been lent to the dignitaries attending the Council of Constance, were not returned; but it still contains, or, at all events, did contain when it was visited by Mr. Coxe, a collection of letters, in 13 volumes folio, by the most distinguished German and Swiss reformers. The library, which now belongs to the town, occupies a fine apartment; and, besides its literary treasures, has some busts, portraits, and a cabinet of mineralogy. The abbey church is now the cathedral of the diocese of St. Gall and Appenzell; the ancient palace of the abbots (*die Pfalz*) at present serves for the public offices of the cantonal government; and the other buildings of the monastery have been appropriated to the Catholic gymnasium. The abbey was secularised after the French revolution, and in 1805 its revenues were sequestrated.

St. Gall is one of the chief manufacturing towns of Switzerland. It has extensive manufactures of muslin; is the centre of the Swiss trade in that article, and of embroidery in gold and silver; and a general depôt for the merchandise of the cantons of St. Gall, Appenzell, and Thurgau. Other cotton fabrics and yarn are also produced, the spinning of the latter employing several factories. In the suburbs there are a great many bleaching establishments. Some pretty extensive banking operations are transacted in the town. A market is held every Saturday, and 2 fairs of 8 days each take place twice a year. The inhab. are generally active and prosperous; about 7-8ths of them are Protestants. House-rent and living are exceedingly cheap. About 2 m. S.W. St. Gall is the fine bridge over the Sitter, called the Krätzerenbrücke, 590 ft. long, and 85 ft. above the surface of the river.

The abbots of St. Gall about the 10th century began to assume a military character, and surrounded the convent with walls and ditches. From the 13th century they enlarged their dominions at the expense of their neighbours, till they became the most considerable territorial sovereigns in N. Switzerland, and were raised to the rank of princes of the empire. Early in the 15th century, however, Appenzell threw off their yoke, and at the Reformation the town of St. Gall emancipated itself from their control, and acquired a territory of its own. The town was first incorporated in the 10th century: in 1454 it allied itself with the free Swiss cantons, and sent a deputy to the diet; and at the end of the 17th century, its civil and political independence was secured. (*Picot, Statistique de la Suisse*, pp. 388—406.; *Lutz, Geogr. and Statist. of Switzerland; Helvetic Almanack; Coxe's Switzerland*, letter iv.)

GALLIPOLI (an. *Callipolis*), a sea-port town of S. Italy, kingd. Naples, prov. Otranto, cap. distr. and cant., on a rocky islet on the E. coast of the Gulph of Taranto, 49 m. S.E. Taranto, and 28 m. W.S.W. Otranto; lat. 40° 3′ N., long. 17° 58′ E. Pop. 8,500. A bridge unites it with the mainland, on which is its suburb Lizza. Gallipoli is fortified, and has a castle, bombarded by the English in 1812. It is well built, and has a good cathedral, several churches and convents, a seminary, and some other public schools. About 1 m. W. from the town is the island of Andrea, on which is a lighthouse; and between it and Gallipoli there are from 9 to 10 and 12 fathoms water: but vessels of considerable burden must not come within gunshot of the city. Gallipoli displays an air of great industry, if not of affluence. It is the most frequented of all the sea ports on the S.E. coast of Naples; and the great mart for the oil of Apulia, most of which is shipped here, it being peculiarly well adapted to serve as a depôt for oil. "The rock (limestone) on which the town is built is easily excavated; and in caverns thus constructed oil clarifies sooner, and keeps without rancidity much longer than in any other place. Hence numerous oil-houses are established at Gallipoli, and a very considerable portion of the rock is cut into cisterns. A Gallipolitan oil-warehouse generally occupies the ground-floor of a dwelling-house, and has a low arched roof. Some are more extensive; but, on an average, they are about 30 ft. square. In the stone floor you see 4, 6, or more holes, which are circular, about 2 ft. in diameter, and like the mouths of wells. Each of these holes gives access to a separate cistern beneath your feet; and when the oil is poured into them, care is taken not to mix different qualities, or oils at different stages, in the same reservoir. One cistern is set apart for *oglio mosto*, or oil that is not clarified; another for pure oil of the season; another for old oil, &c. I have seen oil that had thus been preserved for 7 years in a perfect state, or, as the Gallipoli merchants have it, *chiaro, giallo e lampante*. I also many times verified the fact that the *mosto*, or oil in its turbid state, which arrived almost as black and thick as pitch, soon became bright and yellow in these excellent reservoirs, without any help from man.... When the oil is to be shipped, it is drawn off the cistern into *uteri* or skins, and so carried on men's shoulders down to a small house on the sea-shore. In that house there is a large open basin capable of containing a given quantity, and of measuring the oil, and into that the porters empty their skins as they arrive. A tube communicates from the basin to a large cock on the outside of the house. When the basin is full, well-made casks of various sizes, for the convenience of stowage, are placed under the cock, which is then turned, and the casks are filled. As the casks are closed up by the cooper, the porters roll them down to the brink of the sea, where the sailors secure several of them together with a rope, and taking the end of the cord into the boat, they row off to the vessel, towing the oil-casks through the water after them." (From the volume in the *Library of Entertaining Knowledge*, entitled *Vegetable Substances—Materials of Manufactures*.) Gallipoli has also manufactures of muslin, cotton stockings, and woollen goods; considerable trade in corn, wine, fruit, &c.; and a productive tunny-fishery. It is said to have been originally founded by colonists from Lacedæmon. It suffered greatly at the hands of Charles II. of Naples, the Venetians, and the Turks; but the Emperor Charles V. improved its fortifications, and restored to it a considerable share of prosperity. (*Swinburne; Craven; Rampoldi, &c.*)

Gallipoli (an. *Callipolis*), a sea-port town of Turkey in Europe, prov. Roumelia, cap. sanjiack and distr., on a headland called the *Braccio di Gallipoli*, at the point where the Hellespont unites with the sea of Marmara, 90 miles S. Adrianople, and 126 miles W. by S. Constantinople; lat. 40° 24′ 30″ N., long. 26° 39′ 45″ E. Pop. 17,000.? It was once fortified, but is now destitute of walls; its only defence being, in the words of Tournefort, "a sorry square castle, with an old tower, doubtless that of Bajazet." The town consists of miserable houses and dirty streets, intermixed with gardens. The bazaars, however, are extensive and well-furnished. There are two ports, a N. and S., which frequently harbour the imperial fleets, Gallipoli being the chief station of the capitan-pasha. It is also the see of a Greek bishop; and has manufactures of cottons, silk, earthenware, and the best Morocco leather made in Turkey. A few remains of antiquity are in good preservation, and fragments of sculpture and architecture are seen in every part of the town. When Sir J. Hobhouse visited Gallipoli in 1809, half its inhab. were Turks, and the remainder Greeks and Jews. The great number of Turkish tombs in its vicinity prove it to have been a favourite place of residence with the Turks. A little corn is grown in its neighbourhood, but not enough for 1-4th part of the pop. Gallipoli was the first European town which fell into the hands of the Turks. They took it in 1357, on which occasion the emperor John Paleologus observed, that he had only lost a jar of wine, and a sty for hogs, alluding to the magazines and cellars built by Justinian. Bajazet I., however, knowing its importance for passing from Prusa to Adrianople, had it repaired and strengthened, and its port improved. (*Tournefort; Hobhouse*, let. xliii.)

GALLOWAY, a distr. in the S. of Scotland, comprising the cos. of Wigtown and Kirkcudbright. Its dimensions were at one time much more extensive; but for a lengthened period it has been restricted as above.

GALLOWAY (MULL OF), a promontory of Scotland, co. Wigtown, comprising the S. portion of the distr. called the Rhynns. It stretches in a S. S. E. direction from Portpatrick to the Point of the Mull, about 17 m.: its breadth varies from about 2 to about 5 m. The Point of the Mull, the farthest S. limit of Scotland, in lat. 54° 38′ N., long. 4° 52′ W., rises about 255 feet above the level of the sea, and is bold, bleak, and striking. A lighthouse of the first class, with an intermittent light, having the lantern elevated 325 feet above the level of the sea, has been erected on this headland. The view from the balcony of the lighthouse is very extensive, commanding the whole Isle of Man, the coast of Cumberland and the Cumberland mountains; a great part of the coast with the mountains of Dumfriesshire and Galloway, the Paps of Jura, and the coast of Ireland, from Fairhead to the Mourne mountains.

GALLOWAY (NEW), a royal and parl. bor. of Scotland, on an acclivity, on the W. bank of the Ken, nearly in the centre of the S. of Kirkcudbright, on the road from Kirkcudbright to Ayrshire by Dalry and Dalmellington, 17 m. N. N. W. Kirkcudbright. Pop. 450. Though finely and romantically situated, it is a poor mean place, without trade or importance of any kind. Kenmure Castle, the residence of the viscounts Kenmure, within a ½ m. of the bor., stands on a conical mound at the head of Loch Ken, through which the river of the same name flows. The song "Kenmure's on an awa," refers to the viscount Kenmure who was beheaded for rebellion in 1715. In the bor. or neighbourhood were born Thomas Gordon, author of *Cato's Letters*, the *Independent Whig*, &c., and translator of Sallust and Tacitus; John Lowe, author of *Mary's Dream*; and Robert Heron, author of a *History of Scotland*, in 6 vols, and various other works.

New Galloway was erected into a royal burgh in 1633. It unites with Stranraer, Wigtown, and Whithorn in sending 1 mem. to the H. of C. Registered voters in 1849-50, 13. (*Murray's Literary Hist. of Galloway*, 2d edition, pp. 179. 219. 269.)

GALWAY, a mar. co. on the W. coast of Ireland, prov. Connaught, having S. Galway Bay and the cos. Clare and Tipperary; E. King's County and Roscommon; N. the latter and Mayo; and W. the Atlantic Ocean. Area, 1,510,592 acres, of which 476,997 are mountain and bog, and 77,922 water, principally consisting of Loughs Corrib and Mask. The coast of the co. is deeply indented in its W. and S.W. portions by numerous bays and arms of the sea, affording fine but neglected asylums for shipping, and good, but also neglected, fishing stations. Climate mild, but humid. The co. presents every variety of surface and soil: the country lying to the W. of Loughs Corrib and Mask, including the districts of Connemara, Jarconnaught, and Joyce's Country, being one of the most rugged and wildest portions of Ireland. The other portion of the co., or that lying to the E. of Galway town and of the above-mentioned lakes, is comparatively flat and fertile. After the Shannon, which bounds the co. on the S. E., the most considerable rivers are the Suck and the Black River. Agriculture is very backward. A great extension of tillage has taken place of late years; but it is doubtful whether this be any improvement, and whether it be not wholly ascribable to the improvident breaking up of old pasture land. Principal crops, oats and potatoes; but a good deal of wheat is now also raised. Estates mostly very large. Tillage farms mostly very small, and very generally let on the village or partnership system, which is destructive alike of agriculture and of the interests of the occupiers. A good deal of work is performed by the loy or spade. Excellent long-horned cattle are met with in this co., which, indeed, is much better fitted for grazing than for tillage. Average rent of land 12*s*. 1*d*. an acre. The farm-houses and cottages are, generally speaking, wretched in the extreme; and the cottiers are quite as badly off as in most other parts of Ireland. Manufactures can hardly be said to exist; and, with the exception of limestone and marbles, the minerals are of no importance. In many districts, the Irish language is in all but universal use. Galway is the only considerable town. The co. is divided into 16 baronies and 116 parishes, and returns 4 mems to the H. of C., viz. 2 for the co., and 2 for the bor. of Galway. Registered electors for the co., 1849-50, 851. In 1841, Galway (including town) had 73,325 inhab. houses, and 440,198 inhab., of whom 219,564 were males, and 220,634 females.

GALWAY, a town and sea-port of Ireland, on its W. coast, prov. Connaught: it is a co. of itself, but is locally situated in the above co., on both sides the river flowing from Lough Corrib to the sea, at its mouth, and at the N. E. extremity of Galway Bay, 113 m. W. Dublin; lat 53° 28′ 30″ N., long. 9° 13′ W. The co. of the town extends over a space of 23,000 acres, and had in 1831 a pop. of 33,120, of whom 21,467 were resident in the town, and 11,653 in the country; 32,117 being, at the same time, R. Cath., and 1,003 Protestants, including 81 Presbyterians. Pop., in 1841, 32,511. Galway, from a remote period, has been a place of considerable importance, both as a military station and a commercial mart. It underwent various vicissitudes during the civil war of 1641, when it was taken by the parliamentary army, and in that of 1688, when it surrendered to the forces of King William. The town is situated principally on the E. side of the river: that portion of it which was included within the old walls is built chiefly in the Spanish fashion, the houses being of stone, in a quadrangular form, with an open area in the centre, to which the entrances from the street are through arched gateways. In this part the streets are narrow, ill paved, and dirty. The river is crossed by 2 bridges, one built in 1342, and still in excellent condition, the other of modern construction. The walls were taken down in the beginning of last century, with the exception of the N. bastion, which has been preserved in its original state. The New Town, E. from the Old Town, built according to the modern fashion, contains a square and several wide streets. The extensive suburb of Claddagh, inhabited exclusively by fishermen, lies on the W. side of the river. The town, with the surrounding district, comprising the parish of St. Nicholas and 7 others in the vicinity, constitutes the wardenship of Galway, a separate ecclesiastical jurisdiction exempted from that of the bishop, and subject only to the archbishop's triennial visitation. According to the R. Cath. arrangements, the town is the head of the newly erected see of Galway, comprising 12 parishes. The parish church of St. Nicholas is a large and venerable cruciform structure in the pointed Gothic style, of considerable antiquity, having been founded in 1320. The R. Cath. chapel of the same parish, which is also the bishop's cathedral, is a spacious modern edifice. The Franciscans, Dominicans, and Augustines, have monasteries here, to each of which a chapel is attached, as is one to the nunnery of the order of the Presentation. The Presbyterians have also a meeting-house. The educational establishments comprise one of the new Queen's Colleges opened in 1849 (*See* BELFAST); a classical school, on the endowment of Erasmus Smith; a large parochial school for boys and another for girls, under the care of the nuns of the Presentation, and several private schools. The Amicable and Commercial Societies, each of which has a reading-room for newspapers and other periodical publications, are the only literary institutions: 2 newspapers are published in the town. The charitable establishments are the house of industry, with a dispensary, the Protestant poor-house, the widows' and orphans' asylum, and the Magdalen asylum.

The town is governed by the high-sheriff, recorder, local magistrates, and a board of 21 commissioners, elected trienially. Town revenue above 2,000*l*. a year. A court of record for pleas to any amount is held on Mondays and Fridays. The assizes, both for the co. and the town, are held here, as are the general sessions of the peace for the co., in April and October, and those for the town 4 times a year. The bor. sent 2 mems. to the Irish H. of C., and 1 to the Imperial H. of C., down to the passing of the Reform Bill, which conferred on it the privilege of sending 2 mems. The parl. bor. includes the entire co. of the town, and had, in 1849-50, 1,147 registered electors. The court-houses for the co. and for the town are elegant buildings of modern construction. The co. prison, a handsome building in the form of a crescent, has only 83 sleeping cells for an average number of 160 prisoners: that of the town, which has been lately much improved, has 33 cells for an average of 35. The workhouse, opened in 1842, has accommodation for 1,210 inmates.

Galway is not a manufacturing town. The linen manufacture was attempted, but failed. Its trade at present consists almost exclusively in the export of agricultural produce, fish, kelp, and marble, beautiful slabs of large size being sent to England and the U. States. It is sawn and polished in mills in the town. It has several flour-mills, 2 foundries, 2 breweries, a paper mill, and 2 distilleries. The salmon fishery is valuable; the fishery of cod, hake, haddock, &c. is less valuable than it might be, in consequence of the poverty of those engaged in it, and their pertinacious adherence to rules devised by themselves for the exclusion of strangers from the business. The progress of Galway has been checked by the insufficiency of its harbour, which dries at low water, so that vessels of any considerable burden were obliged to anchor between the town and Mutton Island, where they are exposed to the S. W. gales. To obviate these defects, an extensive dock has been constructed at Galway which admits vessels drawing 14 ft. water, and will, when the access to it is improved, be of the greatest advantage to the trade of the town and of the surrounding district. A lighthouse has been erected on Mutton Island; and it would be easy, by running out a breakwater of 2 cables' length from the S. end of this island, to make an excellent roadstead. We subjoin an account of

the quantity and value of the exports from Galway in 1835:—

Articles.		Quantity.	Value.
Kelp	ton	903	£ 903
Corn, meal, and flour	cwt.	1,195,978	217,319
Bacon and hams	do.	21,000	30,000
Flax and tow	do.	60	150
Hides and calf-skins untanned	No.	1,300	1,080
Other articles	Value	- -	2,412
			£251,861

A canal is now (1850) being constructed from Galway to Lough Corrib. The gross customs' duty collected at Galway in 1848 amounted to 35,075*l.* Post-office revenue, in 1842, 920*l.*, do. in 1848, 1,039*l.* Branches of the Bank of Ireland, and of the Prov. and Nat. Banks have been established at Galway. Markets are held on Wednesday for corn, and on Saturday for corn, provisions, and live cattle, chiefly pigs. Fairs on May 31. and Sept. 21.

Until of late years, Galway had but little connection, owing to the want of roads, with the extensive country W. from it. This defect is now, however, in a great measure obviated by the carrying of roads into Connemara, Joyce's Country, and other wild districts, affording an easy transit for their produce to Galway.

The inhabs. of the Claddagh suburb constitute a separate community; their number is from 5,000 to 6,000, and they are so exclusively fishermen that their cottages have scarcely even a potato garden attached to them. The community is governed by a mayor, elected by themselves, whose authority is so highly respected that appeals from his decisions to the constituted authorities are almost unknown. Their dress is comfortable and substantial, but of a peculiar make. When at home, the men are wholly unemployed. They leave the entire superintendence of their pecuniary affairs to the women, who receive the cargoes of fish on the arrival of the boats, dispose of the produce, and supply the male part of their families with clothing, food, and spirits. The men indulge in whisky; but riots or tumults originating in excess are notwithstanding infrequent, and when they go to sea, which they do in a body, commanded by a leader to regulate their movements, they strictly prohibit any whisky being brought aboard their boats. Their strong religious feeling is evinced by the erection of a large chapel out of their earnings, and by the liberality of their contributions to the support of its officiating clergymen; as also from the custom, undeviatingly adhered to, of having a prayer offered up by a clergyman, according to a specified form, previously to the sailing of their fleet of fishing craft. In 1836 there belonged to the village 105 open sail boats, and 80 row boats navigated by 820 hands. Still, however, as already stated, their exclusion of strangers from all participation in the fishery, their poverty, and their adherence to routine practices, oppose all but invincible obstacles to the extension of what might otherwise be an advantageous source of employment. (*Railway Report, &c.; Thom's Almanac;* and *Private Information.*)

GANDIA, a town of Spain, Valencia, distr. Denia, in a plain 34 m. S.S.E. Valencia. Pop. 6,049. (*Miñano,* 1826.) It is an agreeable town, and is noted for the industry of its inhabitants. It has a large and fine collegiate church, convent, college, cavalry barracks, and a palace of the duke of Gandia. It is in the centre of one of the best cultivated districts of Spain.

GANGES, the principal river, or, as it has been expressively termed, the Nile, of Hindostan, through the N. and E. parts of which it flows, watering its most fertile region, and extending through 13 degrees of long. and nearly 10 degrees of lat. from the central chain of the Himalaya to the Bay of Bengal. Its course is almost wholly comprised within the British presidencies of Bengal and Agra. It rises by two principal heads, the Bhagirathi and Alcananda, about lat. 31° N., and between long. 79° and 80° E. The Bhagirathi, or W. branch, though neither the longest nor largest, is considered by the Hindoos as the "true Ganges." It issues about 12 m. above Gangoutri, and 200 m. N.N.W. Delhi, from under a low arch called the "Cow's Mouth," at the base of a mass of frozen snow, about 13,800 ft. above the level of the sea; with a mean breadth of 27 ft., and a medium depth of 12 inches. It forms a junction with the Alcananda at Deoprang, about 9 m. S.W. Serinagur; lat. 30° 9′ N., long. 78° 33′ E. The resulting stream, with a width of about 80 yards, assumes the name of the Ganges; and at Hurdwar enters the great plain of Hindostan at an elevation of only 1,024 ft. above the sea. It flows thence, with a smooth navigable stream, to the ocean, a distance of about 1,350 m., diffusing abundance on all sides by its waters, its products, and the facilities it affords for internal transit. As far as Hurdwar its course is mostly S. or S.W.; thence to its confluence with the Jumna, in lat. 25° 25′, long. 81° 10′, it runs generally S.E.; from Allahabad to Rajemahal its course is mostly E.; and it then turns S.E., and lastly S., till it enters the Bay of Bengal, by numerous mouths, between lat. 23° and 21° 30′ N., and long. 88° and 90° 40′ E. Its entire course may be about 1,500 m. The chief tributaries of the Ganges are the Jumna, Ramgunga, Goompty, Goggra, Sone, Gunduck, Cosi, Mahanunda, Teesta, &c. They vary in length from 300 to 600 m.; and, except the Sone, flow towards the Ganges from the N.

About 200 m. from the sea, the Delta of the Ganges (which is twice as large as that of the Nile), begins to be formed. Of its two principal arms, which form the outermost of the whole series, the E. is the larger, and preserves the original direction of the main stream, together with the name of the Ganges; but the W. arm, or Cossimbazar branch, called afterwards the Hooghly, is considered by the natives the true Bhagirathi, and invested by them with the greatest portion of sanctity. The whole of the delta between the two principal arms is a vast alluvial flat, nearly 200 m. in breadth, intersected by numerous rivers interlacing each other in all directions, and which enter the sea by from 12 to 20 mouths. The region round the mouths of the Ganges, termed the Sunderbunds, is a pestiferous tract, covered with jungle, and swarming with tigers and other beasts of prey.

Between Hurdwar and Allahabad the course of the Ganges is tolerably straight, the breadth of its bed generally being from 1 to 1¼ m. Thenceforward it winds more; and having received the Goggra, Sone, and Gunduck, attains its greatest magnitude. For the last 600 m. of its course its bed varies from ½ m. to 3 m. in width, and at the lowest season the mean breadth of its channel is about 3-4ths of a m. Above its confluence with the Jumna it is sometimes fordable; below that confluence it is generally of considerable depth, for the additional streams bring a greater accession of depth than width. At 500 m. from the sea the Ganges is 30 ft. deep, and it continues of that depth, at the least, till it approaches very near its mouth. The rate of descent from Hurdwar to the sea averages about 9 inches a m., but nearly 2-3ds of the entire fall takes place before reaching Cawnpore. The mean rate of the current in the dry months is less than 3 m. an hour, but in the wet season it is often from 5 to 6 m., and in particular situations from 7 to 8 m. The banks of the Ganges are commonly precipitous on the side on which the current impinges, and shelving on the other side. The force of the stream, when the river is at its height, sometimes breaks down the banks, which are composed of a loose and yielding soil, with such rapidity that an acre of land has been seen to disappear in less than half an hour! From the great quantity of mud brought down by the river in the latter season, and other causes, its mouths are encumbered with bars and shoals. The Hooghly is less so than the E. arm, but no ship drawing more than 15 ft. water can navigate the latter with safety; and the E. I. C.'s ships, that were usually from 1,000 to 1,200 tons burden, and drew above 22 ft. water, loaded and unloaded at Saugor Island. (*Crawfurd's Miss. to Siam, &c.* i. 3.) The Cossimbazar branch, also, is almost dry from Oct. to May; and the Chundna, which enters the sea by the Hooringottah mouth, is the only branch that is at all times navigable.

The annual inundation of the Ganges is owing chiefly to the tropical rains. These prevail successively throughout all the countries through which the Ganges flows; and in this respect its inundation differs from that of the Nile, whose waters are augmented by rains falling along the upper part of its course only. The Ganges, and other rivers in Bengal, begin to rise in consequence of the rains in the mountains at the end of April, their rate of increase for the first fortnight being about an inch a day; this gradually augments to 2 or 3 inches a day, and the total rise amounts, by the end of June, to between 15 and 16 ft., or half the entire height it attains, before any quantity of rain falls in Bengal. But from the latter period, when the rains there become general, the medium increase of the water is about 5 inches a day; and by the end of July all the lower parts of Bengal, contiguous to the Ganges and Brahmaputra, are under water. The progress of the inundation, in consequence of the flatness of the country, is very slow, being no more than half a mile an hour. Owing to this and other physical causes, the difference in the height of the waters adjacent to, and at a distance from, the sea, is very considerable, but increases in proportion to the distance. In the lower part of the Sunderbunds, the influence of the inundation is at ordinary times little or not at all felt; at Luchipoor, about 10 m. inland, it is when highest about 6 ft. in elevation; at Dacca 14 ft.; at Custee 31 ft., and at Jellingley, near the apex of the delta, 32 ft. The total increase at the latter place may, however, in medium years, be set down at 31 ft. The rise of the inundation continues till nearly the middle of Aug. For a few days preceding the 15th of that month, its height is nearly stationary; but it then begins to decrease, notwithstanding that great quantities of rain continue to fall for the next six or seven weeks. During the latter

half of Aug., and the whole of Sept., the decrease is from 3 to 4 inches a day; from Sept. till the end of Nov. it gradually lessens from 3 in. to 1½ in. The decrease of the inundation, however, does not uniformly keep pace with that of the river, by reason of the height of the banks; but after the beginning of Oct., when the rains have nearly ceased, the remainder of it goes off quickly by evaporation, leaving the lands highly manured. The Ganges decreases at the average rate of half an inch a day, from the end of November to the latter end of April, when it is lowest in Bengal, though the rains in the mountains have already begun to augment it in the upper part of its course. Major Rennell estimated the quantity of water discharged by the Ganges per second in the dry season at 80,000 cubic ft., and in the rainy season at 405,000 cubic ft.; being for the average of the year 180,000 cubic ft. per second. But, according to some observations made at Ghazipore, above Calcutta, by Mr. Everest, in 1831, it would appear that in the 4 months of the flood season (June to Sept.) about 500,000 cubic ft. per second are discharged; while the average for the remainder of the year is only 100,000 cubic ft. per second. The quantity of earth brought down by the river is very great. According to Mr. Everest, the solid matter suspended in the water during the rains weighs about 1-428th part of the water, and occupies about 1-856th part of its bulk; giving a discharge of about 577 cubic ft. of mud per second, or 6,082,041,600 cubic ft. for the discharge in the 122 days of rain. The total annual discharge of mud is estimated at 6,368,077,440 cubic ft.; the weight of which, according to Mr. Lyell, would exceed 60 times that of the great pyramid of Egypt! (*Journal of the Asiatic Society*, No. 6. p. 238.; *Lyell's Geology*, i. 361—364.)

A very striking effect of the inundation of the Ganges is the change produced by it, year after year, in the bed of the stream. This happens in numerous parts of its course through the lower portion of the great plain of Hindostan; but particularly in Bengal, where the soil is the most loose and yielding. The different branches of the river constantly shifting their places, a number of extensive *jheels*, or marshes, are continually being produced; and the geographical face of the country, the condition and extent of private properties, &c., change in the same proportion. In consequence, also, of the looseness of the soil through which it flows, the river is alternately forming and destroying islands in its bed, some of which are 4 or 5 m. in extent, yet formed or removed in the space of a few years. Certain tracts are preserved from the inundation by being surrounded by dykes, the collective length of which was estimated in Rennell's time at upwards of 1,000 m. The policy of their erection has been considered very doubtful, for the land has to be irrigated at certain periods, when the dykes must be cut; besides which, they do not always answer their purpose, owing to the want of tenacity in their materials; and they are maintained at a great expense. The country has, however, been brought by them into so artificial a state, that there is now no alternative but to persist in keeping them up.

The Ganges, like the Brahmaputra, the Amazon, several European rivers, the Gulph of Cambay, on the opposite side of Hindostan, &c., is subject to the phenomenon of the *bore*, or a rapid rush of the tide in a perpendicular face, up the river to a considerable distance. It is especially strong at spring tides. This occurs in all the mouths of the Ganges, and particularly in the Hooghly, through which branch it ascends as far as Culna, or even Nuddea, 200 m. from the sea. The column of water is sometimes a dozen feet in height near the mouth of the river, and often 5 ft. high opposite Calcutta. Its appearance is that of a monstrous billow in a storm, or the dash of a foaming surf: its sound resembles that of a steamboat, but is infinitely louder. Sometimes it takes one side of the river, sometimes the other: it never extends over the whole basin. "The time of its approach being well known, hundreds of boats may then be seen rowing, as for life, towards the middle of the river, the crews urging on each other with wild shouts or shrieks, though at the moment no danger appears; but soon afterwards the spectator is made sensible how necessary was the precaution, as the *bore* foams by with tremendous noise and velocity." (*Heber*, in *Mod. Trav.* ix. 108.)

But, in the words of Mr. Crawfurd, — "With all the difficulties and dangers of the Ganges, the English, if their Indian conquests be of any advantage to them, owe almost as much gratitude to the Ganges as the Hindoos themselves, for unquestionably to it they are indebted for their Indian empire. It is the great military highway which enabled us to conquer the richest provinces of Hindostan, — the acquisition of which enabled us eventually to conquer and maintain the rest of our possessions." (*Embassy to Siam, &c.* i. 7.) Its value to the natives of Hindostan is immense. It is, and always has been, the grand route of communication and traffic in that country, throughout which the roads adapted for the conveyance of goods are very few. Not only the main stream, but all its tributaries from the N. are navigable for large or small boats, to the very foot of the mountains, for more than half the year; thus forming a most extensive system of inland navigation. Sixty years ago, Major Rennell estimated the number of boatmen employed on the Ganges, in Bengal, &c., at 30,000, and the value of the commercial exports and imports conveyed by its means at 2,000,000*l.* a year. But ten times the above number of boatmen would apparently be nearer the mark in such a region of rivers, where almost every cultivator and fisherman is also occasionally a navigator. And at present the gross amount of the imports and exports embarked on its waters varies between 10,000,000*l.* and 12,000,000*l.* annually (*see* CALCUTTA), independent of the inland trade, which has, doubtless, not a little increased with the increase of the pop., and the greater degree of security afforded to commerce under the English rule.

Perhaps no river in the world has on its banks so many populous cities. On different branches of the delta are placed Calcutta, Moorshedabad, and Dacca, the three great cities of Bengal, with a united pop. of little short of a million; besides Chinsura, Chandernagore, Hooghly, Cutwa, Boorhampoor, Cossimbazar, Kishenagur, Jassore, &c. Proceeding up its course, we find on its banks Rajemahal, Monghir, Patna, Ghazipoor, Benares, Allahabad, Cawnpore, Furruckabad, &c.; with myriads of villages, temples, and bungalows.

There are no bridges over this river after it has emerged from the mountainous region; and the natives who attempt to cross it where boats are not used, do so by means of empty water-jars. The native craft used in the Ganges vary greatly in different parts of its course. The flat clinker-built vessels of the W. districts give way about Patna to lofty, deep, and heavy boats, which navigate the river thence to Calcutta. In the Sunderbunds, again, the shallowness of the streams requires that the vessels should be without keels; and the banks there being impracticable for the tracking-rope, rowing is the chief method of propulsion. The boats on the main arm of the Ganges, and others in the E. part of the delta, are better than those on the Hooghly, though all are of a very rude and cheap kind.

The Ganges, from Gangoutri to Sangor Island, is considered holy by Hindoos of all castes, though in some places much more so than in others. Hindoo witnesses in British courts of justice are sworn upon the water of the Ganges, as the Christians and Mussulmans are upon their sacred books. The Ganges water is believed by the Hindoos to purify from all sins; many ablutions and suicides accordingly take place in it; and the feet of the dying, when they are sufficiently near residents, are in most instances immersed in it. (*Rennell's Memoir on a Map of Hindostan*, pp. 335—355.; *Hamilton's Hindostan and E. I. Gaz.*; *Ritter's Erdkunde von Asien*, iv. part 2. pp. 1100—1248.; *Asiat. Researches; Colebroke; Heber; Prinsep, &c., passim.*)

GANJAM, a distr. of British Hindostan. *See* CIRCARS, NORTHERN.

GANJAM, a town of Hindostan, cap. of the above distr., near the coast of the Bay of Bengal, 84 m. S.E. Cuttack, and 535 m. N.E. Madras. It formerly had a considerable pop., as well as numerous and excellent private houses belonging to British civil officers, a fort, cantonments, &c.; but it has now, in great part, been deserted and fallen into decay. (*Hamilton's E. I. Gaz.*)

GANNAT, a town of France, dép. Allier, cap. arrond., on the Andelot, 33 m. S. Moulins. Pop. (1836) 5,109. It is ill built. It was formerly fortified, and the remains of its ancient castle still serve as a prison. It has an hospital, and a tribunal of primary jurisdiction.

GAP (an. *Vapincum*), a town of France, dép. Hautes Alpes, of which it is the cap., in a wide valley, nearly 2,500 ft. above the sea, surrounded by inferior Alpine ranges, and on the road from Paris to Marseilles by way of Grenoble, 44 m. S.E. Grenoble; lat. 44° 33′ 37″ N., long. 5° 5′ 2″ E. Pop. (1836) 5,561. It is a very ill-built and generally disagreeable town. Its principal public edifices are, the cathedral, prefecture, town-hall, bishop's palace, hall of justice, and barracks, some of which are good buildings. The cathedral is in the Gothic style, and richly ornamented; it contains the tomb and effigy of the celebrated constable de Lesdiguières. The tomb is a sarcophagus of black marble, surrounded with bas-reliefs in alabaster, representing the principal actions of that warrior. It has several other churches, a communal college, a society of emulation, a museum of natural history, collections of paintings, sculpture, antiquities, and physical objects, and a small theatre. The town is supplied with water by two small rivulets; but these often fail, and in 1832 a public cistern, capable of holding 20,000 hectolitres of water, was constructed for the general use of the inhab.

Gap is the seat of tribunals of primary jurisdiction and commerce; it has manufactures of woollen cloth, linen fabrics, silks, chamois and other kinds of leather, and cotton yarn. Its immediate vicinity is very fertile: there are in it many marble quarries known to the ancient

Romans, and many mineral springs. This town is of very great antiquity; it was the cap. of the *Tricorii*, under the name of Vap. It became the seat of a bishopric in the 4th century, and belonged for a lengthened period to its own prince or count bishops. It suffered greatly in the middle ages, from the devastations of the Lombards and Saracens, and from repeated sieges, fires, the plague, religious wars, &c., but, more than all, from the revocation of the edict of Nantes. Previously to 1630, Gap is said to have had 16,000 inhab. (*Hugo*, art. *Hautes Alpes*; *Guide du Voyageur*, &c.)

GARD, a dep. of France, in the S. part of the kingdom, formerly comprised in the prov. of Languedoc; between lat. 43° 27′ and 44° 27′ N., and long. 3° 17′ and 4° 50′ E.; having N. the deps. Lozère and Ardèche; E. the Rhone, separating it from Vaucluse and Bouches-du-Rhone; W. Aveyron; and S. Hérault, the Mediterranean, and the Isle de Camargue. Area, 592,108 hect. Pop. (1836) 366,259, about 140,000 of whom are Protestants. The N. and W. parts are occupied by ramifications of the Cevennes, the general slope of the dep. being from N.W. to S.E., in which latter part of its surface there is a considerable extent of level country, with numerous and extensive pools and marshes. Most of the rivers have a S.E. direction; the principal are the Gard or Gardon (whence the dep. derives its name), the Cèze, and the Vidourle. The Gard, which rises in the Cevennes from several sources, runs through the centre of the dep., and falls into the Rhone not far from Beaucaire, after a course of about 60 m. It at first passes through a succession of deep mountain gorges; and when the snows in the Cevennes begin to melt, it subjects the lower parts of the country through which it passes to extensive and often very destructive inundations. Its bed sometimes increases in width to nearly a mile; and its waters not unfrequently rise from 18 to 20 ft. in a few hours. The Hérault has its source in this dep. Climate variable, but for the most part hot and dry. The N. wind, or *bise*, blows sometimes with great impetuosity, and the *scirocco* is by no means rare. The arable lands comprise about 157,500 hectares; vineyards about 71,000 do.; forests 106,472 do.; and heaths about 158,000 do. Though the arable land is in general pretty fertile, the produce of corn, owing to the extremely backward state of agriculture, is estimated at only 650,000 hectolitres, being about half the quantity required for home consumption. It is principally wheat, oats, and barley. A good many potatoes are also grown, and in the mountain region chestnuts go far to supply the place of corn; the Cevennes being covered with chestnut woods. The plough described by Virgil, drawn by 2 mules, is in common use. The annual produce of wine is estimated at 1,120,000 hectolitres, a third part of which is consumed in the dep.; the wines of St. Gilles and Favel are those most esteemed. The date, jujube, pistachio, pomegranate, &c., flourish in the open air; oranges and lemons are grown, but a good deal of care is required in their culture. Olive trees are grown on low hills with a S. aspect; but they suffer severely from cold winters, and their number has decreased of late. Gard is the principal dep. in France for the culture of the mulberry; in 1834, there were estimated to be nearly 5,710,000 trees, being more than double the number in 1820. The quantity of cocoons collected in 1835, amounted to 2,696,230 kilog. In 1830 about 500,000 sheep belonged to this dep., yielding about 900,000 kilog. of wool. Many of the flocks are sent to feed on the Alps in the summer. In 1835, of 114,393 properties subject to the *contribution foncière*, 51,353 were assessed at less than 5 fr., and 19,564 between 5 and 10 fr.: the number of considerable properties is greatly below the average of the kingd. Gard is rich in minerals; and mining, though ill-conducted, constitutes one of the chief sources of its wealth. Iron, argentiferous lead, antimony, zinc, manganese, &c., are found in the mountains; and gold is met with in the sands of some of the rivers. Iron is particularly abundant; the forges of the arrond. of Alais alone employ from 1,000 to 1,200 hands. In 1835, 13 coal mines were wrought, employing about 500 hands, and yielding about 460,000 metrical quintals. Great quantities of salt are obtained from the salt marshes on the coast, which altogether occupy a surface of 86 hectares. In the salt pans of Peccais, during June and July, as many as 2,000 hands are employed to wash the produce. About 1,200 workmen are employed in the gypsum, mill-stone, and other quarries. The total value of the mineral products was estimated, in 1835, at 3,593,000 fr. Gard may be placed near the head of the deps. in the S. of France for manufacturing industry: it is especially distinguished for its manufactures of silk. The principal seat of these is Nimes, where they employ about 13,000 hands. The *Encycl. des Gens du Monde* estimates the value of the silk fabrics annually produced in the dep. at 12 million fr. The other manufactures are those of cotton and woollen fabrics, hats, paper, pasteboard, brandy, leather, glass, earthenware, &c.; there are besides many tawing and dyeing establishments. In the neighbourhood of the coast canals are numerous, and include those of Beaucaire, Sylveréal, Grand Roubine, &c. There is, however, but one seaport, Aigues Mortes, and this is 4 m. from the Mediterranean, with which it communicates by the last-named canal. 102 fairs are annually holden in the dep.; among them is the celebrated one of Beaucaire (which see). Gard is divided into four arrond.: chief towns, Nimes, the cap., Alais, Uzes, and Le Vigan. It sends 5 mems. to the ch. of dep. No. of electors (1838-39), 2,720. Total public rev. (1831), 11,891,796 fr.; expenditure, 6,376,356 fr. The antiquities in this dep. belong principally to the Roman period. The principal is the amphitheatre (*see* NIMES), and the *Pont de Gard*. The latter is an aqueduct, and one of the most splendid relics of the Roman power, built over the Gardon, about 10 m. N.E. Nimes. Inglis thus describes it (*Switzerland, &c.*, ch. xxii.): "The aqueduct is formed upon three bridges, one above another; the total height, from the level of the river to the top of the aqueduct, being 156 ft. The undermost of the bridges consists of 6 arches, through the largest of which the river passes. The middle bridge has 11 arches; and the uppermost has 35 arches (but these are much smaller than those of both the other tiers). Above this is the aqueduct, which is 4½ ft. high and 4 ft. wide. The arches both of the lower and middle bridge are unequal; which, if it does not increase the architectural beauty of the structure, certainly adds to its picturesque effect. The two lower stories of the bridge are formed of hewn stones, placed together without the aid of any cement; but the masonwork underneath the aqueduct is of rough stones cemented, by which all filtration was of course prevented." After the decline of the Roman power, the Vandals, Visigoths, Saracens, and Franks successively possessed this dep. (*Hugo*, art. *Gard.*; *Official Tables*; *Dict. Geog.*, &c.)

GARDA (LAKE OF), an. *Lacus Benacus*, a famous lake of Austrian Italy, bounded by the provs. of Mantua, Brescia, and Verona, and the circ. of Roveredo in the Tyrol. From Peschiera, at its S.E. extremity (15 m. W. Verona), it stretches N.N.E. to Riva, a distance of about 35 m. Its lower or S. portion is about 12 m. across where broadest; but its upper or N. portion is not more than from 3 to 4 m. across. It is every where enclosed by ramifications of the Alps, except on the S., where the luxuriant plain presents a striking contrast to the magnificent mountain scenery that closes round its upper waters.

On the S. shore of the lake, between Peschiera and Rivoltella, the narrow peninsula of Sirmione projects about 4 m. into the lake. It is joined to the mainland by a low slender neck, but behind this it rises into a hill covered with olives, at the extremity of which are some ruins, said to be those of the villa of Catullus. But whether this be so or not, it is, at all events, certain that the poet had a country-house in this singularly beautiful situation; and he has expressed his admiration of and attachment to it in some fine verses: —

> Peninsularum Sirmio, insularumque
> Ocelle, quascunque in liquentibus stagnis
> Marique vasto fert uterque Neptunus:
> Quam te libenter, quamque lætus inviso! — *Catull.* 32.

"The soil of this peninsula," says Eustace, "is fertile, and its surface varied; sometimes shelving in a gentle declivity, at other times breaking in craggy magnificence: and thus furnishing every requisite for delightful walks and luxurious baths; while the views vary at every step, presenting rich coasts or barren mountains, sometimes confined to the cultivated scenes of the neighbouring shore, and at other times bewildered and lost in the windings of the lake and the recesses of the Alps." (i. 203. 8vo. ed.)

The surface of this lake is elevated about 320 ft. above the Mediterranean; it is generally deep; its waters are remarkably pure and limpid; and it is well stocked with fish. In the beginning of summer the level of its surface is raised 4 or 5 ft. by the melting of the snow on the Alps. It receives the waters of the Sarco at its N. extremity near Riva; but none of its other feeders are of such importance as to merit any special notice. Its surplus waters are carried off by the Mincio, which issues from it at Peschiera. A great number of towns and villages are built upon its banks, of which the principal, besides Peschiera, are Desenzano, Salo, Gargnano, Riva, Garda, whence the lake has its modern name, &c. The greater number of these towns have safe and commodious harbours, and a good deal of trade is carried on upon the lake. Like all Alpine lakes, it is subject to violent storms and gusts of wind, a peculiarity to which Virgil has alluded —

> Fluctibus et fremitu assurgens, Benace, marino. — *Georg.* ii. line 160.

GARLIESTOWN, a village and sea-port of Scotland, co. Wigtown, at the head of a small bay, W. coast of Wigtown Bay. Pop. 560. The main street is in the form of a semicircle, facing the sea. The harbour, which is tolerably safe and commodious, is the centre of a good

deal of coasting trade; and it is the only port in Wigtownshire at which the steamer that plies between Galloway and Liverpool touches. Galloway House, the seat of the noble family of Galloway, is in the immediate vicinity of the village. Patrick Hannay, a poet of the 17th century, whose works are now so rare that a copy recently brought, at a public sale, 42*l.* 10*s.* 6*d.*, was born at Sorbie Place (of which his father was proprietor), near Garlieston. (*Murray's Lit. Hist. of Galloway*, 2d dit. p. 268.)

GARMOUTH, a sea-port of Scotland, co. Elgin, at the mouth of the Spey, 35 m. N.W. Aberdeen, and 6¼ m. N.E. Elgin. Pop. 675. The harbour was injured by Morayshire floods in 1829, by the deposition of gravel in the bay; but it is still the principal shipping place in the co. The chief exports are timber, grain, and salmon. The value of timber (which is floated down the Spey from forests in the interior) exported here, was, at one time, estimated at 40,000*l.* a year; but it now seldom exceeds 1,100*l.* About 20,000 qrs. of grain, chiefly oats and wheat, are annually exported. The Spey Fishing Company's salmon smacks do not come into the harbour, but load in the bay. From 8 to 12 such smacks are employed in conveying salmon, chiefly to the London market. In 1834, 73 cargoes were shipped; each cargo contained, at an average, 280 boxes, or 280 cwt. of fish, worth 5*l.* per cwt., or, in the aggregate, 102,200*l.* But this produce is above the general average. (*New Stat. Acc. of Scotland*, § *Speymouth*.)

GARONNE, a river of France, which see. *See* also GIRONDE, DEP.

GARONNE (HAUTE), a dep. of France, region S., formerly comprised in the prov. of Languedoc, between lat. 42° 40′ and 43° 55′ N., and long. 0° 27′ and 2° 3′ W., having N. the dép. Tarn-et-Garonne, E. those of Tarn and Aude, S.E. Ariège, W. Gers and Hautes Pyrénées, and S. the Pyrenees. Area, 618,558 hectares. Pop. (1836) 454,727. Its S.W. portion is covered with lofty mountains, the highest of which, M. Malaletta, is 11,190 ft. above the level of the sea; and among which there are numerous glaciers. In the N.E., there are some plains of considerable extent. The Garonne rises a little beyond the Spanish border; but most of the upper part of its course is in this dep., which hence derives its name. The other chief rivers are the Tarn, Ariège, and Salat, all of which have a N. course, and are tributary to the Garonne. Climate generally temperate; but none of the Pyrenean deps. suffers so much from hail-storms. These, according to Hugo, have, within a period of 20 years, destroyed 3,000,000 quintals of standing corn. This is an essentially agricultural dep., and is reckoned one of the most productive of grain. The arable land amounts to about 352,000 hectares; and the produce of corn is, in general, nearly double what is required for home consumption. In 1838, the crops of all sorts were estimated at 2,119,358 hectolitres, of which wheat made about a half; the rest consisting principally of maize, millet, and oats. Vineyards occupy 48,908 hectares, and about 470,000 hectol. of wine are made annually; the best kinds are those of Fronton, Villandric, Montesquieu, &c. Garden cultivation is well attended to. Near Toulouse, Mr. Inglis says, "corn-fields, vineyards, gardens, and country-houses, occupy every inch of land; and the appearance of the country people bespeaks a healthy and happy condition." Orange trees are grown for the sake of their flowers; the culture of the mulberry tree is very little pursued. The mountains and valleys afford good pasturage; but there are few artificial meadows; and the number of cattle is smaller than in the contiguous deps. Near Toulouse, a fine breed of horses was formerly raised for the dragoon service, but it has been suffered to degenerate. Poultry are plentiful: the *pâtés de Toulouse*, made of ducks' livers, enjoy a high reputation. In 1835, of 132,236 properties subject to the *contribution foncière*, 59,493 were assessed at less than 5 fr., and 22,291 at from 5 to 10 fr. The number of considerable estates is, however, above the average of the deps. Mines numerous, especially those of iron; but there are others of copper, antimony, bismuth, zinc, lead, &c.; and some important marble quarries. The value of the mineral products, in 1835, was officially estimated at 1,539,345 fr. Mineral springs are abundant: many of them are visited by invalids; among which may be specified those of Bagnères de Luchon. Manufactures various, but not extensive or flourishing; the chief are of tools and other metallic articles, coarse woollens, cotton and linen fabrics, leather, sail-cloth, hats, watches, mathematical instruments, &c. The trade is greatly augmented by the Canal du Midi, which commences in this dep. Toulouse is also the entrepôt for supplying the N. of Spain with the products of central and N. Europe. The dep. is divided into 4 arronds.; it sends 6 mems. to the ch. of dep. Number of electors (1838-39), 3,185; chief towns, Toulouse, the capital, Muret, St. Gaudens, and Villefranche. Total public revenue (1831), 13,178,204 francs. (*Hugo*, art. *Haute Garonne*; *Encyc. des Gens du Monde*.)

GASCONY, the name of one of the old provs. of France, which comprised previously to the revolution the country now included in the deps. of the *Hautes Pyrénées*, *Gers*, and *Landes*, and portions of the country now included in the deps. of *Basses Pyrénées*, *Haute Garonne*, and *Lot et Garonne*.

GATEHOUSE, a bor. of regality, river-port, and market-town of Scotland, stewartry of Kirkcudbright, on the Fleet, a little above where it falls into Fleet Bay, and on the high road from Dumfries to Portpatrick, 28 m. S.W. Dumfries, and 6¼ m. W. by N. Kirkcudbright. Pop. 2,000. It is beautifully situated, in a romantic valley opening on the S. to the sea, and bounded on both sides by finely wooded, picturesque hills. The town, which is principally situated in the par. of Girthon, on the E. side of the Fleet, that is here crossed by a bridge, consists principally of three parallel streets, and is remarkably neat, clean, and well built. The par. church, erected in 1817, adjoins the town on the N.; and it has also a secession meeting-house, and a place of worship for Independents. There are 4 schools in the parish, one of which is parochial. The Fleet is navigable to Gatehouse by vessels of 180 tons burden; and within these few years it has been deepened, straightened, and its navigation greatly facilitated through the exertions, and at the expense, of the late Mr. Murray. Gatehouse had formerly 3 cotton mills; but of these only 2 are now at work. It has also a brewery, 2 tan-works, and a branch of the Com. Bank of Scotland. It was created a bor. of barony in 1795; and is governed by a provost, 2 bailies, and 4 counsellors. A bor. court for the recovery of debts not exceeding 5*l.* is held once a fortnight. Market-day, Saturday, and a rural fair times a year.

Gatehouse is mainly indebted for its existence and prosperity to the public spirit, liberality, and intelligence of its late proprietors, the Murrays of Broughton, on whose estate it is built. Cally house, the magnificent seat of the Murray family, lies about 1 m. S. from the town. It is wholly of granite, finely polished; it was constructed after a design by Adams, but was modernised and much improved by its late proprietor. It is beautifully situated; and whether we regard the variety and extent of the grounds, or the classical appearance and magnificence of the house, it is certainly surpassed by very few residences in any part of the United Kingdom. It had a good collection of pictures, and some pieces of sculpture, inc. a noble head of Napoleon, by Thorwaldsen. These, however, were sold by auction and dispersed at the death, in 1845, of Mr. Alexander Murray, — a gentleman distinguished for his taste, his liberality, and the integrity and simplicity of his character.

GATESHEAD, a parl. bor., town, and par. of England, E. div. of Chesterward, co. Durham, on S. bank of river Tyne, which divides it from Newcastle, of which it is substantially a suburb, and with which it is connected by a bridge across the river. Area of par. and old bor. (a small part of Heworth chapelry is included in the new bor.), 3,320 acres. Pop. of do. in 1821, 11,767; 1841, 19,505. "It consists of only one good and wide street, and which is the high road to the N. The several narrow streets and lanes which compose the remainder of the town branch off on each side of the principal street, and the pop. on the different sides is not very unequal. There is not any appearance of wealth or houses belonging to the richer classes; the town is densely populated with the families of the manufacturers and pitmen; the master manufacturers or proprietors of the coal pits reside in Newcastle or in the neighbourhood of the two Fells, where they can enjoy a better atmosphere than in the town." (*Municipal Bound. Rep.*) The best street runs in a curve by the church to the river, saving the steep descent of the High Street. The par. church is a spacious cruciform structure, regularly built, having a handsome and lofty tower; the interior was wholly repaired at great expense, in 1838. The rectory, which was until lately close to the church, is situated in the suburbs. In Gateshead-fell, which was made a separate par. in 1809, is a well-built church, opened in 1825. The patronage of both is vested in the Bishop of Durham. St. Edmund's chapel, which stands S. of the town, was rebuilt in 1810; the chaplain is appointed by the rector of Gateshead. There are several places of worship for various denominations of Dissenters, of whom the Wesleyan Methodists are the prevailing body. The number of schools in the bor. (according to the *Durham Parl. Schools' Report*) is 42, educating about 2,000 children; there are 11 Sunday-schools, attended by 1,053. Of these, the anchorage school, founded in 1658, held in the church-yard, is free, and endowed with a principal sum of 400*l.* St. Edmund's hospital, founded in 1248, was in early times a considerable monastery; it was re-established by James I. in 1611, and now consists of a master, chaplain, and ten brethren, who divide the funds, about 450*l.* annually. The rector for the time being is the master, who appoints the brethren. There are also almshouses for old women.

"Gateshead is a place of considerable importance, not only from its proximity to, and commercial connection with, Newcastle, from which it is separated only by the river Tyne, but more particularly from the numerous glass manufactories and iron-works within the town, and from the coal pits in its immediate neighbourhood. High and Low Fell, which are hamlets in the S. part of the par., are rural districts." Here are large quarries for grindstones, which are much esteemed, and sent to all parts of England. (*Municip. Bound. Report.*) There is also a soap manufactory, the produce of which, in 1848, amounted to 5,722,000 lbs. The old bor. of Gateshead is supposed to have been incorporated in very early times; but there is no charter extant, "the ancient deeds and papers having been surreptitiously removed many years ago." Without doubt, the jealousy of the more powerful town of Newcastle, and the long-continued disputes respecting the privileges of the Tyne navigation, deeply injured the interests of this borough. It was originally governed by a bailiff appointed by the Bishop of Durham, and subsequently by two stewards, who managed the borough property, subject to the borough-holders' and freemen's control; but, under the Municipal Reform Act, it is divided into three wards, and is governed by six aldermen and eighteen counsellors. The Reform Act conferred on this bor., for the first time, the privilege of sending one mem. to the House of Commons: it includes, as already stated, part of Heworth chapelry within the limits of the new parl. bor. Registered electors in 1849-50, 672. The bor. rev., including rates, amounted, in 1847, to 1,753*l*. 8*s*. The local act 54 Geo. III. regulates the leasing of property, the lighting, cleansing, and improvement of the town. The poor rates of Gateshead amounted, in 1847, to 3,653*l*., assessed upon property valued at 38,785*l*. a year. Fairs, chiefly for hiring servants, are held on the second Monday in April, and the first Monday in Nov.

GATTON, a bor. and par. of England, co. Surrey, hund. of Reigate, 17 m. S. London. Area of par., 1,140 acres: pop. of do., in 1831, 145. The bor. is quite inconsiderable, and was formerly one of the most perfect specimens in England of a nomination or rotten bor. It sent 2 mems. to the H. of C. from 1451 down to the passing of the Reform Act, by which it was disfranchised. The right of voting was nominally in the inhab. paying *scot and lot*, but really in the lord of the manor.

GAUDENS (ST.), a town of France, dép. Haute Garonne, cap. arrond., on a hill near the Garonne, 48 m. S.W. Toulouse. Pop. (1836) 4,879. It consists principally of one spacious well-built and well-kept street. It has several churches, one of which is among the oldest in France, several convents, tribunals of primary jurisdiction and commerce, a communal college, and a society of agriculture. It has manufactures of coarse serge and tape, water-mills for sawing, &c.; and a brisk trade in the natural produce of its neighbourhood. (*Hugo, &c.*)

GAWELGHUR, a fortress of Hindostan, in the N. part of the Nizam's dom., cap. of a distr. of the same name, on a high and rocky hill, 11 m. N.W. Ellichpoor. It is very elaborately fortified, and was formerly considered very strong; but it was taken by storm in 1803, by the forces under General Wellesley (now Duke of Wellington) and Colonel Stevenson, after a siege of only 2 days.

GAYA, a town or city of British Hindostan, presid. Bengal, prov. and distr. Bahar, of which last it is the modern cap., on the Phalgu, a tributary of the Ganges, 46 m. S.W. Bahar, and 56 m. S.W. by S. Patna. It is estimated to contain nearly 7,000 houses, most of which are densely inhabited; but the pop. is very variable and uncertain, Gaya being frequented by great numbers of pilgrims and devotees, often amounting to several thousands. It consists of two parts, the old town of Gaya, and the modern one of Sahebgunge. The former, which is the residence of numerous Brahmins and others, and considered by the natives as a place of great sanctity, stands on a rocky eminence; the latter, chiefly laid out by the British, and the seat of trade as well as of the European residents, is situated in a plain between the former and the river. "The old town of Gaya is a strange looking place, but its buildings are much better than those of the quarter named Sahebgunge, the greater part of the houses being of brick and stone, and many of them two or three stories high. The architecture is very singular, with corners, turrets, and galleries, projecting with every possible irregularity. The streets are narrow, dirty, crooked, uneven, and encumbered with large blocks of stone, or protruding angles of rock." Gaya is uncommonly hot, and in spring obscured by perpetual clouds of dust. The streets in Sahebgunge are wide, perfectly straight, and kept in good order, though not paved, with a double row of trees, leaving in the middle an excellent carriage road, with a footpath on each side.

In the immediate vicinity are the ruins of Buddha-Gaya, traditionally supposed to have been the place of the residence and apotheosis of Buddh (the Gautama of the Indo-Chinese nations). These ruins consist mostly of irregular and shapeless heaps of brick and stone. The number of vaulted caverns cut out of immense masses of solid granite is incredible, as is the number of images scattered around to the distance of 15 or 20 m. Among the latter is a gigantic figure of Buddh, in the usual sitting posture; there are now, however, no Buddhists at Gaya, the worship of the Brahminical deities — many groups of which are sculptured on the rocks — having entirely superseded that of the rival divinity. The present town of Gaya contains no ancient monuments whatever, and appears to have derived all its sanctity from its contiguity to the site of the ancient city. (*Hamilton's E. I. Gazetteer; Buchanan; Hamilton's Mod. Trav.*, &c.)

GEFLE, a sea-port town of Sweden, cap. of a Län, and at the mouth of a river of the same name, on the Gulph of Bothnia, 98 m. N.N.W. Stockholm; lat. 60° 39′ 45″ N., long. 17° 8′ 30″ E. Pop. (1836) 8,049. It is divided into four quarters by the river, which separates itself into three branches, and forms two islands, on which, as well as on either bank, the town is built. The houses, somewhat more than 1,000, are well built, some of stone, others of wood, and the streets, though irregular, are wide and well paved. The market-place is remarkable in point of size. The chief buildings are the church, the government-house, the town-hall, and the hospital. There are, besides, a gymnasium of some celebrity, 2 schools, an orphan asylum, and some unimportant manufactories of linen cloth, leather, and tobacco. The excellence of its harbour, defended by a long jetty, and having a depth of 18 ft. a little from the shore, gives it great advantages for trade. Its exports are fir-timber, pitch, tar, and iron; and its chief imports, wheat and salt.

GENEVA (CANTON OF), the smallest canton of Switzerland, at the S.W. extremity of which, and of the lake which bears its name, it is situated; having N. the canton Vaud, E. and S. Savoy, and W. France. Area 913 square miles. Pop. (1838) 58,666, of whom 11,833 were strangers, 28,305 males, and 30,361 females. This canton, which ranks 22d in the confederacy, is composed of the territory of the ancient republic of Geneva, together with some communes formerly belonging to Savoy and France, annexed to it in 1815. Its surface is flat, or but slightly uneven. It is enclosed between the Jura mountains on the N.W., and some Alpine ranges in the opposite direction. The Rhone and Arve are the principal rivers. The climate is mild, but the land is not very productive. The cultivable soil comprises about 56,650 acres; of which the lands in crop make about a half, grass lands somewhat less than 1-5th, and woods about 1-10th. In average years from 29,000 to 32,000 imperial quarters of corn may be produced; but, as neither this nor any other species of agricultural produce is grown to an extent sufficient for home consumption, considerable quantities are imported.

Geneva is essentially a manufacturing canton; but as its manufactures and trade belong to the town, they will be more properly noticed in the following article. The government is representative. The legislative power is exercised by a body of 278 members, elected by such citizens above 25 years of age as pay direct taxes to the amount of about 15 fr. a year. Four *syndics* preside over this body, and are mems. of the executive council, or council of state; which is composed of 28 mems., elected from among the council of representatives, usually for life, but subject to a vote of censure, and removable at pleasure. The magistrates of the different judicial courts are appointed for a certain number of years by the former council. The canton is divided into 3 districts, in each of which there is a court of audience; besides these, there are in the cap. a court of appeal from the foregoing, a tribunal of commerce, and a supreme court of justice, composed of 9 judges. All trials are public. The French code of laws is generally operative. The press is free. As respects religion, 33,562 of the inhab. were (in 1838) Protestants; 24,995 Rom. Catholics; and 109 Jews. Education is in a flourishing state. The canton furnishes a contingent of 880 men to the army of the Swiss confederation, and a contribution of 22,000 Swiss fr. a year to its treasury. The public revenue in 1835 amounted to 33,255*l*., the expenditure to 33,290*l*.; but, according to Dr. Bowring's report, the receipts in that year were below the average of recent years. Except Geneva, the cap., this canton contains no town of importance. (For further details, see succeeding article.)

GENEVA (Germ. *Genf*), the most populous city of Switzerland, cap. of the above canton, situated in a picturesque country, abounding in the most enchanting and magnificent prospects, at the S.W. extremity of the lake of Geneva, 81 m. S.W. Berne, and 70 m. N.E. by E. Lyons; lat. 46° 12′ N., long. 6° 9′ 30″ E. Pop. (1838) 28,003. The Rhone divides Geneva into 3 parts; the city on the right bank, the quarter of St. Gervais on the left, and the island between them, enclosed by two arms of the

river. The city, or upper town, is the largest portion, and is in part built on an eminence, rising to nearly 100 ft. above the level of the lake. Its streets are narrow, crooked, and steep; but many of its private edifices are good: it consists almost entirely of the residences of the burgher aristocracy. The lower town, or quarter of St. Gervais, is the chief seat of commercial activity. It has narrow streets, and lofty houses. Some of the latter are furnished with a shed or pent-house, called a *dome*, which projects from the roof over the street, supported by wooden props reaching from the pavement; twenty-five years ago these appendages to the houses were almost universal. The island is upwards of a furlong in length, by about 200 feet broad, and connected with the other quarters by several bridges. The aspect of Geneva from the lake has been greatly improved of late years. An entirely new quarter has sprung up on the right bank of the Rhone, called the *Quartiers des Bergues*, displaying a handsome front of tall houses, among which is the *Hôtel des Bergues*, lined with a broad and fine quay, towards the lake. The unsightly houses that formerly lined the margin of the lake in the lower town, have been repaired and beautified; and a broad belt of land has been gained from the water to form a quay. This is connected with the *Quai des Bergues*, on the opposite bank, by a handsome suspension bridge, and another bridge communicating with a small island, situated at the point where the Rhone leaves the lake, is ornamented with a bronze statue of Rousseau. Geneva is surrounded on the land-side by ramparts and bastions, constructed about the middle of last century: these are of little use as fortifications, the city being commanded by some adjacent heights; but they serve as public promenades, and 3 iron suspension bridges have been thrown over them to facilitate the intercourse between the city and the surrounding country. The gates of Geneva are closed from midnight to day-break; and after sunset a toll of 24 centimes (about 2½d.) is levied on all horses or carriages going out or in, and 10 centimes on foot passengers after 10 o'clock P.M.

Geneva has but few fine public buildings. The principal is the cathedral or church of St. Peter: it is in a conspicuous situation, has three steeples, and is an interesting specimen of the Gothic style of the 11th century; but a Corinthian portico, in imitation of that of the Pantheon at Rome, has been inconsistently enough added to it. This church contains the tombs of Agrippa d'Aubigny, the friend of Henri IV., and of the Count de Rohan, a leader of the French Protestants in the reign of Louis XIII. There are, besides, 3 Calvinist and 2 Lutheran churches, a Catholic church, and a synagogue. The town-hall and general hospital are almost the only other edifices worth notice. The last is an extensive and spacious building; in the chapel belonging to it the service of the English church is performed on Sundays. The *Musée Rath*, so named after its founder, is a neat building, containing a collection of paintings by native and other artists. The museum of natural history contains the geological collections of Saussure, Brongniart, and Decandolle, the collections of M. Necker, a cabinet of antiquities, and a reading-room well supplied with the best European journals. The academy, founded by Calvin, has faculties of jurisprudence, theology, natural science, and literature, and 39 salaried or honorary professors. It has attached to it a library of 40,000 vols., including many valuable MSS. Geneva has also a college for classical education; a school preparatory for the academy; a school of manufactures, established 1832; schools of watchmaking, drawing, music, &c., and many private schools. It has a public observatory; a society for the advancement of arts; societies of medicine and natural history, and other learned associations; lunatic and deaf and dumb asylums; and various other charitable institutions. About 247,000 fr. a year are spent by the city in aid of the poor. The working classes have united in several benefit societies for mutual assistance, and a savings' bank was established in 1816, which had in 1835 a capital of 5,136,171 florins. The ancient palace of the bishops of Geneva has been converted into a prison; but in 1825 a new prison was established on the panoptic system, the first of the kind founded on the Continent. The prisoners on arriving are detained in solitary cells for a longer or shorter period, and afterwards set to regular work, during which, as well as at all other times, they are obliged to observe a profound silence. Each occupies a chamber by himself, and solitary confinement is the usual punishment for refractory behaviour. The prisoners have books distributed to them from the prison-library. A part of the produce of their labour is put aside for their own use; and when they finally leave the prison, a committee furnish them with employment. Geneva has an arsenal and a theatre; it is well lighted, and is supplied with water by a hydraulic machine situated in the island. There are various public walks within as well as without the walls, which command noble views of the Alps, the lake, &c.; amongst them are the Terrace *de la Treille*, the squares of St. Antoine and Maurice, and the fine botanic garden, laid out in in 1816. Geneva is a favourite place of resort of the English.

In the inhabs., Mr. Inglis remarks, "the stranger will find it difficult to discover any trace of the puritanism and severity of manners for which that city was renowned in earlier times. I never was among a livelier or gayer population. Amusement seemed to be the reigning passion, and religion little less a matter of form than it is in France on Sunday. After listening to a favourite preacher, the Genevese flock to the theatre. The shops also are open on a Sunday, and every man plies his trade as usual." (*Switzerland*, p. 177.)

The main source of the prosperity of this city consists in its manufactures; the principal of these are watches, jewellery, musical boxes, and objects of taste in the fine arts. In 1834, there were 274 master, and 1,332 working, watchmakers; and 117 master, and 663 working, jewellers. The number of watches annually made is estimated at upwards of 70,000, and of these at least 60,000 are of gold. In watchmaking and jewellery, it is estimated that between 70,000 and 80,000 oz. of gold, and about 50,000 oz. of silver, are used annually. The gems (most of which are pearls) used in jewellery and the embellishment of watches may be worth perhaps 20,000*l.* a year.* The watchmaking business is divided into two branches; that of *haute horlogerie*, comprising chronometers, stop-watches, and other articles in which the perfection of the machinery is the highest merit; and that of *horlogerie du commerce*, in which the beauty of the work is its chief recommendation. The articles of the latter class are by far the most numerous. "The great advantage which the Swiss possess in competition with the watchmakers in England is the low price at which they can produce the flat cylinder watches, which are at present much in request. The watches of English manufacture do not come into competition with those of Swiss production, which are used for different purposes, and by a different class of persons. Notwithstanding all the risks and charges, the sale of Swiss watches is large, and it has not really injured the English watchmaking trade. The English watches are far more solid in construction, fitter for service, and especially in countries where no good watchmakers are to be found, as the Swiss watches require delicate treatment. English watches, therefore, are sold to the purchaser who can pay a high price; the Swiss watches supply the classes to whom a costly watch is inaccessible." (*Bowring's Report*, p. 98.) The works or machinery of the watches are made principally at Fontainemelon and Beaucourt in France. The unfinished work is called an *ébauche*, and is polished and perfected by the Genevese artisan. It is difficult to form a correct estimate of the wages earned by the latter, for, in the manufacture of watches, jewellery, and goldsmiths' work, almost everything is done by the piece, and not by daily wages. Watchmakers may generally, however, earn from 2*l.* 8*s.* to 7*l.* 12*s.* a month; makers of musical boxes, from 4*l.* 18*s.* to 11*l.*; the engine-turners about the same: some of the workmen who make the movements may earn from 2*s.* 6*d.* to 4*s.* 8*d.* a day; others from 20 to 50 sous a day: the works which fall to the share of the women are of the latter class. In some kinds of work, skilful hands will earn no less than from 20 fr. to 25 fr. a day. In occupations unconnected with the manufacture of watches or jewellery, working locksmiths may earn from 2 fr. to 5 fr. (French), and cabinet-makers from 30 to 65 sous a day. The other manufactures of Geneva and its canton are principally horn and tortoiseshell combs, carriages, saddlery, agricultural implements, tools of all kinds, cutlery, fire-arms, enamels, musical instruments, printing types, and philosophical instruments of a very superior description. Lithography and engraving medals and vignettes are flourishing branches of art. Some factories of woollen cloth have been rather recently established; the produce of various spinning establishments finds consumption in Switzerland; and printing would form a very important and very productive branch of industry, were it not for the impediments thrown in the way of exportation to neighbouring countries. In 1816, as many as 30 tanneries were in existence. At present, however, tanning is carried on to but a small extent, though the very superior quality of the leather always insures it a preference in foreign markets, particularly in Italy. At the beginning of the 17th century the Genevese also carried on an extensive trade in silk stuffs, lace, &c.; and before the French revolution there were many extensive establishments for the manufacture of printed cottons besides factories of various other kinds. These no longer exist, most of them having been crushed by the system of prohibitions and high duties established by the continental powers during the ensuing period. The watches and

* According to Picot (*Statistique de la Suisse*, 1830), 100,000 watches are made or finished annually in the canton, most of which are of gold: half of them are ladies' watches, and a fourth part repeaters. The consumption of gold in good years is, he says, 75,000 oz.; of silver, 5,000 marcs; and of precious stones to the value of 1,000,000 fr. (30,000*l.*,) a year.

jewellery, however, of Geneva still bid defiance to custom-house regulations, and are very extensively smuggled into France. A committee of master-workmen, with a syndic at their head, called the *commission de surveillance*, are appointed by the government to inspect every workshop, and the articles made in it, to guard against fraud in the substitution of metals not of the legal standard. By a law of 1815, the manufacture of any gold work of a lower standard than ·750 is forbidden; and the legal standards for silver are fixed at ·800, ·875, and 950. The watch-makers of Great Britain buy largely in Geneva; the annual export of watches to England being from 8,000 to 10,000, of the average value of 10*l.* each. The jewellery sent from Geneva to England may be worth about 60,000*l.* a year; but owing to our prohibitions, and high duties upon foreign goods, a large proportion of the trade in Swiss watches and jewellery is contraband: the articles come through France, and the English consumer pays, of course, the costs and profits of the French smuggler. The imports from England are chiefly colonial produce, dyeing drugs, spices, bar and wrought iron, and woollen, cotton, silk, and other kinds of manufactured articles. The value of the British manufactures sold in the canton may, perhaps, be estimated at about 200,000*l.* a year, which no doubt would be greatly augmented, did we admit Genevese watches, and other manufactures, at a moderate duty. The accounts of the imports and exports are given by *weight*, which, of course, renders them good for little or nothing. It is said, for example, that in 1834 the imports into the cant. amounted to 300,830 quintals; and the exports, exclusive of watches and jewellery, to 120,000 quintals! If *we* adopted a criterion of this sort, the export trade of Newcastle would seem to be three or four times as great as that of London! Geneva is the seat of the council of state; the supreme court of justice for the cant.; a court of appeal from the district courts; and a chamber of commerce. The last has a very extensive jurisdiction; every commercial transaction, of whatever description, may be brought before it; and a private individual, who may have bought more of an article than he requires, and sells the surplus, becomes responsible to it.

Geneva is very ancient. *Extremum oppidum Allobrogum est, proximumque Helvetiorum finibus, Geneva*, are the words of Cæsar in speaking of this city. (*De Bello Gallico*, i. § 6.) Many Roman antiquities have been discovered in and near it; and in the island traces may still be discovered of a Roman structure, supposed to be foundations of one of the towers erected by Cæsar to prevent the Helvetians crossing the river. In 426 Geneva was taken by the Burgundians, and became their cap.; it afterwards belonged successively to the Ostrogoths and the Franks, and formed a part of the kingdom of Arles, and the second kingdom of Burgundy. On the fall of the latter it fell under the sole dominion of its bishops, between whom and the counts of the Genevois, in Savoy, there existed incessant contests for its possession. At the Reformation the bishop was expelled, and the town, with its territory, became a republic. Calvin, having sought refuge in Geneva in 1536, was solicited to settle there, and was soon afterwards raised to the highest rank in the state, which he in a great measure governed for 23 years, with a severity and strictness that impressed deep and abiding traces on its jurisprudence and manners. In 1553 the famous Michael Servetus, who had been arrested at Geneva, at the instigation of Calvin, was accused of blasphemy in regard to the Trinity, and being tried and convicted, was ordered to be committed to the flames, which barbarous sentence was immediately carried into execution. The conduct of Calvin in this deplorable affair, though in part excused by the spirit and temper of the times, was directly hostile to every principle for which he had been contending against the church of Rome, and will ever remain a dark blot upon his character, and that of the early reformers. In 1782, in consequence of internal dissensions, Geneva was occupied by the troops of France, Sardinia, and Berne. In 1798 it was taken by the French revolutionary forces, and subsequently became the cap. of the dép. Leman. It was, with its territory, united to Switzerland as an independent canton in 1814. Few cities have produced more eminent individuals: amongst others may be specified J. J. Rousseau; Casaubon, the critic; Lefort, the friend of Peter the Great; Necker, and his daughter, Mad. de Staël; the naturalists Saussure, De Luc, Bonnet, and Jurine; Decandolle and Huber; Dumont, the friend and editor of the best works of Bentham; the philosopher Abauzit; J. B. Say, the political economist; Simonde de Sismondi, the historian, &c. (*Bowring's Rep. on Swit.; Schutz, Allg. Erdkunde*, vol. xxi.; *Ebel; Picot, Statist.; Inglis's Switzerland, &c.; Encycl. des Gens du Monde, &c.*)

GENEVA (LAKE OF), or LAKE LEMAN (Germ. *Genfersee*, an. *Lacus Lemanus*), the largest lake of Switzerland, near the S.W. extremity of which it is situated. It has N., E., and S.E. the canton of Vaud or Leman; S.W. that of Geneva; and S., Savoy. It fills up the lower portion of a somewhat extensive valley enclosed between the Alps and the Jura. It is crescent-shaped, the convexity being directed N.N.W., and the horns facing S.S.E. Its greatest length — a curved line passing through its centre from Geneva at its W. extremity, to Villeneuve at its E. — is about 45 m.; but along its N. shore, the distance from end to end is about 55 m., while along its S. it is no more than about 40 m. Its breadth varies from 1 to 9 m.; its area is estimated at about 240 sq. m. Its greatest depth, near Meillerie, towards its E. extremity, is said to be 1,012 (950 Fr.) ft.: its level is about 1,200 ft. above that of the Mediterranean. In Aug., when its waters are the highest, its surface is often 4½ ft. above its level in March, when it is lowest. It is divided, in common parlance, into the Great and Little lake; the latter is more exclusively called the Lake of Geneva, and extends from that city for a distance of 14 m., but with a breadth never more than 3¼ m., to Point d'Yroire; beyond which, Lake Leman widens considerably. The Rhone enters it near its E. extremity, bringing with it so much alluvial soil, that considerable encroachments are continually made on its upper end. Port Vallais, now 1½ m. distant, was formerly on the margin of the lake, the basin of which is said to have originally extended upwards as far as Bex! The Rhone emerges from the Lake of Geneva at its S.W. extremity, where its waters, like those of the lake itself, are extremely clear, and of a deep blue colour, circumstances which have been often adverted to by Byron. (See *Childe Harold*, iii. s. 58. 85.) Lake Leman receives upwards of forty other rivers; the principal of which are, the Venoge, from the N., and the Drause, on the side of Savoy. It seldom freezes, and has never been known to be entirely frozen over. It is subject to a curious phenomenon called the *seiches*. This consists in a sudden rise of its waters, generally for 1 or 2 ft., but sometimes as much as 4 or 5 ft., followed by an equally sudden fall; and this ascent and descent goes on alternately, sometimes for several hours.* This phenomenon is most common in summer, and in stormy weather; its cause has not been satisfactorily ascertained, but it would seem to depend on the unequal pressure of the atmosphere upon different parts of the lake.

Lake Leman abounds with fine fish. Its banks are greatly celebrated for their picturesque beauty and sublimity. Their scenery is the most imposing at its E. extremity; but the whole of the S. shore exhibits great boldness and grandeur. The N. shore is of a softer character; it is adorned with a succession of low hills covered with vineyards and cultivated fields, and interspersed with numerous towns, villages, and habitations. Nyon, Rolle, Morges, Ouchy (the port of Lausanne), Vevay, Clarens, and the Castle of Chillon, are on the N. bank: on the S. or Savoy side, are Meillerie; Ripaille, the place of retirement of Pope Felix V.; Thonon and the *Campagna Diodati* in the Genevese territory (the residence of Lord Byron in 1816). The first steam vessel in Switzerland, the William Tell, was launched on the Lake of Geneva in 1823; in 1838, there were four steam boats plying on it, two of which usually went daily from one extremity to the other and back in eight hours and a half. (*Picot; Ebel; Cannabich; Murray's Handbook, &c.*)

GENOA (Ital. *Genova*, an. *Genua*), a celebrated marit. city of N. Italy, once the cap. of an indep. repub., and now of a prov. or division of the k. of Sardinia, at the head of the Gulph of the same name, 75 m. S.E. Turin, and 90 m. N.W. Leghorn; lat. 44° 24′ 20″ N., long. 8° 52′ 55″ E. It had, in 1838, a pop. of 97,621, exclusive of the garrison (8,000) and the merchant seamen, and those belonging to the royal navy, in all 17,636, making its total pop. 115,257. Genoa is built round, but principally on the E. side of its port, which is semicircular, the cord being about 1 m. in length. Two gigantic moles (the *Molo vecchio* and *Molo nuovo*), project into the sea from either angle, and enclose and protect the harbour. The land on which the city is built rises amphitheatrewise round the water's edge, to the height of 500 or 600 ft., so that its aspect from the sea is particularly grand and imposing. The white showy houses form streets at the lower part of the acclivity, while the upper part is thickly studded with detached villas. Behind all, the Apennines are seen towering at the distance of, perhaps, 10 or 12 m., their summits during a part of the year covered with snow. Genoa has a double line of fortifications. The inner one encloses merely the city itself on the N. and E. sides of the port; the outer walls extend from either angle of the port back to the summit of the hills, on the declivity of which the city is built, and are 8 or 10 m. in length. The old or E. portion of the city consists of a labyrinth of excessively narrow, crooked, and dark streets, their breadth being generally no more than from 6 to 12 ft. They run between a succession of lofty houses, 5, 6, and even 7 stories high, each story

* *Encycl. des Gens du Monde.* Murray (*Handbook*) says, — "It never lasts longer than 25 minutes, but is generally less."

being from 12 to 15 ft. deep, the cornices under the roof of which sometimes project so far as to meet, and thereby exclude all daylight. "In these streets you meet with vast numbers of mules and some asses, carrying all sorts of articles, bricks, firewood, &c., on their backs; for wheeled carriages are only used in the broad streets, which are rare, except in the suburbs. The streets are paved with broad flags of lava, which are laid in mortar, and have the smoothness and durability of good masonry. In the middle of this pavement there is a pathway laid with bricks set on edge, about 2 or 3 ft. broad, and a little higher than the lava. This is for the accommodation of the mules, the lava being considered too smooth to afford their feet a sufficient hold." (*Maclaren's Notes on France and Italy*, p. 46.) The streets, narrow and steep as they are, are very clean, cool, and quiet. The newer part of the city, which stretches along the N. side of the port, is more regularly laid out, and contains some broad and very handsome streets, in particular that running from the *Piazza delle fontane* to the *Piazza dell' Acquaverde*, near the W. gate, and including the *Strade Nova* and *Novissima*, the *Piazza del Vastato*, and the *Strada Balbi*. The last of these, says M. Simond, is entirely formed of palaces, more magnificent than those of Rome, and neater in their interior. Each is built round a court, and the best apartments are on the third floor, for the benefit of light and air. The roofs, being flat, are adorned with shrubs and trees, as myrtle, pomegranate, orange, lemon, oleanders, &c., 25 ft. high, growing not in boxes only, but in the open ground several feet deep, brought hither and supported on arches. Fountains play among these artificial groves, and keep up their verdure and shade during the heat of summer. In Italy, Genoa has acquired, and deserves, the title of *la Superba*. It exhibits fewer remains of ancient splendour than Venice, but more actual wealth and comfort. "Its architecture is grand in its style, and admirable in its materials. Its palaces are numerous, and many of their princely gates 40 ft. high, with marble columns, courts paved with various coloured marbles in mosaic, broad staircases all of marble, rooms 30 ft. high with arched ceilings, adorned with gilded columns, large mirrors, superb crystal lustres, mosaic floors, the roofs panneled, and the pannels filled with finely executed frescoes or paintings in oil, and divided by sculptured figures. Behind are orangeries. I visited four or five of these palaces; but there are multitudes." (*Maclaren's Notes*, p. 46.) The common houses are of stone plastered with stucco, the finer of marble. Of its palaces, that of Doria, built by and still belonging to the illustrious family of that name, is the largest and finest: it opens into large gardens which extend along the shore; but it is said not to be well kept, and to be falling into decay. It has a noble colonnade supporting a terrace facing the gardens, the whole in white marble: its interior is very richly ornamented. The emperors Charles V. and Napoleon both made this palace their residence during their stay in Genoa. Another *Palazzo Doria* is now a residence of the king of Sardinia.

There are two palaces originally belonging to the Durazzo family. That on the *Strada Balbi* is now a royal mansion; its front is about 250 ft. in length; it has a court, rich in architectural embellishments, and a famous gallery 100 ft. long, ornamented with frescoes, and containing a curious collection of statues and sculptures ancient and modern, numerous portraits of the Durazzi, historical paintings, and others by Carlo-Dolci, Titian, Vandyck, A. Durer, Holbein, &c. In another room is the *chef-d'œuvre* of Paul Veronese, "Mary Magdalen at the feet of our Saviour." The other Durazzo palace is scarcely less rich; its gallery contains some fine works by P. Veronese, L. and A. Caracci, Guercino, Titian, Domenichino, several by Guido, Rubens, &c. The ancient palace of the Doges was almost wholly destroyed by fire in 1777; but the modern building, on its site, is a fine structure, and contains the city council-hall, 125 ft. by 45, and 66 ft. high. The Serra, Spinola, Balbi, Brignole, Carega, Mari, Pallavicini, &c. palaces are amongst the most remarkable of the others. But if the palaces of Genoa be superior to those of Rome, its churches are generally inferior; though some of them would be beautiful, if less profusely ornamented. That of the *Annunziata*, founded in the 13th century, is the finest, and contains some good paintings. The cathedral or church of St. Lorenzo, built in the 11th century, is of Gothic architecture; its exterior has a strange appearance from being cased with black and white marble in alternate horizontal stripes. The church of St. Cairo, the old cathedral, is very ancient; that of St. Stefano has a famous altar-piece, the joint work of Raphael and Julio Romano. The church of *San Filippo Neri*, and the chapel of the Carmelite nuns, are both greatly admired for their chaste style. The church of *Santa Maria Carignano* is also a structure in the best taste, erected by one of the princely citizens of Genoa; whose son, in the 16th century, united two elevated parts of the town by a bridge, the *Ponte di Carignano*, 100 ft. in height, and which passes, "with three giant strides, over houses six stories high that do not come up to the spring of the arches." (*Simond*, p. 588.) There are said to be, altogether, 32 par. churches, and 69 convents and monasteries. There are 3 large hospitals richly endowed; the principal of which, the *Albergo di Poveri*, is a large quadrangular edifice immediately N. the inner city walls. In this institution 1,500 or 1,600 individuals, orphans and old people, are provided for; the children are brought up to different trades, and some otherwise educated; at a proper age, they are allowed half the produce of their labour, with which they in part provide for themselves. The establishment is generally well conducted; the building is handsome, spacious, and clean; it contains numerous busts and statues of its benefactors, and a "Dead Christ," in *alto relievo*, by Michael Angelo; probably the finest piece of sculpture in Genoa. Among the other chief public buildings, are the exchange, the old bank of St. George, and one of the three theatres, — that of *Carlo Felice*, recently built. The opera in Genoa is said to be indifferent. The university in the *Strada Balbi* (founded in 1812) is a fine edifice, and has a large library and botanic garden; but it is not otherwise remarkable. Around the port is a rampart, affording an excellent promenade. On the N. side of the harbour is the *Darsena*, a double basin enclosed by piers, and destined for a refitting dock; adjoining it is the arsenal.

From the centre of the city several quays and jetties stretch into the port, bounded on the S.E. by the old mole, projecting into the sea W. by S. about 260 fathoms; it has a battery near its middle. The new mole, on the W. or opposite side of the port, adjoins the S. extremity of the suburb of S. Pietro d'Arena, and projects from the shore E.S.E. about 210 fathoms. The mole heads bear from each other N.E. by E. and S.W. by W., the distance between them, forming the entrance to the harbour, being about 350 fathoms. A conspicuous lighthouse is erected without the port on its W. side, on a high rock at the extremity of a point of land contiguous to the bottom of the new mole. There is no difficulty in entering the harbour; the ground is clean, and there is plenty of water, particularly on the side next the new mole; care, however, must be taken, in coming from the W., to give the lighthouse point a good offing. Moderate sized merchantmen commonly anchor inside the old mole, contiguous to the *porto-franco*, or bonded warehouses. Men-of-war, and the largest class of merchantmen, may anchor inside the new mole, but they must not come too near the shore. Ships sometimes anchor without the harbour, in from 10 to 25 fathoms, the lighthouse bearing N. ½ W., distant 2 or 3 m. The S.W. winds occasion a heavy swell, but the bottom is clay, and holds well. Public fountains are few in Genoa, but the city is well supplied with water brought by an aqueduct from the little river Bisagno immediately E. of the outer walls. The atmosphere is pure; and the climate of the city and its neighbourhood is healthy, and appears to be particularly favourable for the rearing of silkworms.

Genoa is the entrepôt of a large extent of country; and her commerce, though inferior to what it once was, is very considerable, and has latterly been increasing. She is a free port; that is, a port where goods may be warehoused, and exported, free of duty. The exports consist partly of the raw products of the adjacent country, such as olive oil (an article of great value and importance), rice, fruits, cheese, rags, steel, argol, &c.; partly of the products of her manufacturing industry, such as silks, damasks, and velvets (for the production of which she has long been famous); thrown silk, paper, soap, works in marble, alabaster, coral, &c.; the printed cottons of Switzerland, and the other products of that country, and the W. parts of Lombardy, intended for the S. of Europe, and the Levant; and partly of various foreign products brought by sea, and placed in *porto franco*. The imports principally consist of cotton and woollen stuffs; cotton wool, mostly from Egypt; corn from the Black Sea, Sicily, and Barbary; sugar, salted fish, spices, coffee, cochineal, indigo, hides, iron, and naval stores from the Baltic; hardware and tin plates from England; wool, tobacco, lead (principally from Spain), wax, &c. Corn, barilla, Gallipoli oil, cotton, vallonea, sponge, galls, and other products of the countries adjoining the Black Sea, Sicily, the Levant, &c., may in general be had here, though not in so great abundance as at Leghorn. The various duties and custom-house fees formerly charged on the transit of goods through Genoa and the Sardinian territories have recently been abolished. This will have a very beneficial influence on the trade of this port, particularly as regards the importation of raw cotton for Switzerland and Milan, as well as of the different descriptions of colonial produce.

The bank of St. George, in Genoa, was the oldest bank of circulation in Europe, having been founded in 1407. It was conducted by a company of shareholders; and having gradually advanced immense sums to the govern-

ment, a large proportion of the public revenue was assigned to it in payment of the interest. On the invasion of Genoa by the Austrians, in 1746, a part of the treasure of the bank was carried off. Finally, on the union of Genoa with France, the bank was suppressed; the government of France becoming responsible for an annual dividend of 3,400,000 Genoese livres payable to its creditors.

Genoa is the residence of a general-commandant, and an archbishop, and the seat of the superior judicial court for the prov., an admiralty-council, and a tribunal and chamber of commerce. It has a royal college; a naval school, the first established in Italy; an excellent deaf and dumb establishment; a public library, with 50,000 vols. and 1,000 MSS. (*Dict. Géog.*); several learned societies, and various schools; though education is said not to be very generally diffused. House rent is cheap, and provisions good; beggars are fewer than in many other large Italian cities; the tone of society is said to be agreeable; and Genoa, with a few drawbacks, is considered by most travellers a desirable place of residence. Most ladies wear the *mantilla*, a piece of thin white muslin, or gauze, which covers the head and shoulders, and comes down to the waist. This piece of costume is also in common use at Leghorn, and Civita Vecchia.

Genoa is of great antiquity. After a variety of vicissitudes she became, in the 11th century, the cap. of an independent republican state; and was early distinguished by the extent of her commerce, and by her settlements and dependencies in various parts of the Mediterranean and of the Black Sea. Their conflicting pretensions and interests involved the Genoese in long-continued contests with the rival republics of Pisa and Venice. The struggle with the latter, from 1376 to 1382, is one of the most memorable in the Italian annals of the middle ages. The Genoese having defeated the Venetians at Pola, penetrated to the lagoons which surround Venice, and took Chiozza. Had they immediately followed up this success, the probability is that they would have taken Venice; but having procrastinated, the Venetians recovered from the consternation into which they had been thrown, and the Genoese were ultimately compelled to retire. The ascendancy of Venice dates from this epoch. (*Koch, Tableau des Révolutions*, i. 263.)

The government of Genoa was long the most turbulent that can be imagined; and the city was agitated by continual contests between the nobility and the citizens, and between different sections of the nobility. The mischiefs arising from these struggles were such, that to escape from them, the citizens not unfrequently called in the aid of foreigners; and placed themselves, at different periods, under the protection of France, the Marquis of Montferrat, and the dukes of Milan. Indeed, from 1464 down to 1528, Genoa was regarded as a dependency of the latter. In the latter year, however, it recovered its independence; and was, at the same time, subjected to a more aristocratical government. But the republic continued to be agitated by internal dissensions down to 1576. At that period further modifications were made in the constitution, after which it enjoyed a lengthened period of tranquillity. (A very full account of the revolutions of Genoa is given in the *Modern Universal History*, xxviii. 353—533.; see also *Sismondi, Républiques Italiennes, passim.*)

The conquest of Constantinople, and of the countries round the Black Sea by the Turks, and the discovery of the passage to India by the Cape of Good Hope, proved destructive of a great part of the trade of Genoa. She was, also, successively stripped of all her foreign possessions. Corsica, the last of her dependencies, revolted in 1730, and was ceded to France in 1768. In 1797 Genoa was taken by the French. After the downfall of Napoleon, the congress of Vienna, in 1815, assigned Genoa and the adjacent territory to the king of Sardinia, of whose dominions they now form a part.

GEORGIA (Pers. *Gurdjistan*, Russ. *Grusia*, an. *Iberia*), a country of W. Asia, and formerly the centre of a monarchy of some extent, but now a government of the Russian empire. It occupies a considerable portion of the isthmus, between the Black Sea and Caspian; extending from lat. 40° to 42° 30′ N., and long. 43° 20′ to 46° 50′ E.: separated on the N. by the central chain of the Caucasus from Circassia; E. by the Alazan and Kurak, two tributaries of the Kur, from Skehin and Gulistan; S. and S.W. by the Kapan mountains from Armenia; and W. from Imeritia, by a transverse Caucasian range. Thus surrounded on three sides by mountain ranges, Georgia is in a great measure shut out from communication with the neighbouring countries, there being but one pass either across the Caucasus into Circassia, or across the W. range into Imeritia. (*See* CAUCASUS, pp. 567, 568.) The length of Georgia N.W. to S.E., measured on the best maps, is about 175 m.; its average breadth from 100 to 110 m. The area has been estimated at about 18,000 sq. m., and the pop. at between 300,000 and 400,000.

The surface is mostly mountainous, consisting of table-lands and terraces, forming a portion of the S. and more gradual slope of the Caucasus. The country, however, slopes from the S. and W., as well as the N., to the centre and S.E., which are occupied by the valley of the Kur, an undulating plain of considerable extent and great fertility. Between the mountain ranges there are also numerous fertile valleys covered with fine forests, dense underwood, and rich pasturages watered by an abundance of rivulets. All the rivers have more or less an E. course. The principal is the Kur, or Mthwari (an. *Cyrus*). This river rises in the range of Ararat, a little N.W. of Kars. It runs at first N., and afterwards N.E. to about lat. 42° N., and long. 44° E.; from which point its course is generally S.E. to its mouth, on the W. shore of the Caspian. It is in many places of considerable breadth, and sometimes several fathoms deep; but its great rapidity prevents its being of much, if any, service for navigation; and only rafts are used upon it. Its principal affluents are the Aragwi from the N., which unites with it at Mtskethi, the ancient capital of Georgia, and undoubtedly the *Αρμοζικα* of Strabo, about 10 m. N.W. Tiflis; and the Aras (an. *Araxes*) from the S., which joins it not far above its mouth, where its course deflects southward. Tiflis, the cap. of Georgia, is situated on the Kur.

The climate of Georgia of course varies greatly, according to elevation; it is, however, generally healthy and temperate, being much warmer than that of Circassia, or the other countries on the N. slope of the Caucasus. The winter, which commences in Dec., usually ends with Jan. The temperature at Teflis, during that season, is said not to descend lower than about 40° Fahr.; and in the summer the air is excessively sultry, the average temperature at the end of July, 1830, having been, at 3 P. M., 79°, and at 10 P. M., 74° Fahr. (*Miss. Researches*, p. 124.) The soil is very fertile; and agriculture and the rearing of cattle are the chief employments of the inhab. Wheat, rice, barley, oats, maize, millet, the *holcus sorghum* and *h. bicolor*, lentils, madder, hemp, and flax, are the most generally cultivated articles; cotton is found in a wild state, and is also cultivated.

Georgia is noted for the excellence of its melons and pomegranates; and many other kinds of fine fruits grow wild. Vineyards are very widely diffused, and the production of wine is one of the principal sources of employment. It is strong, and full-bodied, with more *bouquet* than Port or Madeira; but from having generally little care bestowed on its manufacture, it keeps badly; and casks and bottles being for the most part unknown, it is kept in buffalo-skins, smeared inside with naphtha, which not only gives it a disagreeable taste, but disposes it to acidity. But notwithstanding these drawbacks, and its extensive consumption in the country, considerable quantities are imported. Mr. Wilbraham says, that "the Georgians have the reputation of being the greatest drinkers in the world: the daily allowance, without which the labourer will not work, is four bottles; and the higher classes generally exceed this quantity; on grand occasions the consumption is incredible." (*Travels in the Caucasus, Georgia, &c.*, p. 192.) According to Smith and Dwight, "the ordinary ration of an inhab. of Tiflis, from the mechanic to the prince, is said to be a *tonk*, measuring between five and six bottles of Bordeaux! The best wine costs but about four cents the bottle, while the common is less than a cent." The multiplied oppressions to which the inhab. have been long subjected, and the fertility of the soil, have gone far to extinguish all industry. The peasant thinks only of growing corn enough for the support of himself and family, and a small surplus to exchange at the nearest town for other articles of prime necessity. The plough in use is so heavy as to require six or eight buffaloes for its draught, and often double the number are used; the harrow is nothing more than a felled tree; and a great quantity of the produce is wasted owing to the corn being trodden out by buffaloes. Domestic animals of all kinds are reared; the horses and horned cattle equal the best European breeds in size and beauty; and the long-tailed sheep afford excellent wool. Game, including the stag, antelope, wild boar, hares, wild goats, pheasant, partridge, &c., is very abundant; bears, foxes, badgers, jackals, lynxes, and it is said leopards, are common. The forests consist of oak, beech, elm, ash, linden, hornbeam, chesnut, walnut, and many other trees common in Europe; but they are of little or no use. The mineral products of the country, though nearly unexplored, are believed to be various; iron is plentiful on the flank of the Caucasus, and coal, naphtha, &c., are met with. The houses of the peasantry, even in the most civilised parts, are nothing more than slight wooden frames, with walls made of bundles of osiers covered over with a mixture of clay and cowdung, and a roof of rush. "A room 30 ft. long and 20 broad, where the light comes in at the door; a floor upon which they dry madder and cotton; a little hole in the middle of the apartment, where the fire is placed, above which is a copper cauldron attached

to a chain, and enveloped with a thick smoke, which escapes either by the ceiling or the door, is a picture of the interior of these dwellings." (*Malte-Brun.*) In the houses even of the nobility, the walls are sometimes built only of trunks of trees cemented with mortar, and the furniture consists of a very few articles. The roads, except that across the Caucasus to Tiflis, which has been improved by the Russians, are in a wretched state. The vehicles in use are of the rudest kind, and all commodities, except straw or timber, are transported upon horses, mules, asses, or camels. The inhab. never ride, except on horseback. Coarse woollen, cotton, and silk fabrics, leather, shagreen, and a few other articles, are manufactured; the arms made at Tiflis have some reputation; but most of the other goods are very inferior, and only enter into home consumption.

Georgia composes one of the five Trans-Caucasian governments of Russia. Their government is wholly military; and how little soever it may square with our notions of what a government should be, it is not ill-fitted for the circumstances of the country; and there cannot be a question that its establishment has been most advantageous to the population.

The Georgian ladies have usually oval faces, fair complexions, and black hair; and though not generally reckoned handsome by Europeans, they have long enjoyed the highest reputation for beauty in the East: the men are also well formed, and handsome. (See *ante*, p. 183.) This superiority in the physical form of the Georgians, and other contiguous Caucasian tribes, and the low state of civilisation that has always prevailed amongst them, explains the apparently unaccountable fact, that these countries have been, from the remotest antiquity down to our times, the seat of an extensive slave-trade. Latterly the harems of the rich Mussulmans of Turkey, Persia, &c., have been wholly or principally supplied by female slaves brought from Georgia, Circassia, and the adjoining provinces; and they also furnished male slaves to supply the Mameluke corps of Egypt and various other bodies with recruits. In modern times the Georgians have been divided, with the exception of a few free commoners, into the two great classes of the nobles and their vassals or slaves. Previously to the Russian conquest, the latter were the absolute property of their lords, who, besides employing them in all manner of manual and laborious occupations, derived a considerable part of their revenue from the sale of their sons and daughters! Indeed, the daughters of the nobles not unfrequently shared the same fate, being sacrificed to the necessities or ambition of their unnatural parents! *Tournefort*, ii. 303.; *Missionary Researches*, p. 151.)

The Russians have put an end to this traffic; and they have also deprived the nobles of the power capitally to punish their vassals, and set limits to their demands upon them for labour and other services. There cannot therefore be, and there is not, a doubt with any individual acquainted with the circumstances, that the Russian conquest has been of signal advantage to the bulk of the Georgian people. We believe, however, that the Russians are quite as much disliked by the nobles of Georgia as by those of Circassia; and those travellers who live with them, and credit their stories, will be amply supplied with tales of Russian barbarity and atrocity.

With a settled state of affairs, Tiflis might again become, as in the days of Justinian, a thoroughfare for the overland commerce between Asia and Europe. The Georgians belong to the Greek church, and since becoming subject to Russia, have been subordinate in ecclesiastical matters to a Russian archbishop at Tiflis, who has three suffragans S. of the Caucasus. The clergy are generally very ignorant. A high school in the cap. has been recently erected into a gymnasium; and in addition to it, there are a few small schools, in which, however, very little is taught. No serf is, or at least used to be, instructed in reading, but all the nobility are more or less educated; the females of this class teach each other, and are commonly better informed than the males. The Georgian language is peculiar, differing widely from the languages spoken by the surrounding nations.

Georgia was annexed to the Roman empire by Pompey the Great, anno 65 B.C. During the 6th and 7th centuries it was long a theatre of contest between the E. empire and the Persians. In the 8th century a prince of the Jewish family of the Bagratides established the last Georgian monarchy, which continued in his line down to the commencement of the present century. The last prince, George XI., before his death in 1799, placed Georgia under the protection of Russia; and in 1802, it was incorporated with the Russian empire. (*Tournefort; Klaproth; Wilbraham; Letters from the Caucasus; Smith and Dwight; Missionary Researches.*)

GEORGIA, one of the U. States of N. America, and, with the exception of Florida, the most S. territory in the Union; between lat. 30° 22′ and 35° N., and long. 81° and 85° 30′ W.; having N. Tennessee and a small portion of N. Carolina; N.E. and E., S. Carolina and the Atlantic; S. Florida; and W. Alabama. Length, N. to S., 300 m.; breadth variable. Area, 58,000 sq. m. Pop. (1838) 661,702, of which 393,190 were whites, and 268,512 coloured. Along the coast lies a range of low, flat, sandy islands. The mainland for about 60 m. towards the interior is perfectly level; and, for several miles from the shore, consists of a salt marsh of recent alluvion; the whole of the flat country is intersected by swamps, which are estimated to constitute 1-10th part of the whole state. Beyond the swamps which line the coast occurs an extensive range of pine barrens, similar to those of S. Carolina. The Okefinoke swamp, 50 m. long by 30 broad, lies at some distance inland, upon the borders of, and partly within, Florida. This swamp is regularly inundated during the rainy season. At the extremity of the low country there is a barren sandy tract of rather greater elevation, which extends N. as far as the river falls, and is generally regarded as dividing the upper from the lower country. Farther N. the surface becomes gradually more hilly and broken, and the N. extremity of the state comprises some of the most S. ridges of the Appalachian mountain chain, which here rise to about 1,500 ft. above the level of the Atlantic. There are only three harbours on the coast capable of receiving vessels exceeding 100 tons burden, viz. those formed by the mouths of the rivers Savanna, Atalamaha, and St. Mary's. The first of these is navigable by large ships as far as the city of Savannah, 17 m. from its mouth. Three of the principal rivers form the boundaries between Georgia and the adjoining states. The Savannah rises in the S declivity of the Appalachian mountains, and running along the N.E. border of the state, separates it from S. Carolina. The Chattahoochee has its source near that of the Savannah, runs chiefly S., and forms for a considerable distance the boundary between Georgia and Alabama. At the S.W. angle of the state it unites with the Flint, and, on its entrance into Florida, is called the Appalachicola. On the S. the St. Mary's, with a tortuous course of 110 m., forms the boundary of the state for about 80 m. The Atalamaha, formed by the junction of several streams which traverse the centre of the state, falls into the Atlantic, after a course of about 280 m.

Soil, for the most part, very productive. In the low country and the islands, it consists of a light grey sand, gradually becoming darker and more gravelly towards the interior; farther N. it is a black loam mixed with red earth, called the mulatto soil; this is succeeded in the more remote districts by a rich black mould of great fertility. As the elevation of the N. part of the state is estimated at from 1,200 to 1,500 ft. above the level of the islands on the coast, a difference of more than 7 degrees is estimated to exist between the mean temp. of the two extreme points. The N. parts are very healthy, the winters mild; frost and snow frequently occur, but are not severe or of long continuance. In the low country the usual tropical diseases are prevalent. Hurricanes and thunder storms frequently occur in the autumn, at which season the cultivators with their families generally remove either to the islands, or the most N. districts of the state. In the low region the thermometer usually ranges during the summer from 76° to 90° (Fahr.); but it has been known to stand as high as 102° (Fahr.).

Principal agricultural products, cotton, wheat, and other European grains, maize, tobacco, the sugar-cane, indigo, and rice. The coast islands were formerly covered with extensive pine barrens; but they now yield large quantities of *sea-island cotton*, which is not only far superior to that grown on the mainland, but is, in fact, superior to, and fetches a higher price than, any other description of cotton to be found in the market. (*See* CAROLINA, S.) Wheat and other corn are grown chiefly in the central parts along the bottoms of the rivers, and on the slopes of the hills nearly to their summits. The proportion of productive land is much greater in the hilly country than in the plains. The tops of the hills are mostly crowned with forests, composed chiefly of the pine, palmetto, oak, ash, cypress, hickory, black walnut, mulberry, and cedar trees. Bears and deer inhabit the forests; alligators infest the swamps and mouths of the rivers; honey bees are very numerous in the S.

Gold has been found in considerable quantities in the N. part of the state; iron and copper exist in different parts; and there are several valuable mineral springs: good millstone is met with in the central districts. The total value of the gold transmitted to the U. S. mint at Philadelphia, from the mines of Georgia, amounted, down to 1838 inclusive, to 1,799,900 dollars; but the supply seems to be declining, and only 36,000 dollars were furnished during the last-mentioned year, being less than had been sent in any of the preceding years.

Cotton is the great staple; and it, and tobacco, indigo, canes, timber, deer skins, and maize, form the chief exports; the sugar-cane has hitherto been cultivated mostly for home consumption only. From the distance between the N. part of Georgia and its ports, and the difficulty of communication by water, the corn and other produce of the interior have a very limited outlet.

The imports consist chiefly of manufactured goods, E. India produce, wines from the S. of Europe; butter, cheese, fish, &c. from the N. states; and slaves, especially from Virginia. The value of the exports during the year ending 30th of Sept., 1838, was 8,803,839 doll., and that of the imports in the same year only 776,068 doll. In 1837 the state contained 20 banks, and 2 branch banks, with an estimated capital of about 11,790,573 dolls. The state is divided into 76 counties: Milledgeville, near the centre, is the cap.; Savannah, Augusta, Washington, and St. Mary's, are the other chief towns.

The University of Georgia, called Franklin's College, at Athens, was founded in 1788-89. It was intended to embrace the whole system of public education in the state, including the establishment of an academy in each county; but this project has never been accomplished. It was re-organised in 1802, and possesses two edifices, a philosophical and chemical apparatus, a cabinet of minerals, a good library, and a botanic garden. Number of students in 1839, 127. There is a medical college at Augusta. The state has a school fund, and there are numerous and flourishing academies in Savannah, Augusta, and the other chief towns. Several manual-labour schools have been successfully established in different parts. A railroad 200 m. in length, between Savannah and Macon, is in course of construction. A canal 16 m. in length, from Savannah to the Ogeechee river, was completed in 1829; another, 12 m. in length, between Brunswick and the Atalamaha, is in active progress. The legislature consists of a senate of 93 members, and a house of representatives of 207 members, chosen by *all* the citizens and inhab. of the state of full age who have resided in it for the year preceding the election, and paid taxes. The governor is elected by the people, and holds office for 2 years; the senators and representatives are chosen annually. For the administration of justice the state is divided into 10 circuits, each of which has a superior court, and a judge elected by the legislature, with an annual salary of 2,100 doll. There is an inferior court in each county, presided over by five justices, chosen by the people every four years; the justices have no salary. There are courts of oyer and terminer at Savannah and at Augusta. The militia of the state comprises 12 divisions, having, in 1838, a total number of 47,006 men. In 1839, 33 periodical publications were regularly issued in the state.

Georgia was the last settled of the present U. S. founded by the British. It was first colonised by them in 1733, in which year the city of Savannah was commenced by General Oglethorpe. It suffered much during the early period of its settlement from the incursions of the savages, and it was not until 1835 that the Cherokees, the last remnant of the Indian pop., had entirely disappeared. In 1776, it united in the struggle for independence, but continued in the occupation of the British until 1783. It has rapidly gained in importance and wealth upon the earlier established states of the Union. The state sends 9 mems. to the house of representatives, and 2 to the senate in congress. (*Darby's View, &c.; Mitchell's United States; Encyc. Americana; American Almanack*, 1834-40.)

GERA, a town of central Germany, principality of Reuss (younger branch), cap. of the lordship of the same name, on the Elster, 22 m. N.E. Schleitz, and 34 m. S.W. by S. Leipzic. Pop. 9,100. It is well built, is surrounded with walls, and has several suburbs. It possesses 6 public squares, a fine town-hall, 2 churches, 2 hospitals, an orphan asylum, a house of correction, a richly-endowed gymnasium, with a library and cabinet of natural objects, a teachers' seminary, some good citizens' schools, evening and Sunday schools, &c. It has been long noted for its commercial activity; and has manufactures of woollen and cotton fabrics, hats, leather, tobacco, soap, oil-cloth, porcelain, and other earthenware, coaches, and other vehicles; and many cotton-printing and dyeing establishments, breweries, and brick kilns. In its immediate neighbourhood there are some greatly frequented baths. In 1780 Gera was almost wholly destroyed by fire; but it has since been laid out and rebuilt in a much better manner than previously. (*Berghaus; Cannabich.*)

GERACE (an. *Locri*), an inland town of S. Italy, kingd. of Naples, prov. Calabria Ultra, cap. distr. and cant.; on a hill within 4 m. of the Ionian Sea, 46½ m. S.S.W. Catanzaro, and 29 m. N.N.E. Cape Spartivento. Pop. 4,000.? Though rebuilt since the earthquake of 1783, its streets are narrow, mean, and filthy. It has the remains of a castle, a cathedral, 9 par. churches, an hospital, and a foundling asylum: its public edifices were greatly injured by the earthquake alluded to. The ruins of its castle, demolished at an anterior period, show it to have been a fortress of great size and strength. It is said to have been built by the Saracens; and to have been capacious enough to contain a garrison of 18,000 men. The cathedral was formerly a handsome Gothic edifice, but it is now so dilapidated that only a portion of its crypt remains available for public worship. Its ruins contain many fine marble columns, which originally belonged to the ancient city. Gerace is generally supposed to stand either upon or near the site of *Locri Epizephyrii*, so called from its founders being Locrians, and its situation adjacent to Cape Zephyrium. This was one of the oldest, largest, and most prosperous of the Greek cities in S. Italy or *Magna Græcia*. It was mainly indebted for its prosperity and fame to its great legislator Zaleucus, one of the most illustrious of the Grecian political philosophers. Some ruins still remain to attest its former grandeur, among which are those of an aqueduct, of a celebrated Greek temple of Proserpine (sacked by Pyrrhus), and of a temple of Castor and Pollux.

Locri never recovered from the injuries inflicted on her by Pyrrhus. In the second Punic war she sided with the Carthagenians; and having been conquered by the Romans she continued progressively to decline. The present town is supposed to have been founded in the 8th or 9th century. (*Swinburne*, i. 340, 4to. ed.; *Cramer's Ancient Italy*, ii. 404.)

GERMAIN-EN-LAYE (ST.), a town of France, dép. Seine-et-Oise, cap. cant.; on a hill adjoining the Seine, 6 m. N. Versailles, and 9 m. W. by N. Paris. Pop. (1836) 10,624. Though laid out without any fixed rule, it is well built, and its streets are wide, and well paved. It has several large hotels, a public library with 5,200 vols., a theatre, a new corn-market; with manufactures of horse-hair goods, leather, &c.; and an active retail trade. It is, however, chiefly noted for its royal residence, originally built by Charles V. in 1370; reconstructed by Francis I.; and embellished by many succeeding sovereigns, especially Louis XIV., who added to it 5 extensive pavilions, and constructed the fine terrace which extends from it with a breadth of nearly 96 feet for a distance of 1¼ m. between the forest of St. Germain and the Seine. That sovereign expended in all upon St. Germains the sum of 6,455,561 livres; but it is said that he afterwards became disgusted with, and abandoned, the palace, because he could see St. Denis, the burial-place of the kings of France, from its windows! Charles IX. and Henri II., as well as Louis XIV., were born in this palace; it was the residence of Madame de la Vallière; and James II. of England, with most of his family, passed their exile, and died in it. It is now used as barracks, and a military prison. Henri IV. constructed a palace, called the *Château Neuf*, about ½ m. distant from the above: of this there now exist only the ruins. A castle, built here in the 11th century by King Robert, was destroyed by the English in 1346.

The Forest of St. Germain, one of the finest of its kind in France, extends N. of the town, enclosed W., N., and E. by the Seine. It is 9 m. in length by 3 m. in breadth; covers an extent of 8,865 English acres; and is traversed by roads, the aggregate length of which is said to be as much as 1,180 m. (*Hugo*, art. *Seine-et-Oise; Guide du Voyageur.*)

GERMAIN'S (ST.), a bor., market-town, and par. of England, co. Cornwall, hund. East, on the Tidi, near Lynher creek, 19 m. E.S.E. Bodmin, and 196 W. by S. London. Area of par., 10,050 acres (being the largest par. in Cornwall). Pop., in 1831, 2,586. The town is built on a slope, and consists chiefly of one street. The par. church, formerly conventual, and now containing an episcopal choir and prebendal stalls, is a fine old specimen of Saxon architecture, consisting of 2 aisles and a nave: the W. front has 2 towers, between which is an ancient arched doorway, the entrance to the church. The living is in the gift of the dean and canons of Windsor. A free grammar-school and a parochial library have been founded and endowed by the Eliot family, whose seat, Port Eliot, near the church, occupies the site of the ancient priory, and is surrounded by delightful grounds watered by the Tidi. The inhab. chiefly gain their livelihood by fishing and agriculture. Previously to the Reform Act, by which it was disfranchised, this bor. sent 2 mems. to the H. of C.; the right of election was vested in the proprietors of burgage tenements; but of these there were very few, so that the mems. were, in fact, nominated by Lord St. Germains. Markets on Friday: fairs, May 28th, and August 1st, for cattle.

GERMANY (Germ. *Deutschland* or *Teutschland*; Fr. *Allemagne*; It. *Germania*, *Slavonia*). The word Germany is as uncertain in its derivation, as it is often vague and indefinite in its application. The Germans call themselves *Deutsche*, or *Teutsche*, and their country *Deutschland*. The first syllable of this name is derived by those who use this orthography from the verb *deuten*, signifying to interpret or explain; so that *Deutsche* means the people who were intelligible to one another, in contradistinction to the *Wælsche* (Welsh), or Celtic nations, whose language they did not understand. Those who write Teutschland derive the name of the country from the god Tuisco or Teut, mentioned by Tacitus.

The Latin denomination of the country, which we have adopted, is supposed to be derived from the Roman manner of pronouncing the word *Wehrmann*, which signifies soldier, — the character in which the Germans were mostly known to the Romans.

The extent of country comprised under the term Germany has varied in every century since it first became known to the Romans; but our limits preclude our attempting to lay before the reader any account of these variations, or of the growth of that complicated and peculiar system of policy under which the country was placed, at a comparatively early period.

At present Germany comprises all the countries of central Europe, and is bounded N. by Denmark and the Baltic; E. by Prussian Poland, Galicia, and Hungary; S. by the Tyrol and Switzerland; and W. by France, Belgium, Holland, and the German Ocean. Its surface is much diversified; but its mountain tracts lie chiefly in the S.E. and E., while W. and N. the land spreads in spacious sandy plains, intersected by the rivers which run in the same direction from the higher lands towards the sea. The mountains, which may be considered as a N. branch of the great Alpine system of Europe, bear no comparison with the Alps in point of height, for the loftiest summits are only 5,000 ft. high; but they occupy a great space, and diverge in so many various directions through the country, that it is difficult to trace them without the aid of a map. The *Fichtel-gebirge*, however, in the N. part of Bavaria, may be considered as the centre and nucleus of the mountains in central Germany; and from it branch, in four directions, the ranges composing the watershed that divides the rivers of the Black Sea from those of the Baltic and German Ocean. 1. The *Erz-gebirge*, diverging N.E. forms the boundary between Saxony and Bohemia, and has its scarped side S. towards the Eger. Its E. continuations, called the *Sudeten-gebirge*, join the Carpathian ridge, near the sources of the Oder and Vistula. 2. The Bohemian Forest range separates Bohemia from Bavaria. It runs S.E. about 150 m., and then turning N.E., joins the Sudeten-gebirge, near the sources of the March, in long. 16° 40′ E. These ranges, by their re-union, enclose an elevated plain, constituting the kingdom of Bohemia, and drained by the Elbe and its branches, the Eger and Moldau. 3. The Suabian Alps are a low range, branching off S.W. from the central point, and forming the watershed between the affluents of the Rhine and those of the Danube. S. they join the Black Forest range, the connection of which with the Alps is effected by a low chain skirting the Lake of Constance, and joining the main ridge at Mount Septimer. 4. The Thuringian range runs N.W. from the Fichtel-gebirge, and after a course of 50 m., divides into two chains, one running N. into Hanover, and forming the Harz chain which divides the waters of the Weser from those of the Elbe; the other running W. under various names nearly as far as the Rhine, and separating its waters from those of the Weser and its affluents. The hills W. of the Rhine are continuations of the Vosges system. (*See* FRANCE.)

The rivers of Germany are many and important. The largest of these is the Danube (1,800 m. long), which rises in the Black Forest, and is navigable from Pesth to its mouth in the Black Sea. The chief tributaries of the Upper Danube are the Altmuhl, the Naab, and the March, on its N. bank, rising on the S. slopes of the German mountains; and the Iller, the Lach, the Isar, and the Inn, on its S. bank, all rising in the Tyrolese Alps. The Rhine, which rises on Mont St. Gothard, flows through the Lake of Constance, and thence W. to Bâsle: navigable from this place, it turns N., in which general direction it runs as far as Bingen, whence it pursues a course N.N.E. into the German Ocean. Its chief affluents, with the exception of the Moselle and the Maas, are on the E. bank: of these the Neckar, and the Main rise in the Suabian Alps, the Lahn, the Ruhr, and the Lippe in the hills of W. Germany. The Weser is formed by the junction, at Munden, of the Werra and Fulda, which rise in the *Rhön-gebirge*: its course is N. by W. till the junction of the Allar, at which point it turns N.E., and falls into the German Ocean about 40 m. below Bremen. The Elbe rises on the N. side of the plateau of Bohemia, which, after receiving the Moldau and the Eger, it leaves at Schandau, and enters the great N.W. plain of Germany, which it traverses to the German Ocean; its largest affluents from the S. are the Mulda and Saale from the Erz-gebirge, and its chief N. tributary is the Havel. The Oder rises on the N. side of Carpathian range, near its W. termination, and after a general N.N.W. course, and receiving many affluents, falls through the Great Haffe into the Baltic Sea. Besides these rivers, which of themselves constitute a most extensive water-system, there are numerous lakes connected with the rivers: such are the lakes of S. Bavaria and Austria, and the many sheets of water lying on the low plain of N. Germany, between the Oder and the Elbe.

The climate of Germany is far less variable than the nature of its mountain-system, and the range of latitudes in which it lies, would lead us to suppose. If the small strip of Illyria, which borders on the Adriatic Sea, near Trieste, be excepted, scarcely any diminution of warmth is observable between the southern and northern parts, as may best be seen from the following table, which is given by Berghaus: —

Names of Places.	Latitude.	Elevation above the Sea.	Mean Temperature, according to Reaumur's scale.				
			Year.	Winter.	Summer.	Coldest Month.	Hottest Month.
		Toises.					
Stralsund - - - - -	54° 19′	8	8·2°	−1·1°	+17·1°	−3·2°	+17·7°
Berlin - - - - -	52 30	22	8·9	−0·5	+17·9	−2·9	+18·7
Gotha - - - - -	50 57	158	7·9	−1·3	+15·5	−3·2	+16·8
Baireuth - - - - -	49 57	175	7·8	−1·7	+16·0	−2·8	+17·2
Ratisbon - - - - -	49 1	197	8·8	−0·9	+17·8	−2·6	+18·3
Münich - - - - -	48 10	271	8·8	−1·0	+18·2	−1·6	+18·6
Innsbruck - - - - -	47 16	298	9·0	−0·8	+17·8	−2·7	+19·7
Mean - - - -	50° 0′ 20″	175	8·5	−1·	+17·2	−2·7	+18·1

These results, taken along a line drawn through the middle of Germany, show the temperature of the far greater part of the countries of which it is composed; but there are warmer tracts, especially on the western fall, towards the Rhine and the sea. The same author has given another interesting survey along a line drawn through this portion of Germany, in which a similar equality is observable in the extremes of temperature between the N. and the S.; there being only two degrees difference between the mean temperature of Vienna and that of Hamburg.

Names of Places.	Latitude.	Elevation above the Sea.	Mean Temperature (Réaumur).				
			Year.	Winter.	Summer.	Coldest Month.	Warmest Month.
North-west district.		Toises.					
Hamburg - - -	53° 33′	0	8 9°	+0·4°	+17·9°	−1·1°	+18·1°
Brunswick - - - -	52 16	48	9·9	+1·7	+18·6		
Valley of the Rhine.							
Frankfort-on-the-Main - -	50 7	47	9·8	+1·4	+18·3	−0·3	+18·8
Stuttgard - - - -	48 46	127	10·0	+1·0	+18·7	+0·5	+19·5
Mannheim - - - -	49 29	60	10·3	+1·5	+19·5	+0·9	+20·2
Würzburg - - - -	49 47	100	10·4	+0·7	+19·1	+0·3	+20·5
Basin of Vienna.							
Vienna - - - -	48 12	75	10·8	+0·5	+20·4	+1·1	+21·5
Mean of North-western district -	- -	25	9·4	+1·0	+18·2	−1·1	+18·1
— Valley of the Rhine -	- -	80	10·1	+1·1	+18·9	+0·1	+19·7
Mean of the three districts -	- -	65	10·1	+1·0	+18·9	+0·3	+19·7

The vegetation of Germany resembles, in its general character, that of the N. of France. In the S. river valleys the vine flourishes, and walnuts, chestnuts, plums, &c. grow abundantly; but the severity of the winter injures the growth of garden-shrubs and flowering-plants. Only hollies and some of the hardier species of junipers thrive, as even the rivers in the warmest parts freeze, and the Rhine, near Mannheim, as well as the Danube, near Vienna, are usually covered with a coat of ice, notwithstanding their great breadth and the rapidity of their currents. The extreme cold of the winter, although it only lasts in all its violence, in common winters, for a few days, is rendered often very destructive, from the continuance of a less, but still

considerable, cold, which often lasts uninterruptedly for months. The thermometer usually falls once or twice in the course of the winter as low as —5° Fahr., but seldom continues at that figure during twenty-four hours successively. A few degrees below the freezing point is the temperature which frequently lasts for months together in the winter season.

The fall of rain is stated by Berghaus to be, in the four principal regions of Germany, as follows:—

In the region of the Rhine	25 in. 2'''	Paris meas.
Weser	25 - 4 -	—
Elbe & Oder	22 - 2 -	—
Danube	30 -	—

The quantity of rain which falls in summer is more than double the fall of the winter, throughout Germany. The number of rainy days averages 150, that of thunder-storms averages 19 for all Germany; but the latter are very unequally divided. The greatest number of thunder-storms is said to take place in Silesia, where the average amounts to 28 in the year. The smallest number is found in Lower Austria, where their annual number does not exceed 8. The prevailing winds are the W. and N.W.

The first Carlovingian sovereigns of Germany were hereditary monarchs; but, so early as 887, the states, or great vassals of the crown, deposed their emperor, Charles le Gros, and elected another sovereign in his stead. And from that remote period the emperors of Germany continued to be elected, down to our times. Several of the great vassals of the empire had thus early attained to all but unlimited power; and it consisted of a vast aggregation of states of every different grade, from large principalities down to free cities and the estates of earls or counts. The federal tie by which these different states were held together was exceedingly feeble. Their interests and pretensions were often conflicting and contradictory, and they were frequently at war with each other and with the emperor. There was, in consequence, a great want of security; and the wish to repress the numberless disorders incident to such a state of things led, at an early period, to the formation of leagues among the smaller states, and the institution of secret tribunals. The privilege of voting in the election of emperor was restricted to a few of the most powerful vassals, being confined, by the Golden Bull issued by Charles IV., in 1356, to the archbishops of Mayence, Trèves, and Cologne, the duke of Saxony, the count palatine of the Rhine, the margrave of Brandenburg, and the king of Bohemia. The sovereigns of Bavaria, Hanover, Hesse, &c. did not acquire a right to vote till a much later period. Most of the great offices in the empire were hereditary; and the public affairs were transacted in diets or assemblies of the great feudatories and of the representatives of the free cities. But as the diet had no independent or peculiar force to carry its decisions into effect, they were very frequently disregarded. At length, in the reign of Maximilian I., an attempt was made to introduce a more regular system of administration and a better police into the empire.

The progress and object of this change have been described as follows by Mr. K. F. Eichhorn: "A resolution was taken in the year 1500, in which a yearly assembly of the estates of the empire was not numerously attended, to transfer the authority which they exercised to a court to be established in Nuremberg, named the *Reichsregiment*. This court was to consist, under the presidency of the emperor or of his delegate, of members of the diet who might be present, and of 20 deputies from all classes of members of the diet. The whole empire, with the exception of Austria, Burgundy, and the territories of the electors, who were represented by special counsellors, was divided into six circles, for the convenience of electing deputies. The circles were — Franconia, Bavaria, Upper Rhine, Lower Rhine, Westphalia, and Saxony. But this arrangement gave satisfaction to no party. For the emperor, this court was too independent, and it was too active in its proceedings to please those members of the diet who did not sit in it. It only remained assembled two years; and the diet evaded the establishment of a new court more dependent on the emperor. The division into circles was, however, found very convenient as a point of union for the members of the diet, whenever it became necessary to enforce the execution of decrees and sentences, as well as for the purpose of appointing members of the Aulic Chamber. In 1512, two new circles were, therefore, formed out of the territories of the electors (the circles of the Palatinate and Upper Saxony), and as many more out of the lands of Austria and Burgundy. Each of these circles chose, according to ancient custom, at its meetings a captain and delegates, who arranged and conducted the public force."

As this political division was independent of the territorial subdivisions which the changes in families produced, it lasted as long as the empire itself preserved its unity as a political body; and even after the assumption of independence by the king of Prussia, that part of the kingdom of Prussia which previously formed a part of the empire was still included, nominally, at least, in the circles to which it belonged. By their refusal to join in this arrangement of internal police, and to become amenable to the decrees of the Aulic Chamber (*Reichs Kammergericht*), the Swiss cantons finally severed the last tie which united them to the empire. The influence of the kings of Poland caused a similar separation between the empire and the lands belonging to the Teutonic order, on the right bank of the Vistula.

At the period of the outbreak of the French revolution, in 1789, the ten circles of Germany were subdivided into the following territories:—

I. The circle of Austria, belonging entirely to the house of Austria, contained,—
1. The duchy of Lower Austria.
2. Inner Austria, or the duchies of Styria, Carinthia, and Carniola, with Friaul and the district of Trieste.
3. Upper Austria, or the county of Tyrol, with the bishoprics of Trent and Brixen.
4. Fore-Austria, containing the Austrian Breisgau, the margraviate of Burgau, the landgraviate of Nettenburg, the city of Constance, the manors of Altorf and Ravensburg, the towns of Riedlingen, Mengen, and the lordships of Vorarlberg.

II. The circle of Burgundy, belonging to Austria:—
1. The duchies of Brabant, Limburg, Luxemburg, and Gueldres.
2. The counties of Flanders, Hainault, and Namür.

III. The circle of Westphalia, divided between clerical and lay princes:—
1. The bishoprics of Münster, Paderborn, Liege, and Osnabrück.
2. The abbies of Corvey, Stablo, and Malmedy, Werden, St. Cornelis-Münster, Essen, Thorn, and Herfond.
3. The duchies of Cleves (Prussian), Juliers and Berg (to the elector palatine), Oldenburg (to the bishop of Lübeck).
4. The principalities of Minden (Prussia), Werden (elector of Hanover), Nassau (counties of Diez, Siegen, Dillenburg, and Hademar, belonging to the stadtholder of Holland), East Frisia, Mörs, and Gueldres (Prussian).
5. The counties of Mark, Ravensberg, Tecklenberg, and Lingen (Prussian); Schaumburg (Hesse-Cassel and Lippe); Bentheim, Steinfurt, Hoya, and Diepholz (Hanover and Cassel); Riesberg (Prince Kaunitz); Pyrmont (Count Waldeck); Wied, Sayn, Virnenburg, Spiegelberg, Gronsfeld, Reckheim, Holzapfel, Blankenheim and Geroldstein, Kerpen, Lommersum, Schleiden, Hallermund.
6. The lordships of Anhalt, Witten, Winneberg and Beilstein, Gehmen, Gimborn and Neüstadt, Wickerad, Mylendrek, Reichenstein.
7. The free imperial cities Cologne, Aix-la-Chapelle, and Dortmund.

IV. The circle of the Palatinate, divided between one lay and three clerical princes:—
1. The electorate of Mayence, the archbishop of which ranked as the first elector and primate of the German empire. The electorate consisted of the archbishopric of Mayence, the city of Erfurt, the district of Eichsfeld, and of the town and district of Fritzlar.
2. The electorate and archbishopric of Treves.
3. The archbishopric of Cologne and the duchy of Westphalia, which constituted the electorate of Cologne.
4. The palatinate of the Lower Rhine.
5. The principalities of Aremberg.
6. The bailiwick of Coblenz (Teutonic order).
7. The lordship Beilstein.
8. The burgraviate of Reineck.
9. The county of Lower Isenburg.

V. The circle of the Upper Rhine, divided amongst a number of territorial lords, the most powerful of whom was the landgrave of Hesse-Cassel:—
1. The bishoprics of Worms, Spires, Strasburg, Basle, and Fulda.
2. The abbey of Weissenburg.
3. The principality of Heitersheim.
4. The abbies of Prüm and Odenheim.
5. The principalities of Simmern, Lautern, Veldenz, and Deuxponts.
6. Landgraviate of Hesse, in two lines, Cassel and Darmstadt.
7. Principality of Hersfeld (Hesse-Cassel).
8. The county of Sponheim (Palatinate and Baden-Baden), Salm and Nassau; Waldeck, Hanau-Münzenberg, Solms, Königstein (elector of Mainz and Count Stolberg); Upper Isenburg; the possessions of the count of the Rhine and the Wildgrave, viz., the county of Salm, the lordship of Grumbach, &c.; the counties of Leiningen, Witgenstein, Falkenstein (belonging to the emperor), Reipoltskirchen, Kriechingen, Wartenberg.
9. The lordships of Hanau-Lichtenberg, Bretzenheim, Dachstuhl, and Ollbrück.
10. The free imperial cities Worms, Spires, Frankfort-on-the-Main, Friedberg, and Wetzlar.

VI. The Suabian circle. Amongst the many princes of this circle, the duke of Wirtemberg and the margrave of Baden were the most powerful:—
1. The bishops of Constance and Augsburg.
2. The abbies of Ellwangen, Kempten, Lindau, and Buchau.
3. The duchy of Wirtemberg.
4. The margraviate of Baden.
5. The principalities of Hohenzollern (Hechingen and Sigmaringen).
6. The county of Thengen, the counties of Heiligenstadt and Baar (prince of Fürstenberg), lordships of the princes and counts of Otting, the landgraviate of Kletgau (Prince Schwarzenberg), and the principality of Lichtenstein.
7. The domains of 17 abbots and 4 abbesses.
8. The lordships of 18 counts and barons.
9. Thirty-one free imperial cities: viz., Augsburg, Ulm, Eslingen, Reütlingen, Nördlingen, Schwäbisch Hall, Ueberlingen, Rothweil, Heilbronn, Gmünd, Memmingen, Lindau, Dinkelspühl, Biberach, Ravensburg, Kempten, Kaufbeuren, Weil, Wangen, Ismy, Leutkirch, Wimpfen; Giengen, Pfullendorf, Buchhorn, Aalen, Bopfingen, Buchau, Offenburg, Gengenbach, and Zell am Hammersbach.

VII. The circle of Bavaria, in which the elector of Bavaria and the bishop of Salzburg took the lead: —
1. The archbishop of Salzburg.
2. The bishoprics of Freising, Ratisbon, and Münich.
3. The abbies of Berchtisgaden, and
4. Meder and Ober-Münster.
5. The duchy of Bavaria, with the Upper Palatinate.
6. The principality of Neuberg and Sulzbach.
7. The landgraviates of Leuchtenberg and Sternstein.
8. The counties of Haag and Ortenburg.
9. The lordships of Ehrenfels, Salzburg, Pyrnbaum, Hohenwaldeck, and Breiteneck.
10. The free imperial city of Ratisbon (Regensburg).

VIII. The circle of Franconia included —
1. The bishoprics of Bamberg, Würzburg, and Eichstadt.
2. The master of the Teutonic order's territories at Mergentheim (Deutschmeister).
3. The principalities of Baireuth and Anspach.
4. The counties of Henneberg and Schwarzenberg.
5. The principality of Hohenlohe.
6. The counties of Castell, Wertheim, Rieneck, and Erbach.
7. The lordships Limburg, Seinsheim, Reichelsberg, Wiesentheid, Welzheim, and Hausen.
8. The free cities, Nüremberg, Rothenburg-on-the-Tauber, Windsheim, Schweinfurt, and Weissenburg.

IX. The circle of Lower Saxony: —
1. Duchy of Magdeburg (Prussia).
2. Duchy of Bremen, principalities of Lüneburg, Grubenhagen, and Kalenberg (elector of Hanover).
3. Duchy of Wolfenbüttel, principality of Blankenburg.
4. Principality of Halberstadt (Prussia).
5. Duchy of Mecklenburg-Schwerin and Strelitz.
6. Duchy of Holstein, with the county of Ranzau, and the lordship of Pinneberg (king of Denmark).
7. The bishopric of Hildesheim.
8. The duchy of Saxon-Lauenburg (Brunswick).
9. The bishopric of Lübeck.
10. The principality of Schwerin (duke of Mecklenburg-Schwerin).
11. The principality of Ratzeburg (duke of Mecklenburg-Strelitz).
12. The free imperial cities, Lübeck, Hamburg, Bremen, Goslar, Mühlhausen, Nordhausen.

X. The circle of Upper Saxony: —
1. The duchy of Pomerania (of which that part beyond the Prenne belonged to Sweden, the remainder to Prussia).
2. The mark of Brandenburg (belonging to the king of Prussia).
3. The principality of Anhalt, divided amongst four princes: — Dessau, Bernburg, Zerbst, and Köthen.
4. The electorate of Saxony (Saxon Albertine line).
5. Principalities of Weimar, Eisenach, Coburg-Gotha, Altenburg (dukes of Saxony, of the Ernestine line).
6. The abbey of Quedlinburg.
7. The county of Schwarzburg (Sondershausen, and Rudolstadt), Mannsfeld (Prussia and Hesse), Stolberg, and Wernigerode.
8. The lordships of Reuss and Schönburg and the county of Hohenstein.

The Slavonic countries, which were not included in any circle, were —
The kingdom of Bohemia.
The margraviate of Moravia.
The duchy of Silesia, so far as it was Austrian, the margraviates of Upper and Lower Lusatia, the duchy of Silesia (Prussian), and the county of Glatz.

The lands held directly of the emperor, and not included in any circle, were —
The counties of Mumpelgard and Homberg.
The lordships, Asch, Wasserburg, Freüdenberg, Rheda, Jever, Dyck, Schönau, Wylwe, Richold, Stein, Dreyss, Landskron, Rhade, Saffenberg, Schaumburg, Oberstein, Schauen, Kniphausen, and Hörstgen.
The abbies and convents, Elten, Kappenberg, and Burscheid.
The free imperial towns, Alschenhausen in Suabia, Althausen in Franconia, Sulzbach and Soden near Frankfort-on-the-Maine, with the freeholders on the heath of Leütkirch.

Such were the territorial divisions of the German empire at the period of the outbreak of the French revolution, according to Berghaus, from whom the following statements are likewise taken: —

Every circle had its diet, in which the clerical and secular princes, the prelates, the counts and barons, and the free imperial cities, formed five benches or colleges.

Affairs of general importance to the empire at large were treated by the imperial diet, which the emperor had the power of summoning wherever he pleased; but which, since 1663, has been constantly assembled at Ratisbon. In 1789, the members of the diet were as follows: —

1. The college of electors: Mayence, Trèves, Cologne, the Palatinate, Brandenburg, Saxony, Bavaria (since 1623), and Brunswick-Lüneburg (since 1692).
2. The college of the clerical and secular princes, bishops, margraves, counts, &c.; the numbers of the clerical members being 36, and of the secular lords, 63.
3. The colleges of the free imperial cities, then 54 in number.

In 1791, began the memorable contest with revolutionary France, which ended in the overturn of the old Germanic constitution, which was tottering with age and too far gone in decay to bear regeneration. The treaty of Campo Formio, the first that history records in which the Rhine was acknowledged as the frontier of France, decreed an indemnification to those princes who lost by the cession · and this indemnification could only be obtained by the spoliation of some others whose rights were equally indefeasible, in the heart of the empire itself. On the 25th of January, 1803, a decision was come to by the plenipotentiaries assembled for the arrangement of this matter, the import of which was as follows: —

The Holy Roman Empire, as that of Germany was styled, remained as it was divided into circles, but which, with the total loss of the circle of Burgundy, and of the lands on the left bank of the Rhine, were reduced to nine, whose boundaries it was proposed to regulate anew. This regulation was, however, prevented by the wars which so quickly succeeded each other. The right to sit and vote in the diet remained, as formerly, attached to territories held directly as fiefs of the empire; and the place of the convocation of the diet remained at Ratisbon. The colleges remained also three in number; the first being the College of Electors, who were ten in number; one clerical, — the elector archchancellor; and nine secular, — Bohemia, Bavaria, Saxony, Brandenburg, Brunswick-Luneburg, Salzburg, Wirtemberg, Baden and Hesse-Cassel. The electorate of Mayence had merged into that of the archchancellor, and the Palatinate into the electorate of Bavaria; Trèves and Cologne had disappeared, and four new electorates had been created.

The second College — of Princes — counted 131 votes.

The College of Towns was composed of six with votes: Hamburg, Lübeck, Bremen, Frankfort-on-the-Maine, Augsburg, and Nuremberg. The other territories, enumerated above as not being included within the circles, remained as they were, nor did any change take place in the extent or position of the Slavonic countries.

Napoleon, who, since 1799, had directed the foreign policy of the French, not satisfied with this reduction of the power of the empire, now conceived the design of effecting its final dissolution. The treaty of Presburg, in 1805, which followed the battle of Austerlitz, gave him the means of carrying this project into effect, by forming a confederation of German princes, called the Confederation of the Rhine, who, uniting into a corporate body, in 1807, placed themselves under the protectorate of the emperor of the French. The wars which followed, with Prussia, in 1807, and with Austria, in 1809, gave Napoleon the power of altering the territorial distribution of Germany at pleasure. He accordingly created for his brother Jerome the new kingdom of Westphalia, and for his brother-in-law Joachim Murat, the grand duchy of Berg, and raised those members of the Confederation of the Rhine who supported his cause to new dignities and an openly recognised independence as sovereigns. Under these circumstances, the emperor, Francis II., by a solemn act, renounced the style and title of Emperor of Germany, on Aug. 6. 1809. In the following year, Napoleon incorporated the coasts of the German Ocean with the French empire, and divided them into departments; thus separating from Germany a district peopled by more than 1,100,000 inhab. It might have been expected that the ancient distinction, to which allusion has before been made, between high and low German countries, would, on this occasion, have been made the basis of new political divisions; but the circumstance seems to have been altogether overlooked, and can, at most, only explain the indifference with which the people of the north of Germany allowed themselves to be transferred from one hand to another.

The termination of the war with Russia, or as it is called in Germany, "the war of liberation," restored Germany to its geographical and political position in Europe, but not as an empire acknowledging one supreme head. A confederation of 35 independent sovereigns and 4 free cities replaced the elective monarchy, that fell under its own decrepitude. In the choice of the smaller princes, who were to become rulers, as well as of those who were obliged to descend to the rank of subjects, more attention was paid to family and political connection than to the old territorial divisions under the empire. The clerical fiefs, and the greater part of the free imperial cities, were incorporated into the states of the more powerful princes, upon the dissolution of the empire, and were not re-established. Only four cities remained in the enjoyment of their political rights.

The signing and ratification of the Act of Confederation took place, after long discussion, on 8th June, 1815. The following are the principal stipulations of the treaty.

1. The sovereigns and free cities of Germany, including their majesties the emperor of Austria, and the kings of Prussia, Denmark, and the Netherlands; the emperor and king of Prussia, for the whole of their territories, formerly belonging to the German empire; the king of Denmark, for Holstein; and the king of the Netherlands, for Luxemburg, agree to unite to form an eternal league, to be denominated the German Confederation (*der Deutsche Bund*).

2. The object of this confederation is the maintenance of the security of Germany, internally and externally, and the assertion of independence and integrity of the respective Germanic states.

3. All members of the confederation have, as such, equal rights. They all bind themselves equally to observe inviolably the act of union.

4. The affairs of the confederation are managed by the diet, in which every member is represented, either by a separate or by a joint vote, in the order of the annexed list, but without prejudice to the rank of the sovereigns. In the committee the members are represented by 17 plenipotentiaries.

5. Austria enjoys the right of presiding in the diet. Every member of the diet has the right of making propositions, and of bringing forward measures for discussion; and the president is bound to submit them to consideration within a certain term, to be hereafter fixed.

6. Propositions relating to the adoption or alteration of the fundamental laws of the confederation, or which concern its organisation, or the adoption of establishments calculated in any way to be generally advantageous to the members, must be submitted to a full assembly of the diet, in which every individual member has one or more votes according to the size of each state.

It remains a matter for future discussion whether any joint votes shall be allowed to the mediatized nobles of the empire, which shall be considered when the organisation of the diet is under consideration.

The territories of which the German Confederation is now (1850) composed are —

States.	Area in Germ. sq. m. 15 to a degree.	Area in Eng. sq. m. 69·12 to a degree.	Population.	Population to a Germ. sq. m.	Contingent of Men to Army of Confederation.	Votes in full Diet.	Votes in Committee of Confederation.	Place in the Diet.
1 Austrian empire - - -	3,580·5	76,014	11,893,182	3,325	94,822	4	1	i
2 Kingdom of Prussia - -	3,365·94	71,459	12,249,126	3,639	79,484	4	1	ii
3 — Bavaria - -	1,794·3	29,601	4,504,874	3,231	35,600	4	1	iii
4 — Saxony - -	271·83	5,771	1,836,433	6,755	12,000	4	1	iv
5 — Hanover - -	698·65	14,833	1,758,856	2,517	13,054	4	1	v
6 — Wirtemberg -	360·4	7,651	1,743,827	4,815	13,955	4	1	vi
7 Grand duchy of Baden - -	278·5	5,913	1,349,930	4,846	10,000	3	1	vii
8 Electorate of Hesse - -	208·9	4,435	732,073	3,504	5,679	3	1	viii
9 Hesse Darmstadt - -	177	3,758	852,679	5,469	6,195	3	1	ix
10 Duchy of Holstein - -	175·5	3,726	526,850	3,002	3,600	3	1	x
11 Grand duchy of Luxemburg and Limburg - -	86·7	1,841	389,319	4,490	2,556	3	1	xi
12 Duchy of Brunswick - -	72·08	1,530	268,943	3,731	2,096	2	1	xiii
13 Grand duchy of Mecklenburg Schwerin -	228	4,840	528,185	2,317	3,580	2	1	xiv
14 Duchy of Nassau - - -	82·37	1,749	418,627	5,082	4,039	2	with Brunswick	xiii
15 Grand duchy of Saxe-Weimar -	66·8	1,418	257,373	3,853	2,010	1	} 1	} xii
16 Duchy of Saxe-Coburg Gotha -	37·6	798	147,195	3,912	1,116	1		
17 — Saxe-Meiningen -	45·7	970	160,515	3,512	1,150	1		
18 — Saxe-Altenburg -	24	510	129,589	5,399	982	1		
19 Grand duchy of Mecklenburg-Strelitz -	36·1	766	96,292	2,667	718	1	with M. Schwerin	xiv
20 — Oldenburg and Kniphausen	113·95	2,419	278,909	2,448	2,829	1	} 1	} xv
21 Duchy of Anhalt Dessau -	17	361	63,082	3,710	529	1		
22 — Bernburg -	14·19	301	48,844	3,040	370	1		
23 — Köthen -	15	318	43,120	2,874	325	1		
24 Principality of Schwarzburg-Sondershausen -	15·4	327	58,682	3,810	451	1		
25 — Rudolstadt - -	15·6	331	63,891	4,416	539	1		
26 — Hohenzollern Hechingen -	5·5	117	20,143	3,662	145	1	} 1	} xvi
27 — Lichtenstein -	2·5	53	16,351	2,540	55	1		
28 — Hohenzollern-Sigmaringen -	15·8	335	45,431	2,854	356	1		
29 — Waldeck - -	21·7	461	58,753	2,707	519	1		
30 — Reuss (elder branch) -	6·8	144	33,803	4,970	223	1		
31 — Reuss (younger branch) -	21·1	448	77,216	3,650	522	1		
32 — Schaumburg-Lippe - -	9·75	207	28,837	2,830	210	1		
33 — Lippe Detmold -	20·6	437	108,236	5,254	721	1		
34 Landgraviate of Hesse Homburg	5	106	24,373	4,874	200	1	w. Hesse, Elec., &c.	ix
35 Free city of Lübeck - -	5·98	127	47,197	7,893	407	1	} 1	} xvii
36 — Frankfort - -	1·8	38	68,240	37,911	693	1		
37 — Bremen - -	5	106	72,820	14,564	485	1		
38 — Hamburg - -	7·1	151	188,054	26,559	1,298	1		
Total - - -	11,510·64	244,370	41,196,509	3,580	303,493	70	17	

7. The committee decides by a majority of votes in how far a subject is adapted for the consideration of the full assembly.

The propositions to be subjected to the decision of the full diet must be prepared and brought to maturity in the committee. The decision in both assemblies is by a majority of votes, but in the plenum, the majority must amount to two thirds of the votes.

When the votes are equally divided in the committee, the president has the casting voice.

But where the adoption or alteration of fundamental laws is concerned, or the rights of individual members, or in religious matters, no resolution can be adopted by the committee alone, nor can the full assembly decide by a mere majority of votes.

The committee of the diet is constantly assembled, but may adjourn its sittings when the affairs that have been submitted to its consideration are disposed of.

8. Respecting the order in which the votes of the members are collected, no discussion shall take place during the organisation of the confederation, nor shall any accidental order which may arise during this period be prejudicial to the rights of the members, or be considered as establishing a precedent.

When the organisation of the league is concluded, the diet will take up the question of precedence for definitive arrangement, and will then adhere as closely as possible to the usage of the former diet of the empire, but especially to that fixed by the decree of the imperial deputation (of 1803). But this order of voting is to have no influence in fixing the rank of the individual members, nor upon their order of precedence on other occasion than that of voting in the diet.

9. The place of assembly for the diet is Frankfort-on-the-Maine.

10. The first subject which shall take up the attention of the diet upon its opening must be the drawing up of the fundamental laws of the confederation, and its organisation in respect to its relations with foreign powers, its military and internal arrangements.

11. All the members bind themselves for the protection of Germany against the attacks of any foreign power, as well as for the security of each individual state; and guarantee to each other mutually the possessions of each state which are comprehended within the confederation.

When war has been declared by the confederation, no member of the confederation can enter into separate negotiations with the enemy; nor can separate truces or treaties of peace be concluded by individual members.

The members of the league reserve to themselves the right of making alliances of every kind, but bind themselves not to enter into any which could be prejudicial to the security of the confederation, or of any of its members.

12. The members further bind themselves under no pretence to declare war against one another, nor to pursue their mutual differences by force of arms, but engage to submit them to the diet.

The diet is in such cases competent to attempt a reconciliation, by the appointment of a select committee; and should this not prove successful, to procure a decision from a well-organised court of arbitration, whose sentence is implicitly binding upon the disputing parties.

13. In all the states of the confederation, a constitution based on representation by estates shall be introduced (*Landständische Verfassung*).

A further and more detailed declaration of the objects of the league, as well as of the mode of conducting the affairs of the confederation, was published on the 15th May, 1820. This document, with the original act, as given above, and the resolutions of the diet, principally relating to affairs of internal police, published in 1832, may be regarded as the fundamental laws of the confederation.

Since the publication of these decrees, and especially within the last 3 years, very considerable changes have been attempted in the constitution of the Germanic body; and it is probable that at no distant period it will be dissolved, or reorganised on a new footing. The influence of Prussia is gradually becoming more and more paramount in the N., and several of the smaller states have already denuded themselves of their independence, and become integral portions of her territories. But Austria, Bavaria, Wirtemberg, and the other more considerable states belonging to the confederation, necessarily regard the progress of Prussia with the greatest jealousy; so that the probability seems to be that the confederation, if it be not wholly dissolved, will, at all events, be split into two — the Northern and the Southern Unions. The attempt to establish a central government in Frankfort that should coerce the entire confederation could not possibly succeed. It might have been otherwise had it been established on the ruins of the Austrian and Prussian states. But so long as they preserve their power and independence, it is evident that no central authority can have any real influence; and that it can exist only by sufferance, or so long as they approve of its measures.

German Customs' League. — Until a very recent period, each of the states into which Germany is divided had its own custom-houses, and its own tariff and revenue laws; which frequently differed very widely indeed from those of its neighbours. The internal trade of the country was, in consequence, subjected to all those vexatious and ruinous restrictions that are usually laid on the intercourse between distant and independent states. Each petty state endeavoured either to procure a revenue for itself, or to advance its own industry, by taxing or prohibiting the productions of those by which it was surrounded; and customs' officers and lines of custom-houses were spread all over the country! Instead of being reciprocal and dependent, every thing was separate, independent, and hostile: the commodities admitted into Hesse were prohibited in Baden, and those prohibited in Wirtemberg were admitted into Bavaria. It is admitted on all hands that nothing has contributed so much to the growth of

industry and wealth in Great Britain, as the perfect freedom of internal industry we have so long enjoyed, and that intimate correspondence among the various parts of the empire, which has rendered each the best market for the products of the other. How different would have been our present condition had each county been an independent state, jealous of those around it, and anxious to exalt itself at their expense! But, until within these few years, this was the exact condition of Germany; and, considering the extraordinary obstacles such a state of things opposes to the progress of manufactures, commerce, and civilisation, the wonder is, not that they are comparatively backward in that country, but that they should be so far advanced as they really are.

But, thanks to the intelligence and perseverance of Prussia, this selfish anti-social system has been well nigh suppressed; and the most perfect freedom of commerce is now established among the great bulk of the Germanic nations. The disadvantages of the old system had long been seen and deplored by well-informed men; but so many interests had grown up under its protection, and so many deep-rooted prejudices were enlisted in its favour, that its overthrow seemed to be hopeless, or, at all events, exceedingly distant. The address and resolution of the Prussian government have, however, triumphed over every obstacle. Being fully impressed with a strong sense of the many advantages that would result to Prussia and Germany from the introduction of a free system of internal intercourse, they pursued the measures necessary to bring it about with an earnestness that produced conviction, and with a determination, *coute qui coute*, to carry their point.

The first treaties in furtherance of this object were negotiated by Prussia with the principalities of Schwarzburg Sondershausen and Schwarzburg Rudolstadt, in 1818 and 1819, on the principle that there should be a perfect freedom of commerce between these countries and Prussia; that the duties on importation, exportation, and transit, in Prussia and the principalities, should be identical; that these should be charged along the frontier of the dominions of the contracting parties, and that each should participate in the produce of such duties in proportion to its population. All the treaties subsequently entered into have been founded on this fair and equitable principle; the only exceptions to the perfect freedom of trade in all the countries comprised within the league or tariff alliance being confined, 1st, to articles constituting state monopolies, as salt and cards, in Prussia; 2d, to articles of native produce, burdened with a different rate of duty on consumption in one state from what they pay in another; and 3d, to articles produced under patents, conferring on the patentees certain privileges in the dominions of the states granting the patents. With these exceptions, which are not very important, and are daily decreasing, the most perfect freedom of commerce exists among the allied states.

Since 1818, when the foundations of the alliance were laid, it has progressively extended, till it now comprises more than four fifths of the Germanic states, exclusive of Austria. Ducal Hesse joined the alliance in 1828, and electoral Hesse in 1831; the kingdoms of Bavaria, Saxony, and Wirtemberg joined it afterwards, as have Baden, Nassau, and almost all the smaller states by which it had not been previously joined, with the exception of Hanover, Mecklenburg-Schwerin, Mecklenburg-Strelitz, Oldenburg, and Brunswick.

Throughout the whole extent of this immense country, from Aix-la-Chapelle, on the confines of the Netherlands, eastward to Tilsit, on the confines of Russia, and from Stettin and Dantzic, southwards, to Switzerland and Bohemia, there is nothing to interrupt the freedom of commerce. A commodity, whether for consumption or transit, that has once passed the frontier of the league, may be subsequently conveyed, without let or hinderance, throughout its whole extent. Instead of being confined within the narrow precincts of their own territories, the products of each separate country of the alliance may now be sent to every one else; each will, in consequence, apply itself, in preference, to those departments in which it has some natural or acquired advantage; and each will have to depend for its success, not on the miserable resource of customs' regulations, but on its skill and industry. The competition thence arising will be most salutary; and, should the peace of Europe be preserved, we run little risk in saying, that all sorts of industry will make more progress among the states comprised within the tariff alliance, during the next ten years, than they have done during the previous half century.

An assembly of representatives from the allied states meets annually, to hear complaints, adjust difficulties, and make such new enactments as may seem to be required. The Prussian tariff has been adopted, with certain modifications, and is now the only one in force. The duties are received into a common treasury, and are apportioned according to the population of each of the allied states. In addition to its other advantages, the new system has reduced the cost of collecting the duties to a mere trifle, compared with its former amount; and has enabled hundreds of custom-houses, and thousands of customs' officers, to be employed in the different departments of industry.

The existing discrepancy in the weights and measures used in different parts of Germany occasions considerable inconvenience; and we are glad to observe that the equalisation of weights and measures, and their reduction to a common standard, in all the allied states, is declared to be one of the objects of the league.

It is also expressly provided that the tolls, or other charges in lieu thereof, shall, in all cases, whether they belong to the public, or to private individuals, be limited to the sums *required to keep the roads in a proper state of repair;* and that the tolls existing in Prussia shall be considered as the highest that are to be levied, and shall not in any case be exceeded.

It was at first supposed by many persons in this country, and the opinion is not yet entirely abandoned, that the Prussian league was in some degree directed against us, and that, at all events, it threatened to be very injurious to our trade with Germany; we do not, however, believe that there is any foundation whatever for either of these opinions. The alliance was planned, and brought to its present advanced state, in the view, and with the intention, of putting down the galling and innumerable restraints by which the intercourse of the German states with each other was formerly interrupted; and not with the intention of throwing any obstacles in the way of the trade of the alliance with foreign countries: it is, indeed, quite absurd to suppose that it should have this effect. The freedom of internal commerce will do ten times more to promote the industry and prosperity of the allied states than any other measure, or system of measures, that their governments could have adopted; and, as population increases, and the inhabitants become more industrious and wealthy, there will, no doubt, be an augmented demand for foreign products. The league is now no new thing. It was formed several years since, and has been progressively augmented; but, hitherto, it has not had the slightest influence in diminishing our intercourse with Germany; our exports to it, including Holland and Belgium, being greater at present than at any former period! Generally speaking, the duties on imports are reasonable; at least, on all the finer descriptions of goods. It never, in fact, can be the policy of the alliance to make them oppressive; for, though certain states might erroneously suppose that their interests would be promoted by such means, others would undoubtedly be of a different opinion, and would resist any attempt to carry them beyond a reasonable amount. It is a mistake to suppose that Prussia has an overwhelming influence in the assembly. She must conciliate the other states, and carry them along with her; and this can only be done by acting on liberal principles, and with a view to the common interest of the alliance.

Besides, if any of the existing duties be exorbitant, or if any of them, that are at present moderate, should be subsequently raised to an exorbitant pitch, does any one suppose that the over-taxed articles would not be immediately smuggled into all parts of the league? We, who occupy an island, and have revenue cruisers and coast-guards on all the seas and shores most accessible to the smuggler, know from experience that it is not possible to hinder over-taxed commodities from making their way, in immense quantities, into our markets. But the facilities for smuggling into the territories of the league are incomparably greater. It has a land frontier of several thousand miles; and though the whole Prussian army were employed for that purpose, it would be found that it was utterly impotent to prevent the territories of the league from being deluged with such over-taxed commodities as were in demand by the inhabitants.

We are glad to be able to strengthen our view of the influence and objects of the Prussian commercial league, by laying before the reader the following extract from a work printed by order of the House of Representatives of the American States. "Prussia," it is there said, "has evidently taken the lead in this wise and important measure, to which the smaller states have gradually acceded. The whole commercial policy of this enlightened power has been distinguished for its liberality, being founded on the desire of placing her intercourse with all nations on the basis of reciprocity. The commercial league of Germany is intended to carry out this principle, and not to be directed, as has been supposed, against any particular nation; as it is well known that Prussia, in her treaties with maritime powers, has invariably adopted the system of reciprocity, to whatever extent those with whom she negotiates are willing to carry it. The establishment of this community of commercial interests forms a part of the fundamental compact by which the new Germanic confederation was created, after the dissolution of the Confederation of the Rhine; to be subsequently adopted, however, at the option of such of the co-estates as should choose to accede to it. Its effects cannot fail to promote commerce, and every other branch

of industry, as it removes all those vexatious and endless difficulties which previously obstructed the freedom of intercourse. Navigable rivers and highways are now opened to the unfettered use of the German people; the customs and toll-houses, with their officers and barriers, have been withdrawn from the interior, and the whole intercommunication resembles that of the subjects of any one of the states within its own territories. To these benefits may be added the assured prospect of improvement in the finances of the great and smaller sovereignties composing the league. This advantage will grow out of the simplicity or unity of the new system, a saving in the cost of collection, and from the increased consumption which renovated industry and progressive prosperity so invariably cause" (*Digest of Customs' Laws*, vol. iii. p. 227.)

The repeal of the restrictions that formerly existed on the importation of corn into this country will be peculiarly advantageous to Germany; for it is abundantly certain that we shall derive a considerable portion of our foreign supplies from the Elbe and other German sources. We, also, admit the wool of Germany duty free; and the discriminating duty on foreign timber has been greatly reduced, and will, most probably, at no distant period, be wholly done away with. The influence of this liberal policy cannot fail to be felt and appreciated by the Germans; and we feel assured that, in the end, it will lead them to adopt a similar system.

The *Internal Commerce* of the German states is greatly promoted by the Rhine, the Elbe, the Weser, the Oder, the Danube, and other great rivers by which they are traversed; and by the numerous canals by which the rivers are connected, and the transit of goods facilitated. Latterly, too, the railway system has been introduced into Germany; and has been more extended in it than in any other country, with the exception of England, the U. States, and, perhaps, Belgium. All the great towns are now connected by railways. And notwithstanding the difficulties that oppose their construction it is probable that they will speedily unite the Baltic and N. Sea with the Mediterranean and the Adriatic. This facility of communication will have the most powerful influence not merely on the natural and productive capacities of the country, but on its political state and prospects. And it may be safely affirmed that it will do far more than anything else that can be done to soften down local prejudices and animosities, and to combine the different Germanic states into one great people. We subjoin, from Dr. Lardner's work on railways, a table illustrative of the magnitude, &c., of the German railway system.

TABLE showing the Proportions in which the German Railways on the 1st of Jan. 1847, were distributed among the several States.

	Open.		In progress.		Adopted.		Contemplated.	
	Miles.	Miles per Cent. of total Length.	Miles.	Miles per Cent. of total Length.	Miles.	Miles per Cent. of total Length.	Miles.	Miles per Cent. of total Length.
Austria	725·60	25·62	231·39	10·79	160·0	12·11	296·00	[illegible]
Prussia	1,141·60	40·54	572·50	26·65	628·34	47·91	778·25	40·56
Duchies of Anhalt	52·20	1·85						
Kingdom of Saxony	178·16	6·32	149·70	6·98	4·61	0·36	9·28	0·48
Saxon Duchies	13·92	0·49	44·10	2·05	88·10	6·84	18·53	0·96
Bavaria	151·17	5·33	448·00	20·70	44·10	3·41	331·80	17·26
Würtemburg	24·33	0·86	149·70	6·98	32·48	2·52	118·20	6·16
Grand Duchy of Baden	161·14	5·66	35·80	1·67	-	-	124·00	6·45
Grand Duchy of Hesse	34·90	1·23	44·10	2·05	40·06	3·15	2·32	0·12
Nassau	23·70	0·81	3·18	0·17	-	-	74·30	3·86
Free city of Frankfort	5·80	0·20	10·41	0·49				
Electorate of Hesse	-	-	179·80	8·46	3·62	0·28		
Duchy of Brunswick	75·80	2·58	-	-	6·63	0·51		
Kingdom of Hanover	59·50	2·10	155·70	7·29	246·9 3	19·19		
Schaumbergluppe	-	-	15·59	0·73				
Free cities of Hamburg, Lübeck, and Bremen	9·28	0·34	2·32	0·12	-	-	18·54	0·96
Duchy of Mecklenburg	46·40	1·64	95·10	4·44	-	-	69·30	3·62
Duchy of Holstein and Lauenburg	121·50	4·40	9·28	0·43	44·10	3·42	80·30	4·18
	2,288·0	100·0	2,138·0	100·0	1,299·0	100·0	1,921·0	100.0

GERONA (an. *Gerunda*), a fortified city of Spain, Catalonia, cap. correg. of same name; on the declivity, and at the foot of a steep mountain, on the Ter, 50 m. N. E. Barcelona. Pop., in 1845, 7,661. The plan of the city is nearly triangular. At the commencement of the Peninsular war, during which it suffered greatly, Gerona was an important fortress; being surrounded with old walls in good repair, and further defended by the citadel of *Monjuiz*, a square fort 720 ft. in length on each side, with bastions, outworks, &c., placed on an eminence about 60 fathoms distant, commanding the city; besides which there were 4 forts, with redoubts upon the high ground above it. It is still partly surrounded by walls; but Monjuiz is its only outwork remaining. It is now, says Inglis, chiefly noted for the number of its religious edifices; there are no fewer than 13 churches, besides the cathedral, and 11 convents. The principal buildings are the cathedral and the collegiate church of San Felice. The former, built on the ridge of the mountain, "displays a majestic front at the top of three grand terraces ornamented with granite balustrades. The ascent to it is by a superb flight of 81 steps, of a breadth the whole extent of the church. The front is decorated in bad taste with three orders of architecture — Doric, Corinthian, and Composite, and flanked with two hexagon towers. The interior is large and handsome; it has only a nave in the Gothic style." It contains the monuments of Raymond Berenger, count of Barcelona, and his consort. The treasury of this church afforded a rich spoil to the French, on their gaining possession of Gerona. The collegiate church is of Gothic architecture, consisting of a nave and 2 aisles divided by pillars: connected with it there is a very lofty and ancient tower. In the Capuchin convent there is an Arabian bath of elegant construction. The streets of Gerona are narrow and gloomy, but clean and well paved; and the houses are tolerably well built. There are 3 squares, one of which is of considerable size; 2 hospitals, a seminary, college, with a good public library (formerly belonging to the university founded 1521 by Philip II., and abolished 1715 by Philip V.), a Beguine seminary for poor girls, and several other schools. The place wears, however, a dull and melancholy look. "The inhabs. have no theatre, no public amusements, no common rendezvous. Every one seems to live alone. One fourth of the pop. are priests, monks, nuns, and students. They carry on very little trade. The only manufactories are a few looms for weaving coarse woollen and cotton stuffs and stockings, which have been established in the asylum within the last twenty years." (*Mod. Trav.* xviii. 57.)

Gerona is the seat of a bishopric, which is richer than that of Barcelona; of an ecclesiastical tribunal; a subdeleg. of police; and a military governor. It is of great antiquity, and formerly gave the title of prince to the son of the king of Arragon. It has sustained numerous sieges, and been famous for the brave defence it has always made; but especially for that it sustained under Mariano Alvarez, in 1809, for upwards of seven months, against the French.

GERS, a dep. of France, reg. S. W., between lat. 43° 17′ and 44° 4′ N., and long. 0° 18′ W. and 1° 11′ E.: having N. the dép. Lot-et-Garonne, E. those of Tarn-et-Garonne and Haute Garonne, S. the latter and the Hautes and Basses Pyrénées, and W. Landes. Length, E. to W., 74 m., by about 54 m. in breadth. Area, 626,399 hect. Pop. (1846) 314,885. The last ramifications of the Pyrenees cover most of this dep., the slope of which is mostly from S. to N. Rivers numerous: all of them have more or less a N. direction, and are affluents of the Garonne or Adour. There are many ponds and small lakes. Gers, like the neighbouring deps., is subject to violent storms; its soil is, however, in general fertile. It has 233,600 hect. of arable land, 60,800 hect. meadows, and 87,800 hect. vineyards. Agriculture is very backward, but it has been much improved of late years. Only about 3-4ths of the corn required for home consumption is raised in the dep.; it is chiefly wheat, maize, and oats. Garlic, onions, various other vegetables, hemp, flax, &c., are plentifully cultivated. Fruit is good. About 900,000 hectol. of wine are produced in ordinary years, but it is mostly of mediocre quality: about a half is consumed at home, and the other half converted into brandy, which ranks next after that of Cognac. In 1830 there were estimated to be about 388,000 sheep, and 141,350 oxen, in the dep.; considerable attention has been paid to the improvement of the breed of the former, which yield annually about 340,000 kilog. wool. Poultry are plentiful; and, as well as hogs, fattened, or killed and salted, they form an important article of trade. Manufactures unimportant: there are a few fabrics of glass and earthenware, leather, starch, linen, woollen, and cotton cloth, and thread, cream of tartar, &c. The trade

is, however, chiefly in the products of the soil, with which this dep. supplies the neighbouring ones and Spain. Gers is divided into 5 arronds., and sends 5 mem. to the Chamber of Dep. Number of electors (1838-39), 2,105. Chief towns, Auch, the cap., Condom, Lombez, and Mirande. Total public revenue (1831), 5,977,367 fr.; surplus over expenditure, 2,317,807 fr. But, notwithstanding this apparent prosperity, the number of large properties is much below the average of the deps., and the people are generally impoverished. "*La vie des femmes n'est pas moins laborieuse que celle des hommes. Les femmes mariées ont soin du ménage, de la volaille, &c. Les jeunes filles, tant qu'elles sont enfans, gardent les bestiaux et les troupeaux. Dès qu'elles grandissent, elles partagent tous les travaux de l'agriculture, et toutes les fatigues des hommes.*" (*Hugo*, art. *Gers, &c.*)

GHAZIPOOR, or GHAZEEPORE, a distr. of British Hindostan, presid. Bengal, prov. Allahabad; between lat. 25° 10′ and 26° 20′ N., and long. 82° 40′ and 84° 30′ E.; having N.W. and N. the distr. Azinghur and Goruckpore, N.E. Sarun, S.E. Shahabad, and W. Benares and Juanpore. Area, 2,850 sq. m. Pop. and land revenue not specified in the Parl. Report. The Ganges runs through its S. part; the Goggra bounds it on the N. It is one of the most fertile divisions of Hindostan, and the sugar-cane, corn, and fruit trees are extensively cultivated. It has long been celebrated for the excellence of its rose-water and *attar*. "The roses of Ghazeepore are planted, in large fields, occupying many hundred acres of the adjacent country. They bloom sparingly, upon a low shrub, which is kept to a dwarfish size by the gardener's knife, and the full-blown flowers are carefully gathered every morning. The first process which the roses undergo is that of distillation. They are put into the alembic with nearly double their weight of water. The rose-water thus obtained is poured into large shallow vessels, which are exposed, uncovered, to the open air during the night. The jars are skimmed occasionally; the essential oil floating on the surface being the *attar*. It takes 200,000 flowers to produce the weight of a rupee in *attar*. This small quantity, when pure and unadulterated with sandal oil, sells upon the spot at 100 rupees (10*l.*); an enormous price, which, it is said, does not yield very large profits. A civilian, having made the experiment, found that the rent of land producing the above-named quantity of *attar*, and the purchase of utensils alone, came to 5*l.*; to this sum the hire of labourers remained still to be added, to say nothing of the risk of an unproductive season. The oil produced by the above-mentioned process is not always of the same colour, being sometimes green, sometimes bright amber, and frequently of a reddish hue. When skimmed, the produce is carefully bottled, each vessel being hermetically sealed with wax; and the bottles are then exposed to the strongest heat of the sun during several days. Rose-water, also, when bottled, is exposed to the sun for a fortnight at least." (*Roberts's Scenes, &c. of Hindostan*, ii. 113—115.) Rose-water which has been skimmed is reckoned inferior to that which retains its essential oil, and is sold at Ghazeepore at a lower price; though, according to many, there is scarcely, if any, perceptible difference in the quality. A *seer* (a full quart) of the best may be obtained for 8 *annas*, or about 1*s*. It enters into almost every part of the domestic economy of the natives of India, being used for ablutions, in medicine and cookery, as presents, &c. The chief towns in this district are Ghazipoor, the cap., Azimpoor, and Doorighaut. (*Hamilton's E. I. Gaz.; Roberts's Hindostan; Parl. Rep. on E. I. Affairs, &c.*)

Ghazipoor, a large town or city of Hindostan, prov. Allahabad, cap. of the above distr., on the N. bank of the Ganges, 40 m. E.N.E. Benares, and 100 m. W. Patna; lat. 25° 35′ N., long. 83° 33′ E. From the river it has a very striking appearance, though, like other Indian cities, its noblest buildings turn out, on approach, to be ruins. "The native city is better built and better kept than many places of more importance. The bazaars are neat, well supplied, and famous for their tailors, whose excellent workmanship is celebrated in the adjacent districts. A very considerable number of the inhab. are Mussulmans, though the neighbouring pop. is chiefly Hindoo; their mosques are numerous and handsome, and the former grandeur of Ghazipoor is evinced by a superb palace, built by the Nawab Cossim Ali Khan, which occupies a considerable extent of ground overlooking the Ganges. This noble building is now in a melancholy state of dilapidation, neglected by the government, who have turned it into a custom-house, and have converted many of its suites of apartments into warehouses, and the residences of police peons belonging to the guard. Though thus rendered useful, it is not thought worthy of repair; its splendid banqueting-hall and cool verandahs, replete with architectural beauty, abutting into the river, are deserted, and left to the swift devastations of the climate. In a very short period the whole of this magnificent fabric will become a heap of ruins." (*Roberts's Scenes, &c.* ii. 134.) At the other extremity of the town are the houses of the civil servants of the company. These are spacious and well-built, and surrounded by gardens. The military cantonments adjacent are, however, low, ugly bungalows, with sloping roofs of red tile, but deriving some advantage from being intermingled with trees; "very different from the stately but naked barracks of Dinapoor." On the parade ground, a little N.E. the city, is the mausoleum of the Marquis Cornwallis, who died at Ghazipoor. This edifice consists of a dome supported upon pillars; and is entirely constructed of large blocks of Chunar freestone. It cost a lack of rupees, and 15 years were spent upon its erection; but its style and execution have been found much fault with; and it is insignificant when compared with the native sepulchral edifices of Hindostan. The gaol of Ghazipoor is large, strong, airy, and commodious, and usually crowded with delinquents of all castes and denominations; this district being noted for the turbulence of its inhab., and their insubordination to the laws. The E. I. Company have a breeding stud of horses near the city. Ghazipoor is garrisoned by two or three companies of a native regiment; it is famous for its salubrity; and is well supplied with European and native products. Its environs are planted with fine forest trees, the haunts of innumerable monkeys and birds. (*Roberts's Scenes in Hindostan*, vol. ii.; *Heber; Hamilton's E. I. Gaz. &c.*)

GHENT (Ger. *Gent*, Fr. *Gand*), a celebrated city of Belgium, cap. E. Flanders, at the confluence of the Scheldt and Lys, 30 m. N.W. Brussels, 30 m. W.S.W. Antwerp, and 23 m. S.E. by E. Bruges; lat. 51° 3′ 12″ N., long. 3° 43′ 42″ E. It is the seat of a bishopric, of a court of appeal, a tribunal of first resort, and a chamber of commerce; is a fortress of the second class, and the residence of a high military commandant for the provs. of E. and W. Flanders. The pop., which in the 16th century is reported to have amounted to 175,000, had, in 1836, sunk to 88,290 (*Heuschling*); but it had increased in 1846 to 102,977, and it is not characterised by the decayed and listless appearance of its neighbour Bruges. Under Charles V. this city probably covered more ground than any other in W. Europe, whence the boast of the emperor, "that he could put Paris in his glove" (*Gant*). At present the circ. of its walls is between 7 and 8 m.; but much of the enclosed space is occupied by fields, gardens, and orchards. The shape of the city is somewhat triangular; it is entered by 7 gates. The Scheldt and Lys, together with the Lieve and Moere, after having supplied the ditches surrounding the fortifications, enter the city, and, in conjunction with some artificial canals, divide it into 26 islands, most of which are bordered by magnificent quays. Of the bridges connecting these islands, 70 are of considerable size; and of these, 42 are of stone and 28 of wood. In general, the streets are wide, though a few of the most frequented are so narrow that two carriages cannot pass each other. There are numerous fine public edifices; and many of the private houses are well built and handsome. Their antique appearance, and the fantastic variety of the stair-like gable ends, ornamented with scrolls and carving, arrest the stranger's eye at every turn. There are 13 public squares. The principal is the Marché au Vendredi, or Friday Market, so called from its weekly linen market held on that day. In its centre was formerly a column, erected in 1600, in honour of the emperor Charles V. The greatest curiosity in the Friday Market is an enormous iron ring, upon which are exposed the pieces of linen, which, having been found defective on being brought to market, are confiscated by the authorities, and given to the hospitals. The square of St. Peter is one of the largest in Belgium; it serves as a parade ground for the garrison. In the Place St. Pharaïlde is an old turreted gateway, a relic of the castle of the counts of Flanders, built in 868, and doubtless one of the oldest existing remains in Belgium. This castle was, in 1338-39, the residence of the family of Edward III., whose son, John of Gaunt or Ghent, Duke of Lancaster, was born in it. Its existing remains form part of a cotton factory. The corn market and the *Place de Récollets* are the other chief squares.

The finest promenades in Ghent are, one along the *Coupure*, a canal cut in 1758, uniting the Lys with the Bruges canal; and the *Kauter*, or Place d'Armes. The boulevards, anciently the ramparts surrounding the city, and some of the quays, are also agreeable promenades. Ghent contains many churches worthy of notice, not only for their architecture, but for the *chefs-d'œuvres* of the Flemish school which they contain. The cathedral, or church of St. Bavon, near the centre of the city, was originally founded in 941, and the crypt, or *église souterraine* of the original building, still exists. The modern edifice was commenced in 1228, and completed early in the 16th century. Its style is simple Gothic; it has no very striking beauty externally, if we except its tower, remarkable for its elegance and height, about 289 ft. From its summit, which is ascended by 446 steps, the surrounding country may be seen in clear weather for a distance little

short of 40 m. The interior of this church is of almost unrivalled magnificence. It is entirely lined with black marble, with which the pillars of pure white Italian marble form a strong contrast. Adjoining the cathedral is the *beffroi*, or belfry, a lofty square tower, founded in 1183. Its lower part is used for a prison; its summit is ornamented with a gilt copper dragon, carried off by the Gantois from Bruges in 1445, to which city it had been taken from Constantinople during the first crusade. The church of St. Michael, containing the celebrated "Crucifixion" by Vandyck (now much injured), the "Annunciation" by Lens, and the finest organ in Belgium; that of St. Nicholas, the oldest church in Ghent; and those of St. Peter, St. Martin, St. James, St. Sauveur, the Dominicans, and the Augustines, all contain excellent paintings, and are well worth notice. There are in all 55 churches, including an English Protestant church and a synagogue. Ghent contains the only large nunnery that survived the dissolution of conventual institutions by the Emp. Joseph II. This establishment, called the Grand Béguinage, founded in 1234, is of great extent, forming almost a little town of itself, with streets, squares, and gates, surrounded by a wall and moat. It is inhabited by about 600 nuns. The Béguines are not bound by any vow; they may return into the world whenever they please; but it is said to be their boast that no sister has been known to quit the order after having once entered it. The sisters attend the sick as nurses in the hospitals and elsewhere.

The finest public building in Ghent is the palace of the university, founded by William I., king of Holland, in 1816, and attended by about 350 students. In front it has a fine portico raised upon eight Corinthian columns. It has a noble entrance-hall under a vaulted roof 91 ft. in height, a grand staircase, an amphitheatre capable of accommodating 1,700 persons, in which academic prizes are distributed; a court of classes, or square, surrounded by lecture rooms; and cabinets of natural history, comparative anatomy, mineralogy, and natural philosophy. The library, containing 60,000 vols. besides many valuable MSS., the royal college, and the botanic garden, occupy the ancient abbey of Bandeloo and its grounds. Besides these institutions, Ghent has a museum and royal academy of drawing, the expenses of which are defrayed by voluntary contributions; societies of rhetoric, the fine arts and literature, music, botany and horticulture, agriculture and commerce, and various clubs for gymnastic and other pursuits. The museum contains a good many paintings, though none are of first-rate excellence; but there are several private collections of great merit, the principal being that of M. Van Schamp, containing a fine "Annunciation," by Correggio; several paintings by Rubens, including portraits of himself and family; and others by Rembrandt, Vandyck, Teniers, and other distinguished masters.

The town-hall is a large and, at first sight, an imposing building. It has a double front; one in the Moorish-Gothic, and the other in the classic, style. The architecture of the latter is incongruous; its 3 principal stories being ornamented successively with Doric, Ionic, and Corinthian columns. This front has upwards of 70 windows, exclusive of those in the roof. In the interior is the throne-room, in which the treaty called the Pacification of Ghent was signed in 1576. This large and fine apartment is now used for the distribution of prizes given by the town to those who attain excellence in the arts, &c. There are 22 public hospitals. The principal, the *Byloke* (enclosure), founded 1225, is capable of containing 600 sick persons, and has attached to it asylums for aged individuals of both sexes. There are some hospitals for aliens, 2 lunatic asylums, 2 deaf and dumb institutions, and many other charities. The great prison, remarkable for its size and admirable arrangement, has served as a model for several others in London, Prussia, and the U. States. It was begun under Maria Theresa in 1774, and finished in 1824; it stands on the *Coupure*. "Its form is that of a perfect octagon, in the middle of which is a large court-yard, communicating with the different parts of the prison. Each division has a yard, and in the centre of that appropriated to the women is a basin for washing linen. Each prisoner sleeps alone in a small room, looking into an extensive and well-lighted gallery. These apartments are kept very neatly, and are ventilated when the prisoners go to work. The annual expense of this establishment is about 50,000 florins, and the number of prisoners is 1,500; 1,100 of whom are occupied in manufacture and household work. One half of the produce of the prisoners' labour is reserved by the government for the expenses of the establishment, &c., and the remainder is divided into 2 portions, one of which is given to the prisoners for pocket-money, while the other accumulates, and is given to them on leaving the prison." (*Boyce's Belg. Traveller.*) The ruins of the citadel, constructed by Charles V., are still to be seen near the Antwerp gate. The modern citadel, built between 1822 and 1830, the cavalry barracks, *Hôtel de l'Octroi*, workhouse, *mont-de-piété*, fish-market, slaughter-house and shambles, theatre, and the celebrated piece of cannon — the largest in Europe — 18 ft. long, 10½ in circumference, its bore 2½ ft. in diameter, and weighing 34,000 lbs., are the remaining objects most worthy of remark in Ghent. The climate of the city is healthy and temperate: the average heat of winter is 21°, of summer about 70° Fahr.

Manufactures and Commerce. — At the commencement of the 15th century, Ghent is said to have contained 40,000 weavers; but this, like most statements of the sort, is most probably much exaggerated. At the commencement of the present century, the manufacture of cotton yarn was introduced; and furnished employment, we are told, in a few years, to more than 30,000 workmen! In 1804, while united to France, Ghent was ranked by Napoleon as the chief manufacturing town in his dominions after Lyons and Rouen. In 1819, the importation of spinning-jennies and high-pressure steam-engines from England afforded an additional stimulus to the cotton manufacture. The separation of Holland from Belgium in 1830 gave a considerable shock to industry and trade; and several capitalists soon after removed their establishments into Holland. According to Vandermaelen, in 1834, there were in Ghent from 200 to 250 looms of different kinds wrought by steam; about 19,000 workmen were employed in bleaching, cotton printing, and cotton-thread factories, within a diameter of 3 leagues round the city; and the capital employed in the cotton manufactures (ex. the raw material) was estimated at about 21,000,000 florins. The manufacture has recently, however, been involved in the greatest difficulties; and it is doubtful whether it is ever destined to take firm root in the city, or to be able to withstand the competition of foreigners under a system of free competition. Previously to the French Revolution, lace was the staple manufacture of Ghent, great quantities of it being sent to Holland, England, France, Spain, and the colonies. Lace-making has now greatly diminished; but it still ranks, together with the manufacture of silk, linen, and woollen fabrics, amongst the principal branches of industry, after that of cotton. The sugar-refineries employ annually from 10,000,000 to 12,000,000 lbs. of the raw material. There are numerous gin-distilleries, soap-manufactories, breweries, tanneries, and salt-works. Sail-cloth, oil-cloth, gold and silver stuffs, masks, gloves, pins, bronze articles, mineral acids, white lead, Prussian blue and other colours, buttons, cards, paper, tobacco and tobacco-pipes, glue, surgical instruments, machinery, cutlery, articles of various kinds, in wood, stone, ivory, &c., are made in Ghent, and there are some good building docks. The city is admirably situated for commerce. It is connected by one ship-canal with Bruges; and by another, which passes by Sas Van Ghent, with the Scheldt at Terneuse. The latter gives the city all the advantages of a sea-port; vessels drawing 18 ft. water may unload in the basin under its walls. The country in the vicinity produces a great deal of corn, flax, tobacco, and madder; and besides its manufactured produce, Ghent has a large trade in these articles, especially the first, and a very extensive transit trade.

The origin of Ghent is involved in uncertainty; but it is tolerably well ascertained that it became a place of considerable importance early in our æra. In 879–80, the Danes under Hastings, repulsed from England, plundered Ghent, and obtained an immense booty. Ghent belonged successively to the counts of Flanders, and the dukes of Burgundy; but the allegiance of its citizens appears to have been little more than nominal, since, whenever the seigneurs attempted to impose an unpopular tax, the great bell sounded the alarm, the citizens flew to arms, and killed or expelled the officers of the sovereign. The city became subsequently the cap. of Austrian Flanders; but having, in 1539, unwarily rebelled against the authority of its sovereign, the emperor Charles V., and even offered to transfer its allegiance to his rival, Francis I., king of France, it brought on itself a punishment, from the effects of which it never fully recovered. In 1678, it was taken by Louis XIV.; in 1706, by Marlborough. In 1793, it was again taken by the French, and was, till 1814, the cap. of the dep. of the Scheldt. Ghent has given birth to many distinguished individuals, at the head of whom must be placed the emperor Charles V., born here on the 24th of February, 1500; among the others may be mentioned John of Gaunt, son of Edward III.; the popular leader, Jacques Van Artaveldt, the "brewer of Ghent," and his son Philip; Heinsius the critic; the sculptor Delvaux, &c. (*Vandermaelen, Dict. of E. Flanders; Gautier, Pays Bas*, pp. 299—320. &c.; *Murray; Boyce*, &c.)

GHILAN, a prov. of Persia, in its N.W. part; between lat. 36° 25′ and 37° 45′ N., and long. 48° 35′ and 50° 47′ E.; having N.W. the Russian distr. of Talish, S.W. the Elbourz mountains, separating it from Azerbijan and Irak, S.E. Mazunderan, and N.E. the Caspian. Length, N.W. to S.E., about 120 m.; area, probably about 5,000 sq. m. Pop. uncertain. It is one of the

most beautiful portions of the Persian empire. Climate mild and healthy, except in certain districts in summer. It is well watered, and abounds with forests of oak, pine, box-wood, &c.; along the Caspian, there are extensive morasses. The soil is very rich, and yields hemp, hops, many kinds of fruit, corn, rice, &c. in great quantities. The vine grows with the greatest luxuriance; but the chief product of the prov. is silk of excellent quality, the culture and manufacture of which employs most of the pop. The only town of any consequence is Reshd, on the Caspian, which has a considerable trade in silk, &c. with Astrahkan. (*Kinneir, Pers. Emp. &c.*)

GHIZNI, or GHUZNEE, a fortified town or city of Afghanistan, and formerly the cap. of an empire reaching from the Tigris to the Ganges, and from the Jaxartes to the Persian Gulph: though now containing only about 1,500 houses, exclusive of suburbs without the walls, it is still considered throughout central Asia as a fortress of the highest importance. It stands on a slight elevation, in a plain nearly 7,000 ft. above the level of the sea, at the foot of a narrow range of hills, 54 m. S.W. by S. Caubul, and 156 m. N.E. Candahar. From its great height its climate is very cold; for a great part of the year the inhab. seldom quit their houses, and the snow has been known to lie deep on the ground long after the vernal equinox. It is surrounded by stone walls, flanked with numerous towers, and entered by 3 gates, outside which it is encompassed by a *fausse braye*, and wet ditch. On the W. side the walls are elevated to a height of 280 ft. above the level of the plain; and the rock on which they are built might be scarped so as to render it thoroughly inaccessible on that side. (*Vigne*) The Ghizni river, a pretty large stream, runs along its W. face; and previously to its capture by the British, a new outwork had been constructed commanding its bed. Ghizni has 3 bazaars, of no great breadth, with high houses on each side; a covered *chaursoo*, and several dark and narrow streets. A citadel, enclosing a palace, is the only edifice worth notice. About ½ m. N. of the city stands a minaret, and about 400 yards farther, another of the same kind, erected by Sultan Mahmoud of Ghizni. Both are of brickwork, elegantly ornamented, and covered in many parts with Cufic inscriptions. Adjoining them is the site of Old Ghizni, a city which, in the 10th century, was, according to Ferishta, adorned beyond any other in the E. The adjacent plain is covered with ruins. About 3 m. from the modern town, in the midst of a village, is the tomb of Mahmoud, a spacious but not a magnificent building, covered with a cupola. But of all the antiquities of Ghizni, the most useful is an embankment across a stream which was built by Mahmoud, and which, though damaged by the insane fury of the Ghoree kings, still supplies water to the fields and gardens round the town. (*Elphinstone, Caubul*, i. 141, 142.)

The empire of which Ghizni was the cap., was founded by Sebuctaghi in 975, and lasted under 13 successive sovereigns till 1171, when the city was conquered by Mahomed Ghoree, and burned. Recently it has acquired some celebrity from having been taken by storm by the British, 23d July, 1839, after a siege of less than 48 hours; the town being garrisoned by about 3,500 Afghans, under the command of a son of Dost Mahomed Khan. Our loss on that occasion amounted to 17 men killed, and 182 wounded. Of the enemy, about 600 were killed, many wounded, and 1,600 taken prisoners, including the governor and his staff. (*Elphinstone, Caubul; Vigne; Outram; Campaign in Afghanistan, &c.*)

GIANT'S CAUSEWAY, a basaltic promontory of Ireland, N. coast of the co. Antrim, between Bengore Head on the E., and the embouchure of the Bush river on the W. This extraordinary promontory consists of a vast mole or quay, formed of polygonal basaltic columns, projecting from the base of a steep promontory to a great distance into the sea. It is divided into three distinct portions: the first, which is seen at low water, is about 1,000 ft. in length, and the others not quite so much. The pillars are from 40 to 55 ft. in length, and have from 3 to 8 sides; but those having 6 sides are by far the most common. The surface formed by the summits of the pillars is so smooth, and the joints so close, that the blade of a knife can hardly be introduced into them. The pillars are divided into segments, admirably fitted to each other, varying from 6 in. to a foot in thickness. At Fair Head and Bengore Head, in the immediate vicinity, the columns are higher; but the angles are not so sharp, and they are altogether of a coarser texture than those of the Giant's Causeway. The same sort of basaltic columns, though of a less perfect form, extend along the coast for several miles, and, being sometimes detached from the shore, have, at a distance, the most grotesque appearance. Rachlen island contains similar columns; and they extend a good way inland.

GIAVENO, a town of N. Italy, k. Sardinia, prov. Susa, cap. mand., on the Sangone, 16 m. W. by S. Turin. Pop., in 1838 (inc. commune), 8,866. It is encircled by an old wall, and has manufactures of silk and linen, with tanneries and iron forges, some transit trade, and a market for linens, &c. which is well attended.

GIBRALTAR, a town and very strong fortress belonging to Great Britain, in the S. part of Spain, adjoining the narrowest part of the strait joining the Atlantic and Mediterranean, to which it gives name; 61 m. S.E. Cadiz, 93 m. S. by E. Seville, and 312 m. S.S.W. Madrid; lat. 36° 6′ 30″ N., long. 5° 21′ 12″ W. Pop. about 20,000, exclusive of about 3,000 troops. The fortress stands on the W. side of a mountainous promontory or rock (the *Mons Calpe* of the ancients), projecting into the sea S. about 3 m., being from ½ to ¾ m. in breadth. The S. extremity of the rock, 11½ m. N. Ceuta, in Africa, is called Europa Point. Its N. side, fronting the low narrow isthmus which connects it with the mainland, is perpendicular, and wholly inaccessible; the E. and S. sides are steep and rugged, and extremely difficult of access, so as to render any attack upon them, even if they were not fortified, next to impossible; so that it is only on the W. side, fronting the bay, where the rock declines to the sea, and the town is built, that it can be attacked with the faintest prospect of success. Here, however, the strength of the fortifications is such that the fortress seems impregnable, even though attacked by an enemy having the command of the sea. The town, which lies on a bed of red sand, at the foot of the rock, on its N.W. side, has a principal street, nearly a mile long, well built, paved and lighted; and of late years many of the narrow streets have been widened, the alleys removed, and the general ventilation improved. Still, however, "the houses are constructed for the latitude of England, not of Africa; for, instead of patios, fountains, and open galleries, admitting a free circulation of air, closed doors, narrow passages, wooden floors, small rooms, and air-excluding windows, keep out the fresh, and keep in the foul air." (*Inglis*, ii. 121.) These circumstances seem, in part at least, to account for the contagious fevers by which the town is sometimes scourged. The principal buildings are the governor's house and garden, the admiralty, the naval hospital, the victualling-office, and the barracks. There is an excellent public library, founded in 1793, and a small theatre. A steam corn-mill has lately been erected. The Protestant church, situated on the Line-wall, will contain 1,048 persons, and the governor's chapel at the convent, 300 more; the Rom. Cath. church, when full, contains about 1,500. The Wesleyan Methodists have a place of worship, and there is a Jews' synagogue. In 1836, there were three schools in Gibraltar, two on Bell's system, educating together 512 boys and girls, and one on the Lancastrian plan, educating 300 boys: the last is wholly supported by the Rom. Caths. The fortifications are of extraordinary extent and strength. The principal batteries are all casemated, and traverses are constructed to prevent the mischief that might ensue from the explosion of shells. Vast galleries have been excavated in the solid rock, and mounted with heavy cannon; and communications have been established between the different batteries by passages cut in the rock, to protect the troops from the enemy's fire. In fact, the whole rock is lined with the most formidable batteries, from the waters to the summit, and from the Land-gate to Europa Point; so that, if properly victualled and garrisoned, Gibraltar may be said to be impregnable

The bay of Gibraltar, formed by the headland of Cabrita and Europa Point, 4 m. distant from each other, is spacious and well adapted for shipping, being protected from all the more dangerous winds: the extreme depth within the bay is 110 fathoms. To increase the security of the harbour, two moles have been constructed, which respectively extend 1,100 and 700 ft. into the bay. The Spanish town and port of Algeciras lie on the W. side of the bay. As a commercial station, Gibraltar is of considerable consequence. Being made a free port in 1704, subject to no duties and restrictions, it is a convenient entrepôt for the English and other foreign goods destined to supply the neighbouring provinces of Spain and Africa. "Gibraltar, however, is fallen and falling as a place of commerce; and there is no prospect of its revival." This decay is owing to a variety of causes, partly and principally, perhaps, to the insecurity and apprehension occasioned by the fear of pestilential disorders, which raged dreadfully in 1804 and 1828; partly to the circumstance of goods being now largely stored at Malta and Genoa, that were formerly deposited here; partly to the orders of the Spanish government almost preventing the introduction of British produce; and, more recently, to the making of Cadiz a free port, a measure, however, which has since been revoked. In 1838, the declared value of British and Irish produce and manufactures exported from England to Gibraltar amounted to 894,096*l*. The cost of this colony to Great Britain amounted, in 1834, to 172,440*l*. But the advantage which the possession of Gibraltar confers on Great Britain, though wholly of a political character, is most important. It is, as it were, the key of the Mediter-

ranean; and while its occupation gives us the means of effectually annoying our enemies in war, it affords equal facilities for the protection of our commerce and shipping.

Gibraltar, the *Calpe* of the Greeks, formed with Abyla on the African coast "the pillars of Hercules." Its name was changed to *Gibel-Tariff*, or mountain of Tarif, in the beginning of the 8th century, when Tarif Ebn Zarca landed with a large army to conquer Spain, and erected a strong fortress on the mountain side. During the Moorish occupation of Spain it increased in importance, but was at length taken by Ferdinand, king of Castile, in the 14th century. It was soon recaptured, and did not become the appanage of Spain till 1462. Its farther history till its conquest by the English in 1704, is unimportant. During the war of the Spanish succession, the English and Dutch fleets, under Sir George Rooke and the Prince of Hesse-Darmstadt, attacked the fortress, which surrendered after some hours' resistance. The Spaniards, during the nine following years, vainly tried to recover it; and in 1713 its possession was secured to the English by the peace of Utrecht. In 1727 the Spaniards blockaded it, for several months, without success. The most memorable, however, of the sieges of Gibraltar is the last, begun in 1779 and terminated in 1783. The batteries on the rock were known to be most formidable; and yet the bold, not to say extravagant, project was entertained of attempting to silence them by the fire of ten enormous floating batteries ingeniously constructed by the Chevalier d'Arçon. A powerful combined French and Spanish fleet and army was collected to co-operate in the attack, which excited an extraordinary interest in all parts of Europe. The grand effort was made on the 13th of Sept., 1782; and the only thing to be wondered at is, that the floating batteries should have so long resisted, as they actually did, the tremendous fire of red-hot shot to which they were exposed. At length, however, two of them took fire, and their terrific explosion terminated the conflict. The garrison, and their gallant commander, Sir Gilbert Elliot, afterwards Lord Heathfield, were not more distinguished by their brave defence than by their generous efforts to rescue their enemies from the flames and the waves. No farther attempt has been, nor is it likely will be, made to deprive us of this fortress.

GIEN, a town of France, dép. Loiret, cap. arrond.; on the Loire, and on the high road between Orleans and Nevers, 37 m. S.E. the former. Pop. (1836) 4,750. It is irregularly built on a hill, on the summit of which is its church, and an ancient castle now serving for the sub-prefecture, the residence of the mayor, and the seat of a tribunal of original jurisdiction. The Loire is here crossed by a handsome stone bridge, and the town has a spacious quay, and a good bath establishment. Here also are manufactures of earthenware, serge, leather, &c. It has some trade in agricultural produce. (*Hugo, &c.*)

GIESSEN, a town of W. Germany, Hesse-Darmstadt, cap. prov. Upper Hesse; on the Lahn, which is here crossed by a stone bridge, 47 m. N. by E. Darmstadt, and 49 m. E.N.E. Coblentz. Pop. 7,300. It was formerly fortified; but its ramparts have been levelled, and their site is now laid out in public walks. It is irregularly built; but has some good edifices, including the castle, now the seat of the provincial government, the university, *pedagogium*, arsenal, town-hall, and a new church. Giessen is chiefly noted for its educational establishments, which constitute one of its principal resources. Its university, founded in 1607, is now usually attended by between 300 and 400 students; a few years ago, the ordinary number was upwards of 500. The town has, besides, a teachers' seminary, several other seminaries of a superior kind, schools of forest economy and midwifery; a lying-in hospital, philological institute, 2 public libraries, a cabinet of natural history, and a botanic garden. It is the residence of the governor of Upper Hesse, the seat of a superior judicial court for the prov.; a council of mines, board of taxation and committee of public instruction. It has a few manufactures of tobacco and woollen goods. (*Berghaus; Cannabich.*)

GILOLO, one of the Molucca islands, which see.

GIOVENAZZO (an. *Natiolum*), a sea-port town of S. Italy, k. Naples, prov. Bari, cap. cant., on a high rock which advances sufficiently into the Adriatic to afford shelter on its N. side to a considerable number of fishing boats, 9½ m. N.W. Bari, and 4½ m. S.E. Molfetta. Pop. 5,500. It is surrounded by strong turreted walls, and farther defended by a castle. It is, however, a miserable-looking place, though it contains some good houses. Its streets are narrow, dark, and dirty, and crossed by frequent deep archways, which render them still more gloomy. Giovenazzo is the seat of an archbishopric, united to that of Terlizzi: it has a cathedral, 3 other churches, several convents, 2 hospitals, and an asylum for foundlings, mendicants, &c. Without the town, an avenue of immense cypress and pine trees, nearly a mile in length, leads to a very large, but dilapidated palace, formerly belonging to the Cellamare family. (*Craven's Tour, &c.* pp. 95, 96, &c.)

GIRGENTI, a town of Sicily adjacent to the ruins of the ancient 'Ακράγας, or Agrigentum, cap. intend., in the Val di Mazzara, 58 m. S.S.E. Palermo, and 95 m. W. by N. Syracuse; lat. 37° 19′ 25″ N., long. 13° 27′ E. Pop. (1831) 17,767. The modern city stands on the slope of one of the highest hills of S. Sicily, called *Monte Camisco*, about 1,200 ft. above the sea, and nearly 4 m. from the port at the mouth of the small river which divides the present city from the ruins. The mode of building Girgenti, with its streets rising in terraces, and the cathedral crowning the whole, gives it an imposing aspect from the sea; "but the interior is irregular and dirty: most of the streets, or rather alleys, are ill paved, and not only difficult of access, but many of them are absolutely dangerous, and the whole aspect of the place is rendered still more comfortless by a prevalent appearance of poverty." (*Smyth's Sicily*, p. 205.) Besides the cathedral, there are 45 churches and 15 convents, a fact which fully explains the extraordinary number of ecclesiastics met with here, and the consequent poverty of the people. The cathedral, a large, heavy building of the 13th century, is in the Norman style, barbarously mixed with a modern imitation of the Greek orders: its chief curiosity is an echo, or *porta voce*, by which a whisper is conducted from the entrance to the cornice over the high altar (280 ft.). It has a beautiful font of carved stone, and some pictures, one of which is a Madonna by Guido. Bishop Lucchesi, a great benefactor to Girgenti, among other acts of enlightened policy, founded a seminary for the clergy, and a good public library, to which he bequeathed a valuable collection of antique vases, coins, and medals. The country round is delightful, producing corn, wine, and oil in great abundance, with a great variety of fruits, as, oranges, lemons, pomegranates, almonds, &c. The port of Girgenti has a mole built by Charles III. in 1756: a lighthouse has been erected on the mole-head, and another on an adjacent cliff, but they are so badly constructed and lighted, as to be nearly useless. There are here very extensive *caricatori*, or magazines, dug in the rock, for the warehousing of corn, considerable quantities of which are shipped from this port, and which, under an intelligent government, capable of calling forth the productive energies of the country, might be vastly increased: it is, also, a principal port for the shipment of sulphur. In ordinary years, about 70 British ships clear out from Girgenti, mostly loaded with brimstone.

The ancient Agrigentum was not only one of the largest and most famous cities of Sicily, but of the ancient world. According to Polybius, it surpassed most other cities in its advantageous situation, its strength, and the beauty and grandeur of its buildings. Its ruins, so interesting to the historical student for the reminiscences they suggest, and to the antiquary and artist for their instructive lessons on ancient architecture, stand between the *Rupa Athenea*, a high rock E. of Girgenti, and the two branches of the river anciently called Agragas, in the midst of orchards, gardens, and groves of the most luxurious foliage. The S. wall stood on a rock, having adjoining to it a triangular plain, in which may still be seen the tomb of Theron, one of the most illustrious of all the princes, or δυνάσται, who ruled over Agrigentum. (See *Diod. Sic.* lib. xi.) It is about 28 ft. high, and 15 ft. square at the base, consisting of a square pilaster on a triple plinth, with a cornice, and fluted Ionic columns in the Attic story; but Mr. Smyth describes it as "neither magnificent nor elegant, a strange mixture of architectural peculiarities." At the E. angle of the S. wall, on a bold rock, stands the temple of Juno, or rather the Doric columns that formed a part of it. Their situation on a gently swelling eminence, and surrounded by fruit trees, is highly picturesque. On the W. front a grand flight of steps leads up to the vestibule, which was supported by 6 fluted Doric columns: at the sides are 13 others *not* fluted. Within this temple were preserved some of the most valuable pictures of antiquity, among which was one by Zeuxis of the goddess herself. W. of these ruins is the temple of Concord, which presents the most perfect specimen extant of the earliest epoch of Greek architecture. It is composed of a parallelogram, like the last, 6 columns broad in front, and 13 columns at the sides. It is *peripteral*, that is, has a colonnade all round the building. In each of the side walls of the cella are 6 arched openings without any appearance of doors, and on each side of the transverse wall of the pronaos a flight of steps leads to the summit of the architrave: the whole temple, with the exception of part of the entablature and roof, is so nearly perfect, as to be a favourable specimen of the beauty of uninterrupted lines in architecture. Its dimensions are —

	Feet.	Inches.
Length - - - - -	128	6
Breadth - - - - - -	54	8
Length of cellar - - - - -	48	6
Width of ditto - - - - -	24	8
Height of columns - - - -	22	1
Diameter of ditto at base - - -	4	7

The last king of Naples repaired the most damaged parts of this structure, and it is now used as a Christian church. His name and work recorded on the front entablature in large bronze characters, on a glaring white ground, ill agree with the softness and chastity of the old building. W. of the temple of Concord, and near the sea-gate, stood the temple of Hercules; but the foundations and one single dilapidated column are all that remain. Cicero (in his fourth Oration against Verres) speaks in rapturous terms of a statue of the god, the face of which had been worn by the kissing of devotees. Nearly opposite the ruins of the last temple, are the gigantic remains of the temple of the Olympian Jupiter, now known as *il Tempio di Giganti*, which, although never completed, was the largest religious edifice of Sicily. Diodorus says that it was 360 ft. long, 60 ft. broad, and 120 ft. high to the commencement of the roof; but it appears probable, from a comparison with other temples and their proportions, that 160 was meant, instead of 60, for the breadth, an error that might easily have crept into the early manuscripts (*Smyth*, p. 211.); and an examination of the ruin justifies the supposition. Enormous blocks of stone testify its former grandeur. One of the columns measured by Russell in the upper part of its length had flutings, the girth of which was 23 in., a circumstance which goes far to confirm the statement of Diodorus, "that a man might easily place himself in one of them." The lower half of a human face, apparently part of a statue that ornamented the pediment, measured a foot from the chin to the middle of the mouth, and 2 ft. across from cheek to cheek, dimensions much larger than those of the Egyptian Memnon in the British Museum. (*Smyth*, p. 212.) The Sicilian government, about the commencement of the last century, when the mole of the harbour was built, gave orders that the stones of this noble ruin should be removed and used in its construction; and this circumstance, to a greater extent than any other, accounts for the paucity of the present remains. The dimensions of the temple, as computed by Mr. Cockerill, who devoted great labour to ascertain the facts, are as follows:—

	Feet.	Inches.
Length of basement	369	5
Breadth	182	8
Ditto of cell	68	6
Ditto of temple interior	142	6
	Feet.	**Inches.**
Height of basement	9	6
Ditto of columns	61	6
Entablature	25	6
Tympanum	23	6
Total height	120 ft.	

Near these ruins are those of the temple of Vulcan, and that of Castor and Pollux; the latter is singular, as being the only one of the Ionic order. The celebrated spring of Petroleum, and the fish-pond excavated by the Carthaginian prisoners, after the disasters of Himera, B.C. 480, still exist: this pond was more than 40 ft. deep, (Diodorus says 120.) and about 4,500 ft. in circumference, and is stated to have amply supplied the tables of the rich and luxurious Agrigentines, of whom Plato wittily said, that "they built as if they were going to live for ever, and ate as if directly about to die." *Ἄρα οἱ Ἀκραγαντῖνοι οἰκοδομοῦσι μὲν ὡς ἀεὶ βιωσόμενοι, δειπνοῦσι δὲ ὡς ἀεὶ τεθνηξόμενοι.* (*Ælian*, lib. xii. 29.) The pond is now dry, and used as a garden, as it was also in the time of Diodorus, who, therefore, must greatly have mistaken its dimensions. Besides the ruins thus described in detail, there are fragments dispersed over the entire site of the city, respecting which conjecture has been busy, but which need no particular mention. It is curious, however, that in the whole space within the city walls there are no ruins that can be presumed to have belonged to places of public entertainment. (*Swinburne*, ii. 291.) On the whole, Agrigentum may be truly said to be surpassed by few cities, either in respect to the beautiful and magnificent Grecian temples and other antique monuments still existing, or the wild and romantic scenery with which it is surrounded. (*Russell*, p. 100.)

Vast as the public revenue of a city must have been capable of erecting such splendid structures, the wealth of its private citizens appears to have been still greater than could have been anticipated from the national magnificence. The accounts of the riches of Gellias, Antisthenes, and other citizens of Agrigentum, are such as almost to stagger belief. The former, who lived in more than regal splendour, is reported to have had 300 wine cisterns, excavated in the rock on which the city is built, kept constantly full of the choicest wines; and at the marriage of the daughter of the latter, upwards of 800 carriages were in the nuptial procession. The return of Exænetus, a victor in the chariot-race of the 92d Olympiad, was celebrated with a splendour of which we can form no adequate idea; in proof of which it is enough to mention, that, among myriads more, no fewer than 300 carriages in the triumphal procession were drawn by white horses! (*Mitford's Greece*, v. 337. 8vo. ed.)

It is much to be regretted that we have no authentic information as to the means by which such vast wealth was acquired. No doubt, however, it must mainly have been the result of extensive commercial and manufacturing industry; for, notwithstanding its great fertility, the territory belonging to the city was far too limited, and probably, also, too much subdivided, to allow of the accumulation of such gigantic private fortunes. It is clear, too, that a city possessed of such extraordinary riches must have had wisely contrived institutions, and been, on the whole, well governed.

This great city was founded, anno 580 B.C., by a colony from Gela, another Sicilian city, which had itself been founded by a colony of Cretans and Rhodians. (*Herod.* vii. 153.; *Thuc.* vi. 4.) Most probably its government was at first republican; but it early became subject to tyrants, or princes, of which Phalaris is one of the most ancient, and also the most celebrated. The accounts of him are, however, too much mixed up with fable to be relied on. After his death the republican form of government appears to have been restored, and maintained for a considerable period, till Theron, an able and politic citizen, attained to the supreme direction of affairs. This prince, having carried off the prize in the chariot race at the Olympic games, has been the theme of the glowing eulogy of Pindar:—

> "Theron, hospitable, just, and great,
> Famed Agrigentum's honour'd king,
> The prop and bulwark of her towering state!"
>
> *West's Pindar*, Ode ii.

And he obtained and deserved the respect and esteem of the nation by his justice and moderation, and his success in defeating, with the aid of his son-in-law Gelon, the Carthaginians in a great battle. The construction of the piscina, and of other great works at Agrigentum, has, as already stated, been ascribed to the captives taken on this occasion.

After the death of Theron, who was succeeded by his son Thrasydæus, a foolish and licentious prince, the Agrigentines once more asserted their independence, and established a republican government. During the invasion of Sicily by the Athenians, Agrigentum remained neuter, nor does history again mention it till B.C. 408, when, if we take Diodorus's account, it seems to have been most flourishing, the population being 380,000; but this, most probably, is much beyond the mark. At this time it was attacked, and blockaded by 120,000 Carthaginians, headed by Hamilcar, who desired to separate Agrigentum from the cause of Syracuse. After eight months siege, the inhabitants were forced by hunger to evacuate the place during the night, and made for Gela, which they reached in safety. Hamilcar and his troops made Agrigentum their winter quarters, and in the following spring, every thing valuable was either taken to Carthage or sold. Timoleon, according to Plutarch, (rather a doubtful authority in these matters,) rebuilt the city B. C. 340, and, about 30 years after, the Agrigentines attempted to regain their ancient power in Sicily, but were defeated by the Syracusans. Its history during the Punic wars is very imperfectly ascertained. In the first, it was the ally of Carthage; and during the struggle which made Sicily the seat of war, it was alternately in the hands of the Romans and Carthaginians. Its later history must be learnt by a perusal of Cicero's orations against Verres, particularly the fourth of these eloquent invectives. Little more is known of the history of Agrigentum.

GIRONDE, a marit. dep. of France, and the largest in the kingdom, in the S.W. part of which it is situated; between lat. 44° 12′ and 45° 35′ N., and long. 0° 18′ and 1° 16′ W.; having N. the æstuary of the Gironde, and the dép. Charente-Inférieure; E. Dordogne, and Lot-et-Garonne; S. Landes; and W. the Atlantic (Bay of Biscay). Length, N. to S., about 100 m.; average breadth, between 50 and 60 m. Area, 975,100 hectares. Pop. (1846) 602,444. There are a few hills in the E.: but the surface generally is level; and all its W. portion is a vast sandy flat, termed the "Landes," bounded towards the sea in its whole extent by a range of sandy downs, or *dunes*, adjacent to which extends a line of extensive lagoons and marshes. The coast has generally a remarkably straight outline, but near the S. extremity of the dep. it presents a considerable inlet, the *Bassin d'Arcachon*, which communicates with some of the lagoons before mentioned, and contains numerous islands. The port of La Teste de Buch is situated on its S. side. Chief rivers, Garonne, Dordogne, and the Isle and Dronne, affluents of the latter. The river or æstuary of the Gironde, whence the dep. derives its name, is formed by the union of the Garonne and Dordogne, near Bourg. It has a N.N.W. direction to its embouchure in the ocean, 45 m. distant. Its breadth varies from 2 to 6 m.: at its mouth, however, it is only 3 m. wide. It is navigable throughout; though at some points its bed is encumbered with sandbanks. "*L'aspect du département est varié. D'un côté, ce sont des terres arides. et impropre à toute espèce*

de culture; de l'autre, un pays riche et fertile, des plaines verdoyantes, des vallons délicieux. Ici, des nombreux vignobles plus ou moins précieux; là, des marais malsains, des mers de sable nu, des forêts de pins n'offrant aucune pâture aux brébis affamées. Puis, au centre, une ville vaste, bruyante, populeuse; des édifices superbes, et des eaux profondes et rapides, sillonnées en tout sens par des milliers de vaisseaux." (*Hugo.*) It is stated that 326,410 hectares, or about 1-3d of the dep., consists of heaths and wastes; 228,356 hect. of arable lands, 138,823 hect. of vineyards, and 106,709 hect. of woods. Only about half the corn necessary for home consumption is grown; it is chiefly wheat. The culture of the vine is by far the most important branch of industry carried on in this dep. The annual produce of the wines of Gironde, the red growths of which are known in Britain by the general name of *claret*, amounts to about 2,500,000 hectolitres, or about 55,000,000 imp. galls. The vineyards are the property of about 12,000 families, and the expenses of their cultivation are estimated to amount to 45 or 46 millions of francs a year. The best growths are from the confines of the "Landes," behind Bordeaux; the secondary growths are chiefly the produce of the country between the Garonne and Dordogne, and the *palus*, a district of a strong and rich soil bordering the banks of those rivers.

The first growths of the red wines are denominated *Lafitte, Latour, Château-Margaux*, and *Haut Brion*. The first three are the produce of the district of *Haut Medoc*, N.W. of Bordeaux, and the last of the district called *des Graves*. These wines are all of the highest excellence: their produce is very limited, and in favourable years sells at from 3,000 to 3,500 fr. the tun, which contains 210 imp. gallons; but when they have been kept in the cellar for six years the price is doubled, so that even in Bordeaux a bottle of the best wine cannot be had for less than 6 fr. The *Lafitte* is the most choice and delicate, and is characterised by its silky softness on the palate, and its charming perfume, which partakes of the nature of the violet and the raspberry. The *Latour* has a fuller body, and, at the same time, a considerable aroma, but wants the softness of the *Lafitte*. The *Château-Margaux*, on the other hand, is lighter, and possesses all the delicate qualities of the *Lafitte*, except that it has not quite so high a flavour. The *Haut Brion*, again, has more spirit and body than any of the preceding, but is rough when new, and requires to be kept 6 or 7 years in the wood; while the others become fit for bottling in much less time. (*Henderson on Wines*, p. 184.)

Among the secondary red wines, those of *Rozan, Gorce, Leoville* and *Lorose, Bran-Mouton, Pichon-Longueville*, and *Calon* are reckoned the best. The third rate wines comprise those called *Pauillac, Margaux, St. Jullien, St. Estèphe, St. Emilion*, &c. It is but seldom that any of these growths are exported in a state of purity. The taste of the English, for example, has been so much modified by the long-continued use of port, that the lighter wines of the Gironde would seem to us to want body. Hence, it is usual for the merchants of Bordeaux to mix and prepare wines according to the markets to which they are to be sent. Thus the strong rough growths of the *Palus* and other districts are frequently bought up for the purpose of strengthening the ordinary wines of *Medoc*; and there is even a particular manufacture, called *travail à l'Anglaise*, which consists in adding to each hogshead of Bordeaux wine three or four gallons of Alicant or Benicarlo, half a gallon stum wine, a bottle of alcohol, and sometimes a small quantity of hermitage. This mixture undergoes a slight degree of fermentation; and when the whole is sufficiently fretted in, it is exported under the name of claret. This mixture chiefly consists of secondary wines, the first-rate growths falling far short of the demand for them. (*Henderson*, p. 184.; see also *Jullien, Topographie des Vignobles*, p. 203.) But even the first-class wines are frequently intermixed with the best secondary growths; and it is customary to employ the wines of a superior to mix with and bring up those of an inferior vintage. Hence we need not wonder at the statement of a gentleman who, after living twenty years in Bordeaux, doubted whether he had tasted, more than *three times*, any pure wine of the first quality!

The *white* wines of the Gironde are of two kinds; those called *Graves*, which have a dry, flinty taste, and an aroma somewhat resembling cloves; of these, the principal are, *Sauterne, Barsac, Preignac*, and *Langon*. These are said by Jullien to be *très-moelleux, ou, pour mieux dire, semi-liquoreux, et assez spiritueux*. The white wines of the Gironde have for several years past been advancing in estimation and value; and may be said, speaking generally, to come to us in a less adulterated state than the red wines.

About half the wines of the Gironde are sent to other parts of France; one fifth part is consumed in the dep.; one fifth is exported, the finest growths to England, but the larger quantity to the N. of Europe and Holland; and about one fifth part is supposed to be converted into brandy.

A person accustomed to good society in London, and, indeed, in most other parts of the country, would be apt to conclude that French wines were consumed in England to the almost total exclusion of other wines. But any such inference would be in the last degree erroneous. The fact is, that French wines are rarely drunk, except by the upper classes, and their consumption is inconsiderable, compared with that of the middle and lower classes. So much is this the case, that while, in 1849, 2,648,242 gallons of port, and 2,448,107 gallons of sherry, were entered for home consumption, the entries of *all* descriptions of French wines (including champagne, claret, and everything else) amounted only to 331,690 gallons! (*Parl. Paper*, No. 499. Sess. 1850.)

Some excellent fruit and good hemp are grown in this dep. The forests furnish a great deal of timber for deals and masts, together with resin, pitch, and turpentine. In 1835, 64,600 hectares consisted of meadow land; and in 1830, there were about 100,000 head of cattle, and nearly 370,000 sheep belonging to the dep.; but the rearing of live stock has never been much attended to in this dep. In 1835, of 178,272 properties subject to the *contribution foncière*, 78,651 were assessed at less than 5 fr., and 27,972 at from 5 to 10 fr. The number of considerable properties is about the average of the deps. There are no mines, but several furnaces and forges of considerable size, for the reduction and manufacture of metallic products. There are some stone quarries; a great deal of good turf is found, besides sand and clay suitable for the manufacture of earthenware; salt is obtained in the marshes of Medoc. The total annual value of the mineral products was officially estimated, in 1835, at about 4,500,000 fr. Manufactures very various; they include woollen and cotton fabrics, cordage, iron, steel, copper, gold, and silver articles, glass, pottery ware, liqueurs, &c. Sugar refiners and dyeing establishments are numerous; and many merchant ships are built at Bordeaux and elsewhere. For farther details respecting the trade, which is extensive, *see* BORDEAUX. The dep. is divided into six arrond. Number of properties in 1835, 178,272. Chief towns, Bordeaux, the cap., Libourne, and Bazas. Total public revenue (1844), 36,526,888 fr. This dep. contains several fine Roman antiquities. It was ravaged by the Saracens in the 8th, and the Normans in the 9th century: it belonged to the English from the time of Henry II.'s marriage with Eleanor of Guienne, till it was annexed to the French crown by Charles VII. (*Hugo; Official Tables; Dict. Géog.; Encycl. des Gens du Monde, &c.*)

GIRVAN, a sea-port, market-town, and par. of Scotland, co. Ayr, on S. bank of the river of the same name, near its influx into the sea, 17½ m. S. Ayr, and 25 m. N. Stranraer. Pop. of par. in 1801, 2,260; in 1831, 6,430; and in 1841 it amounted to 7,424. The town (which contains five sixths of the pop.) commands a beautiful view of the sea, the N. coast of Ireland, the rock of Ailsa, the Mull of Cantyre, and the various islands lying in the Frith of Clyde. Though large, it is mean-looking, consisting mostly of houses of one story. The inhab. are mainly employed in weaving cotton for the Paisley and Glasgow manufacturers, the number of looms being about 2,000. The people are generally poor and ill lodged, so many as two or three families being, in some instances, crowded together in one end of a house, while the other is filled with the looms on which they work. No fewer than two thirds of the inhab. are Irish or of Irish extraction, attracted by the facility of learning the business of hand-loom weaving, and the miserable remuneration which it affords. It is not uncommon, while the father is working on the loom, for the mother and children to set out as beggars. While weaving is the staple business, both salmon and white fishing affords employment to not a few, and is yearly being prosecuted with greater energy. The harbour has lately been improved by the erection of a new quay; and both grain and coal are exported to a considerable extent. There are two branch banks in the town; and five schools in the par., exclusive of the parochial school, in which ten boys and ten girls are educated gratuitously, on an endowment left for the purpose by Mrs. Crawford of Ardmillan. There are also two subscription and two circulating libraries; and twelve friendly societies. (*New Stat. Acc. of Scotland*, § *Ayr*, p. 394.) Girvan was erected into a bor. of barony in 1668; but, owing to its diminutive size, the charter lay dormant till 1785.

GIULIANO (SAN), a town of Sicily, Val-di-Trapani, occupying the site of the ancient Eryx, on the summit of the mountain of the same name, 5 m. N.E. by E. Trapani, and 40 m. W. by S. Palermo. Pop. (1831) 10,249. It has 9 convents, 15 churches, an hospital, and a *monte di pieta*. From its elevated situation it commands a fine prospect, and has a pure atmosphere: the inhab. enjoy excellent health, the women being remarkable for their beauty and clearness of complexion; a circumstance

which rendered it an appropriate situation for the temple of Venus, which existed here in antiquity. *Mons Eryx*, on which the temple was built, rises 2,175 ft. above the level of the sea, and was said by Polybius to be the largest mountain in Sicily, Etna excepted; and he adds that the temple far excelled all the other temples in the island, in splendour, wealth, and magnificence. (*Lib.* i. § 55.) The accounts of the origin of this famous temple are obscure and contradictory. According to Virgil it was founded by Æneas (*Æneid*, lib. v. lin. 760.); and at all events it was extremely ancient, as Dædalus is said to have built the Cyclopean walls that surround part of the mountain, and to have enriched its treasury with some extraordinary works of art. The votaries of the goddess, thence frequently called *Venus Erycina*, including persons of the highest distinction, resorted thither in crowds, not only from all parts of Sicily, but also from Italy and Greece. It was, in fact, one of the most celebrated seats of superstition, pleasure, and dissipation in the ancient world. According to Diodorus Siculus, 17 cities contributed to the support of the temple. The priestesses of the goddess were slaves; but some of them became rich enough to purchase their freedom. The temple was plundered by Hamilcar, a Carthaginian general, who, being afterwards taken by the Syracusans, expiated his sacrilege by the most cruel torments. But this seat of superstition and debauchery having lost its attractions, was in Strabo's time nearly deserted. It was, in some measure, restored by Tiberius; but it never recovered its former splendour, and was in no very lengthened period wholly abandoned. (See the article on this temple in the learned *Mémoire sur Vénus*, by Larcher, pp. 188—194., and the authorities referred to in it).

"Eryx is at present an abrupt and sterile mountain, with but few vestiges of its former magnificence; those still existing are principally a few granite pillars, and some remains of a Cyclopean wall; there is also a kind of cistern, now dry and filled with weeds and brambles, in the castle court, called the well of Venus; and coins, vases, *amphoræ* and *pateræ*, are frequently found, as are also many leaden bullets for slings, inscribed with imprecations." (*Smyth, Sicily*, p. 242.) Wild pigeons still resort to the mountain in great numbers, as in ancient times.

GIURGEVO, a town of Wallachia, on the N. bank of the Danube, opposite Rustchuk, and 38 m. S.S.W. Bucharest. Pop. 15,000.? It is a miserable place, composed of dirty, narrow streets, and houses built of mud, with here and there one a little more pretending in its appearance, ornamented by a wooden verandah. It was formerly fortified, but its ramparts were levelled by the Russians in 1829. The coffee-houses are numerous, and apparently afford more comfort than the private residences. "The principal square contains a tall quadrangular tower, surmounted by a bell, which sounds at certain hours, and is misnamed a *clock*; but, with the exception of this appendage, the square differs little from a large courtyard surrounded by Irish cabins. Giurgevo carries on a considerable trade with some of the Austrian towns; and a great part of the commerce of Bucharest, of which it may be regarded as the port, flows through it." (*Elliott's Trav. in Austria, &c.* i. 177.)

GIVET, a town of France, dép. Ardennes, cap. cant., on both sides the Meuse, close to the Belgian frontier, 25 m. N.N.E. Mezières. Pop. (1836) 4,273. Its divisions are connected by a fine stone bridge of 5 arches; and both are fortified. The town is in general well-built, especially the grand square. Among the public buildings are commodious barracks, in which English prisoners were detained during the last war; a military hospital, and a public library with 5,000 vols. Givet has a tolerable port, a brisk trade, and manufactures of acetate of lead, sealing-wax, glue, earthenware, pipes, and leather. In its canton is the gorge, ¾ m. in length, through which the Meuse flows; the overhanging rocks on either side of which are called the *Dames de Meuse*.

GLADOVA (Turk. *Fet-Islam*), a town of Servia, on the Danube, immediately below the "Iron Gate," and at present one of the chief stations of the Danube Steam Navigation Company. It is destitute of any house capable of affording accommodation to travellers, being a mere collection of wretched huts. Its inhabs. find constant employment in the conveyance of merchandise, &c. by land to and from Orsova, the station above the rapids of the Danube, a journey of nearly 10 m., which most passengers perform by land. About 2¼ m. below Gladova are the remains of Trajan's Bridge. (*See* DANUBE.)

GLAMORGAN, a co. of S. Wales, being the most southerly in the principality, having S. the Bristol Channel, E. the Co. of Monmouth, from which it is separated by the Remny, N. Brecknock, and W. Caermarthen. It is about 52 m. in its greatest length W. to E., and 28 m. in its greatest breadth. Area, 506,880 acres. On the N. and N.E. it is mountainous; but its S. portion, consisting of the vale, or, more properly speaking, great level of Glamorgan, stretching from the mountains to the sea, is by far the most fertile part of S. Wales. The soil of this level is a reddish clay resting on a limestone bottom, and is most excellently adapted for the growth of wheat. But the agricultural capacities of this co. are surpassed by its all but inexhaustible mineral treasures. In fact, the whole of this co., N. of Llantrissent, is comprised within, and forms the largest portion of, the coal basin of S. Wales — the greatest depôt of coal in the empire; and capable, it is believed, of alone supplying its present rate of consumption for above 2,000 years! This co. has also inexhaustible supplies of lime and ironstone; and is the seat of the Merthyr-Tydvil, Aberdare, Hirwain, and numerous other iron works, the greatest establishments of their kind in the empire. The energies of the inhab. being thus principally directed to mining pursuits, agriculture is not in a very advanced state. A great deal of excellent wheat is, however, produced; barley, oats, and potatoes being the other principal crops. Lime is the principal manure. Estates and farms vary very much in size. The latter are most commonly held under leases of 7 or 14 years. The hills afford good pasture for sheep and cattle, and great quantities of cheese and butter are made. The Glamorgan cattle are the largest of the Welsh breed. Recently they have been crossed with the Ayrshire breed; and the mixed breed thence resulting are found to yield a greater quantity of milk than the old Glamorgan; at the same time that they are hardier, and can be kept at a good deal less expense. Average rent of land, in 1843, 10*s*. 2¼*d*. an acre. The cottages in this co are said to be amongst the best in the empire. The custom of white-washing houses, office-houses, walls, &c. is universal; and it is alleged that, occasionally, even hedges have been subjected to this favourite operation. Principal rivers, Tawe, Neath, and Taffe. There are several canals and railways in the co. by which an easy communication is kept up between the mining districts in the N. and the ports of Swansea, Neath, Cardiff, &c. Near Swansea and Neath are the greatest smelting works in the empire. Cardiff is the principal port in the principality for the shipment of coal and iron. Principal towns, Merthyr-Tydvil, Cardiff, Swansea, and Neath. This co. returns 5 mems. to the H. of C., viz. 2 for the co., 1 for Merthyr-Tidvil, and 1 each for Cardiff and Swansea and their contributory bors. Registered electors for the co., in 1849-50, 6,112. Glamorgan is divided into 10 hundreds, and 118 parishes. In 1841, it had 32,718 inhabited houses, and 171,188 inhab., of whom 87,869 were males, and 83,319 females. Sum contributed to the relief of the poor, in 1847, 44,333*l*.

GLARUS, or GLARIS, a canton of Switzerland, in the E. part of which it is situated, and ranking seventh in the confederation; between lat. 46° 47′ and 47° 10′ N., and long. 8° 51′ and 9° 15′ E.; having N. and E. the cant. St. Gall, S.E. and S. the Grisons, and W. Uri and Schwytz. Length, N. to S., 27 m. Area, 278 sq. m. Pop. (1838) 29,348, of whom 25,548 were Protestants. This canton is one of the most singular in Switzerland, not only in its geographical position and natural features, but also in its political constitution, and some of its laws and usages. Its central portion consists of the long narrow valley of Linth, into which there is but one road; and of two small lateral valleys, to neither of which there is any access but by the principal valley. The rest of the surface is mostly covered with mountains belonging to different ranges, which, in general, rise higher than those in the neighbouring cantons. The Doediberg, at its S. extremity, the loftiest summit in E. Switzerland, is 11,765 ft. in height: the Glarnish is 9,630 ft.; and the Wiggis, 7,444 ft. high. The Linth, its principal river, rises beneath the Doedi, and runs in a N. direction through the whole canton, into the lake Wallenstadt, which forms a part of its N. boundary. Besides this and the lake of the Klœnthal, there are many other small lakes in the mountains. Glaciers are also numerous, and the scenery generally is very striking. According to Ebel, not 1-10th part of the land is arable: orchards of plum, pear, cherry, apricot, almond, and other trees, are sufficiently plentiful, and in some parts the vine is cultivated; but very little grain, or other agricultural produce, is obtained. The pasturages on the mountain sides are fine, and feed during the summer about 10,000 cows and 5,000 sheep. A great many goats are kept. This canton is the peculiar seat of the manufacture of *Schabziegcr*, or green cheese. This article is made of cows' milk, and not of goats', as its name might seem to imply. The peasants, who feed their cows in the mountains, bring down the curd in sacks, each containing about 200 lbs., for which they get about 30*s*. The cheese owes its peculiar appearance, smell, and flavour to the blue pansy (Germ. *klc*; *Trifolium Melilotus cærulea*). This herb is grown in small enclosures beside most of the cottages, dried, ground to powder, and in that state thrown into the mill along with the curd, in the proportion of 3 lbs. of herb to 100 lbs. of the latter. After being turned for about 2¼ hours, the mixture is ready to be put into shapes,

where it is kept until it dries sufficiently to be ready for use. When sold wholesale, it fetches about 3½d. per lb. This is considered a very lucrative trade; and the richest people in the canton are cheese manufacturers. A good deal of Schabzieger cheese is exported to America. The possessor of 20 or 25 cows in Glarus is considered to be in very easy circumstances, and yet his whole property does not amount to more than 160l., the usual price of a cow being 7l., or 8l. at most. But with a single cow, and a little potato land, or with 3 or 4 goats, an individual is above poverty. A person possessing property to the amount of 3,000l. is considered very wealthy, and there is not one in the canton worth 8,000l. (*Inglis.*) The woods, which chiefly consist of fir and beech trees, belong for the most part to the communes. They have, however, been ill managed, and timber has become dear. Several mines of copper, iron, and silver exist, but they are not wrought. Fine black and other marbles, slate, quartz, gypsum, &c. are found, and there are some sulphureous springs. The inhab. are very active and industrious: they manufacture cotton and linen goods, print muslins, &c., pretty extensively, and are endeavouring to establish silk manufactures. They formerly traded in the more precious European woods, and marquetry-work; but the demand for these has greatly diminished. The chief exports of Glarus are about 2,000 head of cattle and 200 or 300 horses annually, Schabzieger and other kinds of cheese, butter, honey, dried fruits, manufactured articles, slates, &c. The principal imports are corn, wines, salt, metals, wool, colonial produce, glass, earthenware, and straw hats, muslins, silks, and Lyonese goods, which the traders sell in the fairs of Italy, Germany, and the N. of Europe. It is estimated that 1-30th part of the pop. are engaged in business out of the canton; some travel for Zurich merchants, and others on their own account; and natives of Glarus are settled in many of the large commercial cities of Europe. The cant. is divided into 15 *tagwen* or communities; chief towns, Glarus, Mollis, Schwanden, and Enneda; the last has risen up since 1780 to be a place containing 2,000 inhab., the most thrifty in the canton. The constitution is purely democratic. The government is in the hands of the whole body of the male pop. above 16 years of age, being from 6,000 to 7,000, who meet annually on the first Sunday in May, in a general assembly, to appoint their magistracy, &c., and to accede to or reject the laws proposed to them by the executive body. The latter consists of a council of about 80 members, of whom 3-4ths are Protestants, and the remainder Catholics. The two persuasions enjoy the same rights, and alternately elect the presidents of the general assembly and council. Some very singular laws prevail in Glarus. One is, that only a son or daughter can inherit property, unless such have been purchased by the testator. Property so lapsing belongs to the government, by which it is let out to the poor at the rate of 15 batzen (2s. 1d.) for 36 ft. sq. A large proportion of the land is held in this way, and generally planted with potatoes or blue pansy. This law gives general satisfaction. The laws respecting marriage are curious. Whatever may be the age of persons desirous of marrying, they cannot do so without the consent of their respective parents. "A man of 50 must still remain a bachelor, if his father of 75 should so determine." (*Inglis.*) This law is, however, partially neutralised by another. If a young woman is *enceinte*, the person in fault is obliged to marry her; or, in case of a refusal, he is declared incapable of being elected to a seat in the council; his evidence is inadmissible in a court of justice; and, in short, he is deprived of civil rights. Both the Catholic and Protestant clergy are paid by the government; but the strictest economy prevails in all the public departments; the chief magistrate receives but 20l. a year! Taxation is very low; the state-expenditure is defrayed by a poll-tax of 4 batzen (about 6d.) upon every one above 16 years of age; a property-tax of 2 batzen upon every 1,000 florins, rent of state-property, customs, post-office, excise, fines, &c. There is no direct poor-law, but something very like one. On Sundays there are what are called *voluntary subscriptions* for the poor; but if any one known to have the means of giving be observed not to give, he may be summoned before the council, and compelled to contribute. There are one or more schools in every commune, for the ordinary useful branches of education, the masters of which are paid by government about 35l. a year. Parents are obliged to send their children to school; but all instruction is gratuitous. Glarus furnishes 482 men to the army, and 3,615 Swiss francs to the treasury of the Swiss confederation. Public revenue (1826) 26,226 florins; expenditure 17,301 florins. As early as the 5th century, the territory of Glarus belonged principally to the abbey of Seckingen on the Rhine; but it fell in the 13th century into the possession of the house of Austria. In 1351, it was occupied by the troops of the confederated Swiss cantons, and soon afterwards joined the confederacy; its independence being consolidated by the memorable battle of Naefels, in 1388. After the reformation, it was the seat of continual religious wars; and in 1799, was the theatre of a contest between the Austrians and Russians and the French. The historian, Tschudi, was a native of this canton. (*Helvetic Almanack; Ebel; Cannabich; Lutz. Geog. and Statist.; Picot; Inglis's Switzerland.*)

Glarus, a town of Switzerland, cap. of the above cant., in the narrow valley of the Linth, between two Alpine mountain ranges, 33 m. S.E. Zurich, and 6½ m. S. the Lake of Wallenstadt. Pop. 4,320. The town is well built, and cheerful; the houses, many of which are antiquated, are chiefly of stone, and frequently ornamented on the outside with fresco paintings. The par. church, an old Gothic edifice, is used by both Protestants and Catholics. The Linth is here crossed by two bridges. Glarus has an hospital, town-hall, a free school for 700 children, erected by private subscriptions; public library, and reading-room. Most of its inhab. are engaged in commerce, and it has a brisk trade; besides manufactures of printed cotton goods, muslins, woollen cloth, and Schabzieger cheese. (*Ebel; Picot, &c.*)

GLASGOW, a city, river-port, and the most populous and important manufacturing and commercial town of Scotland, co. Lanark, on both sides the Clyde, 42 m. W. by S. Edinburgh, and 18 m. E.S.E. Greenock; lat. (Observatory) 55° 51′ 32″ N., long. 4° 17′ W., being about 8 m. farther S. than Edinburgh. The greatest extent of the city from E. to W. is nearly 4 m., and from S. to N. nearly 3 m. The site on which Glasgow is built is a dead level on the S. of the river, and also for about ½ m. on the N., after which the ground rises with considerable rapidity, till, at the extremity of the town, in this direction, it is 150 ft. above the level of the Clyde. The portion of the city on the S. bank of the Clyde, called the Gorbals, had, in 1841, a pop. of 39,054. Its situation, shape, and fine river, give Glasgow a striking, though miniature resemblance to London. Pop. (1841) 282,134: viz. males, 134,087; females, 148,047; excess of females, 13,960. In 1849, the pop. was estimated at 367,800. (See *post.*)

The town originally stood on the elevated ground, adjoining the cathedral erected in the 6th century (by Kentigern, or St. Mungo, the tutelar saint of the city), on the banks of the ravine intersected by the Molendinar rivulet (*Scottice* burn), which formed for centuries its W. boundary. From this point the buildings gradually extended downwards till they occupied the whole of the intervening space N. of the Clyde, and ultimately in every direction, including the large suburb (the Gorbals) S. of the river. Other extensive suburban villages, such as Calton, Anderston, Bridgeton, Camlachie, &c., are now regarded as forming part of the city, being continuously attached to it. The houses both of the city and suburbs are of stone, covered with slate. The principal street, running E. and W., parallel to the river bearing the several names of Argyle Street, Trongate, and Gallowgate, is above 1½ m. in length; and, though not of uniform width, is everywhere of ample dimensions. It is lined on either side with well-built houses, from 3 to 5 stories in height, having handsome shops on a level with the causeway; and is, in fact, one of the best streets and most crowded thoroughfares in Europe. Parallel to this are many fine streets, as Ingram Street, St. Vincent Street, George Street, &c.; and these are intersected by other streets running N. and S., of which the principal and most ancient is the High Street and Saltmarket. Glasgow is in one respect decidedly superior to London, both sides of the Clyde being bordered by fine quays: Carlton Place, on its S. side, is one of the finest ranges of buildings in the city. All that part of the city W. of George's Square and N.W. from Argyle Street to the canal, is comparatively modern. Here, within the last 40 or 50 years a city, of noble streets, squares, and palaces, has been raised. Blythswood Square, on rising ground N. from

the Broomielaw, is splendidly built, and may be regarded as the most fashionable part of the town — the Belgrave Square of Glasgow. The other principal squares are St. Andrew's, St. Enoch's, and St. George's. On the extreme W. of the city, on elevated ground, are Woodside Crescent, Woodside Terrace, Claremont Terrace, &c., splendid ranges of buildings, commanding an extensive view of the basin of the Clyde and the adjacent country.

But we regret to have to add, that while the newer and more fashionable parts of Glasgow will bear a comparison with the finest quarters of any of our best built cities, it has other quarters which, till lately, did not rank above, if they were not below, the worst parts of the liberties of Dublin, St. Giles's in London, or the *wynds* leading from the High Street in Edinburgh. The principal district of this sort lies in the centre of the city, between the Trongate on the N., the Saltmarket on the E., the Clyde on the S., and Stockwell Street on the W. It consists of a labyrinth of narrow lanes or wynds, whence numberless entrances lead off to small square courts or "closes." These wynds and courts are formed of old, ill-ventilated, and mostly dilapidated houses, varying from two to four stories in height, without water, and let out in stories or flats; one of the latter often serving for the residence of two or three families. Frequently, however, the flats are let out in lodgings, as many as 15 or 20 individuals having been occasionally found huddled together in a single room. (*Symonds on Artizans, &c.*, p. 116.) The whole district is occupied by the poorest, most depraved, and worthless part of the pop. Latterly, however, a great deal has been done to introduce cleanliness into these recesses, and to improve their sanatory condition; and, though still susceptible of much improvement, they are now (1850) in a comparatively satisfactory state.

In 1817 gas was introduced into the city. It is now supplied by two companies, the cost being a little more than 6*s.* per 1,000 cubic feet. The city was served very insufficiently with water by public and private wells till 1806, when the "Glasgow Water Company" was formed by act of parliament. Another company incorporated in 1808 was subsequently united with the former. The water is got from the Clyde; quantity furnished daily 8,218,000 imp. galls. Lowest charge per family, 5*s.* 6*d.* per annum, rising on a graduated scale to 13*s.* on houses rated at 10*l.*; above 10*l.* of yearly rental, 6½ per cent on rental. Public works varying from 6*l.* to 12*l.* 10*s.* per annum for a daily supply of 1,000 imp. galls. More recently another water company has been formed by which water brought from the upper Pollock Hills is supplied to the Gorbals, or to the portion of the city S. of the Clyde, at a charge of 5 per cent. on the rental. An excellent market-place for the sale of cattle was established in 1818.

Glasgow can boast of many magnificent public buildings; of which the cathedral, or high church, is entitled to the first notice. The original edifice, built by St. Mungo, having gone to decay, the present structure was begun by John Achaius, Bishop of Glasgow, in 1133, in the reign of David I., but was not completed for upwards of three centuries. As the building stands on an elevation (on the W. bank of the Molendinar rivulet), 104 ft. above the level of the Clyde, it is seen at a great distance in almost all directions. It is a large oblong structure, in what is called the early English style, which, notwithstanding the different æras of the building, is said by Mr. Rickman to be well kept up, and to be excellently designed and executed. Its greatest length, from E. to W., is 319 ft., the breadth 63 ft., the height of the choir 90 ft., and of the nave 85 ft. A square tower, which rises from the centre of the building to the height of 30 ft. above the roof, is surmounted by an octangular tapering spire, terminating in a ball and vane 225 ft. above the floor of the choir. It is said to have in all 157 windows, many of which are of exquisite workmanship. The crypt, under the choir and chapter-house, is said, by Mr. Rickman, not to be equalled by any in the kingdom. "It is, from the fall of the ground, well lighted, and is an uncommonly rich specimen of early English." It was formerly used as a church, but since 1798 has been used as a cemetery only. This venerable and magnificent structure, the most perfect by far of the ancient religious edifices still existing in Scotland, narrowly escaped falling a sacrifice at the æra of the Reformation to the destructive zeal of the mob; but was fortunately saved by the timely and vigorous interposition of the trades. It has recently been, thoroughly repaired and renovated partly and principally at the expense of government, and partly by subscriptions from the corporation, and other public bodies and private individuals. It formerly contained three churches, one of which, as already stated, was in the crypt; but now it contains only one. The bishop's palace, or castle, as it was called, erected in 1430, stood a little S. W. from the cathedral, and was enclosed by a strong wall. The ruins were removed, in 1789, to make way for the infirmary, one of the finest buildings in the city.

Most of the churches, both established and dissenting, are fine buildings, particularly St. Enoch's, St. Andrew's, St. David's, and the Tron; St. Andrew's episcopal chapel; and the R. Catholic chapel, a magnificent Gothic edifice, in West Clyde Street. The University, including the houses for the accommodation of the professors, situated on the E. side of the High Street, is of considerable extent, having a front of 305 feet to the High Street, and extending 282 feet from E. to W. The buildings, occupying 4 quadrangular courts, are generally three stories high, diversified with turrets and appropriate ornaments. In connection with the college and near it, on the S. E., is the Hunterian Museum. The building is one of the most perfect specimens of a pure classical structure to be found in the empire. It was erected in 1804, from funds (8,000*l.*) left for the purpose by the celebrated Dr. William Hunter, a native of the parish of Kilbride, near Glasgow, for the reception of the various articles he bequeathed to the university. They comprised a library of from 10,000 to 12,000 vols., embracing many rare and splendid editions of the classics, and other standard works; a choice, and not easily matched, cabinet of Greek and Roman coins and medals; about 60 capital pictures; and a magnificent assortment of anatomical preparations, shells, minerals, zoological specimens, &c. This truly noble collection is said to have cost Dr. Hunter 100,000*l.*, and since it was placed in its present situation it has received many additions. The adjoining ground on the E. of the college, though called the College Garden, is a park containing several acres, enclosed by a high wall, and laid out in walks for the use of the professors and students. The Macfarlane Observatory stands near its E. end; but a new observatory has recently been erected in the Gartnavel grounds from 2 to 3 m. W. of the city. The new Royal

Exchange, in Queen Street, is a splendid fabric, built in the florid Corinthian style, and surmounted by a lantern, one of the most conspicuous objects in the city. The colonnade, one of the boldest and most imposing structures of the kind in the kingdom, consists of a double row of fluted Corinthian pillars of great height. The apartment appropriated to a news-room is 100 feet in length by 40 in breadth, with a richly ornamented arched roof, supported by fluted pillars. The Royal Exchange is placed in the centre of an area, two sides of which are lined with magnificent ranges of buildings; while behind it is the Royal Bank, a Grecian structure, much admired for the simplicity and chasteness of the design. On each side the bank, two superb Doric arches afford access to Buchanan Street, one of the principal streets of the city. Amongst the other public buildings are the gaol and court-houses; the new city and county buildings in Wilson Street; the tontine buildings, at the E. end of the Trongate, opposite the statue of William III., constructed in 1781, as its name implies, by a company of subscribers, on the principle of survivorship. The news-room on the lower floor is of very large dimensions, and, previously to the erection of the new exchange, was the grand resort of the mercantile body; the upper part is occupied as an hotel. The old lunatic asylum to the N. of the city, a large and massive structure, has been converted within these few years into a workhouse for the city parish; and a new Lunatic Asylum, on a still larger scale, has been erected, in a conspicuous situation, in the Gartnavel grounds to the W. of the city. The bridewell, merchant's hall, town hospital, trades' hall, assembly rooms, the Andersonian university, high school, National Bank of Scotland, Union Bank, surgeons' hall, barracks, theatre, Hutcheson's hospital, house of refuge, lyceum, &c., deserve notice. It may here be stated that, in 1831, there were 3,184 shops of all kinds in the city and suburbs; and that the number is now supposed to be nearly 5000. The highest rent paid for a shop was 250*l.* per annum. In 1712 the highest rent of a shop was 5*l.*, the lowest 12*s.*; the average a little more than 3*l.*!

In connection with public buildings may be mentioned the bridges over the Clyde. The first, or Bishop's Bridge, constructed in 1345, was originally only 12 feet in width, but it was greatly enlarged and improved at subsequent periods. In consequence, however, of the operations for deepening the river and harbour, its foundations became insecure, and for some time past it has been used only by foot passengers. It is now being taken down, and is to be replaced by a splendid new bridge of 5 arches, principally of granite, from a design by James Walker, esq., C. E. Of the other bridges, the newest and handsomest is Glasgow Bridge, built in 1836, on the site of a former bridge, removed for the purpose. It is of Aberdeen granite, 560 ft. in length, and 60 ft. in width over the parapets; and is not only one of the greatest ornaments of the city, but is said to be wider than any other bridge in the U. Kingdom. It is also proposed to throw an iron bridge for foot passengers over the river.

Public Monuments. — Of these may be enumerated an equestrian statue in bronze of William III., erected at the Cross in the Trongate, the gift of James Macrae (1735), a citizen of Glasgow, and governor of the presidency of Madras; an obelisk in honour of Lord Nelson, in the public green; a very admirable equestrian statue of the Duke of Wellington, by Marochetti, immediately in front of the new exchange; a statue of Sir John Moore (a native of Glasgow), in bronze, on a granite pedestal, by Flaxman; a similar statue of James Watt, by Chantrey, both in George Square. In the centre of the same square, is a fluted Doric pillar, about 100 ft. in height, in honour of Sir Walter Scott, with a colossal statue of the great minstrel at the top; in the town-hall is a statue of William Pitt, in marble, by Flaxman. These monuments are exclusive of those in churchyards, of which there are 20 in the suburbs. The Necropolis, formed by the Merchant Company, in 1830, in an elevated park (rising suddenly to the height of 200 ft., on the E. side of the Molendinar rivulet, opposite the cathedral,) is tastefully laid out. Of the various monuments which it contains, an obelisk erected on the summit of the eminence, in honour of John Knox, surmounted by a statue of the reformer, is the most striking: like the cathedral, it is visible at a great distance in every direction. Two additional cemeteries have since been formed; one at Sighthill on the N. of the city, and one in Gorbals.

The *Green* may be appropriately noticed in this place. This, which is the Hyde Park of Glasgow, lies between the Clyde and the Calton and Bridgeton, and contains about 125 acres, appropriated to the recreation of the citizens. It has latterly been very much improved; the public washing-house having been removed to a more convenient situation, and a carriage drive carried round its circumference.

Ecclesiastical State. — Glasgow contains 12 parochial churches, the clergymen of which are paid by state endowments, each receiving an annual stipend of 425*l.*, except the ministers of the cathedral and Barony parishes, whose incomes, arising from teinds, and including their glebes, amount to about 500*l.* The deficiency of parochial churches has been supplied by the erection of chapels-of-ease, or supplementary parishes, the incomes of the clergymen of which arise either from the produce of church sittings, or from a given amount of stipend, secured by a bond voluntarily entered into by certain leading persons connected with the separate parishes. The number of these supplementary, or *quoad sacra* parishes, was recently very considerable; there having been, previously to the foundation of the Free Church in 1843, no fewer than 16 of them in the Barony parish only. But the institution of the Free Church, by withdrawing a large portion of her adherents from the establishment, lessened the demand for and the number of supplemental churches. The number of dissenters is also very great, comprising not only the members of the United Presbyterian Synod, a very important body, and every denomination of Protestant dissenters, but immense numbers of R. Catholics, with Unitarians, Jews, &c.

Including the Barony parish and the Gorbals, there belonged to the different religious denominations in 1850 the following churches: viz. Established Church, 26; Free Church, 30; United Presbyterian Church, 23; Reformed Presbyterian, 2; Original Seceders, 2; Church Presbyterians, 1; Independents, 5; Independents not in connection with the Congregational Union, 4; Evangelical Union, 1; Old Independents, 1; Baptists, 5; Episcopalians, 6; Wesleyan Methodists, 1; Congregational Methodists, 1; Roman Catholic, 4; Unitarians, 1.

Education. — Under this head the university claims the first attention. It was founded by Bishop Turnbull, under a papal bull, dated 1450; and its privileges have been subsequently confirmed and extended by royal charters and parliamentary statutes. The discipline of the university is administered by the court of the rector (or vice-rector), and by assessors nominated by him, who have for many years been the principal and professors. The public affairs of the university are under the management of the senate, which is composed of the rector, dean of faculties, the principal, and all the professors, the latter being 21 in number. The business of the college, as a subordinate corporation, is conducted by the principal and 13 professors, called the Faculty, who, with the rector and dean, dispense the college patronage. The rector, who is generally an eminent literary or political character, who seldom resides, or even appears, except at his inauguration, is chosen annually by the matriculated students. The office, which is now one of distinction only, has been filled by Burke, Adam Smith, Francis Jeffrey, Sir Robert Peel, &c. There is also a sinecure officer, named chancellor, nominated for life by the senate, who is generally a nobleman of distinction. The chancellor appoints a vice-chancellor, but neither has any rights or privileges either in the discipline of the institution or in the exercise of its patronage. In addition to the 21 professors, there is a lecturer on the structure, functions, and diseases of the eye. Government also instituted, in 1840, a professorship of mechanics and civil engineering and endowed it with a salary of 250*l*. a year. The principal presides as chairman at meetings of the senate, and generally over the institution, and is honorary professor of theology, but teaches no class. The crown is patron of the principality, and of 14 professorships, including that newly instituted; the faculty, rector, and dean, being patrons of the remaining 8 professorships. The professors derive their incomes partly from the fees paid by the students (which vary from 2 to 5 guineas), and partly from funds (which amounted, in 1824, to 9,406*l*. a year) belonging to the college. In addition to these sources of income, government annually gives a grant, varying in amount, to augment the income of several of the chairs. It is required by law, that the principal and all the professors be members of the established church: the law, however, is not strictly enforced, except in the case of the principal and theological professors. Religious distinctions are of no consequence in the case of students; those only who belong to the national church and whose parents do not live in town, are required to attend public worship in the College Chapel. The *curriculum*, or course of study, is divided into the four faculties of Arts, Divinity, Medicine, and Law; which last is confined to a single professorship. There is only one session in the year, beginning 10th Oct., and terminating 1st May. There are 30 bursaries, the benefits of which are extended to 65 students. Their average annual income is 1,165*l*. 10*s*. 4*d*.; the highest is 50*l*.; the lowest, 4*l*. 10*s*. Mr. Snell, of Warwickshire, about a century ago, left a landed estate in that county, for the purpose of founding ten exhibitions in Balliol College, Oxford, in favour of students of the Episcopal Church, who have attended at least two sessions at the university of Glasgow, or one session there and two at some other Scotch university. Among the distinguished persons who have been educated on Snell's foundation, may be mentioned Dr. Douglas, Bishop of Salisbury; Adam Smith; and Dr. Matthew Baillie. Each exhibition is of the yearly value of 120*l*., and lasts for ten years. As in the other Scotch universities, there are no apartments for the residence of the students within the College. The number of students varies from 1,000 to 1,200. The graduations during the last year were as follows: — in arts, 23; in medicine, 117; in surgery, 19. The university library, which was founded in the 15th century, contains about 70,000 volumes, and is open to the students. The botanic garden attached to the chair of botany in the university has been removed within these few years to the Great W. Road, about 2 m. W. from the city. It occupies an elevated situation in the vicinity of the new observatory. Some of the most illustrious names in the literature of Scotland have been professors in the University of Glasgow: amongst others may be specified Hutcheson, Adam Smith, Simson, Millar, and Reid.

Anderson's University, or Andersonian Institution, was founded by Dr. John Anderson, Professor of Natural Philosophy in the University of Glasgow, who died in 1796, leaving his effects, including his museum and philosophical apparatus, to the institution. It is under the management of a large body of trustees, elected periodically. It possesses a fine building in George Street, embracing suitable class rooms, a large hall, chemical rooms, and a museum. It consists of three distinct apartments: — 1. General branches for youth, consisting of mathematics, logic and ethics, natural philosophy, chemistry, French, German, geography, drawing, and painting. 2. A medical school, embracing all the branches for the various colleges of surgeons, and public boards. 3. Mechanics' classes; comprising 50 lectures on mechanics and chemistry, in alternate winters, and drawing. Excepting those in the mechanics' classes, the lecturers pay rents for their rooms. There is a good library, to which the students have access. The classes for mechanics in this institution were the *first* established in the empire. The managers in their Report on the session 1849-50, state "they have pleasure in reporting that the attendance on the classes in all the departments of the University has been considerably greater than during the previous year. In the Medical Department the number last session was 515; this session, 567 — increase, 52. In the Chemistry, Natural Philosophy, and General Literary Department, last session, the number was 370; this session, 430 — increase 60. The Popular Evening Classes have also been better attended than lately. Last year the numbers were 117; this year, 170 — increase, 53. The total number attending all the Classes and Lectures in the University this year has been 1,219; last year, 1,084, being an increase of 135 over the previous year."

The Glasgow mechanics' institution was founded in 1823, chiefly by some members of the mechanics' class in Anderson's University, who felt dissatisfied with the management. A ticket, price 5*s*., admits to the classes of natural philosophy and chemistry, on each of which there are courses of lectures which were respectively attended, in 1849-50, by 223 and 145 pupils. Mathematics and other branches are also taught. A scientific and literary reading-room is attached to the institution.

The Athenæum in Ingram Street was established in 1847. Its object is to place within reach of the public the most recent information on all subjects of general interest, whether commercial, literary, or scientific. It has a good library, and its large hall is well supplied with newspapers and other periodical publications. Lectures are given; and there are morning and evening classes for the modern languages, mathematics, &c. In 1850 the institution had 1015 annual members, and 152 half-yearly, and 159 quarterly subscribers.

An immense number of public and private schools and academies, some supported in whole or in part by subscriptions, and others depending entirely on fees — are scattered over all parts of the city. But the means of elementary instruction are, nevertheless, said to be still rather deficient.

The High School deserves particular attention. It was formerly an exclusively classical seminary, with the exception of a writing class, having 5 teachers for Latin and Greek, with 1 for writing; the time devoted to classical literature being from 5 to 6 hours daily. But in 1834, it was resolved to modify the course of instruction in the school, so as to make it more suitable to the wants of a great manufacturing and commercial city. In consequence, the classical department was limited to 2 teachers, and the time to 2 hours: and teachers of English litera-

ture, geography, mathematics, modern languages, and drawing were introduced. In 1836 a chemical class was established; and soon afterwards this department was made to embrace natural philosophy and natural history.

A normal school, or a school for instructing teachers in the art of tuition, was founded by the Glasgow Educational Committee in 1836, and was the first seminary of the kind in Scotland. Its directors must, according to its constitution, belong to the national church; but there is no such exclusion in regard to those who are instructed in it. The fee is 3*l.* 3*s.* for the course of training, which may extend over a whole year. The Free Church has now, also, a well attended and efficient normal school, the building for which is said to have cost 8,000*l.*

Notwithstanding their devotion to commercial pursuits, the merchants of Glasgow have always been distinguished by their attention to and patronage of literature and science. The Literary and Commercial Society was established nearly a century ago, and can exhibit in the list of its members, at different times, the names of Dr. Francis Hutcheson, Adam Smith, Dr. Joseph Black, Mr. Millar, professor of law, and other distinguished individuals. It has, since its origin, been attended by the leading citizens of Glasgow, both literary and commercial. In the range of its discussions, it includes every subject except theology and party politics. The Glasgow Philosophical Society, instituted in 1802, is also an important association. The Maitland Club, instituted in Glasgow in 1828, is similar to the Bannatyne Club of Edinburgh, and the Roxburghe Club of London, printing for the use of its members MSS. and rare works illustrative of the early history, manners, and literature of Scotland. It was originally limited to 50 members; but has been extended to 100. Glasgow has also two statistical societies, a geological society, and several others. In addition to those belonging to the university, to Anderson's institution, the Athenæum, and the mechanics' institute, there are numerous subscription and circulating libraries, of which the two most important are the Glasgow public library, and Stirling's, each containing upwards of 10,000 volumes. The first newspaper published in this city, the *Glasgow Courant*, made its appearance in 1715. At present (1850) there are 13 newspapers in the city, viz. 2 published daily, 1 thrice a week, 3 twice a week, and 7 once a week. But the number is perpetually varying.

Letterpress printing was not introduced into Glasgow till 1638, upwards of 100 years after it had been established in Edinburgh; nor did it flourish for nearly a century after its introduction. But about the middle of last century the Messrs. Foulis raised the Glasgow press to the highest eminence, and their editions of some of the principal Greek and Latin classics are valuable alike for the beauty of their typography, and their accuracy. In the course of the present century Messrs. John & Andrew Duncan, printers to the university, have published some splendid editions of the classics, and of works connected with classical literature. Glasgow is not, however, a literary mart; and its authors usually make arrangements with Edinburgh or London houses for printing and publishing their works.

The *charitable institutions* of the city are too numerous to be minutely specified. They comprise, amongst others, two lying-in hospitals and dispensaries, a cow-pox institution, Magdalene asylum, deaf and dumb institution, blind asylum, eye infirmary, lunatic asylum, house of refuge, humane society, &c. In addition to Hutcheson's hospital for the maintenance of decayed burgesses and their widows, and the education of boys, sons of burgesses, there are numerous free schools for the poor, and similar institutions. But in addition to the sums bequeathed to the poor, and voluntarily contributed for their support, there were raised by assessment, in 1847, for their relief, the following sums, viz., in the city of Glasgow (properly so called), 41,091*l.*, in the Barony parish 15,930*l.*, and in Gorbals, 5,908*l.*, making in all 62,929*l.*

Police.—A regular police establishment was first organised in Glasgow, by act of parliament, in 1800. This was followed by a separate act for Gorbals, another for Calton, a fourth for Anderston, and a fifth for the river and harbour, all included within the present parliamentary limits. These five separate and independent establishments were not found to work uniformly or satisfactorily—frequent jarrings occurring amongst the various officers—till the magistrates and town council, in 1846, found it necessary to apply to parliament for a bill to abolish these separate jurisdictions, and unite the whole into one municipality, with one set of magistrates and police officers; which bill, after considerable opposition, passed both houses of parliament in the summer of 1846; and after the election of councillors and magistrates, in November of that year, came into operation.

The establishment now consists of, 1 superintendent in chief; 5 assistants; 9 lieutenants; 15 inspectors, including markets, weights, cabs, &c.; 37 sergeants; 12 turnkeys; 138 day constables; 300 night constables; 73 substitutes or supernumeraries; 1 inspector, detective department; 2 sub-inspectors; 16 detective officers; 3 assessors for police courts; 4 surgeons, making a grand total of 616 individuals.

The city is divided, for police purposes, into five districts or divisions. To each division an assistant superintendent is attached, who is responsible to the chief superintendent for the men under his charge, and for the quiet and order of the district. In each district a police court is held every morning for the trial of offenders; one magistrate presiding in the central police court, while another magistrate holds a court in each of three other districts, at different hours. A court is also held for the trial of offenders against the river and harbour regulations.

The business done in these police courts during the last year (1849) has been immense; 17,235 persons were apprehended and brought before the magistrates, and were disposed of as follows, viz.: —

Admonished and discharged - -	4,984
Summarily convicted - - -	7,954
Committed for trial - - -	268
Remitted to the sheriff - - -	412
Transferred to the justices - -	56
Forwarded to other towns or places -	344
Forfeited bail or pledge for non-appearance -	3,217
	17,235

11,152 persons were summoned before the magistrates for various contraventions, and disposed of as follows, viz.: —

Discharged (conditionally) - -	5,224
Fined - - - - - -	3,934
Forfeited pledges - - -	1,994
	11,152

The criminal and civil police of the city, being under one management, is found to work admirably; every police officer, while on his beat, is inspector of cleansing, paving, &c.

Since the new bill came into operation, miles of streets have been *formed, drained, paved, watched,* and *lighted,* which could not have been the case, under the previous divided management.

In addition to the officers already enumerated, the establishment is conducted by a treasurer and his clerk; three collectors of assessments; two surveyors; and a clerk to the police and statute labour committee.

The amount of assessment collected last year, for watching, lighting and cleansing, was 43,617*l.*; and for statute labour purposes, 12,230*l.* The amount of fines levied in the police courts was 3,583*l.*

The lighting, cleansing, and draining of the city is managed by a committee of the general council.

There is a superintendent of lighting, with 52 lamplighters; a superintendent of cleansing, with 1 clerk and 90 men; a superintendent of streets and buildings, with 2 assistants, 1 clerk, and 100 men; a superintendent of fire-engines, with 1 assistant, 70 men, 10 fire-engines, and 20 water-butts.

In case of fires, water is plentifully supplied from 456 fire-plugs, distributed throughout the municipal boundary. The number of fires which took place in the city last year was 165.

The *Prison of Glasgow* consists of two branches, the north, formerly denominated the city and county bridewell, situated in Duke Street,—and the south, in connection with the Court House, fronting the Green or public park.

The united prison contains 423 cells, or rooms, for confinement of prisoners.

The average number daily in prison during the year ending 30th June, 1850, was 733, including debtors, the total number in confinement during that period being 5,088, of whom 3,219 were males, and 1,869 females. The average period of confinement was 54 days.

With such a large number of prisoners, there is necessarily much crowding in the cells; but an additional wing to contain 148 cells and several class-rooms is in progress of erection, upon a site whereon formerly stood the town residence of the Duke of Montrose.

Various branches of work are carried on in this establishment; smiths, carpenters, tailors, shoemakers, and weavers, being employed at their respective trades, and female prisoners at factory work and white seam sewing.

The earnings for the year ended 30th June, 1850, amounted to 1,671*l.* 14*s.* 6*d.* The great mass of the prison inmates are, however, deficient in the knowledge of a trade, and are of necessity employed at the very unproductive labour of picking rope into oakum.

The Glasgow bridewell is said to be one of the most perfect establishments of the kind in the empire. Mr. Symons says that, in respect of cleanliness and economy, it leaves nothing to desire, and is a pattern for Europe.

But the general opinion now is that it has been made too attractive, and acts rather as an incentive to than as a check upon crime.

Harbour and Shipping. — Glasgow owes its present greatness to its advantageous situation on a fine river, in one of the richest coal and mineral districts in the empire. Originally, however, the Clyde was much encumbered by fords and shallows, and for a lengthened period it served rather to excite and disappoint expectation, than to confer any real commercial advantage on the city. In 1662, after several other schemes had failed, the magistrates of Glasgow purchased the ground on which Port Glasgow (16 miles lower down the river) now stands, where they formed a harbour and a graving dock, the first work of its kind in Scotland. For a considerable period the intercourse between Glasgow and its newly acquired port was principally carried on by land carriage; but from 1665 attempts were every now and then made to deepen the river. In 1688 a quay was formed at the Broomielaw; but even so late as 1775 no vessel drawing 6 ft. water, could reach Glasgow, except at spring tides. At length, however, a plan, proposed in 1769 by Mr. Golburn, engineer of Chester, for deepening the river to 7 ft. at neap tides, was adopted. He proceeded to accomplish his task, partly by the employment of dredging machines, and partly by constructing dams and jetties, so as to confine and strengthen the course of the river. These measures have since been continuously and energetically followed up, particularly of late years; and with such success that there are now usually 15 or 16 ft. water in the river at high water neaps. In the year ending the 30th June, 1849, 8 ships, drawing 18 ft. water, and 1 drawing 19 ft. do., by taking advantage of springs, came safely to the Broomielaw! The work of deepening and straightening the river is still vigorously prosecuted. Four dredging machines and two diving bells are in constant employment. The river, for 7 m. below the city, is very much contracted, and forms nearly a straight line; the sloping banks, formed of whinstone, being constructed in imitation of ashlar. The accommodation for shipping at the Broomielaw, or harbour, is now, also, very greatly extended. It comprises about 48 acres of water. The quays extend about 2 m. in length, and are amply furnished with sheds for goods, cranes, &c., and have the important advantage of being directly connected, by means of the General Terminus line, with the various railways that centre in the city. The Parliamentary Trustees for managing the river have, also, acquired ground, on the N. side of the harbour, on which they have power to construct extensive docks, and a basin on the S. side.

The total expenditure on the river and harbour, inc. works, purchases of ground, &c. to last year (1849), was about 2,000,000*l.*, of which about 1,500,000*l.* has been raised as revenue. The dues are moderate and reasonable.

The influence of these improvements on the shipping and trade of Glasgow has been most striking. Dr. Cleland says that, "less than 50 years ago, a few gabbards, and these only 30 or 40 tons burden, came up to Glasgow; and I recollect the time when, *for weeks together*, not a vessel of any description was to be found in the port of Glasgow." (*Former and Present State of Glasgow*, 30.) Now, however, a greater number of sailing vessels and of steamers belong to Glasgow than to any other Scotch port; and the harbour is constantly crowded with ships from foreign parts, coasting vessels, and steamers. The steam-packets belonging to the Clyde that ply to Liverpool, Dublin, and Belfast, are amongst the finest vessels of their class in the empire. In all, there belonged to Glasgow, on the 1st January, 1850, 70 sailing-vessels of less, and 354 of more than 50 tons each, the aggregate measurement of the latter being 119,507 tons; with 83 steamers, of which 71, above 50 tons each, measured 15,657 tons.

Revenue of the Clyde Trustees in the Years ending 30th June.

	£	s.	d.		£	s.	d.
1846 -	51,198	12	2	1849 -	59,034	14	1
1847 -	59,017	2	9	1850 -	64,243	14	11
1848 -	60,621	8	1				

Abstract of the Total Number of arrivals of Sailing and Steam Vessels at the Harbour of Glasgow, Foreign and Coastwise, for the Year ended 30th June, 1849: —

Vessels' Tonnage.	Sailing Vessels.	Steam Vessels.	Vessels' Tonnage.	Sailing Vessels.	Steam Vessels.
Under 40	2,973	1,396	350 to 400	41	64
40 to 60	1,048	901	400 — 450	41	128
60 — 80	636	2,918	450 — 500	28	1
80 — 100	235	2,744	500 — 600	37	107
100 — 150	185	469	600 — 700	20	0
150 — 200	180	217	700 & upds.	8	4
200 — 250	147	120			
250 — 300	42	153	Total -	5,557	9,311
300 — 350	36	59			

Total register tonnage of vessels arriving at the harbour of Glasgow, in the year ended 30th June, 1849 —

Sailing, 365,335; Steam, 848,830 — Total, 1,214,165.

Number of Sailing Vessels drawing 6 feet of Water and upwards, which arrived at the Harbour of Glasgow during same Year —

Feet	6	7	8	9	10	11	12	13	14	15	16	17	18	19
No.	756	560	446	298	267	144	150	59	54	39	49	31	8	1

Abstract of the Number and Tonnage of Vessels which arrived at and sailed from the Harbour of Glasgow, from and to Foreign Ports, from 8th July, 1827, to 30th June, 1849: —

Years ending		Arrivals.		Depart.	
		No.	Ton.	No.	Ton.
8th July.	1828 - -	81	8,998	33	4,359
	1829 - -	75	8,362	58	6,293
	1830 - -	75	8,571	65	7,491
	1831 - -	90	10,234	82	9,541
	1832 - -	81	9,117	62	7,025
	1833 - -	87	9,349	63	7,600
	1834 - -	112	13,544	92	11,845
	1835 - -	163	20,752	118	15,896
	1836 - -	148	19,186	137	18,273
	1837 - -	157	24,111	168	24,820
	1838 - -	140	22,327	170	26,589
	1839 - -	175	27,325	276	44,307
	1840 - -	203	35,452	336	61,495
	1841 - -	285	52,769	460	86,714
	1842 - -	244	49,873	456	89,353
	1843 - -	256	57,889	484	99,816
	1844 - -	243	47,355	408	82,783
June 30.	1845 - -	348	84,010	473	106,116
	1846 - -	340	72,538	602	117,690
	1847 - -	413	96,485	649	140,320
	1848 - -	381	88,340	517	119,790
	1849 - -	338	95,713	501	142,279

	£	s.	d.
Revenue of Clyde Trustees for the year ended 30th June, 1849 - - - - - -	£59,034	14	1
Total expenditure, interest, feu duty, &c. - -	52,598	15	10
Surplus - - - - -	£6,435	18	3
Total expenditure on new works - - -	£55,910	12	0
Less surplus revenue - - - - -	6,435	18	3
Excess of expenditure on the year - - -	£49,474	13	9
Total harbour debt at 30th June, 1849 - -	£631,490	4	6

The progress of trade at Glasgow is further exemplified by the following

Account of the Customs' Duties collected at Glasgow in the Years ending 5th January 1812, &c.

1812 - -	L.3,124	1825 - -	L.41,154	1838 - -	L.394,145
1813 - -	7,511	1826 - -	78,959	1839 - -	403,905
1814 - -	7,420	1827 - -	71,922	1840 - -	468,975
1815 - -	8,300	1828 - -	74,255	1841 - -	472,564
1816 - -	8,424	1829 - -	70,964	1842 - -	526,100
1817 - -	8,291	1830 - -	59,014	1843 - -	503,872
1818 - -	8,402	1831 - -	72,054	1844 - -	497,728
1819 - -	8,381	1832 - -	68,741	1845 - -	551,851
1820 - -	11,000	1833 - -	97,042	1846 - -	589,528
1821 - -	11,429	1834 - -	166,913	1847 - -	634,306
1822 - -	16,147	1835 - -	270,667	1848 - -	659,835
1823 - -	22,729	1836 - -	314,701	1849 - -	610,978
1824 - -	29,927	1837 - -	389,702	1850 - -	640,568

In 1781, the revenue of the Glasgow post-office amounted to 4,341*l.*; in 1810, it amounted to 27,598*l.*; in 1831, to 35,643*l.*; and in 1848, to 37,192*l.*

Canals and Railroads. — In addition to river navigation, the city enjoys the advantage of several canals and railroads. Of the former, the Forth and Clyde, generally called the Great Canal, begun in 1768, but not completed till 1798, is by far the most important. It unites the two seas on the E. and W. of Scotland, extending from Grangemouth on the Frith of Forth, to Bowling Bay on the Clyde, a distance of 35 m., with a collateral cut of 2¾ m. to Port Dundas, at the N. extremity of the city of Glasgow. Its medium width at the surface is 56 ft., at the bottom 27, and the depth of water 10 ft.; thus serving for the transit of vessels of upwards of 100 tons burden. The Union Canal from Edinburgh joins this canal 4 m. E. Grangemouth. The other canals are, the Monkland, length 12 m., which connects Glasgow with the coal and iron mines in the pars. of Old and New Monkland; and the Glasgow, Paisley, and Johnstone Canal. The depth of these canals is 6 ft. With regard to railways, Glasgow is amply furnished with them, and is, indeed, a principal centre of railway communication. She is, in fact, either the source or is intimately connected with all the principal Scottish lines; at the same time that she is supplied by numerous smaller lines with the products of the adjacent mineral and other districts. Among the principal lines may be specified the Caledonian, uniting Glasgow with Carlisle, and consequently with Manchester, Liverpool, and London; the lines to Edinburgh, Greenock, and Ayr; the Scottish Central leading to Stirling, Perth, Dundee, and Aberdeen, &c. This facility of communication with the most distant parts of the kingdom has been of the greatest utility to

the city, and has contributed, in no ordinary degree, to extend her connections and her commerce.

Commerce and Manufactures. — Prior to 1300, Glasgow was a fishing village, that part of it lying on the river, now the Briggate, being called the Fisher-row. The business was long on a small scale, and limited to the home market; but, in 1450, the trade of fishing and curing salmon and herrings for the French market was introduced; a traffic that was carried on with varied success for about two centuries. Indeed, this seems to have been the only important branch of business carried on here till 1638, when a person of the name of Fleyming, and partners, proposed to erect a weaving factory, provided the municipal authorities would grant them encouragement. On considering this offer, the town-council gave them a lease of suitable premises, for 17 years, free of rent; an act of liberality that ran great risk of being defeated by the opposition of the freemen weavers, who protested against the grant, on the ground that the factory would be injurious to their interests. In the end the company, to get rid of the opposition, agreed not to employ any weavers other than freemen! This was the origin of weaving factories in Glasgow. But nearly a century elapsed before the manufacture of lawns, cambrics, and such like fabrics, was introduced. These, however, were extensively produced from about 1740, till the business was superseded by the introduction of the cotton manufacture.

The situation of Glasgow as to trade, in 1651, may be accurately learned from the statement of Tucker, who had been commissioned by Cromwell's government to draw up a report on the revenue of customs and excise in Scotland. "With," says he, speaking of Glasgow, "the exception of the colleginors, all the inhabitants are traders; some to Ireland, with small smiddy coals, in open boats, from four to ten tons, from whence they bring hoops, rungs, barrel staves, meal, oats, and butter: some to France, with plaiding, coals, and herring, from which the return is salt, pepper, raisins, and prunes; some to Norway for timber. There hath likewise been some who ventured as far as Barbadoes, but the loss which they sustained by being obliged to come home late in the year, has made them discontinue going thither any more. The mercantile genius of the people is str ng, if they were not checked and kept under by the shallowness of their river every day more and more increasing and filling up, so that no vessel of any burden can come up nearer the town than 14 m., where they must unlade, and send up their timber on rafts, and all other commodities by 3 or 4 tons of goods at a time, in small cobbles, or boats, of 3, 4, or 5, and none above 6 ton a boat. There is in this place a collector, a cheque, and four waiters. There are 12 vessels belonging to the merchants of this port, viz., 3 of 150 tons each, 1 of 140, 2 of 100, 1 of 50, 3 of 30, 1 of 15, and 1 of 12, none of which come up to the town. Total, 957 tons."

A company for carrying on the whale fishery and making soap was formed in 1674. They employed five ships, and had extensive premises at Greenock for boiling blubber and curing fish. The whale fishery has long been given up; but the soap manufacture has ever since been extensively carried on. This is evinced by the fact that the quantity of soap made in Glasgow in 1848 amounted to 9,248,140 lbs. of hard, 4,246,922 lbs. of soft, and 593,110 lbs. silicated soap, being about 2-3rds of the whole quantity of soap made during the same year in Scotland. The manufacture of ropes was commenced in 1696; and two years afterwards an act of parliament was obtained in favour of this business, imposing a duty on all ropes imported from the Sound or E. seas; and in return, the company were to advance a capital of 40,000*l.* Scots, and to bring in foreigners to the work. The manufacture of ropes and cordage is now also an extensive branch of industry, in which large capitals are invested. The tanning of leather and the brewing business were introduced previously to the Union (1707), and have ever since, particularly the latter, formed important branches of manufacture. Almost the whole of the Scotch ale imported into our colonies is produced at Glasgow.

But it was not till after the Union, in 1707, when the trade to the American and West Indian colonies was, for the first time, opened to the enterprise and activity of the Scotch, that the commercial energies of Glasgow began to be fully developed. Her merchants immediately embarked in the trade to the W. Indies and America, especially in that to Maryland and Virginia; and such was the success that attended their efforts in this new department, that in a few years Glasgow became the grand *entrepôt* through which the farmers general of France principally received their supplies of tobacco. But for a considerable time they carried on their colonial trade in vessels chartered from English ports; and it was not till 1718, that a ship, built in the Clyde, the property of Glasgow merchants, crossed the Atlantic! To such an extent was this branch of commerce carried on, that, for several years prior to 1770, the annual import of tobacco into the Clyde ranged from 35,000 to 45,000 hogsheads. In 1771, the quantity was 49,016 hogsheads; and in 1775, 57,143. The American war put an end to a traffic from which Glasgow had reaped great advantages. But no sooner had this business been cut off than the merchants directed their energies to other channels; and found in the extension of the W. Indian trade, and still more in the introduction of the cotton manufacture, new and far more productive sources of employment and wealth. The wonderful inventions and discoveries of Hargreaves, Arkwright, and Watt, powerfully attracted the attention of the more enterprising and intelligent citizens of Glasgow; and in a few years the cotton manufacture was introduced and established. The manufacture of linens, lawns, cambrics, &c., having been already extensively carried on, the work-people had little difficulty in applying themselves to the new business; at the same time that the favourable situation of the city for trade, and its unlimited command of coal and iron ore, gave it every facility for successfully prosecuting the manufacture. Hence it is that for a lengthened period Glasgow has been second only to Manchester in this great department of industry. Her cotton mills are on the largest scale, her machinery is of the most perfect description, and in the fineness of her muslins and other fabrics, she is, perhaps, unrivalled. The following table shows the number of cotton and other factories in Glasgow and its immediate suburbs, in 1838-39; and of the hands employed. (*Parliamentary Report relating to Mills and Factories*, 1839, p. 269.)

Species of Manufactures.	No. of Mills.	Persons under 21 Years of Age.		Persons above 21 Years of Age.		Total of both Sexes.
		Males.	Females.	Males.	Females.	
Cotton -	101	2,444	8,180	2,818	4,178	[illegible]
Woollen -	3	111	228	189	46	[illegible]
Flax -	2	28	134	45	47	[illegible]
Silk - -	3	67	230	43	70	410
Totals -	109	2,650	8,773	3,095	4,341	[illegible]

In 1846 there were in the co. of Lanark, and mostly in Glasgow, 20,729 individuals employed in cotton factories, whereof 5,143 were males, and 15,586 females. And in the same co. in the same year, 1,490 individuals were employed in woollen, 943 in flax, and 723 in silk factories. (*Parl. Paper. No.* 294, *Sess.* 1847.) The populous manufacturing village of Pollockshaws, which is all but a suburb of Glasgow, being in Renfrew, is excluded from the above return.

There belonged to Glasgow, in 1834, no fewer than 32,000 hand-looms; viz., 18,537 in the city and suburbs, and 13,463 in other towns, employed on account of Glasgow manufacturers. (*New Statist. Acc. of Scot.*, § *Glasgow*, p. 154.) And the number is supposed rather to have increased in the interval. The hand-loom weavers at a distance receive the average rate of wages, but have the expense of carriage to defray both from and to Glasgow. Not only, however, is Glasgow a grand centre of the cotton manufacture, but if a circle with a radius of 15 m. be drawn around Glasgow, it will embrace the whole cotton district of Scotland except a few mills scattered up and down in some distant localities. The Glasgow mills are all moved by steam power. The above estimates are exclusive of vast numbers of persons employed in tambouring, bleaching, dyeing, printing, &c. Glasgow is especially famous for its success in dyeing cottons red; in this respect it is superior to any other manufacturing town in Britain, though still inferior to several of those on the Continent. (For some information with respect to the quantity of cotton spun in Scotland, and the value of the manufacture, see *antè*, p. 772.)

Glasgow is also becoming, or rather, has already become, the centre of a most extensive iron trade. In fact, the production of iron in the neighbourhood of this city already exceeds that of either Monmouthshire or Glamorganshire, and promises very speedily to be equal, or superior, to that of the whole of S. Wales. It has increased with unparalleled rapidity. In 1806, the produce of iron in this county did not exceed 9,000 tons; in 1834, it was estimated at about 48,000 tons; and we have ascertained, from returns drawn up with the greatest care, that, in 1850, there were at work in Lanarkshire about 65 furnaces, producing at the rate of about 357,500 tons a year! several furnaces being then, also, out of blast.

There are in Glasgow several joint-stock banking companies belonging to the city, some of which have very considerable bodies of proprietors. But a large proportion of the banking business is transacted by the branches of the Royal Bank, the Bank of Scotland, the British Linen Company, &c., established here. There is also a provident and a savings' bank. The latter held on the 20th of Nov. 1849, deposits to the amount of 405,000*l.*, contributed by about 26,000 depositors.

The chemical works at St. Rollox (Charles Tennant and Co.), for the manufacture of sulphuric acid, chloride of lime, soda and soap, are the most extensive

in Europe. They extend over 14 acres of ground, and contain upwards of 100 furnaces, retorts, or fire-places. A chimney attached to these works has been raised to the extraordinary height of 450 ft.; and though not the most picturesque, is, at a distance, the most conspicuous object in the city. Distillation, the manufacture of earthenware, sugar-refining, and many minor branches of industry, are successfully prosecuted. We may mention, that the curing of *rounds of beef* is carried on to a great extent at Glasgow. Dr. Cleland mentions, that in 1839 no fewer than 14,491 rounds of beef were sent from Edinburgh to Glasgow to be cured! The quantity of coal, from the collieries in the neighbourhood, brought to Glasgow, may, perhaps, amount to about 1,200,000 tons. In 1849-50, 134,247 tons of coal were shipped from Glasgow coastwise, and 38,557 tons to foreign parts.

Account of the Quantities of the Principal Articles imported into and exported from the Harbour of Glasgow during the Year ended 30 June, 1850: —

Goods.	Foreign.		Coastwise.	
	Imports.	Exports.	Imports.	Exports.
	Tons.	Tons.	Tons.	Tons.
Ale and Porter	- -	5,061	983	4,463
Alum	- -	238	- -	1,819
Ashes	2,415	- -	1,020	
Bleaching Powder	- -	2,126	200	307
Bricks and Tiles	- -	4,430	190	6,592
Coal	- -	38,557	2,217	134,247
Castings and Machinery	- -	6,357	527	13,189
Cotton Wool	10,639	- -	3,041	2,660
Cordage	- -	457		
Chalk, Flint, and Clay	- -	167	7,051	288
Corkwood	271	16		
Dyestuffs	7,379	7	3,279	1,798
Draff	- -	- -	2,585	
Flour	20,165	41	9,027	7,310
Fruit	3,325	8	361	
Flax and Hemp	654	- -	1,751	967
Grain	19,045	503	19,741	15,668
Groceries	- -	- -	- -	3,075
Guano	3,842	13	804	2,187
Glass and Earthenware	- -	2,536	432	3,766
Iron, Pig	10	57,909	210	76,418
— Bar and Rod	- -	21,398	3,375	13,380
— Ore	797	- -	3,774	
Indian Corn	4,391	- -	- -	1,133
Kelp	- -	- -	4,731	
Lime and Limestone	168	150	49,769	373
Manufactured Goods	- -	17,140	14,253	18,688
Marble	141			
Manure	- -	- -	22	4,386
Oil and Tallow	4,550	185	3,341	2,015
Oatmeal	312	10	1,470	6,563
Potatoes and Turnips	- -	62	4,515	1,925
Provisions	1,321	948	22,700	2,754
Pitch, Tar, and Rosin	5,481	712	354	1,222
Paints and Colours	- -	769	- -	960
Rice and Sago	545	24	999	
Sugar and Molasses	5,456	- -	6,869	1,846
Staves	1,056	18	1,245	101
Salt	336	588	7,991	511
Slates	- -	60	6,376	148
Stones	- -	11	8,435	8,828
Saltpetre	153			
Sulphur	6,781	15	58	71
Soap	- -	97	310	1,244
Soda, Ash	- -	1,723	115	1,698
Sand and Gravel	- -	- -	1,031	7
Sundries	1,255	2,018	25,312	13,508
Timber and Mahogany	14,412	482	29,678	1,928
Tea	642	16	153	26
Tobacco	504	- -	375	98
Wines and Spirits	2,148	1,200	5,446	5,469
Tons	118,197	166,052	256,119	363,696

Butchers' Meat. — The following is a Return of the Number of Cattle slaughtered in Glasgow in 1849: —

Oxen	22,882
Calves	4,204
Sheep and Lambs	132,498
Goats	11
Pigs	2,088

Ship-building, except in respect to iron steam-boats, can scarcely be said to exist in Glasgow, being chiefly confined to Partick, Govan, Dumbarton, Bowling Bay, Port Glasgow, and Greenock. But Glasgow, and the Clyde generally, are more celebrated for the manufacture of steam machinery and the building of iron steamers than perhaps any other place in the empire. They have, also supplied machinery to some of the largest and finest vessels belonging to foreign powers, as well as to Great Britain.

Progress of Population.—According to the best attainable information, the pop. of Glasgow, at different periods down to 1841, has been as follows: —

Years.	Inhabitants.	Years.	Inhabitants.
1560	4,500	1791	66,578
1610	7,644	1801	77,385
1660	14,678	1811	100,749
1708	12,766	1821	147,043
1740	17,034	1831	202,426
1763	28,300	1841	282,134
1780	42,832		

This is an extraordinary increase. During the interval between 1801 and 1841, the increase of the pop. of Glasgow has been no less than 365 per cent.! — a progress wholly unexampled in any old settled country, and almost equal to any thing that has taken place in the U. States. At this moment (1850) the pop. is probably about 380,000.

State of the Poor, &c. — The increase of pop. has, of course, been mainly occasioned by the still more rapid increase of wealth and employment. It has not, however, we regret to say, depended wholly on this; and there can be no doubt that the increase of pop. has in some degree exceeded the increased demand for labour, vast as that increase has been. This has been principally a consequence of the prodigious influx of labourers from Ireland. When the last census was taken, in 1841, it was found that no fewer than 44,945 natives of Ireland were domiciled in Glasgow; and at present the number is probably about 90,000! It is not easy to exaggerate the mischievous influence of this immigration. There are but few instances in which the Irish have been improved by the change; but they have had, partly by the effect of their competition in reducing wages, and partly and principally by their habituating the Scotch, through their example, to become contented with a lower standard of comfort, the most pernicious influence over the condition of the Scotch part of the labouring pop. At the same time, too, that this pauper horde has been pouring into the city, the weavers, who form a large portion of the pop., have had to bear up against the competition of the power-loom. In fact, but for the reduction of wages occasioned by the Irish immigration, it is probable that the race of hand-loom weavers in Glasgow would have been nearly extinct. And when we consider the fluctuations to which this business is exposed, the facility with which it is learned, and the comparatively low wages which those engaged in it have always earned, no one could regret its annihilation. But the moment a Scotch family has withdrawn from the business, its place has been supplied by an Irish one; and the extension of power-looms has been checked by the extreme lowness of the wages paid to the hand-loom weavers.

In consequence of this depressed state of the weaver pop., of the fluctuations incident to manufacturing employment, and of the crowded, filthy, and miserable lodgings occupied by the pauper portion of the pop., Glasgow is frequently visited by the most destructive fevers, and the rate of mortality has of late years been very high. This will be evident from the following statement, compiled under the direction of the city authorities, which exhibits the pop., and the rate of mortality, since 1822.

Table, showing the Rate of Mortality in Glasgow for the under-mentioned Years ending with 1849: —

Years.	Population.	Burials.	Rate of Mortality.
1822	151,540	3,408	1 in 44·436
1825	166,280	4,571	1 — 36·374
1830	195,650	4,714	1 — 41·504
1835	235,000	7,198	1 — 32·647
1841	282,134	9,605	1 — 29·374
1843	301,000	10,360	1 — 29·054
1845	322,100	8,259	1 — 39·000
1847	344,200	18,886	1 — 18·225
1848	355,800	13,179	1 — 26·997
1849	367,800	13,731	1 — 26·786

The mortality in Glasgow in 1847, as exhibited in the above table, is most appalling, and probably exceeds what has ever been experienced in any other large town in the empire. Its excessive amount is, however, to be ascribed, not to anything peculiar to Glasgow, but to the extreme destitution that then prevailed in Ireland and the Highlands. "Driven from them, hundreds of families were found daily hurrying to Glasgow as to a city of refuge; those families bearing with them the last rags of poverty, and exhibiting but too frequently the last symptoms of famine-fever. Thousands in fact, while they fled from their starving homes to live, arrived here only to die, and have thus not only tended to swell the figure of our city mortality, but to increase, to a fearful extent, the amount of our parochial rates." (*Report of Dr. Strang, City Chamberlain.*) But, independently of these accidental circumstances, the rate of mortality in Glasgow is now, at all times, unusually high. In 1848-49, the city was visited by Asiatic cholera, which, in 18 weeks, carried off 3,777 victims, a large number of them belonging to the upper classes. Fever is generally, also, very prevalent in Glasgow.

In 1849, 3,577 of the burials in Glasgow were performed at the public expense. Dr. Strang justly remarks in regard to this circumstance that it "bespeaks a state of great poverty or increased unscrupulousness respecting alms, among our labouring population. That twenty-six per cent. of the whole burials within the Bills of Mortality should have been paid last year from parochial or charitable funds, is a sad picture of the social condition

of our working classes, and loudly demands a most searching inquiry into the causes of such a fearful increase of pauperism, and of the remedies which should be adopted to meet and to arrest it." Preventive no less than remedial measures are required. Much might certainly be done to diminish mortality by further improving those parts of the city already alluded to, which are at once the receptacles of the lowest and most destitute portion of the pop., and the seats of disease and pestilence. And it deserves consideration whether some stringent restrictions should not be laid on the settlement of Irish labourers. "In Glasgow, as well as in Edinburgh, there is of late a gradually increasing rate of mortality which may be fairly attributed to the increase of Irish immigration with its concomitant misery, destitution, and pauperism. To check this growing evil, productive not only of increased death, but of fearfully increased pecuniary burdens among our city population, is absolutely necessary, otherwise Glasgow will become a city of paupers and of the plague. No time should be lost in warding off from all the great towns in England and Scotland, and particularly Liverpool and Glasgow, the scourge of wandering and famishing Irish; and the only apparently effective mode of doing so, in the present state of matters, is to apply remedial measures to Ireland itself, to check, in fact, the evil at its source, to oblige that country to find employment for its own people, or bread for those who cannot be employed; and if Ireland, in its present condition, be not able to meet that requisite of all countries — which is not to be credited — then would it be better for England and Scotland to contribute something out of the general Treasury to keep Irish paupers at home, rather than permit them to extend their baneful influence over the, as yet, less degraded pauperism of the British Isles." (*Strang*.) It is usual to ascribe much of the want and suffering of the poor of Glasgow, as of other great towns, to the prevalence of drunkenness; but it might easily be shown that drinking, instead of increasing, has considerably diminished. No doubt it is still much too general; and probably an increase of the licence duty, by lessening the number of houses for the sale of spirits, and the temptation to engage in the spirit trade, might have a good effect.

Parliamentary Representation. — Previously to the Reform Act, the representation of Glasgow was in the worst possible state. This great city had not even a representative of its own, but was united with the insignificant bors. of Rutherglen, Renfrew, and Dumbarton, in sending a mem. to the H. of C.; the vote of each of these bors. having equal weight with that of Glasgow! The Reform Act made an end of this preposterous arrangement, and conferred on Glasgow the privilege of sending 2 mems. to the H. of C. The parl. bor. includes Gorbals, Calton, Bridgeton, Anderston, Camlachie, part of Port Dundas, &c.; and had, in 1849–50, 12,150 registered electors. The government of the city is vested in a provost, 5 bailies, and 32 counsellors. Corporation revenue, in 1848-49, 20,247*l*. 15*s*. 6*d*.

With regard to the history of Glasgow, little need be added to what has already been incidentally said. So insignificant at first was this great city, that it was included in the privileged boundaries of Rutherglen, which was made a royal bor. in 1202. Nor was it till 1611 that a similar privilege was conferred on Glasgow, though it had long enjoyed the rank and importance of a bor. of barony, originally bestowed on it by Bishop Joceline about the year 1172. The see was made archiepiscopal towards the end of the 15th century. From the time of Achaius, the restorer of the Bishopric, till the Reformation, Glasgow was governed by 26 bishops and 4 archbishops; and between the Reformation and the final establishment of Presbytery, in 1790, by 14 Protestant archbishops. The town was, in former times, frequently visited by the plague. Leprosy also prevailed: there was a leper hospital in the Gorbals. The famous General Assembly of the Kirk of Scotland, which, in 1638, displaced Episcopacy, deposed and excommunicated the bishops, and established Presbytery, was held in Glasgow. On the occasion of the Union, in 1707, the citizens manifested great discontent, and could with difficulty be restrained from outrage; but that event, by opening new sources of trade, eventually proved of the most signal advantage to their city. They raised 2 battalions of 600 men in defence of government, in 1745, but the city was, notwithstanding, taken by the pretender, and had to submit to heavy exactions. At the commencement of the American war, in 1775, the citizens of Glasgow raised, at their own expense, a regiment of 1,000 men; and during the revolutionary war with France, they kept on foot several regiments of volunteers. In more recent times the contests between masters and their workmen, resulting, on the part of the latter, in strikes and combinations for an advance of wages, have been pretty frequent. In some instances, these strikes have been supported with great obstinacy; and, on one occasion, they were productive of fatal results, and were found to involve principles of the most pernicious and destructive tendency. Among recent incidents in the history of Glasgow may be mentioned the visit of her Majesty and Prince Albert to the city on the 14th of August, 1849. (In addition to the works already quoted, see *The Histories of Glasgow, by M'Ure, Gibson, and Cleland; The Account of Glasgow in the New Statistical Account of Scotland; Glasgow in* 1847, *by James Pagan, Esq.*; but the most valuable information has been readily and obligingly communicated to us by intelligent gentlemen resident in Glasgow.)

GLASGOW (PORT). *See* PORT GLASGOW.

GLASTONBURY, a bor., town, and par. of England, co. Somerset, hund. Glaston-twelve-hides, on the Brue, 22 m. S.W. Bath, and 112 m. W. by S. London. Area of the two pars. which comprise the bor. (including not only the town, but the hamlets of Northover, Edgarley, Norwood-park, and Wick), 7,960 acres. Pop. of do. (1831), 2,984. The town is situated in the valley which separates the Poldew and Mendip Hills, and stands chiefly on a low peninsula (once the Isle of Avolon) formed by the turnings of the river; it consists of two streets, the chief of which runs from E. to W., the other from N. to S., forming the road to Bridgewater and Exeter; and in both of these streets the fronts and other parts of many houses are composed of stone from the ruins of the abbey. Of these the most remarkable are the George Inn, a curious building probably of the 15th century, given by Abbot Selwood in 1490 to the chamberlain of the abbey; the Tribunal, having a fine oriel window adorned with the arms of abbots and other benefactors; the abbey-house, built in 1714 from the materials of the abbots' lodgings; and the great Gate-house, now one of the inns of the town. The hospital of St. John, on the Bridgewater road, was founded in 1246. The cross, now a mere ruin, stands at the intersection of the chief streets. Of the two parish churches, which are both old, that of St. John the Baptist is remarkable for a fine lofty tower, which forms the most ornamental feature of the place. The abbey belonged to the Benedictines, situated on the S. side of High Street, was surrounded with a high wall containing about 60 acres, which, however, is now scarcely traceable. The great church joined the W. front, and was 530 ft. long.; and in other parts were various lodgings for the abbot, prior, and other inmates of the abbey: the great hall was 111 ft. long. by 50 ft. broad. The ruins of the church are extensive, and serve to give an idea of its size. The abbots' kitchen, which is in better preservation than any other part, is octagonal, and in the roof rises an octangular turret crowned with a lantern. This abbey, founded by Augustine of Canterbury in 605, was re modelled and chiefly built during the 12th century, the hall and chapter-house being added in the 14th century. At the dissolution of the monasteries in 1539, the last abbot being unwilling to surrender his abbey, was hanged without trial, and the site was granted by Edward VI. to the Duke of Somerset. At this time the revenues were valued at 3,311*l*. On a hill a little N.E. of the town, is a curious tower, called the Tor of St. Michael, which, from its elevation and peculiar shape, serves as a landmark in navigating the Bristol Channel. On the W. side is a figure of Michael the Archangel.

The town has but little trade, but "it is likely to derive considerable benefit from a canal opened some years ago between this place and the mouth of the river Brue, near Highbridge, the point where the Brue runs into the Parrot; it is intended to be a ship canal for vessels of 70 to 100 tons. Timber, slate, tiles, and coal are the principal articles at present conveyed upon it." (*Mun. Corp. Rep*. No. 1.) The bor. (which before the Municipal Reform Act was governed by a mayor, recorder, and 23 burgesses, according to a charter granted 4th of Queen Anne) is now governed by a mayor, 4 aldermen, and 12 counsellors. The mayor was formerly a magistrate within the bor., and presided at quarter sessions; but, in consequence of the removal of the police business to Wells, the commission of peace has been taken from Glastonbury. The local act of 51 Geo. III. is that by which the paving and improvement of the town is regulated. The rates levied under this act amount to about 240*l*. per annum. The poor-rates average 1,800*l*. a year, and the contribution to county rate about 240*l*. Market on Tuesday. Fairs, Sept. 10. and Oct. 11., the former being for horses and cattle.

The history of the town is intimately connected with that of the abbey, on which its prosperity has mainly depended. It was burnt down in the 12th century, with part of the abbey; and, after having been rebuilt by Henry III., was once more destroyed by (as is said) an earthquake, after which it was gradually restored, chiefly by the help of the abbey. The abbots of Glastonbury lived in great splendour, and possessed great political power: they were always parliamentary barons, and, till 1154, had precedence of all other mitred abbots in England. Sharpham Park, in the vicinage of this town, was formerly a manor-house belonging to the abbots of Glastonbury. Before the Reformation, Glastonbury was a parl. bor., and sent 2 mem. to the H. of C.

GLATZ (Slav. *Kladsko*), a fortified town of Prussian Silesia, gov. Breslau, cap. circ. of same name, on the Neisse, near the Austrian frontier, 52 m. S.S.W. Breslau. Pop. 7,094; or about 9,000, including its garrison. It is strongly walled, and being situated between two adjacent heights, is farther defended by an old castle placed on one, and a new and regular fortress on the other. It has 4 R. Catholic, and 2 Lutheran churches, an hospital, Catholic gymnasium, royal citadel, arsenal, large barracks, and other buildings for military service. It is the residence of a military commandant, and the seat of the council and courts of justice for the circ. and town, and commissions for the superintendence of public works and navigation. It has manufactures of woollen cloth, damasks, plush, ribands, muslins, leather, and tobacco, and some linen-printing establishments. Glatz surrendered to Frederick the Great in 1742; it was retaken by the Austrians in 1759, but restored to Prussia at the peace of 1763. (*Berghaus; Stein; Dict. Géogr.*)

GLOGAU (GREAT), a strongly fortified town of the Prussian dominions, prov. Silesia, gov. Liegnitz, cap. circ. of same name; on the Oder, 33 m. N. Liegnitz, and 83 m. S.E. Frankfort-on-the-Oder. Lat. 51° 38′ N.; long. 16° 6′ 45″ E. Pop. 11,646, of whom about 1-10th are Jews. The town is connected by a wooden bridge with the Dominsel (Cathedral-island) in the Oder, which is also fortified. Besides the cathedral it has several other Roman Catholic and Protestant churches, and a synagogue. It has a royal citadel, and a large garrison. Glogau is the seat of the superior judicial court for Lower Silesia, of tribunals for the circle and town, a board of taxation, circle council, board of agriculture, &c.; it has a Catholic and a Protestant gymnasium, and a school of midwifery. Except a large beet-root sugar establishment, it has few manufactories; its inhabitants derive their principal resources from the supply of the garrison, general trade, and the navigation of the Oder. Glogau has a large corn-market. It came into the possession of Prussia in 1741. (*Berghaus; Cannabich, &c.*)

GLOUCESTER, a marit. co. of England, on both sides the Severn, having S. the channel of that river, the co. Somerset, from which it is principally separated by the Avon, and Wilts; E. a point of Berks. and Oxford; N. Warwick and Worcester; and W. Hereford and Monmouth. Area, 805,120 acres, of which about 750,000 are arable, meadow, and pasture. It is naturally divided into the Vale, Cotswold, and Forest districts. The vale which comprises the low lands from Stratford-on-Avon to Bristol, is commonly divided into the vales of Gloucester, Evesham, and Berkeley: the Cotswold district comprises the hilly country parallel to the Severn from Chipping Camden to Bath, dividing the sources of the Isis, Winrush, Coln, Churn, and other remote feeders of the Thames from the Stroud and other streams flowing W. The forest district includes the greater portion of the land on the W. side the Severn, and was formerly for the most part included within the Forest of Dean, whence its name. The Vale of Gloucester, taking the term in its widest sense, is one of the most fertile districts in the kingdom; the soil consists in part of a sandy loam, and in part of a reddish clay; and the climate is remarkable for its mildness. The soil of the other two districts is, for the most part, light and comparatively poor. Agriculture is not in an advanced state; there is a great waste of labour in ploughing, and a great want of an effective system of drainage. There are some exceedingly productive meadows, especially along the banks of the Severn below Gloucester. This co. has been long famous for its dairies, and for the peculiar description of cheese that bears its name. The average yield of a cow in the dairies is estimated at from 3½ to 4½ cwt. of cheese a year. The sheep of the Cotswold hills are large, and yield long combing wool: the total stock of sheep in the co. is estimated at from 550,000 to 600,000 head. This is one of the principal cider cos. Estates and farms of all sizes. Average rent of land, in 1843, 27*s*. 10*d*. an acre. Gloucester is not only a great agricultural, but also a great manufacturing co. It is especially famous for its manufacture of fine broad cloths. At an average of the 10 years ending with 1837, there were annually produced in Gloucestershire 1,784,928 yds. of cloth, the trade having been during that period pretty stationary. (*Hand-loom Report*, p. 365.) The principal clothing districts are Stroud, Wooton, and Dursley. Iron ore is abundant in the Forest of Dean; but notwithstanding it is also well supplied with coal, the iron-works carried on in it are of comparatively little importance. Principal river the Severn, which intersects the co.: the Wye divides it from Monmouth, and the Upper Avon skirts it on the N., and the lower Avon on the S.: the Isis, as already stated has its sources in the Cotswold hills. (For an account of the Gloucester canal and railway, see following art.) Principal cities and towns, Bristol, Bath, Gloucester, Cheltenham, Stroud, &c. Gloucestershire is divided into 28 hunds. and 339 pars.: it returns 15 mems. to the H. of C., viz. 4 for the co., 2 each for the cities of Bristol and Gloucester, and the bors. of Cirencester, Stroud, and Tewkesbury: and 1 for Cheltenham. Registered electors for the co., in 1849–50, 16,519, being 7,858 for the E., and 8,861 for the W. division. In 1841 the co. had 81,016 inhab. houses; and 431,383 inhab., of whom 205,543 were males, and 225,840 females. Sum paid for the relief of the poor, in 1847, 158,310*l*. Annual value of real property, in 1815, 1,315,726*l*.; do. in 1843, 2,074,515*l*.

GLOUCESTER, a city, co., parl. bor., and river-port of England, on the E. bank of the Severn, locally situated in the above co., hund. of Dudstone and King's Barton, 32 m. N. by E. Bristol, and 93 m. W. by N. London. Area of city, 680 acres; but the new municipal and parl. bor. includes about 170 acres more. Pop. of city in 1841, 14,152. Pop. of the new bor. in 1841, 14,497; the suburbs, also, are extensive, and make an addition of at least 2,000 to the pop. In the bor. are comprised nine entire parishes, and portions of six others. The city is situated on a high eminence, gently falling to the N. and S., and towards the river; it consists of four principal streets, crossing each other at right angles. "It possesses some good streets, and has a general appearance of wealth and business." (*Mun. Bound. Rep.*) The same report informs us that "it is ill paved, and only partially and imperfectly lighted with gas." The river, which is here divided into two channels by Alney island, is crossed, at the N.W. end of the city, by two fine bridges, one over each channel. There are several handsome public buildings, among which, besides the cathedral, the shire-hall, the tolsey or town-hall, the co. gaol, and market-house, deserve notice. The shire-hall, in which the assizes and county sessions are held, has a fine front of Ionic architecture, and is well constructed for the purposes of business. The county gaol, built in 1791, at an expense of 35,000*l*., on the site of the old castle, covers about three acres: it was constructed on a plan suggested by Howard. But though it has been much enlarged of late years, and large sums have been expended upon it, it is still objected to as being extremely deficient in the means of accommodating and classifying prisoners. The city gaol is still more deficient than that of the co., and should be reconstructed upon an improved plan. (*Prison Inspectors' Report*, 1850.) The market-house, which is commodious, and of plain exterior, cost 40,000*l*. A spa having been discovered in 1814, a highly ornamental pump-room and other edifices have been built near it. Several of the churches are old and handsome structures. The cathedral or abbey church, a magnificent fabric, occupying one side of the college green, is 427 ft. in length, by 154 in breadth. On its site was formerly a monastery of Benedictines: the present building was partly erected about 1088; but not completed till the close of the 15th century. Hence it exhibits the various gradations of style during the great æra of church architecture, from the Norman conquest downwards. The crypt, the nave, and north aisle being the oldest parts, are in the Anglo-Norman style, with round-arched windows; the windows of the south aisle, built two centuries later, are of the obtuse lancet shape; the W. front, and the continuation of the nave, erected in the 14th century, exhibit a yet later and more elaborate style than the other parts. Under the tower (which is square, flanked with four highly ornamented pinnacles, and 224 ft. in height), at the E. end of the nave, is the approach to the choir; and from this point is one of the best views of the interior, the highly finished choir, with its curiously wrought roof, forming a remarkable contrast with the simpler architecture of the nave and transepts. The arching of the choir, nave, and transepts is so contrived that, while the eye beholds the massive pillars as they branch upwards, the whole structure has an extraordinary lightness and beauty. The high altar is ornamented with angels playing on musical instruments, and behind it is the great E. window, said to be the largest in England, and containing 2,800 square feet of glass. It was set up in the reign of Edw. III., and is now much mutilated. The floor in front of the altar is of curiously painted tiles, representing the arms of the Plantagenets, the Earls of Gloucester, &c. A monument of Edw. II., near the altar, is well carved, and in good preservation. The choir is 140 ft. long, and has 31 stalls on either side, of exquisitely wrought tabernacle work. The lady chapel, added to the choir in 1228, and rebuilt in 1498, is a peculiarly elegant structure, and most ingeniously united to the church. The cloisters are remarkable for their rich workmanship and beautiful windows; they were begun in 1351, and finished about 1390. (See *Dallaway's Anecd. Arch.* pp. 38—55.)

Gloucester was made a bishop's see by Henry VIII. in 1541. In consequence of the recent ecclesiastical changes, it is united with Bristol. The churches of St. Mary de Crypt, St. Michael, St. John, and the new one of Christchurch, are all edifices ornamental to the town. There are also two very neat district churches in the suburbs, one at Barton Terrace, and the

other at High Orchard, near the Docks. The Wesleyans, Independents, Baptists, R. Catholics and others, have also places of worship, and there is a Jews' synagogue. Here are three foundation schools: 1. the college school, founded by Henry VIII., held in the N. transept of the cathedral; 2. the crypt school, founded by Dame Cook, and sending two exhibitioners to Pembroke Coll., Oxford; 3. the blue-coat school, founded in 1666, which has or recently had a master with a salary of 400*l.* per annum, teaching and apprenticing 20 boys! (See *Carlyle's Grammar Schools.*) Besides these, there are National, British, and other schools, which furnish instruction to great numbers of children. It deserves also to be mentioned, that Sunday schools originated in this city in 1781. They were first suggested and set on foot by Mr. Raikes, a printer, a benevolent and intelligent individual, who rendered by this act an essential service to humanity. Here are 4 hospitals, of ancient monastic foundation, used as almshouses; besides which, there is an infirmary and a lunatic asylum.

Gloucester is situated in a fertile and populous district, and enjoys an extensive command of internal navigation. Latterly, also, its importance as a port has been much increased, owing to the greater facilities given to it by the excavation of the Gloucester and Berkeley canal, by which the intricate and, sometimes, dangerous navigation of the Severn is avoided. This canal, opened in 1826, is 18 m. long; it commences at Sharpnesse Point, about 2¼ m. from Berkeley, and ends in a commodious basin, a little S. of Gloucester; it is 60 ft. wide, and being 18 ft. deep is capable of floating vessels of above 500 tons burden. The shareholders, finding their subscribed capital insufficient, applied to government for a loan, with the interest of which they are still burdened. Gloucester, since the opening of this canal, has had considerable trade with the West Indies and Baltic. There belonged to the port, in January 1850, 329 boats and vessels of the burden of 15,622 tons. The gross customs' duties received at the port in 1846 amounted to 115,983*l.* Gloucester is well supplied with railway accommodation, being united on the N. with Cheltenham, Worcester, Birmingham, &c., and on the S. with Bristol and Exeter. It is, also, united with the Great Western Railway, and consequently with the metropolis, by a cross line leading by Stroud to Swindon. The manufactures of Gloucester are but inconsiderable. 1,378,690 lbs. soap were made here in 1848. Pin-making, which originated in 1625, used to employ 1,500 hands, but it has of late years materially declined. A bell-foundry has been established here for about a century and a half; and its business used to be considerable. A branch bank of the B. of England has been opened in the city; and the Gloucestershire Joint Stock Banking Co. has its head office here. The savings' bank had on the 28th Nov. 1848, 72,342*l.* of deposits.

Gloucester has returned 2 mem. to the H. of C. since the 23d of Edward I. Previously to the passing of the Reform Act, the franchise was vested in the freemen of the bor., who became so by birth, purchase, or apprenticeship. Registered electors, in 1849–50, 1,658.

Gloucester possesses numerous charters of early date; but that by which it was formerly governed, and on which its privileges are founded, was granted in 1673 by Charles II., who received from the city 679*l.* in return. The local acts, by which the lighting and improvement of the city are regulated, are the 4th, 17th, and 21st of Geo. III., and the 1st and 2d of Geo. IV. By the provisions of the Municipal Corporation Act, the bor. is divided into three wards, and is governed by a mayor, recorder, 6 aldermen, and 18 councillors. Corporation rev. in 1847, 7,703*l.* The sum raised for the relief of the poor in 1847 in the 9 parishes within the city amounted to 3,698*l.*, assessed upon property worth 44,453*l.* a year. The custom of borough-English, whereby estates descend to the youngest son, prevails here. A co. court is established here, before which 1359 plaints were entered in 1848. Markets, which are well supplied, are held on Wednesday and Saturday. Fairs for cheese, cattle, horses, &c. are held on April 5., July 5., Sept. 28., and Nov 28.

The history of Gloucester carries us back to the time of the Romans. It is mentioned in Antonine's *Itinerary* as *Colonia Glevum*, and was founded by Claudius, A. D. 44, to repel the wild Celts of S. Wales. Roman coins and antiquities are constantly dug up near the supposed site of the old encampment. In Anglo-Saxon times it surrendered to the king of Wessex in 577, being then called *Gleau-cester*. In the war between Robert and William, the sons of the Norman conqueror, it was nearly destroyed, and was rebuilt, when the present cathedral was commenced. In the wars between Charles I. and his parliament the inhab. sided zealously with the latter; and hence, at the Restoration, the city fortifications were ordered to be destroyed. The gates continued to stand for many years subsequently; but even of these only the name remains.

GLUCKSTADT, a town of the Danish dom., duchy of Holstein, of which it is the cap., in a marshy tract on the left bank of the Elbe, about 30 m. from its mouth, and 26¼ m. N.W. Altona. Pop. (1835) 6,000. It was formerly a fortress of some strength; but, since 1814, its works have been nearly demolished. It is regularly built, has a good harbour, and a large prison. It is traversed by several canals, but has a very deficient supply of good drinkable water, on which account the rain has to be carefully preserved in cisterns. It is the seat of the council, and of the superior judicial courts of the prov.; and has a school of navigation, and various other schools. Since 1830, Gluckstadt has been a free port. Its inhab. are principally engaged in trade, navigation, and the Greenland whale fishery. (*Berghaus; Stein, &c.*)

GOA, a city of Hindostan, and the cap. of the Portuguese dominions in the East, prov. Bejapoor, on an isl. of the same name, at the mouth of the Mandona, 250 m. S.S.E. Bombay; lat. 15° 30′ N., long. 74° 2′ E. Pop. reduced to about 4,000, it having been nearly superseded by New Goa or Panjim, built on the sea-shore about 5 m. distant, which has a pop. of about 20,000. The old city, now almost deserted except by priests, is "a city of churches; and the wealth of provinces seems to have been expended in their erection." The ancient specimens of architecture at this place far excel any thing that has been attempted in modern times in any other part of the East, both in grandeur and taste. The chapel of the palace is built after the plan of St. Peter's at Rome, of which it is said to be an accurate copy. The church of St. Dominick is decorated with paintings of Italian masters; and that of the Jesuits contains the tomb of St. Francis Xavier, a sepulchre of black marble, richly sculptured in bas-relief, representing various passages of his life. The cathedral is worthy of one of the principal cities of Europe; and the Augustine church and convent is also a noble pile of building. Most of the churches are, however, going rapidly to ruin, and the ancient palace of the viceroys has been long unoccupied; the building formerly occupied by the inquisition, though entire, has been shut up for many years. (*Buchanan's Christian Researches, &c.* p. 245.)

New Goa, founded early in the 18th century, and now the residence of the viceroy and the principal Portuguese inhab., is a well-built town, the houses being of stone, and roofed with tiles, a circumstance unusual in Hindostan. Thin layers of oyster shell generally supply the place of glass in the windows. A fine causeway, 3 m. in length, connects the town with San Pedro (the present residence of the archbishop of Goa), and serves to shut out the sea from an extensive tract, partly in cultivation, and partly occupied by salt-pits.

New Goa has a harbour, reckoned one of the best in India, but, during the rainy season, so much mud is brought into it by the river, that ships of large burden find it difficult to enter. Like another harbour on the S. side of Goa island, it is defended by several forts and batteries; both the towns are also fortified, but not strongly.

The inhab. of Goa are principally the mixed descendants of the Portuguese and the natives, and African slaves; there are some Jews; native Portuguese are few. The wholesale trade is in the hands of the Christian pop., the retail in those of the Jews and Hindoo natives. Though formerly the centre of eastern commerce, Goa has now only an inconsiderable trade with the mother country and the Portuguese settlements in China and on the coast of Africa. Its imports are chiefly piece-goods, raw silk, ivory, sugar, woollens, glass, and a few other European articles. Its exports are very trifling, and are chiefly hemp, betel nut, cowries, and toys, beads, &c. for Africa.

The territories possessed by Portugal in Hindostan, exclusive of Damann and Diu, are confined to the district around Goa, 40 m. in length by 20 in breadth, below the W. Ghauts, having N. the dom. of Sattarah, E. and S. the British territories, and W. the ocean; with a total pop. of about 417,000 inhab. Goa was taken from the Hindoo sovereigns of Bijanagur by a Mohammedan prince of the Bhamenee dynasty in 1469; and in 1510 was besieged and taken by Albuquerque, who made it the cap. of the Portuguese possessions in India. During the 16th century, the Portuguese were masters of a number of places on the sea-coasts of India, but their territories at no period extended far inland. In 1807, Goa fell into the hands of the English, who held it till 1815. During the late civil war in Portugal, this colony declared itself in favour of Donna Maria I. (*Hamilton's E. I. Gazetteer, &c.*)

GODALMING, a bor., town, and par. of England, co. Surrey, hund. of the same name, 4 m. S.S.W. Guildford, and 31 m. S.W. London, on the Wey. Area of parish (including the 8 tithings), 8,470 acres. Pop. in 1841, 4,328, of whom 2,183 were included in the town tithing. The town, situated in a valley, is nearly surrounded by high and steep ground. It consists principally of one street, which extends about ⅔ m. along the

high road from London to Portsmouth, but it is narrow, badly paved, and insufficiently lighted. The village of Crownpits stands about ½ m. S.E., and that of Ferncomb about the same distance N.E. of the town; and both are nearly united to it by houses. The church is spacious, with a lofty steeple containing eight bells: the living a vicarage in the patronage of the Dean of Salisbury. There are places of worship for Wesleyan Methodists, Baptists, Independents, and Quakers. On the common, about 1 m. from the town, is an almshouse for 10 old men, founded in 1622. The bridge, which is of brick and stone, was opened in 1783. Attached to the church is a good charity school, and there are several Sunday schools in the town.

Godalming, anciently a clothing town of some note, at present possesses very little importance beyond being a place of considerable thoroughfare. There are four or five mills on the river for the manufacture of paper, parchment, and leather, at which about 50 hands are employed; and the manufactory of cotton stockings gives employment to about 80 persons. (*Mun. Bound. Rep.*) All the mills are worked by water-power. Timber, bark, and hops are exported. The river Wey is made navigable from Guildford, under the 33d of Geo. II.; and coals are brought up here in considerable quantities. (*Mun. Corp. Rep.*)

The old corporation of this town consisted of a warden and 8 assistants, and was chiefly governed by a charter granted in the 18th of Charles II. The present government is vested in 4 aldermen (one being warden), and 21 counsellors. The local act, regulating the paving, &c., of the town, is the 6th of Geo. IV.; and the rates levied under it average about 310*l.* a year. The poor rates, which are decreasing, were 2,360*l.* in 1835. Markets on Saturday: fairs for horses and farming stock, Feb. 13. and July 10.

GODAVERY, a considerable river of Hindostan, through the central part of which it flows, extending through nearly 9° of long. Its course lies between those of the Nerbudda and Nahanuddy, on the N., and the Krithna, on the S., chiefly through the dominions of the rajah of Berar. It rises by numerous streams in the W. ghauts, about lat. 20° N., and long. 74° E., and runs in a direction generally E., but with a slight inclination southward, to near long. 80° E. From this point, it flows mostly S.E. for about 90 m., bounding the prov. Hyderabad N.E., and separates near Rajahmundry (N. Circars) into two arms, which fall into the Bay of Bengal, between lat. 16° 20′ and 16° 40′, enclosing a fertile delta, with an area of about 500 sq. m. The entire length of the Godavery is estimated at about 800 m., and during the rainy season it is in many parts 1¼ m. wide. Its chief affluents are the Wynegunga, with its numerous tributaries, from the N., and the Mangera from the S. Its banks abound with timber, but no very important towns are situated on them. (*Hamilton's E. I. Gaz.*, *&c.*)

GOLCONDA, a town and fortress of Hindostan, prov. Hyderabad, on a hill about 3 m. W. of the city of that name, and formerly the cap. of an extensive Hindoo kingdom. It is chiefly noted as a *dépôt* for diamonds, which are brought to it to be polished and prepared for sale from other marts, mostly in the Balaghaut districts. Its immediate vicinity contains no diamond mines.

GOLDBERG, a town of Prussian Silesia, gov. Liegnitz, cap. circ. of Goldberg-Hainau; on the Katzbach, a tributary of the Oder, at the foot of the *Riesengebirge*, 13 m. S.W. by W. Liegnitz. Pop. (1838) 7,093. It is the seat of the council and judicial courts for the circle and town, and has a high school (*burgher schule*) at which Wallenstein was educated. The inhabitants are chiefly occupied in weaving woollen cloth, but have also manufactures of flannels, woollen stockings, gloves, &c., and considerable dye-works. The town derived its name from a neighbouring gold-mine, now abandoned, but formerly very productive. The hamlet of Wahlstadt, about 6 m. E. of this town, is memorable in Prussian history for the decisive and important victory gained on the 26th of Aug., 1813, by Marshal Blucher and the landwehr under his command, over the French under Macdonald. The latter lost 15,000 men, killed and wounded, and 102 pieces of cannon fell into the hands of the conquerors.

GOLNITZ, a market-town of Hungary, co. Zips, 22¼ m. S.W. Eperies. Pop. 5,000. It is the seat of a mining council and tribunal, and has considerable mines of iron and copper, iron-forges, and cutlery and iron-wire factories. Its inhab. are partly Rom. Catholics and partly of the Reformed Church.

GOMBROON, or BUNDER-ABBAS ("Port of Abbas," an. *Hormuz* or *Harmozia*), a sea-port town of Persia, prov. Kerman, but at present belonging to the Imám of Muscat, on the Persian Gulf, nearly opposite the island of Ormuz, and 160 m. S. Kerman. Pop. from 4,000 to 5,000, chiefly Persians, Arabs, and Kurds, with a few Armenians and Bedouins. The town stands on a slope approaching the sea in a barren and desolate country: it is about 3-4ths of a mile in circ., and surrounded by a mud wall. The houses are few and wretchedly constructed, and the people are mostly lodged in huts.* Gombroon appears to have been a town of very little importance before 1622, when Shah Abbas, assisted by the English, drove the Portuguese from the island of Ormuz, and transferred the commerce to this port. Instead of being carried by sea up to Buporah, and the N. parts of the gulph, many of the imports from India and Africa were now landed at Gombroon, and transported by caravans to the interior, so that it became for a time the emporium of Persia. The English, Dutch, and French, for a long period, had large factories here; but towards the close of the 17th century, the route to the interior having become interrupted by wars and commotions, the factories were left to decay or destruction, and the European merchants removed to Bushire, now the centre of the trade. Some remains of the English factory still exist, but the Dutch is the only one in a tolerable state of preservation; it is used by the Imám as an occasional residence. Gombroon appears to present more natural advantages for a commercial town than Bushire, the route from it leading by natural passes into the heart of Persia; and when, some years ago, Bushire remained in a disturbed state, commerce speedily found its way again into this channel. Even now its trade is considerable, and is said to be increasing. Persian carpets, tobacco, and dried fruits form its exports; its imports, which are chiefly piece goods, Indian cloths, and China ware, were estimated, in 1827, at nearly 3 lacs of rupees a year. The Imám, at the same period, collected a revenue of from 8,000 to 10,000 dolls. a year from the town. Immediately without the walls are the cemeteries of the former European inhab., and in their neighbourhood are some very extensive tanks excavated by the Portuguese, the length of the largest of which has been estimated at ½ m. (*Whitelock; Kempthorne, &c.* in *Geog. Journal*, v. and viii., &c.)

GOMERA, one of the Canaries, which see.

GONDAR, a large city, commonly called the cap. of Abyssinia, kingd. Amhara, prov. Dembea, on the Agrab, about 20 m. N. Lake Tsana or Dembea, 270 m. E. by S. Sennaar, and 1260 S.S.E. Cairo; lat. N. 12° 34′ 30″, long. E. 37° 30′ 15″. Pop. said, by Rüppel, to be reduced to 1,000 families. It stands on a lofty eminence, surrounded on all sides by low lands, and, when seen from a distance, resembles more a forest than a city, on account of the quantity of trees that surround its churches. The city is built in a straggling manner, occupying a space about 11 m. in circ.; the houses, which are mean and wretched, are either of plaster or stone, having one story and a high thatched roof. The only structure worth notice is the royal palace, a square Gothic stone building flanked with towers, and once consisting of four stories: it was built under the direction of Jesuit missionaries, in the latter part of the 16th century. A great part is now in ruins; but the lower floors still contain ample accommodation. One room, used as an audience chamber, is 120 ft. long. The churches, of which there are above 40, have no pretensions either to beauty or convenience. There are very few shops, and all goods for sale are exposed in the great square. The people of Gondar have for some years been subject to the ravages of the wild tribes by which it is surrounded. The city is now in the hands of the Gallas, who, for a long period, have been the scourge of the Abyssinians. (*Ritter's Africa*, i. 298.; *Gobat's Abyssinia*, 78. 168. 176.)

GOOD HOPE (CAPE OF). *See* CAPE OF GOOD HOPE.

GOODWIN SANDS, famous and very dangerous sand-banks, off the E. coast of the co. Kent, about 4 m. E. Deal, and stretching N.E. and S.W. about 10 miles. These sands are supposed by some to have once made part of the Kentish land, and to have been submerged about the end of the reign of William Rufus, or the beginning of that of Henry I. They are very dangerous; vessels riding in the Downs being sometimes driven upon them, and generally wrecked; occasionally through the ignorance and carelessness of pilots, but more frequently from the violence of the S.E. and N.E. winds. They are divided into two principal parts by a narrow channel: in many places they are dry at low water, and some spots appear even sooner. The N. division is of a triangular form, lying N. and S., being about 3¼ m. long, and 2¼ m. broad: the N. end, called the North Sand Head, is about 7 m. from the coast, its position being marked by a light vessel. The Bunt Head, on the W. side is very dangerous. The largest spot that dries on this sand has got from seamen the name of Jamaica Island. The S. part of the Goodwin Sands is about 7 m. in length; at its N. end it is

* Whitelock, in Geogr. Journ., part ii. 1838. Lieut. Kempthorne, who visited Gombroon in 1828, says: — "The houses are flat-roofed, and more commodiously built than those on the coasts of Sind and Makran, but the streets, as in all oriental towns, are very narrow and dirty."

about 2½ m. in breadth, gradually diminishing towards the S. W. till it terminates in the narrow point called South Sand Head, marked by a light-vessel, moored about 3 m. from shore. But it is right to observe, that the position of these sands varies more or less every year, through the joint influence of storms and tides.

GOOLE, a town and river-port of England, W. Riding co. York, on the Ouse, 22 m. W. Hull. Pop. 1841, 2,850. A few years ago Goole was an obscure hamlet; and is indebted for its rapid rise to its situation on the Ouse, at the point where it is joined by the canal, belonging to the Aire and Calder Navigation Company, from Ferry-bridge; and to its also being contiguous to the junction of the Don with the Ouse. To accommodate the shipping engaged in these great lines of internal navigation, two extensive docks, and a harbour communicating with them and with the river, have been constructed. Warehouses of sufficient security having also been built, Goole was made a bonding port in 1828; and it has since continued to increase in pop. and importance. In 1846 the gross customs' duties collected at Goole amounted to 44,920. The distance inland, and the difficulty of navigating the Ouse, are the principal drawbacks on Goole; but vessels drawing 15 and 17 ft. water have, by taking advantage of the tide, reached it in safety. In January, 1850, there belonged to Goole 507 boats and sailing vessels of the aggregate burden of 32,412 tons, and 6 steamers.

GOREE, an isl. and town adjacent to the W. coast of Africa, in lat. 14° 39′ 55″ N., long. 17° 26′ 25″ W., on the S. side of Cape de Verd, belonging to the French, and forming a part of their colony of Senegal. The island is merely a barren rock, about 3 m. in circuit, very steep on its W., S., and E. sides, and having in its centre a small elevated plateau, on which is Fort St. Michael, commanding the town. On the N. E. side of the island is a small harbour, affording good anchorage for eight months of the year. The town of Goree occupies more than 2-3ds of the island. Pop. (1836) 4,860, of whom only 18 were Europeans. Its streets are rather narrow, but straight and clean; its houses, built of basalt cemented with mortar, are terraced in the Italian style. It has a civil and commercial tribunal, and is an entrepôt for gum Senegal, ivory, gold-dust, and other productions of the coast. The island is deficient in water, which has to be brought from the mainland; but it is said to be healthy. It was taken possession of by the French in 1677.

GORITZ (Germ. *Gorz*, Ital. *Gorizia*), a town of the k. of Illyria, gov. Trieste, cap. circ. of same name; on the Isonzo, 12 m. from the Adriatic, and 21 m. N.N.W. Trieste. Pop. (1838) 8,252. It is composed of an upper and a lower town. The first, situated on a hill, is the more ancient: it is surrounded with walls, and has a partly ruined castle, formerly belonging to the counts of Görz, now used as a prison; the second, situated beneath the former, is a well-built town, its houses being mostly modern, and its streets clean and furnished with footpaths. Goritz has a fine cathedral, 4 other churches, a handsome bishop's palace, and other noble residences, some barracks, occupying what was formerly a Jesuits' college, a circle-hall, town-house, almshouses, and an elegant new theatre. It is the seat of the superior tribunal of the circle, and of a non-suffragan bishop; and has an episcopal seminary for the whole gov. of Trieste, a philosophical academy, gymnasium, superior female school, belonging to Ursuline nuns, a Piarist college, Jews' school, teachers' academy, and a society of agriculture and arts. It has 3 sugar-refineries, silks, rosoglio, leather, and various other factories, dye-houses, and a brisk general trade. The ex-king of France, Charles X., died at Goritz in 1836. (*Oesterr. Nat. Encyc.*)

GORLITZ, a town of Prussian Silesia, gov. Liegnitz, cap. circ. of same name, on the Neisse, 52 m. W. by S. Liegnitz. Pop. (1838) 13,670. It is walled, and is entered by 6 gates, and has 3 suburbs. The town is in general well built, and in a flourishing state, with wide streets and spacious squares. It has several fine public edifices, including the church of Sts. Peter and Paul, an edifice of the 15th century, the town-hall, &c. There are 4 hospitals, a prison, orphan asylum, gymnasium, and 3 public libraries. It is the seat of the council for the circle of the courts of justice for the town and circle, the principality of Görlitz, &c., a board of taxation, and the Oberlansitz association of arts and sciences. A good deal of linen and woollen cloth is made here; there is also an active trade in the linen fabrics and wool of the surrounding districts. The manufacture of steel and iron wares, bell-casting, tanning, lithographic and other printing, linen bleaching, &c., are the other chief branches of industry.

GORUCKPORE, a distr. of British Hindostan, presid. Bengal, prov. Oude, between lat. 25° 40′ and 27° 40′ N., and long. 81° 50′ and 84° 30′ E., having N. Nepaul, E. the distr. Sarun, S. those of Ghazipoor and Juanpore, and W. the dom. of the nabob of Oude. Area, 9,520 sq. m. Pop. not specified in the returns. The Goggra divides it into two portions, Azimghur and Goruckpoor Proper. The former division many years ago contained about 350,190 begas of land in cultivation, assessed at 954,135 rupees; and the latter, 263,872 begas in cultivation, assessed at 792,205 rupees. A great extent of the surface consists of jungle-forest, inhabited by elephants and other formidable wild animals; and at the foot of the hill ranges there is a very extensive, low, marshy, and unhealthy tract of country called the *terriani*. Chief towns, Goruckpore the cap., and Azimghur. Total public revenue (1829-30) 169,690*l*. This territory came into the possession of the British by cession from the nabob of Oude, in 1801.

GOSLAR, a town of the k. of Hanover, distr. Hildesheim, on the Gose, a tributary of the Ocher, at the N.E. foot of the Harz, 44 m. S.E. Hanover. Pop. 7,200. It is one of the most ancient towns of Germany, and was, till 1801, a free town of the empire; often the residence of the emperor, and formerly the seat of the diet. It is walled, and has a very antique appearance. Like most old towns, its interior is gloomy; and the streets narrow, crooked, and dirty. Its greatest curiosity, a cathedral finished in 1050, was almost wholly pulled down in 1820; little now remaining of it except a small chapel, containing an ancient Saxon altar, and some other curiosities. Part of a palace, built in the 9th or 10th century, is now used as a corn-warehouse. Goslar is the seat of the mining council for the Harz, and of the corn-magazines for the same district. It has several churches, an hospital, gymnasium, several breweries, the beer of which enjoys great celebrity; manufactures of vitriol, sheet lead, shot, copper, and iron wares, carpets, &c. Most of the inhab. are Lutherans, and employed in the mines of the Rammelsberg, about 1 m. from the town. (*Berghaus, &c.*)

GOSPORT, a sea-port and market-town of England, co. Hants, hund. Tichfield, par. Alverstoke, opposite to and separated from Portsmouth by the mouth of Portsmouth harbour, 14 m. S.E. Southampton, and 65½ m. S.W. London. "Gosport forms no part of the bor. of Portsmouth; it is not incorporated; it is subject to the jurisdiction of the county magistrates. It contains about 7,000 inhab. (in 1841, 8,862), and is computed to have 500 or 600 houses of the value of 10*l*. (annually) within the town. It is surrounded by fortifications, which appear to be a segment of those of Portsmouth." (*Boundary Report, Portsmouth.*) These fortifications include, not only the town of Gosport, but the government establishment of Weovil, separated from the former by enclosed fields. Gosport and Weovil together occupy the E. extremity of a point of land between two inlets of Portsmouth harbour; the northern of which is called Forton Lake, and the southern, Haslar or Alverstoke Lake. The town consists chiefly of one broad street, containing many good houses, running W. from the shore through its whole extent; one or two other streets running parallel with the former; and several more crossing them mostly at right angles. It is in general pretty well built and paved, clean, well lighted with gas, and well supplied with water. Towards its N. side, it has a tolerably good square, termed Cold Harbour: it has few public buildings worthy of remark. The church, a neat and spacious edifice, is a curacy of Alverstoke: there are Independent, Rom. Catholic, Baptist, and Methodist chapels, an academy for ministers of the first-mentioned sect, several charity schools, some almshouses for poor widows, an extensive bridewell, and an assembly-room at the principal hotel. A large building was, in 1811, erected by shares, in a conspicuous situation on the shore, for a market-house; but it proved a losing speculation, and is no longer devoted to that purpose. Its lower part has long been shut up; its upper part is at present used for the meetings of the Ferry Committee and the Philosophical Society. The town is quite open on the side of the harbour; there is a ferry for the conveyance of passengers to Portsea and Portsmouth; and a floating bridge, to communicate between Gosport and the latter town, has recently been commenced (respecting which, *see* PORTSMOUTH).

On the land side, beyond the gates, is the populous suburb of Bingham-Town, in which is the terminus of a railway, intended to join the South-western at Bishopstoke. The inhab. of Gosport are of the same description as those of Portsmouth, follow the same pursuits, and partake equally of the benefits which result from the public establishments. (*Bound. Rep.*) In time of war, Gosport shares in the commercial activity that prevails on the other side of the harbour. Some vessels and boats are built, but there are no other manufactures of consequence. There are 2 fairs annually, but they are of no importance.

The establishment of Weovil comprises the royal brewery, and cooperage; storehouses for provisions of all kinds for the navy, &c.; an extensive ship-biscuit manufactory, wrought by machinery; and the general victualling department, removed thither from Portsmouth in 1827-8. It communicates with the sea by a

large basin and canal, where ships of large burden take in stores. Near Weovil are some extensive military barracks. N. of Forton Lake is Priddy's Hard, where is a large powder magazine. At Forton there was formerly a brick edifice of considerable size, in which many French prisoners were detained during the late war; but it has been pulled down. On the S. side of Haslar Lake stands Haslar Royal Hospital, a magnificent asylum for sick and wounded seamen. It was commenced in 1746, and finished in 1762. It is built of brick, and consists of a central portion 570 ft. broad, with two wings, each about 550 ft. in length, the whole surrounded by a high wall, enclosing an area of nearly a mile in circuit. It is capable of at once accommodating 2,000 patients; and has, besides apartments for the numerous officers connected with it, a neat chapel, a fine museum of natural objects, &c. The annual expenses of Haslar Hospital are estimated at about 5,000*l*. At Stoke Bay, about 2¼ m. S.W. Gosport, the handsome watering-place of Anglesea-ville has grown up since 1825, and is rapidly rising into importance. Gosport is a polling-place for the S. division of Hants. (*Boundary Reports; Private Information, &c.*)

GOTHA (PRINCIPALITY OF). *See* COBURG-SAXE-GOTHA.

GOTHA, a town of central Germany, cap. of the above principality, and, conjointly with Coburg, the residence of the sovereign prince; on the declivity of a hill, the summit of which is crowned by the palace of Friedenstein, 46 m. N. by W. Coburg, and 12¼ m. W. by S. Erfurth; lat. 50° 56′ 8″ N., long. 10° 44′ E. Pop. (1837) 13,874. This is one of the best laid out and best built towns of Germany, and is surrounded by handsome boulevards, which replace its ancient fortifications. Being situated from 900 to 1,050 ft. above the level of the sea, its climate is cold, the mean temperature of the year not exceeding 49° Fahr. (*Berghaus.*) "The palace, called Friedenstein, is an imposing building, conspicuous at a distance, not unlike Windsor Castle in its situation, and surrounded by similar terraces, commanding fine views." (*Murray's Handbook, N. Germany.*) It contains a picture-gallery, in which there are some good paintings by Italian masters, though the works of the old German and Dutch schools predominate; a collection of copperplate engravings; a library of 150,000 vols.; a cabinet of coins, &c.; a museum of natural history and the fine arts; and a Japanese and Chinese museum, containing Chinese and Japanese books, articles of furniture, weapons, &c., including a part of the collection of the eastern traveller, Seetzen. The cabinet of coins and medals is both extensive and complete, and considered one of the finest collections of the kind in Europe: it comprises nearly 10,000 ancient and 52,000 modern coins, 13,000 impressions in sulphur, a numismatic library of 6,000 vols., 9,000 drawings of medals, &c. The town of Gotha has seven churches, an arsenal, a gymnasium, with an excellent library, a new ducal gymnasium, orphan and lunatic asylums, a house of correction, an institution for the improvement of neglected children, the Caroline establishment for poor girls, a teachers' seminary, school of trades, society for the encouragement of arts and trades, and a fire and life assurance office, from which policies may be obtained for any part of Germany. Gotha has a large manufactory of porcelain; and produces cotton, woollen, and linen fabrics and yarn, sail-cloth, leather, tin and lackered wares of all kinds, fire engines and buckets, coloured paper and furniture, and has numerous dyeing-houses. It has an active and extensive trade, and, amongst other articles, Gotha sausages are sent to all parts of Germany. The *Almanach de Gotha*, an excellent publication, to which we are frequently indebted, is published in this town. A little to the S.E. is the observatory of Seeberg; and not far from the palace is a pleasure-house, with a fine garden and orangery, and a ducal park ornamented with statues, &c. The author of a *Tour in Germany in* 1820-22, observes, in speaking of Gotha,—"It has more the air of a town than Weimar, but has not more of the bustle of life, and far less of its pleasures and elegant enjoyments. . . . Some people would not reckon the want of a theatre a misfortune in a town; but, in a small German capital, where the court affects no parade, nothing could be a surer sign of its Trophonian qualities. The Goths occasionally pack themselves into coaches, and make a journey of 40 miles, even in the depth of winter, to hear an opera in Weimar." (i. 324, 325.) The foundation of Gotha is attributed to William, archbishop of Mayence, in 964. (*Berghaus; Cannabich; Dict. Géog.*)

GOTTENBURG, or GOTHENBURG (Swed. *Gœteborg*), a sea-port city of Sweden, and the second in that kingdom, in the W. part of which it is situated; at the head of a fiord, near the Cattegat, which receives the Gœta, about 260 m. S.W. by W. Stockholm, and 157 m. S.S.E. Christiania. Lat. 57° 42′ 4″ N., long. 11° 57′ 45″ E. Pop. (1833) 28,758. (*Forsell.*) It stands principally in a marshy plain, surrounded by precipitous ridges of naked rocks, from 100 to 300 ft. high; but partly on the heights to the W.; being thus divided into the Lower and Upper town. The former is intersected by numerous canals, and has an appearance very similar to that of the towns in Holland. The entrance to Gottenburg from the S. is extremely fine: the slope of the hill, along which the road winds, is covered with houses whose shaded gardens spread beautifully up the height behind, while in front are long terraces, and neatly-clipped harbour walks, all mingling richly among large trees of southern foliage. You enter the city by a good bridge, and, on advancing, the lofty flat-roofed houses, all built of stone, or of well-stuccoed brick,—the wide streets, regularly paved, with foot-walks, laid down in 1838 and 1839, the deep canals, with which the place abounds, displaying rows of trees on either bank—all help to keep up the illusion that you can scarcely be in the far north. (*Bremner, Excurs.*, i. 297.) Since 1834 the town has rapidly increased: most of the empty spaces inside have been built upon, and the rent of houses has risen 35 and 40 per cent. Many of the houses in the Upper town are erected upon the steepest ridges of the rock, rising one above another in situations apparently the most perilous and insecure; these, however, together with the bold scenery round the city, and the harbour thronged with vessels and boats in front of it, give Gottenburg a very picturesque appearance. It is defended by three forts. The suburbs are larger than the town itself, and stretch for a considerable distance along the fiord. The city has several large squares and market places, and some tolerable hotels; there are, however, few public edifices or other objects worth notice. The principal are the exchange, the extensive buildings belonging to the E. India Company, an hospital, and a magnificent church, built since 1812, with stone from Scotland. The exchange is handsome, large, and splendid enough for a commercial city of the first class. The city has three churches, one being a cathedral, a Moravian chapel, two orphan asylums, a gymnasium, Prince Oscar's school, in which 100 soldiers' children are educated, a free school for the education of 300 poor children, and the board of 200 do.; with Sunday-schools, and many benevolent institutions. It has also an arsenal, custom-house, 2 banks, a theatre, barracks, and docks for ship-building, and is a place of considerable manufacturing activity. Within the last 10 years 3 large cotton mills and 1 large sail-cloth and linen manufactory have been built, and are in full operation: the machinery was brought principally from England and Belgium. There are, also, several factories for weaving common printed cotton goods. In addition to these, there are manufactures of tobacco, refined sugar, glass, paper, &c.; but most of these are upon a limited scale. There is a considerable porter brewery, the produce of which is famous throughout the N. of Europe. The establishment is in the hands of a Scotchman; and Mr. Bremner says that the article produced is "more like London porter than any thing made under that name out of England. Considerable quantities of it are exported to Russia." (P. 298.)

The harbour is the most conveniently situated for foreign trade in Sweden. It is formed by two long chains of rocks, and protected at its mouth by the fort of Nya-Elfsborg, built at the extreme projection of a long rocky island, running into the Cattegat. Immediately within this fort, where the fiord is not half a mile wide, the larger vessels trading to the port usually remain, while those of smaller burden proceed some distance further, to Klippen, an extensive suburb of Gottenburg, from whence the inner harbour commences. Vessels do not come close to the city, but lie in the river or harbour at a short distance from the shore, goods being conveyed from and to them by lighters that navigate the canals of the Lower town. The depth of water in the port is 17 ft.; and there is no tide, bar, or shallow. A vessel entering the Götha (fiord) must take a pilot on board, whose duty it is to meet her half a league W. of Wingo beacon. After Stockholm, Gottenburg has the most extensive commerce of any town in Sweden. Iron and steel, the former excellent, the latter inferior to that made in England, form the principal articles of export. They are brought from the rich mines of Wermeland, distant about 200 m.; being conveyed by the lake Wener, the Trölhœtta canal, and the Götha. The exports of iron, in 1839, amounted in all to 191,150 skib.; of which 134,630 went to the U. States, 35,180 to England, 21,340 to sundry places.

The original cost of iron is supposed to be increased about 5 per cent. by the expense of conveyance to Gottenburg; and the shipping charges, inclusive of the export duty, are about 10 per cent. additional. The next great article of export is timber, particularly deals, which are also furnished by Wermeland. The exports of deals (1839) were 148,650 dozen; of which, 64,870 dozen went to England, 41,840 do. to France, 21,480 do. to Belgium, 20,460 do. to sundry places.

The export duty on timber is not heavy. The other articles of export are linen, sailcloth, tar, copper, alum,

glass, cobalt, manganese, linseed, oak bark, bones, juniper berries, cranberries, rock moss for dyeing, &c. The principal articles of import are sugar, coffee, tobacco, cotton yarn and twist, salt, indigo, dye-woods, South Sea oil, rice, wine, spices, herrings, &c. Gottenburg used, at no distant period, to be one of the principal seats of the herring fishery; but at present this branch of industry is quite extinct, and it has always been very capricious, the fish alternately swarming on, or altogether deserting the coast. Since 1812 they have entirely disappeared; so that Gottenburg, instead of exporting, at present imports considerable supplies of herrings.

There belonged to the port, in 1837, exclusive of river craft, 72 vessels of the aggregate burden of 6,354 Swedish lasts, or 15,250 English tons, which had increased in 1839 to 8,100 lasts, and in 1840 to about 9,600 do.; and ship-building is going on briskly. The opening of the Götha canal, by which Gottenburg communicates with a large part of the interior of Sweden, and ultimately with Stockholm, by means of an extensive system of inland navigation (respecting which, see SWEDEN), has exercised a material and beneficial influence upon its commercial destinies, particularly now that the locks have been enlarged, rendering the canal passable for a larger class of vessels than previously. The trade with England is extensive, and English is generally understood in Gottenburg. Steamers run once a week between Gottenburg and Hull for 8 months of the year; but in winter intercourse takes place only by the tedious route of Lubeck and Hamburg. Goods may be bonded for any length of time in the warehouses of the city, on payment of ¼ per cent. *ad valorem*.

Gottenburg is the see of a bishop, the residence of a military governor; and the seat of various courts of justice, and a chamber of manufactures. It has an academy of sciences and literature, incorporated 1775. It was built on its present site by Gustaphus Adolphus, in 1611. It has frequently suffered severely from fire. (*Private Information.*)

GOTTINGEN, a town of W. Germany, k. Hanover, cap. princ. of same name, distr. Hildesheim, 58 m. S. Hanover, and 24 m. N.E. Cassel; lat. 51° 31′ 58″ N., long. 9° 56′ 45″ E. Pop. 10,900. (*Berghaus.*) It is pleasantly situated on the banks of the Leine, in a beautiful and fertile valley, 512 ft. above the sea, at the foot of the mountain of Haimberg. The town, which is divided into three parts, the old and new town, and Masch, is walled round, and has four gates. The ramparts are planted with trees, and form a pleasant walk for the inhab. Streets broad and well paved; but the houses, though old, appear neither venerable nor picturesque. There are three squares, the largest being the market-place, with a handsome esplanade and fountain in the centre, three Lutheran churches, a Reformed church, and a Rom. Cath. chapel. The church of St. John's has two steeples, each 200 ft. high; and St. James's is 300 ft. high. The University church was opened in 1822. The other chief buildings are, the university-hall, finished in 1837; the court of justice; the lying-in hospital; the observatory, in the S.E. suburb of the town; and the theatre of anatomy: of these, the first and last two are chaste and elegant structures. A school of industry was founded in 1785. The trade of the place, independently of the university, is quite insignificant; the sale of books, and the manufacture of sausages and tobacco-pipes, are the only thriving branches. (*Berghaus.*)

The university, founded by George II. in 1734, and chartered in 1736, as the *Academia Georgia Augusta*, with an endowment out of the revenues of some secularised monastic property, was, down to 1831, fully entitled to its appellation, "the queen of German universities," both on account of the celebrity of its professors, and the number of students flocking thither from all parts of Europe. It is chiefly indebted for its early prosperity to the fostering care of its first curator, Baron Munchausen, the king's home minister; and its subsequent success has been owing to the judicious liberality of the sovereigns, who, while cautiously watching its progressive efficiency, have not changed the direction of their bounty, or doled out its supplies with a niggard hand. The first course of lectures was begun by Gebauer the civilian, in 1734; and in the century since elapsed no less than 230 professors have given instruction, most of them, in every branch, possessing a higher degree of talent than those attached to any other university in the country: among these were Heumann, Mosheim, Schleusner, Michaelis, Eichhorn, and Ewald, in theology; Gebauer, Spangenberg, Wahl, Hugo, and Bergmann, in law; Gesner, Heyne, Schlözer, Müller, Grimm, and Heeren, in philology and history; Haller, Blumenbach, Langenbeck, Schröder, Baldinger, Conradi, and Osiander, in medical science; Gmelin and Stromeyer, in chemistry; Zenn, Hoffman, and Schrader, in botany. The entire number of matriculated students during the first century of the university's existence, was 39,736; the greatest attendance being between 1822 and 1826, when the average was 1,481 annually. Since 1831, however, in consequence of the political disturbances at Göttingen, in which the professors and students were implicated, the university has fallen into disrepute, and the numbers in the years 1831-37 averaged only 868 annually. The oppressive measures of King Ernest in 1837, which drove Grimm, Ewald, Dahlmann, &c. to other universities, have still further injured it; and the students in 1839, according to Reden, had declined to 664, of whom only 200 were foreigners, that is, not Hanoverians. The gross annual expenditure of this university is about 160,000 rix-dollars (about 50,000*l.*), nearly half of which goes to enrich the library and museum, the rest being divided among about 32 ordinary professors, whose salaries vary from 80*l.* to 350*l.* a year. The professors altogether, including private tutors (*privatim docentes*), are reckoned by Reden at 8[illegible]. The students in Göttingen are not compelled to reside within college, nor tied to stated hours of discipline, nor forced to oaths of orthodoxy; each lives in any part of the town he likes, takes his meals how, when, and where he pleases, and even pursues his own course in the choice of his academical studies. Their age at entrance varies from 17 to 20, and they usually continue here four years, the periods of study occupying ten months in each year; the winter *semester* lasts from Oct. to March, that in the summer from April till the end of Aug. There is a preliminary examination for the Hanoverian students, called *Maturitäts-prüfung*, which all must pass who wish to serve the state in the learned professions. In 1838, the number passed was 138. This probation, however, is not required of foreigners. The matriculation fee is one louis-d'or, or 17*s.*, and this admits to the use of the library and to attend lectures. Of the lectures, some are *public*, and may be attended without any additional fee; but the greater number are private, the fee being a louis-d'or for each semestral course of daily lectures. The medical fees are higher. Many of these lectures are delivered in public auditories, especially those of the medical faculty: some professors have private class-rooms. The medical and public lectures are very numerously attended: the attendance at the rest varies from 50 to 12. Not less than 140 courses are delivered by the whole body of teachers during each *semester*, and several have two or three courses on different subjects proceeding contemporaneously. The expenses of students must greatly depend on their habits. Saalfeld, in his edition of Pütter's History of the University, mentions 360 rix-dollars a year, as sufficient for respectable maintenance; but this is too low a calculation, 400 or 430 rix-dollars (about 90*l.*) being, it is alleged, the lowest sum that can be spent consistently with comfort and convenience for study. For the poorer scholars there are 204 *Freitisch-stellen*, or sizarships (sums paid for board), and a number of scholarships (*Stipendien*), to which purpose 6,413 rix-dollars are annually devoted. (*Reden*, ii. 447.) With reference to degrees, the university is composed of four faculties — divinity, law medicine, and philosophy, each of which confers its own degrees. The faculty of divinity confers the degree of licentiate in theology and doctor of divinity; that of law, the degree of doctor of laws; that of medicine creates doctors of medicine; while the philosophical faculty confers the degree of doctor of philosophy and master of arts. All these degrees are consequent on disputations and examinations approved by the deans of the respective faculties. These degrees, however, though generally pre-requisites, confer of themselves no right of practising the learned professions in Hanover. This is gained by a subsequent government examination. The members of these faculties consist altogether of 20 professors, from whom ten are chosen to form the Senatus Academicus. The judicial government of the university, which acknowledges no control beyond that of the king of Hanover, its *rector magnificentissimus*, and his two curators, who appoint the salaried professors, &c., is conducted by the pro-rector, or principal, an officer elected each *semester* by the professors from among themselves, who is assisted in his duties by two judges, a secretary and recorder, all of whom, likewise, are professors.

The chief academic establishments of Göttingen are: 1. The library, consisting of more than 300,000 printed books, and 5,000 MSS., admirably selected and arranged, to which the students have full access, with the additional privilege of taking the books home *; 2. The academical museum (founded in 1773, and removed to its present depository in 1793), consisting of 14 rooms, filled with several thousand specimens of zoology, mineralogy, and geology, besides others explanatory of the manners

* Heeren, in his *Life of Heyne*, observes respecting the library: — "Better show collections may be found elsewhere; but the great recommendation of the Göttingen collection is, that it has been made for use, not show, and that the student finds in it every thing that he would see or handle in his science." Heyne was the chief promoter of the arrangements under which this library has acquired its great and just celebrity. See an account of them in *Journal of Education*, No. 4.

and customs of different nations, and a curious collection of models; 3. The observatory, first erected in 1751, and removed to its present site in 1816, containing an apparatus of excellent modern instruments, and every accommodation for astronomical observers; 4. The botanic garden, first laid out under Haller's superintendence in 1739, but now more than quadrupled in extent, and provided since its removal with beautiful green-houses, adapted to plants of all temperatures, and ponds for aquatic plants; 5. The chemical laboratory, constructed by Gmelin, and perfected by Stromeyer, who provided it with an apparatus for experimental students; 6. The school of anatomy, first established by Haller in 1738, and since 1829 held in a fine building containing a spacious theatre and dissecting-rooms; 7. Two infirmaries for medical and surgical cases, and a lying-in hospital, accommodating about 120 pregnant women a year. 8. The *Spruch-Kollegium*, or court of equity, composed of a president and several subordinate members appointed by government, which serves the double purpose of a court of judicial advisers in legal questions sent from all parts of Germany, and of a school for the legal students; 9. The Homiletic seminary, for the instruction of divinity students in preaching and pastoral duties; 10. The philological seminary, founded by Gesner in 1737, and under the direction of three professors, which gives minute philological instruction to 11 stipendiary students (paid 50 dollars each every year), and as many more as the director pleases to admit, after the requisite examination. The last three establishments have been eminently successful in raising up useful and able men in the professions to which their instruction leads. Nearly connected with the university is the Royal Society of Sciences, established by Geo. II. in 1751, on a plan suggested by Haller, and well known to the *savans* of Europe. Its transactions are published in Latin, and may be considered a repertory of all the original views in literature and science started in Göttingen by the professors of the medical and philosophical faculties. An annual prize of 50 ducats (24*l.*) is open to persons of every country for the best essay on mathematics, physics, and history alternately. This society is the patron and superintendent of the Göttingen Literary Review (*Göttingische gelehrte Anzeigen*), which, having risen to eminence under the editorship of Haller, has since been conducted by Heyne, Eichhorn, and Heeren, the last of whom is the present editor. Two large 8vo. vols. are published yearly, and the work has throughout been distinguished not only for exalted talent, but for a tone of moderation and strict adherence to truth: these qualities alone have enabled it to outlive the various and important political changes of the country. (*Reden's Hanover*, ii. 435—449.; *Journal of Education*, No. xx.; *Priv. Inform.*)

GOTTLAND, an island of the Baltic, belonging to Sweden, in the Län of the same name, lying between lat. 56° 52′ and 27° 56′ N., and between 13° 5′ and 19° 8′ E., dist. 60 m. from the continent of Sweden. Greatest length, 75 m.; ditto breadth, 26 m. Area, 1,194 sq. m. Pop. of the Län, sometimes called Wisby Län, which includes the small surrounding islands, in 1830, 38,954. (*Forsell.*) This island presents the appearance of a large plateau, varying from 150 ft. to 200 ft. above the sea. Its sides, which in some places, gently slope towards the sea, are so steep and precipitous in others, as to look like artificial walls. The coasts are indented by several bays, the largest of which are Kapelhamn on the N., and Slitehamn on the E. The high lands, except the barren summits of Thorsburg and Hoburg, are generally well wooded. There are several small lakes. The rivers are few and inconsiderable. In some parts swamps occur, but of no great extent. The geological features of the island, though generally calcareous, vary extremely, especially in the S., where occur large masses of hard grey sandstone containing mica, and susceptible of a high polish. The soil is either calcareous or sandy, and would be very productive if better cultivated. The chief products are wheat, barley, oats, turnips, potatoes, and hops, which are grown only for home consumption. The forest trees are large and handsome, and they furnish timber for exportation. The only other exports are marble, sandstone, and lime, which are sent to Stockholm. The rearing of cattle occupies a considerable share of the people's attention. Horses, goats, and sheep are reared in large numbers; and the breed of sheep has been improved by the introduction of Merinos. Game is very plentiful. There are no manufactures on the island. The Län, of which Gottland forms a part, is divided into 20 districts: and the sea-port town of Wisby, on the W. side of the island, is the cap. Pop. of the latter, in 1836, 4,091. (*Forsell.*)

The epoch of the foundation of Wisby is uncertain; but during the 14th and 15th centuries it was a principal factory of the Hanseatic League, and attained to considerable wealth and importance. It is famous in the history of maritime jurisprudence, for the Code of Sea Laws which bears its name. The date of this compilation is uncertain, and some of the northern jurists contend that the Laws of Wisby are older than the Rules of Oleron; but it has been repeatedly shown that there is no foundation for this statement. Grotius has spoken of the laws of Wisby in the most laudatory manner. "*Quæ de maritimis negotiis,*" says he, "*insulæ Gothlandiæ habitatoribus placuerunt, tantum in se habent, tum equitatis, tum prudentiæ, ut omnes oceani accolæ eo, non tanquam proprio, sed velut gentium, jure utantur.*" (*Prolegomena ad Procopium*, p. 64.) The text of these laws, with a translation and an elaborate introduction and notes, is given in the excellent *Collection des Loix Maritimes* of M. Pardessus (i. pp. 425—502.)

In 1361, Vladimir III., king of Denmark, took Gottland from the Swedes. By the treaty of 1644, it again became their property; and since then has continued in their possession, with the exception of a short period in 1807, when it was occupied by the Russians.

GOUDA, or TERGOUW, a town of S. Holland, cap. cant., on the Yssel, at the influx of the Gouw, 10¼ m. N.E. Rotterdam. Pop. 13,000. It is a neat town, with beautifully wooded environs. It is known only in England by its cheeses and tobacco pipes; but in Holland it is famed for its painted windows, chiefly the work of the two brothers Krabeth, and reckoned the finest specimens of their kind in Europe. "They are the windows of the old church of St. John, a large Gothic structure, kept in excellent repair, and particularly clean. The windows are 31 in number, each measuring about 30 ft. in height, with the exception of those of the transepts, which are nearly double that altitude, and all illuminated with pictorial representations, in colours of the most brilliant hues. The subjects are either scriptural or allegorical, and are full of figures, whose robes in blue, purple, and red, shine with extraordinary lustre. The faces are the best part of the execution, the remainder of the figures being painted in a stiff and formal style, though nevertheless interesting from their antiquity. Besides the large windows, there are several of a smaller size, chiefly blazoned with the coats of arms of the old Netherlandish nobility." (*Chambers's Tour in Holland*, p. 40, 41.) These paintings were mostly executed in the 15th and 16th centuries; and amongst others are introduced portraits of Philip II. and the Duke of Alva. Besides St. John's (the cathedral) there are 4 other churches in Gouda; and it has, also, a handsome town-hall, an hospital for old men, an orphan asylum, and a foundling hospital. A Latin school, and a library containing several curious MSS., belong to the town. There are upwards of 120 tobacco-pipe manufactories in Gouda, some employing 30 workmen; and numerous brick kilns in its neighbourhood. It has manufactures of woollen cloth, sailcloth, cordage, &c., and large markets for cheese, flax, hemp, corn, timber, and other produce.

GOUR (probably the *Ganga Regia* of Ptolemy), a ruined city of Hindostan, and the ancient cap. of Bengal, distr. Dinagepoor, on the E. side of the Ganges, about 50 m. N. by W. Moorshedabad: lat. 24° 53′ N., long. 88° 14′ E. Its ruins extend in a direction N.N.W. to S.S.E., coincident with the ancient bed of the Ganges, the main stream of which formerly washed its ramparts; at present, however, from a change in the course of the river upwards of 200 years ago, no part of the ruins is less than 4 m., while other parts are as much as 12 m. from the Ganges. The city appears, from the extent of the old embankments, which enclosed it on every side, to have been 10 m. long, and from 1 to 1½ m. broad. Beyond those boundaries, however, a smaller embankment has been carried forward for 7 m. further S., in which space are found mosques, tanks, and the remains of habitations; and the same indications are evident for 2 m. to the N. The city and its suburbs thus extended in length about 19 m., with an average breadth of about 1½ m.; and, according to the estimates of both Major Rennell and Mr. Creighton, would appear to have anciently occupied an area of 30 sq. m.! The embankments surrounding the city, some of which are faced with bricks, were sufficient to guard it from floods during the inundation, and a good defence against hostile attacks: they are mounds of earth from 30 to 40 ft. high, and 130 to 200 ft. in breadth at their base, with broad ditches on their outside. Additional embankments were made on the E. side, probably for greater security against a large lake in that quarter, which in stormy weather dashes with great violence against them. Two high brick gateways, in an imposing style of architecture, at the N. and S. ends of the city, and several others, are still standing, and the remains of some that have been destroyed are still traceable. Two grand roads, raised with earth, and paved with brick, led through the city in its whole length, crossing in their course various canals and drains, by means of bridges of brick, the ruins of several of which remain in some degree of perfection. The whole area of the city is furnished with a multitude of tanks, of various sizes, and intersected with drains and ditches in every direction. On the earth thrown up in forming these, which raised the ground considerably above its previous level, the houses, &c., were built

as in the cities and villages of Egypt; the excavations supplying good water, sufficient for every purpose. One of these reservoirs is a mile in length by half a mile broad, and there are several others of considerable size. All of them are, however, overgrown with reeds, and swarm with alligators and other reptiles. Towards the centre of the city is the fort, an inclosure rather less than a mile in length by about ¼ m. in breadth, surrounded with an earth rampart, 40 ft. high, with bastions, and a deep ditch encircling it. The handsome gate, flanked by two towers, forming its N. entrance, is still standing. Within this enclosure is part of a brick wall, 42 ft. high, which surrounded a space 700 yards long by 300 wide, supposed to have been occupied by the palace. Few other remains of that edifice exist, and the whole site is so covered with trees and brambles, as to render it not only difficult but dangerous to explore, from the number of tigers and other wild beasts that infest it.

There are scarcely any antiquities of a remote date extant at Gour; most of the buildings that remain are of Mohammedan origin, erected, indeed, with the materials of the ancient Hindoo edifices. "Toiling through bush and long grass, now crossing a field that some ryot has farmed, now wading through pools of water, or ferrying across them, you make your way from point to point, and find only the ruins of 7 or 8 mosques, the half-broken down walls of a large Moorish fortress, and two strikingly grand and lofty gates of a citadel evidently built by Mohammedans." (*Sketches of India*, p. 145.) Of the religious edifices, the finest and largest is the "Great Golden Mosque." This building, situated N. of the Fort, is 170 ft. long, by 76 ft. broad, and 20 ft. high, exclusive of the domes, of which there are 44, rising 10 ft. above the roof. (*Creighton*, Pl. v.) Its walls are 8 ft. thick; it is built of brick, and has been wholly cased with hornblende, little of which is now remaining. Eleven painted arches open into an arena divided by another similar row of arches, and 20 stone pillars arranged in 2 rows, into 4 aisles, each surmounted by 11 domes. This beautiful edifice is now going rapidly to decay, not only from the effects of wanton dilapidations, but also from banian and other trees insinuating their roots between the bricks of which it is composed. The small "Golden Mosque" is built and cased in a somewhat similar style, but has only 5 arches in front, and 3 aisles instead of 4. Many of the inferior mosques are in higher preservation than the first mentioned; their domes are still perfect, and lined within by tiles painted of the most vivid colours, and highly glazed; and one of the smallest has a tesselated pavement of great beauty. The *Nutti Musjeed*, or "Painted Mosque" is an elegant edifice, having its walls cased both inside and out with glazed bricks about 3 or 4 in. square, of different colours, wrought in different patterns. Its interior is a handsome apartment, about 36 ft. square, the four walls closing above, and forming a majestic dome from 40 to 50 ft. above the ground, and unsupported by pillar, beam, or rafter. Within the fort is the tomb of Hussain Shah, one of the kings of Gour in the 16th century, a fine mausoleum, now much dilapidated; and at a short distance without the citadel is the obelisk or tower erected by Firoze Shah at the latter end of the 15th century. This structure is 21 ft. in diameter at its base, and as much as 17 ft. at the floor of its fourth story, 71 ft. high. Its entire original height was probably about 100 ft.: it was surmounted by a cupola, of which Mr. Creighton gives a representation, but since his time the dome has completely disappeared.

This city, called *Lakshmanavati* (by the Mohammedans, *Lucknowty*), from its last Hindoo sovereign Lakshman, was first taken by the Mohammedans in 1204. In 1575 it was repaired and beautified by the emperor Acbar, by whom it was called Jennutabad (the abode of paradise); but in 1564, the seat of government of Bengal was removed to Tanda, a little higher up the river, owing to which event, and the desertion of it by the Ganges, Gour speedily declined. It, however, appears to have suffered less from the hand of time than from active demolition. For centuries the materials of its structures were extensively removed to construct other towns; Moorshedabad, Maldah, Rajamahal, Dacca, &c., are in a great part built of them; and many portions of its fine buildings have been taken away to erect the cathedral of Calcutta, and to supply tombstones and monuments for the cemeteries of that city. A few straggling villages are scattered here and there over the site of Gour; but it is now for the most part only an uninhabited waste, which strongly reminds the spectator of the desolation of Babylon. (See *Creighton's Ruins of Gour; Rennell's Memoir, &c.; Mod. Trav.* ix.)

GOZZO, a small island of the Mediterranean, contiguous to and dependant on Malta, (which see.)

GRAMMONT (Flemish *Gerrardsbergen*), a town of Belgium, prov. E. Flanders, arrond. Audenaerde, cap. cant., on the Dender, which divides it into the upper and lower town, 21½ m. S.S.E. Ghent. Pop., with commune (1834), 7,389. It is walled, and has two churches, several chapels, a town-hall, convent, prison, hospital, orphan asylum, college, several schools, and manufactures of cotton yarn, lace, linen and woollen fabrics, paper, tobacco, some bleaching, dyeing, and tanning establishments, with distilleries, breweries, and mills for various purposes. It was founded and fortified by Count Baldwin de Mons in 1068. (*Vandermaelen, Gautier, &c.*)

GRAMPIANS (THE), a celebrated and well known mountain chain forming the line of demarcation between the Lowlands and Highlands of Scotland. Its limits are not very well defined; but it may be regarded as commencing on the E. side of Loch Etive in Argyleshire, and as stretching across the island, till it terminates between Stonehaven and the mouth of the Dee on the E. coast. It forms, as it were, a natural rampart, bounding the entire frontier of the Highlands. Its S. acclivity rises from the great valley of Strathmore. The summit of the ridge marks the line that separates the waters that flow into the Forth, the Tay, and its numerous tributaries, and the South Esk, from those that flow into the Spean, the Spey, and the Dee. With the exception of Ben Nevis, the highest mountains of Scotland are comprised in the Grampian range. The principal summits, beginning at the W. and proceeding E., are Cruachan Ben, at the head of Loch Awe, 3,390 ft. above the level of the sea; Ben Lomond, on the E. side of Loch Lomond, 3,195 ditto; Ben More, at the head of Glen Lochart, 3,870 (B) ditto; Ben Lawers, on the N. side of Loch Tay, 3,945 ditto; Schiehallion, at the E. end of Loch Rannoch, 3,560 ditto. But the most elevated part of the Grampian chain lies at the head of the Dee, between Ben Gloe, in Perthshire, and Cairngorm, on the confines of Aberdeenshire and Inverness-shire. Ben Macdhu, the most elevated of the mountains in this vicinity, is 4,327 ft. high, being only 43 ft. lower than Ben Nevis; and the adjoining mountains of Cairngorm, Cairntoul, and Ben Avon, are respectively 4,095, 4,245, and 3,967 ft. high. From this central point, the principal branch of the Grampians runs along the S. side of the Dee, gradually declining in height till it reaches Gaerloch Hill, near Stonehaven; 1,890 ft. high. The coast from Stonehaven to the Dee is high and precipitous, and may be considered as the extreme limit of the Grampians on the E. The branch of the Grampians to the N. of the Dee is of comparatively small extent, terminating at the Buck, above Glenbucket, on the N., and near Tarland, on the S.

The Grampians are, in general, remarkable for their sterility, and the desolate aspect which they present. Their sides are in some places extremely precipitous, exhibiting vast perpendicular ledges of rock. Their summits are frequently rounded, sometimes nearly flat, entirely covered by disintegrating blocks and stone, together with grit and sand, except where the granite rocks present the singular appearance of large tabular protruding pinnacles, having their blocks seemingly arranged in regular strata.

Of the Grampian passes, the principal are those of Aberfoyle, Leni, Glenshie, and Killiecrankie. The latter, which is the most celebrated, is about 15 m. from Dunkeld. It is about half a m. in length. The road is cut out of the side of one of the contiguous mountains; and below it, at the foot of a high precipice, in the bottom of the ravine, the river Garry dashes along over rugged rocks, but so shaded with trees as hardly to be seen. At the N. extremity of this pass, the revolutionary army, under Mackay, was defeated in 1689, by the troops of James II., under the famous Graham of Claverhouse, Viscount Dundee, who fell in the moment of victory.

GRAMPOUND, a bor. and market town of England, co. Cornwall, W. div. hund. of Powder, par. of Creed, on the Fal, 12 m. N.E. Falmouth. Pop., in 1831, 715. This inconsiderable place sent 2 mems. to the H. of C. from the reign of Edward VI. down to 1821, when it was disfranchised for gross bribery and corruption.

GRAN, (Hungar. *Esztergom*, anc. *Strigonium*), a city of Hungary, cap. co. same name, on the Danube, nearly opposite the mouth of the river Gran, 80 m. E.S.E. Presburg, and 26 m. N.E. by N. Pesth. Pop. 12,885. It consists of the royal free town, the archiepiscopal town occupying the site of the former citadel, the adjacent market-towns of St. George and St. Thomas, and several suburbs. Gran was once the finest city in Hungary, and the residence of its kings, some of whose tombs are still to be seen. It is now the seat of the Prince-primate of Hungary, who ranks next to the palatine, and had formerly the privilege of crowning the king and of granting letters of nobility. The superb new cathedral, the palace of the archbishop, and the houses of the chapter, occupy a commanding position, overlooking the town and river, on the summit of a high and precipitous rock, on which an old fortress once stood. The cathedral, the most splendid modern building in Hungary, was commenced, in 1821, by the late archbishop Rudnay at his own expense; but, by his death, was left unfinished, and it is to be feared will remain so. It is in the Italian style, surmounted by a dome, and having

a handsome portico of 38 pillars. The interior is lined with polished red marble, and supported by 54 columns. The dome is 82 ft. in diameter. The altar-piece, by Hess, a Hungarian artist, represents the baptism of St. Stephen, the first Christian king of Hungary, a native of Gran, who founded the archbishopric in 1001. Under the church is the primate's burial vault. The see of Gran is perhaps the richest in Europe; "common rumour generally estimates its revenues at 100,000*l.* per annum; though some reduce them to 80,000, or even 60,000*l.*" (*Paget*, i. 191.) The Danube is here of great breadth, but is crossed by a flying bridge, which communicates with the opposite market-town of Parkany. Besides the cathedral it has 2 Rom. Cath. churches, a Greek church, and 4 chapels, town-hall, house of assembly, hospital for poor citizens, a Rom. Catholic gymnasium, female school, and a good printing establishment. It is the seat of the assembly and judicial courts of the county. Its inhab. are partly Magyars and partly of German descent. Their chief resources are derived from trading in wine; but they also manufacture and dye woollen-stuffs. At the bottom of the rock on which the cathedral stands are some warm mineral baths.

Gran was several times taken by the Turks, who destroyed most of its ancient edifices. It was for a long period the advanced post of their armies in Europe; but was finally taken from them, in 1683, by Sobieski and Prince Charles of Lorraine. Upwards of 200 houses, together with the military hospital, chapel, and other public buildings, were destroyed by fire in 1818. (*Oesterr. Nat. Encycl.*; *Elliott*; *Paget*; *Cannabich*; *Stein*; *Dict. Géog.*)

GRANADA, a prov. and part of an ancient mar. kingdom of Spain, consisting of the S.E. part of Andalusia, between lat. 36° 17′ and 38° 22′ N., and between long. 1° 51′ and 3° 53′ W.; and bounded E. by Murcia; N. and W. by Seville, Cordova, and Jaen; and S. by the Mediterranean. Its general shape is that of an acute-angled triangle, whose base faces the E. Its length is about 240 m., and its breadth varying from 25 to 80 m. Area, 9,600 sq. m. Pop. (1827) 1,097,100. (*Miñano.*) The prov. consists chiefly of high land; but three chains may be distinguished, — one forming the N. boundary of the prov., and connecting itself eastward with the Sierra Morena; a second and principal one, traversing the centre of the prov. (called the Sierra Nevada in the highest part, and the Sierras de Loxa, de Anteguera, and de Cazorla, E. and W. of the culminating point); and a third, nearer the shore, called the Alpujarras. The line of perpetual snow here is at 9,915 ft., and in the principal chain are several summits rising above it, the highest of which are the Cerro de Mulahaçen, 11,660 ft., and the Picardo de Veleta, 11,397 ft.; from the last the Sierra Morena, distant 57 m., and the coast of Africa, distant 112 m., may be discerned in clear weather. The slope in the principal chain is more gradual northwards, while on the Alpujarras the N. side is scarped and the gentle descent is towards the sea. The Sierra de Gador, in the latter chain, is 6,570 ft. high. From the N. side of the principal chain flows the Xenil, measuring 120 m. to its juncture with the Guadalquivir; and farther E. are the smaller streams, the Guadix and the Barbata, — both affluents of the same river. The rivers on the S., with the exception of the Guadaljore and Almeria, are little better than torrents. In this mountainous district are several vallies of considerable extent, the largest of which is the Vega of Granada, a plain 30 m. long, and 16 m. broad, elevated about 2,000 ft. above the sea, surrounded by mountains, and watered by numerous affluents of the Xenil, which traverses it in its whole length, and essentially contributes to its extraordinary fertility. In the E. of the prov. is another valley — the Hoya de Baza, — which, though smaller, is extensive, well watered, and fertile. There are others of more confined extent. The temperature, on account of the varying altitude of the country, is much diversified, but the climate is generally healthy, except occasionally on the coast, where the *simoom* produces fever among the inhabitants. The geology of the Granadian mountains is imperfectly known: the Sierra Nevada is of mica slate, gneiss, and clay slate, the whole overlaid on the S. side by black transition limestone containing sulphuret of lead, which here, as well as elsewhere in the prov., is worked to advantage. The mountains generally are rich in jasper and marbles, especially about the city of Granada, where they eclipse most countries in the beauty, transparency, and polish of the slabs. Precious stones are often found in the quarries. The chief mineral springs of the prov. are at Alhama and Almeria. The soil on the hills is calcareous, that on the plains light and easily tilled, while that on the coast is sandy. The forests produce oaks, cork-trees, chestnuts, firs, &c.; and the plains bear the vine, the fig-tree, the strawberry-tree, the olive and mulberry trees, and others. Tillage, where possible, is pursued according to the Moorish plan of irrigation, and occupies great attention. The fruits of the S. of Europe, — oranges, citrons, pomegranates, melons, — grow here in great abundance, mingled with the productions of the N. Wheat, barley, maize, rice, hemp, flax, and the sweet potato, are raised in large crops; and on the coast of the Mediterranean indigo, cotton, coffee, and the sugar-cane, are cultivated. Mr. Inglis, on the authority of General O'Lowler (manager of a large estate in the Vega of Granada called Soto de Roma, given to the Duke of Wellington by the Cortes in 1813), speaks as follows of the usual rotation of crops in the Vega (ii. p. 183.) — "After the land has been fully manured, hemp is put in: and two, or sometimes three, crops of wheat, according to the nature of the land, are taken in the same year; a crop of flax, and a crop of Indian corn, follow the next year, and beans and Indian corn are taken the third year. For this last crop the land is half manured, and then it is fully manured for the hemp, to begin the next rotation. The hemp is considered necessary to prepare the land for wheat, which otherwise would come up too strong after the manure. This is the rotation on land subjected to the process of irrigation." As to the value of land, he says: — "Ten years ago, land in the Vega of Granada was worth from 50 to 100 dollars per acre: at present, it does not average above 16. Wheat sold, ten years ago, at three dollars the *fanega*; now it does not average, year by year, more than one dollar and a half. Rents are, of course, fallen in proportion; and, low as rents are, they are difficult to be recovered. Upon the lands not capable of being irrigated, the crops are extremely precarious; and where a money rent is required, it is next to impossible to find a cultivator for the land. As a remedy for this, proprietors of high lands are contented to receive a certain proportion of the crop, generally a fifth; and upon land subject to irrigation, a tenant is willing to pay one fourth of the produce. Land generally, in the Vega of Granada, returns 4 per cent., taxes paid; but a considerable quantity returns as much as 6 per cent. The return from land under tillage is greater than from meadow land. The estates belonging to the Duke of Wellington lie in the lower part of the Vega, about 2 leagues from Granada, and all the land is capable of irrigation. His Grace's estates return about 15,000 dollars a year; his rents are paid in grain; a fixed quantity, not a proportion of the crop, a plan beginning to be universally followed by other landholders. The duke has 300 tenants; from which it appears that very small farms are held in the Vega; for if the whole rental be divided by 300, the average rent of the possessions will be but 50 dollars each. The tenants upon the duke's estate are thriving; they pay no taxes; and these estates are exempt from many of the heavy burdens thrown upon land. A composition of 6 per cent. is accepted from the Duke of Wellington in lieu of all demands." The mountain regions afford good pasture; but grazing is less understood here than in most other parts of Spain. The horses of Granada are inferior to those of Cordova; and sheep, though plentiful, have very coarse wool. The asses are superior to most others, both in height and strength. Goats are very numerous, and thrive well. Pigs of a black breed are reared in vast numbers in the woods near Alhama. (*Jacob*, p. 250.) The anchovy and the tunny fisheries give full employment to the inhabs. of the sea-shore.

Except in the articles of wine and oil, the produce of this once fertile prov. does not equal the local consumption. Coarse linen and woollen cloths, silks, paper, leather, and gunpowder, are made in small quantities; but no branch of industry is thriving. Its exports, through Malaga and Almeria, chiefly consist of wines, oil, dried fruits, wax, anchovies, and lead; its imports, of hardware and cutlery from England, lace from France, cloths from England and Holland, spices from Italy, and even corn from the coast of Africa!

Granada formed a part of the ancient Bœtica; and on the destruction of the Ibero-African empire, it became a new state, founded by Mohammed Alhamar, in 1238. It remained in the possession of the Moors for 250 years, which comprise the season of its prosperity. In 1492, it surrendered to Ferdinand the Catholic, being the last province that opposed his arms. The Moors were, by the treaty of peace, to enjoy freedom of religious worship; but this condition was soon broken, and ultimately they were expelled the prov.

GRANADA (an. *Illiberis*), a famous city of Spain, cap. of the above prov. and kingdom, on the N. side of the Sierra Nevada, and at the juncture of the rivers Darro and Xenil, in a mountainous region, not less than 2,240 ft. above the sea, 116 m. E. by S. Seville, and 217 m. S. by W. Madrid; lat. 37° 16′ N., long. 3° 45′ 43″ W. According to Mr. Townsend, the pop. in 1786 amounted, by the government returns, to 52,325; but he says that it might be safely estimated at 80,000. Miñano, in 1826, gives the pop. at 80,000; but, according to Captain Scott, by whom it was visited in 1836, the pop. does not exceed 60,000. (*Scott*, i. 267.) We incline to think that this last estimate comes nearest the mark; though we suspect that even it is too high. The city stands on the edge of a fertile and

extensive *vega* or plain, which these rivers traverse, on two hills, one of which, between the rivers, is crowned by the palace of the Alhambra and the Torres Bermejas; the other, N. of the Darro, by the Albaycin and the Alcazaba. "From whatever point it may be contemplated, it is a sumptuous city, whether viewed from the plain, or from any of the neighbouring heights; and even in walking the streets, vistas of astonishing beauty are occasionally discovered." (*Inglis*, ii. 169.) It still covers a considerable extent of ground, though certainly far less than it must have occupied when swarming with half a million Mohammedans. The approach to it on the Malaga side is particularly fine; a handsome stone bridge, built by the French during the war of independence, spans the Xenil, and immediately beyond rise crenated walls, and terraced gardens, domes, minarets, and shining steeples, reaching to the base of the rock which bears the Alhambra. Every thing within the precincts of the city bears the marks of Moslem hands: the narrow, crooked, and badly paved streets, and gushing fountains, the lofty flat-roofed houses and heavy projecting balconies, are all quite Oriental; whilst here and there the entrance of some old mosque or ruined bath bears in its horseshoe arch the peculiar stamp of the morisco. (*Scott's Granada*, i. p. 235.) The city contains a cathedral, a chapel of the Catholic kings, and 23 parish churches, of which those of San Geronimo and San Juan de Dios are best worth seeing. In all of them are to be seen specimens of variegated marble, not equalled elsewhere, perhaps, except in Italy. The cathedral is a clumsy-looking building, 425 ft. long, and 250 ft. broad; the interior is heavy, excessively gaudy, and fitted up in the worst possible taste. The high altar, flanked by its gilded pillars, is insulated after the Roman fashion, under a dome 170 ft. high, and the area round its base is conspicuous by reason of its light iron railing, and marble pavement. In this church is an exquisite Holy Family by Murillo. The chapel of the kings, which adjoins the cathedral, is of Gothic architecture, is noted for a flat arch of remarkable boldness, which supports its roof. Ferdinand and Isabella, and their successors Philip and Joanna, are buried in front of the altar, and their tombs are superbly sculptured. (*Swinburne's Spain*, i. 301.; *Scott*, i. 261.) The Carthusian convent, about a mile from town, which had till lately great wealth and immense revenues, has a fine marble altar, and some excellent paintings by Murillo and Cano. The palace of the Alhambra (*al-hamara*, the red) is, however, the building by which the travellers' attention is chiefly arrested. This irregular mass of houses and towers, perched on a very high hill, which projects into the plain, and overlooks the city, is said to have been erected about 1224. The walls of the fortress follow the various sinuosities of the cliffs, which bound the plateau on which it stands. The chief entrance, which is approached through a long avenue of elms and myrtles, in one of the towers on the S. front, is called the Gate of Judgment; and over it is embossed a key, the armorial ensign of the Andalusian Moors. The first object seen on entering, in the centre of the plateau, is the palace of the emperor Charles V., built by Verreguete. It is a complete square of 185 ft., having two orders of pilasters, Doric and Ionic, upon a rustic base, the whole measuring 62 ft. from the higher entablature to the base. An oblong vestibule leads into the circular court, forming the centre of the palace: a colonnade of two stories, each supported by 32 columns, runs round its circumference. This building, so remarkable for "magnificence, elegance, and unity of design" (*Swinburne*, i. 275.), was never completed; the pillars are much damaged, and the whole will soon fall to the ground. N. of this building, and strongly contrasted in appearance, stands the palace of the Moorish kings, externally "a huge heap of as ugly buildings as can well be seen." A plain unornamented door admits to the interior. The first place entered is an oblong square, having a deep reservoir for water in the middle, and baths at the sides also, with parterres and rows of orange-trees ranged around; the ceilings and walls being ornamented with intricate stucco and fretwork painted, gilt, and lettered, as in other parts of the building, in the most delicate manner. Beyond this is the Court of Lions, an oblong enclosure, 100 ft. by 50 ft., once paved with white marble, but now converted into a garden, and surrounded by a colonnade of about 130* slender white marble pillars, irregularly placed, and supporting horse-shoe arches that run round the place. In the centre is a fountain, supported by 13 lions, or rather panthers, who disgorge water into a basin of black marble. The arabesque work here is most elaborate, as may be seen in Murphy's and Laborde's illustrations. N. of the last-mentioned court is the tower of the two sisters, a range of apartments having a beautiful ceiling stuccoed in stalactites, and beautifully gilded, and a large window opening to the country; and on the opposite side is the Hall of the Abencerrages, where the chiefs of that noble race are said to have been massacred. The Hall of Ambassadors, however, may be truly called the pride of the Alhambra: it is a square of [illegible] ft., and is 60 ft. high to the top of the cupola, having a ceiling vaulted in a singularly graceful manner, and inlaid with mosaic of mother of pearl; its walls are being adorned with groups of flowers, and fishes intermingled with arabesques of curious workmanship. Highly finished inside, it has also the advantage of extensive views over the city, the dark valley of the Darro, and some other parts of the palace. Swinburne, Jacob, and Murphy give full descriptions of this gorgeous palace. The gardens, which abound with orange and lemon trees, pomegranates, myrtles, &c., lead by a low postern gate to the summer palace of the generalife, situated on the steep declivity of the opposite hill. In the building itself "there is nothing particularly worthy observation; but the myrtle groves and terraces are agreeable, and from the latter there is a charming view over the Alhambra and its gardens." (*Inglis*, ii. [illegible]) The pomegranates and muscatel grapes of this garden are described by Captain Scott as supremely delicious. Above the palace, near the summit of the rock, is a seat cut in the rock, which the Moorish kings are said to have used as a point of observation during the siege of Granada. In the city are several hospitals, the largest being that of San Juan de Dios. The university, founded in 1531, had 812 students in 1827. There are also 6 colleges and 2 academies; one for mathematics, the other for design. The walks about the city are most beautiful; especially two alamedas, one on the Xenil, above which rise orange groves, cypress alleys, and clusters of houses grouped together; the other on the Darro, flowing through a deep romantic ravine, whose scenery equals that of Switzerland. (*Inglis*, ii. 186.)

Granada, many years ago, had extensive factories for velvets, silks, and ribands, employing 2,000 hands, and working up the produce of the neighbourhood (not less than 2,600,000 lbs. of silk), with large paper-mills and a flourishing oil trade. But at present its industry is in a very low state, and poverty, with its attendant crime, has in consequence become prevalent.

This decline in the manufactures and trade of Granada has been ascribed to the emancipation of S. America; and this, probably, may have had some effect. But they had long previously been in a state of paralysis and decay, occasioned by the vicious regulations and the oppressive and injurious imposts to which they were subject. (*Townsend*, iii. 70., &c.) The principal existing business is carried on in the market-place, surrounded with despicable houses inhabited by the poorer orders, and in a narrow crooked street called *El Tacatin*, the little market, which in better times was the great silk-mart. Towards the centre of the city is a bazaar in the Eastern fashion, each stall being boarded off from the rest; but in none of these is there much apparent activity.

The Granadians (called the Gascons of Spain) are proud of their city, and boast not a little of its antiquities and faded grandeur, reckoning themselves at the same time most constitutional citizens. The women are handsome and elegant, like the rest of the Andalusians, but are spoiled by adopting French costume. Like the rest of their countrywomen, they are fond of theatres, masked balls, and the indispensable tertulia. Granada is the see of an archbishop, who formerly possessed a revenue of above 25,000*l.* a year, of which he used to expend a large portion in the maintenance of beggars and other idlers; and was, till lately, the seat of one of the high courts of chancery of Spain. It is at present the residence of a captain-general, and the seat of the audience of the province; and is governed by a corregidor and 2 alcaldes. The Alhambra has its separate governor.

The early history of Granada is hidden in obscurity. Under the Romans, *Illiberis* was a place of some importance, being made by them a municipal colony entitled *Municipium Florentinum Illiberritanum*. The Goths changed the Roman name into Elliberi, and allowed the place to fall into decay. The present city was founded by the Moors in the 10th century, and became a part of the kingdom of Cordova. In 1236 it was strengthened and augmented, in consequence of being selected by Mohammed Alhamar as the capital of his new kingdom. The throne continued in the family of that prince till 1492, when, after a year's siege, it surrendered to Ferdinand the Catholic. Many Moorish families continued to reside here for a century and a half after its conquest, and contributed to its prosperity and importance. Various attempts to convert them to Christianity were made subsequently to the conquest of Granada; but these having proved, as is alleged, totally unsuccessful, the imbecile, priest-ridden government of Philip III. resolved, at the instigation of a few bigotted ecclesiastics, to expel the Moors from all parts of Spain! This insane resolution, by which the kingdom was deprived of a large number of its most industrious and valuable citizens, was carried into effect in 1609 and 1610, under circumstances of the greatest barbarity. This

* Murphy gives 130, Twiss 126, Inglis 110.

act may be said to have consummated the degradation of Spain; and her vicious institutions have prevented her recovering, down even to the present hour, from the wounds inflicted by the bigotry and stupidity of her rulers. (*Watson's Philip III.* lib. 4., &c.)

GRANADA (NEW). *See* COLOMBIA.

GRANARD, an inland town of Ireland, co. Longford, prov. Leinster, 13 m. W. by N. Longford. Pop. in 1831, 2,058: pop. of par. in 1834, 9,798, of which 635 were of the estab. church, 21 Prot. diss., and 9,142 Rom. Cath. It consists of one street, and has in it the par. church, a Rom. Cath. chapel, a market-house, and dispensary. Adjoining this town is a remarkable rath or mount, called the Moat of Granard, which commands extensive views of the surrounding country. Markets, well supplied with agricultural produce, are held on Mondays, and fairs on May 3. and Oct. 1. Petty Sessions on Thursdays. It is a constabulary station. Post-office revenue, in 1830, 385*l.*; in 1836, 492*l.*

GRANGEMOUTH, a sea-port town of Scotland, co. Stirling, par. Falkirk, at the E. extremity of the Forth and Clyde Canal, at a point where this line of communication unites with the small river Carron, ½ m. from the Frith of Forth, 11 m. S.E. Stirling, and 18 W. by N. Edinburgh. Pop. 1750. It is substantially built: public buildings, the custom-house, and a large Presbyterian church, in connection with the Kirk of Scotland. Grangemouth has spacious warehouses, commodious quays for shipping, and a dry dock. The Carron Iron Company, distant 2 m. inland, has a wharf here for its vessels, varying from 15 to 20 in number. The place may, indeed, be regarded as the emporium of the trade, not only of Carron, Falkirk, and other places in its vicinity, but of Stirlingshire, as it possesses the best harbour in the county, though no vessels drawing above 12 ft. water can with ease or safety approach it. The chief exports are iron goods, grain, and wool; but the manufacturers of Stirling, St. Ninians, &c., also, send their goods by land carriage to be exported at Grangemouth. The chief article of foreign import is timber; and ship-building is carried on to a considerable extent. Timber imported for Stirling, and even sometimes for Leith, is landed here, and conveyed to its final destination by means of rafts. The custom-house of Grangemouth, established in 1810, includes the subsidiary port of Alloa, on the opposite side of the Forth. Gross customs' duties in 1839, 38,240*l.*

Grangemouth was founded in 1771, in connection with the Forth and Clyde canal, and has long superseded Airth, which had previously been the chief sea-port of Stirlingshire. The inhabitants are all employed in connection with the trade of the place or the canal, except a few who engage in fishing. Kinnaird House, the seat of the late Mr. Bruce, the celebrated Abyssinian traveller, is in the neighbourhood, and Kerse House, an elegant seat of the Earl of Zetland, is within ¼ m. of Grangemouth. (*Nimmo's Hist. of Stirlingsh*, 2 ed., p. 610.; *Revcn. Tabl.*)

GRANTHAM, a parl. bor., market town, and par. of England, co. Lincoln, soke Grantham, on the Witham, 98 m. N. by W. London, and 22 m. S. Lincoln. Area of par., including Harrowby, Spittlegate, Houghton, and Walton townships, 4,320 acres. Area of old bor., 130 acres. Pop. of par., 1831, 7,427; ditto of bor., 4,496. The town, consisting chiefly of four streets, is neat, clean, and well lighted, but not remarkable for its buildings, and is wholly situated on the W. bank of the river. An increase of buildings has taken place and is still going on, principally in the Spittlegate end of the town. The church, a fine specimen of the Gothic style of the 13th century, has an elegant spire 270 ft. high, and in the interior an elaborately carved font, and some splendid monuments: in the vestry is a public library, left by Dr. Newcombe, master of St. John's Coll., Cambridge. The living, a vicarage, is divided, and is in the gift of two prebends of Salisbury Cathedral. The guildhall was rebuilt in 1787, with the addition of a spacious assembly-room. The grammar-school, at which Sir Isaac Newton was partly educated, was founded and endowed by Henry VIII. and his son Edward VI., out of the spoils of a monastery of grey friars in the town. The rents, in 1833, amounted to 749*l.*, of which 360*l.* went in salaries to three masters, and 330*l.* in exhibitions to the university of Cambridge.

"Grantham is not a manufacturing town; but it is said to be flourishing, and its trade to be increasing. The principal trade is that of malting, which is carried on to a great extent. There is a canal, uniting the town with the Trent, by means of which an extensive export of corn and other agricultural produce takes place, and an import, principally of coal, with which the neighbouring towns to a considerable distance are supplied." (*Mun. Bound. Rep.*)

This bor., which was formerly ruled by 2 aldermen, 13 com. burgesses, and 12 second burgesses, according to a charter granted in the 7th of Charles I., is now under 4 aldermen and 12 burgesses. Grantham has returned 2 mem. to the H. of C. since the 7th of Edward IV. Previously to the Reform Act, the parl. bor. was identical with the old bor.; the right of voting was vested in freemen not receiving alms, and the average number of electors for 30 years before 1831, was 864. The Boundary Act extended the limits of the parl. bor., so as to make it include the whole par. Registered electors, in 1838-39, 678. Markets on Saturday, and fairs for sheep and cattle, 5th Monday in Lent, Ascension Day, July 10., Oct. 26., and Dec. 17.

Grantham is situated on the old Roman road called Ermine Street, and was a strong Roman station. At the time of the Norman survey it was a royal demesne. It was first incorporated by Edward IV. in 1463, and received, in addition, 12 charters of later date.

GRANVILLE (an. *Grannonum*), a fortified seaport town of France, dép. Manche, cap. cant., built on and adjoining to a steep rocky promontory projecting into the English Channel 30 m. S.W. St. Lô, and the same distance S. E. Jersey; lat. 48° 50′ 16″ N., long. 1° 35′ 57″ W. Pop. (1836) 7,581. It is the only fortified town on the coast between Cherbourg and St. Malo; it is encircled by strong walls, which shut the citadel off from a suburb on the E. and S.E.; and though irregularly laid out with precipitous and narrow streets, contains many venerable edifices, among which is a Gothic par. church. It has an hospital, and some good baths. The port, on the S. side of the town, is spacious and secure, being defended W. and S.W. by a large and handsome granite pier lately finished, which has cost 2,500,000 francs. The harbour is partially dry at low water; but a wet dock is about to be constructed, for which purpose 3 millions of francs are expected to be voted in the next session of the chamber of deputies. Granville is the seat of a tribunal of commerce, and of a school of navigation: and the residence of a commissary of marine. Its chief trade is in the cod and oyster fisheries. The latter of these is the chief support of the lower classes, and employs about 800 hands: in 1839, about 90 boats, of about 12 tons each, were engaged in it, and the oysters sold that year were 50 millions, the average price being 7 fr. 85 cent. per 1,000. In the cod-fisheries of Newfoundland about 70 vessels, of 100 to 350 tons each, are employed, with about 3,000 men; and the capital embarked is 5,000,000 francs; besides which, about 15 vessels are engaged in supplying the French colonies with salt fish. Thirteen vessels are employed in trading with the E. and W. Indies, of the burden of 4,100 tons. About 33 smaller vessels are employed in the coasting and channel island trade. The total burden of the shipping of this port amounts to 22,000 tons. Eggs are largely exported from Granville to London. It may be mentioned, in opposition to the prevalent notion of the low rate of wages in France, that the daily wages paid in this town are, cutlers, 3½ to 3¾ fr.; masons, 2 to 2½ fr.; labourers, 1½ to 2 fr.; carpenters, 2¼ to 3 fr.; joiners, 2 to 2½ fr.; ropemakers, 1½ to 2 fr.; caulkers, 2½ to 2¾ fr. Granville was bombarded and burned by the English in 1695; and was partly destroyed by the Vendéan troops in 1793. (*Hugo; Private Information.*)

GRASSE, a town of France, dép. Var, cap. arrond., on the S. declivity of a hill facing the Mediterranean, from which it is about 7 m. distant, and 23 m. N.E. Draguignan. Pop. (1836) 7,515. Its situation and appearance are highly picturesque; from the S. it rises in successive terraces of white houses, having at its summit the principal church, and a large Gothic tower, the only remnant of the walls by which it was surrounded in the middle ages. It commands extensive and beautiful prospects, and enjoys a healthy climate; though the heat in summer is oppressive. The buildings of the town are generally good; but the streets are steep, narrow, crooked, and dirty: it has, however, a large open market-place, clean, and surrounded by good shops; and at its W. extremity, is a fine public promenade. The town is extremely well furnished with water by a rivulet which rises above it; and which supplies not only the public fountains, and two considerable reservoirs, but turns many mills, and supplies various factories. The principal church is a large, but low heavy Gothic building; it has a curious crypt cut out of the rock, a marble altar, and some good paintings. There are 3 hospitals, in the chapel of one of which are 3 paintings by Rubens; a town hall, exchange, theatre, communal college, public library with 5,000 vols., gallery of paintings, &c. Some Roman antiquities exist here; particularly a small edifice about 30 feet in diameter, formerly used as a chapel, but supposed to have been originally a temple of Jupiter. Grasse is the seat of a sub-prefecture, and of tribunals of original jurisdiction and commerce. It is noted for its manufactures of perfumery, and has a large trade in that article, which dates from about the middle of the last century. Great quantities of orange-flower water and essences of various kinds are distilled; and extensive purchases of Italian perfumery are made by the inhabitants, who also buy up the flowers of the principality of Monaco, and the co. of Nice, and the oil of their own arrondissement. (*Guide du Voyageur.*) In the latter article, as well as fruits, Grasse has an active trade; it

has also manufactures of coarse woollen stuffs, organzined silk, linen thread, leather, soap, liqueurs, and brandy. Fine marble and alabaster are found in its neighbourhood. The present town is said to have originated in 583, from a colony of Sardinian Jews, who had embraced Christianity. In the succeeding ages, the adjacent coasts being frequently ravaged by the Saracens, Grasse received great accessions to its population in emigrants from Frejus and Antibes. (See *Guide du Voyageur; Hugo*, art. *Var*, *&c.*)

GRATZ (Slav. *Niemetzki Gradetz*, "the mountain fortress of Niemezki"), a city of the Austrian empire, cap. Styria, near the centre of which it is situated, on both sides the Mur, a tributary of the Drave, 82 m. N.E. Laybach, 88 m. N.N.W. Agram, and 89 m. S.W. Vienna. Lat. 47° 4′ 9″ N.; long. 15° 26″ E. Pop. (1834) 39,772. Grätz is, next to Vienna, Prague, and Trieste, the largest, most populous, and most important city of the German portion of the Austrian empire. It stands in the N. part of an oblong plain, and consists of the city proper on the E. bank of the Mur; and 4 extensive suburbs, the Murstadt on the W. bank of the river, connected with the opposite side by two bridges, and three others. The ancient fortifications were finally levelled by the French in 1809. A great bluff lump of rock, which rises to the height of 300 ft. at the N. extremity of, or rather within the city itself, and whereon once stood the citadel, serves now only as an occasional promenade for the inhabitants, thence to survey the singular beauty of the surrounding scenery. After Salsburg and Innsbruck, Grätz boasts of a more picturesque situation than any other city in the Austrian dominions. "All around its plain, through which the Mur, a large and rapid river, flows amidst fields of corn and rural hamlets, rises an amphitheatre of hills, none very high, but finely diversified in form, green, and wooded; and beyond these again are beheld, towards the N. and W., the lofty mountain masses of Upper Styria and Carinthia, rising in rugged grandeur, and for the greater portion of the year covered with snow." (*Turnbull's Austria*, i. 264.)

Grätz, with its suburbs, is about 1¼ German, or nearly 7 English m. in circ.; but the city itself forms but a very small part of the whole, being only 520 fathoms in length by 420 in breadth, and containing about 30 streets and open spaces, with little more than 400 houses. "The interior is like that of most ancient towns. The streets are generally narrow and dark, opening occasionally into large irregular 'Places.' The shops are tolerable; the houses of the higher classes, all of stone, are spacious and gloomy; and such is the character also of the churches, many of which are highly decorated within. The rarity of carriages in the streets in the summer period when we were there, gave them a certain air of dulness in the estimation of persons lately arrived from Pesth and Vienna; but still in most of them might be seen on foot a dense and active population." (*Turnbull*, p. 264.) The inner city, like that of Vienna, is surrounded by high ramparts, now of no use as fortifications, and is entered by 6 gates. The ramparts, together with the glacis or esplanade beyond them, form the favourite walks of the inhab. The esplanade is planted with chesnut trees, and is well kept. The city and its suburbs generally are tolerably well built, and contain many good private as well as some fine public edifices; but the thoroughfares, especially in the inner town, are mostly ill-paved and ill-drained.

Grätz has 22 churches and chapels. The cathedral, or church of St. Ægidi, a Gothic edifice built in 1456, contains many handsome marble monuments. Near it is a chapel in the Italian style, containing the mausoleum of Ferdinand II., a native of Grätz. Opposite this edifice is the *Convicte*; the largest building in Grätz, formerly a Jesuit's college, now a public school belonging to the university. The latter institution, founded by Charles Francis duke of Styria in 1586, was closed by Joseph II. and re-opened by the emperor Francis in 1827. It is one of the second order, having faculties of theology, law, and philosophy. In medicine lectures are given, but no degrees are conferred. The library, according to Turnbull, comprises about 40,000 vols.*, 2,000 MSS., and several literary curiosities. It is kept partly in some smaller rooms, but principally in a lofty, spacious, and elegant saloon, which, at the period when the university was under the direction of the Jesuits, was not unfrequently used as a theatre, for the performance of "Mysteries." The ordinary students attending the university exceed 300. The *Burg*, or ancient palace of the Styrian dukes, now the residence of the governor; the par. church, with the highest tower in the town, and an altar-piece by Tintoretto; the *Landhaus*, a very ancient edifice, in which the estates or parl. of Styria meet, and in which the ducal hat of Styria is preserved; the new council-house, built in 1807; the theatre, and the palaces of various noblemen, are the other principal buildings. One wing of the Landhaus is called the "arsenal," and is filled with many thousand suits of rusty armour.

But the pride of Grätz and of Styria is the *Johanneum*, one of the most valuable establishments of the kind in Europe. It owes its origin to the present archduke John, whence its name; by whom it was founded in 1811, and who has presented to it the whole of his extensive collections in art and science. Its object is the encouragement of the arts and manufactures of Styria, by means of collections, lectures, and a public library. The museum of natural history occupies 13 rooms, some very spacious. The departments of mineralogy and zoology have very complete collections of the minerals and animals of Styria, and the botanical department contains a *hortus siccus* of more than 15,000 plants. There are collections of the manufactured articles of Styria, and of the agricultural and mechanical implements used in the duchy; besides which, are specimens or models of the principal instruments and machines of all kinds adopted for similar purposes in foreign countries. One room is devoted to antiquities, comprising many Roman, Styrian, and other coins, and Persian, Babylonian, and other antiquities. Near this room is a fire-proof apartment for the custody of records, containing, among other documents, several charters of the 9th and 10th centuries, especially one of 878 by the emperor Carloman. An extensive botanic garden is now attached to the building. The salaries of the eminent professors, who give lectures on mineralogy, geology, botany, chemistry, agriculture, and the useful arts, are defrayed by the *Stände*, or provincial parliament, the students attending *gratis*. The library, which is open to the public at large, comprises the best standard works of all countries. There is another reading-room and library attached to the Johanneum, to which strangers are admitted gratuitously, and natives on payment of about 2*s*. 6*d*. a month. It receives newspapers and periodical publications from all parts of Germany, Italy, France, and Great Britain; in all, more than a hundred journals.

Besides the foregoing educational establishments, Grätz has a gymnasium, episcopal academy, military school, a school for teachers, female seminaries, a school kept by Ursuline nuns, schools of music, dancing, oratory, the fine arts, &c., and many Sunday-schools, and others for the instruction of the poor. There are five convents and two monasteries. The splendid abbey, built by Ferdinand II. for the Capuchin monks, and intended to commemorate the fact of his burning 20,000 Protestant bibles by the hands of the common hangman, was converted, by Joseph II., to the more appropriate purpose of a mad-house! Grätz has six hospitals, besides others belonging to some of the monastic establishments, a foundling hospital, orphan and deaf and dumb asylums, and various other benevolent institutions; a provincial gaol, workhouse, some military magazines, a society for the furtherance of agriculture, other learned associations, and several collections of paintings. It is the seat of the highest civil authorities for the duchy of Styria: of the military commandant for Styria, Illyria, and the Tyrol; the prov. parl. of the duchy; the council for the circle of Grätz; and the residence of the prince-bishop of Seckau. Its principal manufactures are cotton, silk, and woollen fabrics, leather, iron wire, nails, and other metallic goods; it has, however, others of starch, hats, rosoglio, paper, and earthenware. Its trade in timber, iron, clover seed, and the other products of Styria, with Hungary, Croatia, Transylvania, and Turkey, is considerable; and it has a large share of the transit trade between Vienna and Trieste. It has two large fairs yearly. The Mur, though it often greatly injures the city and its vicinity by its inundations, renders the latter very fertile. Grätz is well supplied with all kinds of provisions, and is one of the cheapest towns in the Austrian dominions: many of its inhab. are retired officers of the army, and persons of rank but with limited means. As early as the ninth century, Grätz was a town of some consideration; in 1127 it became the residence of the dukes of Styria. It was taken by the French in 1809, after a siege of seven days. After the revolution of 1830, it was for a while the residence of Charles X., and the exiled royal family of France. (*Oesterr. Nat. Encyc.; Berghaus, Allg. Länder, &c.; Turnbull's Austria; Murray's Handbook, &c.*)

GRAUDENZ (Slav. *Grudziadz*), a town of the kingd. and prov. Prussia, gov. Marienwerder, cap. circ. same name, on the Vistula, which is here crossed by a bridge of boats, 60 m. S. by E. Dantzic. Pop. (1838) 5,918. It is walled, and farther defended by a strong fortress erected on the Vistula in 1776. It has 3 suburbs, 3 R. Cath. churches, a Lutheran church, 2 superior schools, a teacher's seminary, house of correction for West Prussia, with which an establishment for the treatment of juvenile felons is connected, circle council, board of taxation, judicial court of the first class for the district and town, and manufactures of tobacco, wheeled vehicles, &c., with extensive breweries, and some trade in corn and woollen cloth. (*Berghaus; Stein, &c.*)

* *Cannabich* and *Stein* say 100,000, and the former gives the same number of vols. to the Johanneum library.

GRAVESEND, a bor., market town, sea-port, and par of England, co. Kent, hund. Toltingtrough, on the S. bank of the Thames, 20 m. E. by S. London, and 33 m. W. by N. Canterbury. Area of par., 630 acres; ditto of bor., including Milton par., 1,280 acres. Pop. of par., 1811, 3,119; 1821, 3,814; 1831, 5,097. That part of the town which adjoins the river has steep, narrow, inconvenient, dirty-looking streets; but the upper and more recent part is built in better taste, with wide streets, neat and cheerful residences, and pretty gardens. The principal edifices are the old church, built of brick, in 1730 (the living, a rectory in the gift of the crown), a chapel of ease on the London road, in the modern Gothic style, several dissenters' places of worship; a town-hall and market-place, handsomely built, but pent up amid mean and dirty houses; a custom-house, and a small theatre. A battery lies to the E. of the town, nearly facing Tilbury Fort, on the Essex shore. Two or three hotels, lately built, are amongst the handsomest buildings in the place. W. of the town, on the river bank, are some baths, beautifully as well as commodiously constructed, and forming a highly ornamental feature from the water. The pier, which is of iron, is a modern erection, built by the corporation, and bringing in a large income (7,000*l.* in 1836) by the tolls levied on the visiters and others landing there. Another pier, or jetty of wood, has been erected 300 yards E. of the former, by parties opposed in interest to the corporation: both are extensive proprietors of steam-boats plying between London and this place. Nearly ¼ m. S. of the river is a suburb, called Windmill Hill, with a handsome inn, tea gardens, and archery grounds: from the summit is a fine view of the river and surrounding parts of Kent. The village of Milton is chiefly known by its picturesque church, nearly 1 m. E. from the town. Northfleet, lying 1½ m. W. is a favourite place of resort for those who dislike the bustle of Gravesend. The fixed pop. (1,600) consists principally of ship-carpenters, bargemen, watermen, and people employed in the chalk-works.

Gravesend some years ago placed its main dependence on the trade brought to it by ships wanting supplies of various kinds, and by captains and passengers passing through and staying in the town: since the establishment of steam-boats, however, and the erection of the pier, it has been rapidly increasing in size and importance, the cheap and speedy communication having rendered it a place much resorted to in summer by the middle classes, many of which have houses here, to which they come daily or weekly at the close of business. The crowds of visiters on Sunday, in fine weather, are extremely great. Much of the land about the town is occupied by market gardeners, who raise vegetables for the London market.

Gravesend, which was incorporated with Milton in the reign of Elizabeth, was, before the Mun. Reform Act, under the local jurisdiction of a mayor, 12 jurats, and 24 common councilmen, with a recorder, and other officers. By that act the bor. was enlarged, by the addition of a part of Northfleet parish, and divided into two wards, governed by six aldermen (one of whom is mayor) and 18 counsellors. It is one of the polling places for W. Kent. Markets, Wednesdays and Saturdays. Fairs, May 4. and Oct. 24.

This town is called *Grevesham* in Domesday Book, and its later name was Greves-end, supposed to be derived from the Saxon *gerefa*, or German *greve*, ruler, and *ende*, boundary, because the town was the limit of the ancient portreve's authority. The high bailiff was called the portreve in the 14th century. In the time of Richard II. the town was burnt by the French, and many of the inhab. carried into captivity. In the same reign the watermen of Gravesend obtained the exclusive right of conveying passengers to London, which right is still acknowledged, by a yearly compensation from the steam-packet companies. The town was first defended towards the river in the reign of Henry VIII., when Tilbury Fort was erected.

GRAVINA, a town of S. Italy, kingd. Naples, prov. Bari, on a river of the same name, 33½ m. S.W. Bari. Pop. 9,000.? It is a bishop's see, has a cathedral, and eight other churches, several convents, and a college. Two large fairs are held annually. It was formerly a place of some strength, having been unsuccessfully besieged by the Saracens in 975.

GRAY, a town of France, dép. Haute-Saône, cap. arrond., on the declivity of a hill on the Saône, 28 m. S.W. Vesoul. Pop. (1836) 5,513. It has a fine quay, and a handsome bridge across the Saône; but its streets are narrow, crooked, and steep. It is well furnished with public fountains; has an ancient residence of the dukes of Burgundy, cavalry barracks, a town-hall, built in 1568, an exchange, par. church, communal college, public library, with 4,000 vols., and a remarkable water-mill serving various purposes. Gray has an extensive trade, being an entrepôt for the produce of the S. destined for the E. of France. It has 4 large annual fairs. (*Hugo* art. *Haute-Saône, &c.*)

GREECE, a country of Europe, the most celebrated of antiquity, and the favoured seat of art, science, and literature, when the greater part of this continent was involved in barbarism. In its flourishing period it comprised the S. portion of the great E. peninsula of Europe, and extended N. to about lat. 42°, including Thessaly, and a part of modern Albania, with the Ionian Islands, Crete, and the islands of the Archipelago. *Hæc cuncta Græcia, quæ fama, quæ gloria, quæ doctrina, quæ plurimis artibus, quæ etiam imperio et bellicâ laude floruit, parvum quemdam locum Europæ tenet, semperque tenuit.* (*Cicero pro Flacco*, § 27.) This famous region was originally called Hellas (Ἑλλὰς), and received the name of Greece from *Græcus*, a Thessalian prince. (*Plin. Hist. Nat.*, lib. iv. § 7.) The modern kingdom of Greece, though less extensive than the country anciently so called, comprises the territories of all the most celebrated and interesting of the Grecian states. It includes that portion of the continent S. of the gulphs of Arta and Volo, and an imaginary line drawn between them nearly due E. and W., with the islands of Eubœa, the Cyclades, and the N. and W. Sporades. These dominions lie between lat. 36° 16′ and 39° 34′ N., and long. 20° 42′ 30″ and 26° 28′ E.; the continental portion having N. the Turkish pachalics of Trikhala (Thessaly), and Albania (Epirus), and being surrounded every where else by the Mediterranean, denominated on the W. the Ionian Sea; and on the E. the Ægean or Levant. Total area, about 15,000 sq. m. Pop. probably about 900,000.

Continental Greece is naturally divided into two principal portions: the northern, or Hellas, comprising what has been called E. and W. Greece; and the southern, comprising the Morea, an. *Peloponnesus*.

In 1833 the whole country was divided into 10 *nomoi* or nomarchies, 5 of which were situated in the Morea, 3 in Hellas, and 2 were made up of the islands. These nomes were subdivided into 54 eparchies, and 468 *demoi* or communes. The names of the nomarchies are given in the following table, and their pop. in 1835, according to a statement in the *Journal des Travaux Statistiques* for 1836 and 1837. We have, however, but little confidence in this statement; and, supposing it to have been nearly correct at the time, the pop. is known to have rapidly increased in the interval by immigrations from the surrounding countries, and otherwise: —

Nomes.	Pop. 1835.	Chief Towns.
Hellas: —		
Attica and Bœotia -	74,552	Athens, Egina.
Locris and Phocis -	43,740	Zeitoun.
Acarnania and Etolia	45,000	Misolonghi.
Morea: —		
Argolis and Corinth -	89,340	Nauplia, Hydra.
Achaia and Elis -	86,879	Patras.
Arcadia - -	80,871	Tripolizza.
Messenia - -	61,055	Modon, Navarino.
Laconia - -	60,530	Mistra.
Islands: —		
Eubœa and N. Sporades	41,525	Chalcis.
Cyclades - -	105,134	Hermopolis.
Total -	688,626	

Physical Geography. — Greece possesses, in a high degree, those geographical features which distinguish Europe at large. No country is more remarkable for the irregularity of its shape, its shores, and its surface. Its N. portion, Hellas, stretches W.N.W. to E.S.E. for about 200 m., gradually decreasing in breadth from Acarnania to Cape Colonna in Attica. Its S. portion, the Morea, is a peninsula, said to derive its modern name from its supposed resemblance to a mulberry leaf. Its actual shape, however, is more like that of a vine leaf; it is united N. E. to Hellas by the Isthmus of Corinth. The greatest length of the Morea, N. to S., is about 140 m.; its breadth varies from 60 to 135 m.: it comprises about half the area of the newly erected kingdom.

The surface of Greece is so mountainous, that scarcely any room is left for plains. Such of the latter as exist are principally along the sea-shore, or near the mouths of rivers, or else are mere basins, once forming the beds of mountain lakes, enclosed on all sides by mountains, or communicating with each other only by deep and narrow gorges. Such are the plains of Mantineia, Orchomenos, Stymphalus, Topolias, or Copais, &c. The most extensive tracts of plain country are in W. Hellas, and on the N.W. and N. shores of the Morea. These are also of course the most productive parts of the country; but other very fertile, though small, plains are scattered through the E. of Greece, as those of Bœotia, E. Phocis, Marathon, and many others, which are still as anciently, the granaries of the country. The most flourishing cities of antiquity, as Athens, Eleusis, Megara, Corinth, Argos, Sparta, and Thebes, were situated in the midst or on the borders of these plains; and others, as Tripolizza, Leondari, Mistra, Gastouni, Patras, Missolonghi, Zeitoun, and Livadia, which, in modern times, have ranked amongst the principal towns in Greece, have been similarly located.

The *Mountains* belong to the Alpine system, being a continuation of the Julian Alps, so remarkable in their whole extent for their numerous grottoes and caverns. The principal chain — that of Pindus — runs N.W. to S.E. through the centre of Hellas, as far as the Isthmus of Corinth. On entering Greece, the Pindus chain is supposed to be nearly 7,700 ft. in height. It sends off on its W. side some ranges through Acarnania and Ætolia, and the range of Mount Zagora or Helicon in Bœotia; but its offsets on this side are of very inferior height. The mountains of Acarnania in general are estimated at only about 1,900 ft. in height; and Mount Paleo Vouna, the summit of Helicon, has only 5,738 ft. of elevation. On the E. side the branches of Pindus are more lofty: Mount Guiona, the highest point in Greece, and near its N. boundary, is 8,239 ft high; and Katabothra (*Œta*), 7,061 ft. The celebrated Mount Parnassus is a part of the central mountain chain: its principal summit, Liakoura, is 8,068 ft. in height. Mount Elatea (*Cithæron*) is 4,629 ft.; and in Attica, Parnes, 4,636, Pentelicus, 3,642, and Hymettus (*Trelo-vouni*), 3,370 ft. high. A mountain chain runs through Eubœa in its whole length nearly parallel to that of Pindus; its highest point, Mount Delphi (*Dirphossus*), near its centre, reaches the elevation of 5,725 ft. A chain passes through the isthmus, and nearly through the Morea E. to W., giving off lateral branches, which reach quite to the extremities of the four S. promontories of the peninsula. The culminating point in this part of Greece is Mount St. Elias (*Taygetos*), in Maina, 7,900 ft. high. No mountain in Greece reaches the limit of perpetual snow. (*Bruguière, Orographic; Peytier, in Geogr. Journal*, viii. part 3.; *Expédition Scientifique de Morée et Atlas.*)

Rivers, Lakes, &c. — Greece has no navigable river, nor would any be worth notice, but for the classical recollections which attach to every portion of the soil and waters of this celebrated country. The Aspro-Potamos (*Achelous*), between Etolia and Acarnania, is the largest; the principal remaining ones are the Gavrios Mavro-Potamos (*Cephissus* of Bœotia), which runs into the lake Topolias, the Hellada (*Sperchius*) Asopo, the Athenian Cephissus and Ilissus, — in the Morea, the Rouphia (*Alpheus*), Vasilico (*Eurotas*), Iliaco (*Peneus*), Planizza (*Inachus*), Mavro-Nero (the ancient *Styx*), &c. The principal lake is that of Topolias (*Copais*), in W. Bœotia, said by Thiersch to be 1,000 ft. above the sea. It is of a very irregular shape, and in winter is sometimes 15 m. long, by 10 m. broad; but its size varies considerably at different periods of the year. In summer, it is reduced to a mere swamp, partly cultivated, and partly covered with reeds, and emitting pestiferous exhalations. It contains several small islands, and has a subterraneous outlet for its waters under Mount Ptoon into the Channel of Talanti. There are a few insignificant pools in the Morea, including the Lernean and Stymphalian lakes, so famous in classic fable. The former of these "is formed by several clear and copious springs (the veritable heads of the *Hydra*), which rush out of a rock at the foot of a hill. The lake is, however, so diminutive, and so much concealed by reeds and other aquatic plants, that it might easily be passed without attracting the attention of the traveller." (*Dodwell.*) Marshes are numerous. Nearly the whole N. shore of the Morea, from Corinth to Patras, is low and marshy; and the inhab. of both those towns, as well as of Nauplia, Argos and Zeitoun, the plain of Marathon, and a portion of that of Athens, suffer, at certain seasons of the year, from *malaria* generated by stagnant pools.

Shores, Gulphs, Capes, &c. — The want of navigable rivers in Greece is obviated by the numerous gulphs and inlets of the sea, which indent its coasts on every side, and afford unusual facilities to commerce, while they add to the variety and beauty of the scenery. The principal gulphs or bays are those of Volo, Zeitoun, Egina, or Athens (*Sin. Saronicus*), and Argos or Nauplia on the E.; Kolokythi and Koron on the S.; Arkhadia, Patras, and Arta, on the W.; and the extensive and beautiful Gulph of Corinth, between Hellas and the Morea. Between Eubœa and the main land are the Channels of Talanti and Egripo, united by the ancient *Euripus*. The shores of Greece are mostly abrupt. The chief headlands are, Capes Mantelo in Eubœa, Colonna (*Sunium*), and Skyllo (*Scyllæum*) on the E.; St. Angelo (*Malea*), Matapan (*Tænarum*), and Gallo (*Acritas Pr.*), on the S.; and Klarenza and Skropha on the W. coasts. (*Leake, Col., Travels in N. Greece and the Morea; Hoffmann's Europa und seine Bewohner, &c.*)

Geology and Minerals. — The central chain of Pindus is composed in great part of primitive rocks, as serpentine, covered with a yellowish green steatite, granite, gneiss, mica, and other schists, &c. Rocks of this kind are also met with in E. Hellas; and they are plentiful in the higher mountain ranges of the Morea and the islands, particularly Mycone and Delos. Slate occurs in the ridge of Œta and several of the mountain-masses of Messenia and Arcadia. By far the greater portion of the country, however, consists of secondary formations. Greece, generally speaking, is a region of compact grey limestone. This material ascends to a considerable height above the level of the sea, and the chain of Œta, as well as Mounts Parnassus and Helicon, is almost entirely composed of it. The calcareous formations are similar in appearance to those of the N. of Ireland; and contain in many places great quantities of silex. The shores of the Morea are bordered by tertiary formations, containing an abundance of fossil shells. Volcanic action is clearly traceable, particularly in some of the islands. The whole of Greece abounds with caverns and fissures, whence sulphureous and other mephitic vapours arise, which were taken advantage of in antiquity, at Delphi and elsewhere, for practising religious deceptions. There are numerous hot and cold mineral springs, both saline and sulphureous; but few have yet been analysed. In some parts the soil is impregnated with nitre; this is especially the case near Corinth and Kalavrita. Marble of various colours, red and green in the Morea, and white at Pentelicus in Attica, porphyry, slate, gypsum, zinc, lead, iron, gold, and silver, in small quantities, cobalt, copper, manganese, alum, sulphur, asphaltum, &c., are amongst the principal mineral products; but the quantities of any of them at present obtained are quite insignificant. According to Thiersch (i. 274.), the gold, silver, copper, and lead mines of Attica and the islands of Siphnos and Seriphos are far from being exhausted. Iron abounds in Scyros, at Tænarum, and in Eubœa, where, also, as well as in Elis, there are abundant seams of coal. (*Hoffmann's Europa, &c.* i. pt. 1.; *Clarke and Holland's Travels; Encyc. des Gens du Monde.*)

The *climate* is temperate, and for the most part healthy, except in the low and marshy tracts round the shores and lakes, some of which are very unhealthy. The mean temperature, in a country the surface of which is so uneven, must, of course, vary considerably; but the medium temperature of the year in the plains of N. Greece, may be about 60°, and in those of the S. about 64° 5′ Fahr. At Athens the thermometer not unfrequently rises in July above 100° Fahr. Snow falls in the mountains by the middle of Oct., and even in the plains it is occasionally six inches deep; but it never lies long in the latter. The winters at Athens are confined to the two first months of the year. Both spring and autumn are rainy seasons; and in Dec. the rains are generally so heavy that many parts of the country are laid under water; but throughout the whole summer, which may be said to comprise half the year, a shower, or a cloud in the sky, is rare in several parts of the country. The harvest usually takes place in June, but it is nearly a month earlier in Attica than in other parts of Greece. The latter province enjoys the driest atmosphere of any, to which circumstance the better preservation of its splendid specimens of ancient art is mainly owing. Its climate is much more agreeable in every respect than that of some of the other provs., as Bœotia, Arcadia, &c. Violent tempests often occur in autumn, and storms of thunder and lightning in spring: earthquakes are not uncommon. Intermittent fevers, *elephantiasis*, and *lepra*, are amongst the most prevalent diseases; Greece has been occasionally visited by the plague. (*Peytier in Journ. de Travaux, &c.; Leake, Hughes, Lord Byron, Cochrane, &c.*)

The vegetable products are for the most part similar to those of S. Italy. The country may, in this respect, be considered as divided into 4 distinct zones or regions, according to its elevation. The first zone, reaching to 1,500 ft. above the level of the sea, is adapted to the culture of the different kinds of grain, vines, figs, olives, dates, oranges, citrons, melons, pomegranates, and other fruits, cotton, indigo, tobacco, &c., and abounds besides in evergreens, as the cypress, bay, myrtle, arbutus, oleanders, lentisks, &c., with the oriental plane, manna-ash, several kinds of oaks and pines, and a multitude of aromatic herbs. The second zone is the *region of oak and chesnut*; it extends from 1,500 to 3,500 feet perpendicular, and produces, besides the trees above named, the white fir, several kinds of pine, the manna-ash, &c. The third zone is the *region of beech and pine*; it reaches to the height of 5,500 ft., and contains numerous woods consisting of those trees, interspersed with a few corn-fields. The fourth zone, including all the surface above 5,500 ft. in height, is the *sub-alpine region*, and yields only a few wild plants. Among the extracts from Dr. Sibthorp's papers, given in Mr. Walpole's Memoirs, is a very complete list of Grecian plants, with an account of their medicinal and economic uses. A great deal of the surface abounds with aromatic plants peculiarly adapted for the honey-bee; and the *pirnari* (the *pirnos* of the ancient Greeks), which feeds the cochineal insect, is found of every size, from a low shrub to a large forest tree, both in the plains and on the mountains. Acarnania, Elis, Messenia, and the W. parts of Greece generally, are the most richly wooded; the islands are mostly destitute of wood. (*Hoffmann, Europa und seine Bewohner*, iii. 61.; *Leake, N. Greece and Morea, &c.*)

Animals.—The wolf, jackal, lynx, badger, fox, wild boar, wild goat, red deer, roebuck, moufflon (?) &c., inhabit the wilder and more inaccessible and densely wooded parts of Greece; and bears are sometimes met with on the N. frontier, and in the lofty regions of Arcadia and Maina. Hares are very numerous, and their skins are a considerable article of export from the Morea. The otter inhabits the rivers and marshes of Bœotia; and phocæ and porpoises are seen around the coasts, and sometimes in the Corinthian Gulph. The large vulture frequents the cliffs of Delphi, and the woods and precipices of Parnassus. There are several species of the falcon tribe. The little owl (*Strix passerina*), anciently the bird of Minerva, is still as common round Athens as in antiquity. The red-legged partridge, quails, woodcocks, snipes, wood-pigeons, &c., are plentiful; pheasants are to be found in the W. and N.; and large flocks of bustards are often seen in Bœotia. The coasts and lakes abound with wild fowl; storks and many other birds of passage sojourn in Greece. Sturgeons, salmon, mullet, tunny, mackerel, anchovies, &c., and abundance of shell-fish, are caught around the coasts. Large and delicate white eels (often weighing 12 lbs.) are still found, as anciently, in the lake Copais. They are salted, and sent in large quantities to Constantinople, and into the marts of Greece. The coast-fisheries afford employment and subsistence to no inconsiderable number of the population; but their produce is notwithstanding insufficient to supply the demand during the long fasts prescribed by the Greek church, and a good deal of salted fish is imported. Poisonous vipers, and other serpents, infest certain localities; leeches are very plentiful in some of the brooks, which are therefore farmed out by the government as a means of revenue. The insect tribes of Greece include several Asiatic and African as well as European species; especially of the order *Orthoptera*. Wild bees are abundant; clouds of locusts occasionally do great damage to the crops. (*Pouqueville; Hughes; Leake; Cochrane; Dict. Géogr.; Mod. Trav., &c.*)

Scenery.—Travellers in Greece generally speak in high terms of its scenery. It has every where the finest views, and is interesting not less from its natural beauties than its classical associations, and the ruins of ancient art and splendour scattered over it.

> "Yet are thy skies as blue, thy crags as wild;
> Sweet are thy groves, and verdant are thy fields,
> Thine olive ripe as when Minerva smiled,
> And still his honied wealth Hymettus yields;
> There the blithe bee his fragrant fortress builds,
> The freeborn wanderer of thy mountain air;
> Apollo still thy long, long summer gilds,
> Still in his beam Mendeli's marbles glare;
> Art, Glory, Freedom fail, but Nature still is fair.
>
> "Where'er we tread, 'tis haunted, holy ground;
> No earth of thine is lost in vulgar mould,
> But one vast realm of wonder spreads around,
> And all the Muse's tales seem truly told,
> Till the sense aches with gazing to behold
> The scenes our earliest dreams have dwelt upon:
> Each hill and dale, each deepening glen and wold,
> Defies the power which crush'd thy temples gone:
> Age shakes Athena's tower, but spares gray Marathon."
>
> *Childe Harold*, canto ii.

The richly-wooded and well-watered provinces of Acarnania and Etolia are succeeded towards the E. by the lofty, rugged, and forest-clad chains of Parnassus and Œta, alternating with the fertile valleys of the Cephissus and Hellada. Bœotia, consisting of two elevated basins, has been uniformly celebrated for its fertility, and was considered the granary of ancient Greece. Athens has been said to surpass all the other capitals of Europe; not only in ancient celebrity, but also in the beauty and variety of the surrounding country. It is much to be regretted, that the fine forests which once clothed the hills of Greece have been so extensively ravaged, partly by the wanton rapacity of the inhab., partly by the Turkish troops, who carried fire and sword into the remote fastnesses of the mountains. Still, however, on Parnassus, Helicon, and Taygetus, in Megaris and Arcadia, oak-forests and pines are found of great extent. (*Thiersch's Athens and Attica, &c.*)

Distribution of Land, Agriculture, &c.—Mr. Urquhart (*Turkey and its Resources*, 1835,) estimated Hellas (E. and W.) to contain 3,548,200 stremas of arable land, 199,710 str. vineyards, 4,430 str. garden ground, and 854,000 olive trees. He also gave the following statement of the distribution and value of the land in the Morea.

How occupied.	Stremas.	Value per Strema.
		Piastres.
Pasture and forest land	6,000,000	3
Corn land	6,000,000	50
Irrigated land	500,000	1,000
Currant land	1,500	3,000
Vineyards	6,000	1,000
Olive plantations	100,000	50
Orchards	20,000	20
Mills	400	5,000

Mr. Cochrane (*Wanderings, &c.*) supposes the total surface of the country to be about 36,000,000 str. (about 12,000,000 acres); 2-3ds of which, he says, belong to the government, and the rest to individuals; but he adds, that not more than 1-10th part is cultivated. We have since been assured that probably 5-6ths of the land belong to the state and to the church. According to Mr. Green, "Money rent, with some trifling exceptions, is unknown in Greece, the system acted on being that worst of all systems, the *Metayer*, the landlord receiving as rent a certain proportion—usually a third—of the nett produce, or for good lands one-half. The landowner has frequently to furnish, besides the land, the seed, and sometimes the oxen for tillage, the expense of which, together with enormous interest, has to be deducted before the division of the profits. The metayer, without the slightest interest in the soil beyond the season, will neither expend time nor capital on its improvement, while the landlord, it is evident, will never expend capital on ameliorations, two-thirds of the benefit of which he would be deprived of by his metayer. From these causes it is hopeless at present to look for any improvement of the very wretched state of agriculture as regards the arable land, the inclosure and drainage of which is never thought of, and its improvement by manure unpractised, except for the growth of barley, for the green food of horses in the neighbourhood of large towns. The stones never having been removed from the soil are so thickly collected together, that in many spots it is incredible that they can have accumulated naturally, and far more so that man should expect grain to grow from amongst them.

"In spite of such adverse circumstances, the cost of land—for I will not call it its value—continues unaccountably high, and the eagerness of some to purchase seems equalled only by the anxiety of others to retain its possession. Instances continually occur of persons borrowing money at enormous interest to purchase land, which it is notorious will not give them a return equal to half the interest they have to pay; while others, whose circumstances are embarrassed, and who might extricate themselves by the sale of a portion of their lands, continue borrowing from year to year, increasing their difficulties, rather than part with an inch of soil.

"The present price of arable land in Attica is from 10 to 20 drachmas the strema, or 28*s*. to about 3*l*. per acre for notoriously the worst land in Greece. In the plain of Argos, 100 to 120 drachmas the strema, or 14*l*. to 15*l*. per acre, is given. Vineyards in full bearing in Attica sell for from 400 to 500 drachmas per strema, or about 60*l*. per acre. Currant plantations in the Morea, in full bearing, are valued at 1,000 to 1,200 drachmas per strema, or about 150*l*. to 160*l*. per acre.

"M. Thiersch writes in 1833, 'The Regency will find in Greece about 120,000 landed proprietors.' Calculating each family to consist of five individuals, this gives an agricultural population of 600,000 souls, or about two-thirds of the population, which is probably the correct proportion: almost without an exception, exclusive of the strangers in Athens, the shopkeepers are landed proprietors, and also engaged in agriculture." (See SUPPLEMENT.)

There is no regular succession of crops; and two years' fallows are common. Hellas is a better corn country than the Morea; and corn is extensively grown in Acarnania, Etolia, and Bœotia: in the last-named prov. there is always a good crop, the soil being continually moist, even though drought prevail throughout the rest of Greece. As many as 6 different species of wheat are grown; returning, it is said, after a dry spring, from 3 to 5, or in a very favourable season, as many as from 10 to 13 for 1. The annual yield of corn was estimated by Colonel Leake a few years back at 1,700,000 kilogs. But we must add, that these kind of estimates are generally but little to be depended on, and at best are nothing better than rough guesses.

The wheat of the Morea has long been highly prized in the adjacent islands; the lands on either side the Gulph of Corinth, and in a part of Attica, are favourable to the growth of barley, as well as celebrated for their olives. The culture of oats and rye is unimportant. Maize is grown in Bœotia, and the Morea. Rice is cultivated in the plains of Marathon, Argos, &c., and other marshy tracts along the coasts; and the rice of Argolis is said to be esteemed next after that of Damietta in the markets of Constantinople, to which it is exported from Nauplia. Marathon, though forgotten in almost every other respect, is still celebrated, as before the æra of its glory, for being the granary of Athens. The demand for the currant-grape in Great Britain and other N. countries of Europe, has brought it into extensive culture in the Morea; and the S. shore of the Corinthian Gulph from Corinth to Patras is in great part covered with currant-vineyards. The hills of Greece are admirably adapted for the vine (*Vitis vinifera*); yet few vines are grown, except in low situations. The wines of Mistra and Corinth, Elis and Arcadia, the valley of Helicon, the

islands of Naxos, Santorin, &c., have a rich and delicate flavour; but they have comparatively little body, and are almost universally ruined (for other European palates), by the addition of resin or turpentine, a practice handed down from the ancients. Most part of the wine used in continental Greece is brought from the islands of the Archipelago, which are rich also in fruits of various kinds. The olive-oil of Greece would be good if well prepared; the best is said to be furnished by Attica, Egina, and Maina. Cotton of good quality is grown in Messenia, Laconia, and other parts of the Morea, but especially in the plain of Argos. Madder and tobacco in Bœotia, flax and hemp, figs in Attica (so famous in antiquity), and elsewhere, pomegranates, oranges, lemons, peaches, almonds, and a great variety of shell-fruit, haricots and other pulses; tomatas, cucumbers, artichokes, potatoes, and the pot-herbs common in the rest of Europe, are among the remaining articles of culture. The collecting of gall-nuts and valonea bark, which formerly received a considerable share of attention, has been latterly much neglected; and but little pains are bestowed on mulberry plantations, though the annual export of silk be estimated at 60,000 okes. Large quantities of wax are exported from Nauplia. Honey is a highly important product; that of Attica, and especially of Mt. Hymettus, is now, as of old, the best in Europe. It is transparent, and has a delicious perfume.

Gardens are every where wrought by the hoe, the spade (at least at a very recent period) being unknown to the modern Greeks. Except in Laconia, field labour is every where undertaken by males only. The price of labour is very variable: in Attica it varies from 1 to 2½ drachmas (8*d.* to 1*s.* 9*d.*) a day.

The greater part of the surface of Greece being rugged and uneven, it is more a pastoral than an agricultural country; the raising of sheep is an important branch of industry; and the Wallachians have long been accustomed to bring their flocks every year to pasture in N. Greece.* Except in Arcadia and Elis, there are but few horned cattle. In most parts cows' milk is made little use of, and beef is little eaten; oxen and buffaloes are therefore in demand chiefly for the plough. The sheep, except those of the island of Paros, yield coarse wool; they are most frequently kept in flocks of about 500 each, tended by 3 or 4 men, and as many dogs. Goats are very abundant; their flesh and hair are both excellent, and a great deal of cheese is made with their milk. In the time of Strabo, Arcadia was renowned for its horses; those of the present day, in that prov., are not handsome; but they are spirited, vigorous, and sure-footed. As beasts of burden, mules and asses are chiefly employed.

The condition of the peasantry has been materially ameliorated, since Greece became independent. Under the Turks they were obliged to conceal most part of their little possessions, to prevent their being seized on. Their habitations, though still rude, have a greater appearance of comfort than formerly: they are usually their own handiwork, built of wood, or reeds plastered with mud and broken straw, or of stone if that material be found near the spot, cemented with mud and clay. The food of the labouring classes, for four or five days of the week, consists almost wholly of vegetables. Their principal animal food is goats' flesh; but in some of the more barren parts of the Morea, which produce neither corn nor oil, none but the opulent ever taste animal food, except on high festivals. Abject poverty, however, is not common, and a progressive improvement in the condition of the peasantry appears to be taking place, especially in the islands, where the comforts of life are much better understood than on the continent. (*Thiersch.*) Modern English travellers agree in opinion, that though the labourer be sometimes almost as much oppressed by the Greek proprietors as by the Turks, "he is generally industrious, attached to his family, anxious for the education of his children, and equal, if not superior, in intelligence to the peasantry of many of the more civilised states of Europe." (*Leake, Col., Outline of the Greek Revol. & Trav.; Hughes, Urquhart, Cochrane, &c.*)

Manufactures are almost wholly domestic, every peasant's family producing, with few exceptions, the articles required for their consumption. A few silk, cotton, and woollen stuffs, household pottery, some cutlery, leather, and soap, are made in the larger towns, carpets in the Isle of Andros, and sail-cloth and straw hats in that of Siphnos. Goat-skins are prepared for holding wine, oil, and honey; brandy, liqueurs, vinegar, meerschaum-pipes, and arms may also be mentioned. Saddlery and horse-furniture have deteriorated since the departure of the Turks; and these, as well as most articles of luxury, are now imported from other parts of Europe. The art of dyeing in bright colours, for which the ancient Greeks were so celebrated, has, however, been perpetuated to the present day; and the Greek women excel in embroidery. Salt sufficient for the consumption of the country is produced in the lagoons near Missolonghi and elsewhere. Shipbuilding is extensively carried on in many places. (*Leake's Outline, &c.; Encycl. des Gens du Monde; Journ. des Travaux.*)

Commerce, Shipping, &c. — The Greeks have particularly distinguished themselves by the spirit and success with which they have engaged in naval and mercantile enterprises. Their commerce, next to their freedom, was the grand source of the prosperity of Athens, Corinth, and other Greek cities of antiquity. And in this respect the modern Greeks have been no unsuccessful imitators of their illustrious progenitors. The great articles of export from Greece consist of currants, silk, figs, wool, olive-oil, valonea, wine, sponge, wax, tobacco, &c.; the principal imports being manufactured cotton and woollen goods, corn, with a great variety of subordinate articles, principally from England, but partly, also, from France and Germany. The mercantile navy of Greece may at present (1850) be estimated at 4,000 vessels, of the aggregate burthen of 150,000 tons, employing about 30,000 seamen. The Greeks have, in fact, attained to the distinction of being the carriers, factors, and traders of the Levant. We borrow the following statement in relation to this subject from Mr. Green's excellent paper on Greece, which we shall give at length in the SUPPLEMENT to this work: —

"There are Greek vessels of between 600 and 700 tons register, and a considerable number between 300 and 400 tons; but the great majority consists of boats of 6 or 7 tons, having a large hatch in midships.

"The principal shipping port is Syra, where 468 vessels are registered. At Galaxidi 149 vessels, measuring 14,359 tons, are registered as engaged in foreign trade; while at Patras, the most important commercial place of Greece, there are but 2 vessels registered. The Piræus possesses 298 vessels. There is no branch of trade to which the Greeks particularly confine their energies and views; nevertheless Greek commerce may be divided into the following principal great branches: —

"1st. The corn trade of the Black Sea and Alexandria, including the transport in their own vessels, either under Greek or Russian colours, to the ports of Turkey, Italy, Spain, and France, and speculations on the most extensive scale whenever bad harvests or other circumstances open markets to them. Some idea may be formed of the importance of this carrying trade to the Greeks, from the fact that in Galatz 270 Greek vessels loaded in 1844, besides 104 under Turkish colours, and 98 under Russian, of which the great majority were Greek. At Ibraila, during the same year, 225 Greek, 143 Turkish, and 53 Russian vessels loaded. Yet these ports are insignificant as compared to Odessa and Taganrog; and I only mention them and the particular year 1844, from having the returns before me.

"2ndly. The exportation of the produce of Turkey, Greece, Egypt, Persia, and Southern Russia, to England, Italy, and France, principally to London, Trieste, and Marseilles. The great advantage the Greeks possess over foreigners in the purchase of produce in Turkey and Greece, is that having relatives and connections on whom they can depend for the collection of small parcels in the interior of the country, and at the places of growth, so that they are not imposed upon by their agents, and avoid the profits of middlemen. The Greek trader considers nothing beneath his notice, and will gather together a few bags of rags, or a ton or two of bones and horns, while he is chartering perhaps 50 vessels to load corn and tallow.

"3dly. The supply of Turkey, Persia, and Greece, with the cotton and woollen manufactures of England and Germany. The extensive operations of the Greeks at Manchester, where they have their own establishments for purchasing, examining, and packing their goods, attest the importance of this branch of their commerce. In supplying Persia and Constantinople with the cotton manufactures of England, these parties have almost driven the English out of the market, and defied their competition. This has been occasioned by their thorough knowledge of these countries, and by their readiness to execute the smallest as well as the largest commissions of the shopkeepers of Turkey and Greece; while their correspondents open and retail the largest parcels of manufactures in the exact proportions required by the purchasers.

"4thly. Banking and exchange operations. This, perhaps, is the most wonderful part of the Greek system of commerce, and is largely and successfully carried on."

Weights and Measures.

The weights in use are —

The Oke = 43·3 oz. avoirdupois.
Kilo = 22 okes.
Cantar or quintal = 44 okes.
Strema (of land) = nearly 1·3 acres.
Arpent = nearly 1⅓ acre.

The Greeks ordinarily reckon distance by the hour; thus they say, "an hour distant," meaning about 3 m. They calculate time by the old style, *i. e.* 12 days later than we do.

* For an interesting account of the migrations of these flocks. See SUPPLEMENT.

Money.

Gold pieces of 10, 20, 40, and 50 drachmas.

Silver	Otho, or 5 drachma piece	= 3*s*. 6½*d*.	
	Drachma - -	= 0 8	
	Half and quarter dr -	= 0 3¾	
	Piastre - -	= 0 3	(Urquhart).
Copper	Para, 40 to the piastre, 100 to the drachma -	= 0 0 1-3	
	Asper - - -	= 0 0 1-3 of a para.	

The *government* is a nearly absolute monarchy, hereditary in the line of Prince Otho of Bavaria, who, as well as his successors, is prohibited accepting the Bavarian or any foreign crown. The administration is in seven departments — those of the royal household and foreign affairs, the interior, religion, and public instruction, justice, finance, war, and maritime affairs. The council of state, appointed to assist the king in his duties, consists of 3 vice-presidents, 17 ordinary, and 14 extraordinary councillors. Of the latter, four are appointed referees, with privileges above the rest. Its functions, however, are purely admonitory: the king has power to decree laws without its sanction; but in such cases he bears the sole responsibility of the act. The synod of the clergy, elected annually, consists of a president and 5 members, with 2 secretaries, the government being represented by a state officer called the Procurator. There are 33 bishops of the Greek church in the kingdom; and they elect from themselves 6 syndics, composing the above synod. The 4 Rom. Catholic bishops of Naxos, Tinos, Syra, and Santorin, have no political existence. The towns of Greece, from the earliest periods, have enjoyed municipal rights and privileges under different modifications; nor did their foreign rulers interfere much with the patriarchal system by which their society is governed. Even during the Turkish rule, the heads of families in every town, village, and commune, throughout the Morea, chose a *demogeront* or mayor, who took cognisance of all civil judicial matters. No tax can be levied without the concurrence of these *demogeronts;* and they were sometimes called in to assist in council with the primate; and the *voivode* appointed by the pacha, who jointly superintended the province. (See *Thiersch, Etat actuel de la Grèce*, i. p. 2. sec. 3.) Maina was at the same period ruled by its own *capitani*, the chief of whom had the title of *Bey*. N. Greece was governed, with little difference, in the same mode as the Morea, till Ali Pacha destroyed its liberties. In the islands the demogeronts were entitled *archontes*, and were criminal as well as civil judges. Count Capo d'Istrias suspended altogether the municipal rights of the towns, &c., and placed over each eparchy a creature of his government; but on his fall, those individuals were expelled, and the towns and communes every where resumed their privileges, which were confirmed by the crown in 1834. The administration of each *demos* or borough is consequently still exercised by one or more demogeronts, assisted by a municipal council. The demogeronts are elected annually from amongst the heads of families, — one in each commune or rural district, and three in each town. They next assemble in the chief towns of their several eparchies, when three or more are elected to form, in conjunction with the demogeronts of that town, the eparchial or provincial council for the ensuing year. The government of each eparchy is administered by an officer named an *eparch*, subordinate to the *monarch*, whose authority, in the same manner, extends over a monarchy. (See *Parish's Diplomatic Hist. of Greece*, pp. 38-9.)

Justice. — The mayors, aided by the communal tribunals, composed of respectable inhab. of the commune, have authority in cases of petty misdemeanors, and arbitrate, without appeal, in civil transactions to the amount of 20 drachmas. There are eparchial courts presided over by a judge, appointed by the government; and a court of original jurisdiction is established in the chief town of each monarchy, as before the subdivision of the kingdom into 30 governments, an event which appears to have had but little practical influence as to internal arrangements. Formerly there were 3 courts of appeal — at Nauplia, Missolonghi, and Chalcis; but since 1834 their number has been reduced to 2 — those of Athens, for Hellas and Eubœa, and Tripolizza for the Morea, &c. The decisions of these are subordinate to the authority of the Court of Cassation and criminal court, established in the cap., composed of judges, a state-attorney and a registrar. Besides these, there are 10 primary tribunals, and three commercial courts. There is no regularly organised code of laws, but the decisions of the judges are mostly guided by the Code Napoleon and established customs. Trial by jury in criminal cases has been introduced, and is said to be becoming pretty generally understood, and to work well. The annual expenses of the judicial branch of the public service amounts to nearly 1,577,290 drachmas. (*Journ. des Travaux; Encyc. des Gens du Monde.*)

Religion. — The great mass of the pop. belong to the Greek church; but since 1833, Greece has been independent of the authority of the Patriarch of Constantinople. The king is titular head of the church, the affairs of which are conducted by a synod composed of 5 bishops, a secretary, and a royal commissioner. The Greek priesthood, are, speaking generally, poor and illiterate. Their habits are, however, said to be simple and exemplary. Monasteries are by no means so numerous as formerly. The national congress, held at Argos in 1829, wisely abolished 320, which contained, at an average, nearly 5 monks each; there are now 82 in all, with a total of 1,500 or 2,000 inmates, besides about 30 convents. There are about 15,000 Rom. Catholics in Greece, including the royal family and suite; some Protestants, and about 4,000 Jews. Full religious toleration is guaranteed by the constitution. (*Stanhope; Cochrane; Encyc. &c.*)

Public Instruction. — An edict was issued in the early part of King Otho's reign for the establishment of elementary schools in each commune, to which the inhab. should be obliged to send their children from 5 to 12 years of age. This edict has not, however, been fully carried into effect; but in 1839, there were 225 public primary schools existing, at which about 20,500 children received instruction in the rudimentary branches of education; the boys also in various agricultural occupations, land-measuring, &c.; and the girls in various branches of domestic industry. We believe that instruction is more diffused in the islands than in continental Greece. The preparatory schools are supported by the revenues arising from lands formerly belonging to monasteries; their direction is confided to masters appointed by government, with salaries of 350 drachmas a month each. The total annual expenditure for state-education is said to be 450,000 drachmas. (*Encyc. &c.*) There are between 20 and 30 superior schools, principally in the Morea and the islands; and in the cap. there is a normal school for teachers established by an American mission. Athens, Corinth, and 3 other towns, have each a *gymnasium;* and in the former city a university, on the German model, has been established. It has a numerous body of professors, with a library, an observatory, a museum of antiquities, coins, natural history, &c., and about 200 students. In Athens there are 3 scientific institutions, the medical society, the society of natural history, and a society for promoting education (φιλεκπαιδευτικὴ ἑταιρεία). Mr. Aubrey de Vere gives the following account of a school at Athens which he visited in 1849: —

"I visited, with equal surprise and satisfaction, an Athenian school which contains 700 pupils, taken from every class of society. The poorer classes were gratuitously instructed in reading, writing, and arithmetic, and the girls in needlework likewise. The progress which the children had made was very remarkable; but what particularly pleased me was, that air of bright alertness and good-humoured energy which belonged to them, and which made every task appear a pleasure, not a toil. The greatest punishment which can be inflicted on an Athenian child is exclusion from school, though but for a day. About 70 of the children belonged to the higher classes, and were instructed in music, drawing, the modern languages, the ancient Greek, and geography. Most of them were at the moment reading Herodotus and Homer. I have never seen children approaching them in beauty; and was much struck by their oriental cast of countenance, their dark complexions, their flashing eyes, and that expression at once apprehensive and meditative, which is so much more remarkable in children than in those of a more mature age." (*Picturesque Sketches*, i. 249.)

But in Athens, as elsewhere, this juvenile precocity affords no real index of the talents or character of the future men and women. In all the schools the study of the ancient languages is much attended to. And it is to be hoped that to their acuteness and intelligence the Greeks may be taught to add that truthfulness, industry, and perseverance, without which they will hardly make any considerable figure among modern nations.

Armed Force.—Previously to 1838 the army amounted to nearly 10,000 men; but by the new law of conscription the regular army consists of 8,000 men, levied by a conscription of 2,000 in each year. The duration of service is fixed at four years, and all individuals are liable to serve, from the age of 18 to 30, unless those claiming exemption as married men, university students, ecclesiastics, civil servants of the state, only sons, or the guardians of minors. Service by substitute is allowed. The troops consist of 3 battalions of infantry of the line, 2 of light infantry, 4 squadrons of cavalry, a corps of artillery, and another of pioneers. They are chiefly garrisoned at Athens, Argos, Corinth, and Nauplia: at the last-mentioned place is a military school.

Navy. — The prefecture of the Marine at Paros has 10 members. There belong to the fleet, which consists of corvettes, steamers, brigs and schooners, about 2,400

officers, sailors, and marines. The government dock-yards are at Paros and Nauplia. There are two orders for military and naval officers and others, "the Order of Merit," and that of "the Holy Saviour."

The Finances of Greece are and have long been in the greatest disorder. The revenue may be estimated at about 14 millions, and the expenditure (inc. interest of debt) at 17½ or 18 millions drachmas. The revenue is principally derived from direct taxes, inc. the rent of the public lands. Previously to the Revolution these belonged to the Turkish inhabs., and on their expulsion they became the property of the public; and, notwithstanding their continued illegal appropriation, they are still supposed to amount to 2-3rds of the cultivated, and to 4-5ths of the uncultivated lands. This immense national property, were it well administered, would furnish a large amount of revenue; but it is a prey to all sorts of abuse. The rent of the public lands is rated at from 10 to 15 per cent. of the gross produce; but owing to the venality and corruption of the officers, it is frequently reduced to a mere nominal sum; and does not, perhaps, on the whole, amount to 1-4th part of what it should do. (See SUPPLEMENT.) The other items of revenue consist of customs' duties, a tax on cattle, a tax on salt, stamp duties, &c.

People, Manners, &c.—The following statements embody the valuable testimony of Thiersch as to the habits and state of the people when he visited Greece in 1831-32:—"There is a pretty marked distinction among the inhabs. of the three great divisions of Greece—Greece N. of the Isthmus, the Peloponnesus, and the Islands. The inhabitants of N. Greece have retained a chivalrous and warlike spirit, with a simplicity of manners and mode of life, which strongly remind us of the pictures of the heroic age. The soil here is generally cultivated by Bulgarians, Albanians, and Wallachians. In E. Greece, Parnassus, with its natural bulwarks, is the only place where the Hellenic race has maintained itself: in the mountainous parts of W. Greece there are also some remnants of Hellenic stock. In these parts the language is spoken with more purity than elsewhere. The pop. of the Peloponnesus consists nearly of the same races as that of N. Greece, but the Peloponnesians are more ignorant and less honest than the inhabitants of Hellas. The Albanians occupy Argolis and a part of the ancient Triphylia. Among the rest of the inhab., who all speak Greek, there are considerable social differences. The pop. of the town is of a mixed character, as in N. Greece; where there is an active and intelligent body of proprietors, merchants, and artisans in the towns, and among them some of Greek stock. The Mainotes form a separate class of the pop.: they are generally called Mainotes from the name of one of their districts; but their true name, which they have never lost, is Spartans. They occupy the lofty and sterile mountains between the Gulphs of Laconia and Messenia, the representatives of a race driven from the sunny valley of the Eurotas to the bleak and inhospitable tracts of Taygetos, though the plains which are spread out below them are no longer held by a conqueror, and the fertile lands lie uncultivated for want of labourers. In the islands, there is a singular mixture of Albanians and Greeks. The Albanians of Hydra and Spezzia have long been known as active traders and excellent mariners. The Hydriotes made great sacrifices for the cause of independence in the late war; the Spezziotes, more prudent and calculating, increased their wealth and their merchant navy. The island of Syra, which has long been the centre of an active commerce, now contains the remnant of the pop. of Ipsara and Chios. The Ipsariots are an active and handsome race, and skilful seamen; the Chiots, following the habits of their ancestors, are fond of staying at home and attending to their shops and mercantile speculations; they amass wealth, but they employ it in founding establishments of public utility, and in the education of their children. In Tinos, the peasants, who are also the proprietors, cultivate the vine and the fig even amidst the most barren rocks: in Syra, Santorin, and at Naxos, they are the tenants of a miserable race of nobility, whose origin is traced to the time of the crusades, and who still retain the Latin creed of their ancestors. Besides these, there are various bodies of Suliotes, of people from the heights of Olympus, Candiotes, many Greek families from Asia Minor, Fanariotes, and others, who have emigrated, or been driven by circumstances within the limits of the new kingdom. The Ipsariots are those who are supposed to have the least intermixture of foreign blood. They have the fine and characteristic Greek physiognomy, as preserved in the marbles of Phidias and other ancient sculptors; they are "ingenious, loquacious, lively to excess, active, enterprising, vapouring, and disputatious." The modern Greeks are generally rather above the middle height, and well shaped: they have the face oval, features regular and expressive, eyes large, dark and animated, eyebrows arched, hair long and dark, and complexions olive-coloured." (*Journal of Education*, xvii.)

The islanders are commonly darker, and of a stronger make than the rest; but the Greeks are all active, hardy, brave, and capable of enduring long privations. Generally speaking, the women of the islands and of Hellas are much handsomer than those of the Morea. The character of the Greeks, while under the Turks, was thus summed up by Mr. Hope. (*Anastasius*, i. 78—80.) "The complexion of the modern Greek may receive a different cast from different surrounding objects: the core is still the same as in the days of Pericles. Credulity, versatility, and the thirst of distinctions, from the earliest periods formed, still form, and ever will form, the basis of the Greek character. . . When patriotism, public spirit, and pre-eminence in arts, science, literature, and warfare, were the road to distinction, the Greeks shone the first of patriots, of heroes, of painters, of poets, and of philosophers. Now that craft and subtlety, adulation and intrigue, are the only paths to greatness, the same Greeks are—what you see them!"

The Albanians are of a much more serious and pensive disposition than the Greeks; and it has been remarked that they may be considered to bear the same relation to the latter that the Doric did to the Ionic population in ancient times. The *language* of the modern Greeks (for the Albanian is of Illyrian origin), is called *Romaic*. It has a greater similarity to the ancient Greek than the Italian to the Latin; but many of the alterations from the ancient tongues which distinguish both the modern languages are analogous. Many of the popular customs of the Greeks bear the impress of antiquity; various superstitious observances are kept up, and even the ordinary amusements of the people are the same which were popular in ancient times. The far-famed *Romaica*, for instance, the theme of so many travellers, is obviously the same as the Cretan or Dedalian dance; and another modern dance, the *Albanatico*, is supposed to resemble the Pyrrhic dance of the ancients.

History.—The Greek nation boasts of the highest antiquity, and in the mythic period of their history it is often impossible to separate fable from fact. We infer, however, that the Hellenes were not the earliest inhabs. of Hellas, which was previously the abode of the Pelasgi, who migrated not only into Greece, but Italy, and the islands of S. Europe, and there practised tillage and other simple arts of early industry: the remains of Cyclopean walls, scattered in different parts, denote them to have had some knowledge even of architecture. Over these people the Hellenes gradually gained the superiority, and drove them from the continent to the islands, while they peopled it with their own nation, divided into the 4 tribes, of Æolians, Achæans, Ionians, and Dorians, and spreading in different directions over the country, were joined soon afterwards by colonists from Egypt and Phœnicia. The first constitution of Greek cities is beyond the reach of exact history; but it seems that monarchy was the earliest form, and Sicyon is said to have been founded B. C. 2000, Argos, Thebes, Athens, Sparta, and Corinth, claiming an origin not much later. The expedition of Cadmus to Colchis, the siege of Thebes, and the Trojan war (B. C. 1200), are the principal events of the mythic or heroic period. The confusion arising from the last event deprived many kingdoms of their princes, and encouraged the ambition of the Dorian Heraclidæ to get possession of the Peloponnesus, and expel its inhabs. A fresh impulse was thus given to emigration; large bodies of the people crossed the Ægean, and colonised the shores of Asia Minor; governments changed with their rulers, and the states now partook more of that republican form which was afterwards their characteristic feature.

The civil policy of Sparta and Athens, whose growing power now began to lessen the influence of the other states, was most successful in calling forth the public energies, and in making small means produce great results. The progress of military knowledge and of the more refined arts was contemporaneous with that of politics; most departments of science and of the fine arts, pursued with impatient zeal by the highly sensitive Greeks, were carried by them to a higher pitch of perfection than elsewhere in ancient, and in some respects even than in modern times; and their commerce, conducted by means of their colonies on the Black Sea and on the coasts of Italy, Sicily, and Gaul, was extensive and important. Their pride, activity, and enterprise, and, above all, their love of liberty, bore them triumphant through all the difficulties of the Persian war (closed B. C. 469); and the same features of character, differently developed, involved them in intestine feuds. The Peloponnesian war, which lasted nearly thirty years (B. C. 431—404), by destroying their union, and exhausting their strength, paved the way for their subjugation by Philip of Macedon, who won the decisive battle of Cheronæa, B. C. 338. The brilliant conquests of Alexander engaged them for a few years; but their courage was now enervated, and their love of liberty all but extinguished. The Achæan league proved a vain defence against the power of Macedon;

and, when this kingdom fell, Greece was wholly unable to cope with the arms of Rome. The contest was brief, and ended with the capture of Corinth, *anno* 146 B.C., from which time, during 1350 years, it continued to be either really or nominally a portion of the Roman empire. Literature and the arts, long on the decline, were at last destroyed by Justinian, who closed the schools of Athens. Alaric the Goth invaded the country in the year 400, followed by Genseric and Zaber-khan in the 6th and 7th, and by the Normans in the 11th century. After the Latin conquest of Constantinople, in 1204, Greece was parted into feudal principalities, and governed by a variety of Norman, Venetian, and Frankish nobles; but in 1261, with the exception of Athens and Nauplia, it was re-united to the Greek empire by Michael Paleologus. In 1438 it was invaded by the Turks, who finally conquered it in 1481. The Venetians, however, were not disposed to allow its new masters quiet possession, and the country during the 16th and 17th centuries was the theatre of obstinate wars, which continued till the treaty of Passarovitz, in 1718, confirmed the Turks in their conquest. With the exception of Maina, the whole country remained under their despotic sway till 1821; when the Greeks once more awoke from their protracted lethargy, and asserted their claim to a national existence, and to the dominion of the land possessed and ennobled by their ancestors. The heads of the nobler families and others interested in the regeneration of their country, formed an *hetairia* for concerting patriotic measures; and, in 1821, Ypsilanti proclaimed that Greece had thrown off the yoke of Turkey. The revolution broke out simultaneously in Greece and Wallachia; and war continued with various success and much bloodshed till the great European powers interfered, and the battle of Navarino (Oct. 20. 1827) insured the independence of Greece, which was reluctantly acknowledged by the Porte in the treaty of Adrianople, in 1829. The provisional government, which had been set on foot during the revolutionary struggle, was agitated by discontents and jealousies, and the president, Count Capo d'Istrias, was assassinated in 1831. The allied powers having previously determined on erecting Greece into a monarchy, offered the crown to Prince Leopold of Saxe-Coburg (now king of Belgium), who declined it; finally, it was conferred on Otho, a younger son of the king of Bavaria, who was proclaimed at Nauplia, Aug. 30. 1832.

GREENLAND, an extensive territory forming part of N. America, and partly occupied by Danish colonies, extending N. from Cape Farewell, in lat. 59° 49′ N., between long. 20° and 75° W., having W. Baffin's Bay and Davis' Straits, S. and E. the N. Atlantic Ocean, and N. the unexplored Arctic regions. Pop. estimated at only 6,000 or 7,000, all Esquimaux, except about 150 Europeans. Greenland was long supposed to be united on the N.W. to the continent of America; but the discoveries of recent navigators render it more probable that it is an island. Shape, somewhat triangular with the apex towards the S. It is high and rocky, its surface presenting a chaotic assemblage of sterile mountains, bare or covered with ice, which also occupies a great portion of the intervening valleys. The centre is said to be traversed by a range of lofty mountains, by which the country is divided into E. and W. Greenland. Of the former, from lat. 65° to 69°, little or nothing is known, the shore being constantly beset by vast accumulations of ice. All this coast appears to be colder, more barren and miserable than the W. coast. It may be said to consist of one uninterrupted glacier, exhibiting only a few patches of vegetation, generally on the banks of the rivers; and often advancing far into the sea and forming promontories of ice, large masses of which frequently fall in avalanches. The W. shore is high, rugged, and barren, and rises close to the water's edge into precipitous cliffs and mountains, seen from sea at a distance of 60 m. The whole coast is indented with a series of bays or fiords, interspersed with a number of islands of various form and size. The principal of these is the island of Disco, in the bay of same name, on the W. coast, between lat. 69° and 70°. Only the coasts and islands are yet ascertained to be inhabited, no other part having been explored by Europeans. The air is pure, light, and healthy; but the cold during the long winter is often very intense. More snow falls, and the climate is more severe on the E. than the W. coast. In S. Greenland the cold seldom exceeds 16° or 18° Réaumur, but in the N. the thermometer sometimes stands at 30° Réaum. The sun has considerable power during the summer, but fine weather is never of long continuance. Lightning sometimes occurs, and hail, but the latter seldom. Violent storms are frequent in autumn. The rare occurrence of rain, and the intense degree of cold produced by the N.E. wind, has given reason to believe that the most E. parts of Greenland form a great archipelago, encumbered with perpetual ice. The aurora borealis has at some seasons a light equal to that of the full moon. The rocks are principally granite, gneiss, clay-slate, porphyry, potstone, &c., arranged in vertical beds. They have been found to contain a rich copper ore, black lead, marble, asbestos, serpentine, garnets, crystals, and some other valuable stones. There are no volcanoes; but three hot springs have been found in an island on the W. coast. Coal is found in the island of Disco. Vegetation, even in the S., is limited to a few stunted birch, elder, and willow trees, moss, lichens, grasses, fungi, &c. Proceeding N. the surface becomes more sterile, and at last nothing is met with except bare rocks. Several kinds of wild berries attain tolerable perfection, and the soil on the W. coast towards the S. has been found fit for the cultivation of various culinary vegetables: the growth of the potato has latterly been attempted with some success. Among the animals are the reindeer in the S., the polar bear in the N., white hares, foxes of various colours, and dogs; seals abound in the S., where the walrus also is met with; whales of various kinds inhabit the seas, chiefly towards the N.; and the sea, fiords, and rivers abound in fish, especially turbot, herrings, salmon-trout, halibuts, rays, &c., with a great variety of shell-fish. Fishing and seal-hunting are the principal occupations of the native inhab.

In 1837 there were in W. Greenland 13 colonies, 15 minor commercial, and 10 missionary, establishments. The most N. station is Uppernavic, in lat. 72° 30′. Good Hope, the most ancient of the settlements, in lat. 64° 10′, has an excellent harbour. The trade gives employment to about five or six vessels. The exports consist chiefly of whale-oil, seal, bear, and reindeer skins, elder down, &c. The Greenlanders are believed to be of the same race as the inhab. of the coasts of Hudson's Bay, Labrador, the N.W. coasts, Kamtchatska, &c., from whom they differ little in person, manner, and language. On the W. coast they do not much exceed 5 ft. in height. They have long black hair, small eyes, and a yellow or brown skin. The inhab. of the E. coast differ from the former in being taller, fairer, and more active and robust; but they do not exceed a few hundreds in number. There is no European colony on the E. coast, and little or no intercourse is maintained between it and the W. coast. The inhab. display considerable skill in the structure of their fishing boats and hunting implements, which are made of the drift wood brought in vast quantities to the coasts. Many have embraced a species of Christianity; and their superstitious belief in sorcery, &c., is now giving way to a rude kind of civilisation. Their *kajaks* or fishing boats are from 12 to 14 ft. long, and only about 1½ ft. broad, sharp at both ends, and covered with skins, except a small round opening in the middle, where the Greenlander, having a single oar, takes his seat. Their houses are from 6 to 8 ft. high, and vary in size according to the number of families they are intended to accommodate, which sometimes amount to seven or eight. The interior is divided by skins into different compartments; the walls are lined with broom and hung with skins, and the floor paved with flat stones. Their domestic arrangements are simple, and more remarkable for a want of cleanliness than any thing else. The food of the natives is principally the dried flesh of the seal, with a little game and fish; coffee, tobacco, snuff, and brandy, are esteemed the greatest luxuries.

Greenland is said to have been discovered by an Icelander, near the commencement of the 10th century; and the first colonisation of the country, according to the old chronicles, dates from the year 923, when it was settled by the Norwegian Icelanders. It has long been a subject of discussion, whether colonies were established on both coasts; but from the accounts of recent adventurers it is pretty certain that no European colony was ever founded to the E. of Cape Farewell; at all events, no ruins indicative of any ancient settlements have been discovered on that coast, though numerous traces of them remain on the W. coast. Under the Norwegian colonists, the country was governed by Icelandic laws, and had its own bishops. An intercourse was maintained between Norway and these settlements till the end of the 14th or the beginning of the 15th century, when the trade with Greenland was interdicted. Of the subsequent history of the country, and the fate of the colonies, we have no certain accounts. Several expeditions have from time to time been undertaken for the discovery of the lost colonies, but without success. The first of the modern settlements was established in 1721, under the auspices of the Danish crown, by Hans Egede, a Norwegian, who has written an interesting work on Greenland. (For further particulars, see *Egede's* work; *Malte-Brun's Geography; Crantz's History of Greenland; Graah's Voyage to Greenland*, 1837; *Journal of R. Geog. Society*, 1831, &c.)

GREENOCK, a parl. bor. and sea-port town of Scotland, co. Renfrew, on the S. bank of the Frith of Clyde, 18 m. W.N.W. Glasgow; lat. 55° 57′ 2″ N., long. 4° 45′ 30″ W. The situation of Greenock is interesting and picturesque. Immediately behind it the land rises rapidly to a height of 800 ft.; and though the town be built mainly on a strip of level ground stretching up

wards of 2 m. along the shore, it ascends at one place about 500 yards up the ridge. In its front the Clyde is about 4 m. in width; and its magnificent æstuary, which seems land-locked on every side, with the picturesque mountain scenery of Argyle and Dumbarton on the opposite coast, form a noble view. Crawfurdsdyke, or Cartsdyke, on the E., once a rival bor., is now incorporated with Greenock. The progress of pop. has been, anno 1755, 3,858; 1801, 17,458; 1821, 22,088; 1831, 27,571; 1841, 38,860; and now (1850) it is supposed to be about 40,000.

The town, including several streets begun, but not finished, is upwards of 2 m. in length. The width is inconsiderable, except near its centre, where, as already stated, it stretches up the hill. It is pretty regularly built, particularly in the more modern parts. The leading streets run E. and W. The houses are of stone, covered with slate. The streets which are causewayed, have foot pavements of convenient breadth on both sides. The town is rapidly stretching towards the W., where the best streets have been erected. A number of elegant villas are scattered in this direction, and along the heights behind the town. Greenock, however, is not remarkable for cleanliness, nor is its police force, though efficient as far as it goes, sufficiently numerous. From its situation on the W. coast, and its vicinity to the mountains, the climate is moist, the average fall of rain being about 35·34 inches annually. It is lighted with gas.

Of the public buildings, the most distinguished is the custom-house, erected in 1818 at a cost of 30,000*l*. It is advantageously situated in the centre of the quay, about 40 yards from its edge, and being unconnected with any other building, is seen in all directions. It is in the Grecian style, and its portico fronting the quay is particularly handsome. The other more prominent public buildings are, the town-hall, erected in 1766; the gaol, built in 1810; the infirmary, erected at a cost of nearly 5000*l*., with accommodation for 150 patients; the Tontine hotel, built in 1801, at an expense of 10,000*l*.; the exchange buildings and assembly rooms; the sheriff-court-hall; the Watt monument; the mechanics' institute; the Highlanders' Academy, and the workhouse. The mansion-house of Greenock, once the residence of the ancient family of Shaw, the superiors of the place, is situated on an eminence overhanging the town. Part of the building is old, but additions at different times have been made to it. It is now used as chambers for conducting the business of the superior and baron-baillie. Greenock contains three parishes; the Old or West parish, originally taken from the neighbouring parish of Inverkip, and the Middle and East parishes, both taken from the West, and erected into parishes *quoad sacra* by the Court of Teinds. Of the parish churches, two are not without considerable architectural pretensions; the Middle church, built in 1741, and the new West church, which cost about 9000*l*. Besides the three parish churches and a Gaelic chapel belonging to the establishment, there are 21 other places of worship, viz. 1 Episcopalian, 6 Free Church, 4 United Presbyterian, 1 Reformed Presbyterian, 1 Congregational, 1 Wesleyan, 3 Baptist, 1 Evangelical Union, 1 Roman Catholic, 1 Catholic Apostolic, and a Seamens' chapel.

The West parish used to be considered the richest living in Scotland, and for a course of years it yielded upwards of 700*l*. annually; but since 1846, when, in consequence of the discovery of an old decree of valuation in the Teind office, the principal heritor was relieved of his liability for stipend to the extent of thirteen chalders, it has been reduced to about 550*l*. More than two-thirds of this sum is derived from the glebe, which is feued, or let on building leases, under a local act of parliament.

There are (1850) 35 common schools in Greenock; two of them, the grammar school and the mathematical school, under the management of the town council; and one, the Highlanders' Academy, under the management of an educational society. The others are either congregational or adventure schools. There are also 2 charity schools and a ragged school. The whole number of pupils at school in Greenock is not supposed to exceed one-tenth of the population. There are 3 libraries in the town: the Cartsdyke mechanics' library, with about 2,100 vols.; the library of the mechanics' institution, with nearly 4,000 vols.; and the Greenock library, founded in 1783, and the property of a body of shareholders. This last contains about 10,000 vols. of miscellaneous literature, besides a foreign library, and a scientific library (one of the best in the kingdom), composed of the collection of Spence, the celebrated mathematician, who bequeathed his books to his native town, and of more recent works purchased with funds left for the purpose by James Watt. The Greenock library occupies the principal apartment in the Watt monument, a beautiful edifice dedicated to the memory of the most distinguished native of Greenock. Besides the library, this building contains a marble statue of Watt by Chantrey, a museum, a lecture room, librarian's house, &c. It has been completed at the joint expense of the late Mr. Watt of Soho, son of the great engineer, and of a body of subscribers chiefly belonging to Greenock: the former contributing 3,000*l*., the latter 1,400*l*. The marble statue cost 2,000*l*. additional, which was raised chiefly in Greenock. The first newspaper published in this town, entitled the *Greenock Advertiser*, was established in 1802. It still survives, and appears twice a week. Though the inhabitants are eminently distinguished for education, intelligence, and commercial enterprise, literature, in the strict sense of the term, is not much cherished by them, and the town can boast of few great names besides those of Watt and Spence. In 1767, when Wilson, the author of *Clyde, a Poem*, was appointed master in the grammar-school of Greenock, the magistrates stipulated that he should renounce what they called "the profane and unprofitable art of poem-making!" The charitable and religious institutions of Greenock are numerous and liberally supported; and a valuable addition is about to be made to them by an hospital for decayed seamen, which is now being erected in the vicinity of the town under the direction of the trustees of the late Sir Gabriel Wood, who bequeathed 30,000*l*. towards its construction and endowment.

Pauperism has greatly increased within the last few years. In 1837 the total number of permanent and casual poor was 1,915; total expenditure 3,100*l*. In 1849, the total number of paupers was 3,400; viz. 1,163 on the permanent roll, and 2,237 casual poor: expenditure, 8,200*l*.; showing an increase of paupers, in twelve years, of 1,485, and of expenditure, 5,100*l*. Insane or fatuous poor (included in the above amount) 62.

For many years the three burying-grounds of Greenock were in a very unsatisfactory state; but the evil has recently been remedied by the addition of a cemetery of great extent and beauty. It was completed in 1846, and is under the management of the town council. The ground, 20 acres, was procured from Sir Michael Shaw Stewart at a feu-duty of 5*d*. per fall, the lowest rate which can be taken under the entail of the estate of Greenock. Nearly 4,000*l*. has been expended on its inclosure and decoration.

An extraordinary work has been constructed in the vicinity of Greenock, by which not only the town is abundantly supplied with water, but machinery to a great extent may be impelled. To accomplish this an artificial lake, covering 294¾ imp. acres, has been excavated in the bosom of the neighbouring alpine district, behind the town, by turning the courses of several streams and collecting the rain into a basin prepared for their reception. From this, as from a common source, an aqueduct or canal is conducted along the mountain range for several miles, at an elevation of 520 ft. above the level of the Clyde; and when within less than a mile of the town, it pours down a torrent in successive falls, the whole length of the aqueduct being 6¼ m. In addition to the principal basin, there is a compensation reservoir occupying 40 acres, besides several of smaller dimensions, to secure a plentiful supply of water in seasons of the greatest drought. A series of self-acting sluices has been constructed in a most ingenious manner, by which all risk of overflow is obviated, at the same time that every drop of rain, even during the greatest floods, is preserved. This magnificent public work was planned by the late Mr. Robert Thom, of Rothesay, and executed at the cost of the Shaw's Water Company. It has more than realised the expectations of the projectors, though the cost from first to last has not fallen short of 80,000*l*. There are two lines of falls, each with a descent of 512 ft. The water sent down amounts to 1,200 cubic ft. per minute, being equal to 1,843 horse power. The charge to the inhabitants for taking the water into their houses is 9*d*. per pound on the rental.

The docks of Greenock deserve particular notice. Sir John Shaw, the feudal superior of the town, having made two unsuccessful applications (in 1696 and 1700) to the Scottish parliament for aid to build a harbour, the inhab. took the matter (1705) into their own hands, and agreed with their superior to assess themselves at a certain rate, to build a proper pier and harbour. The work was finished in 1710, at an expense of 5,555*l*., Greenock being, in the same year, made a custom-house port, and a branch of the neighbouring and then more flourishing bor. of Port Glasgow. A new dock was built in 1785 at a cost of 4000*l*. In 1824, two spacious wet docks were added, which cost 119,000*l*.; and at present (1850) a new tidal harbour is in the course of being constructed, with 14 ft. water at low ebb in ordinary spring tides, which is expected to cost upwards of 120,000*l*., and to surpass every similar harbour in the island. The debt on the three original docks has been nearly extinguished. In 1783 the harbour dues amounted to only 114*l*. 4*s*. 8*d*., whereas in 1841 they produced upwards of 16,000*l*. The harbour is managed by trustees, including the provost, magistrates, and town council.

The Clyde is navigable to Greenock for vessels of any burden, at any time of the tide; but a sub-marine bank extends from a spot opposite Greenock 9 m. up the

river to Dumbarton; and the channel for navigation, though deep, is only 300 ft. wide. The system, often pursued, of towing by steam-boats, obviates, in great measure, this inconvenience. Government has recently completed a survey of the river.

The trade of Greenock has kept pace with the improvements made on its harbour. The union of the kingdoms (1707) opened the colonies to the enterprising inhabitants of this town, and generally of the W. of Scotland; but it was not till 1719 that the first vessel, belonging to Greenock, crossed the Atlantic. The tobacco trade with Virginia and Maryland was prosecuted with great vigour and success for fully half a century after this date; but it was to a considerable extent carried on upon account of and in connection with Glasgow merchants. The war with the American colonies depressed, for a lengthened period, the trade of Greenock, but other sources of commerce were gradually taken advantage of; and, at present, ships from this town may be found in almost every considerable port to which British enterprise has extended. The first application to government to open the East India trade went from Greenock; and its merchants were also among the first to take advantage of the opening. The trade of Greenock is at present chiefly with Newfoundland, North America, and the West and East Indies. The gradual increase of trade may be seen from the following account of the gross receipt of customs' duties at the port of Greenock in various years: —

Years.	Duty.	Years.	Duty.
1728	L.15,231	1833	L.450,425
1770	57,336	1839	315,084
1802	211,087	1846	324,477
1822	263,464	1848	407,083

The stationary state of the duties of late years is ascribable partly to their reduction, and partly to the improvements effected in the navigation of the Clyde, which enable vessels that formerly had to load and unload here, or at Port Glasgow, to ascend to the Broomielaw. (*Vide* GLASGOW.)

There belonged to Greenock, on the 1st of January 1850, 212 sailing vessels of less, and 213 of more than 50 tons each; the agg. burden of the latter being 71,678 tons; there also belonged to it, at the same time, 7 steamers.

The herring fishery, the trade in which the inhab. of the town first engaged, is still prosecuted to a considerable extent. The Greenland whale-fishery was begun in 1752, but has been long since discontinued. The facilities afforded by the Shaw's Water for water-power in manufactures have not been neglected. There are now (1850) more than 20 works in operation on the falls, inc. sugar refineries, foundries, and mills and manufactories of almost every kind. One of these mills, the Shaw's Water Cotton Spinning Company, is driven by a wheel of 70 ft. 2 in. in diameter, and uses water to the extent of 314 horse power.

The principal trade of Greenock is sugar refining, which is carried on more extensively here than in any part of the kingdom out of London. There are 12 sugar-refineries, which use very large quantities of molasses; the imports of the article into the Clyde being equal to those of all the other ports in the kingdom. Ship-building is also extensively pursued. There are 6 building yards, of which two, those of John Scott and Sons, and Robert Steele & Co., are among the largest in the empire. At the former, the iron frigate, Greenock, was lately built; at the latter six of the Cunard steamers, which ply between Liverpool and New York, were constructed. The two latest built of these steamers are the largest vessels ever launched in the Clyde, being each fully 2000 tons. Among the other branches of business may be mentioned 4 large foundries for the manufacture of steam engines, chain-cables, anchors, and other iron-work; several extensive roperies and sail-cloth factories, 2 breweries, 1 distillery, 1 tannery, 2 soap and candle-works; the manufacture of hats of felt, silk, and straw; pottery; boat-building; block-making; brass-founding; cork-cutting; cooper-work; and many others common to the other large towns throughout the country. There are 5 banking establishments, besides a provident bank; and there are 11 benefit societies, including a penny club designed to encourage habits of economy among the young.

Greenock originally consisted of a few thatched houses stretching along the bay; and Cartsdyke, now incorporated with it, was long a place of greater consideration. It was created a bor. of barony in 1635, and Cartsdyke in 1669. Sir John Shaw, the feudal superior (now represented by Sir Michael Shaw Stewart, bart.) gave power by charter to the feuars, subfeuars, and burgesses to be afterwards admitted, to meet yearly for the purpose of choosing nine managers of the public funds of the town, viz. 2 bailies, a treasurer, and 6 counsellors. The united bor. is now governed under the Scotch municipal reform act, by a provost, 4 bailies, and 16 counsellors, of whom one fills the office of treasurer. The gross revenue of the corporation is about 36,000*l*. The Reform Act raised Greenock to the dignity of a parl. bor., by conferring on it, for the first time, the privilege of sending 1 mem. to the H. of C. Registered voters, in 1849-50, 1,186. Greenock and the three adjoining parishes of Inverkip, Port Glasgow, and Kilmacolm were in 1815 constituted the Lower Ward of Renfrewshire, and placed under the jurisdiction of a sheriff-substitute, who resides and holds courts in the town.

In addition to the authorities already quoted, vide *New Stat. Acc. of Scotland*, § *Greenock*; *Boundary Reports*; and other *Parl. Papers*. But the most important parts of this article have been furnished by the best local authority.

GREENWICH, a parl. bor., town, and par. of England, on the S. bank of the Thames, co. Kent, lathe Sutton-at-hone, hund. Blackheath, 4½ m. E.S.E. London; lat. 51° 28′ 40″, long. 0°. Area of par., 2,030 acres: pop. of ditto (1841), 29,755. It is a thriving town, but without any particular trade or manufacture; the business of the place being derived from its public establishments, from families of fortune residing in or near it, and from the shipping and craft on the river. The streets are in some places narrow and irregular; but within the last few years a new street and many handsome houses have been erected, and the town has been greatly improved. It is partially paved, well lighted with gas, and supplied with water from the Kent water-works at Deptford. The par. church is a handsome stone fabric, with a noble portico, and an interior richly ornamented in the Corinthian order: the living is a vicarage in the gift of the crown. A new district church, of handsome exterior and Ionic portico, stands near the principal gate of the park.

It appears from Willis's *Notitia Parl.* (vol. iii. p. 85.) that the bor. of Greenwich sent two burgesses to parl. in the reign of Philip and Mary; but neither the extent of the bor., nor the nature of the franchise, nor the reason why it ceased to be exercised, has been specified. The Reform Act again conferred on Greenwich the right to send 2 mems. to the H. of C.; but the parishes of Deptford and Woolwich, and about two thirds of that of Charlton, are included with it in the modern parl. bor., which had, in 1841, an aggregate pop. of 72,748. Registered electors, in 1849-50, 5,976.

Greenwich Hospital, the noblest establishment of its kind in Europe, occupies the site of a palace erected by Humphry, Duke of Gloucester, in 1433, and was long a favourite residence of the Tudor family. The present building, originally intended for a palace, was commenced by Charles II., who erected one wing at an expense of 36,000*l*. In the reign of William III. the case of the disabled seamen of the navy engaged the attention of the king and queen, and, in consequence, this palace was granted as an asylum for their relief. Commissioners were appointed to carry out the royal intentions; Sir Christopher Wren undertook to superintend the completion of the building without charge, and voluntary contributions were requested in aid of the public grant, which last amounted to 58,209*l*. In 1715, the confiscated estates of the Earl of Derwentwater, amounting to 6,000*l*. a year, were given to it by parl., and their value has immensely increased within the last half century. The hospital was partly also supported by the forced contribution (by act passed 7 & 8 Will. III.) of 6*d*. a month from the wages of all seamen in the king's and merchants' service. But since 1835, merchant seamen have been exempted from this contribution, in lieu of which the sum of 20,000*l*. a year is advanced from the consolidated fund to the hospital. The entire building consists of four magnificent detached quadrangular piles, of Portland stone, called King Charles's, Queen Anne's, King William's, and Queen Mary's: the interval between the two former is the grand square, 273 ft. wide, in the centre of which is a statue of George II. by Rysbrach: the space between the two latter is filled up by two colonnades supported by 300 double columns and pilasters. The principal front, on the N. side towards the river, comprises the sides of King Charles's and Queen Anne's buildings; and before it, extending 865 ft. in length, is a spacious terrace, with a double flight of steps in the middle, commanding a fine view of the building, and forming a handsome landing place to the hospital. King Charles's building, in the N.W. angle, was erected after Inigo Jones's designs: in it are the council-chambers and residences for the governor and lieutenant-governor. Queen Anne's building contains 24 wards for the pensioners, and some officers' apartments. King William's building, designed and directed by Sir C. Wren, contains the great hall, with its vestibule surmounted by a fine cupola and 11 wards. The hall is 106 ft. long by 56 broad, and 50 high: the roof and walls were painted by Sir James Thornhill, at a cost of 6,685*l*. Several pictures of great naval

actions, with portraits and statues of distinguished officers, give interest to this noble apartment. Opposite the hall in Queen Mary's building is the chapel, with a vestibule and cupola corresponding with those of the hall. The roof and inside having been destroyed by fire, were ably restored by "Athenian Stuart," in 1780. A flight of 14 steps leads to the interior, which is 111 ft. long by 52 broad, and accommodates 1,000 persons. The carving of the pulpit and other parts is exquisitely finished. The altar-piece, by West, represents the Shipwreck of St. Paul. This hospital supports about 2,700 old or disabled seamen in the house, and gives pensions varying in amount, but which may perhaps average about 12*l*. a year, to a much more numerous body of out-pensioners. The nurses are all seamen's widows. The revenues of the hospital being required for the support of the in-pensioners, the expense of the out-pensioners is defrayed by an annual parliamentary grant. Connected with the hospital, in a building contiguous to the park, part of which was intended for a ranger's lodge, is the Naval Asylum, for the education of 400 boys, 100 of which are sons of commissioned and ward-room warrant officers, and 300 sons of private seamen and marines.

The management of the hospital revenues is vested in 100 incorporated commissioners; and the interior regulations are under the superintendence of a governor, lieutenant-governor, chaplain, and numerous other officers.

Greenwich Park, which was attached to the old palace, and is now in the hands of the crown, contains nearly 200 acres; it is well stocked with timber and deer, and furnishes from its higher part magnificent views of the metropolis and its vicinity. On an eminence 160 ft above the river, about ½ m. from the park-gates, is the royal observatory, erected by Charles II. for the celebrated Flamstead, and fitted up with telescopes and other astronomical instruments, which have been successively improved and increased by Graham, Bradley, Hooke, Herschell, Dollond, and others. The upper part of the building consists of rooms well adapted for observations: the lower part being used as the residence of the astronomer royal. This important and honourable situation has been held by some highly distinguished astronomers, as Flamstead, Halley, Bradley, Bliss, Maskelyne, Pond, and Airey, who at present (1850) enjoys that honour. The longitudes of all English charts and maps are reckoned from this observatory: and the captains of ships take their time as given here at 1 P.M. daily. It is 2° 20′ 15″ W. from Paris, and 18° 9′ 45″ E. from Ferro or Hierro, the most W. of the Canary Islands.

Greenwich has for many years been a favourite resort of holyday-seekers from the metropolis, and the means of access have within a few years been greatly facilitated by steam-boats, and also by a railway terminating in Tooley Street, near London Bridge.

Greenwich markets, on Wednesday and Saturday, are well supplied. The fairs, held at Easter and Whitsuntide, are well known, for the various amusements furnished to the crowds that resort thither from all parts of London and its neighbourhood.

GREIFSWALD, a town of the k. of Prussia, prov. Pomerania, cap. circ. of same name, on the Ryck, about 3 m. from the Baltic, and 18 m. S. E. Stralsund. Pop. (1838) 10,291. It is the seat of a superior court of appeal, the high judicial tribunal for the territory, formerly Swedish Pomerania (*Neu-Vor-Pommern*), others for the circle and town, a circle-council, high board of customs, consistory, orphan-tribunal, board of agriculture, &c. It has a harbour at the mouth of the Ryck, which is navigable for small vessels; manufactures of salt and tobacco, oil-mills, distilleries, and a brisk trade both by land and sea. A university was founded here in 1456, and some new buildings were erected for it in 1750, but the number of students is inconsiderable. Greifswald was taken by the Elector of Brandenburg in 1768. (*Berghaus; Stein; Dict. Géogr.*)

GREIZ, or GRAITZ, a town of central Germany, cap. princ. of Reuss (elder branch), on the White-Elster, 49 m. S. Leipzig. Pop., in 1837, 6,500. It is a walled town, and is tolerably well built. It is the residence of the sovereign prince, who has a summer palace here, built on an eminence, and surrounded with fine gardens. The church is the only other public building. There are Latin and normal schools; and it has manufactures of coarse woollen cloths, leather, &c., with distilleries. It is the seat of the government, and of a judicial consistory.

GRENADA, one of the W. Indian islands belonging to Great Britain, and the most southerly of the windward group (Tobago and Trinidad excepted), between lat. 11° 58′ and 12° 14′ N., and long. 61° 20′ and 61° 35′ W., about 90 m. N. Trinidad, and 68 m. S.S.W. St. Vincent. Greatest length, 20 m.; greatest breadth, 10 m. Area, about 80,000 acres. Pop. in 1846, 28,927.

A chain of rather lofty hills runs through the island, in which many small rivers have their sources. There are some small lakes, which appear to occupy the craters of extinct volcanoes. The soil is, on the whole, very fertile, and adapted to every kind of tropical product; but the climate is decidedly unhealthy. About 5-8ths of the surface is cultivated. Indigo, tobacco, sugar, coffee, cocoa, and cotton, thrive well. Game, and birds of numerous species, are very abundant. The chief imports into the U. Kingdom from Grenada, from 1847 to 1849 inc., were —

		1847.	1818.	1849.
Sugar (raw)	- cwts.	104,951	89,662	82,499
Rum -	- galls.	231,785	189,681	92,340
Molasses	- cwts.	4,010	418	10,541
Coffee -	- lbs.	235	184	120,561
Cocoa -	- —	299,802	464,703	424,631

Grenada, like most other W. Indian islands, has its governor, council, and assembly, by whom it is governed. Its cap., St. George, on a spacious bay on the S. side of the island, is a well-built town, with a pop. of 2,780 (1836), and has one of the safest and most commodious harbours in the British W. Indies. The sum awarded by government, in 1835, for the manumission of slaves in Grenada amounted to 616,444*l*. 17*s*., being about 26*l*. 4*s*. per head. This island was discovered by Columbus in 1498, and colonised by the French about 1650, at first as a private speculation, but after 1674 it belonged to the French crown, till taken by the British in 1762. In 1779 it was retaken by the French, but restored to Great Britain at the peace of 1783.

GRENOBLE (an. *Gratianopolis*), a fortified city of France, dep. Isère, of which it is the cap.: on both sides the Isère, 58 m. S.E. Lyons, and 290 m. S.E. Paris; lat. 45° 11′ 42″ N., long. 5° 44′ E. Pop. (1846) 23,227. The portion on the left bank of the river (the city, properly so called) is the larger and more ancient: it is surrounded by bastioned ramparts, and has a citadel, but these defences are at present very much out of repair. The portion on the right bank, originally built by the Emperor Gratian, called the Faubourg St. Laurent, is confined between the river and the foot of an abrupt mountain, and consists of little more than one spacious street. It is, however, comparatively the more populous division, and the chief seat of commercial activity. St. Laurent is inclosed by only an indifferent wall, but is defended by the new fortress of *Bastille* on the mount above it. The two parts of the city are connected by two bridges; one of wood, the other of stone. Grenoble is ill laid out and ill paved; but is generally well built, and clean: many improvements have taken place in it of late years. It contains numerous squares and handsome public fountains; and near its centre is a spacious garden laid out in public walks, planted with trees, and having a quay on the river. Many other agreeable promenades surround the city. The chief public buildings are the cathedral, episcopal palace, hotel of the prefecture, formerly the residence of the celebrated Constable de Lesdiguières, the general hospital, hall of justice, royal college, theatre, and a public library with 60,000 printed vols. and 600 MSS. Here are 4 par. churches, a Protestant church, several convents, and seminaries, a foundling and another hospital, a university academy, schools of medicine, drawing, &c., cabinets of natural history and antiquities, and a fine collection of paintings. In the Place St. André is a colossal bronze statue of the Chevalier Bayard, the knight "*sans peur, et sans reproche*," who is interred in a contiguous church. Grenoble is the seat of a prefecture, a royal court, and of tribunals of original jurisdiction and commerce. It is the see of a bishop, the cap. of the 7th military division of France; and has a chamber of manufactures, arts, and commerce, faculties of law and sciences, and a Society of Arts, &c. It is noted for its manufacture of kid gloves; and has others of liqueurs, linen fabrics, &c.; and some trade in hemp, iron, marble, and timber. It originally bore the name of Cularo, till Gratian enlarged it and gave it his own name. It was long the cap. of Dauphiny. Its inhab. warmly espoused the popular cause against the court of Louis XVI.; and were, afterwards, devoted partisans of Napoleon, in whose favour they made a very vigorous stand against the allies in 1815. (*Hugo*, art. *Isère; Guide du Voyageur*, &c.)

GRETNA GREEN, a small village of Scotland, parish of Graitney, co. Dumfries, famous in the annals of gallantry for the celebration of irregular marriages, on the border of England, near the Sark, 9 m. N. W. Carlisle, and 22 m. E. by S. Dumfries. The marriage ceremony merely amounts to an admission before witnesses that certain persons are man and wife; such acknowledgment being sufficient, *provided it be followed or preceded by cohabitation*, according to the law of Scotland, to constitute a valid marriage. A certificate to this effect being signed by the officiating priest (who has never been above the rank

of a tradesman), and by two witnesses, the union, under the above condition, becomes indissoluble. The marriage service of the church of England is sometimes read, in order to please the parties. The marriages of this sort celebrated at Gretna Green are estimated at between 300 and 400 a year; but as similar marriages are celebrated at Springfield, Annan, Coldstream, and other places along the border, their total number is said to amount to 500 a year! The parties are generally from England, and of the lowest ranks; though there are not a few instances of persons of the higher ranks, and even of lord chancellors having had recourse to the services of the *soi disant* parsons of Gretna Green. A trip to Gretna, or the presence of a self-dubbed parson, is not, however, at all necessary. Parties crossing the Scottish border, and declaring before witnesses that they are man and wife, are, under the previously mentioned conditions, married according to the law of Scotland. This law has been much objected to, but we are inclined to think with no good reason. It would, indeed, be no difficult matter to show, that it is, on the whole, productive of numerous advantages. No where, perhaps, are there so few rash or improvident marriages as in Scotland; and the retrospective effect of the existing law, or its influence in legitimising the children born before marriage, is, perhaps, its most valuable feature. But it is necessary to observe, that though legitimated in Scotland, children born previously to a Scotch marriage are not legitimated in England, and do not succeed, except by special bequest, to heritable property in that part of the U. Kingdom. In all respects, however, Scotch marriages convey the same rights and privileges in England as English marriages. The practice began at Gretna Green about 100 years ago by a person named Paisley, a tobacconist, who died so lately as 1814. It is now carried on by various individuals: indeed each inn has its rival priest, in addition to others who carry on the business on their own account; and so far has competition reduced the fees, that, though large sums (40 *l.* or 50*l.*) have been received, the solatium, in some instances, is now so low as half-a-crown. "One of these functionaries, who breaks stones daily on the verge of England, has the best chance of succeeding, for he accosts every party as they pass, and tries to strike the best bargain." (*New Stat. Account of Scotland, § Dumfries*, p. 262.)

GRIMSBY (GREAT), a parl. bor., market-town, and sea-port of England, co. Lincoln, wap. Bradley-Haverstoe in Lindsey, on the S. side of the æstuary of the Humber, 138 m. N. London, 30 m. N. E. Lincoln, and 15 m. S.E. Kingston-on-Hull.

Area and Pop. of Parl. Bor.	Area.	Pop. 1821.	Pop. 1841.
	Acres.		
Great Grimsby par. -	2,110	3,064	3,700
Great Coates do. -	2,200	3,287	245
Little Coates do. -	1,060	47	40
Bradley do. -	1,450	78	106
Laceby do. -	1,650	523	755
Waltham do. -	2,350	526	656
Scartho do. -	1,390	148	199
Clee and Weelsby do. -	1,972	154	199
Cleethorpe do. -	1,037	406	778
Grimsby parl. bor. -	15,219	5,183	6,678

The municipal bor. includes the par. of Great Grimsby, excepting Wellow, the area of which latter portion is 60 acres, and the pop. 40.

"The town is composed of two portions, with a few houses straggling on the London road: the older part is an irregular cluster of houses at the head of the harbour, a mile or more from the sea; the new part, called the Marsh, having been built since the excavation of the harbour, and consisting of three streets on the E. of and parallel to the harbour, with houses more or less continuous. The distance from the first house in the bor. to the harbour-mouth is about 2 m." (*Boundary Rep.*) "The town, originally consisting of two parishes, which were united in 1586, contains several good streets, lined generally with well-built houses. It is tolerably paved, but though lighted a few years ago, it is not so now, in consequence of insufficient funds, and the poverty of the place." (*Mun. Boundary Rep.*) "The church is a large cruciform structure, with a tower, and fine steeple rising from the centre, and is reckoned a good specimen of English pointed architecture. In the interior are some old monuments, that were removed here at the suppression of the monasteries. The Wesleyan and Primitive Methodists, Independents, and Baptists have places of worship here. A free grammar-school was founded in 1547, the masters of which are appointed by the corporation. All freemen's children receive their education gratis. There is a small prison, but its arrangements are very defective." (*Mun. Rep.*) "About ½ m. E. of the town are some singular springs, called Blow-wells, the phenomena of which are owing to the great depth of clay (40 ft.) to be cut through before reaching the water. When wells are dug thus deep, the water instantly rushes to the surface, and continues to flow to that height."

"Grimsby was a port of such importance in the reign of Edward III., as to send 11 ships to the siege of Calais; but its importance in this respect had much declined at the end of the last century, in consequence of the choking up of its harbour; but since then (in 1802) the new harbour, a very splendid work, has been constructed, and a great increase of trade was the result; this increase, however, has not been considerable during the last 10 or 15 years. The roadstead is said to be safe, the holding ground good, and the shore so soft that a vessel may take the ground without material injury. Vessels drawing 16 ft. may enter this harbour at high water neap tides." (*Mun. and Bound. Rep.*) There belonged to this port, on the 1st of January, 1850, 54 vessels, of the aggregate burden of 1,844 tons, and the gross customs duties in 1846, amounted to 32,730*l.* The principal foreign trade is with the Baltic. There are mills for grinding bones, and tanneries. Connected with the harbour are large warehouses and timber-yards, and on the shore E. of the harbour is an extensive ropery. The other manufactures are local and unimportant.

The old bor. of Grimsby, which was co-extensive with the township, sent 2 mem. to the H. of C. from the reign of Edward III. down to 1832, the right of voting being vested in resident freemen paying scot and lot, of whom, in 1831, there were 400. The Reform Act deprived the bor. of *one* of its mem.; and, at the same time, enlarged its boundaries by the addition of 8 other pars., as previously stated; so that it now includes an area of 15,219 acres, and had, in 1841, a pop. of 6,678. Registered electors, in 1849-50, 824.

The bor. is governed by four aldermen (one of whom is mayor) and 12 counsellors. Petty sessions are held on Thursdays, and quarter sessions by the recorder. A court of requests, for the recovery of debts under 5*l.*, was established in 46 of George III. Markets on Wednesday, fairs 17th June for sheep, 15th September for horses.

But these statements rather apply to what the town was a short while ago than to what it is now. Very recently it has been made a terminus of the Manchester, Sheffield, and Lincolnshire, and of the East Lincolnshire railways. And to accommodate the great increase of commerce and of shipping, which it is thus all but certain will be drawn to the port, very great works are now (1850) being carried on for its enlargement and improvement. They project ¾ m. into the river, and comprise a wet dock 30 acres in extent, having two entrance locks, and a tidal basin, with graving docks, warehouses, and other conveniences. We shall notice them in the SUPPLEMENT to this work.

GRINSTEAD (EAST), a market-town and par. of England, co. Sussex, rape Pevensey, on the high road between London and Brighton, 26 m. S. the former, and 22 m. N. the latter. Area of par., 13,390 acres. Pop., in 1841, 3,586. The town is pleasantly situated close to the N. border of the co. on an eminence commanding fine views of the country to the S. The streets, which are narrow and irregular, contain many good modern houses. The church, on the E. side of the main street, is a large, handsome building, of modern date, the old edifice having been destroyed by the fall of the tower in 1785. The present tower is lofty and well proportioned having pinnacles at the corners. The living is a vicarage in the gift of the Duke of Dorset, the lord of the manor. There are also places of worship for Wesleyan Methodists and Baptists.

The town-hall, which is large and commodious, was used as an assize court, till the Lent assizes were removed to Horsham. At the E. end of the town is Sackville College, endowed by Robert Earl of Dorset with an income of 330*l.* a year, and erected, in 1616, for the support of 24 unmarried persons of both sexes, each of whom has a comfortable room, and 8*l.* a year in money. A free grammar-school was founded in 1708, and endowed with a freehold farm in the par. The rent is taken to pay the master's salary, and the school is on the whole well conducted, although Latin and Greek have not been taught for nearly 60 years. (*Carlyle.*) Markets, chiefly for corn, on Thursday. Fairs, April 21., July 13., and Dec. 11., for horned cattle and pedlary.

East Grinstead, before the passing of the Reform Act, by which it was disfranchised, sent 2 mems. to the H. of C., a privilege which it had enjoyed since the first of Edward II.: the electors were 55 burgage-holders, nominated by the Duke of Dorset, whose bailiff was the returning officer.

GRISONS (Germ. *Graubundten* or *Bunden*, an. a part of *Rhætia*), a canton of Switzerland, and, excepting that of Bern, the most extensive in the union, of which it occupies the S. E. portion. It ranks fifteenth in the confederation, and lies between lat. 46° 15′ and 47° 4′ N., and long. 8° 40′ and 10° 29′ E.; having N. the cants. Glarus and St. Gall, the principality of Lichtenstein,

and the Vorarlberg; E. the Tyrol; S. the Val-Tellina, Lombardy, and the cant. Ticino; and W. the last-named cant. and that of Uri. In the greater part of its extent, it is enclosed by the Austrian territories; but is cut off from them, as well as from the rest of Switzerland, at nearly every point, by lofty mountain ranges. Length, E. to S., 86 m.; greatest breadth about its centre 53 m. Area estimated at 2,560 sq. m.; or, if the inequality of its surface be taken into account, at nearly 3,000 sq. m. Pop. (1838) 88,506, of whom 62,000 were Protestants and 24,000 Catholics. The whole canton is one mass of mountains and valleys; there is not a single plain worthy of notice. The main chain of the Rhætian Alps crosses the canton from W. to E., at first separating it from Ticino and Italy, and afterwards dividing it into two unequal parts, the valley of the Rhine, being the larger, on the N.W., and that of the Inn, or the *Engadine*, on the S.E. A great portion of this chain is above the limit of perpetual snow. The *Muschelhorn*, 10,640 ft., the *Piz Val Rhin*, 10,280 ft., M. Maloya, 11,480 ft. high, form parts of it, and it is crossed by the passes of the Splügen, St. Bernard, Albula, and Scaletta. From the E. extremity of the canton, a chain, little inferior in height, passes off N.E., separating the Grisons from Uri, Glarus, and St. Gall. Another chain bounds the Engadine on the S.E., to which belong the Monte dell' Oro, 10,538 ft., and M. Bernina, 7,654 ft. high; and which is crossed by the Pass of Bernina, about 6,460 ft. above the level of the sea. A fourth chain, called the *Rhætikon*, also including many elevated peaks, forms the boundary between the Grisons and the Vorarlberg. (*Bruguière, Orographie de l'Europe.* See also the art. ALPS in this Dict.) Both the Rhine and the Inn rise in the Grisons, as do several tributaries of the Upper Adige, Po, and Adda: the Rhine receives most of the minor Rhætian rivers. Climate and soil very various; but where the Rhine, Inn, and other rivers leave the canton, the general temperature is sufficiently high to admit of the cultivation of the vine. The scenery is peculiarly grand and magnificent; the canton contains upwards of 240 glaciers, comprising the largest in Switzerland. The nature of the country generally unfits it for agriculture; but in the Engadine, where the inhab. are very industrious, every patch of land is cultivated that is worth the pains. The corn raised is chiefly rye, barley, oats, and Turkish wheat; but not half the quantity required for home consumption is produced, and it is consequently imported to the annual value of about 300,000 florins. (*Picot.*) Hemp and flax, also, though pretty generally grown, are not produced in sufficient quantities for home demand. Potatoes have been cultivated only of late years. Fruit and wine are among the articles of export. The chief wealth of the canton consists in its cattle. Its pasture lands are estimated to feed, in the summer, 100,000 head of cows, oxen, &c., besides from 60,000 to 70,000 goats, and perhaps 100,000 sheep, many of which are driven from Italy to feed in the Alpine pastures for about three months, under the care of Bergamasque shepherds. The best breed of cattle is that of the Prottigan (or valley of the Lanquart); but the best cheese is made in the Engadine; some of which, Mr. Inglis says, "far surpasses that of Gruyère." (*Switzerland*, p. 67.) A great many hogs are kept, most of them for home consumption. Rural economy, and the condition of the peasantry, vary very greatly in different parts. Throughout the Engadine, the land belongs to the peasantry, and each individual usually supplies his family with provisions and clothing entirely from the produce of the territory belonging to him. Poverty is here rare, and beggary unknown. Indeed, many of the inhab. of the Engadine are possessed of considerable property, which they have amassed in some of the commercial cities of Europe, chiefly as confectioners. Schools are numerous, and few of the children in the valley of the Inn are uneducated. In the valley of the Rhine, the peasants are also the proprietors of the soil, living upon the produce of their own lands; but, as in most other parts of the Grisons, they are not industrious. Their land is badly tilled; garden cultivation is ill-conducted; and the forests are neglected. In the *Tavetsch-thal* there is a good deal of squalid misery. Wages are, notwithstanding, high throughout the Grisons. There are some rich veins of metal, especially iron; but they are not wrought. Manufactures few, and mostly domestic; the principal are those of cotton fabrics, some of which are exported. The most profitable branch of commerce is the transit trade between Zurich and Italy, the route of which passes through the Grisons and over the Splügen, and is a source of wealth to Chur, the cap. (*See* CHUR and ALPS, p. 68.) The chief exports from the Grisons are timber, of the value of about 180,000*l.*, and cattle, mostly to Italy, to the amount of 70,000*l.* a year: the principal imports are corn, salt, oil, sugar, coffee, tobacco, foreign manufactured goods, and iron.

This canton comprises a confederation of little republics in itself. It consists of a number of communes, exercising within themselves rights almost independent. These are united into 26 *Hoch-gerichte*, or high-jurisdictions, each of which is, in many important respects, independent, not only of the rest, but even of the supreme council. These high-jurisdictions are united into the 3 leagues of the *Grau Bunden* (Grey League), containing 8; the *Gottes-haus Bund* (League of the House of God), 11; and the *Zehngerichte* (League of Jurisdictions), 7 high-jurisdictions. The whole unite in electing a supreme federal legislative council of 65 members, chosen in the different jurisdictions and communities, by the universal suffrage of the male pop. above 18 (in some instances 17) years of age. The supreme council or diet of the leagues meets at Chur every year, in June, and appoints a commission of 9 members to prepare matters for its own consideration; and a minor council of 3 members, one from each league, to whom the executive duties are entrusted. It also elects the public officers of the canton generally, concludes treaties, &c., and appoints 9 judges to form a central court of appeal; though, for the most part, the communities and petty municipalities themselves exercise full judicial powers, and in each of the high-jurisdictions there is a power of life and death in criminal cases, which is sovereign and without appeal. The common law is different in each jurisdiction: every one has its own peculiar laws and usages, and by these the questions within their boundaries must be determined. The decisions of the supreme council have also to be submitted for approval to the jurisdictions and communities at large. The inhab. of the Grisons are fond of boasting of the liberties they enjoy; but, in point of fact, they are destitute of some of the most important rights of the citizens of really free states. A free press, and trial by jury, are unknown; and both the supreme council and the courts of law deliberate and determine with closed doors. There is, however, no direct taxation of any kind; the state revenues are derived from customs and duties on the transit trade, a monopoly of salt, passports, &c. The public revenue in 1832, amounted to 336,870 fl.; the expenditure to 221,782 fl. The annual surplus is devoted to the payment of a small cantonal debt, which at present amounts to about 18,000*l.* About 2-5ths of the pop. are of German, and 1-10th of Italian origin. The different communities elect and support their own clergy. The canton furnishes a contingent of 1,600 men to the army, and 12,000 Swiss francs annually to the treasury, of the Swiss confederation. It has a militia of all its male inhab. from the ages of 17 to 60. Chur, Mayenfeld, and Ilanz are the only places worthy the name of towns. Few countries abound so much with ruined castles and other feudal remains. These belonged, in the middle ages, to the nobles, who for a long period were possessors of the soil. In 1396, a number of communities revolted against the feudal nobles, and, headed by the Bishop of Chur, formed the *Gottes-haus* Bund; in 1424, the *Graübund* was formed in a similar manner in the W. part of the Grisons; and in 1428, the *Zehngerichte* in the E. In 1471, the 3 leagues entered into a common union; and, in 1497-8, formed an alliance with the Swiss confederacy, though it was not till 1798 that the Grisons became a canton of Switzerland. (*Helvetic and Weimar Almanacks; Picot, Statistique de la Suisse*, p. 411—436., *Ebel; Inglis's Switzerland*, p. 57—99. &c.)

GRODNO, a government of Russia, formerly included in the old k. of Poland; between lat. 51° 30′ and 54° 20′ N., and long. 23° 7′ and 26° 42′ E., having N. the gov. Wilna, E. Minsk, S. Volhynia, and W. Bialystok and the k. of Poland. Greatest length N.E. to S.W. about 200 m.; average breadth, nearly 75 m. Area, estimated by Schnitzler at 14,700 sq. m. Pop. probably 600,000. The surface is an alluvial or sandy plain, broken only by a few undulating chalk hills. The Niemen, Bug, Narew, and Priepec, are the principal rivers; in the S. there are some large marshes. The climate is damp, and the atmosphere cloudy and foggy. The principal agricultural product is rye, about 6,825,000 hectolitres of which are said to be produced annually, a third part of which is exported. Few other kinds of grain or vegetables are grown for food, but flax, hemp, and hops are raised in considerable quantities. There is a large extent of pasture land; cattle-breeding is pretty well understood; and the native breed of sheep, which has been much improved by crossings with the breeds of Silesia and Germany, yields good wool, which is a principal article of export. The forests are extensive. Many belong to the crown, and that of Bialoreja, a royal domain, occupies nearly 96,200 hectares. Iron, lime, nitre, and building-stone are found. Manufactures are hardly worth notice; the principal are those of woollen cloth, leather, and felt. The exports consist of corn, flour, cattle, and wool; much of the produce is sent to Memel, Koningsberg, Vindau, Riga, &c., by the canal of the Niemen, and by land. The greater part of the inhab. are Rusniaks, except in the N., where Lithuanians prevail. The nobles comprise about 1-24th part of the whole pop., and are principally Poles. Jews are very numerous. There

are some Tartars and colonies of German artisans. The dominant religions are the Rom. Catholic and the United Greek church. In 1832, there were 32 public schools, and 1,012 scholars. There were throughout the gov., at that period, only two printing-presses. Chief towns, Grodno the cap., Novogrodek, Slonem, and Brzesc (Brest Litofskii).

Grodno, a town of Russian Poland, and cap. of the above gov., in the N.W. part of which it is situated, on a hill on the Niemen, 85 m. S.W. Wilna, and 154 m. N.E. Warsaw; lat. 53° 40′ 30″ N., long. 23° 49 ′45″ E. Pop. (1840) 10,000.? Grodno was formerly considered the second town of Lithuania, and even disputed the superiority with Wilna. Its houses are partly of stone and partly of wood; and the greater number of its streets are extremely filthy. It has a fine castle built by Augustus III. of Poland, the ruins of a more ancient fortress, 9 Rom. Cath. and 2 Greek churches, a synagogue, and some handsome residences of the nobility, a gymnasium, an academy of medicine founded by Stanislaus Augustus, many other schools, a good public library, cabinets of mineralogy and physical objects, and a botanic garden. There are some inconsiderable manufactures in the town and its vicinity; and it has some well frequented fairs. (*Schnitzler, La Russie*, 412—420.)

GRONINGEN, a fortified city of Holland, cap. prov. of same name, and the most important town in the N. Dutch provs.; on the Hunse, at the influx of the Aa, 45 m. E. by N. Harlingen, and 90 m. N.E. Amsterdam; lat. 53° 13′ 13″ N., long. 6° 34′ 18″ E. Pop. 30,500. It is well built, and clean: its market-place (*Bree-Markt*) is one of the largest and handsomest squares in Holland; and there is a fine public promenade, called the *Plantage*. It has a strong citadel, built in 1607, and is surrounded by ramparts and ditches, kept in good condition. Many of the public buildings are handsome, especially the great church of St. Martin, a Gothic structure, the spire of which is the loftiest in Holland; and the town-hall, erected in 1793. The university, founded in 1615, is usually attended by about 400 students, a much greater number than formerly: it possesses an excellent museum of natural history, a library, and a botanic garden. Groningen has an academy of painting, sculpture, and architecture, a seminary for deaf and dumb, another for the instruction of the blind, societies of natural history and chemistry, poetry, literature, and jurisprudence, and a branch of the society of "public good." It has a large paper manufacture, besides some factories of woollen and silk stuffs, cotton stockings, &c., and yards where merchant-vessels are sometimes built; but, speaking generally, the manufacturing industry of the place is but inconsiderable. It has an active trade in cattle, butter, &c.; and by means of a canal, large vessels come, from the æstuary of the Ems, quite up to the town.

This town is not mentioned previously to the ninth century, and it was not fortified for several ages afterwards. It was first attached to the United Provinces in 1576: it afterwards fell into the hands of the Spaniards, but was finally retaken by Prince Maurice, in 1594. (*Dict. Géog.; Boyce's Murray's Guide Books.*)

GRUYÈRE (Germ. *Greyerz*), a town of Switzerland, cant. Freiburg, 16 m. S. Freiburg. Pop., with some adjacent hamlets, 940. It is situated on a hill, the summit of which is crowned by the ancient castle of the counts of Gruyère, a fortress said to have been founded in the fifth century, and which is one of the most extensive and best-preserved feudal monuments in Switzerland. The town is walled, and contains a handsome parish church, a rich hospital, and a public library. The district around Gruyère is famous for its cheese, of which it produces about 25,000 cwt. a year. It is made on a chain of mountains about 10 leagues in length and 4 in breadth: all the cheese, though made in the same manner, is not of the same quality; the lower pastures not being in such estimation as those in the more elevated situations. The very finest qualities are said to be too delicate for exportation; and Mr. Inglis mentions that he tasted cheese in Switzerland far superior to any that can be bought in London or Paris. The whole district is divided into greater or lesser farms, which the proprietors let out on leases of 3 or 6 years, at rents varying according to the nature and elevation of the ground; the lower pastures, though not of the best quality, being the dearest, because, being sooner freed from the snow, and later covered with it, they afford food to the cattle for a longer time. The farmers who rent pastures, hire from the different peasants in the canton from 40 to 60 cows, from the 15th of May to the 8th of October, paying for them certain rates per head. Each cow, at an average, yields daily from 20 to 24 quarts of milk, and supplies 200 Swiss pounds of cheese during the 5 months. On the 18th of October, the farmer restores the cows to the different proprietors. The cattle are then pastured in the meadows, which have been twice mowed, until the 10th or 11th of November, when, on account of the snow, they are usually removed to the stables, and fed during winter on hay and after-grass. Throughout the commune of Gruyère, the inhab. are above poverty. During a part of the year, there are not so many hands in the cheese country as are required, and these are of course borrowed from other and poorer communes. Wages are very high, in comparison with most other parts of Switzerland, being about 2*s*. 6*d*. a day, exclusive of living. (*Inglis's Switzerland, &c.*, p. 163.; *Coxe's Switzerland*, ii. 220.)

GUADALAXARA, or GUADALAJARA, an inland city of Mexico, cap. of the state of same name (otherwise called Xalisco), in a rich and extensive plain, on the Rio Grande de Santiago, 130 m. from the Pacific, and 275 m. W.N.W. Mexico; lat. 21° 9′ N., long. 103° 2′ 15″ W. Pop., which in 1803 was only 19,500, had in 1823 reached 46,800, and is now probably 60,000 (*Ward's Mexico*, ii. 357.), so that it is, in point of pop., the second city in the republic. It covers a great extent of ground, and at a distance has a very picturesque appearance. Its interior is also handsome; its streets are airy and well laid out, and many of the houses extremely good, though mostly of only one story. There are 14 squares, the principal of which, the *Plaza de Armas*, has in it the government-house, in which the congress assembles; the cathedral, a fine edifice, though much injured by the earthquake of 1818; and the *Portales de Comercio*, consisting of piazzas or arcades built around three large square blocks of houses. "Within the town the Portales are the principal rendezvous, as besides a number of handsome shops, well provided with European and Chinese manufactures, they contain a variety of stalls covered with domestic productions, fruits of all kinds, earthenware from Tonala, shoes in quantities, mangas, saddlery, birds in cages, "dulces" of Calabasate, and a thousand other trifles, for which there seems to be an incessant demand. As each of these stalls pays a small ground rent, the convents to which the Portales belong derive from them a considerable revenue. They are the counterpart of the Parian in Mexico, but infinitely more ornamental, being built with equal solidity and good taste." (*Ward*, ii. 362.) Besides this public promenade, there is the *Paseo*, an extensive avenue shaded by double rows of fine trees, having a stream flowing through it, and leading to the *Alameda*, a public walk "very prettily laid out, for the trees, instead of being drawn up in battle array, in lines, intersecting each other at right angles, like the streets, are made to cover a large tract of ground in irregular alleys, while in summer the intervening spaces are filled with flowers, particularly roses, which give both life and variety to the scene. There is a fountain too in the centre, and a stream of water all round." (*Ward*, ii. 361, 362.) Many of the public places are adorned with fountains. Besides the cathedral, there are several churches, with numerous monasteries and convents, a college maintained at the public expense on the most liberal footing, and for which a magnificent building has been erected, two ecclesiastical establishments for the education of young women, three for young men, five boys' schools, a public hospital, bishop's palace, mint (a fine building), and a neat theatre. A large pile of building, erected during the Spanish rule for a workhouse, now serves as a barrack for about 500 men. The coffeehouses are tolerable, and the shops and market-place are well supplied with provisions, &c., but the last, which is large, is very ill-kept, and the hotels or inns are said to be filthy. The city is supplied with water from the Cerro de Col, three leagues distant; it is lighted at night, except at the time of the full moon, and watched by a patrol. Many of the streets look melancholy and deserted, "most of the lower orders being occupied in their own houses, where they exercise various trades in a small way, as in San Luis. They are good blacksmiths, carpenters, silversmiths, and hatters, and are famous for their skill in working leather, as well as in manufacturing a sort of porous earthenware, with which they supply not only all Mexico, but the neighbouring states upon the Pacific. Shawls of striped calico, much used by the lower orders, are made in considerable quantities, as were formerly blankets; but this branch of trade, after suffering much in 1812, when the port of San Blas was opened by General Cruz, has been destroyed entirely by the late importations from the U. States." (*Ward*, ii. 357.) There is at present little or no foreign trade, San Blas having been nearly abandoned for the ports of Mazatlan and Guaymas; and foreign goods are now brought overland, chiefly from San Luis or Mexico. When Mr. Ward visited Guadalaxara there was but one foreign mercantile house in it, which belonged to a British merchant. This city was founded in 1551, and in 1570 was erected into a bishopric. Under the Spaniards it was the cap of an intendency of the same name, and the seat of a royal *audiencia*, as well as of some flourishing manufactures.

In no part of Mexico have republican principles made such progress as in the state of Guadalaxara. It was here that the revolution was brought to maturity, that the rise and fall of Iturbide was effected,

and the law banishing Spaniards from the country passed the senate. The government has shown a laudable desire to promote education. Lancastrian and other schools are diffused throughout the state; four printing presses have been established in the cap. since the revolution; and by the constitution, those who, after 1840, are unable to read, will lose the right of voting at elections; and in no part of Mexico has so vigorous and successful a resistance been made to the encroachments of the ecclesiastics, or the influence of the latter been so much diminished. (*Ward's Mexico*, ii. 356—364.; *Humboldt, Essai, &c.* · *Poinsett; Hardy; Thompson's Alcedo, &c*)

Guadalaxara, a town of Spain, and cap. prov. of same name, on the E. bank of the Henares, 35 m. S.W. Madrid; lat. 40° 33′ N., long. 3° 22′ 15″ W. Pop., according to Miñano, 6,736. It was once walled, and fragments of its walls still remain. It is wretchedly built; the only buildings of any consideration being the palace of the Duke del Infantado, a large edifice, constructed with very little taste; and the church of the Franciscans, which contains a superb mausoleum of the duke's family, said to be second only in splendour to that of the Escurial. Here is a bridge over the Henares, originally built by the Romans, and restored in 1758. A woollen cloth factory established here by Philip V., is said to have employed, in 1786, 4,000 hands, besides giving employment in spinning to no fewer than 40,000 in the adjacent villages. But, as might have been anticipated, it has greatly declined; and now scarcely pays, and most probably never did pay, its expenses. The town is the seat of a corregidor, and is governed by an alcalde of the first class.

GUADALQUIVIR, a river of Spain, having its sources in Murcia and La Mancha, and flowing S.W. through Andalusia. The source called the Guadalquivir, is in the Sierra de Cazorla, lat. 37° 51′ N., and long. 2° 58′ W.; but the true source, and that most distant from the mouth, the Guadarmena, rises in the Sierra de Alcaraz, not far from the town so called; lat. 38° 48′ N., long. 2° 30′ W. The length of the river from this point is 240 m. direct distance, and 320 m. along the channel. The general direction is S.W. by W. as far as Seville, where it takes a turn nearly S., and, after forming two islands, Isla Major and Isla Minor, flows through a marshy and most unhealthy flat into the Atlantic, at San Lucar. It is navigable for vessels of 100 tons as far as Seville, and for boats as high as Cordova, 774 ft. above the sea. The chief affluents are, the Jandula, Guadiato, Bembezar, and Biar, on the r. bank; and the Guadalimar, Guadiana menor, and Xenil, on the l. Of these the Xenil, flowing through Granada, is the longest, being 120 m. long. The ancient name was Bætis: the present appellation is Arabic, *Wady-al-kebir*, the great river.

GUADELOUPE, one of the Windward Islands, in the W. Indies, and one of the most valuable colonies belonging to France, lying (inclusive of Grande-Terre) between lat. 15° 58′ and 16° 13′ N., and long. 61° 15′ and 61° 55′ W., 40 m. S.E. Antigua, and 30 m. N. Dominica. Together with its dependencies, the adjacent islands of Marie-Galante, La Désirade, and Les Saintes, and 2-3ds of the island of St. Martin (Leeward Islands), the area and pop., in 1836, of the colony, has been estimated as follows:—

Islands.	Area in English sq. m.	Free Pop.		Slave Pop.*		Total.
		Male.	Female.	Male.	Female.	
Guadeloupe -	534	15,017	17,042	46,034	49,575	127,668
Marie-Galante -	60					
Les Saintes -	5					
La Désirade -	16					
Saint Martin -	20					
Grand Total -	635	32,059		95,609		127,668

Guadeloupe is divided into two unequal parts by the *Rivière-salée*, or Salt River, an arm of the sea about 5 m. in length, and varying in width from 30 to 120 yards. The division S.W. of this inlet is Guadeloupe Proper; that on the N.E. is called Grande-Terre: the former is of an oblong shape; length, N. to S., about 25 m.; average breadth, about half as much; area, 82,289 hectares. A chain of volcanic mountains, covered with woods, runs through the centre of the island, nearly in its entire length. The medium height of its summits is somewhat more than 3,000 ft.; but, near its S. extremity, the *Soufrière*, a volcano still exhibiting a smouldering activity, rises to 5,108 ft. above the level of the ocean. A multitude of rivulets, by which every part of the island is well watered, run down the flanks of this mountain chain; two of them, the Goyave and Lezarde, are navigable for small craft, and highly useful for the conveyance, upwards, of sea-mud, to manure the lands, and downwards, of the produce of the land. Guadeloupe contains many mineral springs.

The island of Grande-Terre is of a triangular shape, and has an area of about 55,923 hectares. It is little raised above the level of the sea, and differs remarkably in its features from Guadeloupe. It is almost a level plain, with only a few scattered hills. It is destitute of woods, and its rivers are insignificant; in consequence of which the rain, which is much less frequent than in Guadeloupe, is obliged to be carefully preserved in cisterns. Marie-Galante, a circular-shaped island about 12 m. to the S.E., is traversed, E. to W., by a chain of hills, which, like those of Guadeloupe, abound in timber.

The mean temperature of the year at Basse-Terre is about 81° Fah.; its annual range is between 70° and 99°. In the sun, the thermometer sometimes rises to 130° Fah.; the heat is, however, tempered by land or sea-breezes. The atmosphere is remarkable for humidity. About 86 inches of rain falls annually, on an average, chiefly between the middle of July and the middle of October. Like the other Antilles, Guadeloupe, is very subject to hurricanes, and shocks of earthquakes are frequent. The soil is light and easy of tillage, but its productiveness is owing more to the heat of the climate and the abundance of water than to its richness. The soil of Grande-Terre is, on the other hand, very rich. Almost every part of that island is capable of cultivation, and, notwithstanding the deficiency of water, it is very productive. The total surface of the colony is said to have been divided as follows, in 1835:—

Islands.	Total Surface.	Cultiv. Lands.	Pasturages.	Woods.	Uncultivated.
	Hectares.	*Hectares.*	*Hectares.*	*Hectares.*	*Hectares.*
Guadeloupe -	138,212	38,004	19,801	20,528	59,879
Marie-Galante -	15,344	4,109	3,201	1,626	6,408
Les Saintes -	1,256	162	89	192	813
La Désirade -	4,330	629	457	121	3,123
Saint Martin -	5,371	1,841	241	674	2,615
Total -	164,513	44,745	23,789	23,141	72,838

The following table shows the mode in which the cultivated lands were occupied, in 1836, the number of slaves employed, and the quantities of produce obtained:—

Articles grown.	No. of Hect. cult.	No. of Slaves employed in culture.	Produce.
Sugar-cane -	24,573	42,167	Raw sugar 34,697,068 kilog. 139,654 — Syrup and Molasses 5,964,750 litres. Rum - 2,381,175 —
Coffee - -	5,838	6,037	471,685 kilog.
Cotton - -	1,027	1,615	68,194 —
Cocoa - -	179	135	10,301 —
Cloves - -	2	122	239 —
Tobacco - -	30	9	34,047 —
Mulberry-tree -	11	126	
Corn, Pulse, &c.	13,100	3,490	
Total -	44,760	53,701	

The sugar-cane, at present grown, is of the Otaheitian variety, and was introduced in 1790, after the other kinds were found to have degenerated. For the last fifteen years its culture has very much increased, and in a great measure superseded that of coffee. Most of the kitchen vegetables of Europe are raised in the gardens at Basse-Terre; but they degenerate rapidly; tropical fruits, and others of the S. of Europe, attain considerable perfection. Agriculture has been much improved of late years by the introduction of the plough and the use of manure, including lime, salt, &c. The sugar manufacture has been also greatly improved by the introduction of steam-mills. The live-stock consists principally of black cattle, sheep, and mules. Guinea grass is the only forage grown.

The manufacturing establishments are limited to 3 tanneries, a pottery, and about 24 limekilns. The various trades and handicrafts in the colony are exercised by about 1,600 individuals, chiefly whites, or free coloured labourers. There is no fishery on any extended scale; but about 30,000 kilogs. of fish are annually taken. We subjoin an

Account of the Quantity and Value of the principal Articles exported from the Island in 1836.

Articles exported.		Quantity.	Value.
Raw sugar - -	kilogr.	36,377,548	21,807,344 *fr.*
Molasses - -	—	2,554,424	609,993
Rum - -	litres.	167,945	98,801
Coffee - -	kilogr.	915,354	1,464,567
Dye-woods - -	—	512,912	102,582
Cotton - -	—	98,841	197,662
Copper - -	—	13,831	27,576
Gold and silver -	grammes.	399,919	82,199
Other articles -	-	- -	185,019
Total - -		- -	24,575,141 *fr.*

* From July 1830 to Jan. 1837, 8,637 slaves were emancipated, about 1-10th part of whom purchased their liberty.

Nearly all the exported articles are sent to France, whence 9-10ths of the imports are derived. The imports are chiefly salted meat and fish, wheat flour, maize, pease and beans, olive oil, cotton, linen, and silk fabrics, wine, timber, candles, perfumery, hats, &c., amounting, in 1836, to the value of 26,769,217 fr. In the same year, 518 French vessels, of the aggregate burden of 70,027 tons, entered, and 543, of the burden of 69,066 tons, left the island: the number of foreign ships which entered and left was 156. The principal roadsteads and ports are those of Basse-Terre, and Mahault, in Guadeloupe; Pointe-à-Pitre, and Moule, in Grande-Terre; the roadstead of Saintes, and a few others.

Guadeloupe and its dependencies are divided into 3 arrondissements, 6 cantons, and 24 communes. The legislature consists of a governor, and a colonial council of 30 members, elected for 5 years, by natives of France resident in the island, above 25 years of age, paying taxes of 300 fr. a year, or having a capital of the value of 30,000 fr. In 1836, the number of electors was 1,092. To be eligible for a member of council, an individual must be 30 years of age, and pay taxes to the amount of 600 fr., or possess property of the value of 60,000 fr. In 1836, 619 persons were eligible for counsellors. There is a royal court at Basse-Terre; the other tribunals are 2 courts of assize, 3 of original jurisdiction, and 6 tribunals of justices of the peace. The colony has a military commandant, and an armed force of 2,138 men, including 100 officers. There are about 30 ecclesiastics, upwards of 50 public schools, and hospitals in the chief towns. The public revenue for 1837 was fixed at 4,412,318 fr., and the expenditure at 4,396,967 fr., leaving a surplus of 15,351 fr.; but of the former only 2,134,527 fr. were contributed by the colony. Basse-Terre, the cap. of Guadeloupe, and the seat of government, on its S.W. shore, is clean, well built, and contains 5,500 inhab. It has two parish churches, a government house, hall of justice, a large hospital, an arsenal, some good public fountains and promenades, and a fine colonial garden. It is defended by several batteries on the side of the sea.

Capesterre, on the E. side of the island, is its other chief town. Pointe-à-Pitre, a town of 12,000 inhab., is situated at the W. end of Grande-Terre. It owes its prosperity to its excellent port. It is regularly built, has a handsome church, and many good private edifices. Several forts protect its harbour. The other towns are insignificant; but three of them, besides the foregoing, have their own municipal councils. These islands were discovered by Columbus, in 1493: the French took possession of them in 1635. Guadeloupe has, on several occasions, been taken by the English, and was occupied by British troops from 1810 to 1815, when it was restored to France. (*Notices sur les Colonies Françaises*, tom. i.; *Official Reports; Encyc. des Gens du Monde.*)

GUADIANA, (an. *Anas*, Arab. *Wady-Ana*), a river of Spain, rising in the mountains of La Mancha, about 15 m. N.W. of Villahermosa, lat. 38° 55′ N., long. 2° 48′ W., and flowing through New Castile, Estremadura, and a part of Portugal. It has several sources, which form small connected lakes, called the Lagunas de Ruidera. Its direction at first is N.N.W. for about 30 m.: it then disappears among the marshes, and is not traceable for 14 m. It rises again N.E. of Daymiel, at a place called Los Ojos de Guadiana, with a general E. direction past Merida, as far as Badajoz, where it turns S., and after a very tortuous course of 424 m., enters the Atlantic by two mouths. It is navigable about 45 m. as far as Mertola, to the falls called *El Salto del Lobo*. The chief affluents are the Gigucla, the Guadarranque, and the Oeiras, on the r., and the Jabalon, the Guadalema, the Ardilla and the Chanza, on the l. bank. With the exception of the Giguela, the affluents on the l. bank are by far the largest.

GUADIX (an. *Acci*), a town of Spain, prov. Granada, on the river of same name, 32 m. W. by S. Granada, and 216 m. S. Madrid. Pop., according to Miñano, 9,110. It is an old walled town, with steep, narrow, and badly-paved streets. It has a cathedral, built in the Corinthian and Composite orders, with a handsome portico, 5 par. churches, 7 convents, and an hospital. The approach to the town is through a fine avenue of trees, and the surrounding land is rich, and subjected to irrigation. The chief branch of industry is the manufacture of large clasp knives. (*Townsend*, iii. 102.) Inglis remarks that "Guadix is famous for its midnight frays." It is a bishop's see, and is the seat of a corregidor (*Inglis*, ii. 196.)

GUAMANGA, or HUAMANGA, called also *San Juan de la Victoria*, or *de la Frontera*, a city of Peru, cap. prov., on the river of same name, in an extensive and beautiful plain, 210 m. E.S.E. Lima, and 185 m. W.N.W. Cuzco. Pop. 25,000.? It is well built, has good squares and streets, and the houses, which are of stone, have gardens and orchards attached to them. Alcedo affirms that no town in Peru is to be compared with it as to its buildings, and speaks very favourably of its climate. It has a cathedral, with several other churches and convents; and a university with faculties of philosophy, divinity, and law. Guamanga is the seat of an intendent, and the see of a bishop. It was founded by Pizarro, on the site of an Indian village of the same name, for the convenience of the trade between Cuzco and Lima. (*Dict. Géog.; Mod. Trav.*, xxvii.)

GUANARE, a town of the repub. Venezuela, dep. Orinoco, prov. Varinas, on a river of the same name, 45 m. S.E. Truxillo, and 65 m. N.N.E. Varinas. Pop. 12,300. It has wide and straight streets, and neatly built houses. A handsome church, the interior of which is splendidly adorned, contains a shrine of our Lady of Conomorato, much resorted to by pilgrims. The chief wealth of the inhab. is derived from their trade in cattle, of which they possess large herds; and which, together with mules, &c., they export by way of Coro, and Puerta Cabello.

GUANAXUATO, or GUANAJUATO, an inland and mining city of Mexico, cap. of the state of same name, in the Sierra de Santa Rosa, 6,836 ft. above the level of the sea, and in the very centre of the richest mining district in the whole country, 156 m. N.W. Mexico; lat. 21° 0′ 15″ N., long. 79° 23′ 53″ W. Pop., including its suburbs, according to Humboldt, in 1803, 70,600, which number had, however, diminished to 34,000 in 1835. The town is very irregularly built: the streets are full of ascents and descents, many of which are so steep as to render the use of four mules in the carriages of the more wealthy inhabitants almost universal. The open spaces cannot be called squares, for they are of irregular and indescribable forms: the whole city, in short, is distributed here and there, wherever vacancies at all adapted for building have been left by the mountains. One part is so hidden from another, that, viewed from the streets, it appears to be a small town. "It is only by ascending the heights on the opposite side that a view is gained of the whole valley, broken into ravines, along the sides of which the town is built. Surveyed from this point, the novelty of its situation strikes the stranger with astonishment. In some places it is seen spreading out into the form of an amphitheatre; in others, stretching along a narrow ridge; while the ranges of the habitations, accommodated to the broken ground, present the most fantastic groups." (*Mod. Trav.* xxvi. 2.) The houses also have a singular appearance: they are large, and well built of hewn stone, but disfigured by their fronts being painted of the gayest colours! Some of the residences belonging to the principal families are, however, really magnificent, as are the churches, and the Alhondiga, or public granary. But the civil war, and the decay of the mines, has inflicted great and, perhaps, irreparable injury on the city. The town and its suburbs have numerous amalgamation works, one of which sometimes occupies a whole ravine, the spaces above, on either side, being crowded with miners' huts. Guanaxuato suffers two serious inconveniences; one is, a scarcity of water, there being within the city only a few cisterns belonging to wealthy individuals; so that most part of this important necessary has to be brought a distance of 2 m. upon the backs of asses: the other is, that during a portion of the year it is liable to inundation from the torrents which descend from the mountains, and, though works to prevent this have been constructed at a great expense, few years pass without some accidents occurring. Some of the public highways have been strangely neglected. On approaching Guanaxuato from the S., there is, indeed, a raised path for foot-passengers, but coaches and animals of all kinds have to proceed up the bed of a river, which during the rainy season rushes along with dangerous impetuosity.

This town has been entirely created by the mines which surround it. In the vicinity of some of them, little *pueblos*, as Valenciana, Rayas, Serena, &c., have been formed, which may be considered as its suburbs. The first mine — that of St. Barnabe — was opened in 1548; but it is only within the last 70 or 80 years that the mines of Guanaxuato have become so famous. In 38 years, viz. from 1766 to 1803, they produced gold and silver of the value of 165,000,000 piastres, or 12,720,060 lbs. tr.; the annual average produce being 556,000 marcs of silver, or 364,911 lbs. tr., and from 1,500 to 1,600 marcs of gold. (*Mod. Trav.* xxvi. 3.) The *Veta-Madre*, or great "mother-vein," is composed of several parallel veins running N.W. and S.E. for rather more than 5 leagues, within which distance there have been upwards of 100 shafts opened. According to Humboldt, the mother-vein has yielded more than a fourth part of the silver of Mexico, and a sixth part of the produce of all America. The principal mines situated on this vein are those of Valenciana, San Juan de Rayas, Mellado, Secho, Cata, Tepeyac, Serena, &c. When Humboldt visited these works in 1803, they employed 5,000 workmen, 1,896 grinding mills, and 14,618 mules; and before the revolution of 1810, they yielded, in all, 10,000 mule-loads of ore, of 11 arrobas (275 lbs.) each, weekly; making 62,562 parcels of 82 quintals of ore yearly, worth 7,727,500 dollars. Of this quantity, the mine of Valenciana alone produced from 5,000 to 6,000

loads, Rayas 1,500, and the other mines the remainder. (*Poinsett's Notes, &c.*, 206, 207.) According to Mr. Ward, the mother-vein supplied bullion from 1766 to 1829 (the date of his publication), of the value of 225,935,736 dollars. (*Ib.* ii. 189.)

"The mine of Valenciana," says Humboldt, "is the sole example of a mine which, for forty years, has never yielded less to its proprietors than from 2,000,000 to 3,000,000 fr. (80,000 to 100,000*l.*) annual profit." (*Polit. Essay*, iii. 193.). It is at the N.W. extremity of the mother-vein. After having been abandoned for a long period as unpromising, it began again to be wrought about 1762, by M. Obregon, a young Spaniard without capital, but with good credit and great perseverance. In 1768 considerable quantities of silver began to be extracted from it; and from 1771 till 1804, it constantly yielded an annual produce of 600,000*l.*, the net profit to the proprietors being in some years as much as 250,000*l.*! At that period, 1,800 men were employed in the interior of the mine, besides 300 men, women, and children employed without in different ways; and Valenciana (a town which afterwards contained 22,000 inhab.), at an early part of these proceedings, sprang up, and had between 7,000 and 8,000 inhab. on the very spot where goats had been browsing 10 years before. The machinery of this celebrated mine was much injured by Hidalgo in 1810, and destroyed by Mina after his unsuccessful attack on Guanajuato in 1818. When the Anglo-Mexican Mining Association undertook to drain and work the mine, it was nearly 3-4ths filled with water, and the town of Valenciana had become a ruined place, with only about 4,000 inhab.; and notwithstanding the expenditure of vast sums by the Association it has not hitherto recovered its former productiveness.

Much of the landed property in this and the neighbouring states, belongs to the great mining families resident in Guanajuato. The vicinity of this city abounds with tillage-land, yielding rich crops of wheat, barley, maize, &c., orchards, gardens, &c. Agriculture has been much depressed through the injury done to the mines, and the suspension of mining labours. Guanaxuato was founded in 1545, constituted a town in 1619, and a city in 1741. (*Humboldt; Ward; Hardy; Poinsett; Sketches of Society in Mexico; Mod. Trav., &c.*)

GUATEMALA, GUATIMALA, or CENTRAL AMERICA. Under this term is included the long and comparatively narrow tract of country connecting the continents of N. and S. America, lying between lat. 8° 5′ and 16° 50′ N., and long. 80° 50′ and 94° 12′ W.; having N. the Mexican provinces Tabasco and Yucatan, and the Bay of Honduras, E. the Caribbean Sea and the Columbian province of the Isthmus, and S. and W. the Pacific Ocean; length, N.W. to S.E., about 1,000 m.; breadth varying from 90 to 250 m. Besides the British settlement of Honduras, and the independent territories of the Mosquito Indians and Poyais, Central America includes the territories of 6 republican states, and a federal district common to the latter, the area, pop., &c. of which have been estimated as follows by Don G. Galindo in the *Geographical Journal*, vol. vi., and the *American Almanack* for 1840:—

Republics.	Area in Eng. sq. m.	Population.				Chief Towns.
		Indians.	Whites.	Ladinos.	Total Pop.	
1 Guatemala	196,000	500,000	104,000	170,000	464,000	Guatemala.
2 Quesaltenango					320,000	Quesaltenango.
3 Honduras		- -	70,000	280,000	350,000	Comayagua.
4 Nicaragua		120,000	110,000	120,000	350,000	Leon.
5 Salvador		60,000	60,000	180,000	300,000	San Vincente.
6 Costa-Rica		25,000	125,000	- -	150,000	San José.
Federal District *		25,000	13,000	28,000	66,000	San Salvador.
Total	196,000	740,000	482,000	778,000	2,000,000	

The above table has few pretensions to accuracy, no general census having been taken since the declaration of independence. In the pop. of Honduras is included that of the Mosquito coast; that of Guatemala comprises the British settlers of Belize, &c., amounting to about 4,000; and to that of Quesaltenango are added 6,155 inhab. of the prov. Soconusco on the Pacific, which has remained, since 1823, as a neutral territory between Central America and Mexico.

Physical Geography. — No very distinct mountain chain traverses Guatemala, but an elevated plateau occupies the central parts of the country, forming a kind of chain of communication between the Cordilleras of S. America and the mountain chains of Mexico. This plateau rises much more precipitously from the side of the Pacific than the Atlantic, the general slope of the country being to the N.E. The table-land rises also considerably as it proceeds N.W.: in Costa-Rica and Nicaragua its highest parts are of very moderate elevation, and the lake of Nicaragua, situated in a plain bounded on either side by hills of no great height, is less than 134 ft. above the level of the Pacific. In the states of Guatemala and Quesaltenango, the table-land averages perhaps 5,000 ft. in height above the ocean: the loftiest summits, which are either active or extinct volcanoes, being in that part of the confederation. The Water Volcano, near Guatemala, so called from its frequently emitting torrents of hot water and stones, but never fire, is 12,620 ft. above the Pacific. There are two large plains — those of Nicaragua and Comayagua, besides many of less size on the banks of the larger rivers and along the shores: these principally consist of extensive savannahs with rich pasturage interspersed with clumps of trees. All the larger rivers flow N.E. or E., the proximity of the high mountain range to the Pacific permitting but a short course to those flowing W. The chief are the Motagua, Honda, Belize, Polochie, Rio de Segovia, the San Juan, connecting the lake of Nicaragua with the Atlantic, &c.; the banks of most of them are richly wooded. The Motagua is of considerable size, and useful for the conveyance of European and other goods into the interior of Guatemala. The lake of Nicaragua, 130 m. long by more than 40 m. average breadth, is by far the most important, and it will probably form an important part of the projected water communication between the Atlantic and Pacific. (For further details, *see* NICARAGUA, LAKE.) The other principal lakes are the Golfo-Dolce, and those of Leon or Managua, Peten, Atitan, Amatitan, &c. The Golfo-Dolce, 24 m. long by 10 broad, receives several rivers, and discharges itself by the Rio Dolce into the Bay of Honduras. Central America possesses an advantage over Mexico in having excellent harbours on both seas; its coasts are indented by deep and capacious gulphs, as those of San Juan and Chiriqui, on the Caribbean Sea, and of Nicoya, Papago, and Conchagua, on the Pacific. A few islands surround the shores, but they require no description. (*Galindo, in Geogr. Journal*, vi., &c.)

Climate. — The coast plains are subject to violent tropical heats, and are very unhealthy, especially those on the Caribbean Sea, where fevers incessantly prevail. These are chiefly inhabited by the Indian pop., whose constitutions are better able to resist the pestiferous nature of the atmosphere than those of Europeans. The climate of the table-land varies according to its elevation, but an equable, moderate, and agreeable temperature may be obtained there all the year round, with a perfectly healthy climate. The dry season lasts from October to the end of May, during which N. winds prevail; and in the table-land, in November and December, water exposed to the open air at night, is sometimes, though rarely, covered with a thin pellicle of ice. The rest of the year is entitled the wet season; but the rains, though heavy, last only during the night, and the days are fair and cloudless. Earthquakes are very frequent. *Goitre* is a common disease in the high regions of Central America.

Mineral Products. — The precious metals are found in great abundance in Honduras, Costa Rica, and other provinces; with copper, iron, lead, nickel, zinc, antimony, &c.

The Vegetable Products are of greater importance. The forests yield many valuable kinds of timber, including mahogany, cedar, *palo di maria*, a species of wood well adapted for ship-building, &c. But the logwood tree (*Hæmatoxylon Campeachianum*, Linn.) is by far the most valuable of the products of the forests. It is found here and in the adjoining peninsula of Yucatan in the greatest perfection, and is a most important article of export; a species of Brazil wood is also exported. Among the other vegetable products may be enumerated the dragon's blood, mastic, *palma Christi*, and other balsamic, aromatic, and medicinal plants; with the sugar-cane, cocoa, indigo, coffee, tobacco, and cotton, which are extensively cultivated. The crops vary according to the elevation of the surface. Below the level of 3,000 ft., indigo, cotton, sugar, and cocoa, are the principal. The last is chiefly grown along the shores of the Pacific, and that of Soconusco was esteemed by the Spaniards the best furnished by their American possessions. The federal district is distinguished

* This is a circle round the city of San Salvador, 20 m. in diameter, with a farther extension of 10 m. towards the S., to include the roadstead of Libertad on the Pacific.

for the growth of indigo, to which the agriculturists devote their attention so exclusively, as almost wholly to neglect the cultivation of articles of prime necessity. The culture of indigo is, however, very general throughout Central America, and, according to Humboldt, it was formerly produced to the value of 12 millions of livres a year. Between the heights of 3,000 and 5,000 ft., the Nopal, or cochineal plant, is a favourite object of cultivation, particularly in the neighbourhood of Guatemala. Maize is generally grown, but wheat only in the high table-land in the N.: it is almost unknown in Nicaragua and Costa-Rica. Flax and hemp, though they grow luxuriantly, receive little attention, owing to the superior facilities for growing and manufacturing cotton; and vanilla is suffered to run to waste for want of hands to gather and prepare it. Among the remaining kinds of produce, are tamarinds, cassia, long pepper, ginger, and others, which, though highly useful, are little known in commerce. A fruit called the *chicozapote*, yielding a great deal of substantial nourishment, supplies the place of maize, and forms a principal article in the traffic of some provinces.

Cattle. — Horses, asses, sheep, goats, and hogs, having been introduced by the Spaniards, are now found in great abundance. Large flocks of sheep are reared by the *Ladinos* on the table-land of Quesaltenango almost solely for their wool, their flesh being very expensive, and only met with at the tables of the wealthy. Immense herds of cattle are pastured in the grazing farms of Nicaragua, where the country is not favourable for breeding sheep, and the most valuable resources of Costa Rica are in its cattle, sheep, hogs, and goats. The horses are not good; but the mules are very superior.

The wild animals comprise the American tiger, wolf, tapir, mountain-cow, wild goat, wild striped boar, flying squirrel, the *zorillo*, noted for its fetid odour, &c. Few of them are very formidable; but the densely wooded coast of the Pacific is much infested by dangerous reptiles, including the cayman, and several venomous serpents. The birds exhibit the most beautiful plumage. Locusts occasionally cause extensive devastation, and in some provs. swarms of warrior-ants frequent one house after another, clearing it, however, of all other vermin. The pearl-oyster is found on the coasts.

Industry.—Agriculture, and cattle and sheep breeding, are the chief occupations of the people; but the manufactures are not quite unimportant. While it belonged to Spain Guatemala produced most of the cotton and woollen fabrics required for its own consumption: at present the former are chiefly imported from Great Britain. but coarse woollens are still manufactured, together with some cotton cloths, caps, hats, &c. A good many hands are also employed in making earthenware, furniture, wooden articles in cabinet work, &c., and an inland trade is carried on in mats, woven of different colours by the Indians, and used at Guatemala as carpets.

"From the mine called *Tisingal*" (Costa Rica), says Alcedo, "not less riches have been extracted than from that of Potosi in Peru." That state has also the gold mine of Aguacate, which began to be wrought about 1821; but we have no recent accounts of its produce. Several companies have been at different times formed to work this and other mines, and the government have long been endeavouring to induce capitalists to undertake the working of the silver mines in the prov. of Comayagua (Honduras). In the prov. Chiquimula, in the same state, some mines have been wrought to considerable advantage. According to a report of the assay master of the mint, every cwt. of ore from these mines formerly yielded 17 marcs 6 3·8 oz. (the marc = 8 oz.) of silver. A mine at Tabanco, in Salvador, used to be wrought to advantage by an English house in Belize. Most of the metallic wealth raised in Honduras is smuggled in bullion through Belize, and the Mosquito coast to Jamaica; not more than 1-3d part of the whole obtained in the Confederation being sent to the head mint. Owing, however, to the coinage duties in Mexico, Peru, and Chili, considerable quantities of the precious metals are sent from those countries to be coined at the mint of Guatemala. At Tegucigalpa, in Honduras, there is a mint coining about 1,400 dollars a-week of *masquequina*, or cut money. Private coining, and base money, are common, especially in Nicaragua.

Commerce. — The foreign trade of the Confederation, though considerable, is trifling compared with what it might be were the inhabitants intelligent and enterprising. The principal articles of export are bullion, indigo. cochineal, dye-woods, sarsaparilla, balsam of Peru, hides, tortoiseshell, &c. The imports consist chiefly of cotton, linen, and silk fabrics; hardware, and cutlery; earthenware, wines, trinkets, &c. The trade is principally in the hands of the English and Americans; but being mostly carried on through Belize, its amount connot be exactly specified. The principal ports on the Pacific are Realejo, Calderas, La Union, Libertad, Acajutla, and Istapa; those on the Bay of Honduras and the Caribbean Sea are Omoa, Truxillo, and San Juan de Nicaragua. The following is a

STATEMENT of the Quantities and Value of Goods imported into and exported from Central America, in 1835.

Imports.		Exports from	Guatemala.		San Salvador.		Honduras.		Nicaragua.		Costa-Rica.	
Articles.	Value.	Articles.	Quantities.	Value.	Quantities.	Value.	Quantities.	Value.	Quantities.	Value.	Quantities.	Value.
	Dollars.			Dollars.		Dollars.		Dollars.		Dollars.		Dollars.
Dry goods -	2,500,000	Indigo (seroons of 150 lbs.)	150	22,500	5,000	750,000	100	15,000	200	30,000		
Wine, oil, spirits - -	250,000	Cochineal - -	3,500	787,500								
Hardware -	250,000	Gold and silver -	- -	40,000	- -	20,000	- -	600,000	- -	- -	- -	300,000
Provisions for the S. coast -	60,000	Sarsaparilla (quintals)	1,000	8,000	- -	- -	6,000	60,000	1,000	10,000	4,000	40,000
Sundry articles	200,000	Dye woods (do.)	- -	- -	- -	- -	- -	- -	300,000	600,000	100,000	200,000
Cash - -	300,000	Hides (No.)	10,000	10,000	30,000	30,000	6,000	6,000	10,000	10,000	20,000	20,000
		Mahogany and other woods -	- -	5,000	- -	- -	- -	- -	- -	20,000		
		Peruv. balls (lbs.)	- -	- -	20,000	15,000						
		Sugar (do.)	- -	- -	- -	6,000	- -	- -	- -	- -	- -	20,000
		Coffee (quintals)	- -	- -	- -	- -	- -	- -	- -	- -	8,000	80,000
		Tortoiseshell -	- -	- -	- -	5,000	- -	48,000				
		Cattle - - -	- -	- -	-	- -	- -	20,000				
			- -	873,000	- -	836,000	- -	749,000	- -	670,000	- -	660,000
Total value of Imports -	3,560,000	Total value of Exports -	- - - - - 3,782,000 dollars.									

The Government is modelled on that of the U. States. Since 1824, Central America has formed a federal republic, with a president, vice-president, senate, and a house of representatives. The house of representatives is composed of deputies selected by the people in the proportion of one to every 30,000 inhab.; half its members are re-elected annually. The senate consists of two members from each state; one third of the senators are re-elected every year. The president and vice-president, elected for four years, are entrusted with the executive power. There is a supreme court of justice, composed of six members elected by the people, which decides in cases of final jurisdiction, and has a power of judicature over the president, senators, ambassadors to foreign states, secretaries of state, and other functionaries. One third of its members are re-elected every two years. All elections are conducted through the medium of electoral colleges, as in France.

Each of the states has for its internal government an assembly of deputies, a council with powers similar to the senate, and a chief and deputy chief with functions similar to those of the president and vice-president. The cities, towns, and villages have municipalities, the members of which are annually elected, and at which the *alcaldes*, or chief justices, preside. Three ministers of state, appointed by the president, superintend the departments of foreign and home affairs, finance, and war. In the state of Guatemala the Spanish laws have been entirely abolished, and the code compiled by Mr. Livingston, of the U. States, substituted in their stead.

Religious Establishments. — The Roman Catholic is the established religion, but complete religious toleration exists. The archbishop of Guatemala is primate; there are three bishops, those of Leon, Comayagua, and Ciudad Real; and the whole country is divided into about 300 parishes, each having a curate with an income of about 1,500 dollars a year. The monastic orders have been wholly suppressed; and the few nunneries that

exist are not permitted to enforce the residence of their inmates against their will. Each of these establishments has attached to it a free school for the education of the poor in reading, writing, arithmetic, and religious principles. Slavery is entirely abolished.

People. — The Indians of the state of Guatemala preserve to a great degree their aboriginal languages and customs, but in the other states they speak a Castilian patois, and their manners are assimilated to those of the mass of the pop. The chief occupation of the settled tribes is agriculture; some are engaged as workmen in various manufactures. They live in great harmony with the whites, but entertain a dislike to the *ladinos*. The latter are a mixed breed between the whites and Indian tribes; their complexions are much fairer than those of the W. Indian mulattoes, and many are little distinguishable in appearance from the whites. The latter are mostly of Spanish descent. It is alleged, but we are very doubtful as to the authenticity of the statement, that among the whites and ladinos there is an extraordinary excess of female over male births, the former being to the latter, it is said, nearly as 6 to 4! Among the Indians the births of males and females are about equal. (*Geog. Journ.* vi. 126.)

History. — The N.E. coast of this region was discovered by Columbus in 1502. Most part of it was conquered by the Spaniards about 1524, and erected into a captain-generalship by the emperor Charles V., in 1527. The policy adopted by Spain towards Guatemala was attended with unintentional benefits to the latter. Being only a captain-generalship, the scale of its public expenditure was kept down in deference to the higher pretensions of the Spanish viceroyalties, and as its financial wants were few, taxation pressed lightly on the people. It was not, however, permitted to export more of its native products than were sufficient to pay for the articles which the merchants of Cadiz thought necessary to send for its consumption! Central America became independent in 1821, and was subsequently incorporated with Mexico; but on the fall of Iturbide, it disconnected itself from the Mexican republics, and was formed into a separate confederation in 1823. After its separation from Spain, its finances suffered greatly from the remission of the tribute formerly paid by the Indians, and the abolition of the taxes on cards, the moiety of secular revenues, bulls, and some customs and tobacco duties, and the reduction of the ordinary *alcavala* duty from 6 to 4 per cent. The national debt was thereby greatly increased, but a powerful impulse was, at the same time, given to national industry. Since the declaration of independence, the country has been disturbed by frequent civil wars; but these have at present happily subsided. (*Thompson's Official Visit to Guatemala; Harfkins; Centraal Amerika; Encycl. Americana; Galindo, Roberto, &c.*)

GUATEMALA (SANTIAGO DE), or NEW GUATEMALA), a city of central America, cap. repub. of same name, in the spacious plain of *La Virgen*, in the valley of Mexico, 1,800 feet above the level of the sea 106 m. W.N.W. San Salvador, and 655 m. E.S.E. Mexico: lat. 14° 37′ N., long. 90° 35′ W. Pop. 40,000.? Viewed at a distance from the surrounding mountains, few cities present a more beautiful aspect. It lies in the midst of sloping meadow lands and rich plantations; its walls, domes, and steeples being covered with a white and glittering cement. It forms a square divided into 4 quarters, each of which is again divided into two *barrios*, or wards, superintended by their own alcaldes. The streets, which are 12 yards broad, are mostly paved, and in their centre is usually a streamlet of water. To obviate the danger of earthquakes, the houses are only one story high; but they occupy a considerable space, being built in squares, round one or more open courts. The roofs are flat. The *Plaza*, or Great Square, is a rectangle, 150 yards each way, surrounded on three sides with colonnades, and having in it the cathedral, with the archbishop's palace, the *College de Infantes*, the old royal palace, and various government offices, including the supreme court of justice, treasury, and mint; the town-hall, prisons, markets, public granary, custom-house, &c. In the middle is a large stone fountain, of very superior workmanship, supplied with water brought by pipes from the mountains upwards of 2 leagues distant; the same source supplying 12 public reservoirs, in different parts of the city, besides many belonging to convents and private houses. Besides the cathedral, there are a great number of highly ornamented churches; and Mr. Thompson affirms, that "in the republic the cost of religious worship is equal to twice the expenses of the government!" (p. 148.) There is a university, but it is on a limited scale. Girls' schools are attached to the nunneries, and there are some endowed schools for boys; but, according to a recent account, the total number of children receiving instruction does not exceed 500. On the N.E., adjoining the city, is an extensive suburb, divided into two quarters and four *barrios*. Guatemala has manufactures of fine muslins, gauzes, calicoes, and common cotton goods, earthenware, and china of very good quality, &c. Among the females are excellent embroiderers, dress-makers, and florists; many also are employed in the manufacture of cigars, and spinning cotton yarn of all degrees of fineness. The inhab. possess an aptness for the arts, and are particularly noted as workers in silver, sculptors, and musicians. Their chief entertainments are *pic-nic* parties to the surrounding country; bull fights, a circus for which stands about half a mile from the city; and the theatre, an edifice partially open to the sky, the performances in which take place during daytime. Religious festivals have always been celebrated in this city with great magnificence. On Sundays, from sunrise till 11 o'clock, the churches are devoted to public worship, and filled with successive congregations; but at the latter hour a new scene commences. The church doors are shut; the *plaza*, which till then had been filled with crowds hurrying to and from their devotions, is suddenly converted into a fair: stalls and booths are erected in all parts of it, and the remainder of the day is devoted to business or pleasure.

Guatemala is the seat of the government of the repub. of the same name, and was until recently that of the whole confed. of central America: it is also the see of the primate. It was founded in 1776, after the destruction by an earthquake of old Guatemala, 25 m. W. by S. from the new city. But the latter has been again rebuilt, and is a favourite place of resort, having seldom fewer than from 12,000 to 18,000 inhab. (*Thompson's Guatemala*, p. 469. *&c.*)

GUAYAQUIL, a city, and the chief sea-port of the repub. of Ecuador, Colombia, on the river of the same name, 153 m. S.S.W. Quito, and 43 m. N. by E. the isl. Puna, in the Gulph of Guayaquil; lat. 2° 20′ 21″ S.; long. 79° 43′ W. Pop. 20,000? It is built principally on the N. bank of the river, and is divided into the old and new town, the former being occupied by the poorer classes. The city is tolerably well laid out; and as its houses are of wood, and it has frequently suffered from fires, much of it is comparatively modern, and has a good appearance. Its private residences are mostly tiled and furnished with arcades. It contains several good edifices, including the custom-house, 3 convents, a college, hospital, &c.; but from being situated on a dead level, and intersected by many creeks, the drainage is bad, and the streets are so swampy as to be sometimes impassable. Many of the inhab. live on the river, on *balzas, or* floating rafts, from 50 to 80 ft. long. The river opposite the city is about 2 m. wide, and has on its S. bank a dry dock, where several ships of a superior construction have been built. The city is unhealthy, and, like its whole prov., infested with vermin; it is ill supplied with water, which has to be brought from a considerable distance on *balzas*, which, indeed, are used for the conveyance of all kinds of goods. It deserves to be mentioned that, notwithstanding the severe injury the city has frequently received from fires, it has not a single fire-engine! The port of Guayaquil is one of the best on the Pacific, ships of large size coming up close to the town. It is defended by three forts, one being on the opposite side of the river. Ships bound for Guayaquil usually call at Puna for pilots. The principal articles of export are, cocoa, timber, hides, cattle, tobacco, ceibo wool, &c. We subjoin an account of the quantities of cocoa, exported from Guayaquil during each of the 10 years ending with 1849, specifying the countries to which they were exported in 1849, and the quantities shipped for each: —

Exports in 1849.

	Cargas of 80 lbs.			*Lbs.*
Spain - - -	85,508 11	Or - -		14,231,734
England - -	22,904 28	which was in		
Germany - -	19,644 49	1848	-	21,007,393
France - - -	15,086 40	1847	-	12,073,613
North America -	7,721 23	1846	-	11,807,006
Mexico - - -	6,017 5	1845	-	9,729,069
Havana - - -	6,000 0	1844	-	8,374,147
Italy - -	3,957 67	1843	-	15,463,426
Peru - - -	3,400 64	1842	-	6,709,[illegible]
Chili - - -	3,305 41	1841	-	11,410,230
Central America -	1,793 21	1840	-	14,266,942
New Granada - -	408 12			
Total cargas - -	175,737 0			

The exports of other articles, in 1849, were 17,627 dozen of straw hats, 3,794 small balks (Alfayas), 1,092 mangel trees, 22,517 sole leathers, 12,688 lb. petto fibres, 1,555 cwts. of tobacco, 236 cwts. of tamarinds, 590 cwts. of cascarilla (fibre bark), 75 cwts. of sarsaparilla, 240 orseille.

GUAYMAS, a sea-port town of Mexico, state Sonora, at the mouth of a considerable river, on the E. shore of the Gulph of California, 230 m. W.N.W. El Fuerte. Lat. 27° 50′ N., long. 112° W. Pop., in 1826, about 3,000. It has grown up since the revolution, and owes its origin and rise to its magnificent harbour, the best in Mexico. This inlet is capable of accommodating 200 vessels, and is sheltered from all winds by the lofty hills

which surround it, and the island of Paxaros, which forms a natural breakwater before its entrance. Close to the pier there are 5 fathoms water, and deeper soundings, with good anchorage, are found a short distance further off shore. The town consisted, in 1826, of about 300 houses. The more modern are large and well built; the rest are chiefly of mud, and flat-roofed. The climate is healthy though hot. Water, with provisions, have to be conveyed to the town from a distance of about 3 m., the immediate neighbourhood being arid and sterile. But the great commercial advantages of the place countervail these drawbacks, and will probably render it the principal commercial *dépôt* on the W. coast of Mexico: it being much superior as a port to either Mazatlan or San Blas, and easier of access than Acapulco to vessels from China to Calcutta, which, from the prevalence of particular winds in the Pacific, seldom make the Mexican coast S. of Guaymas. At this port and Mazatlan, indeed, all the trade between Mexico and E. Asia is now transacted. (*Ward's Mexico*, ii. 312, 313., *Hardy's Tour*, *&c.*)

GUAYRA (LA), the principal sea-port town of the repub. Venesuela, Colombia, gov. Caraccas, on the Caribbean Sea, 11 m. N.N.W. Caraccas; lat. 10° 36′ 19″ N., long. 67° 6′ 45″ W. Pop. 7,000.? Humboldt observes:—"The situation of La Guayra is very singular, and can only be compared to that of Santa Cruz, in Teneriffe. The chain of mountains that separates the port from the high valley of Caraccas, descends almost directly into the sea; and the houses of the town are backed by a wall of steep rocks. There scarcely remains 100 or 140 fathoms' breadth of flat ground between this wall and the ocean. The town is commanded by the battery of *Cerro Colorado*, and its fortifications along the sea-side are well disposed and kept in repair. The aspect of this place has something solitary and gloomy. . . . The heat is stifling during the day, and most frequently during the night." (*Pers. Narrat. Trans.*, vol. iii., 383, 384.) In 1812 the town was nearly destroyed by an earthquake, from the effects of which it has not yet wholly recovered. Its port is a mere roadstead, open to the N. and E., and slightly sheltered to the W. by Cape Blanco. Vessels anchor in from 6 and 7 to 25 and 30 fathoms, according to their distance off shore; but though the anchorage be open, and there is a considerable surf, the holding-ground s good, and vessels properly found in anchors and cables are seldom driven from their moorings. The trade of La Guayra is extensive. The principal articles of export are coffee, cocoa, indigo, and hides. The imports consist principally of manufactured goods from England, provisions from the United States, with wine, &c. The town is unhealthy in summer, especially to strangers; and it is extremely hot, the mean temp. of the town being nearly 83° Fah. La Guayra was founded by Osorio in 1588. (Humboldt.) We subjoin a statement of the exports of coffee, hides, and indigo, the produce of Venezuela, from the port of La Guayra, for the year ending 31st July, 1846:—

	Coffee.	Hides.	Indigo.
	Lbs.		*Lbs.*
Great Britain - -	2,680,286	675	—
Hamburg and Bremen -	6,208,564	2,198	2,600
United States - -	6,312,154	39,909	55,800
France - - - -	3,307,739	517	19,860
St. Thomas and Altona	1,205,730	—	—
Genoa - - - -	183,000	—	—
Trieste - - - -	290,000	—	—
Spain - - -	22,725	16,790	2,116
Amsterdam - - -	249,619	460	—
Total - - -	20,459,817	60,849	80,376

GUBEN, a town of the Prussian dom., prov. Brandenburg, gov. Frankfort, cap. circ. of same name on the Neisse, 27 m. S.S.E. Frankfort-on-the-Oder. Pop. 9,256. It is the seat of the courts of justice for the circ., town, and district, a board of forest economy, a gymnasium, &c. It is one of the most populous and flourishing towns in the gov.; and, besides producing woollen and linen stuffs, yarn, stockings, &c., has tanneries, water-mills, and a copper foundry, with building docks, and a considerable trade in cattle, wool, and agricultural produce: it has also a brisk transit trade.

GUERNSEY, an island in the English Channel, belonging to Great Britain, 75 m. S. the Isle of Portland, 32 m. E. the coast of Normandy in France, 22 m. S.W. Alderney, and 15 m. W.N.W. Jersey. Shape triangular; greatest length 9 m.; breadth 3 m.; area, 16,000 acres. Pop., in 1841, 28,521. The surface of its N. part is level with a low irregular line of coast; but the S. part is more lofty, varied with deep gullies: the coast is bold and precipitous, presenting fine marine scenery. The geological formation is almost entirely granitic, and quarries of gneiss and granite, at Grande Rocque, are extensively worked; on the W. side of the island, trap-rocks and micaceous schist occur. There are no metals of any kind. The climate, though inconstant and occasionally very moist, is not unhealthy. The winters are mild, snow seldom lying on the ground more than two or three days, and the summer heats are less oppressive than on the neighbouring coast of France, or even in the S.W. of England. The thermometer ranges from about 80° to 37°: prevailing winds are E. in spring, and W. the rest of the year. The water is excellent, and the lands are well watered by streams running in every direction towards the sea. Guernsey, in point of fertility, does not equal Jersey, neither is it so well covered with timber; and it contains, especially in the N., considerable portions of waste, or imperfectly reclaimed land. Husbandry is much crippled by the almost infinite division of properties, which vary here from 5 to 12 acres, 30 acres being considered a large farm. This division is owing to the law, or custom, which gives to each son an equal share of his father's landed property, and which is here, as in France and elsewhere, productive of the most grievous injury to the industry and comfort of the population. Farms of 7 or 8 acres, with house attached, let for 6*l*. in the country; but near St. Peter-le-Port, land fetches 9*l*. or 10*l*. an acre. The annual growth of wheat is estimated at 4,000 quarters: the growth of barley amounts to 3,800 quarters. These quantities supply only about a fourth part of the home consumption, the deficiency being made up by importations from France and the Baltic. Barley, some years ago used for bread, is now chiefly employed in malting; it sells for about 12*s*. the Guernsey bushel (55 lbs. English). Oats and rye are little grown; but parsneps, beet-root, and potatoes are extensively grown. The principal manure is *vraic*, a kind of sea-weed, gathered by the people twice a year. With the exception of draining marsh-lands, several hundred acres of which have been brought into cultivation, the art of tillage has been stationary here for many years. Garden produce forms a main part of the cottager's subsistence. Melons, figs, peaches, and even oranges are abundant. The breeding of cattle is the most profitable branch of farming: the price of Guernsey cows varies from 10*l*. to 16*l*. according to their excellence, and they yield about 7 lbs. of butter weekly. The cows, which are milked 3 times a day, are universally tethered; about 1½ acres being reckoned sufficient for the support of each. The law forbidding the importation of foreign breeds is strictly enforced; and thus the purity of the native race is maintained. Hogs are numerous, and of great size; sometimes attaining from 50 to 80 stone weight.

The trade of Guernsey is very inferior to that of Jersey, and has greatly decreased since the French war. In 1839 there were 98 ships, burden 10,025 tons. Before the introduction of the bonding system, Guernsey was used by merchants as a *dépôt* for foreign wines and other goods; besides which it had a most extensive smuggling trade, which, however, has now wholly ceased. The shipping is at present chiefly employed in exchanging the wines of Spain and the Mediterranean for the sugar, coffee, spices, &c. of S. America, which they take to Hamburg or Rotterdam, and again exchange for corn. The exports consist chiefly of cider, apples, potatoes, building-stone, and wine; the imports are wheat and flour, British manufactures, wines, sugar, coffee, &c. (For particulars, *see* Jersey.) There are some manufactures in Guernsey of cement, bricks, cordage, paper, and soap; but all on a small scale.

The military government of the island is vested in a lieutenant-governor, who represents the sovereign in the assembly of the States. The legislative body, called the States, is composed of the bailiff, the procureur or attorney of the royal court, 12 jurats, the rectors and constables of parishes, total 32; and of these the first two are appointed by the crown, and the rectors by the governor; while the jurats and constables are chosen by the islanders. The States vote money for ordinary public expenses; but new taxes must be sanctioned by the crown: indeed, all new laws and constitutional changes can be effected only by application to the privy council. The "Royal Court," the supreme tribunal, consists of a bailiff appointed by the crown, and 12 jurats elected by the people. The language spoken in court is French. Juries are not known; and the powers of the court are extensive, undefined, and sometimes oppressively used. Guernsey is a deanery, in the diocese of Winchester, and comprises 8 livings; but as the great tithes belong to the government, the clergy are wretchedly paid, and have little personal influence.

The natives of Guernsey, like those of Jersey (both of whom, in the lower ranks, speak a Norman patois), are thrifty, parsimonious, clean and neat in person and dress, simple in their manners, and generally honest. They are credulous, many still believing in witchcraft. The estab. of schools, however, in every parish has greatly raised the moral feelings of the lower orders: these schools have been repaired, and are partly supported by public money. Queen Elizabeth's college, founded in 1563, and greatly enlarged in 1824 at an expense of 16,000*l*., is now in a flourishing state, and furnishes a first-rate classical and scientific education to about 200 students, at an expense of about 12*l*. a year each. The improvement of this establishment is conducing materially to the prosperity of

the island, both by its direct influence on the natives, and by bringing new residents from England.

The only considerable town of Guernsey is Peter-le-port, its cap. situated on the E. side of the island. Pop. in 1831, 11,000. Being built on the slope of a hill, it looks well from the sea; but the streets, except in Hauteville, the modern and best built quarter, are narrow, steep, and crooked, lined with old and very lofty houses. The chief buildings are, the government-house, Queen Elizabeth's college, the court-house, the town hospital, and a handsome fish market. The par. church was built in 1312. The harbour, formed by two piers, is considered sufficient for the trade of the place, and there is good anchorage in the roadstead. Fort George, a strong fortress, stands ½ m. S. of the town.

Guernsey, as well as the other channel islands, was included in the duchy of Normandy, which once belonged to Great Britain. The French have made several attempts to capture it, but without success. The last was in 1780. (*Inglis's Channel Islands; Journal of Educ.*, vol. vii. &c.)

GUIANA, GUYANA, or GUAYANA, an extensive region of S. America, embracing, in its widest acceptation, all the territory between the Amazon and Orinoco, and extending between lat. 4° S. and 8° 40′ N., and long. 50° and 68° W. By far the greater portion of this region (formerly called Spanish and Portuguese Guayana) belongs to the Venezuelan and Brazilian territories; and the term Guiana is now generally understood to refer only to the country between lat. 0° 40′ and 8° 40° N., and long. 57° 30′ and 60° W., divided among the English, Dutch, and French.

GUIANA (BRITISH), is the most westerly portion of the above territory, and the largest, if we include within its limits the entire territory claimed by the British. The latter extends between lat. 0° 40′ and 8° 40′ N., and between the 57th and 61st deg. of W. long., having E. Dutch Guiana, from which it is separated by the Corentyn; S. Brazil; W. Venezuela; and N. and N.E. the Atlantic. This territory is supposed to comprise about 76,000 sq. m.; but of this a disputed portion, claimed by Brazil and Venezuela, amounts to not less than 64,000 sq. m., leaving only about 12,000 sq. m. for the area of the undisputed British territory. The latter has the Corentyn on the E., and the Essequibo on the W. Its subdivisions, pop., &c., are as follows: —

Counties.	Population (1834).				Chief Towns.
	Whites.	Free-colrd.	Apprentices	Total.	
Demerara } Essequibo }	3,006	6,360	65,556	74,992	George Town.
Berbice -	570	1,651	19,359	21,589	New Amsterdam.
Total	3,576	8,011	84,915	96,581	

At present (1845) the pop. may be estimated at 100,000, exclusive of 30,000 aborigines.

Physical Geography. — An alluvial flat extends from the coast inland, with a breadth varying from about 10 to 40 m., terminating at the foot of a range of sand hills, from 30 to 120 ft. high. Parallel with this range run several detached groups of hills, seldom more than 200 ft. high, which cross the Essequibo in lat. 6° 15′, being continuous with the Sierra Imataca in Venezuela. About lat. 5° a mountain chain, composed of granite, gneiss, and other primitive rocks, an offset of the Orinoco mountains, runs W. to E. through Guiana, forming large cataracts where it is crossed by the bed of the rivers, and rising frequently to the height of 1,000 ft. above the ocean. About a degree farther S. are the Pacaraima mountains, which in a similar manner run W. and E., and are of primitive formation. This chain forms many rapids and cataracts in the larger rivers, and contains the sources of several rivers of secondary importance, including the Berbice and Massaroony. Its highest point, M. Roraima, lat. 5° 9′ 30″ N., long. 60° 47′ W., near the W. extremity of the territory claimed by the British, is 7,500 ft. high. The Conocou or Canucu chain, running S.E., connects the Pacaraima with the Sierra Acarai. The latter is a densely wooded chain of mountains, forming the S. boundary of Guiana, and the water shed between the basins of the Amazon and Essequibo. Mr. Schomburgk estimated the elevation of the highest summits of this chain at 4,000 ft. The Essequibo and Corentyn rise in it.

"The whole surface of the coast lands of British Guiana is on a level with the high water of the sea. When these lands are drained, banked, and cultivated, they consolidate, and become fully a foot below it. It requires, therefore, unremitting attention to the dams and sluices, to keep out the sea, one inundation of which destroys a sugar estate for 18 months, and a coffee one for 6 years. The original cost of damming and cultivating is fully paid by the first crop, and the duration of the crops is from 30 to 50 years; so that, though great capital is required for the first outlay, the comparative expense of cultivation is a mere trifle compared with that of the (W. India) islands, notwithstanding that the expense of works, buildings, and machinery may be treble or quadruple, being built on an adequate scale for half a century of certain production." (*Hilhouse on the Warow Land, &c., Geog. Journ.*, iv. 323.)

Between the first and second chains of hills are some extensive savannahs, which approach the sea-shore E. of the river Berbice. S. of the Pacaraima chain and the Rupunoony are others still more extensive, but not so well watered. In the latter region are situated the small lake of Amucu and the frontier settlement of Pirara. With the exception of these savannahs, and the swamps on the Berbice, the interior is mostly covered with hill-ranges and dense forests.

The greatest slope of the country is towards the N., in which direction run the principal rivers. The chief of these is the Essequibo, which rises in the Sierra Acarai, about 40 m. N. the equator, and discharges itself into the ocean by an æstuary nearly 20 m. wide, after a course of at least 620 m. Its entrance is much impeded by shoals, and it is navigable for sailing vessels for only about 50 m. from its mouth. According to the volume of water, its current is more or less strong, but it is seldom more than 4 knots an hour, even during the rainy season. The Corentyn rises about lat. 1° 30′, and long. 57°, and discharges itself also by an æstuary 20 m. wide. Between these two rivers run the Berbice and the Demerara; the former may be ascended for 165 m. by vessels drawing 7 ft. water; the latter is navigable for 85 m. above Georgetown, which is situated near its mouth. The Mazaruni, Cuyuni, &c., affluents of the Essequibo, are the other principal streams. All the large rivers bring down great quantities of detritus, which being deposited around their mouths and æstuaries renders the whole coast shoal. For 12 or 15 m. seaward the mud bottom is covered by only 3 or 4 feet water.

Geology and minerals. — These deposits around the coast rest upon deep strata of strong clay of different kinds, alternating with others of sand, and beds of small shells; and these again upon a granitic formation, which begins to appear on the surface in the second chain of mountains. The granite rocks in the interior often assume the most imposing and singular forms; mural precipices, with cascades 1,400 or 1,500 ft. high descending over them; granite boulders of huge size, spread over extensive tracts, &c.; and in lat. 2° 55′ is a natural pyramid, called the *Ataraipu*, wooded to the height of 350 ft., and rising from that limit in naked grandeur to an elevation of about 900 ft. Mr. Schomburgk gives a sketch of this pyramid in the *Geog. Journ.*, x. 163. The other chief rocks are porphyry, and various kinds of trap, gneiss, clayslate, sandstone, coloured ochres, &c.: there is a total absence of limestone, and its modifications. Traces of iron are frequent, but none of the precious metals has been discovered. Next to granite, excellent pipe and other clays are the most valuable mineral products.

Climate. — The mean temperature of the year at Georgetown is 81° 2′ Fahr., the maximum 90°, the minimum 74° on the coast. Two wet and two dry seasons constitute the changes of the year. The great dry season begins towards the end of August, and continues to the end of Nov., after which showers of rain follow to the end of Jan.: the short dry season then commences, terminating about the middle of April, when the rains begin to descend in torrents, and the rivers to inundate their banks. The winds during the rains are generally westerly; in the dry season they blow mostly from the ocean, particularly in the day-time. Hurricanes are unknown, gales unfrequent: thunder-storms occur at the changes of the seasons, but, like a few occasional shocks of earthquakes, are not attended with danger. The low and swampy coast-lands are unhealthy, but the interior is quite otherwise; and the insalubrity of Georgetown, and other sea-port towns, has been greatly aggravated by the quantity of refuse suffered to collect and decompose on the shore.

Vegetable products. — The forests abound with trees of immense size, including the *mora excelsa*, sipari or *green-heart*, and many others, yielding the most valuable timber, and an abundance of medicinal plants, dye-woods, and others of excellent quality for cabinet-making. Arnotto, so extensively used in the colouring of cheese, grows wild in profusion on the banks of the Upper Corentyn. That magnificent specimen of the American Flora, the *Victoria Regia*, was discovered by Mr. Schomburgk, on the banks of the Berbice. (*Geog. Journ.*) Another indigenous plant deserving of mention, is the *hai-arry*, a papilionaceous vine, the root of which contains a powerful narcotic, and is commonly used by the Indians in poisoning waters to take the fish. The Indians beat the root with heavy sticks, till it is in shreds, like coarse hemp; they then infuse it, and throw the infusion over the area of the river or pool selected. In about 20 minutes, every fish within its influence rises to the surface, and is either taken by the hand or shot with arrows. A solid cubic foot of the root

will poison an acre of water, and the fish are not thereby deteriorated. (See *Hilhouse, in Geog. Journ.* iv.)

Wild Animals. — The jaguar, puma, peccari, and wild hog, tapir, many kinds of deer, &c., abound in Guiana: the sea-cow is met with in the larger rivers, which are also inhabited by the cayman, alligator, and guana. There are several kinds of formidable serpents, but they are fortunately of a sluggish and inactive nature. The birds have the most magnificent plumage. Turtles are plentiful. The rivers teem with fish; the low-low, a species of *silurus*, often weighs from 200 to 300 lbs. The insect tribes are not excessively annoying.

Resources and Industry. — The staples of the colony are at present sugar, coffee, and cotton; the two latter were formerly almost exclusively grown, but their culture is now in a great measure superseded by that of the sugar-cane.

The coast regions are the only parts cultivated for sugar; but many tracts in the interior seem to be equally well fitted for that purpose; coffee, also, is grown only on the coast, but, according to Mr. Schomburgk, no tract appears better suited for it than the central ridge of the mountains. The Indians have generally some indigenous cotton growing round their huts, and among the Macusis (on the Rupununi) it is raised to a considerable extent. It comes to perfection in most parts of the colony; but is cultivated by the colonists only on the coast, and even there it has of late been nearly abandoned, the planters being undersold by those of the U. States. There are numerous other products, which as yet neither form articles of export, nor of internal consumption, for which both the soil and climate are suitable, and which might be raised with advantage, were it not for the want of labour. Among these are rice, maize, Indian millet, Victoria wheat, cocoa, vanilla (a native of Guiana), tobacco, cinnamon, &c. Between the Berbice and the Essequibo there is a tract of many thousand acres, possessing the means of constant irrigation, on a small portion of which 3 crops a year have been repeatedly raised; but at present it is nearly all a complete wilderness, and will so continue till labour becomes more abundant and cheaper. The coast region, which is covered by a deep layer of vegetable mould, forming what is called a *pegass* soil, is so extremely fertile that 6,000 and even 8,000 lbs. of sugar, and from 20,000 to 30,000 lbs. of plantains, are sometimes produced on an acre; but in order to cultivate this soil, dams and embankments as before stated are necessary, and agriculture is conducted at a great outlay, and on large estates.

In the article AMERICA (p. 83.), notice has been taken of the vast increase of the horses and cattle carried thither from Europe. Large herds of both wander wild on the wide but ill-watered savannahs beyond the Pacaraima; and, with little exception, have hitherto afforded food only for beasts of prey. The savannahs between the Berbice and the Demerara occupy upwards of 3,000 sq. m.; they are clothed with nutritious grasses, plentifully irrigated, and interspersed with shady woods. Were these stocked with cattle from the interior, beef might be obtained as cheaply as in the U. States. From 1,800 to 2,000 individuals, 7-10ths Indians, are employed in cutting timber, which is in great demand within the colony, though its export has hitherto been very trifling.

Since 1837, there has been a rapid decrease in the quantities of the staples grown and exported. Different circumstances have probably conspired to bring about this result; but there can be no manner of doubt that it is mainly ascribable to the nature of the climate, and the aversion of the emancipated negroes to severe labour. It is, indeed, not a little surprising, that any other result should have been anticipated from their emancipation. It was all but contradictory and absurd to suppose that people with few wants, occupying a soil of great natural fertility, lying under a burning sun, should voluntarily and heartily engage in labour, which is both severe, and associated in their minds with the most degrading recollections. We believe, indeed, that it will be found wholly impossible, except under peculiar circumstances, to carry on the culture of sugar on its present plan, in tropical countries, by the agency of *really* free labourers. Hayti, formerly the most important and productive of all the sugar colonies, does not now produce a single pound weight of sugar! and such, most probably, would also be the case in Cuba and Brazil, were the blacks really free. In 1839, about 400 Hill coolies were imported from Hindostan into Guiana; and they are said to be quiet, useful labourers. But it was suspected, and we believe with good reason, that this was, in effect, a revival of the slave trade; and the practice has in consequence been discontinued. At present, therefore, many thousand acres of the most fertile soil are lying waste for want of hands.

In a despatch from Governor Light, May, 1848, we find the following statements: — "Many estates have already been sold to the Creole labourers; the desire for land is not at all lessened; the experience of some years has made me alter my opinion as to the benefit the purchase of estates has been to the Creoles. I was, like other well-wishers to the descendants of the African race, glad to see the progress of independence; but I do not believe now that such purchases have tended to the civilization, advancement, or industry, of the purchasers. The estates have been indiscriminately cultivated in provisions; sublet, subsold, partitioned among gangs of new comers; the drainage neglected; and the evils of largely-associated bodies without managing heads become manifest.

"It becomes a matter of serious consideration to what the purchases of estates by the Creoles and blacks will bring the colony. It is to be hoped that education will elevate the minds of the Creoles above being satisfied with the mere subsistence which the cultivation of provisions secures. The sea coasts and trenches swarm with fish, for which there is no market, nor desire for one; it is eaten by the villagers; but it is not a medium of traffic, and the ease with which life is thus supported, contributes to the indifference of a large portion of the Creoles to ought but ease. This, in older countries, may be a proper reward, in maturer years, for industry in early life. Men labour at their vocation in Europe, promising to themselves ease and enjoyment at the end of a certain number of years passed in toil.

"The facility with which independence, sufficient for the subsistence of a race of men so lately released from coercion, is obtained may almost be considered an evil. Pass but a few years and the original stock of labourers will be withdrawn from the cultivation of exportable produce, by possession of independence; the exports will depend on emigrants.

"Robbers of provision-grounds and plantain walks swell the list of prisoners, and it is no uncommon thing to find the plunderer a man himself possessed of provision-grounds and plantain walks. Cattle-stealing has lately been common on the populous parts of the E. coast of Demerara. Pilfering is an inbred quality of the slave; it has not yet been forgotten in the free man."

Manufactures can hardly be said to exist.

Commerce. — The following is an account of the quantities of the staple products of British Guiana, imported into the U. K. during each of the 6 years ending with 1849.

Articles.	1844.	1845.	1846.	1847.	1848.	1849.
Sugar (cwt.) - - - -	543,237	619,677	325,756	635,166	703,174	577,569
Rum (gallons) - - - -	908,298	1,640,879	906,152	1,881,169	2,516,447	1,882,142
Molasses (cwt.) - - - -	188,630	155,422	128,938	142,201	112,413	155,952
Coffee (lbs.) - - - -	1,104,917	945,587	61,694	157,876	121,906	63,253

The total value of the exports which, in 1836, amounted to 2,135,379*l.*, in 1844 amounted to only 1,131,326*l.* Nearly the whole are sent to Great Britain or to British America and the W. Indies. The value of the British and foreign goods imported in 1844 was 675,950*l.*

In 1836, 716 ships, of 111,425 tons burden, entered; and 728, of 116,005 tons burden, cleared out. A railway from the cap. to Mahaica has been projected. There are about 250 m. of public roads. Dutch and English measures, and Spanish, Dutch, and English money are in use.

Government, &c. — The government is vested in a governor, and a court of policy consisting, besides the governor, of the chief justice, attorney-general, collector of the customs, and government secretary, and an equal number of unofficial persons elected from the colonists by the college of electors. This college is a body of 7 members, appointed by the inhab. for life, whose qualification is the payment of taxes to the amount of 5*l.* sterling a year. The unofficial members of the court of policy serve for 3 years, and go out by rotation. There is a college of financial representatives of 6 members, with the same qualifications as the members of the college of electors, chosen by the inhab. for 2 years. The court of policy decides on all financial regulations; but when they have prepared an estimate of the expenses for the year, and the mode of taxation and the different items have been discussed and acceded to by a majority, the estimates are handed over to the financial representatives, who, in concert with the court of policy, examine the charges. In the combined court every member, whether of the court of policy or financial representatives, has an equal vote. The court of policy, combined with the financial representatives, having approved of and sanctioned the ways and means, they are passed into a law. The governor not only has a casting vote, as president of the court of policy, but an absolute veto on all laws passed by a majority. The king in council may enact or disallow any law passed in the colony. The supreme civil court consists of a chief judge, 2 puisne judges, a secretary, registrar, and accountant. It is

a court of appeal from the rolls court in each co., in which one of the judges of the supreme court presides. The laws of Holland, but particularly the laws, statutes, and resolutions of the states-general, are followed by the judges of the court in giving judgment. Appeal from the supreme court, in matters above 500*l*., lies to the king in council. The supreme criminal court is composed of 3 civil judges and 3 assessors, chosen by ballot. Its judgments are decided upon by a majority of votes, and are delivered in open court. Inferior criminal courts are holden by the sheriffs of each county, with whom 3 magistrates are associated. Special magistrates, appointed from England, decide between the masters and labourers in the different districts; 3 superintendents of rivers, and 6 post-holders are appointed for the protection of the Indians in the interior. There are at present 18 ministers of the church of England, 2 of that of Holland, 5 Rom. Catholic, 5 of the church of Scotland, and several of protestant dissenting sects. The provision for the different religious establishments in 1839, amounted to 22,942*l*. In 1838, 11,363 persons were receiving instruction in the public schools. The military force consists at present of one regiment of the line, and a detachment of another. The colonial militia has been disbanded.

The public revenue is derived from taxes on produce; on incomes of 500 dollars and upwards; on imports not of the origin or manufacture of Great Britain; and from assessed taxes on horses, carriages, wine and spirit licences, &c. In 1836, it amounted altogether to 106,081*l*., and the expenditure to 113,946*l*. The portion of the 20 millions sterling falling to this colony, as compensation for the freedom of slaves, amounted to 4,268,809*l*.

The only towns worthy of mention are Georgetown and New Amsterdam. Georgetown, formerly Stabroek, the cap. and seat of government, is on the E. bank of the Demerara, near its mouth; lat. 6° 49′ 20″ N., long. 58° 11′ 30″ W. Pop. about 20,000, of whom 16,000 are coloured. (*Schomburgk*, 73.) Except Water-street, which is built close to the river, the streets are wide, and traversed by canals; the houses are of wood, seldom above 2 stories high, shaded by projecting roofs, having verandahs and porticoes, and surrounded by gardens separated by trenches. An edifice facing the river, built of brick and stuccoed, which cost the colony upwards of 5,000*l*., comprises all the government offices: near it are the Scotch church, market-house, and town guard-house. Within a mile of the town, near the mouth of the river, is Fort William Frederick, a small mud fort. A handsome Gothic church, to cost 13,000*l*., is now in course of erection at Georgetown; another episcopal church stands on the parade ground, besides which it has a Rom. Catholic cathedral, Wesleyan chapel, 3 public, an infant, and 8 private schools, a colonial hospital, an excellent seaman's hospital, a savings' bank, 2 commercial banks, and an amateur theatre. Shops and stores are numerous, and European goods of all kinds plentiful; no duty being laid on English merchandise. The markets are good, and a new market-house is being erected. New Amsterdam, on the Berbice, in lat. 6° 15′ N., long. 57° 27′ W., extending about 1½ m. along the river, is intersected by canals, and has about 3,000 inhab. It has English, Scotch, and Dutch churches, Rom. Cath. and Wesleyan chapels, a free school, court-house, barracks, fort, many commodious wharfs and warehouses, and 2 commercial banks. It is less unhealthy than Georgetown.

History. — According to some, Columbus discovered Guiana in 1498: others give that honour to Vasco Nunez, in 1504. The Dutch, who were its first European settlers, established some settlements near the Pomeroon and elsewhere in its neighbourhood, in 1580, and several further to the E. a few years afterwards. The English began to form settlements about 1630. Most of Guiana, however, remained in the hands of the Dutch till 1796; when Demerara and Essequibo surrendered to the English. They were restored to the Batavian republic in 1802; and re-taken by the British in 1803. The territory called British Guiana has belonged to us ever since that period; that called Dutch Guiana was given up to Holland at the conclusion of the late war. (*Schomburgk's British Guiana; Schomburgk, Hilhouse, &c., in Geog. Journ.*, vols. ii. iii. iv. vi. vii. x.)

GUIANA (DUTCH). This territory is intermediate, both in size and position, between British and French Guiana. It extends between the 2d and 6th deg. of N. lat., and the 53d and 57th deg. W. long., having E. French Guiana, from which it is separated by the Marony, S. Brazil, W. the Corentyn, which divides it from British Guiana, and N. the Atlantic. Length, N. to S. 250 m.; average breadth, about 155 m. Area about 38,500 sq. m. (*Stein*.) Pop., exclusive of Indians and Maroons, probably 65,000, of whom 6,000 are whites or free coloured people, chiefly Dutch, French, and Jews, and the remainder negro slaves. The maroons of the interior are the descendants of runaway negroes, and were very troublesome during the past century; they have now, however, adopted much more settled habits than formerly, and receive annual presents of weapons, arms, &c., from the Dutch, the territory they occupy forming a kind of military frontier to the colony. The physical geography, climate, productions, &c., of Dutch Guiana, are pretty much the same as those of the British colony above described. All the rivers have a N. direction; the chief is the Surinam, which runs through the centre of the country, and falls into the Atlantic, after a course of nearly 300 m. It gives its name to the N. portion of the territory, and is navigable for large ships for about 4 leagues from the coast. Paramaribo is situated near its mouth. About 50 ships are employed in the transport of the produce of the colony to Europe. Sugar is the chief staple, and about 25,000,000 lbs. are produced annually; the export of coffee may be estimated at about 4,000,000 lbs. a year; cocoa, cotton, rice, cassava, yams, &c., are also grown in considerable quantities; and plentiful supplies of various descriptions of timber, and of woods for cabinet work, with gums, balsams, and other drugs, are procured from the interior. Provisions, arms, and manufactured goods are imported from Holland: provisions are also imported from the U. States, to which the exports are syrup and rum: there is some commerce with the W. Indies, and a smuggling trade is carried on with Colombia. The government is vested in a governor-general and a high council. The cap. and seat of government is Paramaribo, a town of 20,000 inhab., three fourths of whom are blacks, or of mixed descent. It is neatly laid out in the Dutch style, and has R. Catholic, English, and Lutheran churches, a German, and a Portuguese Jewish synagogue, an exchange, &c., and is the centre of the trade of the colony. The fort of Zeelandia, a little N. of the town, is the residence of the governor, and the seat of most of the government establishments.

GUIANA (FRENCH). — This, which is the most E. and smallest division of Guiana, lies between the 2d and 6th deg. N. lat., and 51½ and 54½ deg. W. long., having E. and S. Brasil, W. Dutch Guiana, and N. and N.E. the Atlantic. Length, N. to S., 250 m.; breadth varying from 100 to 190 m. Area, 27,560 sq. m. Pop., in 1837, free 5,056, slaves 16,592; total, 21,648, *ex.* garrison and colonial functionaries.

The coast plain (*basses terres*) is an alluvial tract of extreme fertility, interspersed with a few isolated hills, apparently of volcanic origin, and some ranges of low hillocks. The uplands (*terres hautes*) are also very fertile, their soil being generally argillaceous, more or less intermixed with granite, sand, and tufa, and in some parts highly ferruginous. The mountain chains run E. and W.; they are almost wholly granite, but no where reach any great elevation; in the centre of the colony they rise from 1,600 to 2,000 ft. above the level of the sea. Few countries are more abundantly watered. There are upwards of 20 rivers of tolerable size, all of which have a N. course. Their mouths are obstructed by sand-banks, and do not admit of the entrance of vessels drawing more than 12 or 15 ft. water; they cease to be navigable, except for canoes, at a distance of from 45 to 60 m. inland. In the rainy season they inundate the low country to a great extent, but are then innavigable from their rapidity. The coasts are low, and, except at the river mouths, ships cannot approach the shore. There is only one roadstead, that of Cayenne, where vessels can ride in security. Several small rocky or wooded islands lie off the coast, among which is Cayenne, at the mouth of the Ozapoh, on which the cap. is built. The climate is similar to that of British Guiana (which see); but the coast lands appear to be less unhealthy. About 50 or 60 m. from the coast the country begins to be covered with vast forests. The low lands are in a great part uncleared, and covered with underwood. The settled and occupied lands were dispersed in 1836 over a surface of 230 sq. leagues, or about 1-80th part only of the whole surface of the colony, the rest of which is tenanted by wild beasts and roving Indians. The cultivated lands, slaves employed on them, and amount of produce at the same period, were thus estimated: —

Articles cultivated.	Hectares under cultivation.	Slaves employed in cultivation.	Produce and Quantities obtained.	
Sugar-cane	1,571	4,932	Raw sugar	2,422,796 kil.
			Syrup & treacle	583,062 lit.
			Rum - -	259,536 —
Coffee -	180	280	- - -	42,000 kil.
Cotton -	2,746	2,968	- - -	280,000 —
Cocoa -	197	174	- - -	25,900 —
Cloves -	829	1,508	- - -	81,000 —
Arnatto -	1,760	2,693	- - -	315,000 —
Pepper -	273	237	- - -	25,300 —
Cinnamon	9	- -	- - -	600 —
Nutmegs	2	- -	- - -	100 —
Corn, &c.	4,251	943	to the value of	942,950 fr.
Total -	11,826	13,727		

The sugar-cane was introduced by the earliest colonists, and its culture has been greatly extended since 1829; it is grown only on the low lands, where the mean annual produce of a hectare of good soil is estimated at 2,000 kilogr., worth about 1,000 fr. There are from 30 to 40 large establishments for the manufacture of sugar, and in all about 50 sugar-mills, 27 of which were, in 1836, worked by steam. Coffee is very inferior to that of the W. Indies, and its culture has rather diminished of late years. Cotton, cocoa, arnatto, and vanilla, are indigenous. In the low lands, from 225 to 350 kilog. per hectare is the mean annual produce of cotton. The clove succeeds pretty well, especially on the uplands; other spices have met with only doubtful success. Cocoa is unfit for the French markets, and most of what is grown is exported to the U. States: indigo and tobacco are of very inferior quality. Manioc, rice, maize, bananas, &c., are grown, but the quantities produced fluctuate greatly, and are often insufficient for home consumption. In 1837 there were about 12,000 head of live stock, principally black cattle. Manufactured goods are imported from France. Building docks for small vessels, employ about 170 slaves; and there are several brick and tile-yards. The price of an artisan's labour varies from 3 to 6 fr. a day. The trade is increasing: in 1836, the value of the imports from France and her colonies amounted to 2,675,162 fr., and those from foreign countries to 569,353 fr., making a total of 3,262,519 francs. The principal articles exported, and their value, in the same year were as follows: —

Articles exported (1836).	Quantities.	Value.
Sugar (raw) - - -	2,249,417 kilog.	1,338,383 fr.
Molasses - - -	473,002 —	69,995 —
Cocoa - - - -	34,223 —	30,800 —
Coffee - - - -	18,993 —	30,389 —
Cloves - - - -	82,635 —	280,084 —
Pepper - - - -	28,834 —	40,362 —
Wood for cabinet-making -	517,083 —	180,229 —
Cotton - - - -	256,991 —	513,988 —
Arnatto - - - -	289,837 —	801,145 —
Rum - - - -	57,705 litres	28,766 —

The total value of the exports amounted to 3,121,752 fr., nearly the whole being shipped for France or her colonies. Forty-two French vessels, of the aggregate burden of 6,792 tons, entered; and 45 of the burden of 7,950 tons, left the colony in 1836, besides which 22 foreign vessels entered, and 19 departed.

French Guiana is divided into 2 districts, those of Cayenne and Sinnamary; and 14 communes, composing 6 electoral arrondissements, and sending 16 deputies to the colonial council. Cayenne, the seat of government (which see), is the only town worth notice. The government is vested in a governor, assisted by a privy council of 7 of the highest official functionaries; and the colonial council, composed of 16 members, elected for 5 years, by inhab. of French descent, 25 years of age, born, or having resided in Guiana for 2 years, and paying direct taxes to the amount of 200 fr. a year, or the possessors of property to the value of 20,000 fr. Number of electors in 1836, 211. The public revenue, derived chiefly from taxes on slaves and domestics, house taxes, customs, export duties, patents, licences, passports, sale of government lands, rents, fees, fines, &c., amounted, in 1837, to 255,222 fr.; the colonial expenditure in the same year was 1,446,710 fr.

Some French adventurers first settled at Cayenne in 1604; and with only a few short interruptions from the Dutch and English, the French held that station and the rest of the colony till 1809: it was then taken possession of by the English and Portuguese, and held by the latter till 1815, when, in pursuance of the Treaty of Paris, it was restored to France. (*Notices sur les Colonies Françaises*, *Hugo*, &c.)

GUIENNE, one of the provs. into which France was divided previously to the Revolution. It was situated in the S.W. part of the kingdom, on both sides the Gironde; and is now distributed among the depts. of the Gironde, Lot-et-Garonne, Dordogne, Lot, and Aveyron.

GUILDFORD, a parl. bor. and market town of England, co. Surrey, of which it is the cap., hund. Woking, on the Wey, 27 m. S.W. London. Pop. of the town (1841), 4,074. Guildford, as seen from the W., has an imposing appearance, being principally situated on the declivity of a chalk down, at the foot of which runs the Wey, crossed by a bridge of five arches. It consists chiefly of one long, broad, and well-built, but inconveniently steep, street, which is crossed by several other streets of inferior dimensions. "It has the appearance of a well-conditioned place, and may be expected to increase." (*Boundary Report.*) It is well paved, lighted with gas, and supplied with water forced up from the river. It has 3 par. churches, all ancient structures; a handsome co. hall, town-hall, council-chamber, a gaol, rebuilt in 1765; chapels belonging to Baptists, Presbyterians, Quakers, Rom. Catholics, &c.; a large free grammar-school, founded by Edward VI., with an endowment for a scholar at Cambridge and at Oxford; a charity-school, at which 25 boys are educated and clothed; and a theatre. Guildford was a residence of the Anglo-Saxon kings, and the ruined keep of a castle, consisting of a quadrangular tower, 70 ft. high, and built of flint, ragstone, and Roman bricks, forms a picturesque object at the S. extremity of the town. The traces of an ancient palace are also clearly discoverable. Since the passing of the Municipal Corporation Reform Act, Guildford has been governed by 4 aldermen, one of whom is mayor, and 12 councillors. Petty sessions are held here, and the assizes in the summer circuits here and at Croydon alternately. Guildford has sent 2 mems. to the H. of C. since the time of Edward I. Previously to the Reform Act, the right of voting was in the freeholders and freemen resident in the town, paying scot and lot. The Boundary Act considerably extended the limits of the parl. bor., which had, in 1841, a pop. of 5,925. Registered electors, in 1849-50, 536. Corporation revenue (1847) 1,041*l.* Guildford has a considerable trade with the metropolis in corn, timber, malt, &c., sent to London by the Wey. Market-day, Saturday, for corn, and other necessaries. Fairs, May 4. and Nov. 22., for horses, cattle, &c.

GUILSBOROUGH, or GUISBOROUGH, a market town and par. of England, co. York, N. Riding, E. div., Langbourgh lib., 39 m. N. York, and 21 m. E. Darlington. The par. comprises 5 townships: area of township of Guilsborough, 6,120 acres: pop. of do. in 1831, 1,988. The town stands in a small but beautiful and very productive valley near the river Tees, and at the foot of the Cleveland hills. It consists of a single wide and handsome street, lined with old but substantial houses. The church is a modern edifice, supposed to occupy the site of one attached to the Austin Priory, established here in 1129, some ruins of which still remain in the meadows S. of the town. In the church-yard are the grammar-school and hospital, founded by the last prior, and chartered by Queen Elizabeth, in 1561. The rental of the property, according to Carlyle (ii. 805.), is 376*l.* Ten scholars are taught gratuitously, and 15 others for a payment of 5*s.* per quarter. The master's salary is 50*l.*, with a house and garden. The hospital lodges and clothes six old men and six old women, and gives them a money allowance for food and coals. Guisborough is a quiet country town, with little trade, except on Monday, the market day, and its six fair days (last Tuesday in April and May, third Tuesday in May, Aug., and Sept., and second Tuesday in Nov.). It used, however, to have a considerable trade in alum, and the first alum-works in England were begun here about 1600. This mineral is worked in some of the neighbouring parishes, especially Lofthouse; but it has for many years ceased to be a branch of industry at Guisborough.

GUIMARAENS, a town of Portugal, prov. Entre Duero-y-Minho, cap. of a comarca of same name, 28 m. N.N.E. Oporto, and 196 m. N. by E. Lisbon; lat. 41° 24′ N., long. 8° 14′ W. Pop. 8,260. (*Miñano.*) It is built on a slight elevation in the midst of a beautiful and productive plain between two small rivers, the Ave and Visella, and is surrounded with fortifications. The streets, which are wide and straight, are lined with well-built houses, and there are several handsome *pascos*, or squares. Among the public buildings are 4 churches, one of which is collegiate, and remarkable for its fine architecture: there are also 5 convents and 4 hospitals. It has some small manufactures of cutlery, hardware, and linen. There are thermal springs in the neighbourhood, which were known to the Romans. The ancient town is said to have been founded, *anno* 500 B.C., under the name of Araduca: the modern one was the first capital of the Portuguese monarchy. (*Miñano; Balbi; Stat. de Portugal.*)

GUINEA, a name applied by European geographers to designate a portion of the W. coast of Africa. The origin of the word is not certainly ascertained, nor are writers agreed respecting the limits of coast to which the name should extend. D'Anville, and the older geographers, apply it to the line of coast from the mouth of the Gambia to that of the Quorra; whereas Ritter, and the more modern authors, extend its confines from C. Verga, lat. 10° 30′ N., to the mouth of Nourse's river, lat. 17° S., and call the district S. of C. Lopez, lat. 5° S., comprising Congo, Angola, and Benguela, by the name of S. Guinea; while under N. Guinea, or Guinea Proper, are comprehended Sierra Leone, Liberia, the Grain and Ivory Coast, Ashantee, Dahomey, Benin, and Biafra. The description of this extensive line of coast, for which we are chiefly indebted to the discoveries of *Bowditch*, *Adams*, *Isert*, and *Tuckey*, will be found under the heads of the countries above mentioned.

GUINGAMP, a town of France, dép. Côtes-du-Nord, cap. arrond.; on the Trieux, in an extensive plain, 17 m. W.S.W. St. Brieuc. Pop. (1836) 6,466. It was formerly surrounded with walls, parts of which still exist; a spacious street intersects it from end to end, about

the middle of which is a singular par. church, with a square tower, surmounted by a dome. The town contains several good edifices, and is surrounded by agreeable walks. It has manufactures of the fabrics named from the town *ginghams*, linen cloth, thread, &c., and 12 fairs yearly, at which large quantities of corn, cattle, flax, hemp, and manufactured goods, are sold. (*Hugo, Dict. Géog., &c.*)

GUIPUZCOA. *See* BISCAY.

GUJERAT, GUJRAT, or GUZERAT (*Gurjara Rashtra*), an extensive prov. of W. Hindostan, chiefly between lat. 21° and 24° N., and long. 69° and 78° E.; having N. Rajpootana, E. Malwah and Candeish, S. Aurungabad and the Gulph of Cambay, and W. the Indian Ocean, the Gulph of Cutch, and the Runn. It comprises the N. districts of the British presidency of Bombay, most part of the Guicowar's dom., a part of those of Scindia and the rajah of Jondpoor, and the territories of many smaller chieftains. Its length, E. to W., may be estimated at 300 m., by an average breadth of about 180. "The inhab. of this vast province are probably much under-rated at 6,000,000." (*Hamilton's E. I. Gaz.*) Gujerat is bounded on the N. and N.E. by steep and craggy mountains of difficult access, sending out many ramifications, the intervals between which are filled with jungle. Into this part of the prov. the Mahrattas were never able to penetrate; but they conquered the S. part, consisting of an open fertile plain, apparently level, but in reality intersected by numerous ravines and chasms, and watered by numerous rivers. The W. part consists of the Peninsula of Gujerat, stretching into the ocean between the Gulphs of Cambay and Cutch, about 190 m. in length, by 100 broad, and which forms the great nucleus of the Guicowar's territories.

The N.W. part of the prov. is in part a swampy plain where it adjoins the Runn, and an arid desert continuous with that of N.W. India. The climate is oppressively hot in summer, but, in winter, temperate and agreeable. Mr. Elphinstone (*Parl. Rep.* p. 165.) says that "Gujrat is the most flourishing country in India;" and though in parts there is a great deal of barren land, it is, upon the whole, one of the richest parts of Hindostan, both as respects its productiveness and the condition of its pop., a result which is mainly ascribable to the moderate assessment of the land both under the British and the native princes. (See *Parl. Rep., &c.*) Of 1,452,000 acres in tillage in British Gujerat, it was estimated, some years since, that 157,720 were under cotton culture, 4,956 under sugar-cane, 1,923 under indigo, 10,766 under tobacco, and the rest appropriated to the growth of grains and garden produce. (*Appendix to Rep. on Public Rev.*, p. 286.) All the foregoing articles of growth are of excellent quality: indigo was, however, grown formerly to a much greater extent than now. Oil, hemp, flax, pulse, &c. are the other principal kinds of produce. In the British districts, nearly all the land is cultivated that is capable of yielding an adequate return; in some parts of the prov. there are fine pasture lands, on which many good horses and draught cattle are reared. The land is assessed on the village system, the tax being collected through the medium of *potails*, or head-men. (*See* BOMBAY PRESID.) In the British territories, most of the land is occupied by permanent tenants: leasehold lands are few. There are also few landholders of any extent; and in Kattywar, property is very much subdivided. The inhab. are mostly Hindoos, amongst whom the Jain sect are more numerous than in any other prov. of India. The pop. is, however, extremely mixed, and includes numerous tribes of Grassias, Katties, Coolies, Bheels, Mewassies, Bhatts, and other lawless races, who acted an important part during the wars of the Mahratta and other dynasties that long troubled this part of India. Many of these tribes still lead a roving life; but most of them have now adopted peaceful occupations. Besides its native tribes, Gujerat (with Bombay) is the chief seat of the Parsees, a people who emigrated from Persia in the 7th century, after the overthrow of the Sassanide dynasty by the Mohammedans. In 1815, the Parsees in Hindostan were estimated at 150,000 families. (For some details respecting them, *see* BOMBAY, p. 407.) The Mohammedans in Gujerat make about 10 per cent. of the pop. Almost all the castes of this prov. work at the loom occasionally, and cotton fabrics, sent in considerable quantities to Bombay, form, in fact, the chief export of the prov., after corn and raw cotton. The Surat manufactures, of various kinds, have long been famous for their cheapness and good quality. The principal imports of the prov. are sugar, raw silk, pepper, cocoa-nuts, cochineal, and woollen goods. During the period of its independence in the 15th and 16th centuries, Gujerat enjoyed a much more flourishing trade than at present; but there are still many rich native merchants in the towns, the chief of which are Surat, Ahmedabad, Baroach, Baroda, Cambay, Gogo, Bhownuggur, Chumpaneer, and Junaghur. Gujerat was subjected by the Mohammedans under Mahmoud, of Ghizni, about 1025: from 1390 to 1572, it belonged to a native Rajpoot dynasty, which had revolted from the Moguls; but at the latter date it fell into the hands of the Emperor Acber. After the death of Aurungzebe, in 1707, it was conquered by the Mahrattas, and remained a part of their empire till the destruction of their power by the British.

GUMBINNEN, a town of the Prussian dom., prov. Prussia, cap. gov. of the same name, on the Pissa, 70 m. E. by S. Koningsberg. Pop. 6,255. It is regularly built, and has several churches, 2 hospitals, a public library, a gymnasium, and schools of midwifery, architecture, &c. It is the seat of the superior courts, and council for its gov., and has manufactures of woollen cloths and stockings, distilleries, breweries, and some trade in corn and linseed. Most part of its pop. are Protestants.

GUNDWANA, a large prov. of the Deccan, Hindostan, extending between lat. 18° and 25° N., and long. 77° 30′ and 86° E.; having N. the provs. Malwah and Allahabad, E. those of Bahar and Orissa, S. the Northern Circars and Hyderabad, and W. Beeder, Berar, and Candeish. It comprises the N.E. portion of the table land of Central India, and is chiefly included in the dominions of the rajah of Berar (the Nagpoor rajah) and the ceded and almost unexplored territories in the S.W. parts of the British presidency of Bengal. A large proportion of its surface is mountainous, and some of the largest secondary rivers of Hindostan rise within its limits; as the Nerbudda, Sone, Mahanuddy, &c., while the Wurda and Godavery bound it W.; but in general it is ill-watered, unhealthy, covered with jungle, and thinly inhabited. The pop. consists chiefly of Gonds, apparently an aboriginal people, at a remote period partly conquered and converted by the Hindoos, and the remainder driven to the hills and jungles, where they live nearly in a state of nature, the country continuing to be for the most part a sort of primeval wilderness. Their broad flat noses, thick lips, and often curly hair, distinguish them from the other native tribes of Hindostan. Some are domesticated in the plains, where they make good agricultural labourers; those who live wild, on the contrary, have no agriculture, and subsist on roots, vegetables, bamboo-shoots, and whatever animal food they can obtain. Their own idols are of the rudest description, but they have also borrowed many objects of worship from the Hindoos, to which they offer up animal, and even human, sacrifices; in many parts, they divide themselves into castes, like the Hindoos, and have adopted various institutions and practices from them and the Mohammedans. Their language contains, among its elementary words, many of Telinga and Tamul origin. The chief towns in Gundwana are Nagpoor, Sumbhulpoor, Deoghur, Mundlah, &c. Deoghur was formerly the seat of an extensive Hindoo empire; but the S. part of the prov. was included in the kingdom of Telingana, which, with Deoghur, afterwards constituted a portion of the Bhamenee empire of the Deccan: while the N. parts of the country were tributary to the Mogul emperors. There are, however, no remains in the prov. to indicate that it ever flourished as a highly civilised or cultivated country. (*Hamilton's E. I. Gaz.*)

GUSTROW, a town of N. Germany, G. D. Mecklenburgh Schwerin, cap. duchy of same name, on the Nebel, 31 m. E.N.E. Schwerin. Pop. 8,567. It is walled, has an anc. castle, now converted into a workhouse and house of correction, and several handsome public edifices, among which are, the cathedral, 2 other churches, the government house, &c. It is the seat of a court of chancery, and boards of taxation and police, and is a town of considerable commercial importance. It has between 50 and 60 manufactories of different kinds, including many breweries and distilleries. Two large fairs for cattle and wool are held yearly, at which wool to the amount of nearly 300,000 dollars is sold. (*Berghaus; Stein.*)

GWALIOR, a strong fortress and town of Hindostan, and the modern cap. of Scindia's dom., prov. Agra, 61 m. S.E. Agra, and 260 N.E. by N. Oojein; lat. 26° 15′ N., long. 78° 1′ E. It stands on a precipitous, isolated hill, close around the brow of which its defences of stone are carried. This hill is rather more than 1½ m. in length; but its greatest breadth does not exceed 300 yards: the height at its N. end is 342 ft. At this end is a palace; and about the middle of the fort are two remarkable pyramidal buildings of red stone, in the most ancient style of Hindoo architecture. The only gate is towards the N. extremity of the E. side; from which, by several flights of steps, you ascend to the top of the rock. Within the citadel there are large natural excavations, which furnish a supply of excellent water. The town, which runs along the E. side of the hill, is large, well inhabited, and contains many good houses of stone, which is furnished in abundance by the neighbouring hills. E. of the town runs the river Soonrica, beyond which is a large Mohammedan tomb, a handsome stone building, with a cupola covered with blue enamel. There are numerous caves adjacent to the fort, said to contain many Buddhic sculptures. Gwalior, from its position,

must always have been a military post of great importance, but by no means impregnable; for it has frequently changed masters. It was taken by escalade, in 1780, by the British; but finally ceded, in 1805, to Scindia, and has since been the permanent residence of his court.

GYONGYOS, a market-town of Hungary, co. Heves, at the foot of the Matra mountains; 22 m. S.W. by W. Erlau, and 42 m. N.E. Pesth. Pop. about 14,700. (*Berghaus.*) It has several churches, a Franciscan gymnasium, and a Rom. Catholic high school; manufactures of woollen cloth, leather, hats, brandy, &c., and a large trade in agricultural produce and cattle. Good wine is made in its vicinity.

GYULA, a market-town of Hungary, cap. co. Bekes, on the White Körös, 35 m. N.N.W. Arad. Pop. (1838) 13,752. It consists of two parts, Hungarian and German Gyula, separated by the river; it has a fortress, a county-hall, several churches, some oil-mills, and a large trade in cattle, &c.

H.

HAARLEM, or HARLEM, one of the principal cities of the Netherlands, prov. N. Holland, cap. arrond. and cant.; on the Spaarn, 10 m. W. Amsterdam. Pop. about 22,000. It is now in great part destitute of defences, but was formerly a place of some strength, having been fortified in the 16th century with brick walls, parts of which, with an old gateway, still remain. "Haarlem is, in external appearance, unlike most other Dutch cities. It has an ancient and somewhat dingy aspect. The architecture of some of the houses is remarkably picturesque, with sharp-pointed gables; and the roofs show several rows of small attic windows, like what one is accustomed to see in old Flemish pictures. The streets are arranged in an irregular manner, with cross alleys and back courts, and few of them have havens in the centre, which is quite a singularity in a Dutch town." (*Chambers*, p.26.) Mr. Barrow says it is "very well built, very clean, and very dull." Its pop. at present is greatly below what it formerly contained. It has a large paved market-place surrounded by several of the principal edifices of the city, as the church of St. Bavon, a vast Gothic structure, with a high square tower; the flesh-market; the *Stadthaus*, a fine building, &c. Opposite the church is a statue of Laurence Coster, the reputed inventor of moveable types, a citizen of Haarlem. St. Bavon's has somewhat of a naked appearance inside; but its organ has long been considered one of the finest and largest in Europe. It is supported on porphyry pillars, and fills up the whole of one end of the church, reaching up to the roof. It has nearly 5,000 pipes; its tones are remarkably fine, and its power very great; but in the diameter of some of its pipes, it has recently been surpassed by organs built at York and Birmingham. Immediately under it, and between two masses of pillars, is a group of figures the size of life, in white marble, representing Faith, Hope, and Charity, executed by Xavery, a living artist, and which, according to Chambers, are the best specimens of modern sculpture in Holland. The remaining chief public buildings and institutions in Haarlem are several churches, public charities and schools, the Teylerian Museum, with a good collection of philosophical instruments, and others of fossils, coins, &c., at which lectures on different scientific subjects are delivered; the academy of sciences, the celebrated normal school of M. Preusen, and many other schools; an academy of drawing, an observatory, botanic garden, &c. There are several good private collections of paintings. Haarlem is the residence of a civil governor and a military commandant; is a bishop's see, and the seat of tribunals of original jurisdiction and commerce. It has manufactures of silk, linen, and cotton fabrics, velvets, rugs, carpets, lace, ribands, soap, and oil. Many of these have greatly declined; but, of late, several cotton factories have been established in its neighbourhood under the patronage of the king, and the manufacture of cotton goods has increased materially since the separation of Holland and Belgium. In one of these factories, conducted by a Scotchman, the king is a shareholder; steam-engines are employed to turn the machinery. There are 3 factories on a similar scale at Haarlem, employing in all 2,000 individuals, men, women, and children. The weekly wages of workmen average from 12*s.* to 13*s.*; boys and girls get about 1*s.* 6*d.* a week. In the environs of Haarlem are extensive bleaching grounds for linens, and here were at one time prepared those fine fabrics, long known in England as Holland cloths. An important branch of trade in Haarlem is the sale of flowers, roots, &c., of which traffic it is the chief seat. Near the city, on the S., are the "Bloemen-Tuin," or gardens for rearing these products. "Each garden is secluded from the public road by a high wall, or a brick house tidily painted; and when admitted, you find yourself in the midst of offices or warehouses devoted to the great business of drying and packing the roots. Thence the garden stretches out to the length of perhaps a quarter of a mile by a breadth of 100 yds., and is separated from other gardens, as well as frequently divided across by partitions of wood 6 ft. high. In the sunny square spots thus sectioned off, are all the varieties of tulips, dahlias, hyacinths, ranunculuses, and various other flowers. The drying-houses are filled with shelves, in stands, on which are spread myriads of roots, and in adjacent apartments men are kept constantly busy packing for exportation. In packing, each root is first twisted into a small piece of paper, and then a hundred are put together in a paper bag, according to sorts. The bags are afterwards packed in cases, and are thus sent to all parts of the world." (*Chambers*, p. 30.) A large horticulturist and dealer told Mr. Chambers, that he exported annually 300,000 crocus, 200,000 tulip, 100,000 hyacinth, and 100,000 ranunculus roots, besides many of other flowers. At one period, the most extravagant prices were given for these roots; but 100 florins is now considered (and well it may) a very large sum for one, and the greater part of the tulips cultivated and sold by the *bloemists* of Haarlem, are valued at from 1*d.* to 20*d.* each. The city was once celebrated for its printing; but at present this branch of industry is not more active than in an English country town. It has still, however, a type-foundry, chiefly for Greek and Hebrew characters, from which the Jews principally supply themselves with the latter.

The neighbourhood round Haarlem is carefully laid out in plantations and public walks, and for several miles on the road to Leyden the country is sprinkled with numerous neat villas. Immediately on the S. of the city is a wood of considerable extent, in which is a large and elegant mansion in the Grecian style, called the Pavilion. It formerly belonged to Mr. Hope, who sold it for 500,000 guilders (about 42,000*l.*) to Napoleon for his brother Louis. At the peace it was sequestrated by the nation: at present it is shut up; but it is designed to form a gallery for the paintings of Dutch living artists.

The epoch at which Haarlem was founded is uncertain. In 1572 it was besieged by a Spanish force under Toledo, a worthy son of the duke of Alva. The city held out for 7 months, when it being known that the garrison intended to make a desperate *sortie* as a forlorn hope, terms of capitulation were offered and accepted; but no sooner had the Spaniards obtained possession of the town, than they commenced a massacre of the inhab., and upwards of 1,000 individuals were either put to the sword, or tied in pairs and thrown into the lake. In 1577 the town was retaken by the Dutch. Haarlem was the birthplace of Ostade, Wouvermans, Berghem, Van der Helst, and Schrevelius.

The *Haarlemmer Meer*, or Lake of Haarlem, is an inlet of the sea S.E. of the city, extending S. to within a short distance of Leyden, and about 33 m. in circumference. It was formed by an inundation at the end of the 16th century, which transformed four small lakes into one sheet of water, and, overflowing the surrounding country, laid several villages waste, and destroyed much property. It has an outlet to the S. communicating with the Old Rhine; on the N. it communicates with the Y by the Spaarn, and by another small outlet which is crossed by the road from Haarlem to Amsterdam. It is generally shallow, except in the middle, and is easily agitated by winds, which drive the waves with great fury against the dykes erected round its shores. It is liable to sudden squalls, and is, on that account, little used for navigation. Various schemes have been proposed for draining this lake, by which at least 50,000 acres of land would be recovered. Hitherto nothing decisive has been done on the subject; but the impression is, that the undertaking will, ere long, be commenced, and that it will succeed. A railway between Haarlem and Amsterdam, which must in part pass through the Y, has been commenced. (See *Chambers' Tour*, p. 31, *&c.*; *Barrow's Tour in Holland*, *&c.*; *De Cloet, Pays Bas*; *Dict. Géogr.*, *&c.*)

HACKNEY, a town and par. of England, co. Middlesex, hund. Ossulstone, 3 m. N. by E. London. Area of par., including the hamlets of Clapton, Homerton, Dalston, Shacklewell, and Kingsland, 3,227 acres. Pop., in 1831, 31,047. The town consists chiefly of two wide and well-lighted streets, running nearly at right angles to each other, from which other streets diverge. There are many large and substantial residences both detached and connected with the line of street; but the houses generally are of inferior size. The par., now divided into 3 districts, has 4 churches; the mother-church, St. John's, and 3 chapels of ease. All are commodious; but none are remarkable for architectural elegance. The dissenters have several places of worship, among which is one (now occupied by Unitarians) rendered illustrious by the ministerial labours of Bates, Matthew Henry, Priestley, and Price. At Homerton is an academy for Independent ministers, of which Dr. Pye Smith is the

present principal. There are 3 charity schools, educating in the whole about 500 children; a school of industry for 60 children; and 3 hospitals or almshouses for aged people. At Clapton is the London Orphan Asylum, where 300 children, the orphans of respectable parents, are boarded, clothed, and educated; and at Hackneywick is an establishment supported by the Society for the Suppression of Juvenile Vagrancy. The land about Hackney is chiefly occupied by nurserymen and market-gardeners. Loddige's garden is said to contain some of the finest and rarest exotics in England: the rest of the land is employed in cow-pastures and brick-fields. The pars. of Hackney and Stoke Newington form a union under the Poor-Law Amendment Act; and the expense of maintaining the paupers of Hackney, in 1838, was 7,950*l*.

HADDINGTON (CO. OF), *see* LOTHIANS.

HADDINGTON, a parl. and royal bor. and market town of Scotland, cap. co. Haddington, 16 miles E. by N. Edinburgh, and 10½ W. by S. Dunbar, at the foot of the Garleton hills on the N., and bounded by the Tyne on the E., which stream divides it from the suburb of Nungate, to which, however, it is joined by a bridge of 4 arches. Pop. in 1841, 3,742. The town consists principally of two parallel streets, running E. and W., and a long cross street which bounds one of these, and intersects the other nearly at right angles. The main parallel street, which is a continuation of the road from Edinburgh, is spacious; the general character of the town, as to buildings and appearance, is superior to that of most others of its size. The approaches to it from the E. and W. are ornamented by a number of villas, with gardens and nursery grounds adjoining. The streets are paved, and lighted with gas. The principal buildings are the town-hall, with a lofty spire 150 feet in height; the county buildings, which contain accommodation for the sheriff's court, the meetings of the county, and apartments for the preservation of the public records; and a Gothic parish church, supposed to have been erected in the 13th or 14th century. It is 210 ft. in length; the choir and transept are in a somewhat dilapidated state; it has square towers, and is 90 ft. high. The western part of the cross is used as the parish church. Fordun styles it *lucerna Laudoniæ*, the lamp of Lothian. The parish church of Haddington is one of the few churches in Scotland, not in Edinburgh, that are collegiate. There is, also, a new chapel belonging to the Free church. There are chapels belonging respectively to the Scottish Episcopalians, to the United Associate Synod (two), to the Old Light Burghers, the Independents, and Methodists. Haddington can boast of one of the earliest schools established in Scotland (*M'Crie's Knox*, i. 4.), and it possesses at present an excellent classical seminary under the direction of the magistrates, and 6 other schools. A mechanics' institution was established here in 1823. There are no fewer than five public libraries in the town; and Haddington is the head quarters of the Itinerating Libraries, instituted by Mr. Samuel Brown. In 1835, there were in East Lothian 43 divisions of these libraries, of 50 volumes each. Each division remains for 2 years in the same place, when it is removed to another locality, and succeeded by a new supply of books of the same number; so that each locality has a fresh supply of new useful reading every two years. Each volume, at an average of the 43 divisions, is read *five* times during that period. The system of circulating libraries has been extended to various other parts of Scotland, to several districts in England, to Ireland, Canada, South Africa, and Jamaica. The use of the books is gratuitous if so wished, but never more than 1*d. per annum* has been systematically taken from any reader; but voluntary contributions, either in books or money, are received. (*MS. communication from Mr. Brown.*) The number of benevolent, friendly, and religious societies, is great. The permanent and occasional poor for three years previously to 1837 inclusive was 179 a year; and the average yearly fund for their support was 942*l*. The highest rate given was 10*l*. 8*s*. a year; the lowest 2*l*. 12*s*. (*Report by General Assembly*, 1839, p. 11.) The assessment for the poor is now (1849), 1,521*l*. There are no manufactures in the town, but there are two breweries and two distilleries in the vicinity; an iron forge, and coach work; a considerable trade in wool, in tanning and currying leather, in preparing bones and rape-cake for manure, and various minor banches of industry. Haddington is celebrated for its weekly grain market, which is the second in point of importance in Scotland, Dalkeith being the first. In 1839, the quantity of grain of all kinds sold in this market was 42,361 qrs.; but as that year was one of comparative scarcity, the average sale is greatly above what we have stated, being sometimes as high as 80,000 qrs. There are three branch banks, and a savings' bank, the latter instituted in 1815. The agricultural and horticultural societies of the county hold their meetings in the town.

Haddington is very ancient. A castle on its W. boundaries was used as a royal residence in the 12th and 13th centuries, and here Alexander II. was born in 1198. A convent of Cistertian, or Bernardine nuns, was founded here in 1178; and a monastery of Franciscan, or Grey Friars, in the subsequent century. (*Keith's Cat. of Scot. Bishops*, 449. and 462.) The suburb of the Nungate obtains its name from the former of these institutions. It was in this nunnery that the Scottish Parliament was convened (1548), when its assent was given to the marriage of Queen Mary with the Dauphin of France, and to her education at the French court. Haddington has often suffered severely from the overflowing of the Tyne. The last inundation was in 1775, when the river rose 17 ft. above its usual level, and flooded more than half the town. In 1244, the town, then composed of wooden buildings, was totally consumed by fire. It was again nearly consumed from the same cause in 1598; since which latter date, a curfew goes through the town at 8 o'clock, P.M. during winter, when, after tolling a bell, the crier repeats some uncouth rhymes, alluding to the calamity, and warning the inhabitants to greater caution in future. Haddington was the first place visited by cholera in 1831. Of 125 persons seized 57 died. In one night there were 8 deaths. It continued from the 17th Dec., 1831, to 22d Feb. ensuing. Haddington unites with N. Berwick, Dunbar, Lauder, and Jedburgh, in sending a member to the H. of C. In 1849-50, its registered voters were 187. The municipal income is about 1,400*l*. a year.

Various eminent men have been connected with Haddington. John Knox, the famous reformer, is generally believed to have been born in the suburb of Giffordgate in 1505, and received his education at the burgh school; but some writers regard the village of Gifford, five miles distant, as his birthplace. The Maitlands of Lethington, a place within a mile of the town, are well known both in literary and general history. Sir Richard Maitland, Lord Privy Seal of Scotland, and a Lord of Session, was himself a poet, and a collector of ancient Scottish poetry. (*Pinkerton's Ancient Scottish Poems*, Lond., 1786; see *Richard's Poems published by the Maitland Club*, 1830.) His eldest son William is well known in history as Secretary of State during the reign of Queen Mary; his second son John was Lord High Chancellor of Scotland; and Thomas, his youngest son, is celebrated both for his Latin poems (*Deliciæ Poet. Scot.*), and for being one of the interlocutors in Buchanan's dialogue *De Jure regni apud Scotos*. The Duke of Lauderdale, the capricious and tyrannical Secretary of State for Scotland in the time of Charles II., was a descendant of Sir Richard; also John, Earl of Lauderdale, author of "the Works of Virgil translated into English Verse." The only eminent man of more modern times connected with Haddington was the Rev. John Brown, author of the "Self-Interpreting Bible," and other theological works, who died in 1787. (In addition to the works quoted, see *New Stat. Acc. of Scot.*, § *Haddington*, i. 17.; *Chalmers' Caledonia*.)

HADLEIGH, a market-town and par. of England, co. Suffolk, hund. Cosford, on the Bret, a tributary of the Stour, 8 m. W. Ipswich, and 58 m. N.E. London. Area of par., 3,440 acres; pop., in 1831, 3,425. It is an ancient-looking town, exhibiting, both in brick and wood, many curious specimens of old house architecture. The church, a handsome structure with a fine steeple, forms the principal ornament of the town. There are also 12 almshouses, and a curious brick gate-house, with hexagonal turrets, erected at the end of the 15th century. This town had formerly a flourishing clothing trade; but the chief manufacture at present carried on is the spinning of yarn for the Norwich weavers. A silk-mill also employs 297 hands. Hadleigh was formerly a corporate town, but lost its charter by a *quo warranto* in the reign of James II. Markets on Monday; fairs on Whit-Monday, and Oct. 4.

HAGUE (THE), (Dutch *Gravenhaag*, "the count's meadow;" Fr. *La Haye*), a town of Holland, of which it is the cap. and usual residence of the king and court, prov. S. Holland, on a branch of the canal between Leyden and Rotterdam, 10 m. S.W. the former, and 13 m. N.W. the latter city, lat. 52° 4′ 20″ N., long. 4° 46′ 30″ E. Pop. 66,000. It is an open town, being surrounded only by a moat crossed by drawbridges. It has the usual features of a Dutch town; its houses and pavements are of brick, and several of its streets are intersected with canals, and planted with rows of trees; its general appearance, however, is much superior to that of the commercial cities of Holland. The N. end of the town is the fashionable quarter, and in it is the Vyverberg, a fine open space, ornamented with a lake and wooded island in its centre. Around and adjacent to this square are all the chief public edifices. The first of these is the National Museum, occupying the former palace of Prince Maurice, an elegant building of the 17th century. Its extensive picture gallery is reached by a noble staircase; the paintings here are mostly confined to works of the Dutch school, but in that department

the collection is almost unrivalled. The grand object of attraction is Paul Potter's Bull, a picture which occupies nearly the whole end of one of the rooms. "The representation is that of a young bull with brown and white spots, a cow reclining on the green sward before it, two or three sheep, and an aged cowherd leaning over a fence — all as large as life; the background being a distant landscape. The chief animal in the group appears to stand out in bold relief, with a briskness in its air that is perfectly startling; such also is the minuteness of the touching, in order to make every hair on the hide and forehead of the creature tell, that the picture will endure the closest inspection. This highly-prized work of art was carried off to Paris by order of Napoleon, and hung in the Louvre." (*Chambers*, p. 22.) The Royal Museum of curiosities, occupying the lower part of the building, consists principally of a large and unique collection of Chinese and Japanese articles. One apartment is devoted to objects of interest connected with Dutch history, containing, among other similar articles, the armour and weapons of De Ruyter. The king's palace, in an adjacent street, presents little that is remarkable either without or within: it is an edifice in the Grecian style, its centre and two wings forming three sides of a square. There is in it a good suite of state rooms, in which the king gives audience, every Wednesday, to his subjects indiscriminately. The palace of the Prince of Orange is a large but plain edifice; it contains, however, a good collection of Dutch paintings, and the valuable assemblage of chalk drawings by the old masters, formerly the property of Sir Thomas Lawrence. On one side of the Vyverberg is the *Binnenhof*, an irregular pile of building of various dates, comprising a handsome Gothic hall, the only existing remnant of the ancient palace of the counts of Holland. It is occupied by various government offices, and the chambers in which the states-general and states of Holland meet. The *Binnenhof* served for the prison of Grotius and Barneveldt; the latter of whom was executed in front of it in 1618. There are 14 churches, several chapels, 2 synagogues, an orphan asylum, state prison, house of correction, 5 poor schools, several intermediate and superior private schools, a royal library with 100,000 vols., a museum of medals, gems, cameos, &c., many private galleries of paintings, and learned and benevolent associations, and a theatre for Dutch, German, and French plays. The favourite promenade is the *Voorhout*, a fine wide road, lined with elegant mansions, planted with rows of trees, furnished with benches, &c., which leads from the N. quarter of the town to the *Bosch*. The latter is a finely wooded park, belonging to the king of Holland, and immediately adjacent to the Hague. In the centre of the grounds, which are embellished with artificial sheets of water, and winding walks amongst the trees, stands the *Huys in den Bosch* (house in the wood), the summer palace of the royal family. It is an edifice of an unpretending character externally, but within are many excellent pictures, and it has a ceiling partly painted by Reubens. About 3 m. W. of the Hague is Scheveningen, a fashionable but dreary Dutch watering-place; and about 1¼ m. S.E. the town is the castle of Ryswick, which gave its name to the treaty of 1697.

The Hague has never been a place of much commercial importance. The inhab. derive their resources chiefly from supplying or being employed by the court and government establishments; and they suffered very considerably from the transfer of the seat of government to Amsterdam on the erection of Holland into a kingdom by Napoleon. The manufacture of porcelain, and the printing of books, especially those in the French language, are almost the only branches of industry. There is, however, a cannon foundry, established in 1668.

The Hague became the residence of the feudal lords of Holland in 1250, from which period it continued the seat of government till 1806; it again assumed the rank of a capital on the restoration of the Orange family. It was the native place of the astronomer Huygens, the naturalist Ruysch, and William III. king of England. (*Chambers; Barrow; De Cloet; Encyc. des Gens du Monde.*)

HAGUENAU, a town of France, dép. Bas-Rhin, cap. cant., on the Moder, 15 m. N. Strasbourg. Pop. (1836) 8,084. The Moder here divides into 2 arms, one of which intersects the town, while the other encircles it on the S. Haguenau is surrounded by old and ill-constructed walls, and a wide ditch: it was originally fortified by the Emperor Frederick Barbarossa in the 12th century. A fine Gothic church erected about the same period, and ornamented with some elegant sculptures, is its chief public edifice; it has several other churches, a synagogue, civil and military hospital, some good cavalry barracks, many oil, madder, and other mills, and manufactures of cotton fabrics and yarn, woollens, soap, &c. The forest of Haguenau is one of the largest in France; it extends over an area of 17,000 hectares. (*Hugo; Dict. Géog.*, &c.)

HAINAN, or **HAI-LAM**, (Chinese, "*South of the Sea*,") a large island of the Chinese Sea, between lat. 18° and 20° S., and long. 108° 20′ and 109° E., belonging to the Chinese empire, and forming a dep. of the prov. of Canton, but separated from the continent by a strait from 15 to 20 m. wide, probably identical with what was called "the Gates of China" by the Mohammedan authors of the 8th and 9th centuries. (*Chinese Repository*, i. 37.) The island is of a somewhat oval shape; greatest length, N.E. to S.W., about 180 m.; average breadth, nearly 70 m. Area perhaps about 12,000 sq. m. Pop. estimated, in 1823, as little short of a million, independent of unconquered tribes in the interior. A mountain chain runs through Hainan in the direction of its length, and near its centre rises above the limit of perpetual snow. In this part of the island the principal rivers take their origin, some of which are of considerable size. The E. coast is bold and rocky; the W. low; the S. has some good harbours; but Hainan generally, like Formosa, is surrounded with many rocks and shoals dangerous to shipping. The climate is very hot: the heat is, however, tempered by sea-breezes, frequent fogs, and abundant dews. The soil is mostly sandy; the W. side of the island is more productive than the E., but the country is, upon the whole, barren; and, except timber, rice, and sugar (the latter principally sent to the N. of China), its articles of export are very few. Its chief wealth consists in its timber: the forests which cover the mountains abound with sandal, cocoa, rose, and other cabinet woods, brazilctto, ebony, &c. Tobacco, cotton, and indigo are raised, but in no great quantities. Various fruits are grown, and the sweet potato forms an important article of culture and food. Bees are very plentiful, and wax is a valuable item of produce. Pearl oysters and coral abound around the shores, on many parts of which extensive salt-works are established. Small quantities of gold and silver are obtained in the interior. The natives carry on some trade with Anam, Siam, and Singapore. On their voyages to Siam, they cut timber along the coasts of Tsiampa and Camboja, with which they build junks at Bankok. These junks are then laden with cargoes saleable at Canton or Hainan, and both cargoes and junks being sold, the profits are divided among the builders. Most part of the pop. are Chinese, who are similar to the inhabs. of the opposite coast; but the interior is inhabited by a different race, supposed to be aboriginal, some of whom have submitted to the Chinese government, while others still hold a savage independence. The island is subdivided into 13 districts. The cap., Kiong-tchou, a populous city, and the residence of the Chinese governor, is on the N. coast. Several other towns have a pop. of some thousand inhabs. Hainan appears to have been discovered by the Chinese about *anno* 108 B.C., and conquered by them soon afterwards. It was annexed to the prov., of which it now forms a part, in 1381. (*Ritter, Asien Erdkunde*, iii. 881—893.; *Purefoy*, in *Asiat. Researches*, vol. xx.; *Chinese Repository*, &c.)

HAINAULT, a prov. of Belgium, which see.

HALBERSTADT, a town of the Prussian dom., prov. Saxony, gov. Magdeburg, cap. circ. and principality of same name, on the Holzemme, a tributary of the Bode, 32 m. S.W. Magdeburg, next to which it is the largest and most important town in the gov. Pop. (1838) 17,227. (*Berghaus.*) It is very ancient; is built chiefly in the Gothic style, and is surrounded with walls, outside which are three suburbs. It has a cathedral, an edifice of the 15th century, remarkable for its paintings and stained glass windows, ten other Protestant, and two Rom. Catholic churches, a synagogue, a handsome mansion house (formerly a royal palace) gymnasium, superior town and girls' schools, a teacher's seminary, two large public libraries, a school of midwifery, an orphan asylum, house of correction, theatre, and several fine private collections of paintings, medals, antiques, &c. It is the seat of the superior courts of the gov., of town and distr. courts, and a board of tolls and taxation, and has numerous factories for woollen stuffs of secondary quality, carpets, linen fabrics, leather gloves, straw hats, starch, tobacco, soap, &c., with extensive oil refineries, numerous breweries, lithographic-printing establishments, and a considerable trade in corn and wool. Its commercial importance appears to have increased of late years. The epoch of its foundation is uncertain. It was made a bishop's see in 804. A great part of it was destroyed in 1179, by Henry the Lion. It was ceded to Prussia, together with its principality, at the peace of Westphalia, and has ever since belonged to that power, except during the existence of the short-lived kingdom of Westphalia, of which it formed a part.

HALES-OWEN, a par. and market-town of England, partly in an insulated portion of co. Salop, hund. Brimstrey, and partly in co. Worcester, lower div. hund. Halfshire, 104 m. N.W. London, 7 m. W.S.W. Birmingham, and 24 m. N.E. Worcester. Area of par., 11,290 acres; pop. of do., in 1841, 17,376. The town, which consists of a handsome main street, crossed by several others of inferior character, stands on the Stour, in a beautiful and well wooded valley, and bears the appearance of a busy and thriving place. The church is of Norman archi-

tecture, and has a light spire curiously supported on four arches. St. Kenelm's chapel, situated outside the town, was originally erected in the time of the Saxons, and a part yet remains apparently of that early date. The far larger part, however, was built in the reign of Henry III., and the tower, with its ornamental pinnacles, is an elegant specimen of the Gothic style. Few buildings so small present such striking architectural contrasts. There are three places of worship for dissenters. A free grammar-school was established here during the Commonwealth by a chancery commission, which provided it with an endowment, the present yearly value of which is about 130*l*. The school, open to all boys belonging to the par., is attended by about 50; it affords a classical education, but confers no university advantages, in the way of exhibitions. (*Carlisle.*) Shenstone, the poet, who was also the proprietor of "the Leasowes," a beautiful villa in the neighbourhood, was educated at this school: his monument is in the church. The manufacture of nails and the coarser kinds of hardware and tools constitutes the chief employment of the working classes. Steel is extensively made in the hamlet of Congreaves; and coal mines are worked within the parish.

Hales-owen is under the jurisdiction of the co. magistrates, who hold petty sessions here. A high bailiff, headborough, and constable are annually elected at the court leet of the lord of the manor, and these officers govern the internal economy of the town. A court of requests is held every third week for the recovery of debts under 5*l*., the power of which extends to five other pars. This par. forms a part of the Stourbridge union, and the expense of maintaining its poor in 1847 was 341*l*. Markets on Monday; fairs on Easter and Whit Monday for horses, cattle, cheese, &c.

An abbey of Premonstratensian monks was founded here in the reign of King John out of funds provided by that monarch. Its revenues, at the dissolution of the religious houses, amounted, according to Speed, to 338*l*. The ruins are extensive, and have partly been converted into farming premises. A few very fine lancet windows at the gable end of the chapter-house indicate the style of building to have been early English. (*Antiq. of Salop; Lewis's Top. Dict.*)

HALIFAX, a market town, par., and parl. bor. of England, co. York, W. Riding, wap. Morley, on the Hebble, a branch of the Calder, 170 m. N.N.W. London, 36 m. W.S.W. York, and 13 m. W.S.W. Leeds; lat. 53° 44′ N., long. 1° 49′ W. The entire parish is one of the most extensive in the kingdom, and nearly equals in size the county of Rutland. It includes 23 townships, and 75,740 acres. For rating, it is divided into 3 parts: the parish district of Halifax, the chapelry of Heptonstall, and the chapelry of Elland. The following table gives the pop. at each of the three last censuses, and the inhab. houses in 1841.

Townships.	Area in Acres.	Inhab. Houses.	Pop. 1821.	Pop. 1831.	Pop. 1841.
Halifax par. dist.					
Halifax -	990	3,920	12,628	15,382	19,881
N. Owram -	3,400	2,540	6,841	10,184	13,352
S. Owram -	2,290	1,253	4,256	5,751	6,478
Hepperholme -	2,550	1,078	3,936	4,977	5,421
Midgeley, bor. of -	2,110	498	2,207	2,409	2,667
Ovenden -	5,170	2,203	6,360	8,871	11,799
Shelf -	1,350	571	1,998	2,614	3,050
Skircoat -	1,340	1,018	3,323	4,060	5,237
Sowerby -	3,670	1,510	6,890	6,457	8,163
Warley -	3,980	1,233	4,982	5,685	6,857
Elland chapelry					
Barkisland -	2,420	438	2,224	2,292	2,391
Elland -	3,360	1,291	5,088	5,500	6,479
Fixby -	890	80	345	348	399
Norland -	1,140	310	1,665	1,616	1,670
Rastrick -	1,290	751	2,796	3,021	3,482
Rishworth -	6,190	293	1,588	1,536	1,710
Soyland -	4,960	659	3,242	3,589	3,603
Stainland -	1,730	701	2,814	3,037	3,759
Heptonstall chap.					
Erringdon -	2,980	392	1,471	1,933	2,221
Heptonstall -	5,320	969	4,513	4,661	4,791
Langfield -	2,420	602	2,069	2,514	3,284
Stansfield -	5,920	1,508	7,275	8,262	8,466
Wadsworth -	10,080	1,059	4,500	5,198	5,583
Total of par. -	75,740	24,872	92,050	109,899	130,743

The parl. bor. includes the township of Halifax, with small contiguous portions of the townships of N. and S. Owram, lying along the E. side of the Hebble brook; its pop., in 1841, was 26,694. The town is built on a gentle slope, in a valley surrounded by hills. In many parts the streets are narrow and irregular; but of late several have been widened, and some, as Broad Street, and Waterhouse Street, are handsome and spacious. It is well paved, and lighted with gas. The houses are almost exclusively built of stone from the quarries of N. and S. Owram; but a few still remain, built in the reign of Henry VIII., of plaster, with carved oak framework. Within the entire parish there are above 20 episcopal, and 80 dissenting places of worship; but many of these are in the rural districts. Within the town are three churches, the largest and finest of which, St. John's, the parish church, built in the 15th century, is of pointed Gothic architecture. It has a lobby, nave, side aisles, and chancel; and 2 side chapels were added in the 16th century. Of late years a handsome painted window has been put up, similar to the Marygold window in York cathedral. The tower, which is highly ornamented, contains a peal of 10 bells, and is 117 ft. high. In Sowerby Church is a monumental statue of Archbishop Tillotson, a native of that township. Trinity Church, built in 1798, is a Grecian edifice, with Ionic pilasters, surmounted by a tower and cupola at the W. end. St. James's, opened in 1832, is a pseudo-Gothic structure, with square turrets at the W. end. Besides the episcopal places of worship, there are chapels for Independents, Wesleyan Methodists, Methodist New Connection, Rom. Catholics, Primitive Methodists, Unitarians, and the Society of Friends, among which, one, belonging to the Independents, is remarkable for classical elegance and good taste. Connected with the churches and chapels are many Sunday schools; and the Halifax S. S. Union comprises numerous schools, attended by upwards of 5,000 children. The National School, built in 1815, near Trinity Church, is attended by about 250 boys; and the Lancastrian School, opened in 1818, has rather more than 300 of both sexes. The parish has 7 free or endowed schools; but of these only one, Smith's charity school, founded in 1726, is situated in the town. Queen Elizabeth's grammar school, in the township of Skircoat, was chartered in 1585, and is under the direction of 12 governors, chosen from among the inhab. The rental of the school property is considerable. The school is free to the sons of all parishioners; but the number of scholars was recently only about 40. The grammar schools at Hipperholme, N. Owram, and Heptonstall, have a good character, and are attended not only by the free boys, but others, who pay for their schooling. Wheelwright's school at Rishworth is a noble establishment, supported at an expense of more than 2,000*l*. a year, and providing a liberal education for 30 boys, with 2 exhibitions of 150*l*. a year at the universities: it is superintended by 2 masters and a matron. There are numerous charities for the relief of the poor and aged, none of which need any particular mention, except Waterhouse's almshouse and blue-coat school, established in 1627 for 12 aged persons, and 20 orphan children. The largest public building is the Piece Hall, a very extensive quadrangular stone structure, occupying more than 2 acres of ground: it has a rustic basement story, above which are two other stories fronted by colonnades having walks within them leading to the various storerooms, of which there are 315. In these rooms the manufacturers keep their cloths for sale. This building, erected in 1779, cost 12,000*l*. The infirmary, built in very elegant style, furnishes excellent accommodation for the many sick who resort thither. The baths on the Huddersfield road are well adapted for their purpose, and have a bowling-green attached. The building in Harrison-lane, called the Public Rooms, has elegant assembly rooms, and other accommodations, both for pleasure and business. There are 2 subscription libraries, one of which has apartments in the Public Rooms. The town possesses, among other public establishments, a Literary and Philosophical Society, established in 1830, and already offering the advantages of a library and museum. The Odd Fellows' Hall, in St. James's Road, erected in 1839, has a large room adapted for lectures, public meetings, &c. The Mechanics' Institute, founded in 1825, has a library of about 2,500 vols. The theatre, though small, is quite large enough for a pop. that feels little interest in such amusements. Outside the town, on the W., is Gibbet-hill, where formerly, in consequence of a local law designed principally for the protection of the clothiers, felons convicted of depredating upon their property were executed, by a machine like the French guillotine. The gas-works are in S. Owram, and in Ovenden are the springs and reservoirs which supply the town with excellent water.

The magistrates of Halifax are also county magistrates. Petty sessions are held every Saturday, and there is a court for the recovery of debts under 15*l*.; and a county court is established in the town, before which 4,776 plaints were entered in 1848. During the Commonwealth, Halifax sent 2 mems. to the H. of C.; but the franchise was withdrawn at the Restoration; and, notwithstanding its growing and universally acknowledged importance, it had no voice in the legislature till the Reform Act again conferred on it the privilege of sending 2 representatives to the H. of C. The parl. bor. includes small portions of N. and S. Owram, as well as the township of Halifax: registered electors, in 1849-50, 1,084. Market on Saturday. Fairs, June 24., and the first Saturday in Nov. for cattle and horses.

For the administration of the poor laws, the par. is formed into two unions, Halifax Union comprising 20 townships, and the Todmorden Union, including the Hemptonstall district and the chapelry of Todmorden.

The rise of Halifax is attributable wholly to its manufacturing industry, which is itself mainly a consequence of its unlimited command of coal and of the means of internal navigation. The cloth-weavers first settled here in the beginning of the 15th century, since which time it slowly, but gradually, increased till the American and French wars, when extraordinary activity prevailed, and the pop. was proportionally enlarged. The introduction of steam-engines and power-looms has also, of late years, contributed in no little degree to increase its importance as a place of trade. The town is united by a canal with the Rochdale canal and the Calder and Hebble navigation; and has, consequently, a navigable communication with Hull on the one hand, and Liverpool on the other. Woollen and worsted cloths are the staple produce of the par., and the following table shows the amount of factory labour bestowed on their manufacture in 1838. (*Parl. Rep.*, 1839.)

Kind of Mills.		Steam power.		Water power.		Hands employed.
	No.	Engines.	Power.	Wheels.	Power.	
Worsted mills	80	50	1,150	23	259	5,614
Woollen do.	63	29	510	46	407	2,074
Cotton do.	71	49	809	56	478	5,281
Silk do.	7	8	109	2	14	610
Total -	221	136	2,578	127	1,158	13,579

Halifax is well supplied with canal and railroad accommodation. It has 3 joint stock banking companies; each having a considerable number of partners, and a Savings' Bank, which had, on the 20th of November, 1848, 65,336*l*. of deposits. One or two newspapers are published in the town.

The staple manufactures of the town and neighbourhood are shalloons, tammies, and draw-boys, best known under the title of figured lastings and amens, superfine quilled everlastings, double russets and serges, all which are made of combing wool. They are brought in an unfinished state to the Piece-hall, where the merchants attend every Saturday to make their purchases. There is, besides, a very considerable manufactory of kerseys and half thicks, also of bockings and baize, chiefly carried on in the vale of Ripponden, whence comes a large portion of the cloth used for clothing the British navy. Large quantities are also sent to Holland, and all parts of America. The most promising branch of manufacture, however, is that of cloth and coatings, which was also introduced at the end of the last century by persons of enterprise, who, at vast expense, erected mills on the Calder and its tributaries. The success of these factories was such as to excite the jealousy of the Leeds merchants, who had been previously used to buy the same articles from the lower manufacturers at their cloth-hall, and parliament was petitioned, in 1794 and 1806, to prevent any merchant from becoming a manufacturer. The legislature very properly refused to cramp the energies of Halifax, to serve private interests in Leeds. Bombasins also and crapes, together with other fabrics of silk and worsted mixed, are manufactured here; and the manufacture of cottons is becoming a rapidly increasing and most important branch of industry. A great number of hands are employed in making machinery. (*Watson and Crabtree's Hist. of Halifax*, passim; *Private Information.*)

Halifax, a marit. city of British N. America, on a small peninsula on the S.E. coast of Nova Scotia, of which it is the cap. It stands on the declivity of a hill about 250 feet in height, rising from the W. side of one of the finest harbours in the American continent; lat. 44° 36′N., long. 63° 28′W. Pop., in 1850, exclusive of the army and navy, about 19,500. The streets are generally broad, the principal, which runs next the harbour, is well paved, and most of the others are macadamised. "The appearance of Halifax from the water, or from the opposite shore, is prepossessing and animated. The front of the town is lined by wharfs, alongside which vessels of all sizes, and variously rigged, are incessantly loading or discharging their cargoes. Warehouses rise over the wharfs, as well as in different parts of the town; and dwelling-houses and public buildings rear their heads over each other as they stretch along and up the sides of the hill. The spires of different churches, the building above the town in which the town-clock is fixed, a rotunda-built church, the signal posts on Citadel Hill, the different batteries, the variety of style in which the houses are built, some of which are painted white, some blue, and some red; rows of trees showing themselves in different parts of the town, the ships moored opposite the dockyard, the establishments and tall sheers of the latter, the merchant vessels under sail, at anchor, or alongside the wharfs; the wooded and rocky scenery of the back-ground, with the islands, and the small town of Dartmouth on the E. shore, are all objects which strike most forcibly on the view of a stranger." (*M'Gregor's Brit. America*, i. 325.) It is estimated that there are about 1,800 dwelling-houses, and 84 public buildings. Most of the former are built of wood; of the latter, the chief is Province Building, a handsome stone edifice 140 ft. long, by 70 ft. broad, and ornamented with a colonnade of the Ionic order. It comprises chambers for the council and legislative assembly, the supreme court, various government offices, and the Halifax public library. In the S. part of the town is the Government House, a solid, but sombre-looking building, near which is the residence of the military commandant. On the N. side of the town is the admiral's residence, a plain stone building. The dockyard, at the end of a straggling suburb, is the finest out of England; it covers 14 acres, and forms the chief dépot of naval stores in the British N. American colonies.* It is peculiarly fitted for the shelter, repair, and outfit of the fleets cruising on the American coast and in the W. Indies; and Mr. M'Gregor and others have censured the plan for the removal of the establishment to Bermuda. The N. and S. barracks may accommodate three regiments; and attached to them there is a good library. The other government buildings are the ordnance and commissariat stores, and the military hospital, erected by the late Duke of Kent. The naval hospital was burnt down some time ago. Dalhousie College is a handsome edifice of freestone, but not yet efficient as a seat of education. There are 2 churches, a large R. Catholic chapel, 2 Presbyterian, and 4 other chapels belonging to different sects, a poor-house, house of correction, an exchange, some assembly rooms, and a small theatre. The markets are well supplied with provisions, but the inns and boarding-houses are reported to be very indifferent. Several weekly papers, and a monthly magazine are published in Halifax; the inhab. are intelligent and social, and travellers have remarked that the tone of society is there more decidedly English than in most other colonial cities.

The harbour opposite the town, where ships usually anchor, and where, at medium tides, there are 12 fathoms water, is rather more than a mile wide. After narrowing to ½ m., about 1 m. above the upper end of the town, it expands into Bedford Basin. This noble sheet of water, which is completely landlocked, occupies a surface of 10 sq. m., and is capable of containing the whole British navy. Halifax harbour is accessible at all seasons, and its navigation is scarcely ever interrupted by ice. The best mark in sailing for it is Sambro lighthouse, on a small island off Sambro Head, about 13 m. S. by E. Halifax, with a fixed light 210 ft. high. Another lighthouse stands on Magher's Beach, a spit extending from M'Nab's Island, a wooded and cultivated island, at the very entrance of the port. When the latter light is seen, ships may run in without fear. The passage on the W. side of M'Nab's Island is for large ships, the other on the E. has only water for schooners. There are several other small islands further in, on one of which, nearly opposite the town, some strong batteries are mounted. Some other pretty strong forts defend the harbour. North West Arm, which bounds Halifax peninsula on the W., is 4 m long, nearly ½ m. wide, and has from 10 to 20 fathoms' depth of water, with safe anchorage. Near its head lies Melville Island, some buildings on which, now destroyed, were formerly used for the detention of prisoners of war. A joint stock company's canal, in aid of which the legislature contributed 15,000*l*., now connects the harbour of Halifax with Cobequid Bay and the Bay of Fundy.

Since its first settlement, in 1749, Halifax has continued to be the seat of a profitable fishery and trade. The latter, especially, is in as prosperous a condition as that of any town in British America; and this city may be said to engross the whole foreign trade of Nova Scotia. The chief trade is with the W. Indies, and other British colonies, the U. States, and Great Britain. There belonged to this and the other ports of Nova Scotia, on the 1st of Jan. 1850, 1519 vessels under, and 945 above, 50 tons burden; their total aggregate burden being 152,589 tons. They are principally engaged in the fisheries and in the timber and lumber trade.

The following is an account of the quantities and values of the principal articles exported from the colony of Nova Scotia during 1836: — [See top of next page.]

The principal articles of importation are rum and other spirits, manufactured goods, meal and flour, sugar and tea, slops, &c.

In 1817, Halifax was declared a free port to a certain extent, and has since acquired the privilege of warehousing. About 100 square-rigged vessels, and the same number of schooners, with several small craft, were owned in Halifax in 1833. Some ships of large size were

* Mr. Moorsom (*Letters*, 1830) says that it is only a naval yard, "there being no docks. The men-of-war lie alongside a large wharf to refit, or must be hauled up on slips." (p. 63.) Dartmouth, opposite, offers natural facilities for the formation of docks, but these have not been taken advantage of.

Exports.		
Goods.	Quantities.	Value.
		L.
Beef and pork - - -	6,880 lbs.	17,907
Coals - - - -	42,587 tons	38,328
Corn and meal - - -	-	18,980
Fish — Cod, dry - -	221,500 quintals	119,054
Do. wet - -	37,133 lbs.	30,097
Other sorts of fish - -	- -	8,053
Gypsum - - -	31,489 tons	14,165
Oil, train and sperm - -	221,967 galls.	29,004
Whalebone - - -	21,000 lbs.	700
Pine timber - - -	15,523 tons	14,747
Deals and planks - -	- -	53,514
Other sorts of wood - -	- -	47,599
Miscellaneous - - -	- -	54,889
		446,097

employed in the South Sea fishery; but, generally speaking, the inhab. are less enterprising and successful fishers than the New Englanders. Halifax has some manufactures, but they are of no great importance, and confined to articles of immediate consumption; as soap, candles, leather, paper, snuff, rum, gin, whiskey, porter, ale, and refined sugar. There are two private banking companies, and a chamber of commerce, composed of 15 members. Packets sail monthly between Halifax and Falmouth, and others regularly to Liverpool, Boston, New York, and the W. Indies: a steam-boat and ferry-boats also ply constantly to and from Dartmouth, on the opposite side of the harbour. (*M'Gregor's Brit. America*, i. 323—344.; *Moorsom's Letters; Commerc. Dict; Parl. Papers, &c.*)

HALL (Suabian), a town of Wirtemburg, circ. Jaxt, on both sides the Kocher, which is here crossed by a stone bridge, 34 m. N.E. Stuttgard. Pop., with its suburbs, 6,800. It is ancient, and was formerly a free imperial city. It has 7 churches, a fine town-hall, a richly endowed gymnasium, an ancient mint, an hospital, 2 public libraries, &c. Next to Ulm, it has the greatest number of sugar refineries in the kingdom; it has also some soap and other factories, and a large trade in oxen and hogs; but its chief article of commerce is salt, procured from the saline springs in its vicinity, which yield, according to the *Encyc. des Gens, &c.*, 80,000, or, according to Horschelmann, 95,000 quintals, a year. (*Memminger, Beschreib. von Würtemb.; Berghaus, &c.*)

HALLE, a town of Prussian Saxony, distr. Merseburg, cap. circ. same name, on the Saale, 93 m. S.S.W. Berlin, 65 m. N.E. Gotha, and 18 m. N.W. Leipzic; lat. 51° 29′ 5″ N., long. 11° 58′ E. Pop. (1846) 29,800. The shape of the town is an irregular parallelogram, and it contains quarters, viz. Halle, Glaucha, and Neumarkt, each of which has its own magistrates. It is old and ill built, and has few remarkable edifices. The Gothic church of St. Mary was built in the 16th century, and that of St. Maurice as early as the 12th. In the market-place is a singular structure, 250 ft. high, called the Red Tower. The other principal buildings are Franke's Institute, the university-hall, and the hospitals. Outside the walls, E. of the town, is an elegant monument in honour of the Germans who fell in the battle of Leipzic. The old castle of Moritzberg, where the archbishops of Magdeburg used formerly to reside, was mostly destroyed in the Thirty Years' War: the solitary remaining wing is used as a Calvinistic church. Halle is not remarkable as a place of trade; but hardware and starch-making are more followed than any other branch of industry. In a valley near the river are two large salt springs, which formerly were extremely productive; at present, however, they yield only about 16,000 quintals a year. Pit-coal is used in these salt-works; but, strange to say, it has not been introduced in any other way.

The university was founded by Frederick I. in 1694, and soon after its establishment became known as the seat of the great *Pietist* divines of Germany, who have exercised in subsequent times a most powerful and beneficial influence over the morals of the people; and since this time it has always been known as a great theological university, though the sentiments of its professors have verged more and more towards *Rationalism*. At the beginning of the present century, the university of Halle had reached the height of its prosperity; but Napoleon's victory at Jena led to its dissolution, nor can it be said to have regained a positive existence till after his overthrow in 1815, when it was united with that of Wittemberg, and called the *United Frederick-University of Halle-Wittemberg*. In 1829 there were 1,400 students, 944 of whom belonged to the theological faculty. Lately, however, the university of Berlin has attracted many of its students, whose numbers have fallen to about 800. Francke, Wolff, Vater, Semler, Wegscheider, Gesenius, Pfaff, and Tholuck are a few among its theologians; besides whom, Meckel, and other medical professors, have contributed to raise its character as a school of medicine. The library contains about 50,000 volumes; and there are, besides, museums of various kinds, an anatomical theatre, chemical laboratory, botanical garden and observatory. Three hospitals connected with the medical school furnish the students with ample opportunities of seeing practice. Besides the university, there are several institutions for education, the chief among which is the institute founded by Francke in 1698. It consists, — 1. of an orphan school, educating about 150 children, 3-4ths of whom are boys; 2. of a royal pädagogium, for educating children of the better classes, and which has trained since its establishment upwards of 3,000 children; 3. of a Latin school, intended chiefly to impart sound grammatical instruction to the sons of the citizens; 4. of a Bible press, which has sent forth some millions of copies of the Scriptures at a cheap rate, and at which also certain classical works are printed for the use of the students. The profits are continually applied to increase the usefulness of the establishment. The building has been recently enriched with an excellent bronze statue of the founder, by Rauch. Its cost was defrayed by a subscription, headed by the king of Prussia. Halle has a society of natural history and an oriental society, and one of the best literary publications of Germany, *Die Allgemeine Litteraturzeitung*, has been published here ever since 1804.

HALSTED, a market-town and par. of England, co. Essex, hund. Hinckford, on rising ground, near the Colne, 43 m. N.E. London, and 23 m. W. by S. Ipswich. Area of par., 6,230 acres: pop. of ditto, in 1841, 5,710. The town has wide and clean streets, and a good market-place in its centre. The church is a fine old building, in the Gothic style, having a tower and wooden steeple. The living is a vicarage, in the patronage of the bishop of London. Besides the church, there are 3 places of worship for dissenters. A grammar-school was founded here in 1594, for the education of 40 poor children within this or the adjoining parishes, the governors of Christ's Hospital, in London, being the trustees. The revenues, which for some years have amounted to 200*l.* yearly, have been lately expended in building a good schoolhouse, capable of accommodating 100 scholars; but the master's salary is confined to 20*l.* a year, and the school is attended by only 25 boys. The trustees have the management of several other town charities. (*Char. Comm. Rep.*) The town has 6 other schools; and the children taught in Sunday schools amount to 700. A baize manufacture has almost wholly decayed; but there is a silk mill employing about 260 people; besides which there are about 180 hand looms employed on figured and plain silk velvets; the wages of the velvet weavers averaging 13*s.* 3*d.*, and of satin weavers 7*s.* 6*d.* weekly. Winding silk employs numerous females: many of the poor people are engaged in straw plaiting. Hops are abundantly raised in the neighbourhood. Halsted, under the Poor Law Amendment Act, is the chief town of a union comprising 16 parishes; and the expense of maintaining the poor belonging to this par. was 2,395*l.* in 1838. Markets on Friday, chiefly for corn: fairs on May 6. and Oct. 29. for cattle, &c.

HAM, a town of France, dép. Somme, cap. cant., in a marshy plain near the Somme, and on the canal d'Angoulême, 35 m. E.S.E. Amiens. Pop. 1,663. It is celebrated for its castle, a strong fortress used as a state prison, in which Prince Polignac, and other ministers of Charles X. were confined for 6 years. This edifice is visible from a great distance; it has a large round tower, built in 1470, 108 feet in height, and as many in diameter, with walls of extraordinary thickness. The lordship of Ham was united to the possessions of the crown by Henri IV.; Louis XIV. demolished the fortifications of the town, but preserved the castle. (*Hugo*, art. *Somme; Dict. Géog.*)

HAMADAN (an. *Ecbatana*), a town of Persia, prov. Irak, and cap. beglerbeglik same name, 190 m. W.S.W. Teheran, and 260 m. N.W. Ispahan; lat. 34° 53′ N., long. 48° E. It stands on a slope near the small river Hamadan-tchai, and at the foot of Mount Elwund (the *Orontes* of antiquity). Its pop. is variously stated at from 25,000 to 40,000, the smaller number being perhaps nearest the mark. It is meanly built, and occupies a considerable space, the houses being profusely interspersed with trees. The ruins of walls and houses show that it must formerly have been an immense city, filled with splendid edifices; but it now contains only a single good street, the rest being inferior to those seen in other eastern towns. The largest public building is the *Mesjid-Jumah*, in a large square, used as a market-place: there are also several other mosques, an Armenian church, a Jews' synagogue, some public baths, bazaars and caravanserais, all of which indicate, by their ruinous state, the fallen prosperity of the place. Near the great mosque, in a Jews' grave-yard, filled with tombs, stands a building which claims, by its Hebrew inscription, to be the sepulchre of Esther and Mordecai; but Morier is of opinion that the structure is Mohammedan; and it was perhaps raised or rebuilt after the sack of Hamadan by Timour. Within the town also are the tombs of the celebrated physician Avicenna, of the Persian poet Attar, and of the Arabic poet Abul-Hasif; and on this account it is much resorted to by

pilgrims from all parts of Turkey and Persia. On a height commanding a complete view of the town are the ruins of a castle destroyed by Aga Mahomed Khan; and a little below are some remains, considered by Morier to have belonged to the ancient palace of the Kings of Media. The same writer observes, that "Hamadan presents more objects of research to the antiquary than any other city that he had visited in Persia." The modern town is famed for its manufacture of leather, in which it has a large trade, and carpet and silk weaving is also pursued to some extent; but its chief wealth is derived from its situation on the great commercial road between Bagdad, Tehran, and Ispahan. The environs are highly productive; but the absence of forest timber deprives the scenery of a picturesque character, and causes wood to be so expensive, that dried cow-dung is usually substituted for it as fuel.

There is every reason to believe that Hamadan stands on or near the site of the ancient Ecbatana, Agbatana, or Apobatana; though Sir W. Jones fixed it at Tabriz, and Dr. Williams, of Edinburgh, at Ispahan. No position, however, except Hamadan, will suit the descriptions of Isidore of Carax and Diodorus Siculus, as has been clearly proved by the reviewer of *Williams's Geog. of Asia Minor*, in the *Journal of Education*. (ii. p. 305.) Ecbatana of Media was founded, or rather enlarged, by Dejoces, *circa anno* 680 B.C. The Medes, says Herodotus, "obedient to the command of their king, erected that great and strong city now known under the name of Agbatena, where the walls are built circle within circle, and are so constructed, that each inner circle overtops its outer neighbour by the height of the battlements alone. This was effected partly by the nature of the ground, a conical hill, and partly by the building itself. The number of the circles was seven, and within the innermost were built the palace and the treasury. The circ. of the outermost wall was almost equal to that of Athens. The Median nation were ordered to construct their houses in a circle round the outer wall." (*Herod.* i. 95—130.) We are told in the Apocrypha, that in the reign of Arphaxad (Phraortes) it was besieged and taken by Nebuchadnezzar, who "spoiled the streets thereof, and turned the beauty thereof into shame." (Judith, i. 14.) From the days of Darius to those of Jenghis-khan it was, on account of the coolness of its climate, the favourite residence of the kings of Persia during those months of summer in which the heat of Susa and Ispahan is almost insupportable. It was reduced by the caliph Othman, nearly destroyed by Jenghis Khan, and again taken and ravaged by Timour at the end of the 14th century. It was rebuilt, however, and appears to have been a city of considerable importance under the Sophi dynasty. In 1722 it suffered greatly during the wars that took place after the dethronement of Shah-Hussein, and more recently from the pillage of the Turks under Ahmed, pacha of Bagdad. It remained subject to the Turks till Nadir Shah drove them beyond the Tigris, and again annexed it to the kingdom of Persia. Its present ruinous appearance is attributable to the fact of its having been so often the theatre of war and the object of plunder. This, the great Median Ecbatana, must not be confounded with the Atropatenian Ecbatana, the site of which has been fixed by Major Rawlinson at Takhti-Suleiman, 180 m. S.S.E. Tabriz. (*Geog. Journal*, x.; *Kinneir's Persia; Ker Porter's Travels*, ii.; *Morier's Travels*, ii.)

HAMAH (an. *Epiphania*), a city of Syria, and cap. of a sanjiack, on the Orontes, 76 m. N.E. Tripoli, and 81 m. S. Aleppo; lat. 34° 55′ N., long. 37° 6′ 15″ E. Pop., according to Mr. Consul Moore, 44,000. It is pleasantly situated on both banks of the Orontes, or Aasy, which is here crossed by four bridges. The town is walled and otherwise well defended; and some agreeable suburbs give it externally a prepossessing appearance. But the streets, as in most cities of Syria, are narrow, irregular, and dirty; and the houses, though handsome inside, present to the street only unattractive mud-brick walls. The principal buildings are the palace of the Mutzellim and the mosques, one of which is remarkable for a fine old minaret. There are several bazaars, three public baths, and some handsome residences with spacious gardens. Some curious hydraulic works for supplying the town with water have been constructed on the river, one of the wheels of which is 70 ft. in diameter. The industry of the town comprises silk and cotton fabrics: it trades largely with Aleppo in European and colonial merchandise, and being on a great caravan route, has considerable commerce with the interior of Asia and Africa. The place suffered much from an earthquake in 1157, in common with other Syrian towns; and hence there are few antiquities, a square mound of earth in the middle of the city being the only vestige of the older buildings. There is no doubt, however, that Hamah stands on the site of the Hamath mentioned in Scripture, and reputed to have been founded by Hamath, son of Canaan. It was known in the time of Moses; and at a later period it was relieved from the oppression of a neighbouring prince by the victorious David, to whom, in testimony of his gratitude, "the king sent Joram, his son, to salute him and to bless him." (2 Sam. viii. 9. 10.) The prophet Amos (vi. 2.) styles it "Hamath the Great." Its name was changed by the Macedonians, in honour of Antiochus Epiphanes; and during the expedition of Pompey into Apamæa and Cœle-Syria, it became subject to the Romans, *anno* 63 B.C. (*Robinson's Pal. and Syr.* ii. 245.; *Burckhardt's Trav.* ii.; *Bowring's Reports.*)

HAMBURG (REPUBLIC OF), an indep. state of N.W. Germany, the territories of which comprise the city of Hamburg and the country immediately surrounding it; the town of Bergdorf, with the district called the *Vierländer* (the sovereignty over which is, however, shared with Lubeck), Ritzebuttel, Cuxhaven, and the island of Neuwerk, at the mouth of the Elbe, some islands in that river opposite the cap., and several small detached territories, chiefly situated N. of the rest, and enclosed by the Duchy of Holstein. The whole of these dominions are included between lat. 53° 24′ and 53° 54′ N., and long. 9° 30′ and 10° 27′ E. United area, 150 sq. m. Pop. 188,054, of whom about 170,000 are Lutherans, 10,000 Jews, and the residue Calvinists, R. Catholics, &c. The more compact central territory round Hamburg is surrounded by the Danish dominions on every side, except on the S. and S.W., where the Elbe separates it from those of Hanover. Besides the Elbe, it is watered by the Alster and Bille. It is generally a level plain; not particularly fertile, excepting the Vierländen, to the S.E. The islands in the Elbe called the *marsh-lands* are very productive. A good deal of land is devoted to fruit, flower, and vegetable gardens; and the entire country round Hamburg is dotted over with flourishing villages and plantations. The rural pop. is in a good comfortable condition.

The government "consists of a senate and 3 colleges of citizens. The former is composed of 4 burgomasters and 24 senators, with the addition of 4 syndics and 4 secretaries, 3 of the burgomasters and 11 of the councillors must be lawyers; the remainder are merchants. The qualification necessary for becoming a senator is, that the individual be born in Hamburg, be above 30 years of age, and a member of the Lutheran Church; no Calvinist or Catholic being permitted to sit at this board.* The senate appoints agents and consuls to foreign courts, and receives foreign ministers; grants letters patent, makes contracts, issues mandates, has the power of mitigation, or of changing the punishment of criminals; and, in fine, the charge of every matter connected with the executive. The *Burgerschaft*, or general body of the citizens, in whose hands the legislative power is placed, are divided into 5 divisions (co-elective with the 5 parishes of the city), who elect the 3 colleges. The first of these is the *College of Oberalten*, or aldermen, and consists of 15, the privileged inhab. of each parish having each the choice of 3. The members of this college attend the senate, can debate on any proposition, and, should they find the constitution or the laws infringed, can impeach any senator whom they may suspect. The second division of the Burgerschaft is called the *College of Sixty*, and consists of the college of aldermen, with 9 other persons, called deacons, from each parish. Their duty is to watch over the inferior deps. of the state. The third division is the *College of One Hundred and Eighty*, and is composed of the 2 former colleges, with 24 sub-deacons out of each of the 5 parishes. This college has very limited duties. In addition to these colleges there is another called the *Kammerei*, composed of 10 members, or 2 from each parish. This chamber is elected for 10 years, and its duty is to audit the public accounts, and lay them before the senate. These several bodies may be said to be merely colleges for controlling the senate (which always assumes the initiative in legislation). But when a new law is to be enacted, a new tax to be levied, a new loan to be contracted, or an increase to be made to the salary of any public functionary, the general body of the citizens must be consulted." (*Strang, Germany in* 1831, i. 67. 72.) The citizens of Hamburg are divided into "great" and "small." The former alone are eligible to places of rank and honour, and can buy and sell without restriction. The latter can neither import nor export goods wholesale in their own names, nor transact business on the exchange. "The affair is altogether a matter of money, the expense of becoming a *grosse* burgher being 150 marks; that of a *kleine*, 40." (*Strang*, 74.) The right of citizenship is not hereditary; nor can any foreigner transact business in Hamburg without becoming a citizen, nor carry on any kind of manufacture or handicraft without entering one or other of the guilds or corporations, of which 23 exist. Jews are wholly debarred from the last mentioned privileges. There are in the cap. an upper court of justice, which takes cognizance of all suits above 2,000

* The mode of filling up vacancies in this body is a curious combination of chance and choice; it is fully described in *Strang's Germany, &c.*, i. 68—70.

marks; appeals from which can, however, be made to the superior court of the Hanse Towns at Lubeck: a lower court of justice, which tries criminal cases, and decides in civil causes under 2,000 marks; and a commercial tribunal, a final appeal from the decision of which lies to the upper court of justice. The inferior towns have their own magistracy, and police courts subordinate to 2 directors of police in Hamburg. The armed force consists of a garrison of about 1,400 regularly paid soldiers, and 10,000 unpaid burghers, including all the citizens between the ages of 18 and 45. The contingent furnished to the army of the German Confederation is 1,298 men. The public revenues amount to about 7,000,000 marks, and the public debt to about 37,000,000 do. Hamburg has as many as 60 consuls in different parts of the world: it enjoys a separate vote in the full German Diet, and together with Lubeck, Bremen, and Frankfort, has one in the Lesser Council of the Confederation.

Hamburg, the principal commercial city and seaport of Germany, cap. of the above republic, and one of the three existing Hanse Towns, and four free imperial cities, of Germany; on the N. bank of the Elbe, at the point where it receives the Alster, 60 m. S.E. from its mouth, 60 m. N.E. Bremen, and 36 m. S.W. Lubeck; lat. 53° 32′ 51″ N., long. 9° 58′ 37″ E. Pop. 148,754. The city is oval shaped; is about 4 m. in circ., and was formerly fortified; but having suffered severely during its occupation by the French in the last war, its ramparts have been levelled since the peace, and converted into public walks. It is intersected by numerous canals; and its aspect resembles that of a Dutch town. There are some good streets, as the *Grossen Bleichen*, *Neue-Wall*, and *Admiralitäts-Strassen*, the *Jungfernstieg*, &c.; but the rest are mostly narrow, dark, and dirty. The houses are generally of brick, old-fashioned, and ill-built; and altogether the outward appearance of the city presents but few objects of curiosity to the visiter. "The principal ornament of Hamburg is the Alster. This river rises in Holstein, some miles above the city, and spreads out into a wide lake, which flows through deep broad ditches, some of which encircle the ramparts, and communicate with the Elbe by sluices, while others intersect the city in all directions, forming numerous canals navigable for barges of considerable size. This lake is called the Outer Alster. The Inner Alster is a large square sheet of water connected with the former by a narrow channel, spanned by a single arch. On three sides of the Inner Alster there are broad walks, with rows of trees, the favourite resort of the Hamburgers of all classes and all ages. The best houses in the city are to be found in its immediate neighbourhood. The Jungfernstieg occupies its S. and W. sides." (*Murray's Handb. for N. Germany*, 16.) "On a summer's evening, when this lake is covered by so large an assemblage of gaily painted boats as to resemble a regatta, and the citizens, in their best attire, are enjoying the cool breezes on its shores, or crowding the numerous coffee-houses that surround it, few cities possess a more agreeable promenade than Hamburg." (*Germany and the Germans*, i. 6.)

But these statements apply quite as much, perhaps, to what Hamburg was, as to what it is; for, in May, 1842, it was visited by a tremendous fire, which raged for 3 days, destroyed the buildings on two sides of the Alster basin, the Rathaus, Bank, and other public edifices, and 1749 private houses. This visitation elicited the deepest sympathy in this and other countries; and as much as 400,000*l.* was subscribed by foreigners (about 41,000*l.* in England), and remitted to Hamburg in alleviation of the distresses of the sufferers.

But, however severe at the time, this conflagration, like the great fire in London, has proved in the end for the advantage of the city. The system of mutual insurance having been generally adopted, the proprietors of houses and other property were subjected to a tax to defray the interest of a loan of 32 millions marks banco, raised to indemnify the sufferers, and to enable them to rebuild their houses. The work thus vigorously commenced has since been successfully carried on. The ground that had been cleared by the flames has been laid out on an improved plan, with wider and straighter streets, and other essential ameliorations. The finest of the new buildings are near the Alster. Many of them are of vast extent, and have been constructed at an enormous cost. The foundations are mostly of granite, the superstructure of brick and stucco. The arcade opening out of the *Jungfernstieg* deserves attention for its extent and beauty. Other improvements consist in conducting the drains to the Elbe without allowing them to enter the canals, and in the conversion into a new quarter of the town of a low marshy tract on the right bank of the Elbe. Its surface was raised 4 ft. by covering it with the rubbish of the fire. (*Handbook for N. of Europe*, 1850.)

There are but few public buildings worthy of notice. The city is divided into five parishes, those of Saints Peter, Nicholas, Catherine, James, and Michael, the churches of which are amongst the principal edifices. The church of St. Peter, originally built in the 12th century, was burnt down in the great fire, but it has since been rebuilt, and is a fine lofty edifice. St. Nicholas, also, was burnt down; but it is now being restored on a grand scale. The church of St. Michael is the most interesting in the city. It is 245 ft. long, by 180 ft. broad; and has a tower 456 ft. in height, ascended by a stair of nearly 600 steps. Its interior is capable of accommodating 6000 persons (*Strang*); it has a fine altar-piece, an organ with 5600 pipes, and a large crypt supported by 69 granite columns. There are 12 other places of worship, including the chapels of the German, French, and English Calvinists, and the English Episcopal, Calvinist, and R. Catholic churches. The new exchange, opened in 1841, happily escaped the ravages of the fire. It contains a magnificent hall for the assemblage of the merchants; a hall for the meetings of the merchant company; rooms for the use of the *commercium*, or board of trade, and for the extensive commercial library belonging to the latter institution. Hamburg has a great many charitable institutions, some of which are on a splendid scale. The General Infirmary, erected in 1823 in the suburb of St. George, on the Lubeck road, cost about 85,000*l.* Its yearly expenditure is about 16,500*l.*, the greater part of which is supplied from the city funds. It contains 140 sick wards, the majority about 40 ft. long, 25 ft. broad, and 13 ft. high, and various apartments for different offices, with apartments for officers, &c. It may accommodate from 4,000 to 5,000 patients: invalids of the middle ranks are attended to in it on their paying a proportionate subscription. In the new Orphan Asylum, 600 orphans are received into the establishment, and 500 more are provided for elsewhere. There are, also, asylums for aged persons, deaf and dumb, the blind, sailors and their widows, &c.; and a private hospital, in which, besides medical attendance, a superior education is also given to deformed children, cripples, &c.; of whom Hamburg contains a large number. The old *Rathaus*, or senate-house, was burned down in 1842; but a new *Rathaus*, on an improved plan, is now being erected adjacent to the exchange. The bank, also, was destroyed in 1842, but its treasure, which was in its vaults, escaped untouched. The bank was founded in 1619: it is a bank of *deposit* only, and is extremely well-managed. The Eimbeck-house, workhouse, prison, town-hall, arsenal, and 2 theatres, are amongst the remaining chief buildings; the new theatre is one of the largest in Germany, and the performances and music are generally good. A commodious new building, the *Schulgebaude*, opened in 1840, contains the *Gymnasium*, or college for instruction in philosophy, philology, history, physics, and natural history; the *Johanneum*, or high school, an excellent and well-directed institution, founded in 1529; and the city library, containing 180,000 vols., open to every burgher and literary man. Hamburg has also an observatory and a botanic garden, academies of design, commerce, navigation, anatomy, &c.; museums of physical objects and works of art, and several learned societies, especially one for the promotion of the fine and useful arts. In 1839, 27 daily and weekly periodical publications were published in Hamburg, and circulated over a great part of N. Germany. But the Hamburg press does not rank high.

In 1813, while the town was occupied by the French, a series of wooden bridges, and a *chaussee* connected by ferries with the N. and S. shores, were thrown across the swamps and islands of the Elbe, separating Hamburg from Hanover. Having been fitted only for temporary purposes, they were removed in 1816, and the communication is now maintained by steam boats. The arm of the Elbe opposite the city is not very wide, but it is deep enough for vessels of considerable burden. The maintenance of floating lights, buoys, &c., for the safe navigation of the river, is said to cost the city 60,000 dollars a year. The city harbour presents an animated scene: "a forest of ships of all nations, and from every quarter of the globe; while the face of the stream is covered with boats sporting about in every direction. The tide rises at the quays from 5 to 12 ft., and flows about 20 English miles above the city." (*Strang*, i. 11.) Between Hamburg and Altona, an adjoining town within the Danish territory, is the suburb of St. Paul, a narrow strip of about ½ m., called Hamburgersberg, which is in fact a kind of "Wapping." The environs of Hamburg abound with the villas of merchants, public cemeteries, pleasantly laid out, hotels, tea-gardens, and places of public entertainment, amongst which Rainville Garden, near Altona, is pre-eminent.

The manufactures of the town are in some respects not so flourishing as formerly. Thirty-five years ago there might have been 600 sugar refineries; and now there are scarcely 100. Sugar refining is still, however, the chief branch of industry; breweries, distilleries, calico printing, dyeing, lime-kilns, rope-walks, anchor and other iron forges, rank next in importance. Glue, cork, sailcloth,

leather, whalebone, feathers, hats, tobacco, soap, cotton-yarn, woollen, linen, cotton and silk fabrics, tin ware, gold, silver, and copper articles, needles, wax-lights, surgical and musical instruments, dies, &c., are amongst the remaining articles of manufacture. The shipping belonging to Hamburg is small as compared with its trade. The English shipowners engross most part of the direct trade with England. The Hamburg ships are almost entirely employed in transatlantic commerce, and in the coasting trade with continental Europe.

Commerce. — Hamburg is the greatest commercial city of Germany, and perhaps of the continent. She owes this distinction principally to her situation. The Elbe, which may be navigated by lighters as far as Melnick in Bohemia, renders her the *entrepôt* of a vast extent of country. Advantage, too, has been taken of natural facilities; that extend still further her internal navigation; a water communication having been established, by means of the Spree, and of artificial cuts and sluices, between the Elbe and the Oder, and between the latter and the Vistula; so that a considerable part of the produce of Silesia destined for foreign markets, and some even of that of Poland, is conveyed to Hamburg. There is, also, a communication by means of a canal with the Trave, and consequently with Lubeck and the Baltic, by which the necessity of resorting to the difficult and dangerous navigation of the Sound is obviated. Vessels drawing 14 feet water may safely come up to the town at all times, and vessels drawing 18 feet may come safely up with the spring tides. There are no docks nor quays at Hamburg; and it is singular, considering the great trade of the port, that none have been constructed. Vessels moor in the river outside of piles driven into the ground a short distance from shore; and in this situation they are not exposed to any danger unless the piles give way, which, though rarely, sometimes happens. Hamburg is now joined by railways with Berlin, Hanover, Kiel, &c. There is a sort of an inner harbour formed by an arm of the Elbe which runs into the city, where small craft lie and discharge their cargoes. The largest vessels sometimes load and unload by means of lighters at Cuxhaven. The trade of Hamburg embraces every article that Germany either sells to or buys from foreigners. The exports principally consist of linens, grain of all sorts, wool, and woollen cloths, leather, flax, glass, iron, copper, smalts, rags, staves, wooden clocks and toys, Rhenish wines, speiter, &c. Most sorts of Baltic articles, such as grain, flax, iron, pitch and tar, wax, &c., may generally be bought as cheap at Hamburg, allowing for difference of freight, as in the ports whence they were originally brought. The imports consist principally of sugar; coffee, which is the favourite article for speculative purposes; raw cotton; woollen and cotton stuffs and yarn; tobacco, hides, indigo, wine, brandy, rum, dye-woods, tea, pepper, &c. The following tables give a view of the import trade of Hamburg, in the principal articles, during the undermentioned years.

Account of the Principal Articles of Import, the Consumption, Stock, &c., at Hamburg during each of the Five Years, ending with 1846.

		Imports.					Consumption.					Stock.
		1842.	1843.	1844.	1845.	1846.	1842.	1843.	1844.	1845.	1846.	1846.
Cocoa	tons	600	1,350	560	800	1,000	590	1,250	710	610	1,170	120
Coffee	—	35,300	34,000	29,900	33,400	31,500	31,800	33,500	32,100	34,600	32,900	6,200
Cotton	bales	60,200	76,200	65,100	67,400	61,800	62,900	69,500	66,200	70,700	71,600	5,100
Cotton twist	—	43,900	36,800	30,300	37,100	38,900	43,800	37,000	30,100	37,900	39,000	—
Fustic	tons	1,100	450	700	450	440	1,150	700	720	550	365	175
Hides	pieces	244,600	338,000	308,200	730,600	521,800	245,100	319,500	326,700	614,600	640,300	54,500
Indigo	chests	8,330	5,980	7,170	7,030	6,490	8,355	5,975	7,409	7,070	6,430	340
—	seroons	410	150	52	130	90	280	365	127	100	140	50
Logwood	tons	2,700	1,900	4,200	6,000	4,500	3,200	3,000	4,250	4,500	4,500	1,000
Mahogany	logs	6,600	9,550	13,700	10,795	13,438	9,810	10,210	11,330	12,115	14,320	998
—	square feet	702,000	578,000	1,201,500	793,500	777,000	920,000	635,000	946,700	875,500	929,000	90,000
Pepper	tons	800	270	630	900	700	570	440	650	750	660	570
Pimento	—	250	470	150	580	145	245	480	125	500	275	250
Quercitron	casks	850	270	350	580	230	950	370	500	530	380	50
Rice	tierces	9,800	9,850	7,900	6,600	7,300	12,300	9,930	7,450	6,200	8,500	550
—	bags	45,000	33,900	52,900	32,300	40,600	41,200	32,900	50,700	40,200	37,600	9,300
Rum	puncheons	4,000	4,800	2,600	4,900	2,800	4,600	5,300	3,600	4,120	3,880	500
Sugar	tons	45,600	47,900	33,500	41,000	35,300	47,800	43,900	39,400	37,400	38,700	4,800
Tea	½ chests	14,540	16,400	21,800	11,050	20,620	13,300	14,390	15,250	12,600	15,840	18,930
Tobacco	casks	7,800	4,800	7,100	6,200	4,550	7,100	5,150	5,850	6,900	5,150	900

Sugar. Import from 1. Jan. to 31. Dec.	1844.			1845.			1846.			1847.		
	Chests.	Hhds.	Bbls. and Bags.	Chests.	Hhds.	Bbls. and Bags.	Chests.	Hhds.	Bbls. and Bags.	Chests.	Hhds.	Bbls. and Bags.
From Cuba	69,476	3	2	35,119	665	—	70,418	260	—	49,395	798	—
Bahia	13,906	—	130	20,937	—	1,270	13,284	—	221	11,837	—	1,087
Rio, Pernambuco, &c.	2,812	—	2,084	1,856	—	4,297	3,768	—	13,663	916	—	6,756
St. Thomas and Porto Rico	—	430	—	—	8,776	68	—	4,254	—	20	676	—
East Indies	5,785	—	12,505	2,787	—	18,201	6,493	—	11,426	1,299	—	7,274
United States	195	58	—	2,008	3,879	—	102	82	—	—	110	—
Great Britain	380	101	6,958	2,628	1,210	3,280	79	38	282	11,071	1,911	63,233
Portugal	—	—	—	1,071	200	722	—	—	—	220	40	215
Holland and Belgium	1,038	13,575	—	3,834	8,496	1,439	3,780	9,270	245	1,218	9,759	4,908
France and other ports in Europe	9	35	94	441	2,088	147	459	176	3	1,766	7	2,679
Total Import	93,601	14,202	21,773	70,681	25,314	29,424	98,383	14,080	25,840	77,742	13,334	86,182
In Tons	33,200			38,900			35,100			33,000		

Coffee. Import from 1. Jan. to 31. Dec	1844.		1845.		1846.		1847.	
	Bags.	Casks.	Bags.	Casks.	Bags.	Casks.	Bags.	Casks.
From St. Domingo	45,068	6	68,448	—	60,695	9	55,928	—
St. Thomas and Porto Rico	24,608	3,341	11,355	1,837	10,026	2,757	28,840	4,956
La Guayra and Porto Cabello	58,005	1,705	67,670	1,491	68,580	1,646	73,020	632
Brazils	181,006	26	229,049	217	198,962	1,189	254,522	106
Cuba	11,351	1,435	7,471	898	3,764	876	7,899	198
United States	7,253	41	4,551	15	25	—	385	—
East Indies	9,301	1	1,520	—	2,719	167	5,202	—
Ports in Europe	92,419	479	74,336	1,177	114,380	1,168	98,397	1
Total Import	429,011	7,034	464,380	5,635	459,051	7,812	524,193	7,171
In Tons	29,200		31,300		31,300		35,600	

Hides. Import from 1. January to 31. December.	1845.	1846.	1847.
	Pieces.	Pieces.	Pieces.
From W. Indies and S. America	352,365	232,650	328,330
United States	1,556	4,570	—
East Indies	24,705	10,940	26,210
Great Britain	188,564	236,340	374,800
Other ports in Europe	50,710	19,500	45,360
Total import	617,900	504,000	774,700

Cotton. Import from 1. January to 31. December.	1844.	1845.	1846.	1847.
	Bales.	Bales.	Bales.	Bales.
From East Indies	—	260	860	190
United States	22,170	28,480	12,640	18,310
Brazils and S. America	3,390	5,260	1,300	2,240
West Indies	2,380	2,980	2,500	3,150
Great Britain	28,190	24,990	39,630	39,660
Other Ports in Europe	5,270	5,130	3,270	3,150
Total Import	61,400	67,100	60,200	66,700

Besides the foregoing specified articles may be mentioned the following: —

From the colonies; mahogany, jacaranda, and other woods, ebony, sarsaparilla, ipecacuanha, tapioca, vanilla,

tamarinds, gums of various sorts, balsams, drugs, sago, arrow-root, cocoa-nuts, &c.

From France, Spain, Portugal, Italy, and the Levant; feathers, prunes, dates, olives, citron and orange-peel, capers, manna, opium, safflower, saffron, mustard, sponge, cork, sulphur, asphaltum, soda, sulphuric acid, tartar, vinegar, soap, essences, volatile oils, glass wares, carpets, clocks, jewellery, Paris articles, antiques, &c.

From Holland and Belgium; many kinds of seeds, chicory, flower-roots, dyes, drugs, mineral waters, cheese, paper, glass, iron and steel goods.

From Great Britain; sheet tin and copper, brass and iron wire, machinery, chains, anvils, slate, and numerous kinds of manufactured goods.

From the N. of Europe; fleeces, copper, alum, amber, malt, stockfish, caviar, &c.

The customs' duties are as moderate as possible, being one eight per cent. *ad valorem* on exports, and one half per cent. on imports. Nevertheless, the customs' revenue is found to amount, one year with another, to from 30,000*l*. to 35,000*l*. The rate may, perhaps, be taken on imports and exports, at a rough average, at 5*s*. 3*d*. per cent., which would give, at a medium, 12,380,000*l*. a year for the value of the trade in articles subjected to duties; and adding 2,000,000*l*. for the trade in articles exempted from duties, we have 14,380,000*l*. as the total annual value of the import and export trade of the port. In the year ending Sept. 1839, 3,233 ships arrived at Hamburg, of which 1,490 were from Great Britain. Besides sea-going ships, a great number of vessels arrive at Hamburg by the Elbe: these, in 1838, amounted to 3,085, of the aggregate burden of 99,850 lasts, of which number, 2,274, burden 84,162 lasts, belonged to Prussia. In the same year, 196 ships, of the burden of 23,469 lasts of 4,000 lbs. each, belonged to Hamburg and Altona; and 24 steam vessels plied between Hamburg and other ports, 9 of which went to and from London, and 8 to and from Hull.

Transit goods are totally exempted from duty. They are such only as arrive at Hamburg *direct*, and which are neither sold nor exchanged while in the city. The liberty of transit is limited to the term of three months from the time of receiving the transit ticket; but, upon application being made for a prolongation of the term previously to the expiration of the first three months, it is granted on payment of ¼ per cent on the banco value of the goods; but under no circumstances is the term extended beyond six months. If the goods be not then exported, they become liable to the ordinary duties. No warehousing system has been introduced at Hamburg; nor, from the smallness of the duties, is it necessary, though it would seem that the time during which goods are allowed to be in *transit* might be advantageously extended. The warehouse rent of a quarter of wheat may be about 1½*d*. sterling per month, and of a ton of sugar about 9*d*.; but there are no fixed rates.

Accounts are kept in marcs divided into 16 schellings, and these into 12 pfennigs each; or else in pounds, shillings, and pence Flemish. The money in circulation is from 23 to 25 per cent. under the value of bank money (*banco*). There is no coin representing the latter in circulation, all payments made in it being effected by transfers in the books of the bank. The rate of exchange is continually varying; but at an average the rix dollar *banco* is worth 4*s*. 6¾*d*.; the rix dollar current, 3*s*. 8½*d*. nearly; the marc *banco*, 1*s*. 5¾*d*.: and the marc current, 1*s*. 2¼*d*. The Hamburg gold ducat is worth about 9*s*. 4*d*. 100 Hamburg lbs. = 106·8 lbs. avoird. The ahm is equivalent to 38¼, and the fuder to 229½ English gallons. The Hamburg foot = 11·2 English inches.

Hamburg is well supplied with provisions, and the traveller is little inconvenienced by those vexatious custom-house regulations so common throughout most parts of the Continent. The activity that constantly prevails, and the gaiety and cheerfulness of the inhab., render this city an agreeable residence to a visitor. Mr. Hodgskin says, "it resembles Paris on a Sunday; and on week days, when the quays, the streets, and the 'change, are crowded with people of all countries, it resembles London." (*Tour in the N. of Germany*, i. 198.) Certain customs prevail that arrest the attention of most visiters. Among others, funerals are attended by bodies of hired mourners, some of whom are attired in a black Spanish habit, a large wig, a ruff about their neck, and a sword by their side. These individuals also attend weddings and other festive meetings. The Vierland flower girls, who wear a peculiar costume, market women, and female servants, all carry in the streets an oblong wicker basket covered with a printed cotton shawl of the brightest colours. The public baths, and the dancing saloons, are among the principal features of the city; especially the latter, which are fitted up in most elegant style, and are the most popular places of public resort. Some of them are of questionable reputation; but others are frequented by the families of highly respectable citizens.

The climate of Hamburg is unpleasant, and it suffers frequently from inundations. The drainage of the city was formerly as bad as possible. But extensive improvements have, in these respects, been recently commenced. The police is good, and beggars are not suffered to infest the streets. The city gates are shut at dusk, but are opened afterwards on payment of a toll, which increases in amount with the lateness of the hour. The water gate is, however, absolutely closed at dark.

This city was founded by Charlemagne towards the close of the 8th century. After the extinction of his dynasty, it became successively subject to the dukes of Saxony and the counts of Holstein. Early in the 13th century it joined with Lubeck in the formation of the Hanseatic league; in 1258 it obtained a portion of territory; and acquired the right to legislate for itself in 1269. In 1528 it adopted Lutheranism. It was long subject to attacks from the Danes, but in 1768 it purchased a resignation of all claims upon it from Denmark, and a security against future attacks. In 1806 it was occupied by the French, and in 1810 made the cap. of the dep. Bouches de l'Elbe. It suffered considerably from the exactions of the French troops under Marshal Davoust; but at the peace it was partially indemnified for its losses, and has since gradually retrieved its former flourishing condition. (*Private Information*.)

HAMELN, a fortified town of N. Germany, k. Hanover, distr. Hanover, on the Weser, at its confluence with the Hamel, 25 m. S. W. Hanover. Pop. 6,400. The Weser here forms an island, and on it a large sluice was constructed by Geo. II. in 1734, for the convenience of shipping: the town, by its position, commands the navigation of the Upper Weser, and has extensive communications with different parts of Germany. It is defended by Fort George, a strong fortress on a hill on the opposite side of the river. Its inhab., many of whom are wealthy, and have a considerable trade, carry on various branches of manufacture.

HAMILTON, a parl. bor., market, and manufacturing town of Scotland, co. Lanark, being the cap. of the Middle Ward, on the Clyde, on a rising ground gently sloping towards the E., 10 m. S. E. Glasgow, and 12 m. N. W. Lanark. It is about 1 m. W. of the conflux of the Avon with the Clyde, is intersected by the Cadzow burn, and is about 80 ft. above the level of the high-water mark at Glasgow. Pop., in 1801, 4,711; in 1841, 8,876; including the par., 10,718. The town is not regularly but substantially built, and has an appearance of respectability, wealth, and comfort. It is paved and lighted with gas. The most important of its public buildings are the two parish churches, both elegant structures, particularly the older, in an elevated situation near the centre of the town; and the trades' hall, and jail. This last edifice, which stands on high ground W. of the town, and was built in 1836, has in connection with it suitable apartments for all the public offices, municipal and civil. The court-room, common to the sheriff of the district and magistrates of the burgh, is 37 ft. long by 32 broad. In the vicinity of these buildings are extensive cavalry barracks.

But the great object of attraction connected with this place is Hamilton Palace, the magnificent seat of the Dukes of Hamilton, separated from the town on the E. by a wall and plantation. The pleasure-grounds round the mansion, lying between the town and the Clyde, comprise 1,460 acres, and are the most extensive in Scotland. The oldest portion of the palace was erected about 1591; but the greater part of the building is comparatively modern, some very extensive additions having recently been made to it. The front, which faces the N., is 264 ft. 8 in. in length, adorned by a noble portico, consisting of a double row of Corinthian pillars, each of a single stone 25 ft. high, surmounted by a lofty pediment. The interior decorations are not less splendid than the exterior; and altogether it forms one of the largest and most superb structures of its kind in Britain. The collection of paintings, in particular, has long been considered as unrivalled, at least in Scotland. It contains above 2,000 pieces. There is, also, a vast number of antique vases, antique cabinets, slabs of porphyry, and other similar relics. Within a mile of the town are Chatelherault, a venerable building, and still an occasional residence of the Dukes of Hamilton, and the ruins of Cadzow Castle, the original seat of this noble family, on the summit of a precipitous rock 200 ft. in height, the base of which is washed by the Avon.

Besides the par. churches, there are 2 meeting-houses belonging to the Relief, 2 to the Associated Synod, and 1 to the Independents. The Cameronians and Rom. Catholics have each public worship here once in 4 or 6 weeks. The old par. church was uncollegiated in 1836; and a new church built for one of the ministers. About 2-3ds of the pop. are dissenters.

The grammar or classical school of Hamilton is of ancient date, and has uniformly been an efficient seminary. There are in the parish 18 other schools, including two for young ladies: the total attendance in 1835 was 997, or about a tenth part of the whole pop.; exclusive of about 538, who attend Sunday schools. There are

several subscription libraries in the town; the largest contains 3,500 volumes. A mechanics' institution has existed here for several years

The charitable institutions, and other provisions made for the poor, are very considerable. There are 2 hospitals, and a good deal of property has been left in mortmain for behoof of the poor. Poors' rates have been introduced; the annual assessment for 1847, being 1,369*l.* 5*s.* 11*d.*, assessed upon property valued at 38,180*l.* a year. Total number of paupers relieved, including casual poor, 513; sum awarded to each 2*l.* 8*s.* 7*d.*

Hamilton has been the principal seat of imitation cambric weaving since the introduction of the cotton trade into Scotland. The reeds run from 1,200 to 3,000, which are the finest *setts* that cotton has been wrought into. There were, in 1840, 1291 looms in the bor., and 58 in the landward part of the par. The trade has for years been rather on the decline. The average wages of a hand-loom weaver (and there are no other in the town) are never above 1*s.* 6*d.* per day; out of which must be deducted 1*s.* per week for expenses, and 10*s.* per annum for loom-rent. A house with a room and kitchen, and a four loom shop, lets at from 5*l.* to 6*l.* The females are employed in winding weft, and in tambouring, sometimes in weaving. The work is executed for the Glasgow manufacturers. The lace manufactory was introduced here many years ago, but it had become almost extinct, when (about 11 years since) a manufactory of the same kind was introduced, which has continued to prosper. About 20 houses are now engaged in this branch of trade; and it employs upwards of 3,000 females in this and the neighbouring parishes. Vast quantities of black silk veils of peculiar patterns are also manufactured here. A weaver's wife makes higher wages in these trades than her husband. Many thousand check-shirts have of late been manufactured, chiefly for the Australian market. The other branches of trade are of minor importance. There are 3 branch banks.

In the park attached to Cadzow Castle are still preserved genuine specimens of the old Scotch breed of wild cattle: they are milk white, with black muzzles, horns, and hoofs; and are ferocious and untameable. They are not taken and killed like other cattle, but shot in the field. Similar cattle are to be found in Chillingham Park (Lord Tankerville's), and in Chartley Park (Lord Ferrers's).

Cadzow* was a royal residence for at least two centuries previously to the battle of Bannockburn in 1314; immediately after which it was conferred on the chief of the Hamilton family, in whose possession it has since continued. In 1414, James, first lord Hamilton, married the Princess Mary, eldest daughter of James II; by which connexion his descendants came to be declared in parliament, on the demise of James V., in the event of the death of his only child Mary, next heirs to the crown. In consequence of the marriage of Anne, duchess of Hamilton, to Lord W. Douglas, eldest son of the Marquis of Douglas, the Hamilton family now represent the male line of the Douglases. On the death of the last Duke of Douglas, in 1761, the house of Hamilton, as male representatives of the Douglases, laid claim to the estates, under the plea that Mr. Douglas, the alleged son and heir of the only sister of the Duke of Douglas, was a supposititious child, taken at Paris from the real parents. A long lawsuit, well known by the name of the "Douglas cause," was the result. It was decided in Paris, and in the court of session in Scotland, in favour of the Hamiltons; but, on an appeal to the House of Lords, it was ultimately decided in favour of Mr. Douglas, afterwards created Lord Douglas: we believe, however, that the all but unanimous opinion among well informed parties now is, that this decision was flagrantly unjust.

Hamilton was created a royal burgh in 1548; but the magistrates, having consented to resign that privilege, in 1676, accepted of a charter from Anne Duchess of Hamilton, by which it was constituted the chief burgh of the regality and dukedom of Hamilton. An attempt was made by the magistrates, in 1723, to get the original privilege restored, but in vain. Since the passing of the Reform Act it has been a parliamentary burgh, and unites with Airdrie, Linlithgow, Falkirk, and Lanark, in returning 1 mem. to the H. of C. In 1849-50 it had 339 registered voters. Municipal revenue about 2,600*l.*

Among historical events connected with Hamilton, the battle of Bothwell Bridge, fought between the Covenanters and the royal forces, under the Duke of Monmouth, in 1672, deserves mention. The result of the engagement was unfavourable to the former, about 400 of whom were killed on the spot, while 1,200 were taken prisoners. (*Laing's Hist. of Scotland*, iv. 104.)

In addition to various distinguished characters that the noble house of Hamilton has produced (*Burnet's Memoirs of the Dukes of Hamilton*), this burgh has given birth to several eminent persons: Dr. Cullen, the celebrated physician, born here in 1714; Professor Millar, of Glasgow, author of an *Historical View of the English Government*, and other works; the late Dr. Matthew Baillie, of London, and his sister Miss Joanna Baillie, authoress of *Plays on the Passions*. (See *Boundary Reports; New Stat. Account of Scotland*, § *Lanark*, p. 249.; and *Beauties of Scotland*, in addition to the works already quoted.)

* Cadzow Castle has been made the scene of one of Scott's finest ballads. It turns on the assassination of the Regent Murray by Hamilton of Bothwellhaugh.

HAMME, a town of Belgium, prov. E. Flanders, arrond. Dendermonde, cap. cant., on the Durme, 18 m. E.N.E. Ghent. Pop., with commune (1833), 8,222. It has manufactories of linen, soap, starch, cordage, &c.; with numerous breweries and oil-mills, and a brisk trade with the surrounding country. Some interesting antiquities have been discovered in its neighbourhood.

HAMMERSMITH, a village and chapelry of England, par. Fulham, co. Middlesex, hund. Ossulston, near the N. bank of the Thames, and on the great W. road out of London, from which it is distant 4 m. W. by S. Area, 2,140 acres. Pop., in 1831, 10,222. The village is well paved and lighted with gas; but the streets are irregular and the majority of the houses inferior. Many handsome mansions, however, lie scattered in different parts, and more especially by the side of the river, and along the great road which forms its main street. The church, erected in 1631, is a plain brick building with a low tower; and the interior is old fashioned and inconvenient. The living is a perpetual curacy, in the gift of the Bishop of London. A district church was erected in 1820. The dissenters also have several places of worship, and there is a Jews' synagogue. Close to the R. Cath. chapel is a small Benedictine nunnery, originally a boarding-school, established in 1669; and the monastic rules are strictly observed. Among the charity schools, one founded by Bishop Latimer has revenues amounting to 800*l.* a year. Other day and Sunday schools are supported both by adherents to the church and by dissenters. The most striking feature in Hammersmith is the suspension bridge over the Thames, completed in 1827 at an expense of 80,000*l.* It consists of a horizontal roadway, suspended from iron chains carried over stone piers and archways, and secured by substantial abutments. The roadway is 822 ft. long, and 20 ft. wide, exclusive of a foot-path 5 ft. wide. The West Middlesex Water Company has its engines and reservoirs a little above this bridge. The grounds in the neighbourhood are chiefly occupied by nurserymen and market-gardeners, who supply London with some of the choicest flowers and vegetables. The gardens of the Horticultural Society present a finer display in the summer season than any gardens, private or public, round the metropolis; and the shows are fashionably attended.

HAMPSHIRE, HANTS, or SOUTHAMPTON, a marit. co. on the S. coast of England; it includes the Isle of Wight, and has Berkshire on the N., Surrey and Sussex on the E., Wilts and Dorset on the W., and the English Channel on the S. Area, 1,040,000 acres, of which the Isle of Wight contains about $\frac{1}{11}$th part; including the island, 900,000 acres are supposed to consist of arable, meadow, and pasture land. This is one of the most agreeable cos. in England, the surface being finely varied with gently rising hills and fruitful vales, and its climate being at the same time peculiarly mild and genial. Soil various; in the N. districts on the borders of Berks, it is hilly and poor; but between Basingstoke and Silchester is some fine wheat and bean land; a broad zone of chalky downs, intersected by numerous valleys, extends across the co. In the S. and middle parts of the co., and particularly in the vales watered by the Anton, Itchen, and other rivers, are large tracts of fine land, and some of the best water meadows in England. The S.W. district, or that lying between Southampton Water and Dorsetshire, is principally occupied by the New Forest, and by extensive heaths. Principal crops, wheat, barley, oats, and beans; turnips are extensively cultivated, especially on the light soils. Farms till lately have been mostly let on leases, but the practice of holding them at will is gaining ground. Tenants are prohibited from taking two *wheat* crops in succession; but two white crops in succession have not been usually objected to, and it is common to take a crop of oats after wheat. This erroneous practice is, however, beginning to be corrected, and agriculture in this co. is generally good, and the condition of the land such as to reflect credit on the occupiers. Cattle of various breeds: the dairy is not an object of much attention. Stock of sheep large. Weyhill, near Andover, in this co., has the greatest sheep fair in England. At the fair held here in 1840, about 150,000 sheep were exhibited for sale! Hants is famous for its bacon; and excellent honey is produced in different parts of the co. Estates mostly large; farms of all sizes, from 25 to 500 acres. Average rent of land, in 1843, 14*s.* 11½*d.* The co. is every where particularly well wooded. The New Forest comprises about 92,000 acres, but only about 67,000 are now the property of the crown, the rest having been assigned to individuals. About 6,000 acres have been inclosed and set apart for the growth of timber. There are the re-

mains of other extensive forests; and brushwoods are met with on most of the chalk lands. Minerals of little importance. If we except the building of ships at Portsmouth, and the various works subordinate to their outfit, the other manufactures are but of trivial importance; there are, however, silk mills at Overton, and straw hats are made in different parts of the co. Principal rivers, Avon, Anton, and Itchen. Portsmouth harbour and the road of Spithead lie in the Sound between the mainland and the Isle of Wight. Principal towns, Portsmouth, Southampton (now united to the metropolis by a railway), Winchester, and Lymington. Hampshire, including the Isle of Wight, has 39 hundreds and 298 parishes. It sends 17 mems. to the H. of C.; viz. 2 for each division of the co.; 2 each for the bors. of Portsmouth, Winchester, Lymington, Southampton, and Andover; 1 for the Isle of Wight; and 1 each for the bors. of Petersfield and Christchurch. Registered electors for the co., in 1849-50, 10,993; viz., 3,580 for the N., 5,748 for the S. div., and 1,665 for the Isle of Wight. In 1841 Hampshire had 66,617 inhab. houses, and 355,004 inhabs., of whom 175,023 were males, and 179,981 females. Sum paid for the relief of the poor, in 1847, 156,653*l.* Annual value of real property in 1815, 1,240,547*l.*; do. in 1843, 1,661,447*l.* (*See* further WIGHT, ISLE OF.)

HAMPSHIRE (NEW), one of the U. S. of America, in the N. E. part of the Union (New England), and between lat. 42° 40′ and 45° 10′ N., and long. 70° 40′ and 72° 23′ W.; having N. Lower Canada, E. Maine, W. Vermont, S. Massachusetts, and S.E. the Atlantic, on which, however, it has a coast of only 18 m. Length, N. to S., about 170 m.; breadth very variable. Area, 9,280 m. Pop., in 1840, 284,574. The coast is indented by small inlets, but has only one harbour of any value, that of Portsmouth. It is skirted by a narrow sandy plain, which, at no great distance inland, rises rapidly into a hilly country. In the interior, the state is covered with mountains of granitic formation. The White Mountains, towards the N., which attain a height of more than 7,000 ft., are the highest in the Appalachian system, and, consequently, in the U. S. But between the mountains are many green and sheltered valleys, and the state contains a considerable proportion of fertile land, as well as a great deal of beautiful and picturesque scenery. Several of the principal rivers of New England rise in this state; among which are the Connecticut, Merrimac, Piscataqua, Androscoggin, and Saco, which have a general S. direction. The Connecticut forms the W. boundary of the state. There are several considerable lakes, the largest of which, the Winnipissiogee, 23 m. in length, is situated near the centre of the state. With the exception of the alluvial lands bordering the rivers, the soil is, perhaps, more adapted for pasture than cultivation. The country was originally densely wooded, and such is still the character of the interior. Climate very healthy, but cold. The lakes and rivers are generally frozen for four months in the year, and winter lasts from Nov. to April. Wheat, rye, maize, barley, oats, pulse, and flax are grown; cattle-breeding is pursued to a considerable extent. Manufactures have greatly augmented of late years: they include cotton and woollen fabrics, nails and other hardware, paper, glass, &c. The exports consist principally of cattle, pork, flax seed, linen, timber, fish, beef, granite, manufactured goods, &c. &c. The foreign trade is but inconsiderable; the value of the exports to foreign countries during the year ending Sept. 30. 1838, having amounted to only 74,670 doll., and that of the imports to 169,985 doll. The state had, in 1839, 27 banks.

New Hampshire is divided into eight counties; Concord, on Merrimac, being its political cap. Portsmouth is the largest town, and the only sea-port. Dover, Exeter, Hanover, New Ipswich, Keene, and Haverhill are increasing places, already of some size. Dartmouth College, at Hanover, established in 1770, ranks third among the literary institutions of New England. It has attached to it a medical school, library, and philosophical apparatus; and had in 1839 upwards of 300 students. There is a theological seminary at New Hampton, besides upwards of 30 incorporated academies. The state has a literary fund, the income arising from which, with the produce of a tax on banks, is devoted to the support of free schools. These are established on the same system as in the other Atlantic states. A lunatic asylum is about to be established at Portsmouth. In 1839, 20 periodical publications were issued. Several canals have been constructed connected with the Merrimac, which, by its communication with the Middlesex Canal, affords a navigable route between many parts of the state and Boston. In 1837, a railroad, 15 m. in length, to extend from Nassau, N.W., to Lowell Massachusetts, was in progress.

The legislature consists of a senate of 12 mems. and a house of representatives of 234 mems., the mems. of which, as well as the governor, are chosen annually by the electors of each district, consisting of every white male citizen above the age of 21 years who pays taxes and has resided in the state for three months. Together, they are styled the General Court of New Hampshire, and assemble annually on the 1st Wednesday of June, at Concord. The governor is assisted in his executive duties by a council of 5 mems., elected for a similar period with himself. The poor in this, as in other N. E. states, are supported by a direct tax on the towns to which they belong. The militia, comprising 3 divisions and 6 brigades, consisted, in 1838, of an aggregate body of 28,136 men. Justice is administered in a superior court, and county courts of common pleas, presided over by the judges of the superior court, and two justices selected from each county. The judges hold their offices during good behaviour, until 70 years of age; but may be removed by impeachment, or by address of the two houses of the legislature.

New Hampshire was first colonised by the British in 1622. It was twice united to Massachusetts; and the final separation between them did not take place till 1741. New Hampshire was one of the first states to take a decided part in the war of independence. A temporary constitution was formed in 1784, which, in 1792, was altered and amended nearly to the form now in force. The state sends 5 representatives to Congress. (*Darby's View, &c.; Hayward's Gazetteer of New England; American Almanack*, 1834, 1840.)

HAMPSTEAD, a par. and village of England, co Middlesex, hund. Ossulston, 4 m. N.N.W. London Area of par. (which includes part of Kilburn), 2,070 acres: pop. in 1841, 10,093, being more than double the pop. in 1801. The town lies on the brow and S. slope of an irregularly-formed hill, on the summit of which (460 ft. above high-water mark) is an extensive heath covering about 280 acres, which commands fine views of the metropolis, Kent, and Surrey southward, and of the highly cultivated lands of Bucks and Herts on the N.W. The streets are mostly crooked and irregular, lined with houses of every size and quality, from the spacious mansion to the mere cottage; and the subordinate streets, connecting High Street with the other parts, are narrow, inconvenient, and in some places even dangerous. The church, which has been parochial since 1598 (when Hampstead was separated from Hendon), was rebuilt by subscription in 1747; it is a plain brick building, having at its E. end a low tower and spire. The living is a vicarage, and there is a lectureship founded some years ago, for the benefit of the curates. A chapel of ease, in Well Walk, occupies what was a century back the most fashionable assembly-room in the town, and a favourite place of resort for all who came to drink the chalybeate waters: another chapel, recently erected, has a handsome cupola and portico. There are places of worship for Independents, Wesleyan Methodists, Unitarians, and Rom. Catholics; but they are of small extent. Besides churches and chapels, the large assembly-room attached to the Holly-bush Inn is the only public building; but numerous large private mansions, in different parts within and round the town, attest its importance as a fashionable suburban retreat. A large square house, on an eminence to the left of the London road, with a row of elms in front, once belonged to Sir Harry Vane, one of the regicides, who, at the Restoration, was here seized, and soon after executed: it was subsequently occupied by Bishop Butler. In the upper part of the town, near the Terrace, is Branch-hill Lodge, once the residence of the Earl of Macclesfield and Lord Loughborough; but its fine collection of painted glass windows, procured from various convents at the period of the French revolution, has been removed, by Sir Thomas Neaves, to his house at Dagenham, in Essex. The Upper Flask Inn, in High Street, formerly the resort of the celebrated Kit-cat Club, and subsequently inhabited by G. Steevens, the editor of Shakspeare, is now a private residence. The inns receive hundreds of visiters on the Sundays during summer.

The manor of *Hamestead* was given by King Ethelred to the Abbey church of Westminster, by whom it was retained till 1550, when Edward VI. took possession of it and presented it to a layman, from whom the present lord of the manor is descended. In the reign of Henry VIII. Hampstead was an obscure hamlet, "chiefly inhabited by washerwomen;" and being well covered with wood, and abounding with game, it was often visited by hunting parties from court. James II. is said to have had a hunting-seat here, still known as Chicken House, and now let out to several poor people. About 1640, Hampstead became a fashionable watering-place, and concerts, balls, and races were established for the amusement of the visiters. The wells (the water of which is a simple carbonate chalybeate) were in high repute during the 17th century, but they have long since ceased to attract attention. The election of mems. for the co. was held on the heath from 1680 to 1701 when it was removed to Brentford.

HAMPTON, a village and par. of England, co. Middlesex, hund. Spelthorne, on the N. bank of the Thames, opposite the point where it receives the Mole, 12 m. W.S.W. London, and 3 m. W. by N. Kingston. Area of par., 3,190 acres. Pop. in 1831, 2,529, and, including the

hamlet of Hamptonwick, close to Kingston, 3,992. The town, which is a favourite resort for anglers, is not remarkable either for the width of streets or regularity of the buildings; but many beautiful villas ornament the neighbourhood, among which is one formerly the property of the celebrated David Garrick. A wooden bridge, built across the Thames in 1753, joins the town to E. Moulsey. The church, lately rebuilt, is a very handsome structure, having a square tower at the W. end. A free grammar school was founded here in 1556, and the original endowment has been subsequently so much enlarged, as to furnish the master with a salary of 230*l*., and a sum of 36*l*. yearly for six poor men. The average attendance of boys is 60: the present instruction is confined to English, writing, and accompts.

About 1 m. from the village, and close to the Thames, is Hampton Court Palace, respecting which Grotius has not scrupled to say,—

> Si quis opes nescit (sed quis tamen ille ?) Britannus,
> HAMPTON-CURIA tuos consultat ille lares;
> Contulerit toto cum sparsa Palatia mundo,
> Dicet ibi Reges, hic habitare Deos!

The palace was begun by Cardinal Wolsey, who, in 1526, presented it to Henry VIII. The original edifice consisted of five quadrangles, of which two only remain. The W. quadrangle, little altered since Wolsey's time, presents a good specimen of Tudor architecture: the middle or clock court is of mixed style, Sir C. Wren's Ionic colonnade strangely contrasting with the massive construction of the old building: the third quadrangle was erected by William III. The king's entrance in the clock-court leads to the grand staircase and state apartments. The ceiling and walls of the former were painted by Verrio, in his usual glaring style: the rooms, which open from each other, and are partially furnished, consist of the guard-chamber, presence and audience chambers, public dining-room, state drawing-room and bed-rooms. Notwithstanding the removal of some of the best specimens to Windsor, there is still at Hampton Court an extensive and excellent collection of pictures. It comprises many by the principal Italian and Flemish masters; and an extensive collection of portraits connected with English history by Holbein, Lely, Kneller, West, &c. But the great glory of Hampton Court is the *Cartoons* or drawings executed by Raphael, by order of Pope Leo X., for patterns for tapestry intended to decorate the Vatican. They are called cartoons from being painted on sheets of large paper, *cartone*. These noble drawings, of which there were originally 25, being left neglected at Brussels, the greater number of them appear to have been lost or destroyed. Fortunately, however, *seven* were purchased by Rubens for Charles I.; but even since their arrival in this country they have been exposed to numerous vicissitudes, and would seem to owe their preservation as much to accident as to any thing else. The gallery in which they are now placed at Hampton Court, was built for their reception by William III.; but George III. removed them first to Buckingham Palace, and thence to Windsor, whence they have been again brought back to Hampton Court. They represent some of the most striking incidents recorded in the New Testament, and are unrivalled for sublimity of conception and purity of design. They have been well engraved by Holloway.

Among the parts of the palace not usually shown to the public are the chapel and hall, the former of which was refitted after the ravages of the fanatics during the Commonwealth, and handsomely pewed with oak by Q. Anne. The latter, built by Wolsey, and still retaining his name, is a finely proportioned room 160 ft. long, and 40 ft. broad, having two large gabled windows, and an elaborately carved wooden roof, similar to that of Westminster Hall and that of Christ Church Hall, Oxford. This room was thoroughly restored on the old model in 1801. Close to the Hall is the Board of Green Cloth, a small, though very beautiful Gothic chamber, which furnished Sir Walter Scott with the pattern for one of the finest rooms at Abbotsford. "The garden front of the palace, though disfigured by modern windows, is still very magnificent. The gardens comprise about 44 acres: the pleasure-grounds were laid out by William III., in the Dutch taste: the terrace is ½ m. long, and the first view of it is very striking. The home-park, immediately adjoining the gardens, is 5 m. in circuit, and its soil produces very fine herbage. The canal, which is ¾ m. long, and 40 yds. broad, is lined with an avenue of lime trees, and other avenues intersect the park in every direction, through one of which is a good view of the tower of Kingston church." (*Jesse's Gleanings*. 3d ser.) The green-houses contain, among many valuable exotics, a vine said to be the largest and most productive in Europe; and a maze or labyrinth furnishes much amusement to young visiters. This palace, in which Wolsey maintained a more than regal state, was afterwards the favourite residence of Henry VIII. and his children, and of James I. and his son Charles I., who escaped from his imprisonment here in 1647. The protector, Cromwell, resided here during the commonwealth; and it afterwards became the usual abode of William III. and his queen, and of the princess, afterwards Queen Anne. George II. was the last monarch by whom it was inhabited. Of late years it has been mostly divided into private dwellings, given to court-pensioners. Latterly it has been fully opened to the public. All individuals are now freely admitted to view the public apartments and grounds, without any demand being made upon them; and without, as formerly, being hurried from one apartment to another, at the caprice of some mercenary *cicerone*. In consequence, Hampton Court is resorted to in summer by crowds of visiters, and is deservedly one of the principal points of attraction in the vicinity of the metropolis. Near Hampton Court palace is Bushy Park, comprising 1,100 acres, with a central avenue 1 m. long. "The numerous thorn-trees, though of great age, are still healthy and vigorous; and when they are in blossom, they appear at a short distance as if covered with snow." (*Jesse*.) The house on the right of the grand avenue was during many years the favourite retreat of William IV. when Duke of Clarence, and is still inhabited by Queen Adelaide, the present ranger of the park. (*Lyson's Environs; Jesse's Gleanings*.)

HANAU, a town of W. Germany, electorate of Hesse, cap. prov. of same name, and seat of its superior courts, &c.; on the Kinzig, near its junction with the Main, 11 m. E. by N. Frankfort, and 82 m. S.S.W. Cassel; lat. 50° 8′ 24″ N., long. 8° 55′ 17″ E. Pop., inclusive of its suburbs, 15,000. Hanau is no longer fortified; and its ancient castle is now used for the purposes of the Wetteravian Society of Natural History. It is divided into the old and new towns; the former is ill-built, but the latter has broad and regular streets, modern built houses, and, near its centre, a good market-place. There are 4 Calvinistic parish churches, a Rom. Cath. church, a large hospital, handsome theatre, gymnasium, free school, drawing academy, many scientific and benevolent associations, a school of trades, &c. Hanau is the most industrious town, and the place of the greatest commercial activity in the electorate. Its manufactures are numerous and extensive, including silk stuffs, camlets, leather, gloves, stockings, hats, excellent carpets, cotton fabrics, tobacco, playing-cards, gold and silver wares, brass musical instruments, carriages, &c. It has a large trade in timber, barrels, and wine. Many of its inhab. are descendants of Dutch and Flemish emigrants, who fled thither from the persecutions in the low countries, under Philip II., early in the 16th century. Very near it are the mineral springs of Wilhelmstadt. Here, on the 30th of October, 1813, Napoleon, on his retreat from Leipsic, gained a decisive victory over a very superior force of Bavarians, and other allied troops, under Marshal Wrede. The combined army lost about 10,000; while the loss of the French did not exceed 3,000 or 4,000 men; but the opening of the route to France was the most important advantage gained by the latter. The principality of which Hanau was formerly the cap., was, after the extinction of its line of princes in 1736, divided between Hesse-Cassel and Hesse-Darmstadt. (*Encyc. des Gens du Monde; Cannabich; Berghaus, &c.*)

HANG-TCHEOU, one of the largest and richest cities of China, cap. prov. Tche-kiang; on the Tsien-tang-kiang, 20 m. from its mouth in the Eastern Sea, and 140 m. S.E. Nanking; lat. 30° 20′ 20″ N., long. 119° 48′ E. Its pop. was estimated by Du Halde at upwards of a million, without, apparently, including the pop. of the suburbs: but this estimate is most probably much beyond the mark, especially as the houses are but one story high, and there are gardens of large size interspersed among them. The city is surrounded with high and thick walls, said to be as much as four leagues in circuit. The W. part of this enclosure is taken up by a fort or citadel, in which the officers of the government reside, and a garrison of 10,000 men is maintained. The Grand Canal has its S. terminus here, in a large commodious basin. This city has, in consequence, a direct communication with Pekin, and a vast command of internal navigation, which it has turned to good account. On its W. side is a lake highly celebrated for its natural and artificial beauties. Barrow, by whom this city was visited, says, "the city of Hang-tcheou-foo, being particularly famed for its silk trade, we were not surprised to meet with extensive shops and warehouses: in point of size, and the stock contained within them, they might be said to vie with the best in London. In some of these were not fewer than ten or twelve persons serving behind the counter; but in passing through the whole city not a single woman was visible, either within-doors or without. The crowd of people, composed of the other sex, appeared to be little inferior to that in the great streets of Pekin." (*Travels*, p. 527.) The streets are not so wide as Cranbourn Alley, but as well paved. They are ornamented in many places with triumphal arches, and monuments to eminent individuals, and are kept remarkably neat and clean. Barrow says: "In every shop were exposed to view silks of different manufactures, dyed cottons and nankins, a great variety of English broad-cloths, chiefly however blue and scar-

let. used for winter cloaks, for chair covers, and for carpets; and also a quantity of peltry, intended for the northern markets. The rest of the houses, in the public streets through which we passed, consisted of butchers' and bakers' shops, fishmongers, dealers in rice and other grain, ivory cutters, dealers in lacquered ware, tea-houses, cook-shops, and coffin-makers; the last of which is a trade of no small note in China. The number of inhab. in the suburbs, with those that constantly resided upon the water, were, perhaps, nearly equal to those within the walls." (*Barrow; Du Halde*, vol. i.; *Dict. Géographique*.)

HANLEY, a town and chapelry of England, belonging to the par. of Stoke-upon-Trent, co. Stafford, hund. Pirehill-north, 2¼ m. S.E. Stoke-upon-Trent, and 16 m. N. Stafford. Pop., in 1831, 7,121. It consists of one main street, intersected by various others; and many good houses have recently been built, though the pop. is chiefly confined to the working classes. The church is handsome, and has a fine tower 100 ft. high. Good schools are connected both with the church and the three dissenting places of worship. The inhab. are chiefly employed in the potteries, which alone have raised this district to its present importance. For further particulars, *see* STOKE-UPON-TRENT, and POTTERIES.

HANOVER, a kingd. of N.W. Germany, situated between lat. 51° 18′ and 53° 52′ N., and long. 6° 43′ and 11° 45′ E., bounded N. by the German Ocean and the Elbe, E. by Prussia and Brunswick, S. by Prussia and Hesse-Cassel, and W. by Holland. Its bounding line is very irregular, and a portion on the W. is almost divided from the rest of the kingdom by the grand duchy of Oldenburg. Length, from mouth of Elbe S., 172 m.; breadth, E. and W., 180 m. It has 7 districts (*Landrosteien*): the area, population, &c. are as follows (*Reden's Hanover*, i. 1, 2.):—

Landrosteien.	No. of Subdivis.	Area in Miles.	Pop. in 1836.	Prop. Pop. to Sq. M.	Houses.	Villages.	Towns.
Hanover - -	3	2,183	325,980	131·7	41,795	880	39
Hildesheim -	4	1,681	357,170	212·7	49,685	587	34
Lüneburg -	- -	4,295	366,800	71 4	39,550	1,685	38
Stade - -	3	2,615	245,510	93·9	39,190	1,050	27
Osnaburg -	5	2,330	266,270	114·3	40,700	350	21
Aurich - -	- -	1,113	157,430	141·4	26,330	345	12
Klausthal Mining Intendancy -	- -	210	29,090	138·5	2,830	45	7
Total of kingd. -	- -	14,726	1,688,280	113·6	242,680	4,942	178

The most populous towns of the kingdom are Hanover (the capital), 24,000 inhab.; Hildesheim, 15,000; Göttingen, 10,900; Lüneburg, 11,800; Celle, 10,300; Stade, 5,700; Osnaburg, 11,500; Emden, 12,000; Aurich, 12,000; and Clausthal, 9,100. The population of 1823 was 1,434,130; so that in 12 years there has been an increase of 254,150, or about 21,000 yearly, the ratio of increase being 17·7 per cent. The number of marriages has not, however, increased in a proportional degree; and the present ratio of illegitimate to legitimate children is, for all Hanover, 1 in 10, and in the various districts, as follows:— Hanover, 1 in 8; Hildesheim, 1 in 8; Clausthal, 1 in 8; Lüneburg, 1 in 9; Stade, 1 in 16; Aurich, 1 in 21; Osnaburg, 1 in 28.

Surface.— Hanover, physically considered, is an inclined plain, gently sloping from S.E. to N.W., and no where, except on a few of its eminences, more elevated than 200 ft. above the sea. The districts of Stade, Lüneburg, Hanover, and part of Osnaburg belong to the N. plain of Germany, which stretches from the North Sea E. into Russia. No hill in the central provinces reaches 1,400 ft. In the S. part of Hildesheim are the Harz Mountains, the highest summit of which, Königsberg, is 3,300 ft. high. The well-known Brocken (3,660 ft.), is within the Prussian dominions. This mountain mass forms the watershed between the Elbe and Weser. Its geological formation is chiefly granite overlaid by grauwacké, grauwacké slate, and clay slate; and in these latter formations the mineral riches, hereafter described, are mostly found. Above these strata lie the flötz and tertiary formations. The great plain of the N., with the exception of a few limestone hills in Lüneburg and Stade, is of diluvial formation, and consists either of extensive tracts of sand covered with furze, or of vast moors and marsh-lands. The heath of Lüneburg, in its whole extent, comprises about 1-6th of the kingdom: granite boulders are found in different parts of it, some of very extraordinary size. Of the peat-moors the largest are the Bourtanger moor, on the Ems, and the Hoch moor, in E. Friesland. The lowlands on the sea-coast are below the sea-level, and hence are kept dry by means of dykes similar to those of Holland and the Bedford Level, the maintenance of which occasions an expenditure of several thousand dollars yearly. These lands, however, are by far the most productive of the kingdom.

Rivers and Lakes.— Hanover is traversed by three large rivers, all of which fall into the German Ocean:— 1. the Elbe, which, rising in the plateau of Bohemia, enters the kingdom at Schnakenburg, and forms, with a slight exception, its whole N. boundary, as far as its mouth; its chief affluents within Hanover are the Jetze, Ilmenau, Este, and Oste, all on the S. bank: 2. the Weser, formed by the junction of the Werra and Fulda at Munden, flowing N.W. as far as the juncture of the Aller, and its tributary the Leine, and thence N. past Bremen into the German Ocean: 3. the Ems, rising in Westphalia, and flowing N. through the moorlands of Mappen, and E. Friesland to Emden, at its mouth. Throughout the flats of N. Germany there are numerous lakes and stagnant pools, in which the waters subside after the floods, which extensively cover the country in winter and spring: the chief of these in Hanover are the Steinhuder-meer, 5 m. long by 2½ broad, the Dümmer-see, and the Seeburger-see. In E. Friesland the subterraneous lake Jordan is so thickly coated with vegetation, that waggons can pass over it. The mountain lake Oderteich, in the Harz, is 2,300 ft. above the sea.

Soil and Climate.— The nature of the soil of Hanover will be best understood from the distribution of the land, as stated by Marcard. (The morgen is equal to ·64 Eng. acre.)

Arable meadow, and garden land		5,833,000 morg.
Forests - - - - -	-	2,242,000 —
Waste land, lakes, and rivers	-	6,514,000 —
Total of the kingdom	-	14,589,000 —

The waste lands, which form so large a proportion of the whole country, consist principally of vast sandy tracts wholly unavailable for tillage. They extend in a broad belt across the kingdom, of which they occupy about 1-6th part. This band of sand is aptly termed "the Arabia of Germany." The sandy districts are covered with heath, on which a very small and hardy breed of sheep, known by the name of *Staidschnucken*, find a scanty subsistence. They yield wool of the coarsest description, but their flesh is well-flavoured.

The proportion of land under cultivation to the whole extent of each province is as follows:—

Hanover - - -	·39	Stade - - -	·40
Hildesheim - - -	·58	Osnabrück - - -	·1
Lüneburg - - -	·37	Aurich - -	·6

The richest land of the kingdom is the alluvial soil and weald-clay of the Hadeln-land at the mouth of the Elbe, and of E. Friesland at the mouth of the Weser. It is taxed, as belonging to the highest class. The soils of the secondary classes are found in the limestone districts of Hildesheim, Göttingen and Grubenhagen, Bremen and Werden. The least productive of all, belonging to the lowest class, is that of the duchy of Aremberg-Meppen. Much of this land, however, is laid out in meadow, especially the rich soil of E. Friesland, as the following table, giving the proportion of meadow to the whole cultivable soil, will show:—

E. Friesland - -	56 per ct.	Lüneburg, Dannenberg, and Lanenberg -	25 per ct.
Bremen and Werden	36 —	Grubenhagen -	21 —
Osnabrück - -	31·5 —	Kalenberg - -	18·3 —
Hoya - - -	27 —	Göttingen - -	16 —
Diepholz - -	39 —	Hildesheim - -	11 —

In E. Friesland 4·6 cwt. of hay are reckoned as the produce of a morgen of meadow land, and 2·95 morgen of summer pasture are reckoned in that province to one cow. In Hildesheim, the morgen yields half a cwt of hay, and 6·10 morgen are deemed enough to pasture one cow.

The climate is damp and unwholesome in the low country about the coast; but the winters are not so severe as in the interior, where, especially near the Harz, they begin in September, and last till May. The spring is the most gloomy and disagreeable part of the year, owing to the long prevalence of N.E. and E. winds. S.W. winds prevail in the summer months. The temperature of the kingdom is thus stated by Von Redeu, in his *Statistical Description of Hanover*, i. 24.:—

Place.	Mean Temperature (Réaum.)				
	Year.	Spring.	Summer.	Autumn.	Winter.
Cuxhaven - -	6·9°	5·9°	13·4°	7·7°	0·1°
Lüneburg - -	7·2	7·04	13·8	7·4	0·7
Göttingen - -	6 6	5·4	14·6	7·4	0·7
Harz district -	4·9				
Average of kingdom	7·4	6·8	14·3	7·7	0·8

The fall of rain during the year averages 23·5 in.; but it is very unequal in different parts of the kingdom. Fogs prevail in the dyke-lands; and in the winter violent storms frequently occur, causing great damage to the embankments and drainage.

Agriculture and Grazing. — The soil, on account of its

general mediocre quality, requires effective cultivation to make it profitable to the proprietor: this, however, is seldom to be met with, owing to the smallness of the estates into which the land is divided.

Table showing the proprietorship of the soil of Hanover.

Proprietors.	Arable and Meadow.	Drained Land.	Forests.	Common-land.	Prop. to Total.
	m.	m.	m.		
Royal domains -	208,893	1,837	1,209,516	10,081*	17·6
Monasteries -	42,295	191	30,695	2,098	·9
Nobles - -	321,360	246	171,250	7,583	6·1
State offices and corporations -	73,680	378	725,734	612,674	9·9
Clergy and schools	141,461	14	10,126	4,295	1·9
Other small proprietors (265,630) - -	5,014,917	180	94,955	5,092	63·6
Total of land (except turf-moors)	5,832,606	2,864	2,242,576	641,823	100

* These numbers refer to the number of cattle which this land is capable of grazing.

Thus it appears that 3-5ths of the land is in the hands of small proprietors, the average property of each of whom is only 20 morgen, or 12 acres; while only 1-5th belongs to those who can furnish an adequate capital for scientific cultivation.

The best cultivated lands belong to the crown and the nobility, and on these estates as much attention is given to improved systems of tillage as in Pomerania and Prussia. In the land held by small proprietors, the best farms are in the marsh-lands, and they both yield abundant crops and support numerous cattle. The freeholds in the principalities of Hildesheim, Göttingen, Grubenhagen, part of Kalemberg, and near the large towns, are next in order as respects tillage. Among these the system prevails, called *Koppel-schlag-wirthschaft*, which consists in parcelling the land out into a number of fields for a rotation of crops proportioned to the numbers of the owner's cattle, and his consequent power of keeping the land properly dressed. The small proprietors in the sandy districts, and the *Meier* (stewards), who farm small parts of the crown lands, and of the nobles' estates, abide by the old fashion of three courses, — fallow, winter corn (chiefly rye), and summer corn (barley or oats), with clover on the fallow, where the land will bear it. Potatoes are universally grown, and constitute the chief food of the poor. Rye is generally grown for bread, the raising of wheat being confined to the rich weald soils, and the quantity is insufficient for the demand. Barley and oats are largely cultivated, and when in demand, are exported to England in considerable quantities. Clover and lucern are much grown on good farms, and even by the peasants, on dry soils. Turnips are becoming a favourite article of production, and flax, hemp, tobacco, and hops are more or less cultivated in different parts. The cranberries, abounding on the heath-lands, are gathered for exportation. The forest-land, which amounts to 2,242,576 morgen (equal to about 1,400,000 acres), yields about 51,878,000 cubic ft. of timber yearly, not including inferior wood.* The timber in the Harz district consists of fir: large beach and oak forests are found in Kalenberg, the duchy of Bremen, and the Upper Weser. These forests are under special control, and even when forming a part of private property, are confided to foresters scientifically educated and licensed for the purpose. With all this plenty and care, however, the Hanoverian timber merchants are often undersold at Bremen by the Thuringian dealers, who float their deals down the Werra.

Cattle-breeding, which is extensively carried on in every province, is on the increase; but grazing husbandry is as little understood and attended to as agriculture. The horses of E. Friesland are those most prized, as the rich pasturage is favourable to the growth of the foals; but horse-breeding is well managed every where in the level country, and a great number of horses are annually exported. The government has a stud at Celle, which sends out stallions to 70 stations, and has proved a most useful institution. In 1817, the number of horses in the kingdom was 224,627; it is now 250,000. The number of horned cattle, in 1817, was 640,633; it is now 900,000. E. Friesland and the district of Hoya have the best breeds, the large Dutch cow being preferred in those parts. In the rest of the kingdom, the breed is small and wretched, excepting always the stocks of rich proprietors. On the marshes, in good years, a cow is reckoned to yield from 140 lbs. to 240 lbs. of butter. In 1817 there were 1,564,355 head of sheep. Malchus estimates their present number at 1,611,284 head; and the yearly produce of wool is said to be 3,224,000 lbs., two thirds of which are exported. The price of the wool varies from 50 to 90 rix-dollars per centner (not including the coarse wool of the *Staidschnucken*). Bees are a favourite addition to a farm throughout the kingdom, and thrive well, on account of the quantity of flowering heath and buck-wheat in the sandy districts. The annual produce of honey is valued at 40,000*l.* Large flocks of geese are kept in moist situations: their flesh is salted for domestic use, and the feathers are preserved. Leeches, which formerly abounded in the marsh-lands, have become nearly extinct, from being too eagerly fished. Fish are caught in all the ponds and rivers, and contribute to the support of no small number of the poorer orders. The herring and cod fisheries at Emden used to employ about 1,500 hands, taking 13,000 tons annually; but the produce at present is not one third part of its former amount.

Mining Industry. — This is the most extensive branch of Hanoverian industry; and there is little doubt, that if the government would abandon the mischievous and absurd plan of keeping the mines in its own hands, and administering them by an expensive establishment of officers (*die Berghandlung*), who have no sufficient stimulus to increase their productiveness, they would, in the hands of private speculators, become much more productive, and employ many more hands. At present, out of 30 mines in the Upper Harz, only 7 are worked; and the amount of ore, at an average of 10 years, was 1,647,023 cwt. yearly, produced at an expense of 877,700 rix-dolls., and realising a nett revenue to government of only 633,100 dolls.! The Harz mines at Clausthal, Tellerfeld, and Andreasberg are worked exclusively by the Hanoverian government, and, if not very profitable, are carried on upon an expensive scale. One of them (Sampson pit) is 1,900 ft. deep, and many attain to a depth of 700 and 800 ft. The ore of Clausthal is very rich in lead, yielding 75 per cent., and from 1½ to 4 per cent. of silver; the ores of Andreasberg, however, produce from 6 to 11 per cent. of silver. The mines of the Rammelsberg, near Goslar, are worked by the states of Hanover and Brunswick jointly (the shares being 4-7ths to the former, and 3-7ths to the latter). Silver, copper, and lead are produced in tolerably large quantities, and sometimes gold is found. In these mines, 1 cwt. of lead ore yields 7 lbs. of lead and 3-16ths of an oz. of silver; and the same quantity of copper ore, 14 lbs. of copper and 3-32ds of an oz. of silver. An average of 5 years' produce from these mines gives 301,230 cwt. of all kinds yearly. The total produce of the lead and copper mines of Hanover is said by Reden (i. 205.) to average 10 marks of gold, 50,000 marks of silver, 100,000 cwt. of lead and litharge, 2,500 cwt. of copper, and 50 cwt. of zinc. The iron mines of Hanover are not wrought by the government, but let out to speculators, who are obliged to deliver all the ore to the royal smelting-houses at such prices and quantities as will be accepted. Hence the production is very trifling, though the yield of ore be not less than from 40 to 60 per cent.

Thus mines, the produce of which might enrich the kingdom to a very great extent, are, by the absurd policy of its government, left to languish and decay. An average of 5 years gives only 290,000 cwt. as the produce of the rich iron ore so extensively spread through the hilly districts of Hanover. The salt-works, as well as the metallic mines, are, most of them, under the stepmother care of government. They employ 480 hands, and furnish 290,000 cwt., yielding a yearly gross revenue of 374,000 rix-dolls., with a clear profit of 80,000 rix-dols. (*Reden*, i. 224.) Coal is found in many different localities on the hills that divide the Weser from the Leine, and, with greater convenience for transit, it might be made available for every want of a mining district. At present, however, only 2,260,000 cubic ft. are worked yearly. (*Reden*, i. 224—235.) The smelting-houses use coke and wood.

Manufactures. — Hanover, though furnished, by its mineral wealth and navigable rivers, with means for carrying on a considerable commerce, holds a very low station among the trading countries of Europe. Its inhab. have little enterprise or ardour for business, and even that which they might exert is effectually checked by restrictions. Most of their manufactured goods are produced at such an expense as to exclude them from the foreign market, and those which go abroad command only inferior prices. The manufacture of linen is, perhaps, more extensive than any other. Few, however, of the improved methods by machinery have been introduced, or can be introduced on the present system. There are only 2 spinning-mills in Hanover, and it is believed that no weaving machinery whatever, of very modern date, is used. Spinning and weaving form the great in-door employment of the rural pop., and hence large quantities both of yarn and thread are the work of private hands. In Grönenburg, for instance, where large crops of flax are raised, no less than 1,378,000 skeins (496,750 lbs.) are spun annually by the farmers' and peasants' families. The number of professional weavers is nearly 5,000, using 7,200 looms, and the linen cloths produced

* The forest land of Hanover is distributed as follows: — Hanover, ·17; Hildesheim, ·33; Lüneburg, ·17; Stade, ·01; Osnabrück, ·12; Aurich, ·06; Harz, ·8.

by them are known in the markets by the name of Osnaburgs and white rolls, there being different qualities of each. The hempen cloths are known as Tecklenburgs, hempen bagging, and Hessians. They are commonly made up in pieces of 100 double ells (128 yds.).

Price of Hanoverian Linens per Piece, in 1826 and 1836.

Names in English Market.	Length of Piece.	Breadth.	1826.	1836.
			Rix-doll.	*Rix-doll.*
Osnaburgs, prime -	128 yds.	27 to 28 inches	19 to 23½	25 to 27
Do. 2d -	—	26 — 27 —	15 — 19½	16 — 24
Do. 3d -	—	24 — 26 —	11½ — 15	14 — 16
Do. 4th -	—	23 — 26 —	9 — 10	9½ — 12
Stiegen-leinen (white rolls) -	60 ells	28 — 30 —	3¾ — 6½	4 — 6½
Tecklenburgs -	128 yds.	27 — 28 —	19 — 22	21 — 25
Stout do. - -	—	26 — 27 —	11 — 17	14 — 20
Cotton bagging -	84 ells	42 — 46 —	5	6
Hessians - -	58 —	{32 — 34} {38 — 40} —	3 — 5½	3 — 6¼

These cloths, when bleached and ready for sale, are taken to the various *Lagge-Anstalten*, or cloth-marts of Hanover (chiefly in the district of Osnabrück), where, after being measured, stamped, and valued, they are bought, chiefly by Bremen and Hamburg merchants, who export them to England, Spain, and Portugal, N. America, and the W. Indies.

The linen and hempen cloths entered for sale in the four years ending with 1838 were as follows:—

Years.	Quantities.	Value.
	Ells.	*Rix-dollars.*
1835	15,546,000	1,319,500
1836	19,182,000	1,688,400
1837	18,682,000	1,713,200
1838	19,936,000	1,856,240

Besides these, a large quantity, both of cloths and flax, is brought up without entering the market at all, and nearly the whole is exported. The total yearly value of the linen and linen yarn exported from Hanover is estimated by Reden (i. 364.) at 2,500,000 rix-dollars. The manufacture of cotton cloths, in Hanover, is of recent date, and is chiefly owing to the erection of a cotton spinning-mill at Hanover: it keeps at work about 600 hand-loom weavers, who, when fully employed, gain about 100 rix-dolls. a year, and manufacture 2,200,000 ells of coarser cotton cloths. The tariff of 1835, in the view of encouraging the linen manufacture, taxes the importation of bleached yarn and unbleached linen cloths at the rate of 1 rix doll. per centner, and finished cloths from 8 to 12 rix-dolls. per centner. Flax, hemp, and unbleached linen yarn may be imported duty free. (*Reden*, i. 364.) The woollen manufactured cloths are reckoned at 28,000 pieces, value 800,000 rix-dolls. The paper, made in 52 establishments, employing 1,000 workmen, amounts to 20,000 *ballen*, yearly value 360,000 rix-dolls. There are no other manufactures of any importance.

Trade. — Though seemingly destined by its situation in the valleys of three navigable rivers, to command a large import and export trade, Hanover exhibits little disposition to exchange its goods with foreign nations. The merchants of Hamburg and Bremen buy, in the Hanoverian markets, goods suitable for re-exportation; but the Hanoverians themselves take little interest in shipping their own goods for foreign ports. The number of their vessels entering Bremen and Hamburg, in 1838, was only 76 and 41 respectively; nor is it probable that there will be any great increase till the vexatious disputes about river privileges, between the Hanoverian government and the Hanse Towns, are ended, and the restrictions imposed by both wholly removed. In 1838 there belonged to Hanover 422 sea-going ships, of the burden of 31,730 tons; and of these, 400 belonged to the ports of the Ems. The coasters and river-craft amount to 1,370. The exports in 1838 were, manufactured linens and woollens, worth 1,800,000 rix-dolls.; linen yarns, 500,000 do.; raw flax, 140,000 do.; raw wool, 500,000 do.; mineral produce, 500,000 do.; horses and cattle, 450,000 do.; wheat and other grain, 300,000 do.; butter and cheese, 214,000 do.; tobacco (manufactured), 250,000 do.; timber, 107,000 do.; sundries, 338,000 do.: total, 5,099,000 doll.

The chief imports of the kingdom are English manufactures (such as cotton and woollen, hardware and cutlery), colonial produce, wine and spirits. The table of returns, however, as given by Von Reden, is very unsatisfactory, and conveys no intelligible idea of the trade of Hanover. The following are said to be the quantities of the chief articles imported in 1837-38: — Coffee, 43,290 centners; sugar, 58,362; tea, 3,769; tobacco (raw), 49,445; iron, 82,688; toys, jewellery, &c., 157; cloth manufactures, &c., 7,349; pitch and tar, 24,708; wine and spirits, 77,547; horses and live-stock, 12,419 head.

Coins, Weights, and Measures. — By the new mint regulations of 1834, the coinage has been fixed as follows:

Gold.

1 George-pistole = 16s. 4d. Eng.
1 Williams-pistole = 8s. 2d. —
1 ducat = 4s. 1d. —

Silver.

1 thaler = 24 groschen = 2s. 11¼d. Eng.
⅙ thaler = 4 — = 5¾d. —

Weight.

1 zentner = 46·8 kilog. = 103 lbs. avoird.
1 pfund = 46·7 gram. = 1·03 lb. —
1 loth = 14·6 — = 1 lb. 4 oz. —

Measures — Length.

1 foot = 12 zollen = 11⅜ Eng. inches
1 ell = 24 — = ·639 Eng. yard.
1 ruthe = 16 feet = 5·1 Eng. yards.
1 mile = 25,400 feet = 4·6 Eng. miles.

Surface.

1 sq. foot = ·92 Eng. square foot.
1 morgen = ·64 Eng. acre.

Inland transit for goods has hitherto been effected either by tow-boats on the rivers, or by waggons on the roads; but the carriages are of so primitive and clumsy a description, and the roads so bad, that the expense of time and labour is wholly incommensurate with the value of the articles. A railroad has lately been projected from Hanover through Brunswick to Hamburg; but it seems very doubtful whether it will be accomplished.

Condition of the People. — Although the soil and climate of Hanover be so unfavourable to agriculture, the condition of the peasantry in the hereditary provs. of the house of Brunswick has, until very lately, been such as to confine them almost exclusively to the cultivation of the soil: indeed, the trading resources offered by the rivers of the kingdom are only beginning to be appreciated by the people. In the sandy districts, the pop. is necessarily scanty, and indigent even to wretchedness; in the better soils of Hildesheim, Göttingen, and Grubenhagen, the peasants are in a better condition, but still very poor. The most prosperous districts are E. Friesland, and the rich lands along the Elbe, where good agriculture, united with activity and enterprise in trade, serves to enrich the pop. The people are everywhere industrious and temperate, labouring, without ill-feeling, for the smallest possible remuneration. They are mostly descendants of the ancient Saxons, and, as such, speak the Low German dialect, excepting the inhab. of the Harz, who came from Upper Germany. And we may remark, by the way, that the circumstance of the language of the peasants differing from that of the educated classes, in which all intellectual progress takes place, operates powerfully to keep back the former, and is a serious impediment to the admission of the lower classes to a participation in the government, through their representatives.

Government. — Before Prussia ceded Hanover to France, in 1804, the form of government was monarchical, and the various territories were subject to feudal lords. The peasants of the marsh-lands had more freedom, and in E. Friesland the constitution of the country was almost republican. In the territories of the princes of the empire, the representation of the people by estates, composed of the nobles, prelates, and deputies from the towns, served to check the power of the sovereign, as in other parts of Germany. In 1808, when Napoleon created the kingdom of Westphalia, the territories of Hanover, with the districts of Hildesheim and Osnabrück, formed a part of it, and the Code Napoléon took the place of the ancient laws, and a sham representative government was established. On the return of the rightful sovereign to Hanover, in 1813, the French institutions were summarily abolished, and the old forms re-established; and in 1818 the estates, summoned upon the ancient footing, drew up the form of a new constitution, modelled on that of England and France, and substituting a uniform system of representation for the various representative forms which prevailed under the empire. The chief change that excited disapprobation arose from the arbitrary decision of the sovereign (George IV.), advised by Count Munster, that there should be two chambers instead of one, contrary to the proposal of the estates, and the universal custom of Germany. The respective rights of the sovereign and of the country to the crown land revenues were not clearly defined by this fundamental law; but the interests of the people were supposed to be sufficiently consulted by the institution of a national treasury, the commissioners of which, named for life, were *ex officio* members either of the upper or of the lower chamber.

This constitution, however, contained no properly defined statements respecting either the rights of the people, or the prerogatives of the crown; and as the new system of representation was not sufficiently consolidated to resist the encroachments of a monarch supported by powerful foreign influence, the necessity of a more definite fundamental law, in which the rights of

the citizens should at least be declared, was felt on all sides. This feeling led to the drawing up of the constitution of 1833, which differed in but few, though most essential, points from that of 1819. The principal points of difference were a fuller acknowledgment of the right of the chambers to control the budget, and to call the ministers to account for their conduct; the restriction of the king's expenditure, by a regulated civil list; and the reservation, for the use of the nation, of the surplus revenue of the crown demesnes. These modifications rendered the treasury, whose functions thus devolved upon the chambers, wholly unnecessary; and it was dissolved. The new fundamental law, after being discussed by both chambers, received the assent of William IV. in 1833, who, however, by the same act, modified 14 articles of the bill. New elections followed, and the new chambers were exhibiting their activity in reforming abuses, and introducing economy into the state disbursements, when the death of William IV. interrupted their proceedings. As the salic law, excluding females from the succession to the throne, prevails in Hanover, William IV. was succeeded by his eldest surviving brother, Ernest, Duke of Cumberland, in England. Immediately on taking the government, the new king declared the chambers dissolved; and previously to their re-assembling, he abolished, by proclamation, the fundamental law which had been adopted under the reign of his predecessor, and in the most arbitrary manner, insulting alike his brother's memory and the whole country, declared the fundamental law of 1819 to be alone valid. Under the last-named law, he summoned a fresh parliament: but he found the spirit of the nation aroused and indignant; for not only the courts of law, but the highest legal authority in Germany, and several faculties of universities, declared his proceedings illegal; many towns refused to send representatives to the parliament, and those which met signed a memorable protest, declaring their opinion that the fundamental law of 1833 was still the law of the land. As the chambers could not be convened, for decency's sake, they were declared dissolved.

In this state of things, the present government of Hanover is managed by authorities partly belonging to the period of 1819: the independent treasury, however, no longer exists, not having been reinstated by the king, when he abrogated the law of 1833. The privy council, too, which met to advise the king on state affairs, in the same manner as that of England, has been arbitrarily abolished; and a cabinet council, composed of the king's ministers and creatures, has been appointed in its place. This council, like a new star-chamber, has on one occasion even arrogated the novel power of assuming a judicial control over the supreme court of appeals at Celle. As none of the decrees which the king, under the advice of this authority, has issued since his accession have received the sanction of the chambers, the legislative power is at present vested in the council of state, or rather in its president the king, who may be said to be the absolute monarch and despot of Hanover. Except this degradation of the supreme court of appeals at Celle, no change has hitherto been made in the judicial arrangements, which consist of 9 chanceries or district courts, besides the magistracies of the towns, and the manorial and minor royal courts, as primary tribunals.

Religion and Education. — The pop., considered in respect of religious creeds, is thus divided (not including the military):—Lutherans, 1,356,000; Calvinists, 102,850; Roman Catholics, 212,300; Jews, 11,000; Memnonites, 1,850. The Roman Catholics chiefly reside in the princips. Osnabrück and Hildesheim: their number is small elsewhere. Religious matters are directed by Calvinist consistories at Hanover, Stade, Aurich, and Nordhorn, with the subordinate consistories of Hadeln and Neustadt; the Lutheran consistory at Osnabrück, and the Roman Catholic consistory of the same see, which is alternately filled by a Roman Catholic and by a secularised Protestant bishop; lastly, the bishop and consistory of Hildesheim, for the Roman Catholic inhab. of that district. Education has been much attended to in Hanover; but, as was before stated, it is not carried on in the dialect most familiar to the people, the instruction being universally in the High German tongue.

The following table shows the distribution of elementary schools in Hanover.

	Protestant.		Rom. Cath.		Prop. of Child. ed. to Pop.
	Schools.	Scholars.	Schools.	Scholars.	
Hanover -	593	44,199	10	745	1 in 7·
Hildesheim -	543	39,045	117	7,166	— 7·7
Lüneburg -	826	39,443	1	35	— 9·3
Stade -	658	32,139	- -	.	— 7·6
Osnabrück -	172	15,401	213	17,192	— 8·4
Aurich -	295	19,970	2	189	— 7·8
	3,086	180,197	343	25,327	1 in 7·9
Total of schools, 3,428		Do. scholars, 214,524			

The teachers for these schools are prepared for their duties in 6 normal schools, established in princips. of Hanover, Hildesheim, Stade, and Osnabrück. Besides this provision for the education of the lower orders, there are 17 gymnasia and higher schools, taught by 153 masters, and attended by 2,200 scholars, and also 13 elementary grammar-schools, taught by 71 masters, and attended by more than 2,000 children. These schools prepare youth for the university, or for the various callings of life. The university of Göttingen, which was one of the best attended of Europe a few years back, and counted from 1,500 to 1,900 students, has now scarcely 500. The greatest loss is, however, that of its moral influence over the institutions for education, occasioned by the dismissal of 7 of its most respected professors, for expressing their doubt of the king's power to absolve his subjects from their oaths. (*See* GÖTTINGEN.) The press is under a censorship, the mildness or severity of which depends on the character of the monarch; and this censorship affects the public libraries, as well as publishers and editors of newspapers. The coercive measures of King Ernest's government have been very unpopular.

Poor. — The poor are provided for by voluntary contributions procured for them, at stated periods, from the wealthier inhab. They are, in a great degree, supported in workhouses built and maintained by subscription, where their own labour contributes in some measure to their subsistence. Their food and clothing are of the coarsest description; but, on the whole, they are as well taken care of as in some countries burdened with poor-rates.

Condition of People. — Most of the Hanoverians are of Saxon origin; but in the N.W. there are Frieslanders, and in other parts may be traced Thuringians, Franks, and Vandals. The people are generally strong and well built, industrious and persevering. The distribution of the land into small estates has produced a good deal of family pride even among the peasants; and it is considered discreditable to intermarry with families in inferior circumstances. The rural pop. in the S. provinces is much more advanced in civilisation than in the N.; but there is every where a great disinclination to adopt improvements in farming. The great majority of the farmers act as labourers, and even the richest live in the plainest style, except in the duchy of Bremen and the Hadeln-land, where mahogany furniture is to be seen in their houses, and four or five sleek Holstein carriage-horses in their stables. In these districts the country people are very frank and hospitable; but they are equally obstinate with the rest in their adherence to ancient fashions. Beer is the favourite beverage: some occasionally produce wine. The national dishes of the Hanoverians are smoked geese, beef and raisins, and pork served with dried fruit.

Taxation. — The changes of the government of Hanover have necessarily, and in the most important degree, affected its finances. The re-establishment of the ancient order of things, in 1813, brought upon the country the whole mass of abuses belonging to a past age, which had been abolished by the French. Amongst the most obnoxious was, the claim of the nobles to exemption from the land-tax: and this, as well as many other points, had to be arranged by the estates assembled under the constitution of 1819. Between 1821-26, a measurement and valuation of the country and its soil was made; and the amount of annual produce, after deducting expenses, being taxed at 10·2 per cent., was calculated to yield 1,310,000 dolls.; but in this loose estimate, the values undoubtedly fell much below the reality. An indemnity was, at the same time, granted to the nobles, in lieu of exemption, to the amount of 1 per cent. on the revenue taxed. This charge appeared in the budget of 1826-27, and amounted to 65,000 dolls. The revenues claiming exemption amounted, consequently, to 6,500,000 dolls., nearly equalling the amount of taxable property belonging to peasants and burghers, and which, in 1816, was found (exclusive of E. Friesland) to amount to 6,689,717 dolls. Thus, half the nation was obliged to purchase justice from the other half, after the re-establishment of the so-called constitution of 1819 had been granted. The other direct taxes are the house-tax, which is 4 per cent. on the appraised rent; the personal tax, rated in 6 classes; an income-tax, which likewise includes all salaries, and the rate of which is ½ per cent. below 500 dolls., rising to 2 per cent. above 2,000 dolls. annual income; and lastly, the industry-tax, which is paid by all tradesmen, in 7 classes, the lowest paying ½ doll., the highest 80 dolls.

The indirect taxes include the customs, the tax on spirits, beer, &c., the monopoly of the sale of salt, the stamp and legacy duties, besides duties levied on the grinding of corn, and unslaughtered beasts. The royal and national revenues amounted, in 1838-39, to 6,566,140 rix-dolls.; and the expenditure, during the same period, was 5,581,850 rix-dolls., leaving a surplus of 984,290 rix-dolls., which was devoted to the payment of the public

debt, together with a further surplus of 280,000 rix-dolls. of the previous year.

The estimate for 1840 is,—

	Dollars.	Dollars.
Nett revenue from domains	1,113,111	
Mines, &c.	126,000	
Tolls at Stade, &c.	400,000	
Tolls on roads	230,000	
Post-office	140,000	
Lottery and sundries	256,455	
Direct taxes	2,178,300	
Indirect taxes	1,382,269	
Sundries	188,887	
		6,015,022
King's civil list deducted from the proceeds of the crown lands		513,888
		6,518,911

The expenditure for the same year was estimated at 5,872,889 dollars, without including the civil list. In 1837 the expenditure was 5,830,590 dollars. The national debt is said, by Abbelohde, to amount to 15,091,283 doll. 20 gr.: according to later accounts, it is 19,266,000 dollars. Thus the revenue is in a flourishing state, but Hanover is one of the heaviest taxed countries of Germany, especially if the large income drawn from the crown lands be considered.

The kingdom of Hanover ranks as the fifth state of the German confederation, and has 1 vote in the smaller assembly, and 4 votes in the full assembly, of the diet at Frankfort.

Army. — The contingent of Hanover to the confederate army is 13,050 men, belonging to the 10th division; but the whole army consists of above 20,000 men, and bears a proportion to the whole pop. of 1 to 83.

	Men.	Horses.
Military staff	45	
Engineers	198	
Artillery, 2 companies horse-art. / 2 battalions foot / 1 company pioneers	1,368	275
Cavalry, 3 regiments	3,310	2,445
Infantry, 16 regiments	15,380	
Total	20,301	2,720

There are 10 garrison towns, a cannon-foundry at Hanover, and a manufactory for small arms at Herzberg. The expense of maintaining the army is about 1,500,000 rix-dollars yearly.

History. — The kingdom of Hanover is formed out of the duchies formerly possessed by several families of the junior branch of the house of Brunswick. The reigning family derives its origin from the union of the Marquis d'Este, in the 11th century, with a wealthy princess of Bavaria, the issue of which received the surname *Guelph*, from his maternal ancestors, and inherited the dukedom of Bavaria. Henry the Proud, third in descent from him last mentioned, married Gertrude, the ruling princess of Brunswick: their son, well known in the history of the crusades as Henry the Lion (born 1129), was the first *Guelph* duke of Brunswick. He married a daughter of Henry II., king of England; and from this marriage both the houses of Brunswick and Lüneburg are descended. The history of Hanover for the two centuries preceding the Lutheran reformation presents little interest, except in the connection of its princes with the wars of the Guelphs and Ghibellines, in the latter end of the 14th century: little or nothing is known of its internal history. The Reformation numbered the princes of Brunswick among its most zealous supporters, and their subjects, during the thirty years' war, warmly seconded their anti-papal efforts. Ernest of Zell, the reigning duke, was one of the most eloquent defenders of Luther at the diet of Worms. His endeavours to improve the people by establishing clerical and general schools, when learning was esteemed only by the few, show him to have been a man of enlightened views. His grandson, Ernest Augustus, married Sophia, a grand-daughter of James I. of England (by his daughter Elizabeth, the wife of the elector-palatine); and on this marriage was founded the claim of the elder branch of the house of Brunswick to the English crown, acknowledged by parliament in 1701. George Louis was the issue of this marriage, and became king of England in 1714; from which time till 1837, at the death of William IV., both England and Hanover have had the same sovereign. The salic law then conferred the Hanoverian crown on Ernest, Duke of Cumberland, fifth, but eldest surviving son of George III. The important constitutional changes during the last thirty years have been mentioned elsewhere. As respects other features of its history during the reigns of George I. and II., the territory of the electors of Hanover was increased by the conquest and purchase of many adjoining districts; Bremenverden and Wildeshausen in 1719, the Hadeln-land in 1731, &c. Geo. III. added Hohenstein and the bishopric of Osnabrück, which, by the treaty of Westphalia, was held by his house as a secularised bishopric alternately with a Rom. Cath. prelate. In 1804, Prussia took possession of Hanover, but ceded it in the same year to the French, who constituted it a part of the kingdom of Westphalia, established in 1808. At the peace of 1813, the King of Great Britain reclaimed his rightful dominions, which were much enlarged by the stipulations of the treaty of Vienna, and formed into a kingdom. On the definitive settlement of the kingdom, the district of Lauenburg was ceded by Hanover, which obtained in return the bishopric of Hildesheim, the principality of East Friesland, the districts of Lingen, Harlingen, &c. A treaty of mutual inheritance has long existed between Hanover and Brunswick, which was formally renewed in 1836, and by which the Hanoverian crown is declared to descend to the dukes of Brunswick, on the extinction of male heirs of the line of Hanover.

HANOVER, a city of W. Germany, cap. of the above kingdom, on the Loire, a branch of the Weser, 84 m. S. Hamburg, 62 m. S.E. Bremen, 35 m. W. Brunswick. Lat. 52° 22′ 26″ N., long. 9° 44′ 40″ E. Pop. (1835) 24,000. It is built in an extensive sandy plain, and is divided by the river (over which are several bridges), into an old and new town, each of which is governed by a separate magistrate. The old town, on the right bank, has crooked and narrow streets, and is ill built and dirty: the streets of the new town are more regular, and are lined with handsome houses, particularly George Street and Frederick Street, opening on a fine esplanade; the latter is adorned with the handsome monumental rotunda of Leibnitz, and the column, 156 ft. high, sacred to the memory of the Hanoverians who fell in the battle of Waterloo. The chief public buildings are the royal palace, of good exterior architecture, and splendidly fitted up within, especially the *Ritter-saal*, or knights' hall; the opera-house attached to the palace; the vice-roy's palace; the house of assembly of the states (*Landständehaus*); the mint; the arsenal; the *Gewerb-schule* (trade school); the royal stables, where the well known breed of black and cream-coloured Hanoverian horses is kept; and the town-hall and record-office, containing a library of 80,000 printed books, besides about 2,000 valuable MSS., chiefly given by Leibnitz, who was a great benefactor to this town. Besides this, there are here seven other public libraries attached to various national establishments. (*Von Reden*, ii. 463.) There are 7 churches, 4 Lutheran, 2 Calvinist, and 1 Rom. Catholic: of these the handsomest are the court and city church in the new town, and the *Schloss-kircke*, which contains the remains of the Electress Sophia and her son George I., King of England. Outside the town are 2 suburbs, Linden and Gartengemeinde, in the latter of which are upwards of 500 houses, with gardens, &c. About ½ m. distant is Mount Brilliant, the king's country residence, and formerly the seat of Count Walmsden, who enriched it with a gallery of fine pictures. About 1 m. distant is the old palace of Herrnhausen, once the favourite residence of George I. and George II.: it is heavy and tasteless, and appears to be going to decay. The gardens, which are laid out in the old French style, formerly contained a fine collection of rare plants; but they were dispersed during the late war. Hanover has several establishments for education, among which are the Georgianum, founded in 1776, for educating 40 sons of the nobility free of expense, the lyceum, the normal school (the earliest of its kind, founded in 1754), several elementary schools, and a girls' school of industry. Among the charitable institutions are a large almshouse, an orphan asylum, and several hospitals, one of which has been only lately erected. There are also, a Bible Society founded in 1806, a Soc. of Nat. Hist., an Hist. Soc., an Art. Union, which annually exhibits specimens of Hanoverian artists, and a trade-union. The manufactures consist mostly of oil-cloth, gold and silver articles, with beer, leather, tobacco, chicory, &c.; but they are of trifling importance. The transit trade with Bremen and the interior of Germany is very considerable: there is an exchange, a chamber of commerce, and a *Berghandburg*, or market for mining produce. Commercial activity, however, prevails more among the Dutch and foreign German merchants settled in the town, than amongst the Hanoverians. Some of the bankers are considerable capitalists. The town is not considered healthy: N. and E. winds are prevalent, and much rain falls. Longevity is said to be rare.

The foundation of Hanover, though attributed to the eleventh century, is most probably of still earlier date. In 1303 it is mentioned as having some trade in cloth, skins, and salt. Little more is known of it till 1526, when its inhabitants distinguished themselves by their zeal in the Reformation. It escaped the devastations of the thirty years' war, and even refused admission to the victorious troops of Tilly in 1625. The old royal palace was built early in the 17th century, and in 1641 it became the residence of the Duke Christian Louis, since which it

has always been the capital of the electorate and kingdom, and has made great advances in size and splendour. The ramparts being found useless as a means of defence, were in 1780 converted into a handsome esplanade, and planted with trees. (*Berghaus; Stein; Von Reden.*)

HARBOROUGH (MARKET), a market town and chapelry of England, par. Gt. Bowden, co. Leicester, hund. Gartree, on the N. bank of the Welland, which divides it from Northamptonshire, and 14 m. S. E. Leicester. Pop. of town in 1831, 2,272. It consists of a well-built street, crossed by several others of inferior character; and near the middle of the town is a handsome town-hall, with shops below, and a justice-room above, in which the county magistrates transact their business. The church is fine and spacious, and its octangular spire is one of the most elegant in England. The dissenters have 3 places of worship, attached to which, as well as to the church, are Sunday schools, giving instruction altogether to about 500 children. Considerable trade takes place on the market-days and at the October fairs; which, not less now than in the time of Camden, are famous for the show of beasts. Silk and shalloon weaving, and the manufacture of carpets are carried on here, but not extensively. One mill is returned as working 2 engines, and employing 103 hands. (*Parl. Rep.*) Market-Harborough is one of the polling-places for the S. division of the co., and is the chief town of a poor law union, comprising 41 pars. or townships. Markets on Tuesday; fairs Jan. 6., Feb. 16., April 29., and July 31., Oct. 19. and 8 following days, for cattle, leather, cheese, &c. Other fairs are held on the Tuesdays after March 2., after Midlent Sunday, and before Nov. 22. and Dec. 8.

HARLINGEN, a sea-port town of Holland, prov. Friesland, on the Vliestrome, or entrance to the Zuyder Zee, opposite the Texel, and at the mouth of the canal of Leewarden, 15 m. W. by S. that town. Pop. nearly 8,000. It is pretty well fortified, and is strong by its position, the surrounding country being readily laid under water. Streets regular, well built, clean, and intersected with canals bordered with trees. Chief edifices, the Admiralty, a large par. church, and the town-hall. It has a good harbour; but the entrance to it is blocked up with sand-banks, so as not to admit large vessels. It has manufactures of sail-cloth, salt, hollands, paper, bricks, and lime, with building docks, and a brisk trade in corn, butter, cheese, flax, hemp, glue, pitch and tar, &c. It is the seat of the naval office for the prov.; and suffered severely from a violent storm in 1825.

HARROW-ON-THE-HILL, a village and par. of England, co. Middlesex, hund. Gore, 10 m. N.W. by W. London. Area of par., 13,600 acres. Pop., in 1831, 3,861. The hill on which the village stands rises singly out of an extensive and fertile vale; it is considerably depressed in the centre, but has two very conspicuous eminences at the extremes. On the more N. of these stands the church, with its tower and lofty steeple, a prominent feature throughout Middlesex and some of the adjoining counties. Part of this building is Norman, belonging to the 11th century; but the main fabric, with the tower, belongs to the 14th century. The living is a vicarage, in the gift of Lord Northwick. Immediately below the church lies the village, chiefly consisting of one street running down the slope of the hill. The best houses are mostly occupied either by assistant-masters, or others, who accommodate the scholars attending the free school, to which Harrow is wholly indebted for its celebrity. This school was founded, in 1571, by Mr. John Lyon, a wealthy yeoman of the neighbouring hamlet of Preston, and received a royal charter, by the terms of which the management of the property and the appointment of the master were committed to six trustees as a body corporate. The school-buildings are of brick, and have no claim to particular mention. The head master's house has a Gothic porch, and is a fine old mansion. The primary object of this establishment was the gratuitous instruction of the poor children of Harrow, without limitation of number; but the founder expressly directs "that the master may receive, over and above the youth belonging to the par., as many *foreigners* as can be well taught and accommodated, for such stipends and wages as he can get, so that he take pains with all indifferently, as well of the par. as foreigners, as well of *poor* as of *rich*." This liberality of the founder, and the judicious choice by the trustees of able and learned men as its masters, have chiefly conduced to its present very high reputation as a school for the English aristocracy; but, at the same time, there can be no doubt that the founder's intentions, as respects the poor of the par. itself, have been wholly frustrated. A classical education is quite unsuitable to the pop. of a village, and hence the school has been little used of late years by the parishioners. A petition of the latter to the Court of Chancery, in 1810, for the reformation of these abuses, was unsuccessful. (See *Vesey's Chancery Reports*, xvii. 498.) The revenues strictly applicable to the school amount to nearly 900*l.* a year, in the hands of trustees, usually noblemen or gentlemen living in or near the par. The education furnished was exclusively classical till within the last few years, when Drs. Butler and Longley ventured to introduce a little modern history and arithmetic, neither of which, however, is considered at all important: beyond these trifling attempts at reform, we are not aware that any deviation has been made from the beaten path of the old grammar-schools. The routine of grammars, classes, hours, &c. very much resembles that pursued at Eton, owing, no doubt, to the appointment of several head-masters from that school: the Eton grammar is used, verse-making supersedes the more useful study of prose composition, learning-by-heart is a favourite employment; and the pernicious private-tuition system, the chief object of which is to save the master's labour, and fill the tutor's pocket, prevails at Harrow no less than at Eton and Westminster. The masters originally were two only, the master, and the *usher* or under-master both of whom were permitted to take "foreigners" as boarders; but as the school increased, further assistance became from time to time necessary, and there are now six assistant-masters, paid either by the high or lower master, according to the school in which they teach; and besides these there is a mathematical teacher. All the masters receive boarders; but the head-master does not furnish tuition, and hence arises the difference in the terms; for at a tutor's house they amount to 130*l.*, whereas at the head-master's they are little more than 100*l.* All, however, are compelled to procure tuition, which is a part of the system. At least 60*l.* a year must be added to complete the necessary annual expenses of boys educated at this school. The governors have given prizes for verses, and Sir R. Peel (an old Harrovian) has lately established a prize for Latin prose composition, besides which the head-master has voluntarily given rewards for composition. The speech-days, on which these papers are read or recited, are the first Wednesdays in June and July. The University scholarships attached to Harrow-school are four, established by the founder, of 50 guineas each, either to Oxford or Cambridge, and two of the same value, founded by the late Mr. Sayer, to Caius College, Cambridge,—all tenable for *four* years: they are gained by an impartial examination. The number of boys attending the school fluctuates at present between 350 and 420. Among the many public characters educated in this school may be mentioned Sir William Jones, Spencer Percival, Dr. Parr, Lord Byron, Marquis of Hastings, and Sir Robert Peel. Harrow had formerly a weekly market, which is now decayed; but a pleasure fair is still held on the first Monday in Aug. Bentley Priory, a fine seat belonging to the Marquis of Abercorn, is within this par.: it occupies the site of a monastery, dissolved at the Reformation.

HARROWGATE, a village of England, celebrated for its mineral waters, co. York, W. riding, wap. Clare, forming with Bilton a chapelry of the par. of Knaresborough, 178 m. N. London, 14 m. N. Leeds, and 20 m. W. by S. York. Area of chapelry 4,800 acres. Pop. of ditto, in 1831, 2,812. The village is divided into High and Low Harrowgate. High Harrowgate is built on an elevated plain, which less than 100 years ago was properly described by Smollett as "a wild common, bare and bleak, without tree or shrub, or the least signs of cultivation." At the close of last century, however, Lord Loughborough made large plantations; houses have since been built in different directions; and the situation is now extremely pleasant, commanding a most extensive view of the distant country, finely varied by towns, villages, fields, and woods. The cathedral of York is distinctly seen at the distance of 20 m., and the view W. is terminated by the mountains of Craven, and E. by the Hamilton Hills and Yorkshire wolds. The air is pure and bracing, and the climate dry and salubrious. Low Harrowgate is situated in a valley, and has many handsome stone buildings, erected either for hotels or private lodging-houses for visitors. An almost continuous series of these houses unites the upper and lower parts of the village. The church of High Harrowgate is a well-built structure, erected in 1749 by subscription: that in the lower village was built in 1824. There are besides two chapels for Independents, and one for Wesleyan Methodists. A bath hospital was erected in 1826, which has been lately enlarged: it accommodates about 40 patients, who have the benefit of the waters free of charge.

The springs of Harrowgate are both chalybeate and sulphureous. The chalybeate springs rise in both villages, the sulphur springs only in Low Harrowgate. The following analysis gives a tolerably correct idea of their chemical composition. [See top of next page.]

The chalybeate waters are principally tonic and alterative, the sulphureous waters strongly purgative. The latter are also used externally in rheumatism and scorbutic cases. The wells are covered with elegant cupolas, and surrounded by promenades, for the accommodation of those who come to drink the waters. Races are held in summer on the high ground to the W., where also is

Chemical Compo-nents, &c.	Chalybeate.			Sulphur.		Saline.
	Old Spa.	Tewit Well.	New Chalyb.	Old Wells.	Cresc. Spring.	Chelt. Spa.
Spec. grav.	1·00014	1·00017	1·00012	1·0061	1·002	1·0075
Gases.						
Carb. Ac.	15·75gr.	16gr.	16·5gr.	8gr.	20·8gr.	6·32gr.
Nitrog.	4·25 -	5 -	4·2 -	7 -	7 -	3·97 -
Sulph. Hy.	- -	- -	- -	19 -	13·6 -	
Oxyg.	- -	- -	- -	- -	- -	0·87 -
Salts.						
Mur. Sod.	- -	- -	2·5 -	615·5 -	137 -	434 -
— lime	- -	- -	- -	13 -	- -	30 -
— mag.	- -	- -	- -	91 -	45 -	13 -
Carb. lime	- -	- -	- -	18·5 -	3·1 -	3 -
— mag.	- -	- -	- -	5·5 -		
— iron	2 -	2·5 -	10·5 -	- -	2 -	
Sulph. Sod.	8 -					
— lime	- -	4 -	- -	- -	- -	9 -
— mag.	- -	- -	- -	10·5 -	8 -	

a high tower or observatory, from the top of which is a very extensive prospect of the surrounding country.

HARTFORD, a town or city of the U.S., Connecticut, of which it is joint cap. with Newhaven, co. Hartford, on the W. bank of the Connecticut river, 50 m. from its mouth, and 32 m. N N.E. Newhaven; lat. 41° 46′ N., long. 72° 50′ W. Pop. (1840) 9,468. It is advantageously situated, the river being navigable for sloops up to this point. It is generally well built, particularly the main street, and is connected with E. Hartford, on the other side of the river, by a bridge of 6 arches, 974 ft. long. It has a handsome state-house, 3 banks, including a branch of the U. S. bank, an arsenal, academy, museum, college, 9 places of worship, and an asylum for deaf and dumb. The last named, the first institution of the kind established in America, was founded in 1817; and in 1819 was presented with a grant of 23,000 acres of land by congress; besides which it is possessed of other donations and sources of revenue. It is open to patients from the whole union, at a charge of only 115 dollars a year, and many are provided for and educated gratuitously. It occupies a large and commodious brick building, on an eminence about ¾ m. W. of the city; is surrounded by grounds between 7 and 8 acres in extent, and has attached to it some workshops, in which the male pupils are taught mechanical trades. In 1830, 318 persons had been received in it. A little S. of the town is an asylum for the insane, a spacious stone edifice, with extensive grounds. Washington Episcopal College, established 1826, is another of the public institutions at Hartford. It has a president, 8 professors, generally from 80 to 100 students, and a library of 6,200 vols. Hartford is the seat of the state assembly for Connecticut, alternately with Newhaven. It has manufactures of leather, shoes, woollen and cotton goods, saddlery, brass work, carriages, &c.; many printing houses, a large inland trade, and daily communication with New York by steam-boats and stage-coaches. A railroad connects Hartford and Newhaven.

HARTLAND, a market town and par. of England, co. Devon, hund. same name, 44 m. W.N.W. Exeter, and 190 m. W. London. Area of par. 11,030 acres; pop., in 1831, 2,143. It is situated in a bleak district close to the borders of Cornwall, and 2 m. from the Bristol Channel, with which it is connected by a steep road that leads down to a quay lying under the cliffs, and much frequented by fishermen. The church, which stands on the cliffs, about a mile from the town, is a large building, and serves as a landmark to mariners. The inhabs. are employed in fishing and agriculture: the herring fishery on the coast is of some consequence, and the market is well attended. The town became a sea-port by an act made in the reign of Elizabeth, and is governed by a portreeve. In a fine valley near it is Hartland Abbey, formerly a monastery of Black Canons, but now converted into a modern mansion. N.W. of the town is Hartland Point, a very high cliff, forming the W. boundary of Bideford Bay; and near it is a ridge of rocks, on which the sea breaks very heavily. Markets on Sat.; fairs, Easter Wed. and Sept. 25., for cattle.

HARTLEPOOL, a town, par. and sea-port of England, co. Durham, ward Stockton, near the mouth of the Tees, 17 m. S.E. Durham, 16 m. S. by E. Sunderland. Area of par., 840 acres. Pop. of do., in 1841, 5,236. The town stands on a peninsula, connected with the mainland by a narrow neck at the N. end, which at high water assumes a crescent shape, stretching S. and S.W., forming a natural harbour, secure from the E. wind. The cliffs towards the sea N. are bold and abrupt, and their summits command a magnificent view of the sea, and the coasts both of Durham and Yorkshire. The town, which occupies the S.W. portion of the peninsula, has latterly been very much enlarged and improved. It has, in fact, increased with extraordinary rapidity. The pop., which in 1831 was only 1250, being now between 7,000 and 8,000. This has been partly and principally a consequence of the facility afforded by the situation of Hartlepool for the formation of a harbour, and partly of its having been made a terminus of railways connecting it with Durham and the adjacent coal fields. A wet dock, about 20 acres in extent, was formed a few years ago within the harbour, and another wet dock has since been constructed by a rival company about ½ m. S.W. of the old dock on the W. side of the bay. In consequence of the accommodation thus afforded, Hartlepool has become a leading port for the shipment of coal, no fewer than 922,000 tons having been shipped coastwise from her in 1848, and 243,060 tons to foreign parts! There belonged to the port on the 1st January 1850, 94 ships of the aggregate burden of 20,102 tons, and 47 boats. Customs duty in 1846, 4,374*l*., principally derived from timber. Hartlepool was formerly fortified, as the old Durham gate and the ruins of walls abundantly testify. The church stands on a rising ground at the E. end of Southgate, and appears to have been built at different periods. Hartlepool is a chapelry, dependent on Hart, the next par.; but it was separated a few years ago. A free school was founded by John Crookes, in 1742, for the education of 30 poor children. The school-house was built in 1790. At no great distance from town are two strongly fortified batteries, S. of which is a chalybeate spring. Fishing was until lately the chief occupation of the people, who were described as free, honest, industrious, and much attached to their town. Hartlepool was governed by a mayor, aldermen, and common council, under two charters, granted by King John in 1200, and by Queen Elizabeth in 1593; but the power of the corporation was destroyed by the Municipal Reform Act in 1834. The local act by which the town is regulated is 53 Geo III., c. 35. Markets on Saturday: fairs, May 14. Aug. 21. Oct. 9. and Nov. 27.

Hartlepool is a very old town, and during the 13th and 14th centuries was a place of considerable importance. In the reign of Edward III. it furnished five ships to the royal navy, and was the second town of the county palatine of Durham; in later times, however, until very recently, it has been in a languishing condition. (*Surtees's Hist. of Durham; Priv. Inform.*)

HARWICH, a market town, parl. bor., and sea-port of England, co. Essex, hund. Tendring, on a point of land at the S.E. extremity of the æstuary of the Stour, 66 m. E.N.E. London, 9¾ m. S.E. Ipswich: lat. 51° 56′ 39″ N., long. 1° 17′ 8″ E. The bor. includes the parishes of St. Nicholas and Dover-court. Area, 2,060 acres. Pop. in 1841, 3,730. There are three principal streets, and several smaller; the houses are of brick, and the town is well paved, and lighted with gas. The church, a large brick structure, with stone buttresses and steeple, was erected in 1821, on the site of an older building. The living is a perpetual curacy. The grammar-school was founded in 1730, for 32 boys, and the mastership has usually been given to the curate, with a house, and salary of 40*l*. a year. The principal public buildings are the town-hall, gaol, and custom-house. The old gates and fortifications were demolished during the late civil war, and there are very few traces of them. The harbour of Harwich is the best on the E. coast of England; the access to it is, however, a good deal encumbered with rocks, but ships properly navigated need apprehend no danger; there is water to float the largest men-of-war, and the harbour is at once capacious, safe, and commodious. It is said that 100 ships of war, and above 300 colliers, have been anchored here at the same moment. The excellence of the harbour, and its convenient situation, made Harwich be selected as the station whence the packets usually sailed with the mails for Hamburg and Helvoetsluys. The town is defended by a battery and by Landguard Fort, on the opposite side of the æstuary. The entrance to the harbour is indicated by two lighthouses with fixed lights, and is well buoyed. The sea has made great encroachments on the peninsula on which Harwich is built; and the battery, which, when constructed, about 30 years since, had a considerable space of ground between it and the sea, is now partially undermined. (*Lyell's Geology*, i. 40. 3d ed.)

"The prosperity of Harwich has very much declined of late years. During the late war with France it was in a very flourishing condition, owing partly to the influx of strangers, who entered and quitted the kingdom at this place on their way to Hamburg and Helvoetsluys; partly to the convenience of its spacious harbour, its thriving fisheries, extensive government works, and the large garrisons kept up here and at Landguard Fort. Some of these advantages continued to a certain extent whilst the government packets to Holland, Germany, and Sweden were stationed here; but since their removal (consequent on the general adoption of steam mail packets), a great diminution has taken place, and the fishery has almost ceased. The effect of this is shown by the number of empty houses in the town, and by the depreciation in value of those which are still occupied. A manufacture of cement is carried on here; shipbuilding is also carried on by a private individual who rents the government dockyard, and the town derives some benefit from the visitors who frequent it in the bathing seasons. There is, under these circumstances, little probability of any increase in the size of the town."

Mun. Bound. Rep.) There belonged to the port of Harwich, in 1850, 119 vessels, of the burden of 5,944 tons. Harwich was formerly governed by a mayor, 8 aldermen, and 24 head burgesses, under the authority of a charter granted by James I. But under the Municipal Reform Act it is governed by a mayor, 4 aldermen, and 12 councillors. Corporation revenue, in 1847, 702*l*. Harwich returned 2 mems. to the H. of C. in the reign of Edward III.; but the privilege was very soon withdrawn, and not restored till the 12th of James I. The franchise was vested in the resident members of the corporation, and it was, in fact, a nomination bor., in the patronage of the existing government. Under the Reform Act, it still returns 2 mems., and its limits continue unaltered. Registered electors, in 1849–50, 272. The boundaries of the mun. and parl. bor. are co-extensive, and include the par.

The town is said to be of Roman origin, and in the time of the Saxons was used as a fortress. The earls of Norfolk were the lords of the manor, and through their agency its chief mun. and parl. privileges were originally obtained.

HARZ (*Silva Hercynia*, Tac.), a mountain-chain of Germany, on the S.W. frontier of Hanover, connected by low hills with the Thuringer-wald, a W. offset from the Feshtelgebrige, the great centre of the German mountain-system. (*See* GERMANY.) It extends farther N. than any other chain, and immediately at its foot commences the great plain which stretches N. to the Baltic and from the N. Sea to the Wolga. It is a mass of mountain-land rather than a succession of ridges, and has no summits so high as Snowdon in N. Wales; its length is about 60 m., and average breadth 24 m.: area, 1,350 sq. m. Mansfeld and Seesen are considered as the limits of the Harz; and it is divided into two sections by the watershed of the Weser and Elbe, which takes a direction from S.S.W. to N.N.E., and cuts the range at the Brocken (3,489 ft.). The higher summits are N.W. of the Brocken, and this section is, therefore, called the Upper Harz. It contains the chief mineral wealth of the range, and its forests consist of pines and other resinous trees. Its chief summits are the Heinrichshöhe, 3,409 ft., and the Königsberg, 3,307 ft. The lower Harz, which lies E. of the Brocken, is much less elevated, and its sides, covered with oaks, beeches, and other deciduous trees, are remarkable for beautiful scenery. The hills flanking its range, and beyond its strict limits, are called the *Vor-harz*. The geological composition of the Harz is granitic, overlaid by grauwacké and clayslate, in which the mineral wealth is wholly found. The Vor-harz is composed of the flötz, or old red-sandstone formation. The mineral products of the Harz are considerable; and it is said to furnish annually 30,000 quintals of lead, 1,700 quintals of copper, 85 quintals of silver, and a very large quantity of iron. (*See* HANOVER.) These returns appear, however, to be quite insignificant, if we may rely on the accounts given of the capabilities of the Harz. (*Bruguiere; Convers. Lex.*)

HASLEMERE, a bor., market town, and chapelry of England, par. Chiddingfold, in the S. W. angle of co. Surrey, hund. Godalming, 40 m. S.W. London, and 17 m. N. Chichester. Pop., in 1831, 849 (being a decrease of 42 since 1821). The town, only partly paved, and not lighted, stands on the side of a steep hill, and consists of a wide main street, crossed by two others, at the intersection of which is an ancient-looking town-hall. The houses are generally old and ill built, interspersed here and there with handsome residences. The church is ancient, with a low square tower: the Independents have a chapel; and there is a good national school. This place once possessed rather extensive manufactures of silk and crape; but these have disappeared: but it has still some large paper-mills about 1 m. distant. Its importance has greatly diminished since the alteration of the London and Portsmouth road, which withdrew from it the traffic incidental to a great thoroughfare. Markets (ill provided and thinly attended) on Tuesdays; fairs for cattle, May 13. and Sept. 26. This small and unimportant town sent 2 mems. to the H. of C. from the 27th of Elizabeth down to the passing of the Reform Act, by which it was disfranchised. The electors were the burgage-holders; but it was, in fact, a mere nomination bor. of the Earl of Lonsdale, the chief proprietor.

HASLINGDEN, a market-town and chapelry of England, par. Whalley, co. Lancaster, hund. Blackburn, 160 m. N.N.W. London, and 7 m. S.E. Blackburn. Area of chap. 4,420 acres; pop., in 1841, 8,063. The town is pleasantly situated on the slope and at the foot of a hill. Most part of the houses are of stone; and it has the appearance of industry and prosperity. The church is modern, with an old tower. The dissenters have several places of worship, and in the Sunday schools are taught about 1,700 children. A free school, having a scanty endowment for 10 children, furnishes instruction to about 50. The increase of the town (which in 1831 had doubled itself since 1801) is attributable to the introduction of the cotton manufacture, which now employs the bulk of the working classes almost to the exclusion of the woollen manufacture, which a few years ago was the staple of the town. The mills, &c. of Haslingden are not distinguished in the returns of Whalley par.; but above 4,000 people of both sexes are said to be employed in manufacturing industry. Haslingden is the chief town of a poor law union, comprising 11 parishes. The surrounding country abounds in good building stone, and slate is quarried about 1 m. S. of the town.

HASSELT, a town of Belgium, prov. Limburg, cap. arrond., on the Demer, 14½ m. W.N.W. Maestricht. Pop., with commune (1837), 7,316. It is well built, and was surrounded with walls in 1282. It is the residence of the chief courts and civil authorities for the Belgian div. of the prov., and has several churches and hospitals, a college, prison, numerous distilleries, a large salt refinery, with other manufacturing establishments, and a considerable trade in spirits, tobacco, and madder, and two weekly markets. (*Vandermaelen, Prov. Limbourg, &c.*)

HASTINGS, a cinque port, parl. bor., and town of England, co. Sussex, rape same name, 54 m. S.S.E. London, and 32 m. E. Brighton; lat. 50° 52′ N., and long. 0° 37′ E. Pop. of town and port, in 1841, 11,607. It is pleasantly situated in a vale, surrounded on every side, except towards the sea, by hills and cliffs, the latter of which abut E. of the town, close on the shore, those on the W. sloping more towards the interior; and it owes chiefly to its mild climate, consequent on this sheltered position, its high rank among the watering-places of the S. coast of England. Less than a century ago, it consisted of two chief streets, lined with ancient-looking houses; but within the present century many handsome streets and squares have been built, for the accommodation of visiters, and the appearance of the beach has been much improved by the removal of some old tenements which obstructed the sea-view. The two par. churches are ancient structures; but an elegant new church stands in Pelham Crescent, erected at the expense of the Earl of Chichester: there are also places of worship for Wesleyan Methodists, Independents, and other dissenters. There is a handsome town-hall. A grammar-school, founded in 1619, is attended by upwards of 100 boys; and there is a free school for 70 boys and 30 girls, with an endowment for apprenticing them: the various Sunday schools furnish instruction to about 900 children. The chief public buildings are the town-hall and custom-house: there are also extensive baths, well-assorted libraries, a handsome assembly-room, a theatre, a literary institution, and a savings' bank. Races were established in 1827. The suburbs are very beautiful, furnishing delightful drives and walks; and at the distance of 1½ m. W. is the village of St. Leonard's, built according to the plans of Mr. D. Burton, and comprising a fine church, a large market-place, and many handsome houses and villas, occupied during the season by people of property and fashion. The trade of Hastings seems, from the charters, to have been once very extensive; and its port or road was anciently protected by a pier destroyed by a storm in the reign of Elizabeth, and not rebuilt. Considerable quantities of fish are taken, and sent to the London market; a good deal of boat-building is also carried on, and lime is extensively produced in the neighbourhood. The mun. gov. of the town, which was vested in a mayor and 12 other jurats, and regulated by the gov. charter of the cinque ports (20 Charles II.), and by one peculiar to itself (30 Eliz.), is now, under the Mun. Reform Act, committed to a mayor, 5 other aldermen, and 18 councillors, the town being divided into three wards. Petty and quarter sessions are held here, at the latter of which the recorder presides. Hastings has sent 2 mems. to the H. of C. since the 43d of Edward III., the franchise till the Reform Act, having been vested in all resident freemen (made so by birth or election) not receiving alms: the number of electors being small, it had for many years been a mere nomination bor., in the patronage of the gov. for the time being. The present parl. bor. comprises the town and port, the liberty of the Sluice, and a detached part of the par. of St. Leonard's. Reg. electors, in 1849-50, 976.

Hastings is a place of high antiquity, having already, in the time of Athelstan, attained such importance as to be made the residence of a mint-master. On the edge of the W. cliff are the walls of an ancient castle, apparently of great strength, and the traces of walls dicate the town to have been fortified: on a hill E. are banks and trenches, supposed to have been constructed by William the Norman during his contest with Harold II., which terminated the Saxon dynasty. Its subsequent history is closely connected with that of the cinque ports, among which it ranked first. These trading towns, which were selected from their proximity to France, and early superiority in navigation, to assist in protecting the realm against invasion, were vested with chartered privileges from a very early period. The ports are, Hastings, Romney, Hythe, Dover, Sandwich, Winchelsea, and Rye: Deal was afterwards incorporated, and made subject in some particulars to Sandwich. In early times they furnished among them nearly all the shipping required

by the state, and even after the formation of a national navy, were compelled to assist it with their vessels. In return for these services, which have long ceased to be rendered, except formally at coronations, these corporate towns, together with 22 others subordinate to them, enjoyed the privilege of exemption from service on county juries and in the militia, and the power of criminal and civil jurisdiction, even in capital cases, in courts peculiar, held under the authority of the lord warden. These exclusive privileges were suffered to continue, much to the injury of the community at large, and even of the towns themselves, till the Parl. and Mun. Reform Acts reduced them, with the reservation of the sessions-court and the exemption from serving on county juries, to the level of other towns possessing a really equal importance.

HATFIELD, a town and par. of England, co. Hertford, Hund. Broadwater. Area of par. 12,700 acres; pop. of do., in 1841, 3,646. The town is situated near the Lea, 18 m. N.N.W. London, and 7 m. E. St. Albans. This place was granted in the 10th century to the Abbey of Ely; and on the conversion of the latter into a bishopric, the manor-house became a palace of the bishops, whence it has been called Bishops Hatfield. Queen Elizabeth, who had resided in the bishop's palace for some time previously to her accession to the throne, and was very much attached to the place, prevailed on the bishop of Ely to alienate it to the crown, in exchange for other property. In the succeeding reign, James I. exchanged the manor of Hatfield with his minister, Robert Cecil, Earl of Salisbury, for the manor and park of Theobalds. Its new master erected the present magnificent quadrangular mansion, one of the finest specimens of the baronial buildings of that age. A few years since it was materially injured by fire; but it has been restored, with great taste, quite in the old style. The town is small, and unimportant; it has a handsome church, with an embattled tower.

HAVANNAH, or HAVANA (Span. *Habana*, "the harbour"), a large and flourishing marit. and commercial city, the cap. of the isl. of Cuba, and, perhaps, next to New York, the greatest emporium in the W. hemisphere. It stands on the N.W. coast of the island, and on the W. side of one of the finest harbours in the world: lat. 23° 8′ 15″ N., long. 82° 22′ 45″ W. The pop. of the city and suburbs amounted in 1791 to 44,337, in 1810 to 96,304, and in 1827 to 94,023, of whom 46,621 were whites, and 23,562 free mulattoes and blacks, the residue being slaves. To the pop. in 1827 must be added the pop. of the hospitals and prisons, the garrison, and strangers, making the whole about 112,000; and the total pop. is now probably not far short of, if it do not exceed, 150,000. (*Humboldt, Essai Politique, &c.*)

From its position, which commands both inlets to the Gulph of Mexico, its great strength, and excellent harbour, the Havannah is, in a political point of view, by far the most important marit. station in the W. Indies. For a long period it engrossed almost the whole foreign trade of Cuba; but since the relaxation of the old colonial system, various ports (such, for instance, as that of Matanzas), that were hardly known 30 years ago, have become places of great commercial importance. The rapid extension of the commerce of the Havannah is, therefore, entirely to be ascribed to the freedom it now enjoys, and to the great increase of wealth and pop. in the city, and generally throughout the island. The port of Havannah is the finest in the W. Indies, and one of the best anywhere to be met with. The entrance is narrow, but the water is deep, without bar or obstruction of any sort, and within, it expands into a magnificent bay, capable of accommodating 1,000 large ships: vessels of the greatest draught of water coming close to the quays. The city lies along the entrance to and on the W. side of the bay; the suburb Regla is on the opposite side. The Morro and Punta castles, the former on the E. and the latter on the W. side of the entrance of the harbour, are strongly fortified, as is the entire city: the citadel is also a fortress of great strength; and fortifications have been erected on such of the neighbouring heights as command the city or port. The city-proper, which stands upon level ground, is about 2,100 yds. in length by 1,200 broad, and, even in 1810, contained less than half the total pop. It is separated on the W. by a ditch and glacis from its suburbs of Salud, Guadalupe, Jesus-Maria, Cerro, and Horcon. Within the walls, the streets are narrow, crooked, and mostly unpaved; but in the suburbs, particularly Salud, they are wider and better laid out. The Havannah was formerly very much exposed, in the autumn, to the ravages of the yellow fever, owing partly to the filth of the city, the want of common sewers, and the contiguity of marshes; but of late years, the cleanliness and police of all parts of the town have been very materially improved, and fever is much less prevalent and fatal. The houses, within the walls, are all of stone; without, they are of various materials. The public edifices, such as the cathedral, government house, admiralty, arsenal, general post-office, and royal tobacco factory, are less remarkable for beauty than solidity of construction. Besides the cathedral, which contains the ashes of Columbus, removed thither from St. Domingo in 1796, there are 9 par. churches, 6 others connected with hospitals and military orders, 5 chapels or hermitages, 11 convents, a university, 2 colleges, a botanical garden, anatomical museum and lecture-rooms, an academy of painting, a school of navigation, and above 70 ordinary schools for both sexes. The charitable institutions consist of the *Casa Real de Beneficencia*, a penitentiary or magdalen asylum, a foundling asylum, and 7 hospitals, one of which comprises a lunatic asylum. The *Casa Real* also has within its walls two other lunatic asylums, with about 180 patients, an hospital for the aged and infirm, boys' and girls' schools, &c. The revenues of this institution, derived from landed and household property, donations, subscriptions, government grants, taxes on the flour imported at the Havannah and Matanzas, on public billiard tables, landing-places, a poll tax, and various other sources, amount to from 55,000 to 60,000 dollars a year, the whole of which sum is annually expended on objects of the charity. There are 3 theatres, an amphitheatre for bull-fights, and several handsome public promenades. The arsenal and dockyard are at the S. extremity of the city. In the latter, 49 ships of the line, 22 frigates, and many war brigs and schooners have been built. The saw-mills there are turned by water from an aqueduct, which also supplies the shipping in the port.

At the village of Casa Blanca, on the opposite side of the harbour, there are also some wharfs and shipyards, at which vessels of all classes may be laid up, fitted out, or repaired. This village is notorious as the resort of the slavers frequenting the Havannah, at which port a considerable number of the slaves brought into Cuba are landed. For accounts of the articles of import and export at the Havannah, the duties levied on Spanish and foreign trading vessels, &c., *see* CUBA. The following table shows the quantities and destination of the principal articles of native produce exported from the Havannah in 1849:—

	Boxes (400 lbs.) of Sugar.	Lbs. of Coffee.	Hhds. of Molasses.	Lbs. of Wax.	Pipes of Aguardiente.	Lbs. of Tobacco.	No. of Cigars.
Spain	111,355	1,193,650	109	198,525	1,038	265,192	22,114,000
United States	63,208	2,001,375	32,623	22,825	520	142,396	57,293,000
England	38,530	348,100	1,371	-	123	28,198	3,331,000
Cowes	218,751	901,200	10	-	230	9,825	2,353,000
Russia	31,513	18,000	-	-	-	-	1,117,000
Hamburg and Bremen	31,651	2,192,350	9	-	2,774	280,812	12,235,000
Holland	14,875	3,900	-	1,851	-	40,623	2,372,000
Belgium	46,388	602,350	-	-	-	99,907	3,716,000
France	28,574	4,370,400	-	1,300	28	151,387	3,547,000
Trieste and Venice	8,512	522,925	-	-	27	-	72,000
Italy	5,233	499,625	-	-	77	-	333,000
Other places	13,832	101,975	2,134	423,525	2,177	139,925	2,675,000
Total	612,422	12,756,850	36,256	648,050	6,999	1,158,265	111,440,000

The quintal of 4 arrobas contains 101⅖ lbs. English; the arroba of wine or spirits = nearly 4·1 English galls.; the fanega = nearly 3 bushels; and the vara = ·925 English yard: the dollar is worth about 4*s.* 6*d.*

The Havannah is an episcopal see, the seat of the provincial government, and the residence of all the colonial authorities, except the judges of the supreme court of justice, which sits at Puerto Principe. The principal nations of Europe and America have consuls resident at this city. It has an extensive manufacture of cigars, for which it is widely celebrated; its other manufactures, of coarse woollens, straw hats, &c., are comparatively unimportant. This city was founded in 1511, by Diego Velasquez; it was taken by a French pirate in 1563; afterwards by the English, French, and buccaneers; and again by the English in 1762, by whom it was restored to Spain at the peace of 1763. (*Humboldt's Essai Politique sur l'Isle de Cuba; Parl. Reports, &c.*)

HAVERFORD-WEST (called by the Welsh *Hwlfordd*), a parl. bor., market-town, river-port, and co. of

itself in S. Wales, locally in the co. Pembroke, of which it is the cap., on the Cleddy, near where it falls into a creek stretching from the N. side of Milford Haven, 205 m. W. by N. London, and 28 m. W. by S. Caermarthen. The co. of the town, which extends over a considerable district, had, in 1841, a pop. of 5,941; but, according to the Boundary Act, the parl. bor. includes Haverford-west, Fishguard, and Narberth, and had in 1841 a pop. of 8,582. This town "is disposed in a very picturesque manner on the sides and at the bottom of very steep hills: the river Cleddy passes through its E. part, terminating in the creek. Its position gives it an irregular appearance; and the narrowness of the streets and want of proper pitching and paving, deprive it of an air of respectability which the number of good shops and houses would otherwise secure it." (*Bound. and M. Bound. Reps.*) It has lately been paved and lighted with gas. High Street and Market Street, however, notwithstanding the improvements in paving, are still dangerously steep. The handsomest of the churches is St Mary's, a cathedral-like structure of pointed architecture, surmounted by a large square tower. St. Martin's is an extensive and lofty structure, apparently an appendage to the castle, and has a tower and spire. Outside the town, at the top of the hill, is St. Thomas's, said to have been built in 1225; and there is a low turreted church at Prendergast. There are several chapels for Methodists, Presbyterians, Baptists, and the Society of Friends. A charity school, for clothing and educating 24 boys and 12 girls, was founded in 1684; and a free grammar school was established in 1614, and endowed with lands (now let for 90*l*. yearly), for the gratuitous education of the sons of poor burgesses. The town-hall is a respectable building, but placed so as to obstruct the view of St. Mary's church. A market-house, built by the corporation, was opened in 1825. A good and well-conducted modern gaol stands on the green, near St. Thomas's church. Overhanging the town is the ruined keep of an old castle; and within the precincts of an old priory of Black Canons, some ruins of which are yet standing, a dockyard and quays have been constructed for the convenience of the shipping.

"Haverford-west is principally occupied by shopkeepers, mechanics, and persons of moderate independent fortunes, for whom the cheapness of the place is an attraction. Provisions are cheap; house-rent is, however, not very low, as compared with this part of Wales; perhaps it would be more accurate to state that the houses of gentlemen here are on a very respectable scale; so that though houses are found to have large rents, they are not, properly speaking, dear. Workmen's wages are low; those of good mechanics averaging from 14*s*. to 20*s*. weekly. The lower orders use culm or coal mixed with clay for firing: and this is brought from a distance of about 3 m.; coals of the better sort being brought by water from Newport and Liverpool. Vessels of 100 tons can come up to the town at spring tides; but at neaps, vessels much exceeding 30 tons cannot come up. Hard coal, for malting, is exported to the S. coast of England, and even to London; shop goods are brought by water; and about half a dozen timber-ships unlade here in the year. Butter and oats are exported; but the most important native commodity is the cattle, a great quantity of which is sold for the English market. The custom-house is subordinate to that at Milford Haven. On the whole, the place is certainly increasing and improving." (*Parl. Bound. Rep.*) A large paper-mill is the only manufactory of importance within the town, the traffic of which has much decreased since the Irish steam-packets have run from Bristol instead of Milford Haven.

Haverford-west was first chartered in the reign of Richard II.; but its governing charter, down to the passing of the Municipal Reform Act in 1845, was that granted in 7 James I. The bor. is now governed by a mayor, 3 other aldermen, and 12 councillors: corporation revenue in 1847, 816*l*. Haverford-west has sent 1 mem. to the H. of C. since the 17th of Henry VIII. Previously to the Reform Act, the right of voting was vested in the inhab. of the town and co. paying scot and lot, and in the burgesses, who became so by birth, servitude, or election. The Boundary Act enlarged the limits of the parl. bor., by adding to the old bor., or town and co. of Haverford-west, portions of the pars. of Prendergast and Ugmaston: the towns of Fishguard and Narberth were then also made contributory boroughs. Registered electors in the three boroughs, in 1849-50, 686. The assizes and quarter and petty sessions are held here. Markets on Tuesday and Saturday; fairs for horses and live stock, May 12., June 12., July 18., Sept. 23., Oct. 18. This town was anciently the cap. of the Flemish possessions in Pembrokeshire. Its castle was erected by Gilbert de Clare, first Earl of Pembroke, in the 14th century.

HAVRE (LE) (formerly *Havre-de-Grace*), a fortified town, and the principal commercial port on the W. coast of France, dép. Seine-Inférieure, cap. arrond., on the N. bank of the æstuary of the Seine, at its mouth in the English Channel, 42 m. W. Rouen, and 109 m. W. N. W. Paris. Lat. 49° 29′ 14″ N., long. 0° 6′ 38″ W. Pop. (1842) 26,543, to which number may be added 5,000 more for the pop. of the shipping constantly in the port. It is built on a low alluvial tract of ground formerly covered by the sea, and is divided in 2 unequal parts by its outer port and basins, which stretch into the town and insulate the quarter of St. Francis. A noble main street, the *Rue de Paris*, wide, clean, and lined with good houses and numerous shops, completely traverses the town S. to N., from the *Place de la Bourse*, on one of the quays, to the Ingouville gates: this is the chief seat of commercial activity; the other streets present nothing remarkable. There are 9 quays, which, with the High Street, form the favourite promenades. The fortifications, begun by Louis XII., continued by many succeeding sovereigns, and perfected by Napoleon, are about 3½ m. in circuit, and consist of bastioned ramparts surrounded by trenches. The tower of Francis I. a heavy round edifice of freestone, built by that monarch, nearly 70 ft. in height, and 85 in diameter, guards the entrance to the harbour on one side, and a small battery, mounting 6 pieces of cannon, on the other. The citadel, constructed by Richelieu in 1564, comprises the barracks, military arsenal, residence of the governor, &c. Havre has few other public buildings worth notice; the chief are — the church of Notre Dame, a singular edifice of the 16th century, the marine arsenal, new theatre, commenced 1817, exchange, custom-house, *entrepot-general*, royal tobacco-manufactory, and a public library, with 15,000 vols. It has numerous public fountains, and is well supplied with water, conveyed by pipes from the vicinity.

The port, which is the best and most accessible on the coast, consists of 3 basins separated from each other, and from the outer port, by 4 locks, and capable of accommodating about 450 ships. A large body of water being retained by a sluice, and discharged at ebb tide, clears the entrance of the harbour, and prevents accumulations of filth. 2 lighthouses, 50 feet high, 325 feet apart, and exhibiting powerful fixed lights, stand on Cape de la Hève, a promontory about 2 m. N. N. W. Havre, and 390 feet above the level of the sea; and there is also a brilliant harbour light at the entrance of the port, on the extremity of the western jetty. Havre has 2 roadsteads; the great, or outer, is about a league from the port, and the little, or inner roadstead, about half a league. They are separated by the sand bank called *l'Eclat*, between which and the bank called *Les Hauts de la Rade*, is the W. passage to the port. In the great road there are from 6 to 7½ fathoms water at ebb; and in the little, from 3 to 3½. Large ships always lie in the former. The rise of the tide is from 21 to 27 feet, and by taking advantage of it the largest class of merchantmen enter the port. The water in the harbour does not begin perceptibly to subside till about 3 hours after high water, — a peculiarity ascribed to the current down the Seine, across the entrance to the harbour, being sufficiently powerful to dam up for a while the water in the latter. Large fleets taking advantage of this circumstance, are able to leave the port in a single tide, and get to sea, even though the wind should be unfavourable. (*Annuaire du Commerce Marit.*; *Coulier sur les Phares.*)

It was a saying of Napoleon, that "*Paris, Rouen, Le Havre, ne forment qu'une seule ville, dont la Seine est la grande rue.*" Havre being, in fact, the sea-port of Paris, most of the colonial and other foreign products destined for its consumption are imported thither. Nearly double the quantity of goods, estimated by weight, is imported annually at Marseilles; but the total value of the imports at Havre amounts very nearly to that of those at the former port. The chief imports are cotton, sugar, coffee, rice, indigo, tobacco, hides, dyewoods, spices, drugs, timber, iron, tin, dried fish, &c.: grain and flour are sometimes imported and sometimes exported. The chief exports are silk, woollen and cotton stuffs, lace, gloves, trinkets, perfumery, Burgundy, Champagne, and other wines, brandy, glass, furniture, books, &c. We subjoin a statement of the Cotton, Sugar, and Coffee imported into Havre in the following years. (See Table top of next page.)

Havre receives 7-10ths of the cotton imported into France, more than half the tobacco, and wood for cabinet work, half the potash and indigo, more than 2-5ths of the rice and dye-woods, and more than a third part of the sugar and coffee. As respects cotton, Havre is to France what Liverpool is to England.

Most of the goods imported at Havre are destined for the internal consumption of France. The coasting trade has increased very largely of late years, as is proved by the great increase of French wines, soaps, and other produce imported at Paris from Havre, instead of being sent to the cap. by land. The coasting vessels transfer their cargoes to large barges, called *chalands*, which are towed by steam as far as Rouen, and by horses for the rest of the way to Paris. Independent of the *cabotage*, or coasting trade, there entered the port, in 1839, from

Articles.	1848.	1847.	1846.	1845.	1844.
Cotton from —					
New Orleans	108,770 bales	106,870 bales	136,938 bales	107,942 bales	111,370 bales
Mobile	59,154 —	40,240 —	62,456 —	69,496 —	51,310 —
Charleston and Sava	32,982 —	55,485 —	62,217 —	78,969 —	45,654 —
Florida and Virginia	—	2,592 —	5,017 —	4,327 —	1,507 —
New York	30,465 —	49,005 —	49,250 —	61,471 —	58,279 —
Brazil	1,496 —	3,272 —	820 —	2,784 —	6,999 —
Other countries	4,768 —	10,027 —	9,237 —	6,298 —	4,532 —
	237,935 bales	267,491 bales	325,935 bales	331,287 bales	279,651 bales
Sugar from —					
Martinique and Guadaloupe	33,065 casks	67,850 casks	53,000 casks	66,500 casks	49,600 casks
Réunion	12,288 bags	25,152 bags	49,645 bags	55,687 bags	32,295 bags
Havannah	5,097 boxes	5,707 boxes	3,920 boxes	1,051 casks	1,953 boxes
	4,739 chests	425 chests	2,224 casks	92 tierces	252 chests
	—	—	555 bags	121 quarters	—
Brazil	28,949 bags	22,225 bags	21,023 bags	989 chests	11,391 bags
	775 boxes	306 boxes	70 boxes	21,544 bags and qrs.	594 boxes
Other qualities	2,328 casks	1,542 casks	4,170 casks	6,851 casks	2,685 casks
	105 quarters	1,184 qrs. and boxes	33 tierces	1,770 tier. and qrs.	2,981 qrs. and bags
	364 boxes	—	1,552 quarters	—	—
Coffee from —					
Martinique and Guadaloupe	65 tierces	110 tierces	245 tierces	170 tierces	570 tierces
	1,215 quarters	3,087 quarters	2,400 quarters	2,415 quarters	4,750 quarters
	19 bags	11 bags	—	—	10 bags
Réunion	1,100 bales	115 bales	1,303 bales	1,887 bales.	1,523 bales
Hayti direct	84,286 bags	89,042 bags	59,620 bags	68,218 bags	77,758 bags
	2 quarters	30 quarters	126 quarters	173 quarters	—
Several other qualities	98,576 bags	125,067 bags & hhds	78,060 bags	86,042 bags	102,980 bags
	7,573 chests	1,236 chests	1,537 chests	1,828 chests & tier.	518 chests
	7,068 bales 74 tier.	624 casks	—	—	3,385 tier. and qrs.
	587 qrs. 2 boxes	1,189 tier. and qrs.	3,759 quarters	3,150 quarters	

foreign parts, 753 sailing vessels, with cargoes of the total burden of 191,339 tons, of which 429 vessels, of the total burden of 105,202 tons, were French. Including native and foreign sailing vessels in ballast, and coasting vessels, the entries in 1838 were 4,388, total burden 580,983 tons. The entries of steamers during the same year were 558, total burden 101,561 tons. The latter ply between Havre and London, and the principal ports of Great Britain, Holland, Lisbon, Hamburg, Elsineur, Copenhagen, Petersburg, &c.; and *lines* of sailing packets are established between it and New York, Bahia, Vera Cruz, New Orleans, &c.: some of the steamers ascend the Seine to Paris. The entrances to the basins are, however, too narrow to admit of the passage of large steamers, which are obliged to remain in the outer port, imperfectly sheltered from high winds. In fact, the port of Havre is at present inadequate to the growing importance of its trade; and in the financial estimates (*project de loi sur les ports*) presented to the chambers in 1839, the French government demanded 6 millions of francs for its augmentation and improvement.

There belonged to Havre on the 31st Dec., 1841, 333 vessels, of the aggregate burden of 63,257 tons. Formerly about 40 ships of from 400 to 600 tons each, belonging to this port, manned by 1,500 prime seamen, were engaged in the whale-fishery; but this extension of the trade was principally to be ascribed to the encouragement given by the law of 1829; the ships being, in fact, fitted out quite as much in the view of catching the bounty as of catching whales. The customs' duties at Havre produced, in 1837, 18,123,993 fr.; in 1847 they had increased to 26,000,000 fr., notwithstanding the formation of warehousing establishments at Paris, and other places, for the reception of goods that had previously been warehoused here.

The town has manufactures of chemical products, furniture for the colonies, earthenware, starch, oil, and tobacco, besides good building docks, rope-walks, breweries &c.; and many females are occupied with making lace.

On a height immediately N. of Havre is its well built and pleasant suburb of Ingouville. In that village is the *Hospice d'Havre*, founded by Henry II. in 1554, and removed to Ingouville in 1669, at which establishment it is estimated that about 120 sick persons, and upwards of 500 aged, orphan, or infirm, are annually provided for.

HAWICK, a bor. of barony, and eminent manufacturing town of Scotland, co. Roxburg, on level ground, on the banks of the Teviot, 45 m. S. E. Edinburgh, and 43 m. N. by E. Carlisle. A small mountain stream, called the Slitterig, falls into the Teviot, towards the extremity of the town. The country round is mountainous and pastoral, except the narrow valley through which the two rivers flow. The town was originally confined to the bank of the Teviot, and to the parish of its own name, but its boundaries now extend to the opposite side of the river, in the parish of Wilton. Pop. of par in 1801, 2,145; in 1841, 6,573.

Hawick consists chiefly of a single street, 1 m. in length, which forms the line of the public road; but there are several suburban streets, of which the largest and the most elegant is the Crescent, built on the right bank of the river. The town, the houses of which are of stone, and slated, has a substantial thriving appearance; and the transparent waters of the Teviot and Slitterig flowing over a pebbly bed, with the mountains which so closely environ it, give it a high degree of picturesque beauty. The streets are paved, and lighted with gas. Being a border town, and consequently of old exposed to attacks from the English, the houses were anciently built with stone walls, and vaulted below, without any door to the street, but having an archway, giving access to a court-yard behind, from which alone entrance to the house was obtained. Of these structures a few specimens yet remain. The present head inn is called "The Tower," because it was originally built as a fortress, having been the residence of the feudal superior of the burgh. There are two bridges over the Teviot; and two over the Slitterig, one of the latter being supposed to be of Roman origin. The only public buildings are the subscription rooms (used for public meetings, &c.), the town-house, the parish church, with a small square spire, and three dissenting meeting-houses. Of these latter, two belong to the Associate Synod, and one to the Relief. The Quakers, though a small body, have a place of worship. There is also a small congregation of Independents. Between a third and a half of the pop. are Dissenters. (*Fifth Report of Church Commission*, 1839.)

In addition to the parochial school there are no fewer than 13 private seminaries, some of them exclusively for females; and the aggregate number of scholars is rather above 800, a greater number, as compared with the pop., than will perhaps be found in any other bor. in Scotland. This, too, is exclusive of children who attend Sunday schools. There are several subscription libraries in the town, the oldest of which, containing 3,500 vols., was established so far back as 1762. A Mechanics' Institution was founded in 1824. There are two printing-presses, and three reading-rooms.

Notwithstanding its inland situation, its distance (50 m.) from any sea-port, its want of railways, canals, or navigable rivers, Hawick has attained to great eminence in manufactures. It has pretty large establishments for the manufacture of thongs, gloves, candles, machinery for tanning of leather, and other branches; but the woollen manufacture is that for which the town is chiefly distinguished, a department of industry which undoubtedly owes its origin to the command of water-power which the Teviot and Slitterig afford, and to the wool-growing district in the middle of which Hawick is situated. The manufacture of carpets was established in 1752; the inkle (a species of tape) manufacture in 1783, and that of cloth in 1787. But these have very generally given way to the manufacture of stockings and under-clothing, introduced in 1771. But comparatively trifling progress was made in the manufacture till the introduction of machinery, which took place about the beginning of this century, since which the business has been steadily advancing. Within the last few years great additions have been made to the mills previously established; while several new mills have been erected on a large scale. There are numerous extensive factories, most part of which are set in motion by water. There are, besides, various buildings of considerable extent for the operation of stocking-frames. The following table, constructed from returns made by some of the leading manufacturers of Hawick, will give a tolerably correct idea of the state of the manufactures during 1838-9: —

Value of floating capital employed in manufactures, (buildings and other articles of fixed capital excluded) - - -	101,861*l.*
Amount of wages - - - -	45,726*l.*
Quantity of yarn manufactured, (exclusive of what is sold to manufacturers at a distance)	354,462 lbs.

Consumption of wool	108,162 stones.
Quantity of soap consumed	102,899 lbs.
Number of stockings made	1,049,676 pairs.
Articles of under-clothing	12,552
Number of work-people	1,788
Number of stocking-frames	1,209
Number of weaving-looms	226

This is exclusive of flannels, plaiding, blankets, shawls, tartans, druggets, and cloths of various descriptions, the aggregate value of which may amount to from 30,000*l.* to 40,000*l.* a year. The hosiery includes every species of texture, even the finest. The number of work-people given above does not include either the females engaged in sewing stockings (these being employed not by the manufacturers but by the stocking-makers), nor the weavers and stocking-makers in the neighbouring towns and parishes, who work for the Hawick manufacturers. Besides, the number of persons employed in the factories, as returned by the Factory Inspectors, is not a third part of those to whom manufactures give direct employment. The stocking-maker, for example, works on his own frame in his own house, and is paid by the piece, and so of others. The total amount of power employed, including one steam engine, is equal to 160 horse-power. Coal cannot be got nearer than 40 m., viz. either from Etals in Northumberland, Langholm in Dumfriesshire, or Dalkeith in Mid-Lothian. Yet, in the face of the formidable difficulties of the distance from sea and from coals, the woollen manufacture has been prosecuted in Hawick with a degree of activity, enterprise, and success quite peculiar, and highly honourable to the character of the manufacturers. They in most cases are their own salesmen; and no class of commercial men carry on business with greater liberality, activity, and perseverance. There are three branch banks in the bor.

Hawick has been a bor. of barony from an early date. But its present charter was granted by William Douglas, of Drumlanrig, in 1537, and confirmed by Queen Mary, in 1545. The charter is peculiarly liberal for the age in which it was granted, extending to all the burgesses, without distinction, the right of electing the municipal authorities. The senior magistrate has, since 1835, been a justice of the peace *ex officio*. The landed property of the burgh amounts to 1,000 acres, and the gross annual revenue to upwards of 470*l.* The feudal superiority of the bor. descended to the barons of Buccleugh till 1747, when, all hereditary jurisdictions being abolished by act of parliament, the Duke of Buccleugh received 400*l.* in compensation for the regality. From its situation near the English border, Hawick was exposed to that continual hostility and commotion which for centuries distinguished that portion of the empire. It was burnt down in 1418. It suffered severely in 1544, when the whole district of Teviotdale was laid waste by the English. To prevent its occupation by the troops of the Earl of Surrey, in 1570, the inhabitants themselves tore the thatch from the roofs of the houses, and set fire to it on the streets, by which, with the exception of the Black Tower, now the "Tower Inn," the whole town was completely consumed. The inhabs. of Hawick mustered strong in the battle of Flodden, and were there nearly extirpated; but the survivors succeeded in rescuing their standard, which is still carefully preserved.

The people of Hawick are still distinguished by the free spirit of their ancestors. "We doubt much if a community could be found elsewhere more jealous than they are of what they conceive to be their own rights; more keen and indefatigable in the working out of what they reckon to be their own interests; and more determined in asserting, at all hazards, what they deem to be essential to their own independence. Any thing like a spirit of vassalage to any man, or any class of men, how elevated soever in rank, is what they cannot brook; and any attempt, from whatever quarter, to interfere with their ancient or established privileges, is sure to be strongly and almost universally resisted. There are, moreover, few places where less attention is paid to the ordinary distinctions of rank, or where all classes are more disposed to associate together on the footing of equality." (*New St. Acc. of Scot.* § *Roxburgh*, p. 388–89.) The truth is, they have always been a free people in the midst of a feudal and comparatively dependent population. Principles and worth, not mere rank, are valuable in their estimation. Since the passing of the Reform Act they vote with the county constituency; and, with few exceptions, their suffrages are given in favour of the liberal candidates. The greater portion of the population are descended from ancestors belonging to the burgh; and as there are thus many individuals of the same name (there being at present no fewer than six heads of families in the town of the name of Walter Wilson), sobriquets, or conventional designations, have prevailed among them from the earliest record. So inveterate is the practice, that the sobriquet, instead of the real name, was, at no distant period, generally inserted in the parochial register of deaths. Even at present, so general is the practice, that many persons are better known by their fictitious name than by any other. The town has frequently suffered from inundations.

There is an artificial mound of earth situated at the W. extremity of the town, called "the Moat," used, in ancient times, for meetings both judicial and deliberative. Branxholm Castle, the ancient seat of the Scots of Buccleuch, and celebrated in *The Lay of the Last Minstrel*, is situated within 2 m. of the town. Several eminent persons have been born in or connected with Hawick. Gawin Douglas, afterwards bishop of Dunkeld, and the translator of Virgil's Æneid, was rector of Hawick in 1496; Dr. John Leyden, the celebrated poet and linguist, who died in Java in 1811, was born in the vicinity of the town; Dr. Thomas Somerville, minister of Jedburgh, and author of a *History of Queen Anne*, and other works, was born in the burgh; the Rev. Mr. Young, author of *Essays on Government*, was a dissenting clergyman here; and Mr. Robert Wilson, author of the *History of Hawick*, a native of the burgh, died here in 1837.

HAYE (LA), a small town of France, dép. Indre-et-Loire, cap. cant., on the Creuse, 30 m. S. Tours, worthy of notice only as the native place of Descartes, born here on the 31st of March, 1596. The house in which he first saw the light has been carefully preserved, and is the subject of an almost religious care and veneration.

HAYTI, or HAITI (Carib. *the mountainous country*), the original and now revived name of one of the W. India islands, being, next to Cuba, the largest of the Greater Antilles, and forming, inclusive of the adjacent islands of Tortuga, Gonaive, &c., an independent state. Columbus gave it the name of *Hispaniola*, and it was frequently also called *St. Domingo*, from the city of that name on its S.E. coast. The French bestowed on it the deserved epithet of *la Reine des Antilles*. It lies between lat. 17° 40′ and 19° 58′ N., and long. 68° 24′ and 74° 35′ W.; having N. the Atlantic, E. the Mona Passage, separating it from Porto Rico, from which it is 76 m. distant, S. the Caribbean Sea, and W. the Windward Passage, which lies between it and Cuba and Jamaica, its N.W. point being 48 m. E. of the former, and its S.W. 112 m. E. of the latter. Its shape is somewhat triangular, the apex directed eastward; but it has several considerable peninsulas and promontories, which render its outline very irregular. Greatest length, W. to E., about 400 m.; its breadth varies from 40 m., near its E. extremity, to 155 m., about its centre. Area, according to M. Lindenau (*Humboldt, Polit. Essay*), 2,450 sq. marine leagues, or nearly 29,500 sq. m. Eng. Pop. estimated at from 600,000 to 700,000, about a tenth part only being white or coloured.

Physical Geography. — The surface of Hayti is, as its name implies, generally mountainous; but there are some extensive plains, especially in the E. The mountain system is complicated, and it is difficult to give a clear idea of it without the aid of a map. A great mountain knot, the Cibao, occupies the centre of the country, from which two parallel chains, running E. and W., extend through the island in its entire length. The loftiest summits of the Cibao are considerably more than 6,000 ft. in height. In the S.W. is an additional mountain chain, which stretches W. to the extremity of the long and narrow peninsula terminating in Cape Tiburon. Between this peninsula and the N.W. promontory of the island is the spacious bay of Gonaive, including the island of the same name, and having at its head Port Républicain (or Port-au-Prince). Tortuga is opposite the N.W. promontory. The shores of Hayti are in general bold, except on the E., where low and swampy lands prevail. They are almost every where surrounded by small uninhabited islands and dangerous reefs, but they have, notwithstanding, many excellent harbours, especially along the N. and W. coasts. The largest plain, called by the Spaniards *Los Llanos*, in the S.E., extends along the coast for 80 m., with a breadth varying from 20 to 25 m. It is said to be well adapted to the culture of most tropical products, but has always consisted chiefly of wide savannahs, used for pasture lands. N. of it, enclosed between two mountain ranges, is the more productive plain of Vega Reale, little inferior in size to the foregoing. In the W. half of the island are the large plains of Artibonite and the Cul-de-Sac. The last named, E. of Port-au-Prince, is from 30 to 40 m. long, by about 9 broad, and was formerly one entire sugar-garden, though now almost wholly waste. There are several plains of less extent. Hayti is in most parts profusely watered; it has numerous rivers, the largest being the Yaque, Yuna, Nieve, and Artibonite, which disembogue on the N., E., S., and W. coasts. These are navigable for a great part of their course; they are generally deep, and two or three of them are, near their mouths, as wide as the Thames at Vauxhall. Three lakes of considerable size exist at no great distance from the S. coast of Henriquillo; the largest is about 50 m. in circuit, and has salt water, while the adjacent lake of Azney is fresh.

The *climate* of the low lands is very unhealthy to Europeans; and Mackenzie says that "the yellow fever would effectually secure the island, in case of external

attack, if the policy of abandoning the coasts and destroying the towns were acted on." (*Notes on Haïti*, vol. ii.) The excessive heats of the plains, &c. are, however, tempered by fresh sea breezes at night. The temperature, of course, decreases with the elevation, and in the mountains the cold is often piercing. The year, as elsewhere between the tropics, is divided between the wet and dry seasons. The change of the seasons is accompanied by stormy weather; but hurricanes are not so frequent as in most of the other Antilles, nor are earthquakes common, though in 1770 a convulsion of that kind destroyed Port-au Prince.

Little is known of the geology; a limestone somewhat analogous to that of Cuba, containing vestiges of marine shells, is a prevalent formation. The *soil* is almost universally a deep vegetable mould, the fertility of which is scarcely equalled. The mountains, even to their summits, are, according to Mackenzie, capable of cultivation. The greater part of the island is covered with dense forests of mahogany, iron-wood, logwood, cedars, and other large and useful trees, or an impenetrable underwood. The plantain, potato, vanilla, manioc, &c. are indigenous; as is the palmetto or cabbage-tree. The latter is "truly the prop of the E. Haytian, who eats the upper portion of it, builds and covers his house with its various parts, and fashions his furniture out of its trunk." Of several kinds of quadrupeds found by the first European settlers, the *agouti* is the only one remaining. Parrots, and other birds of brilliant plumage, waterfowl, &c., are very abundant; the alligator, cayman, ignana, turtles, &c. abound in the larger rivers; several kinds of serpents are met with, and the *crustacea* and *testacea* afford a plentiful supply of food to the inhab. of the coasts. Hayti produces gold, silver, copper, tin, iron of good quality, rock-salt, &c. The principal copper mine yields an ore containing a considerable admixture of gold, and the sands of many of the rivers contain a good deal of gold dust, small quantities of which are collected: the working of gold mines has, however, entirely ceased. The mines of Cibao, which have long been unproductive, are said by Robertson to have yielded for many years a revenue of 460,000 *pesos* (nearly 100,000*l.*) annually; but it deserves to be remarked, that notwithstanding the excessive destruction of the original inhabs. in the working of these and other mines, the Spaniards derived so little advantage from them, that when Sir Francis Drake made a descent on the island in 1588, the inhabs. were so wretchedly poor as to be compelled to use *pieces of leather* as a substitute for money! (*Edwards*, i. 110., ed. 1819.)

History and Resources. — In order to understand the progressive changes which have taken place in the condition of Hayti and its inhabitants, it is necessary to premise a short sketch of their history. The island was discovered by Columbus, on the 5th of Dec. 1495, at which time it is said to have been divided into five states. Having taken possession of it in the name of Spain, Columbus founded the town of La Isabella on the N. coast, and established in it, under his brother Diego, the first colony planted by Europeans in the New World. The city of St. Domingo, which subsequently gave its name to the entire island, was founded in 1498. The island is believed to have contained, at the epoch of its discovery by the Spaniards, above 1,000,000 inhabs. of the Carrib tribe of Indians. But, incredible as it may appear, in consequence of their wholesale butchery by the Spaniards, and of the severe drudgery they were compelled to undergo in the mines, the natives were reduced to about 60,000 in the short space of 15 years! (*Robertson's America*, i. 185., ed. 1777.) The aboriginal inhabs. were soon, in fact, wholly destroyed: and their place was at first very inadequately supplied by Indians forcibly carried off from the Bahama islands, and adventurers from Spain and other European countries, and in the following century by the importation of vast numbers of negroes from Africa. The Spaniards retained possession of the whole island till 1665, when the French obtained a footing on its W. coasts, and laid the foundations of that colony that afterwards became so flourishing. In 1691, Spain ceded to France half the island; and in 1776 the possessions of the latter were still farther augmented. It was not, however, till 1722, when the monopoly of trading companies was put an end to, that the French part of the island began rapidly to advance in pop. and wealth. From 1776 to 1789 the colony had attained the acme of its prosperity; and its produce and commerce were then equal or superior to those of all the other W. India islands. Unhappily, however, this prosperity was as brief as it was signal; and the ruin that has overwhelmed the colony may be said to be complete.

To attempt to give any intelligible sketch, how slight soever, of the events by which this destruction was brought about, and by which the blacks of Hayti have emancipated themselves from the dominion of the whites, and founded an independent state, would far exceed our limits. At the epoch of the French revolution, the negroes in the French part of St. Domingo were estimated at from 480,000 to 500,000. That a good deal of dissatisfaction existed amongst them is certain; but there was no disposition to revolt, and the rash and injudicious proceedings of the mother country, the debates and proceedings of the colonial assembly, and the deep-rooted animosities of the whites and mulattoes, were the prominent causes of the revolution. The proscriptions, ruin, bloodshed, and atrocities by which it was accompanied and brought about, are, perhaps, hardly to be paralleled. In 1800, Hayti was proclaimed independent; and its independence was consolidated by the final expulsion of the French in 1803. This was effected by Dessalines, who erected the French or W. part of the island into an empire, of which he became emperor, with the title of James I. His despotism and cruelty having rendered him universally detested, Dessalines was slain in an insurrection in 1806, and Hayti was divided among several chieftains, the principal of whom were Christophe in the N.W., and Petion in the S.W. In 1811, the former made himself be proclaimed king, under the title of Henry I.: Petion continued to act as president of a republic till his decease in 1818, when he was succeeded by Boyer. The latter, after the suicide of Christophe, in 1820, took possession of his dominions, and the Spanish portion of the island having, in 1821, voluntarily placed itself under his government, he became master of the whole of Hayti.

Previously to the revolution, the pop. and the extent and distribution of cultivated lands, &c. in the French division of the island were thus estimated (*Edwards's Hist. Survey*): —

Provinces.	Population, 1790.		Plantations, &c.					[illegible]
	Whites.	Blacks.	Sugar.	Coffee.	Cotton.	Indigo.	Various.	
Northern - -	11,996	161,656	288	2,009	66	443	215	Cap François.
Western - -	12,798	192,961	357	894	489	1,952	343	Port au Prince.
Southern - -	6,037	76,812	148	214	234	765	119	Aux Cayes.
Total -	30,831*	*434,429	793	3,117	789	3,160	677	[illegible]

* Exclusive of European troops and seafaring people, of free people of colour amounting to about 24,000, and domestic slaves and negro mechanics in towns, perhaps 50,000.

The whole extent of land under cultivation in the three provs. was 763,923 *carreaux*, equal to 2,289,480 English acres, about two thirds of which were situated in the mountains. The French, who justly considered this their most valuable colony, cultivated its territory with the greatest care. Every plantation was laid out with the utmost neatness, and so arranged as to bring every portion of the soil into use in its proper order of succession. Artificial irrigation was effected on a large scale, and the remains of the aqueducts in the plain of Cayes are really magnificent. The growth of sugar engaged the largest share of attention; the immense fertility of the soil making the average produce about 2,712 lbs. an acre, or nearly two thirds more than the general yield of the land in canes in Jamaica. (*Edwards*, p. 135.) The coffee plantations were also exceedingly productive, and those of cotton, indigo, and cocoa had begun to be prolific sources of wealth to individuals, and of revenue to the state. Besides these staples, large quantities of Indian corn, rice, pulse, and almost every description of vegetables required for the consumption of the inhabs. were grown. The live stock in the French colony consisted of about 40,000 horses, 50,000 mules, and 250,000 cattle and sheep. The Spaniards never paid much attention to the culture of their portion of the island. The example of the French, indeed, stimulated them to grow tobacco, sugar, cocoa, and some of the other staple products of the Antilles; but their chief source of wealth consisted in the herds of cattle they reared on their extensive savannahs. With these they supplied their French neighbours, whose demands were large; besides which, they exported a good many to Jamaica and Cuba. Hides were also one of their chief articles of export, and, according to Edwards, many cattle were slaughtered for their hides only. The occasional cutting of mahogany, cedar, and other kinds of timber, dye-woods, &c., made up nearly all the rest of their resources. It is stated that the French purchased annually upwards of 25,000 head of horned cattle, and about 2,500 mules and horses; and that the Spaniards also transmitted upwards of half a million of dollars in specie, during the year, for the purchase of goods, agricultural implements, and negroes. Large shipments of mahogany and dye-woods found their way to Spain and different parts of Europe, the U. States, and Jamaica,

and a considerable intercourse was kept up with Porto Rico and the Spanish main. Most of the trade of the Spanish colonists was, however, illicit, the facilities for smuggling being quite as great as the advantages derived from evading the heavy duties imposed on commerce.

The following is an estimate of the average exports from the French part of St. Domingo during each of the three years ending with 1789: —

Articles.			Quantities.	Value in livres.
Clayed sugar	-	lbs.	58,642,214	41,049,519
Muscovado do.	-	—	86,549,829	34,619,931
Coffee	-	—	71,663,187	71,663,187
Cotton	-	—	6,698,858	12,397,716
Indigo	-	hhds.	951,607	8,564,463
Molasses	-	—	23,061	2,767,320
Rum	-	—	2,600	312,000
Raw hides	-	No.	6,500	52,000
Tanned ditto	-	—	7,900	118,500
Total value at ports of shipping			- -	171,544,666 = *L.* 4,765,129

One of the first effects of the revolution which abolished the slavery of the blacks was an enormous decrease in the amount of agricultural produce. From 1794, the year in which the slaves were declared free by the National Convention of France, to 1796, the value of the exported produce had sunk to 8,606,720 livres, being only about 5 per cent. of what it had been in 1789; and seven years afterwards, the country had become almost a desert, not only from the waste of civil war, but also from the indolence of the black pop. The famous Toussaint L'Ouverture adopted coercive measures to restore agriculture; and it is, we believe, idle to suppose that any other will ever be effectual in such a country to impel the negro to labour. By an edict issued in 1800, Toussaint obliged every Haytian not a proprietor of land (with a few exceptions) to hire himself as an agricultural labourer to some proprietor, without the power subsequently to withdraw himself from his service. The labouring classes were thus again rendered slaves in fact, though not in appearance. The use of the whip was abolished; but, on the other hand, the sabre, musket, and bayonet, in the hands of a military police, were employed to keep the peasantry at work. This object was enforced with the most rigid severity; the hours of labour were to continue from sunrise to sunset, with a few intervals; and both the cultivator and proprietor were visited with heavy pains and penalties; the former if he refused to work, and the latter if he did not oblige the former to do so. By such means, with a labouring pop. not exceeding 290,000, according to Humboldt, the exports in the most productive year during the short sway of Toussaint were raised to the following amount: —

Sugar	-	-	53,400,000 lbs.	Cocoa	-	-	234,600 lbs.
Coffee	-	-	34,370,000 —	Indigo	-	-	37,600 —
Cotton	-	-	4,050,000 —	Molasses	-	-	9,128 hhds.

This compulsory system was followed both by Dessalines, who at one period raised the value of the exports to 59,181,800 livres, or to a third part what it was in 1789; and by Christophe, an able, though a brutal and sanguinary tyrant. Petion, on the contrary, abandoned the coercive plan; and, in consequence, while the N.W. part of the island had the appearance of industry and cultivation, the S.W. displayed little more than occasional spots of culture. Boyer, during the first few years of his rule, continued the lax system of his predecessor, and the total value of the exports *of the entire island* amounted, in 1825, to no more than 5,793,758 dollars (4*s.* 2*d.* each)! The state of agriculture at that period was most deplorable: every branch requiring systematic industry had fallen into decay; the sugar plantations had become almost annihilated; the plain of Cul-de-Sac, formerly an immense sugar-garden, had on it only four plantations of any extent; little or no sugar was made, the juice being either used as syrup for domestic purposes, or distilled into tafia, the favourite liquor of the natives; coffee, in the W. part of the island, was grown only around Cayes, and in some small patches in the mountains; and in the former locality at least two thirds of what was raised was lost for want of hands to gather the produce: all other products were obtained in small quantities only; maize, the only species of corn grown, was frequently scarce, and sometimes imported from the U. States, whence also a good many of the horses required were obtained. The following extracts from Mr. Mackenzie's report (1827-28) though referring more especially to one district, give good idea of the general state of agriculture in Hayti: —

"According to Moreau St. Mery, in 1789, the plain o Cayes, one of the finest in the island, contained at tha period 100 flourishing sugar plantations, which were calculated to yield annually from 130,000 to 150,000 casks of muscovado sugar, the weight of which is unfortunately not stated in pounds, so that the absolute amount cannot be given.

"At present, the whole of these 100 plantations are still partially planted in canes, of which, however, no care whatever is taken. About 75 of them have either water or cattle mills for grinding the cane, with boiling-houses; but generally of a most wretched construction, and in miserable condition. The boiling-houses in general are formed by a shed made against the old walls, which, during the revolution, it required too much labour to destroy. The canes produced on the remaining 25 plantations are transported to those that have mills, and one fourth of the syrup or molasses produced is allowed for the use of the mill. The whole of these estates are, more or less, in a dismembered condition, from the small grants made by the government to the military of from 5 to 30 carreaux, and from similar sales having been effected by many of the large proprietors. The parties purchasing are called 'concessionnaires,' and generally plant small patches of cane, which they grind at the estate to which the land formerly belonged, or at some other neighbouring property. The land is never manured, and scarcely ever weeded, and only a part of each year's produce is converted into molasses. This arises principally from idleness, to which may be added the depredations of cattle, owing to bad fences, and the almost total impossibility of repairing sugar-works, from a want of workmen, and the bad faith of all parties concerned.

"About 2,000 hhds. of raw sugar, of 1,000 lbs. each, may be considered the average quantity produced by those estates; but it fluctuates very much. Few of the plantations make more than from 3 to 4 hhds. of syrup per week, and that generally at distant periods, very few having the power, from want of manual labour, of grinding canes two or three weeks in succession. Nearly the whole of the molasses are purchased by the distillers (the proprietors being generally too poor to erect distilleries on their own plantations), and principally converted into tafia, an inferior spirit, 4,500 hhds. of which, with 600 hhds. of rum, of 60 gallons each, were made in 1826. The whole of those spirits are consumed either in the immediate neighbourhood, or sent into the interior, or coastwise to Port-au-Prince and other ports. None of them are exported for foreign use.

"The very little field labour effected is generally performed by elderly people, principally old Guinea negroes. No measures of the government can induce the young creoles to labour, or depart from their habitual licentiousness and vagrancy. The few young females that live on the plantations seldom assist in any labour whatever, but live in a constant state of idleness and debauchery. This is tolerated by the soldiery and military police, whose licentiousness is gratified by this means.

"The value of land is very small, varying from 24 to 100 dollars per carreau or 1·8125 acre. In some cases, 200 dollars have been given. Rent also varies. It is, however, rare that estates are farmed out in the neighbourhood of Cayes. Small properties of from 5 to 10 carreaux, with a few negro huts, are let at an annual rent of from 40 to 100 dollars. Larger ones of 100 or 200 carreaux, from 400 to 800 dollars per annum. Money is lent at 75 per cent. per annum." (*Parl. Report on Hayti*, published 1829.)

The following table, showing the amount of the external trade of Hayti at different periods, will tend to indicate the effects of the different measures of its successive rulers: —

Table of Exports from Hayti, during the Years 1789, 1801, and from 1818 to 1826, both inclusive.
(From *Mackenzie's Notes on Haiti.— Appendix.*)

Year.	Clayed Sugar.	Muscovado Sugar.	Coffee.	Cotton.	Cocoa.	Indigo.	Molasses.	Dye-woods.	Tobacco.	Castor Oil.	Mahogany.	Cigars.	Gum Guaiacum.
	Lbs.	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Gallons.*	*Feet.*	*No.*	*Lbs.*
1789	47,516,531	93,573,300	76,835,219	7,004,274	- -	758,628	25,749						
1801	16,540	18,518,572	43,420,270	2,480,340	648,518	804	99,419	6,768,634	- -	- -	5,217		
1818	198	5,443,567	26,065,200	474,118	134,368	- -	- -	6,819,300	19,140	121	129,962		
1819	157	3,790,143	29,240,919	216,103	370,439	- -	- -	3,094,409	39,698	711	141,577		
1820	2,787	2,514,502	35,137,759	346,839	556,424	- -	- -	1,919,748	97,600	157	129,509		
1821	- -	600,934	29,925,951	820,563	264,792	- -	- -	3,728,186	76,400	- -	55,005		
1822	- -	200,454	24,235,372	592,368	464,154	- -	211,927	8,295,080	588,957	- -	2,622,277	279,000	7,338
1823	- -	14,920	33,802,837	332,256	335,540	- -	- -	6,607,308	387,014	- -	2,369,047	393,800	13,956
1824	- -	5,106	44,269,084	1,028,015	461,694	1,240	- -	3,858,151	718,679	- -	2,181,747	175,000	68,692
1825	- -	2,020	36,031,300	815,697	339,937	- -	- -	3,948,190	503,425	- -	2,986,469		
1826	- -	32,864	32,189,784	620,972	457,592	- -	- -	5,307,745	340,588	- -	2,136,984	179,500	

* This table comprises, with the exports from the E. portion of the island, those from Port-à-Plate and St. Domingo, since their annexation to the republic in 1822.

At length, however, Boyer adopted coercive measures, and in 1826 promulgated his *Code Rural*, which is as stringent as that of any of his predecessors. It enacts that every Haytian not employed in the civil or military service, in some manufacture, as a patented tradesman, or as a domestic servant, shall, under pain of imprisonment and hard labour, attach himself to some estate, and employ himself in agricultural labour. He cannot quit the country for the purpose of residing in any town or village, nor venture off the estate without a licence; he dare not desist from labour during the hours specified, nor take any recreation except at stated times; he is prohibited from keeping a shop, nor can he even send his children to school or to be apprenticed in a town, without especial permission. In return, the cultivator has a right to a fourth part of the produce of his labour, and the proprietor is bound to pay the expenses of his maintenance and other agricultural charges. However severe and little consistent with our ideas of freedom, we have no doubt that some such system is absolutely indispensable; but the misfortune is, that it acts only on the labourer, while it leaves the proprietor of a few acres, or of one to indulge in idleness and dissipation, without let or hinderance. This inconsistency is aggravated by the circumstance of the government readily making grants of small patches of land (10 or 15 acres) to individuals who, in consequence, are emancipated from the onerous obligations of the *Code Rural*. This plan, as Mr. Franklin has observed, goes to "extend and perpetuate the evil and pernicious habits of the people. When a negro obtains a grant of a small tract of land, he cares little about the cultivation of it beyond the production of enough for his own immediate wants; and these wants are trifling. Two or three hours' labour in each week will suffice to answer all the purposes of the culture required to produce food enough for himself; the rest of his time is then allowed to dwindle away in the most puerile pleasures and inconsistencies. No object which moderate industry could procure would balance the insatiable desire for reposing under the shade of the guava, and for ablutions in the neighbouring stream: with these and a little food, all his wants are supplied. Such being the case, and known to be so by the government, it is enough to surprise one that they should parcel out their lands in this way; because, even under the *Code Rural*, the person holding it is no longer a labourer, but a proprietor, and is not, therefore, amenable to it. Had the government proceeded differently, and let the estates to farm as they were originally laid out, so many petty proprietors would not have existed, but would have remained amenable to the law for enforcing cultivation. From this unwise system, labourers are scarce in Hayti, and the few that are to be obtained are of the worst character — negroes so abandoned as not to have been considered worthy of inheriting a patch of land Hayti abounds with these small proprietors; their patches of land, with their huts upon them, are generally situate in the mountains, or on the most elevated parts, on spots, as the poet has described, 'the most inaccessible by shepherds trod.' They are therefore lost for the purposes of agriculture: their cultivation does not extend beyond vegetables for the markets in their vicinity; added to which, they furnish an occasional supply of pork, poultry, and wild pigeons.

"The Haytian proprietor is not a planter practically, and he is ignorant of its theory. There is nothing regular in his system; it is an anomaly, a strange incongruous method of proceeding, having no tendency either to improve the soil or benefit himself. The sugar planter, in the first place, is so ignorant, that he knows not the virtue which his soil possesses, nor what it is capable of producing. He considers not whether one field be better adapted for the production of canes than another, but plants indiscriminately in bad or good soil, in heavy or light; in fact, he knows not whether it ought to be planted with canes or cotton, or if it would be wise to allow it to become common pastures. He is contented, and seems to be quite satisfied, if he can but obtain vegetation in any way; careless about the manner in which it is accomplished. To ascertain whether it can be improved by art or industry, is a matter about which he is unconcerned." (*Present State of Hayti*, pp. 344—346.)

We are without any authentic information as to the present state of agriculture; but if we estimate it by the best criterion, that of the exports, it would seem to be in the most depressed state. Sugar has all but entirely disappeared from the list of exports; and the exports of coffee and most other articles seem to be rapidly diminishing. And this, after all, is only what might have been anticipated. To expect that half civilised negroes, under a burning sun, and without the wants or desires of Europeans, should be equally industrious, is to expect what is contradictory, and all but absurd.

Commerce. — The entire of the wholesale trade is in the hands of foreign merchants, towards whom, however, the most narrow and unwise policy is adopted. They may reside only in the eight free ports, — Port-au-Prince, Gonaives, Cape Haytien, Port-à-Plate, St. Domingo, Jacqmel, Cayes, and Jeremie, for which privilege they have each to pay at least 1,600 dollars. They are obliged to confine themselves exclusively to foreign commerce; are not permitted to have any transactions *with each other*, to make local speculations, or buy the produce of the country, except through a native broker; and cannot *resell* any excess of produce when purchased. The coasting trade wholly belongs to Haytian citizens. The interior is supplied with imported goods by means of hucksters (usually females), the agents of the foreign merchants, with whom they balance accounts weekly. Beasts of burden are commonly used for the conveyance of goods, the roads, except in the N.W., being generally bad, and carriages few. The principal foreign trade is with Great Britain, France, the U. States, Holland, and Germany; besides which there is a considerable smuggling trade between Cayes and Cuba, Jamaica, &c. The chief British imports are printed cottons, muslins, ginghams, coffee bagging, woollens, cutlery, tin, and hardware, earthen and glass wares, cordage, army accoutrements, ammunition, &c. France supplies wines, liqueurs, silks, shawls, gloves, brandy, porcelain, perfumery, and other manufactured goods. The small imports from Holland and Germany include linen fabrics, bagging, inferior woollens, Rhenish wines, Spa and Selser waters, &c. The U. States supply lumber, provisions, hides, and colonial produce. The following is a statement of the quantities of the principal articles exported from Hayti during each of the three years ending with 1637: —

Articles.			Quantities exported.		
			1835.	1836.	1837.
Coffee	-	lbs.	48,352,371	37,662,674	30,545,4[illegible]
Logwood, &c.	-	—	13,293,737	6,767,902	6,036,2[illegible]
Cotton	-	—	1,649,717	1,072,555	1,013,171
Mahogany	-	feet	5,413,316	4,954,944	4,7[illegible]
Cocoa	-	lbs.	397,321	550,484	
Tobacco	-	—	2,086,606	1,222,716	
Cigars	-	No.	8,500	83,000	
Sugar	-	lbs.	1,097	16,199	
Hides	-	No.	24,951	14,891	
Old rags	-	lbs.	31,192	77,275	
Wax	-	T	10,993	15,620	
Ginger	-	—	8,769	15,509	

In 1836, 369 ships, of 50,580 tons burden, and with cargoes worth 474,782*l*., entered, and 295 ships, of the burden of 52,485 tons, and with cargoes worth 921,336*l*., cleared out of the principal port: of the former, 84, with cargoes worth 192,262*l*.; and of the latter 99, with cargoes worth 367,388*l*., were British.* No goods are suffered to remain on board vessels coming to the ports, but are warehoused on payment of 1 per cent. per ann. The following goods are entered free of duty: — arms, ammunition, agricultural implements, horses, cattle, coin, and school-books. The import of mahogany, dye-woods, and other articles produced in the island, sword-sticks, &c. is prohibited, as is the export of arms, coin, old or new iron or copper, horses, asses, and timber for shipbuilding

The *government*, though nominally republican, is in reality an elective military monarchy: it is vested ostensibly in a president, senate, and chamber of representatives; but the whole efficient authority is wielded by the chief officer. The president, who must be 35 years of age at the time of his election, holds his office for life; is charged with all the executive duties; commands the army and navy; makes war, peace, and treaties, subject to the sanction of the senate; appoints all public functionaries; proposes to the commons all laws except those connected with taxation; directs the receipt and issue of taxes, &c.; but in case of *malversation*, may be denounced by the senate, and tried by the High Court of Justice: his salary is 40,000 dollars a year. The ministry consists of a secretary-general, and a financial and a judicial secretary. The senate consists of 24 mems. above 30 years of age, each chosen by the chamber of representatives, from lists furnished by the president. The senate sits nine years; and its previous mems. are re-eligible after a lapse of three years. Each senator receives 1,060 dollars annually. The chamber of representatives consists of 75 mems. chosen every five years by the electoral colleges of the respective communes. Its mems. must be 25 years of age, and each receives 200 dollars a month, besides a dollar a league for travelling expenses. The session of the chambers is limited to three months annually.

The High Court of Justice, composed of 15 judges, has jurisdiction in all charges preferred by the *legislative* bodies against their own mems., or against the high state functionaries. There is no appeal from its decision, but the accused has the privilege of rejecting two thirds of his judges. There are 8 provincial, *civil, and criminal* courts, — at Cape Haytien, Cayes, St. Domingo, Gonaives, Jeremie, Jacqmel, Port-au-Prince, and St. Jago, composed of a president, 8 judges, a government commissary, &c., appeal from which lies to a court of

* The returns of British trade at Cape Haytien are only for the last half of 1836.

cessation in the capital. Ordinary legal cases are decided by justices of the peace, who decide without appeal, in cases to the amount of 50 dollars. Justice is said to be very corrupt, and the police is very inefficient, except in enforcing the *Code Rural*. Fortunately, though petty thefts are common, serious crimes are rare. The legal code is a modification of the old colonial laws of France. By the constitution of 1806, revised in 1816, all Haytian citizens, whatever their origin, are distinguished by the generic name of *blacks*. All Indians, Africans, and their descendants, after one year's residence in Hayti, are entitled to the rights of citizenship; while whites are debarred from either becoming citizens or proprietors of land.

Religion, Education, &c. — The Rom. Cath. is the established religion; but all other sects are tolerated. The church is under the archbishop of St. Domingo, 4 vicars general, and 31 parish priests. The government has appropriated to its own use all the property formerly belonging to the church; the monasteries have been suppressed; the chapter of St. Domingo has now only 6 canons; and the clergy, who are said to be in the last degree ignorant and corrupt, rely for support on voluntary contributions and fees, two thirds of which they must pay into the treasury. The established religion is consequently without any efficiency or influence in the state. Morals are universally disregarded; the private habits of the people are characterised chiefly by filth and laziness; "marriage is scarcely thought of, and the ties consequent on it have not the shadow of an existence."

Christophe made vigorous efforts to extend education, but many of his schoolhouses have been converted into barracks, or to other purposes. The schools founded by the Spaniards, in the E. part of the island, have been suppressed, except the University of St. Domingo, which has still 7 professors, but is little frequented. There are some government schools in the chief towns, a few on the Lancastrian plan, a military school in the cap., and some private academies; but reading, writing, and arithmetic are usually the utmost acquirements of the educated, and these are alleged not to be general, even among the members of the legislature. It is necessary, however, to bear in mind, that we have no very recent and well authenticated information as to the state of Hayti. The friends to the emancipation of the slaves in the British colonies represented it in far too favourable a light, while the opponents of that measure are believed to have exaggerated its defects. The establishment of an independent black commonwealth in one of the finest islands in the world, and in the vicinity of the U. States and of some of the principal colonies of the European powers, was certainly not the least extraordinary event of modern times; and the progress of so peculiar a community might have been expected, on many accounts, to have attracted a more than usual degree of attention. But such has not really proved to be the case. And, with the exception of Mr. Mackenzie's meagre, and now nearly antiquated report, we have no full or official information as to the moral, economical, or political condition of this negro republic; and are compelled, in consequence, to trust to defective and partial statements, and to analogies which, though probable, may not, after all, be well-founded. That such should be the case is not very creditable either to this or other civilised states; and we incline to think that the appointment of a commission to inquire into and report on the state and prospects of the Haytian community, while it could hardly fail to throw a great deal of light on many interesting questions, would be cordially approved by all the intelligent portion of the public.

The *armed force* consists of about 28,000 men, exclusive of staff officers. There is, besides, the national guard, composed, with few exceptions, of all the males from 15 to 60 years of age. These form a body of perhaps 40,000 men, the superior officers of which are chosen by the president or emperor, and the inferior ones by the privates. The navy is quite insignificant, consisting of only three or four schooners, and a few small craft.

The public revenue is derived from import and export duties, territorial imposts, wharfage dues, taxes on demesnes farmed out, the land-tax, stamps, patents, registry taxes, sale of demesnes, &c. It may amount in all to about 3,500,000 doll.

In 1825, the president Boyer concluded a treaty with France, by the provisions of which the independence of Hayti was fully recognised, and its ports thrown open to all nations (ships sailing under the French flag, however, paying only half duties inwards and outwards); and 150 millions of francs, in five annual payments, were guaranteed to France as an indemnity for the losses of the colonists during the revolution. The first instalment of 30 millions was paid in 1836; but it being evident that Hayti was utterly unable to repeat the payment of such a sum, the French government, in 1838, agreed to reduce the remaining amount to 60 million francs, to be paid in six instalments by 1867; two of those instalments have already been discharged. (*Encyc. des Gens du Monde.*)

Hayti is divided into 6 departments and 33 arrondissements. Next to Cape Haytien and Port-au-Prince, which have been alternately the capitals, the chief towns are St. Domingo and Cayes.

St. Domingo, a sea-port, on the S.E. coast, at the mouth of the Ozama, which forms its harbour, lat. 18° 28′ 40″ N., long. 69° 59′ 37″ W., was the first permanent settlement made by Europeans in America, and though greatly diminished in importance, has still above 12,000 inhabs. It is surrounded by old ramparts strengthened by bastions and outworks. Its interior is regularly laid out; the streets, which intersect each other at right angles, are spacious, but not all paved. The houses are in the Spanish style, and many of them are fine substantial buildings. Besides the cathedral, a Gothic edifice, finished in 1540, and reported to have formerly contained the remains of Columbus, there are 9 other churches, 2 convents, 2 hospitals, some large barracks, an arsenal, lighthouse, old and new national palace, prison, &c. The handsome Jesuits' college has been converted into a military storehouse. No monks are to be seen, but in other respects the town has very much the air and character of a Spanish city. The whites and coloured inhabs. far outnumber the blacks. The climate is agreeable, the air being continually cooled by sea breezes. The harbour is both capacious and secure; it has from 10 to 12 ft. of water; but, owing to a bar at the mouth of the Ozama, large ships are obliged to anchor in the roadstead outside, exposed to the S. winds. St. Domingo has a considerable trade with the interior, but its external commerce is now very limited. Cayes, one of the most flourishing towns in the island, is built close to its S.W. shore, lat. 18° 11′ 10″ N., long. 73° 50′ 19″ W. Its harbour admits ships drawing 13 ft. water; those of larger size lie in the roadstead of Chateaudin, half a league W. Several British houses are established at this port. A considerable smuggling trade is carried on between Cayes and Jamaica. In the vicinity are upwards of 80 rum distilleries. The remaining towns of the island are now of little importance. (*Mackenzie's Notes on Haïti, and Parl. Reports; Franklin's Present State of Hayti; Moreau de St. Mery, Descr. Topog. et Recueil des Lieux Princip. de St. Domingue; Edwards's Hist. Survey; Routier des Antilles; Encyc. Americana.*)

N.B. Since the foregoing article was written, ten years ago, Hayti has been the scene of various revolutions. But there has been no improvement among the blacks, who, on the contrary, seem to be fast sinking into the grossest barbarism. The republican government in the former French part of the island has been overthrown, and it is now under a chief of the name of Soulouque, who is at the head of a considerable military force, and has been proclaimed emperor of Hayti. The Spanish part of the island has, however, vindicated its independence, and has a republican form of government. From the circumstance of the mulattoes or mixed race preponderating in this quarter, it is comparatively civilised; but it is doubtful whether it will be able to preserve its independence against its barbarian neighbours.

HAZEBROUCK, a town of France, dep. du Nord, cap. arrond., in a fertile tract, 23 m. W.N.W. Lille. Pop. (1836) 4,926. Hugo says that the town is ill-built; but other authorities affirm the contrary. It has several handsome public buildings, including the par. church, with a lofty and elegant spire, the town-hall, finished in 1820, a fine specimen of classic style, the sub-prefecture, and Augustine convent now occupied by a college, primary school, house of charity, and depôt of tobacco. It has manufactures of linen fabrics, thread, starch, soap, leather, salt, beer, oil, lime, &c., and a large Saturday market for these and other kinds of goods. (*Hugo; Guide du Voyageur, &c.*)

HEBRIDES (THE), or WESTERN ISLES OF SCOTLAND, (the *Hebudes* or *Ebudes* of the ancients,) a series of islands and islets lying along the W. coast of Scotland, partly and principally in the Atlantic Ocean, but partly also in the Frith of Clyde, between 55° 35′ and 58° 51′ N. lat., and between 5° and 7° 52′ W. long. The islands (seven) in the Frith of Clyde constitute a co. (Buteshire), the others belong respectively to the counties of Argyle, Inverness, and Ross. The Hebrides consist of about 200 islands, great and small, and are usually divided into the Inner and Outer Hebrides; the former embracing all those islands which lie nearest to the mainland, including those in the Frith of Forth; the latter consisting of a long continuous range of islands, stretching N.N.E. and S.S.W. from Barra Head, in lat. 56° 49′ N., to the Butt of the Lewis, in lat. 58° 51′ N. The strait which divides the Outer Hebrides from the Inner, and from the mainland of Scotland, is called the Minsh, and is, where narrowest, from 15 to 16 m. across. The Outer Hebrides are commonly called the Long Island, and appear, in fact, as if they had originally consisted of one lengthened island, divided at a remote æra into its present portions by some convulsion of nature. Lewis and Harris (which are more extensive than all the rest put together), though considered as separate, form, in fact,

only one island; and the sounds, or arms of the sea, which intervene between the larger islands of the group, are so interspersed with islets, that the range is still nearly continuous. The following table contains a list of the principal islands of which the Inner and Outer Hebrides are respectively composed, with their estimated extent in sq. m.

Inner Hebrides.	Sq. m.	Outer Hebrides.	Sq. m.
Bute, Arran, and the other islands constituting Buteshire -	165	Barra, including the islets Vatersay, Sanderay, Pabbay, Mingalay, and others dependent on it - -	31½
Coll - - -	28	Benbecula, with its subsidiary islets -	43
Collonsay and Oronsay -	12	Harris, with do. -	191
Gigha and Cara -	6	Lewis, with do. -	557
Iona or Icolmkill -	10	North Uist, with do. -	118
Islay - - -	308	South Uist, with do. -	127
Jura - - -	84	St. Kilda - -	9
Lismore - - -	10	Add, for several islets or rocks not included in the foregoing -	20
Lorn islands, or Scarba, Lunga, Luing, Sasil, Shuna, Eisdale, Kerrera, &c. - -	30		1,096½
Mull - - -	301	Inner Hebrides -	1,653½
Raasay - - -	31½	Total extent of Hebrides	2,750
Skye - - -	535		
[Scalpa, Rona, and other islets depending on Raasay or Skye] -	20		
Small islands, or Canna, Rum, Eig, and Muck -	55		
Staffa - - -	1½		
Tyree - - -	36½		
Ulva - - -	20		
Total - - -	1,653½		

The total extent of the Hebrides may, therefore, be estimated at about 2,750 sq. m., or 1,760,000 acres, of which 64,000 are lakes. They are divided into 30 parishes, of which 5 are in the islands in the Frith of Clyde, 17 in the Inner Hebrides, and 8 in the Outer Hebrides.

The following table shows the pop. of the Hebrides in 1801 and 1831; with the number of males and females, and of families and inhabited houses in 1831.

Divisions	1801.	1831.	Males.	Females.	Families.	Inhab. Houses.
Buteshire, or islands in the Frith of Clyde	11,791	14,151	6,495	7,656	2,998	2,134
Inner Hebrides, exclusive of Buteshire -	40,537	57,839	28,331	29,508	10,653	10,065
Outer Hebrides	21,694	32,031	15,290	16,741	6,289	6,131
Totals -	74,022	104,021	50,116	53,905	19,940	18,320

As the total number of acres is, according to the foregoing table, 1,760,000, and of individuals, in 1831, 104,021, it follows that the average density of the pop. is nearly 48 to a sq. m.; while the average pop. of the rest of Scotland is 86 to a sq. m.

The pop. has considerably increased since the census of 1831. The increase in the Outer Hebrides, in 1836-38, was 3,375; in the Inner Hebrides, including Buteshire, 2,065: total, 5,440. Of the 200 islands of which the Hebrides consist, more than half are so small, or so sterile, as not to be inhabited. In 1808, only 79 were regularly inhabited during the whole year; while 8 were tenanted during the summer, and abandoned on the approach of winter. The greater portion of the people reside within a mile of the sea-shore: in fact, except in the islands of Bute and Islay, scarcely an inhabited house can be seen 1,000 yards from the sea-shore, or 300 feet above the level of the sea. (*Remarks on the Highlands and Islands of Scotland, by Fullarton and Baird*. Glasgow, 1838.)

From the thinness of the pop., it is not to be expected that schools should be very common, or be easily accessible to the inhab. of every district; but each par. has at least one parochial school, except Barra, which has no school of any kind. Four of them have two parochial schools, one of them has three, and two have four: total number of parochial schools, 42. This is exclusive of 149 non-parochial schools, of which those founded by the General Assembly's Education Committee, and the Society for the Propagation of Christian Knowledge, form a part. But notwithstanding the great number of schools, parochial and non-parochial, there were, in 1833, no fewer than 36,152 individuals, above six years of age, unable to read either English or Gaelic! (*Rep. of Gen. Assembly's Com.*, May, 1833.) The following table contains a statement of the number of schools, the greatest number of scholars in attendance, and the number of those above six years of age unable to read or write. [See top of next column.]

Divisions.	No. of Parochial Schools.	No. of Non-parochial Schools.	Greatest Number of Scholars at both kinds of Schools.	No. of Persons unable to read and write.
Islands in the Clyde, or Buteshire (5 parishes) -	11	27	1,869	Few, if any.
Inner Hebrides, exclusive of Buteshire (17 parishes) -	24	88	5,702	18,433
Outer Hebrides (8 parishes) -	7	34	2,012	17,719
Totals -	42	149	9,583	36,152

There is one par. (Kilmenny, in Islay) from which no return has been received as to the number of individuals at school; but taking it at the rate of the other islands, it will be about 630; so that the aggregate largest number of persons at school in the Hebrides is 10,213, or nearly a tenth part of the pop. If this proportion continue (and there is every reason to believe that it will increase rather than diminish), there will very soon not be a single individual in this group of islands (except perhaps in remote or very thinly peopled corners) unable to read or write. It will be observed, that the means of education are the most limited, and the number of persons uneducated greatest, in the Outer Hebrides. In some of the smaller islands, such as Canna, Rum, &c, there are no schools, and not one of the inhab. can either read or write. (*Educat. Inquiry, Scotland, Parl. Paper*, Sess. 1837, vol. xlvii.; *Gen. Assembly's Rep.*; and *Fullarton and Baird*, ut suprà.)

Gaelic or Celtic is the language spoken throughout the whole extent of the Hebrides; and in some of the more remote or thinly inhabited islands, it is still the only language used or known. But both English and Gaelic are now taught in almost every one of the schools, and the former is becoming common, and, in some instances, has almost superseded the use of the Gaelic. A few families, chiefly farmers from the lowlands of Scotland, have, of late years, settled in different parts of the Hebrides; and this, combined with the increased facilities of communication with the low country and with England which steam navigation affords, has had the effect of diffusing a more general knowledge of the English tongue than would otherwise have been the case. Speaking of the more populous portions of the Hebrides, we may say that there are few persons, if any, under 20 years of age, who do not understand English, though, with slight exceptions, Gaelic continues the language of common conversation. Gaelic was not, till about the beginning of last century, a written language *; but the Bible, and a great variety of religious as well as miscellaneous books, have since been translated into it; and Gaelic grammars and dictionaries have also been published. These things have been done, not with the view of perpetuating the knowledge of a rude language, but of diffusing information among the inhabitants; but we are by no means clear that this would not be better attained by teaching English exclusively in schools, and making it the sole medium for popular instruction.

The 30 parishes of which the Hebrides consist have each a par. church, and a resident clergyman. There are, besides, 14 *quoad sacra* chapels belonging to the established church, 6 chapels belonging to the R. Catholics, 3 to Presbyterian dissenters, 2 to the Episcopalians, and 1 to Independents; the total number of places of worship being 56. In some of the islands, particularly Barra, Eig, and S. Uist, Catholicism abounds, to the entire exclusion of almost every other creed. The Catholic priests do not confine their labours to the islands in which they have their head quarters, but periodically visit all those in their neighbourhood where a single member of their church is to be found. Missionaries, belonging both to the established church and to the dissenters, are common throughout the Hebrides.

Though a poor-law has existed in Scotland since 1579, and is at present in operation in 236 Scotch parishes, it is practically unknown in the Hebrides. Limited as are the means of the inhabs., the poor are supported exclusively by the collections made at the church doors on Sunday, by (in some cases) other voluntary contributions, and by sessional funds; a legal assessment for their behoof having never, in one single instance, been adopted.

It appears, from the official returns, that the poor receiving relief are only as 1 to 51 of the inhab.; that the average annual amount given to each individual is 11*s.* 4*d.*; and that the cost averages rather less than 2¼*d.* to each head of pop. The lowest allowance is in a parish (Kilmuir) in the Isle of Skye, in which 5*l.* is divided among no fewer than 110 persons, averaging scarcely 10*d.* each annually, the highest sum given being 1*s.* 6*d.*! This insignificant degree of assistance is scarcely appre-

* The first books published in it were a version of the Psalms, and a translation of the Shorter Catechism, by the Synod of Argyle, in 1690.

ciable, and proves how extremely destitute the people must be, and how low their estimate of physical comfort, when such a miserable pittance can be of any sensible benefit, or an object of desire. (*Report of General Assembly on Poor in Scotland; Parl. Papers*, 1839.)

The climate of the Hebrides is more humid, variable, and inhospitable, than that of any other part of the British dominions. "The temperature of the atmosphere is variable, the climate very rainy, and the air extremely moist; insomuch that when a person walks by the sea-side, in a hazy atmosphere and under a cloudy sky, the saline particles rest like dew on the pile of his coat. The dampness of the air is such, that in rooms wherein fires are not constantly kept, the walls emit a hoary down of a brinish taste, resembling pounded saltpetre, when brushed off. The climate is an enemy to polished iron and to books. Frequent and heavy rains fall at all seasons, especially after the Lammas term, whereby the hopes of the husbandman are often blasted, and the fruit of his toil and industry in a great measure lost." (*New Stat. Account of Scotland*, No. 12. p. 118.) In the Outer Hebrides winter lasts for six months, from the end of Oct. to the end of March: spring, summer, and autumn occupy the other half of the year. "During the spring, E. winds prevail, at first interrupted by blasts and gales from other quarters, accompanied by rain or sleet, but ultimately becoming more steady, and accompanied with a comparative dryness of the atmosphere, occasioning the drifting of the sands to a great extent. Summer is sometimes fine, but as frequently wet and boisterous, with S. and W. winds. Frequently the wet weather continues, with intervals, until Sept., from which period to the middle of Oct. there is generally a continuance of dry weather. After this, W. gales commence, becoming more boisterous as the season advances. Dreadful tempests sometimes happen through the winter, which often unroof the huts of the natives, destroy their boats, and cover the shores with immense heaps of sea-weeds, shells, and drift timber." (*Macgillivray's Acc. of the Outer Hebrides; Edinburgh Quarterly Journ. of Agric.*, No. 11. p. 274.) These remarks are applicable, with very slight modifications, to the whole range of the Hebrides, the islands in the Frith of Clyde excepted; in which latter, the climate, though damp and variable, is comparatively genial and mild.

In addition to the unfavourable climate, the Hebrides are remarkable for their rugged and sterile soil, more than six sevenths of their superficial extent consisting of irreclaimable mountains, morasses, &c.; while the extent of arable and meadow land under grass, hay, corn, and potatoes, is little more than a ninth part. Assuming the whole extent of the islands to be equal to 1,592,000 Scotch acres, or about 2,000,000 English (an estimate somewhat different from that given in this article), Mr. M'Donald, in his excellent *Agricultural Survey of the Hebrides*, supposes it may be distributed as follows: —

	Acres.
Mountains, morasses, and undrained lakes, scarcely yielding any specified rent to the proprietors	600,000
Hill pasture, appropriated to particular farms, and sometimes enclosed, or at least limited by acknowledged marches, as lakes, rivulets, &c., and paying rent	700,000
Arable and meadow land, under grass, hay, corn, and potatoes	180,000
Kelp shores, dry at ebb-tide, regularly divided among the tenantry, and producing 5,000 tons of kelp, besides manure, annually	30,000
Ground occupied by villages, farm-houses, gardens, gentlemen's parks, &c.	20,000
Ground occupied by peat-mosses annually; and by roads, ferry-houses, and boats	22,000
Barren sands, tossed about by the winds, and pernicious to their vicinity	25,000
Ground occupied as glebes, or, in lieu of glebes by established clergymen, manses, churches, and churchyards	8,000
Ground occupied by schoolmasters	2,000
Ground under natural woods, coppices, and new plantations, chiefly in Bute, Islay, Mull, and Skye	500
Total	1,592,000

But, while the arable and meadow land is so limited, it is, at the same time, light, sandy, and poor, with some exceptions, in Islay and a few other islands, and unsusceptible of much improvement. The ordinary produce is black oats, barley or bigg, and potatoes. Mr. M'Donald distributes the arable land as follows: —

Inner Hebrides.	Acres.
Bute, 8,000, Arran, 10,500 =	18,500
Gigha	1,500
Islay	22,000
Jura	3,000
Colonsay and Oronsay	3,500
Kerrera, 1,000, and the other Lorn Islands, 5,000 =	6,000
Mull and dependent islets	10,000
Lismore	4,000
Coll and Tyree	8,500
Skye and dependent islets	30,000
Small islands, or Canna, Rum, Eig, and Muck	3,500
Raasay and Rona	3,000
Outer Hebrides.	
North and South Uist, and Barra, with the islets S. of the Sound of Harris	40,000
Lewis and Harris	26,000
St. Kilda	500
Total	180,000

Other authorities give somewhat different results; and the reader may compare on this subject *M'Donald's Survey*, with *Appendix to Gen. Report of Scotland*, No. 3.; *Fullarton and Baird's Remarks*, p. 104, 105.; and *New Stat. Acc. of Scotland.*

Not only, however, are the soil and climate unpropitious, but the tenure on which lands are held is, with some exceptions, as objectionable as possible. A very great majority of the farmers are tenants at will or from year to year; in other words, having no lease, they are liable to be turned out at the end of any year. This wretched system prevails almost universally in the Outer Hebrides. In the islands in the Frith of Clyde, it was laid aside in 1815, and superseded by leases; but in the remaining Inner Hebrides it still holds about three fourths of the land under its fetters, and nine tenths of the farmers. Besides, where leases are given, they generally range from 5 to 7 years, seldom extending to 9 or 12. Wherever this miserable system extends, there is a total apathy as to agricultural improvement. A tenant at will is almost sure to remain undisturbed if he follow in the beaten track of his predecessors; but should he try experiments, or execute any very considerable improvement, he is afraid lest a greater advance of rent should be demanded of him than the improvement may warrant, or that he may be ejected from the farm altogether. Hence, though a tenant at will may retrograde or may remain stationary, he very seldom advances, or advances only by almost imperceptible degrees. "Whatever may be the nature of the possession," to quote from an excellent authority, "it cannot be imagined that any farmer of capital and skill should embark either on a property of which, in many instances, he can get no lease at all, or of which he is offered a lease of a duration too short to afford any hope of his being remunerated for his labour and expense before its termination. In Islay and some of the other large islands of the Inner Hebrides, leases of 19 years are given, and *there* the consequences appear in the sytematic rotation of crops, and the general improvement of the country. The tenants, in such cases, are in every respect on a footing with those in any part of Scotland. They are in circumstances of comfort, respectability, and independence. But the situation of a tenant at will is, in the highest degree, discouraging and uncomfortable. When he is without a lease, he is liable to be turned out any term, however impossible it may be to obtain elsewhere a place of refuge or protection for himself and his family. When he has a lease of a short duration, the only difference is, that this painful state of things occurs at periods a little more remote from each other. The effect in both cases infallibly is, to beget, on the part of the tenant, a carelessness about improvement either of the farm or the family; which being for a certain time allowed to remain uncorrected, brings the most certain and irretrievable ruin upon both the one and the other." (*Fullarton and Baird*, p. 59, 60.)

In addition to the baneful system of tenants at will, another practice, that of parcelling the land into small farms, is still more unfavourable to improvement. Though on some of the islands, as Islay, Bute, Arran, and Skye, large farms are now to be found, they are usually small, the rents ranging from 5*l.* to 50*l.* a year. The small farmer, or crofter, who almost universally is a tenant at will, is nearly in every case devoid of capital, and cannot therefore, though he were willing, engage in any thing like improvement. The truth is, as universal experience has shown, that land, when let in small patches, is uniformly ill cultivated; no proper system is or can be adopted as to cropping or manure; but every year as much is extorted from the soil as it can produce. Besides, small farms are always let at proportionally higher rents than large ones. In the Outer Hebrides, the crofter depends as much on fishing and burning kelp for payment of his rent as on the produce of his farm; and his whole life is a continual struggle with poverty and wretchedness, without improvement, or hope of improvement. But, in addition to the pernicious systems of tenants at will, and of small farms, another vicious practice prevails, viz., that of *subletting*. This practice has been in operation for ages, and though it has been checked in some of the islands, it is still very general, and wherever it exists, it is most pernicious.

High as the rent of small farms is, when held directly from the landlord, lands that are sublet are always higher. Indeed, such lands are generally let far above their real value; and the sub-tenant becomes, in the majority of cases, the immediate dependent of the farmer of whom he holds his lease, and not unfrequently pays part or the whole of his rent, by labouring in his service, to the neglect of his own wretched patch of ground.

The system of *tacksmen*, which corresponds to that of middlemen in Ireland, also exists. The tacksmen hold considerable tracts of land directly from the landlord, at a certain specified rent; which they relet to others in smaller portions, and at a higher rent. A tacksman is seldom so considerate or liberal as the landlord: hence, not only are rack-rents exacted by the tacksmen, but comparatively little accommodation or generosity is extended to the sub-tenant. But this is not all: the system of joint tenancy also prevails in the Hebrides: under this system a number of persons, sometimes as many as 10 or 15, take a farm, in what is called *run-rig*, or partnership, who are jointly and severally liable for the rent. Each farm thus becomes a *societas arandi*, containing perhaps as many families as there are partners in the lease, each field being divided into as many stripes, separated by a narrow ridge called "a bone," where the stones, weeds, and other rubbish gathered off the land are accumulated. The share or stripe, which in some cases does not exceed 3 acres, belonging to each partner, is determined by lot, and is changed every second or third year, according to the arrangement of the parties. Ploughing and most sorts of labour are performed in common; and if there be any pasture land, it too is held in common; and when the crops are secured at the end of harvest, sheep, cattle, horses, and hogs range at large over the whole farm. It is obvious that this associated form of occupancy precludes all draining, enclosing, and laying down in grass; in short, presents an insuperable barrier to all improvements either of stock or of land. Indeed, this mode of holding land is, if possible, more pernicious than any before specified; but we are glad to have to state that it is every where declining, and will, it is likely, soon disappear altogether. (*See* ARGYLE.)

Hence, with the exception of the islands in the Frith of Clyde, and of Islay, Collonsay, and some portions of Skye and Mull, in all which large farms and other improvements have been more or less introduced, agriculture is in as backward a state as can be imagined. Generally there is nothing like a rotation of crops. The grains usually cultivated are bear or bigg, and the old Scotch grey oat. In the *outfield*, which means that portion of a farm nearest the hills, and farthest from the farm-house and offices, one miserable crop follows another, till the ground be thoroughly exhausted. It is then allowed to rest, yielding for several years nothing but weeds; and as soon as these begin to disappear, by the return of grass and heath, it is again broken up, to undergo the same exhausting process. In the cultivation of the *infield*, the system pursued is nearly as injudicious. No regular rotation is followed; but the general rule is,—1. oats; 2. oats; 3. potatoes and peas; 4. barley or bigg, with manure; 5. pease; 6. oats; 7. two years of pasture choked with weeds, unaided by sown grasses, and therefore deficient both in quality and quantity. In a few places only has draining been practised; and without a very extensive system of drainage, no material alteration can be made for the better. In places not drained or levelled, the implements of husbandry are of the same rude and barbarous description that they were nearly a century ago. In the Outer Hebrides, "small tenants and cotters generally till the ground with the Chinese plough, of one stilt or handle, and the *casschrom*, a clumsy instrument, like a large club, shod with iron at the point, and a pin at the ankle for the labourer's foot. This antediluvian implement will soon be superseded by the spade, which has now come into almost general use. But the plough is never seen, except in cases of large farms. The common mode of turning the ground is by what is called *teeming*, forming a kind of lazy beds, such as are made in Ireland for the planting of potatoes. At this work two persons are employed, one on each side the ridge, which is seldom in a straight line, collecting the earth; and the earth, burrowed in this way, makes a proper bed for the seed. The ground being prepared, the seed is sprinkled from the hand in small quantities: the plots of ground being so small, narrow, and crooked, should the seed be cast as in large long fields, much of it would be lost. After sowing the seed, a harrow, with a heather brush at the tail of it, is used, which men and women drag after them, by means of a rope across their breasts and shoulders. The women are miserable slaves: they do the work of brutes, carry the manure in creels on their backs from the byre to the field, and use their fingers as a five-pronged gripe, to fill them. In harvest, when the crop is ripe, no sickle is used for the barley among the small tenants. The stalk is plucked; the ground is left bare; and consequently the soil is injured. When the sheaves are dry, and conveyed to the barn-yard, the sickle is then used to cut off the heads or ears. After this operation, all the heads are formed into a little stack covered with the roots of the sheaf, which had been cut off." (*New Stat. Acc.*, § *Lewis*, p. 131—133.)

It may be farther mentioned, that, except in Arran, Islay, Jura, and Skye, where roads have been made by parliamentary commissioners, assisted by the local landlords, roads or bridges can hardly be said to exist in the Hebrides: in some islands there is not a vestige of either. Of course, carts cannot, under such circumstances, be introduced. These, indeed, are confined to large farms and districts where roads have been constructed. In the less improved islands, all sorts of articles are conveyed either in panniers, slung across horses' backs, or by sea in boats. The advantages of good internal communication may, therefore, be said to be only partially known in the better portion of the Hebrides; in the remaining parts, which comprise about four fifths of the pop., they are almost entirely unknown.

It is well known that the system of small farms, subletting, and joint-tenancy, has a powerful tendency to give a factitious impulse to pop. And there is, in fact, in many instances, in the Hebrides, a great excess of pop.; and when any reverse comes, when the crops or the fishery fail, the people, having no capital on which to fall back, are unavoidably and at once exposed to all the horrors of famine. An instance of this took place in 1836, when the distress was so general and alarming, that an appeal was made on their behalf, not merely to the Scotch public, but to that of the united empire; and a sum of no less than 50,000*l*. was, in a few months, raised for their relief.*

The pop. of the Hebrides has also been greatly increased by the introduction of the potato, which is now become the principal food of the people. It is, in fact, alleged that four fifths of the inhab. live principally on this root. And as the potato crop is more exposed to fluctuation than that of corn, they are placed in a proportionally perilous situation.

Pennant's account of the inhabs. of Islay, though no longer applicable to them, Islay having been most materially improved in the interval, is still strictly applicable to those of most of the other islands. "A set of people worn down by poverty, their habitations scenes of misery, made of loose stones, without chimnies, without doors, excepting the faggot opposed to the wind at one or other of the apertures, permitting the smoke to escape through the other, in order to prevent the pains of suffocation. The furniture perfectly corresponds: a pot-hook hangs from the middle of the roof, with a pot pendant over a grateless fire, filled with fare that may rather be called a permission to exist, than a support of vigorous life: the inmates, as may be expected, lean, withered, dusky, and smoke-dried." (*Tour in Scotland*, ii. 263.)

Those who compare this striking paragraph with the description given in the *New Statistical Account of Scotland* of the houses in the Lewis and other islands, will find that it is, if any thing, really too favourable. There the dwellings of the people are, speaking generally, wretched huts, that afford shelter not only to the cotters and their families, but also to their cattle and pigs:

> ———Ignemque, laremque,
> Et pecus, et dominos communi clauderet umbra.

These huts, which are only half thatched, and without windows or chimnies, are indescribably filthy, and are, in fact, inferior even to the wigwams of the American Indians. The dung and other filth collected in and round the hut, is only removed once a year, when it is carried to the potatoe or barley field; and where also it is not unusual to strip the thatch off the hut, and to apply it to the same purpose. (*New Statistical Account*, art. *Ross and Cromarty*, pp. 129. 147. &c.)

It is right, however, to state, that these miserable huts have nearly disappeared from the estates of Mr. Campbell of Islay, of Lord Macdonald in the Isle of Skye, of the Duke of Hamilton in Arran, &c.; and the probability is, that they would in no very long period wholly disappear, were it not for the embarrassed circumstances of many of the landlords, and their inability to undertake any improvement that requires any considerable outlay.

The dress of the people corresponds with their food and houses. The *kilt* and *trews*, the characteristic Highland dress, are rapidly disappearing, and are no longer to be found in Skye and some other islands. Home-made woollen stuffs, checked or blue, are the universal dress both of men and women. Cotton and linen shirts are not generally in use, except on Sundays; but the dress, as well as the manners of the more civilised parts of the

* Several Highland districts on the mainland were, at the same time, and from similar causes, involved in the like distress; and the sum in question was distributed in common in these districts and in the Hebrides.

empire, is beginning to make its way into these sequestered recesses. Wherever a steamer is seen, Manchester or Glasgow cottons will be found not long after.

The manufacture of kelp and the fishery, once the principal employments in the Hebrides, have declined very much of late years. Kelp is formed by burning sea-ware, previously dried in the sun; the alkaline substance thus formed being used in the manufacture of glass, soap, and alum. The annual produce of kelp towards the close of the late war has been estimated at about 6,000 tons. Its price was sometimes as high as 20*l.* a ton; but its average price, during the 23 years ending with 1822, was 10*l.* 9*s.* 7*d.* (*Encyc. Brit.*, art. *Scotland.*) And such was the influence of the manufacture, that the kelp stores of the island of N. Uist let at one time for 7,000*l.* a year! But the foundations on which this manufacture rested were altogether unsound. The repeal of the exorbitant duties laid on barilla and salt, especially the latter, virtually annihilated the manufacture of kelp. Its price, instead of averaging upwards of 10*l.* per ton, has been so low as 1*l.* 10*s.*, but ranges generally between 3*l.* and 4*l.* The manufactnre is still carried on in some of the islands, though in some instances at a considerable loss, instead of a profit. (*Fullarton and Baird*, — *App. table* iv.) The loss to the Hebrides, however, has been only apparent. The manufacture withdrew the attention of the islanders from what would have been more profitable pursuits. Being engaged during summer and harvest at the kelp shores, their crofts and crops were both neglected; and the sea-weed which, had it been laid on the land, would have been the best possible manure, was carefully collected and carried off. Although, therefore, the ruin of the kelp trade was injurious to several proprietors, and was extensively felt at the time, it was productive of no real injury to the islands; but, on the contrary, will, in the end, conduce materially to their advantage.

The herring fishery has also, of late, been declining in the Hebrides. The factitious encouragement given to this business by government (which ceased in 1830), did not raise it to any considerable importance; nor has the abolition of the salt tax and the freedom of the trade been more successful. This has arisen from various causes, such as the want of encouragement on the part of the landlords, who are the only capitalists belonging to the country; the want of continuous application, and, consequently, of skill on the part of the fishermen, who, being at the same time farmers, are not, and indeed cannot be, proficients in either employment; and especially from the herring, which is very capricious, having comparatively deserted the W. shores of Scotland. In 1837, only 22,706 barrels of herrings were cured, gutted and ungutted, at Stornoway, Rothsay, and Tobermory.

The rearing of black cattle and sheep is the most extensive and profitable business in the Hebrides. The introduction of large farms into some of the islands has given a powerful stimulus to grazing, and black cattle are, in fact, the staple product of the Western Islands. The Kyloes, or West Highlanders, are the general breed, of which the best specimens are to be found in Skye; they are hardy, easily fed, not injured by travel, and, when fattened, their beef is finely grained, and is, perhaps, superior to any brought to table. The stock is estimated at not less than 120,000 head, exclusive of the islands in the Clyde, of which about a fifth part are annually exported lean to the mainland for fattening. When sold lean, their weight ranges from 13 stones to 30; but when fattened, it often rises to 50; but the average is from 24 to 36. The native breed of sheep is small, weighing only from 15 to 20 lbs.; weight of fleece (which is of various colours, even in the same fleece), from ½ to 1 lb. Both the black-faced, or mountain breed of sheep, and Cheviots have been latterly introduced with success; the former to the greatest extent. Mr. M'Donald estimated the number of sheep in the islands, in 1811, at rather less than 100,000; it cannot be less at this moment than 120,000.

The Hebridean horses are small and hardy; but they are not so handsome as those of the Shetland Isles. They are, however, extensively exported.

The woods and plantations in the Hebrides, in 1811, were estimated at 5,000 Scotch acres. Their extent has greatly increased in the interval, particularly in Skye, Mull, and Islay. But in the Outer Hebrides there are no trees; and, except in a very few spots, none can be raised. Turf or peat is the common fuel in all the islands; in some islands, as Tyree, Iona, and Canna, moss being deficient, the greater part (in Tyree, the whole) of the fuel has to be imported, chiefly from Mull, a third part of the industry of the inhabs. being required to supply themselves with this indispensable article. Limestone is found in several of the islands, particularly Islay, whence it is exported in considerable quantities. Lead mines have also been long wrought in Islay, but not with any spirit. Marble is found in Tyree and other places, and slate in Easdale and the adjacent islands: both are pretty largely exported.

Manufactures, in the usual meaning of the word, are entirely unknown in the Hebrides, if we except two cotton mills, employing 455 hands, at Rothesay, and 12 distilleries in Islay, producing above 250,000 gallons of spirits a year. The people manufacture their own clothing from wool and flax of their own raising; and each head of a family makes the greater part of the utensils, implements, and furniture they require. Boat-building is carried on to a small extent at Tobermory, Stornoway, and several other places. With the exception of one or two common trades, such as those of a tailor, shoemaker, and joiner, the division of employments is nearly unknown; every person carrying on different kinds of business at different seasons of the year, and even at different hours of the day. In some of the smaller islands, there are no day-labourers, the small farmer and his family doing all kinds of work. (*Fullarton*, p. 121.) The wages of labour are, in almost every instance, 1*s.* per day. There are 6 branch banks, 3 in Rothesay, and 1 each in Islay, Portree (Skye), and Stornoway.

The introduction of steam navigation has contributed largely to the improvement of the Hebrides, particularly the islands in the Clyde, with which there is a regular steam communication every day, and the Inner Hebrides generally; but the Outer range is scarcely ever visited by steamers. Not only are the former resorted to by numbers of strangers, from whose superior intelligence the inhabitants derive much advantage, but the steam-boats create a taste, and open a market, for various articles for which there was previously no demand, and afford a ready means of conveying articles of native produce to Glasgow, Greenock, and other places. These facilities of intercourse and exchange are continually being extended, and have a most beneficial effect on the character and circumstances of the Hebrideans.

There are about 50 landlords, of whom Mr. Campbell, of Islay; Lord Macdonald; the Duke of Hamilton; Mr. Stewart Mackenzie, of Seaforth; Macleod, of Macleod; the Marquis of Bute; and Maclean, of Coll, are the largest. The landlords generally are becoming more alive to the importance of large farms, and of agricultural improvement. Islay, which belongs almost entirely to Mr. Campbell, has been justly denominated the Queen of the Hebrides. The soil rests on a bed of limestone, and yields good crops of wheat and other grain, of which it exports considerable quantities. An improved rotation of crops has been introduced, comfortable houses and offices have been built, roads and harbours have been constructed, and all sorts of improvements are carried on with spirit and success. Lord Macdonald has also laid out immense sums on the improvement of his estates in Skye; and we have elsewhere noticed the extraordinary change that has been effected in the island of Arran, under the auspices of the Duke of Hamilton. (*See* Arran.)

The rental of the Hebrides, in 1815, was 102,328*l.* It is now (1840) estimated at from 110,000*l.* to 120,000*l.* The exports are black cattle, sheep, kelp, wool, cod and ling, herrings; the imports are iron, groceries, salt, oatmeal, &c.

There are only 10 attornies in the Hebrides, of which a half are in Rothesay, and only one (Stornoway) in the Outer Hebrides. Some of them are also bank agents, and engaged in employments other than law. There are only 5 constables in the whole range of the islands, and soldiers are neither known nor required; and the greater number of the islands are destitute of surgeons, and even inns. The nearest hospitals are in Greenock and Inverness. There are no printing-presses, nor, of course, any native newspaper.

The Hebrides have few remains of antiquities, excepting those of the cathedral and other religious buildings of Iona, a small but famous island (3½ m. long by 1 m. broad), situated 9 m. S.E. Staffa, and 1 m. from the S.W. point of Mull. These ecclesiastical ruins are of the most venerable description. St. Columba, who introduced Christianity here from Ireland in 565, and whose successors, and those who adopted his creed, are known under the name of *Culdees*, is said to have built the cathedral; but it is abundantly evident that it was erected at a considerably later period. Of the buildings, some belong to the Roman, some to the Gothic, and others to the Norman style. The successors of Colomba were expelled from the island by the Danes in 807; but two orders of monks, the Benedictines and the Augustines (nuns), took possession of the place in the 12th century, and flourished there till the general abolition of monasteries at the Reformation, when the island became the property of the family of Argyle, to which it still belongs. The remains of these various establishments, which cover several acres of ground, consist of the cathedral, St. Oran's chapel, the chapel of the nunnery, five smaller chapels, and other dependent buildings. The cathedral is cruciform, with a tower 70 ft. high: the length from E. to W. is 160 ft., the breadth 24 ft.; the length of the transept 70 ft. Within the precincts of the cathedral are two crosses, the one called St. Martin's, the other St. John's. A large space around

these buildings was used as a cemetery, in which were interred the remains not only of their religious inmates, and of several Highland chieftains and families of distinction, but (it is said, though the statement is probably much exaggerated) of 48 Scottish and 16 Norwegian kings, and 1 French and 4 Irish sovereigns. Of 360 native crosses erected on the island, only 4 remain. (*Keith's Cat. of Scot. Bishops*, ed. 1824, pp. 414. 458.; *Pennant's Scotland*, ii. 285.). There were five other monasteries in the Hebrides, viz., in Oronsay, Colonsay, Crusay, Lewis, and Harris; but of their history nothing is known, and few remains can be traced of their existence. (*Keith*, pp. 385—393.)

Iona, as every body knows, was visited by Dr. Johnson in his tour to the Western Islands. He has described his sensations on visiting it in the following noble passage, which never can be too often quoted:—"We were now treading that illustrious island which was once the luminary of the Caledonian regions, whence savage clans and roving barbarians derived the benefit of knowledge, and the blessings of religion. To abstract the mind from all local knowledge would be impossible if it were endeavoured, and would be foolish if it were possible. Whatever withdraws us from the power of our senses; whatever makes the past, the distant, or the future, predominate over the present, advances us in the dignity of thinking beings. Far from me, and from my friends, be such frigid philosophy as may conduct us indifferent or unmoved over any ground which has been dignified by wisdom, bravery, or virtue. That man is little to be envied whose patriotism would not gain force upon the plains of *Marathon*, or whose piety would not grow warmer among the ruins of *Iona*."

Of the early history of the Hebrides nothing certain is known. They recognised for a lengthened period the sovereignty of the Norwegian kings, but were, in 1264, annexed to the crown of Scotland. Owing, however, to their remote and inaccessible situation, their chieftains were for centuries afterwards lawless and turbulent, and assumed and exercised almost regal authority. Indeed, it was not till the abolition of hereditary jurisdictions, in 1748, that a final blow was given to the influence of the independent chieftains of the Western Islands.

The Hebrideans, in 1715 and 1745, were almost to a man in favour of the exiled family of Stuart. Charles landed on the small island of Grisca, to the S. of S. Uist; and after the battle of Culloden, he took refuge, first in the Outer Hebrides, and afterwards in Skye, previously to his escape to France. We need only further mention that, owing to the introduction of the system of large farms, and the consequent superseding of the small tenants, the latter have emigrated extensively to Canada. The landlords have not unfrequently furnished them with the money required for their passage across the Atlantic.

HECLA, or HEKLA (MOUNT), a famous volcano of Iceland, near the S.W. coast of the island. Its height was estimated by Sir G. Mackenzie at about 4,000 feet, or probably less; but, according to later authorities, it has an actual elevation of 5,210 ft. "On approaching," says Sir G. Mackenzie, "Hecla from the W., it does not appear remarkable; and has nothing to distinguish it among the surrounding mountains, some of which are much higher, and more picturesque. It has three distinct summits, but they are not much elevated above the body of the mountain." The crater, of which the highest (or N.) peak forms a part, does not much exceed 100 feet in depth. The bottom is filled by a large mass of snow, in which various caverns have been formed by its partial melting. The middle and lower peaks form the sides of similar hollows, and on the ascent are numerous other craters, whence flame and other matter have at different times been ejected. Hecla, like the Snæfell Jokul, near the W. extremity of the island, terminates in a long group of comparatively low hills. These, and others surrounding, are almost wholly composed of tufa, closely resembling that of Italy and Sicily; but the mountain itself consists chiefly of columnar basalt and lava, which latter forms a rugged and vitrified wall around its base. All the upper part of the mountain is covered with a layer of loose volcanic matter, slag-sand, and ashes, which increases greatly in depth towards the summit. In this part, indeed, few traces of any other substances are to be seen. Mackenzie says, "We could not distinguish more than four streams of lava, three of which have descended on the S., and one on the N. side; but there may be some streams on the E. side, which we did not see." (*Travels*, p. 249.) The view from the summit is one extended scene of frightful desolation. Towards the N. the country is low, except where a jokul here and there towers into the regions of perpetual snow. Several large lakes appear in different places, and among them the Fiske Vatn is the most conspicuous. In this direction the prospect reaches nearly two thirds across the island. The Blæfell and the Lange Jokuls stretch themselves in the distance to a great extent, presenting the appearance of enormous masses of snow heaped up on the plains. The Skaptar Jokul, whence the great eruption in 1783 broke forth, bounds the view towards the N.E.: this is a large, extensive, and lofty mountain, and appears covered with snow to its very base. The Torfa, Tinfialla, and Eyafialla Jokuls limit the view to the E. To the S. is an extensive plain covered with lava, rugged with sharp stones and other volcanic substances, imbedded in the soil, and bounded by the sea.

There is, perhaps, no country where volcanic eruptions have been spread over so large a continuous surface as in Iceland, no part of the island being wholly free from the marks of their agency. But the distribution of the volcanic energy over so wide a space is doubtless the reason that the eruptions of Hecla are far behind those of Etna and Vesuvius, both in frequency and magnitude. Since 1004, only 22 eruptions from Hecla have been recorded, but some of these lasted for a considerable length of time; 8 or 9 eruptions have also taken place within the same period from the Kattlagiau, Eyafialla, and Skaptar Jokuls in the immediate vicinity of Hecla; and it is a curious fact, that out of 42 eruptions mentioned by native authors as having occurred in different parts of Iceland since the year 900, 5 were simultaneous, or nearly so, with eruptious of Vesuvius, 4 with those of Etna, and 1 (in 1766) with eruptions of both Etna and Vesuvius. (*Sir G. Mackenzie's Travels in Iceland*, pp. 236—254; *Henderson's Encyc. des Gens du Monde; Lyell's Principles of Geology*, &c.)

HEDON, or HEYDON, a bor., market-town, and par. of England, co. York, E. riding, middle div. of wap. Holderness, on the Breamish, 6. m. E. Hull. Area of par., with which the bor. is co-extensive, 1,440 acres· pop., in 1831, 1,080. The town is small and mean-looking, with little business or trade. It was formerly of greater importance, and its decay is owing to the choking up of its harbour, and the greater advantages enjoyed by the neighbouring port of Hull. A church, dissenting chapel, and charity school are its only public buildings. This inconsiderable place returned 2 mems. to the H. of C., from the 1st of Edward VI. down to the Reform Act, by which it was disfranchised. The franchise was vested in the freemen, who became such by descent, apprenticeship, or gift: the seats were usually sold to the highest bidder.

HEIDELBERG, a city of S. Germany, duch. Baden, and the seat of a town and district bailiwick, at the foot of the Kaiserstuhl on the Neckar, about 12 m. above its confluence with the Rhine at Manheim, 30 m. N. Carlsruhe, and 48 m. S. Frankfort-on-Main: lat. 49° 24′ 43″ N., long. 8° 41′ 38″ E. Pop., in 1838, 13,420. (*Berghaus*.) It is picturesquely situated at the entrance of the beautiful winding valley of the Neckar, and overlooked by well-wooded hills at the back, while rich vineyards cover the rising ground as far as the Heiligenberg on the opposite side of the river. The town lies close to the bank, and the principal street (*Hauptstrasse*), into which most of the others run, is nearly a mile long. The streets are narrow and gloomy, and the public buildings have no pretensions to grandeur. The church of the Holy Ghost, a large structure with a very lofty steeple, is divided so as to furnish accommodation both for Protestant and Rom. Catholic worship. St. Peter's church is the oldest in the town, and on its doors Jerome of Prague nailed his celebrated theses expounding the doctrines of the Reformers. There are two other churches and a Jews' synagogue. The University-house is a plain building, in a small square near the centre of the town, and contiguous to it is the library. In the same square is the Museum Club, where the members of the University dine, and meet for various purposes. The Anatomical and Zoological Museum, in the suburbs, was formerly a Dominican convent. Connected with the medical school are 3 hospitals, small and ill-ventilated, and not accommodating, in the whole, more than about 60 patients. The river, only navigable here for barges and rafts, is crossed by a stone bridge of 9 arches, 750 ft. long, and 34 ft. broad; and at its foot, within the town, is a heavy-looking building with towers, used as a prison for riotous students and other disorderly persons. The well-known *Schloss*, or electoral palace, stands on the side of the Giesberg, S. of the town, from which its ruins have a most imposing aspect. This castle was sacked and partly burnt by the French in 1693, and afterwards struck by lightning in 1764; since which time it has been wholly uninhabited: it is now roofless, and presents a mass of red-sandstone walls perforated with windows. The styles of architecture partake of all the successive varieties belonging to the 14th, 15th, and 16th centuries. The most ancient part is the E. front, part of which was built in the 14th century by the Elector Otto Henry: it is a solid square building with towers at each end, one low and round, the other higher and of octagonal shape. A more modern part, less injured than the rest, is remarkable for its tall gables, curious pinnacles, and richly ornamented windows, showing it to belong to the 17th century. The front towards the Giesberg is a mere mass of moulder-

ing buttresses and crumbling walls. Within the ruined hall it has long been the custom to hold a sacred concert once in three years: it is got up in the most splendid style, and is attended by all the people of the surrounding country. The cellars of the castle are very extensive, and are even said to communicate with the town below: in one of them is the famous Heidelberg tun, now empty, but said to be capable of holding 800 hhds. The terrace and gardens furnish the most magnificent views of the Neckar and its windings, and of the Rhine glittering here and there in the distance: spires and towers of numerous cities and villages dot the landscape which is bounded S. by the dusky outline of the Vosges. Heidelberg has no trade of any importance; but some expectations are entertained of its prospects in this respect being improved, in consequence of the railway just opened between it and Manheim. It is a cheap place of residence in consequence of the low price of provisions and the moderate house-rent charges. The climate, however, is not very healthy, especially during the winter; and consumption, scrofula, and goitre are prevalent diseases. The most curious objects in the neighbourhood of Heidelberg are the Wolfsbrunnen, the Heiligenberg and its ruined castle, and the Kaiserstuhl. From the top of the tower on this last hill one may see the spire of Strasburg Cathedral, 90 m. distant.

The university, called *Ruperto-carolina*, is, except Prague, the oldest in Germany. It was founded by the elector Rupert II. in 1386, and after the ravages of the 30 years' war, and that of the Palatinate, was restored by the elector, Charles Louis, under whom it reckoned Spanheim, Freinshemius, and Puffendorf among its professors. In 1802, when Heidelberg was ceded to the grand duke of Baden, he accepted the office of rector: through his munificence the university funds were greatly increased, and a fresh spur was given to the exertions of its professors. Its present income from the government is 40,000 florins (about 4,000*l.*), which, together with the income arising from fees, &c., is applied to the payment of professors' salaries, and the enlargement of the library. There are 4 faculties (divinity, law, medicine, and philosophy); and to these are attached 40 ordinary and extraordinary professors, and 21 private tutors. The faculties of law and medicine are those most attended. The number of students in 1840 was 622, of whom 22 studied theology, 364 law, 148 medicine, 59 mineralogy, and 29 philosophy and philology. The fees commonly paid for daily lectures during one semester are from 12 to 20 florins; and the necessary expenses of a student during a university session may be estimated at about 45*l.* Many of the Germans, however, live at a still lower rate. The present professors are many of them of high repute: among others are Schwarz, Umbreit, and Paulus in theology; Mittermaier, and Zachariä, in law; Geiger, Tiedemann, and Chelius in medicine; Creuzer, Schlosser, and Bähr in philosophy. It is matter of regret that the impetuosity of the students in mingling with the disturbances at Frankfurt, in 1833, should have injured the usefulness of the university: the numbers have fallen off nearly a half in consequence of several German princes forbidding their subjects to resort thither. The riotous conduct of the Heidelberg students is chiefly owing to the system of *Burschenschaften*, or students' clubs, which excite here greater animosity and more frequent disturbances than in any other university of Germany. The library, which in the unhappy period of Heidelberg's history, was pillaged of its most valuable treasures to enrich the papal library, a part only of which were returned by Pius VII. in 1815, now contains 120,000 vols., besides a large number of rare and very valuable MSS. Connected with the university may be mentioned an homiletic seminary, a philological seminary, and a *spruch-collegium*, or practical school for law students. There is a good gymnasium for junior students, and 17 elementary schools are supported by the government. (*Conversations-lexicon; Private Information.*)

The date of the foundation of Heidelberg is not known; but it ranked only as a small town in 1225. The count-palatine, Robert, enlarged it in 1362, and the period reaching thence to the 30 years' war appears to have been the era of its prosperity; for it then displayed, in its handsome buildings, all the splendour arising from a flourishing trade, and the residence of the court of the electors palatine of the Rhine. In 1622, during the 30 years' war, the town was taken by Count Tilly, after a month's siege, and given up to be sacked for three days: the library was sent to the Duke of Bavaria, and the imperial troops retained possession of the place during 11 years, at the end of which it was retaken by the Swedes under Gustavus Adolphus, and kept by them till the peace of Westphalia, in 1648. In 1674, in consequence of disagreements between Louis XIV. and the elector Charles Louis, a French army under Turenne invaded the Palatinate, sacking and setting fire to its towns and villages. The sufferings of Heidelberg at this time, however, bore no comparison to the severe treatment which it met with in 1689 and 1693, when Melac and Chamilly ravaged and burnt the place. (See *Voltaire, Siècle de Louis* XIV., ch. 16.) These repeated calamities, and the removal of the elector's residence and court to Manheim, in 1719, contributed to diminish its importance among the towns of Germany; and it has never since recovered either its trade or pop. In 1802, at the peace of Amiens, Heidelberg was attached to the grand-duchy of Baden.

HEILBRONN, a town of S. Germany, k. of Wirtemberg, circ. of the Neckar, and near that river, 25 m. N. Stuttgard. Pop. 10,200. It is irregularly laid out, but contains many good houses. The *Dict. Géographique* (1828) says that it is surrounded by lofty walls and a deep ditch; but later authorities do not mention its fortifications. Its most interesting public edifice is the church of St. Kilian, remarkable for the pure Gothic architecture of its choir, and its beautiful tower, built in 1529, 220 ft. high. The town hall is an antique edifice, in which many imperial charters, bulls, and other ancient records are deposited. In the outskirts of the town is a tall square tower, in which Götz of Berlichingen, celebrated in one of Göthe's dramas, was confined in 1525. The house of the Teutonic Knights is now a barrack; on the other hand, the orphan asylum has been converted into a royal residence. There are 3 Rom. Cath. and 2 Protestant churches, a richly endowed hospital, a house of correction, and a gymnasium with a library of 12,000 vols. Heilbronn retained the privileges of a free city of the empire, originally conferred upon it by the Emp. Fred. Barbarossa, down to the beginning of the present century. It was formerly a place of importance, from its position near the frontiers of the circles of Swabia, Franconia, and the Lower Rhine, and it still has an active trade, being an entrepôt for the merchandise sent from Frankfort for the supply of S. Germany. It has manufactures of woollen cloth, white lead, tobacco, hats, brandy, paper, oil, gypsum, silver articles, &c.; and some trade in woollen and cotton goods. The *Wilhelms canal*, recently carried into the town, facilitates the traffic between it and the Neckar. Great quantities of wine, some of very tolerable quality, are grown in the neighbourhood, and coal is said to abound in the vicinity.

HELDER (THE), a marit. town of N. Holland, on a projecting point of land at the N. extremity of that prov., opposite the Texel, 40 m. N. by W. Amsterdam: lat. 52° 57′ 42″ N., long. 4° 44′ 55″ E. Pop. 2,852. Being important from its position, commanding the Mars-Diep, or channel to the Zuyder Zee, and having almost the only deep water harbour on the coast of Holland, it is strongly fortified. It has a few manufactures, and some trade with Amsterdam, with which city it communicates by the Helder canal, the noblest work of the kind in Holland (*See* AMSTERDAM, p. 100.) The famous Van Tromp was killed in an engagement off the Helder in 1653. It was taken by the British under Sir R. Abercrombie in 1799.

HELENA (ST.). *See* ST. HELENA.

HELIER'S (ST.), the cap. of the Isl. of Jersey on its S. coast, 90 m. S. Portland Bill, 35 m. N.W. Granville, and 39 m. N. St. Malo; lat. 49° 18′ N., long. 2° 13′ 45″ W. Pop. (1831), 10,120. It stands on the E. side of St. Aubin's Bay, on a slope facing the shore between two rocky heights, on one of which is the citadel, Fort Regent, overlooking the harbour. It is not well built, and in the old and central parts the streets are irregular and narrow; but in the outskirts they are regular and well built, with ornamented garden-ground in front. The Royal Square, the chief open space within the town, contains the par. church, built in 1341, the court-house, reading-rooms, and a large hotel. The principal public buildings, besides these, are the theatre, gaol, and two chapels, one being of Gothic architecture. This chapel and the theatre are the only edifices that have any claim to architectural beauty. The market-place is an enclosure within a wall and iron palisades, and the market on Saturday presents a magnificent display of vegetables, fruit, and flowers, besides poultry and game from France, all at very moderate charges. Fort Regent, which cost 800,000*l.*, was erected in 1806, and possesses all the usual defences of a regular fortress; but it has little accommodation for troops, and is said to have been injudiciously planned. Another fortress, Elizabeth Castle, (so called, because it was first built in Queen Elizabeth's reign), stands on a rocky island ½ m. from the shore, which at low water may be reached on foot by means of a long natural causeway: it contains extensive barracks, and appears to be a strong position. Lord Clarendon resided here two years while writing his history of the Rebellion. The harbour of St. Helier's is formed by two piers jutting out into the bay at the S. end of the town. (*See* JERSEY.) (*Inglis's Channel Islands*, i. 11—30.)

HELIGOLAND or HELGOLAND (an. *Hertha*), an island belonging to Great Britain, in the North Sea, 26 m. from the mouths of the Elbe and Weser Area 5½

sq. m. Pop. (1834) 2,221. It is divided into 2 parts, a high cliff and and a low plain communicating with each other by a ledge of rocks, on which is cut a flight of 190 steps. The elevated part is about 4,000 paces in circ., a precipitous rock of red conglomerate, varying from 90 to 170 ft. in height, and covered on the top with thin herbage, but without tree or shrub: the lower part is much smaller, and the entire circ. of the island is less than 4 m. The dimensions are continually lessening, owing to the encroachments of the sea, which, in 1770, separated a part of the island, now an uninhabited sandbank. Lyell (*Geol.* b. i. ch. 7.) attributes its destruction to the contest between the waters of the Elbe and Weser, and the strong ocean-tides of the North Sea. On the summit of the cliffs stands the lighthouse, lat. 54° 11′ 34″ N., and long. 7° 53′ 13″ E., maintained from dues paid by British vessels entering the port of Hamburg. The church also, and the batteries, are conspicuous objects from the sea. Since 1821, when the military establishment was broken up, the batteries have been dismantled, and are falling to decay. The church is a plain structure, erected in 1682, the duties of which are performed by a Lutheran clergyman salaried by government, who is likewise the head master of the free school, which is attended by 320 children. The little town on the cliff consists of about 350 houses, chiefly inhabited by small traders and fishermen. On the lower part of the island are about 70 fishermen's huts, the only remains of the numerous storehouses standing here during the war, when this island was the centre of an extensive contraband trade. (*Convers. Lexicon.*) Heligoland has two good natural harbours, one on the N., the other on its S. side; and E. of it is a roadstead, where vessels may anchor in 48 fathoms. The people, who are of Frisian extraction, and speak a dialect of that language, are chiefly employed in the haddock and lobster fisheries, the produce of which is taken to Hamburg, and exchanged for those necessaries which this island does not supply: some thousands of the lobsters come, also, to the London market. The annual value of these fisheries is said (*Dict. Géog.*, art. Heligoland) to average 5,000*l.* a year. Many of the people are excellent pilots, and, being licensed by the island authorities, procure lucrative employment from vessels of all nations entering the Elbe. The females of the pop. are chiefly engaged in raising a little barley and oats on spots where vegetation will thrive, and in tending the few sheep (about 150) that graze on the downs. This dependency, though useless in time of peace, serves in war for a point of observation, and a dépôt for produce. It costs at present from 850*l.* to 900*l.* a year.

Heligoland, in ancient times, was the residence of a chief of the Sicambri or N. Frieslanders, and was the seat of worship of the Saxon goddess Phoseta, from which circumstance its name (*holy-land*) was derived. It was in the possession of Denmark till 1807, when it was taken by the English, who have since retained it.

HELLESPONT. *See* DARDANELLES.

HELMSTADT, a town of N.W. Germany, duchy Brunswick, distr. Schöningen, and cap. circle same name, 22 m. E. by S. Brunswick, and 30 m. W. Magdeburg; lat. 51° 13′ 45″ N., long. 11° 1′ 15″ E. Pop., in 1838, 6,400. It is an old-fashioned walled town, with four gates; and the fortifications are turned into public walks, lined with lime-trees. Its two suburbs are called Ostendorf and Neumark. The places most worthy of note are the principal square, the Lutheran church of St. Stephen, the town-hall, and the circle-tribunal, once the university building. Besides these, there are 3 other churches, 3 hospitals, and an orphan asylum. Near the town, in the forest of Marienburg, are some medicinal springs; and on the Corneliusburg are the Lubbensteine, four enormous altars of Thor and Odin, surrounded with a circle of stones somewhat similar to that seen at Abury, in Wiltshire. It was once the seat of a university, founded by Julius duke of Brunswick in 1575, which was in a most flourishing state, till the establishment of Göttingen university thinned its members. It was suppressed in 1809 by Jerome Bonaparte, and a portion of its library removed to Göttingen. A gymnasium and a normal school are the only existing establishments for education. Helmstadt is the seat of a general superintendency, and a place of considerable trade for its size. Flannels, hats, tobacco-pipes, soap, spirits and liqueurs are its chief manufactures. It trades with Prussia, and has four markets in the year. It is believed to have been originally built by the emperor Charlemagne in 782.

HELSTONE, a parl. bor., market town, and par. of England, co. Cornwall, hund. Kerrier, 242 m. W. by S. London, and 15 m. S.W. Truro. Area of par. 130 acres; pop. of do. (1831) 3,293. The town stands on the side of a hill sloping to the river Loe or Cober, which is here crossed by a bridge. The houses are chiefly ranged along four streets, which cross each other at right angles; it is well paved, lighted with gas, and abundantly supplied with water by streams running through the streets. Near the centre of the town is an ancient town-hall, and there is a coinage hall, now disused and let for private dwellings. The church (a chapel of ease dependent on the vicarage of Wendron) is a modern structure, on high ground, having a fine pinnacled tower 90 ft. high. The dissenters also have two places of worship, and the Sunday schools are attended by 500 children. The grammar-school, recently revived, has a high character; and there is a good national school. Helstone is the market for an extensive farming district, and also participates in the advantages derived from the mining speculations in the immediate neighbourhood: the mechanics are numerous, especially shoemakers, and the town is, on the whole, in a thriving state. Loe Pool, about 1 m. below the town, dries at low water; but facilities have lately been afforded to the trade by sea by the improvement of the harbour of Portleven, about 3 m. distant. Iron, coal, and timber are imported in large quantities, for the use of the neighbouring mines. A singular custom prevails here, called the Furrey-dance, a kind of joyous procession, celebrated May 8., which is always observed as a holiday. The town received its first charter from King John; and Edward I. made it a coinage town, with the privilege of sending 2 mems. to the H. of C. The governing charter of the corporation, previously to the Municipal Reform Act, was granted in 1774. The last-mentioned act vested the government in 4 aldermen and 12 councillors. Corp. rev., in 1839, 824*l.* Previously to the Reform Act, the elective franchise was vested in the freemen, elected by the mayor and aldermen; but it had been for many years a mere nomination bor. belonging to the Duke of Leeds. The Boundary Act added to the old bor. the entire par. of Sithney, which had, in 1831, a pop. of 2,772, and a large portion of the par. of Wendron; so that the pop. of the parl. bor. may be estimated at from 7,000 to 8,000. Registered electors, in 1838-39, 366. Markets on Wednesdays and Saturdays; fairs on the Saturdays before Mid-lent Sunday and Palm Sunday, and on Whit-Monday, July 20., Sept. 9., Oct. 28., and the first three Saturdays in December. (*Polwhele's Cornwall; Parl. Rep.*)

HELVOETSLUYS, or HELLEVOETSLUIS, a fortified town and port of Holland, prov. S. Holland, on the Haring-vliet, the largest mouth of the Rhine, 16 m. S.W. by W. Rotterdam. Pop. 1,644. Its excellent harbour, capable of accommodating the whole Dutch navy, runs through the centre of the town, and, being bounded by a pier on either side, extends a considerable way into the river; it has also a large arsenal, and docks for the construction and repair of ships of war, and a naval school. It used to be the regular station for the English and Dutch packet-boats, which sailed to and from Harwich twice a week, till the adoption of steam-packets for the conveyance of the English mail to Rotterdam, in 1823. Our great deliverer William III. embarked at Helvoetsluys for England in 1688. (*De Cloet; Dict. Géog.*, *&c.*)

HEMEL-HEMPSTEAD, a market town and par. of England, co. Hertford, hund. Dacorum, 22 m. N.W. London, and 16 m. W. Hertford. Area of par., 7,310 acres. Pop. (1831), 4,759. The dependent chapelries of Bovingdon and Flaunden have also an area of 5,130 acres; and a pop., in 1831, of 1,278. The town stands on the slope of a hill, close to the small river Gade, and consists of a main street, lined with tolerably good houses. The church, in a spacious churchyard, is cruciform, with an embattled tower surmounted by a high octagonal steeple: the architecture was originally Norman, and the W. door is considered by Dallaway one of the finest specimens in England: many alterations and enlargements have, however, been made at subsequent periods, which greatly diminish the beauty of the edifice. The town-hall, the only other public edifice, is a long narrow building, with an open space underneath for the accommodation of the farmers, who bring thither large quantities of corn for sale on Thursday, the market-day. Within the par. are 2 endowed free schools, one for 13 boys, the other for 15 girls; besides which there are 2 infant schools, 2 national schools, and 2 schools of industry, altogether attended by upwards of 200 children: the Sunday schools have nearly 300 scholars. The chief employment of the female part of the pop. is straw plaiting, and this art is taught to about 280 children, in 24 dame-schools. In the neighbourhood are some of the largest and most perfect paper-mills in the empire; and within 4 m. of the town there are numerous flour-mills. The Grand Junction Canal and Birmingham Railway are 1½ m. S.W. and greatly contribute to increase the traffic of the place, by the facility they afford for the transit of corn and other agricultural produce. Hemel-Hempstead was incorporated by Henry VIII., and the inhab. are empowered to have a bailiff, and to hold courts of pie-poudre during fairs and markets. This corporation, however, is mentioned neither in the commissioners' report, nor in the schedules of the Municipal Reform Act.

Markets on Thursday: fair for sheep, Holy Thursday; statute-fair, 3d Monday in September.

HENLEY-ON-THAMES, a market town, mus.

bor., and par. of England, co. Oxford, hund. Binfield, on the W. bank of the Thames, 22 m. S.E. Oxford, 35 m. W. London. Area of par. 1,920 acres; pop. of ditto, in 1831, 3,618. The town is beautifully situated at the foot of the Chiltern range, which is here well covered with beech and other forest timber. The E. entrance is by a handsome stone bridge, of 5 arches, built in 1786; and the first object presenting itself to the view on entering from London, is the church, a handsome, though irregular Gothic structure, built at different times, and having a lofty tower, ornamented at the angles with taper octagonal turrets, rising to considerable height above the battlements. It contains some curious monuments, and a library bequeathed by Dean Aldrich in 1737. The High Street, which runs W. from the bridge, is wide, well paved, and lighted, and lined with good houses: at its further end, on the rise of a hill, stands the town-hall, a neat building, on pillars, having on the upper story a hall, council chamber, and other rooms; its lower part, which is open, being used as a market-house. Crossing the High Street at right angles are two other streets, much narrower, and lined with inferior houses. There are places of worship for Independents and Wesleyan Methodists, some almshouses endowed by Longland, Bishop of Lincoln, and several schools. The principal of the latter are the "United Charity Schools," founded in 1604, and endowed with land, realising 370*l.* yearly: the establishment, as revived in 1774, consists of an upper school, in which 25 boys receive class instruction, and a lower school, which provides 60 boys with a plain education, and 20 out of that number with clothing: besides this school, which is by no means in a thriving condition, there is a national school, attended by 124 boys and 72 girls; an infant school, with 160 children; and three Sunday schools. A savings' bank was established in 1817. The chief industry of Henley is malting, but the trade has much declined of late years; and the town can scarcely be said to possess any peculiar manufacture at the present time. It is a corp. town, its governing charter being granted in 1722, having a recorder, 10 aldermen (one of whom is mayor), and 16 burgesses. In consequence of the statement made by the commissioners, "that it may be questionable whether any considerable advantage can be derived from a municipal institution in so small a community, especially as the income of the corp. is too limited to enable them to do any thing material for the improvement of the town" (*Mun. Corp. Rep.*), this bor. was left untouched by the Municipal Reform Act. The members of the corp. have the patronage of various local charities; but the income at their disposal amounts only to about 70*l.* yearly. Quarter sessions and a court for the recovery of small debts are held here. Markets on Thursday, for corn and other grain: fairs, March 7., Holy Thursday, Thursday in Trinity week, and the Thursday after Sept. 21., chiefly for horses, cattle, and sheep. (*Bingley's Beaut. of Engl.*; *Parl. Papers.*)

HERACLEA PONTICA, also called PERINTHUS, a famous marit. city of antiquity, now called *Erekli*, on the N. coast of Asia Minor, on the Euxine Sea; lat. 41° 16′ N., long. 31° 30′ E. Heraclea, says Major Rennell, "has filled the page of history with its grandeur and misfortunes; and its remains testify its former importance." Diodorus Siculus describes it as situated on an elevated neck of land about one stadium in length, the houses thickly set, and conspicuous for their height, out-topping one another, so as to give it the appearance of an amphitheatre. This is exactly the appearance that it exhibits at the present day: and the harbour, though neglected, is magnificent, forming a roadstead like a horse-shoe. The walls are now in a ruinous condition, and constructed chiefly of the remains of a former rampart. In the part fronting the sea, where are the remains both of an inner and an outer wall, huge blocks of basalt and limestone are piled one on another and intermingled with columns and fragments of Byzantine cornices with Christian inscriptions. The castle upon the height is in ruins. Only a part of the ancient city was contained within the wall, the outer portion extending, in the form of a triangle, to a small river-valley, in which was formerly a harbour defended by two towers. The modern town comprises 5 mosques, 2 khans, 2 public baths, and about 300 houses, 50 of which belong to Greek Christians and the rest to Mahommedans. According to the *Dict. Géog.*, it manufactures linen cloth, and exports flax, silk, wax, and timber, importing coffee, sugar, rice, tobacco, and iron.

The ancient Heraclea, founded by the Megareans, early attained to considerable wealth and importance as a place of trade. The inhab. maintained their independence for several years, subject only to a tribute paid to the Persian monarch. The Heracleots supplied the 10,000 Greeks, under Xenophon, on their memorable retreat, with vessels to carry them back to Cyzicus. The republican government was overthrown, about *anno* 380 B.C., by Clearchus, one of the chief citizens, in whose family the government continued nearly a century. Heraclea furnished succours to Ptolemy against Antigonus; and afterwards, notwithstanding the aid furnished to Rome by its marine, and a treaty of alliance, both offensive and defensive, with that powerful state, it was pillaged by Cotta, under the pretext that it had resisted the exactions of the publicans (or tax-farmers) of Rome Its splendid library, temple, and public baths were plundered and set on fire, and many of the inhab. put to death by the conqueror. The city, however, continued to flourish under the Roman emperors, and coins of Trajan and Severus are extant, in which it is styled *metropolis* and *augusta*. The fleet of the Goths waited here for the return of the second expedition that, in the time of Gallienus, ravaged Bithynia and Mysia; and it is mentioned as still prosperous even so recently as the reign of Manuel Commenus. Athenæus informs us that it was celebrated for its wine, almonds, and nuts. (*Tournefort*, ii.; *Walsh's Constant.* 101.; *Geog. Journ.* ix.; *Dict. Géog.*)

HERAT, or HERAUT, formerly HERI (an. *Aria* or *Artacoana*), a city of W. Caubul, in antiquity the cap. of Ariana, and one of the most renowned cities of the E., and still the largest and most populous town of the modern prov. of Khorassan, and the cap. of an independent chiefship. It stands on the Herirood (an. *Arius*), in a fertile plain, 380 m. W. by N. Caubul, 270 m. N.W. Candahar, 410 m. N.E. Yezd, and 410 m. S.S.W. Bokhara; lat. 34° 50′ N., long. 62° 27′ E. Pop. estimated some years since by Christie at 100,000; but at present it does not probably exceed 45,000 (*Elphinstone*, *Conolly*, *&c.*), of whom 2-3ds are native inhab.; about 1-10th part Dooraunee Afghans, and the rest Moguls Eimauks, Hindoo merchants, Jews, and other strangers Previously to 1824, when the city was besieged by the Candahar troops, it covered a large extent of ground, having had some considerable suburbs outside the walls. It now consists of only the fortified town, 3-4ths of a m. square, surrounded with lofty walls of unburnt brick, erected upon a solid mound formed by the earth of a broad wet ditch, which goes entirely round the city, and is filled by springs within itself. There are 5 gates, each defended by a small outwork; and on the N. side of the fortress is the citadel, a square castle of burnt brick, flanked with towers at the angles, and, like the town itself, built on a mound enclosed by a wet ditch. The interior of Herat is divided into quarters by 4 long bazaars, covered with arched brick, which run from 4 of the gates, and meet in a small domed quadrangle in the centre of the city. (*Conolly.*) It is said to have about 4,000 dwelling-houses, 1,200 shops, 17 caravanseras, and 20 baths, besides many mosques, and fine public reservoirs. But, notwithstanding a plentiful supply of water, and abundant means for insuring cleanliness, Herat is one of the dirtiest places in the E. "Many of the small streets which branch from the main ones are built over, and form low dark tunnels, containing every offensive thing. No drains having been contrived to carry off the rain which falls within the walls, it collects and stagnates in ponds, which are dug in different parts of the city. The residents cast out the refuse of their houses into the streets, and dead cats and dogs are commonly seen lying upon heaps of the vilest filth. *Rusm ust*—'it is the custom'—was the only apology I heard from those even who admitted the evil." (*Conolly*, ii. 3, 4.) The residence of the prince is a mean building, standing before an open square, in the centre of which is the gallows and the great mosque. The latter, a lofty and spacious edifice, supposed to date from the 12th century, surmounted with elegant domes and minarets, and ornamented with shining painted tile, is going to decay. "But though the city of Herat," says Conolly, "be as I have described it, without the walls all is beauty. The town is 4 m. distant from hills on the N., and 12 from those which run S. of it. The space between the hills is one beautiful extent of little fortified villages, gardens, vineyards, and corn-fields. A *bund* is thrown across the Herirood; and its waters, being turned into many canals, are so conducted over the vale of Herat, that every part of it is watered. The most delicious fruits are grown in the valley; the necessaries of life are plentiful and cheap; and the bread and water of Herat are proverbial for their excellence." (*Ib.* ii 4, 5.) Herat, from its extensive trade, has acquired the appellation of *bundar*, or emporium, it being a grand centre of the commerce between Caubul, Cashmere, Bokhara, Hindostan, and Persia. From the N., E., and S., the chief goods received are shawls, indigo, sugar, chintz, muslins, leather, and Tartary skins, which are exported to Meshed, Yezd, Kerman, Ispahan, and Tehran; whence dollars, tea, china-ware, broad cloth, copper, pepper, and sugar candy, dates and shawls from Kerman, and carpets from Ghaen, are imported. The staple commodities of Herat are saffron and assafœtida: silk is obtainable in the neighbourhood, but not in sufficient quantity for commerce. Many lamb and sheep skins are made up into caps and cloaks; and when Conolly visited the city, there were in it more than 150 shoemakers' shops. The latter were, however, inadequate to supply the demand of the prov., and many camel loads of slip-

pers were brought from Candahar. The carpets of Herat are in great repute for their softness, and brilliancy of colour; but the trade in them has declined of late years. The greatest capitalists here are the Hindoo merchants. A mile N. of the town are the remains of what anciently was the wall of Heri, not far from which are the magnificent ruins of a place of worship, built by a descendant of Timour. The princes of his house constructed several palaces, gardens, and cemeteries on the hill range N. of Herat, traces of which still exist. Herat is capable of being made a place of great strength. An army might be garrisoned in it for years with every necessary immediately within its reach; and the influence of any W. power in possession of this fortress would be felt over all the country E., as far at least as Candahar. It long formed the cap. of an extensive empire transmitted by Timour or Tamerlane to his sons. It thence passed under the rule of Persia; was taken in 1715 by the Dooraunee Afghans; in 1731, by Nadir Shah; and retaken by the Afghans, under Ahmed Shah, in 1749. Since then, the Persians have often attacked it unsuccessfully; on the last occasion, in 1838, they were routed under its walls.

The territory of Herat, subject to Kamraun Shah (*see* AFFGHANISTAN), extends N. perhaps to the Moorghaut, and S.E. the greater part of the way to Candahar; but W. for about 30 m. only. The money revenue derived from the city and its neighbourhood, in 1831, was rated at about 21,500*l.*; that of the provs. was estimated at four times as much: besides which, a large quantity of agricultural and other produce was exacted by the sovereign. (*Conolly's Overland Journey to India; Elphinstone's Caubul; Burnes, &c.*)

HERAULT, a marit. dép. of France, in the S. part of the kingdom, formerly a part of the prov. of Languedoc, between lat. 43° 13′ and 43° 57′ N., and long. 2° 33′ and 4° 13′ E.; having N.W. the déps. Tarn and Aveyron, S.W. Aude, N.E. Gard, and S.E. and S. the Mediterranean. Length, N.E to S.W., 73 m.; average breadth, about 30 m. Area, 624,362 hectares. Pop. (1836), 357,846. The slope of this dép. is from N.W. to S.E., and most of its rivers run in that direction; but the Herault, from which it derives its name, has mostly a S.W. course from the dép. Gard, in which it rises, to its mouth in the Mediterranean, 15 m. S.W. Cette. Its total length is about 31 leagues, 3¼ of which are navigable. A long succession of lagoons, occupying an area of more than 40,000 hectares, lines the coast, on which there are several good ports, including those of Agde and Cette. The climate, though hot and dry, is generally healthy: the soil is mostly calcareous. In 1834, 156,566 hectares were arable, and 8,537 in pasture; vineyards occupied 103,683 hect., woods 77,644 hect., and heaths, wastes, &c. upwards of 214,000 hect. The growth of wine is the principal branch of industry. About 2,080,000 hectol. are made annually, 400,000 h. of which are exported, and a similar quantity used for home consumption; the rest is converted into brandy. The best kinds are the red wines of St. George and Virágues, and the white wines of Frontignan and Lunel. Corn, which is chiefly wheat, with some oats and rye, is not grown in sufficient quantity for home consumption; the annual produce is about 1,000,000 hectol. Oil, olives, figs, and dried fruits form important articles of commerce. In 1834, there were 237,000 mulberry-trees in the dép., and in 1835, 372,390 kilog. of silk cocoons were obtained. Bees are largely reared; and wax to the value of nearly a million of francs is annually exported. In 1830, there were 534,000 sheep in the dép.; their flesh is excellent, and they yield about 1,200,000 kilog. of wool yearly. In 1835, of 115,048 properties subject to the *contribution foncière*, 45,842 were assessed at less than 5 fr., and 19,420 at from 5 to 10 fr.: the number of large properties is greatly above the average of the déps. The pilchard and other fisheries in the Mediterranean and the lagoons, employ a great many hands; and it is estimated that 75,000 quintals of fish are annually taken, worth 545,000 fr. Herault is rich in mineral products; iron, copper, and coal mines, and quarries of marble, alabaster, gypsum, granite, &c. are wrought. The principal manufactures are those of woollen cloths, silk and cotton fabrics, of which Montpellier is the chief seat: there are others of paper, chemical products, perfumery, and liqueurs many distilleries and dyeing establishments, and a good deal of salt is made in the marshes. Herault is, however, much more an agricultural and commercial, than a manufacturing dép. Montpellier, Cette, and Agde have extensive trade, and their intercourse with the interior is promoted by several navigable canals, of which the *Canal du Midi* is the chief. Herault is divided into 4 arronds.; chief towns, Montpellier, Beziers, Lodève, and St. Pons. It sends 6 mems. to the ch. of dep. No. of electors (1838-39), 3,609. Total public revenue (1831), 12,312,819 fr. This dép. anciently formed a part of Narbonnese Gaul, and contains many Celtic and Roman antiquities, and some which are probably of a Greek origin. (*Hugo*, art. *Herault; French Official Tables, &c.*)

HERCULANEUM, or HERCULANUM (*Cic. ad Att.* vii. 3.), an anc. and now buried city of Campania, in Italy, close to the Bay of Naples, and 8 m. S.E. that city. The date of its foundation is unknown, and its early history fabulous; but there is little doubt that it was held by Osci, Pelasgi, and Samnites, before it came into the possession of the Romans. Velleius Paterculus tells us that its inhab. took an active part in the social and civil wars, and that the city suffered considerably in consequence. Little more is known about it except its destruction with Pompeii and Stabiæ, by an eruption of Mount Vesuvius. The volcano had for some centuries been inactive, and even covered with verdure; but in the first year of the reign of Titus, A.D. 79., it burst forth with great violence, and caused those terrible disasters so well described by the younger Pliny, in two entire epistles (vi. 16. and 20.), and more briefly by Tacitus:—"*Luctum attulit atrox et continuus tremor terræ, quem secuta est horrenda Vesuvii montis conflagratio. Pulcherrima Campaniæ ora miserè fœdata: obrutæ duæ urbes Herculaneum et Pompeii: vasta hominum strages, quos inter periêre Agrippa ejusque mater Drusilla. At studiorum famâ mors C. Plinii fuit insignitior.*" (*App. Chron.*) Martial alludes also to the fate of Herculaneum:—

> "Hic locus Herculeo nomine clarus erat:
> Cuncta jacent flammis et tristi mersa favillâ."
>
> *Epigr.* iv. 42.

The city appears to have been completely buried under showers of ashes, over which a stream of lava flowed, and afterwards hardened. The figure of the coast itself was altered by the burning torrent; and thus, when the local features were so wholly changed, all knowledge of the city, beyond its name, was soon lost. After a concealment of more than sixteen centuries, accident led to the discovery of its ruins. In 1713 the Prince d'Elbœuf, a French nobleman, who was building a palace at Portici, having need of materials for stucco, procured large quantities of marble and terra cotta from the sinking of a well on his estate. As the sinking proceeded, the workmen, when about 76 ft. below the surface, came to fragments of statues; and the prince then ordered excavations to be made, with the view of ascertaining the extent of the remains. A vault, a marble door-way, and several statues of vestals, were disclosed with little labour; but the works were soon afterwards stopped by the jealousy of the court of Naples. Twenty-five years after, on the accession of Don Carlos, the Infanta of Spain, to the throne of Naples, the works were resumed on a grander scale, and a theatre, chalcidicum, two temples, and a villa, were successively discovered and excavated. Owing, however, to the clumsy manner in which the mining was conducted, discreditable alike to the engineer and the government employing him, the statues and columns were needlessly injured and demolished, and, strange to say, the earth, instead of being brought to the surface, was used to fill up one part as another was searched. In consequence of this procedure, a small portion of the theatre is all that is now accessible; and the works, together with the interest excited by them among the Neapolitans, have long been discontinued. The whole extent of the ground explored was about 600 yards from N.W. to S.E., by 300 yards in breadth. The largest street was the N.E. limit, beyond which it was supposed the mining could not be carried without endangering the town of Resina. Parallel with it was another street, and three others cut them at right angles. These streets appear to have been paved with lava, like those of modern Naples, a fact which proves that there must have been an eruption of Vesuvius prior to that which overwhelmed the city. The theatre was situated at the N. end of the town, which is supposed by Winkelmann to have extended nearly 2 m. along the shore, but without any great breadth. The theatre appears, from an inscription on its architraves, to have been built by Memmius, and its dimensions are as follow:—External circumference, 290 ft.; internal ditto as far as stage, 230 ft.; internal diameter, 150 ft.; width of stage, 70 ft.; height, not known.

There were 18 rows of benches, besides 3 above the portico; and the entrance to them was by *vomitoria* or passages leading from the three tires of arched corridors which ran round the building, and communicated by steps with the exterior. Its walls were cased with polished marble; both inside and outside beautiful statues and highly wrought columns were found. The floor was composed of thick squares of yellow marble, many of which still remained when Winkelmann examined the place. The theatre is supposed to have been capable of accommodating 3,000 spectators, and was therefore very much smaller than many others, the ruins of which are still extant. In the chief street, which is 36 ft. wide, having a raised foot-way on either side with portions of columns showing the existence of an old colonnade, are the remains of a forum, or *chalcidicum*, and of two temples. The forum is an oblong building, 228 ft. long and 132 ft. broad, with a colonnade of 42 pillars running

round its exterior; and it had 5 entrances, 3 in front, formed by 4 great pilasters decorated with equestrian statues, and 2 smaller entrances at the sides. The building was all cased with marble except under the colonnade, where the walls are covered with frescoes. One of the equestrian statues formerly at the front entrance has been restored, and is reckoned quite a *chef-d'œuvre* of ancient art. The two temples are united under a single roof, and the entire length of both is 192 ft., and the breadth 60 ft. They are very unequal in size; but are highly ornamented internally with columns, frescoes, and inscriptions. Among the private buildings excavated, all of which were small, with only one story, was a suburban villa most profusely decorated with statues and fresco paintings. It seems to have been extensive, having rooms extending along the side of the garden; but they are all on the same story. Here were found the celebrated papyri, upwards of 580 in number, the unrolling of which has given so much trouble to the learned, and which would appear to be little better than thrown away, if the value of the 400 already unrolled and partly published may be taken as any criterion of the value of the others. The subjects are very various; but the works and their authors are alike uninteresting. (*Phil. Transac. for* 1755; *Sir H. Davy's Report in the Journal of the Royal Institution for April*, 1819.) Close to this villa a large tank, or piscina, was discovered, 250 ft. long and 27 ft. broad, with semi-circular ends, and enclosed by a balustrade on which were ranged many exquisitely wrought bronze figures, now in the private apartments of the Queen of Naples. The ornamental beds and arrangements of the garden were still discoverable, and at its extremity towards the sea was a pavilion floored with African marble and *jaune antique*. The precious relics of antiquity, so far as they were capable of removal, were taken to Naples, and are now deposited, with the other relics from Pompeii, in a large museum in a wing of the king's palace. The collection is most extensive, and comprises not only frescoes, statues, and works of art, but also articles of household furniture, such as tripods, chandeliers, lamps, basins, pateræ, mirrors, articles of the toilet, musical and surgical instruments, and even cooking utensils. Engravings and descriptions of them will be found in David and Marechal's *Antiquités d'Herculanum*, 12 vols. 4to., and also in that instructive little work, "*Pompeii*," in the *Library of Entert. Knowledge*. The paintings which have been cut from the walls on which they were originally executed have, since their restoration to the light, lost somewhat of their brightness; but the colours are still wonderfully fresh. Their merit of course varies extremely, and many are incorrect in drawing; but the vigour of the touches by which some of the figures are expressed, and the graceful elegance of the attitudes selected by the painter are truly astonishing. The most beautiful of these were taken from the walls of the theatre at Herculaneum, and the subjects may be understood at a glance, by those acquainted with Grecian history and mythology. Among the statues, the palm is generally given to a Mercury and a drunken Faun; but there are many, of bronze as well as marble, of most exquisite beauty: both the statues and busts are very numerous. In the collection of medals, a gold medallion of Sicily, struck in the 15th year of the reign of Augustus, is considered by virtuosi to be the most rare and curious. On the whole, the remains of Herculaneum, so varied and perfect, throw a light on the arts and domestic customs of the Romans, which no mere description by a classic author could give. Antiquity here seems to revive, and we are carried back to the days when Rome was the mistress of the world. (*Encyc. Metrop.* art. *Herculaneum, by Rev. G. C. Renouard; Winkelmann's Letters on Herculaneum*, passim; *Gell's Pompeii; Moore's Italy*, ii.)

HEREFORD, an inland co. of England, on the borders of Wales, having N. the co. Salop, E. Worcester and Gloucester, S. the latter and Monmouth, and W. Brecknock and Radnor. Area, 552,320 acres, of which about 500,000 are arable, meadow, and pasture. The aspect of this co. is every where rich and beautiful; the surface is finely diversified with gentle eminences and valleys, magnificent woods, orchards, and meadows, enclosed with hedges and rows of trees. It is usually represented as being every where remarkable for fertility; but it has probably been in this respect overrated, and though the soil in many districts be not surpassed by any in the kingdom, it has, notwithstanding, a considerable extent of inferior land. It produces excellent crops of wheat and barley, and is one of the principal cyder cos. Its wool is also esteemed equal, if not superior, to any produced elsewhere in England. The Hereford breed of cattle are deservedly held in high estimation: they are of a dark red colour, with white faces, throats, and bellies, and fatten easily; are excellent workers, and are remarkably quiet and docile; but as respects the dairy, they are good for nothing. Nearly half the field labour of the co. is performed by the cattle. The wool of the Ryland sheep, formerly so celebrated for its fineness, has been injured by crossing by the Leicesters; but the carcass of the animal has been, in consequence, materially improved, and the weight of the fleece increased. Agriculture is in a pretty advanced state in this co., but there is a great want of drainage. Turnips are pretty extensively cultivated; and a vast improvement has been effected in many districts by means of irrigation. Hops are largely grown, particularly on the borders of Worcestershire, from 12,000 to 12,500 acres being under this crop. Property very variously divided: there are a few large estates, with many of a medium, and some of a small size. The tenures of gavelkind and bor. English exist in some districts, but are usually nullified by will. The farms, which are mostly large, are usually held from year to year. All the more modern farm buildings are of brick, and slated, those of older date being principally thatched. Average rent of land, in 1843, 22*s.* 9½*d.* an acre. Oak bark is an important product. Iron ore has been discovered, but it is not wrought; and the other minerals seem to be of no importance. If we except cyder, which is produced to a greater extent here than in any other county, manufactures are inconsiderable; gloves, however, are made at Hereford and Leominster, and some coarse woollens in a few places. Principal rivers, Wye, Lug, and Munnow. The Wye is navigable to Hereford for barges carrying from 18 to 20 tons, but the navigation is difficult, and but little to be depended on. Hereford is divided into 11 hunds. and 219 pars.; it sends 7 mems. to the H. of C., viz. 3 for the co. and 2 each for the bors. of Hereford and Leominster. Registered electors for the co., in 1849-50, 6,856. In 1841, Hereford had 23,381 inhab. houses, and 113,878 inhabs., of whom 56,978 were males, and 56,900 females. Sum expended on the relief of the poor, in 1847, 45,363*l.* Annual value of real property assessed to income-tax, in 1815, 629,156*l.*; ditto in 1843, 805,319*l.*

HEREFORD, a city and parl. bor. of England, co. same name, of which it is the cap., hund. Grimsworth, on the N. bank of the Wye, 118 m. W.N.W. London, and 56 m. S.W. Birmingham. It stands on a gravelly soil, in a valley, near the centre of the co. The parl. bor., which is co-extensive with the old mun. bor., comprises the entire pars. of All Saints, St. Peter's, St. Owen's, St. Nicholas, with parts of St. Martin's and St. John the Baptist, exclusive of out-townships; and had, in 1841, a pop. of 11,367. It extends about 3½ m. from N. to S., and nearly 4 m. from E. to W., enclosing an area of about 2,220 acres. The new municipal borough excludes about 2-5ths (chiefly rural tracts) of the above district. The streets are wide, straight, macadamised, flagged, and well lighted with gas. The private dwellings, almost entirely of brick, are generally old-fashioned, some few only being of modern construction. Among the many public edifices, the largest is the cathedral, founded in 825, and rebuilt in 1072. It is a cruciform structure of the Saxon and early Norman style, and at the points of intersection rises a fine square tower 160 ft. high. The uniformity of the building, however, is greatly impaired by the erection of a new and very plain W. end, rendered necessary by the fall of the tower and a part of the nave in 1786. The extreme length of the cathedral is 350 ft., length of the great transept 100 ft., breadth of nave and side aisles 74 ft., height of nave 63 ft., height of entire building 91 ft. The nave is divided from the aisles by two rows of massive columns, sustaining semicircular arches, over which are rows of arcades with pointed arches. At the E. end are the Ladye Chapel, an octangular chapter house, and a well-stocked and valuable library. The N. porch is generally admired as a specimen of the ornamental Gothic style. Within the church are many fine monuments, among which that of Bishop Cantelupe (who died in 1287) is beautifully ornamented with the most delicate sculpture. Adjoining the cathedral are the college and bishop's palace, in the former of which are apartments for the vicars and other officers of the establishment. The cloisters connecting the palace with the church are considered curious and handsome. A triennial musical festival takes place within the cathedral, the profits of which are given to charitable institutions within the county. A side chapel is used as the parish church of St. John Baptist, the living of which is held under the dean and chapter. Of the other parish churches, that of All Saints, which is united with St. Martin's, has a tall and well-proportioned steeple, but is otherwise uninteresting. St. Peter's, which is united with St. Owen's, is a plain building, with a spire. The church of St. Nicholas is old-fashioned and uninteresting; the rectory is in the gift of the crown. The dissenting places of worship belong to Wesleyan Methodists, Independents, Quakers, and R. Catholics, the last of whom have lately built an extremely handsome chapel. Numerous day and Sunday schools are connected both with the churches and chapels; and there is a good charity school for clothing and educating 50 boys and 30 girls. The free grammar-school, locally known as the College

School, was either founded or enlarged by Q. Elizabeth; but it appears to have fallen into disrepute, and to be now almost useless, notwithstanding the 20 exhibitions which it offers to the universities of Oxford and Cambridge: connected with this school is Dean Langford's charity, which clothes and educates four children, and sends them to Brasennose College, Oxford, with scholarships of 35*l.* per annum for four years. Among the numerous and richly endowed charities of Hereford, the principal are, — 1. St. Ethelbert's Hospital for 10 aged persons, having an income of 160*l.* yearly. 2. Coningsby's Hospital, founded in 1625, on the site of an ancient monastery, and providing lodging, clothing, and 13*l.* a year each to 14 old soldiers, and a salary of 20*l.* for a chaplain. 3. Lazarus's Hospital, once used for lepers and others afflicted with contagious diseases, but now an almshouse for six poor women, who divide 19*l.* yearly. 4. St. Giles's Hospital, established in 1290, as a monastery of Grey Friars, and given by Richard II. to the corporation, by which it was formed into an almshouse for five poor men, who are clothed, and share 80*l.* yearly. 5. William's Hospital, providing six decayed tradesmen with good lodgings, and 3*l.* 10*s.* each per month, and a chaplain, at a salary of 20*l.*, who also officiates in the last-mentioned hospital. 6. Price's Hospital, for 12 men, who are lodged and paid 2*l.* a month each. 7. Trinity Hospital, a handsome brick building, in which 16 poor people are lodged, clothed, and pensioned, at 5*s.* each per week. The last five of these charities are in the patronage of the corporation, who, according to the statement of the municipal commissioners, formerly used their influence for the most corrupt purposes. Many other minor endowments belong both to the corporation and the parishes; indeed few cities in England possess so many charitable trusts as Hereford. (*Charity Comm.*, 32*d Rep.*) A large infirmary, supported by subscriptions and benefactions, and containing accommodation for 70 patients, stands S.E. of the city, near the Castle Green. The union workhouse, completed in 1838, stands on the N.E. side, outside the city. The chief public buildings not yet noticed are the shire-hall, designed by Sir R. Smirke, having a fine Doric portico; the town-hall, an old-fashioned wood and plaster building, supported on pillars forming an arcade, in which is held the vegetable market; the guildhall, built of brick; the theatre; the co. gaol, a well-arranged prison, in which the silent system, and hard labour, are rigorously enforced; and the town gaol, which is very small, and wholly insufficient for the wants of the city. (*Gaol Returns*, 1839, p. 68.) "Hereford, in point of trading prosperity, is in a stationary condition. Though the principal streets contain many good dwelling-houses and shops, there are no evidences of any very active or thriving establishments. It produces no staple commodity; and the glove trade, formerly considerable, has declined. There are some manufactures of hats and cutlery; and the trade in cider, hops, oak-bark, wool, and agricultural produce is somewhat on the increase. The Wye is navigable by barges up to the city, except in dry summers or during heavy floods; and about 10 years ago, a railroad was carried from Hereford to Pontrilas, and thence to Abergavenny: this, among other advantages, secures a steady supply of coal, the price of which has fallen nearly one third." (*Mun. Bound. Rep.*)

Hereford received its first charter of incorporation in 1189, from Richard I., but the governing charter, previously to the Municipal Reform Act, was granted by William III., in 1697. The corporation now comprises a mayor, 6 aldermen, and 18 councillors: the city is divided into three wards. Corp. rev., in 1848, 4,151*l.* Hereford has sent 2 mems. to the H. of C. since the 23 Edward I., the franchise, previously to the Reform Act, being vested in freemen, resident or non-resident, who became so by birth, marriage, apprenticeship, gift, or purchase. Reg. electors, in 1850, 861. Quarter and petty sessions, and a mayor's court, for the recovery of debts, are held within the city. The local acts are 14 Geo. III. c. 38., and 56 Geo. III. c. 23. Market-days on Wed. and Sat., the Wed. after St. Andrew's day being the "great market." Fairs first Tuesday after Feb. 2., and Oct. 2. for cattle, cheese, and farming produce, being among the largest in England. Cattle fairs are also held on Wed. in Easter week, and July 1. The May fair, called the bishop's fair, lasts nine days, and, being a mere holiday fair, is much complained of as a hindrance to business.

During the disputes between Henry III. and his barons, and in the wars of York and Lancaster, Hereford was repeatedly the seat of hostilities; and its fine castle and strong walls, according to Leland, were so much injured, that in the time of Henry VIII. they were going fast to ruin. During the parliamentary wars it was garrisoned by Charles I., and twice besieged: in 1643 it surrendered to the parl. troops under Sir W. Waller, and being retaken by the royalists, was nearly the last that opened its gates to the parliament. The ancient fortifications and castle are wholly destroyed, and their site is now occupied by a public promenade, maintained by subscription, and forming the favourite resort of the pop. (*Price's Hist. of Hereford; Britton's Acc. of Her. Cathedral; Mun. Bound. and Char. Com. Reports.*)

HERFORD or HERVORDEN, a town of the Prussian dom., prov. Westphalia, gov. Minden, cap. circ. of the same name, on the Werra, 15 m. S.W. Minden. Pop. (1838) 6,852. It has courts of justice for the circle and district, a large prison, a gymnasium, and R. Cath. high school, and manufactures of cotton cloth and yarn, leather, tobacco, and linen goods. The central museum of arts, antiquities, and manufactures for Westphalia is established at Herford.

HERISAU, a town of Switzerland, cant. Appenzell, div. Outer Rhodes, of which it is the cap. jointly with Trojen, these towns being alternately the seat of the legislature. It stands on a height, at the junction of two small streams, which turn the machinery of numerous factories, 5 m. W.N.W. Appenzell. Pop. 2,200, or, with its commune, about 7,000, who are among the most industrious inhab. of the canton. The principal manufactures are those of cottons and silks, the last of recent introduction. It has an ancient church, in which the archives of the Outer Rhodes are kept, a pretty large public library, orphan asylum, court of justice, arsenal, &c. Near it is the Heinricksbad, one of the most frequented watering-places in E. Switzerland. (*Rüsch, Kanton Appenz.*; *Picot*, &c.)

HERMANSTADT (Hung. *Nagy-Szeben*), a town of Transylvania, cap. of the Saxon land, in an extensive and fertile plain, on the Tibin, a branch of the Aluta, 71 m. S.S.E. Clausenburg, and 70 m. W. Cronstadt. Pop., in 1838, 18,237. (*Berghaus.*) It partly stands on an eminence, and is thence divided into an upper and a lower town. It is pretty well built, mostly in the Gothic style, and has a square ornamented with a statue and fountain; but still it has a dull and stagnant appearance. It has three suburbs, and is surrounded by a double wall, having a foss and five gates. The most remarkable public buildings are the palace of Baron Bruckenthal, the favourite minister of the Empress Maria Theresa, containing an extensive library and fine museum; the churches, 9 in all (viz., 4 Lutheran, 1 Calvinist, 3 Rom. Cath., and 1 Greek); the barracks, the military hospital, and the orphan asylum. The Lutherans have a gymnasium, in which the study of divinity, law, and philosophy is pursued, and a free school; besides which, there is a Rom. Cath. gymnasium, and a normal school. Hermanstadt is the head quarters of the commander-in-chief of the troops in Transylvania, and several departments of the government, as the customs, post-superintendence, &c., are located here. It is a place of considerable trade, having three markets in the year, and it has manufactures of linen and woollen cloths, hats, &c.: still, however, the town "is not what it was. The overland trade through Wallachia has almost disappeared, and with it the best days of Hermanstadt." The Hermanstadters are said to be of Flemish origin, and have a strange notion that their extraordinary dialect strongly resembles the English. There are not less than seven distinct dialects among these Saxons, all supposed to have been derived from the different parts of Germany from which they originally came. (*Paget's Hungary*, vol. ii. ch. 13.)

The town, which takes its name from Hermann, the Saxon chief who conquered Transylvania, is said to have been founded in 1160, and to have early possessed many valuable rights and privileges under the Hungarian government; the greater part of the town, however, was built in the 16th century. It was once the capital of Transylvania, and was then in its most flourishing condition. (*Oesterr. Nat. Encycl.*; *Paget's Hung.*)

HERTFORD, an inland co. of England, having S. Middlesex, E. Essex, N. Cambridge, and W. Buckingham and Bedford. It has a very irregular outline, and a detached portion at Coleshill is wholly surrounded by Buckingham. Area, 403,200 acres, of which about 350,000 are arable, meadow, and pasture. A ridge of chalk hills, from 800 to 900 ft. high, runs along the N. frontier of the co., and the rest of its surface is beautifully diversified with uplands and valleys: it has many thriving plantations, and a more than ordinary proportion of fine seats, among which Ashridge and Hatfield occupy the first rank. The sub-soil is generally chalk. It has every variety of soil, and may, on the whole, be said to be of about an average degree of fertility. By far the greater portion of the land is in tillage; and the wheat and barley of this co. are reckoned equal to those of any other district in England. Agriculture is not, however, in a very advanced state. Two white crops not unfrequently follow each other; and the land is mostly ploughed very shallow, and is "in many parts extremely foul." (*Kennedy and Granger on the Tenancy of Land*, i. 239.) Drill husbandry is but little introduced; and the thrashing machine is not used, from a notion that it would injure the quality of the straw, which meets a ready sale in the London markets. Meadow land is in general much better managed than the arable, the quantity of hay produced being large, and

the quality superior. Few cattle are raised or fed in this county; but the stock of sheep is considerable. Few large estates. Farms of various sizes, but not generally large. Leases, where granted, are usually for 7 or 14 years. Average rent of land, in 1843, 21*s*. 8¼*d*. an acre. With the exception of chalk, the minerals are of no importance. Manufactures not very important. Paper, however, is made on a large scale, of the best quality, and by the most improved machinery, near Watford and Rickmansworth. Malting is extensively carried on at Ware, Hitchin, and other towns; and a good deal of straw plait is made in different parts of the county: silk and cotton are also spun, and ribands made, at Tring, Watford, St. Albans, &c. Principal rivers, Lea, Rib, Beane, Colne, Gad, &c. The Grand Junction Canal passes through its W. parts, and it is also traversed by the London and Birmingham Railway. Hertford has 8 hunds. and 135 pars.; it sends 7 mems. to the H. of C., viz. 3 for the co., and 2 each for the bors. of Hertford and St. Albans. Registered co. electors, in 1849-50, 5,414. In 1841, Hertford had 30,155 inhab. houses, and 157,207 inhabs.; of whom 77,617 were males, and 79,590 females. Sum contributed for the relief of the poor, in 1847-48, 64,589*l*. Annual value of real property assessed to income-tax, in 1815, 583,657*l*.; ditto in 1843, 849,794*l*.

Hertford, a parl. bor. and market-town of England, cap. of the above co., hund. Hertford, on the Lea, 19 m. N. London. The parl. bor., which includes, besides the old bor. and liberties, portions of the parishes of Brickendon and Bengeo, had, in 1841, 950 inhabited houses, and a pop. of 5,463 persons. The town, which stands in a valley, though irregularly laid out, is respectable in its appearance, well paved and flagged, abundantly supplied with water, and lighted with gas. There are 2 churches, which serve for all the parishes, the others having been demolished. All Saints, the corp. church, is a spacious cruciform structure in the later English style, with a square tower and spire; and St. Andrew's, at the S. end of the town, though smaller in extent, is handsome, and has a low embattled tower and spire, and a large gallery within, for the accommodation of the children belonging to Christ's Hospital. The Independents also, the Wesleyan Methodists, and the Society of Friends, have commodious places of worship. Among the public charities in Hertford, the chief are,— 1. A well endowed free grammar-school, founded in the reign of James I., having seven scholarships at Peterhouse, Cambridge. 2. The Green-coat School, founded and endowed in 1760, in which about 50 boys are educated. 3. The branch school of Christ's Hospital, occupying a large brick building with wings, and accommodating 500 of the younger pupils of that great establishment. 4. A girls' charity school, attended by about 50 children. 5. An infant-school. 6. An almshouse for aged people, built and endowed with 50*l*. a year. The principal public buildings are — the castle, originally built in 909, afterwards enlarged, and now the property of the Marquis of Salisbury (who lets it to the proprietor of a large school preparatory to Hailybury College); the shire-hall, erected in 1771, under which is the corn-market; the sessions-house, in which the assizes are held; and the gaol, on the E. side of the town. About 2 m. from the town is Hailybury College, established in 1806 by the East India Company, for preparing its civil officers for their duties in India. The buildings, erected at a cost of 70,000*l*., contain rooms for the 8 different professors and about 100 students, who receive instruction in divinity, science, law, history, and the oriental languages. The Rev. T. R. Malthus, author of the *Essay on Population*, and Sir James Mackintosh, were professors in this institution. Hertford is a busy town, and there are several mills on the Lea, the principal trade being mealing and malting, the produce of which it exchanges with London for coals and other commodities. There are also some large breweries, and an extensive distillery. The markets, held on Saturday, are among the largest in the S. of England for corn: fairs for cattle are held on the Saturday fortnight before Easter, and on May 12., July 5., and Nov. 8. This bor. received its earliest corporate privileges from William the Conqueror: its markets were granted by Edward III. The corporation now consists of a mayor, 3 other aldermen, and 12 councillors, and holds a commission of the peace: corp. rev., in 1839, 874*l*. Hertford sent 2 mems. to the H. of C. from the reign of Edward I. to the 50th of Edward III., when it was relieved from the burden, on the plea of poverty, and did not regain the privilege till the 22d of James I., since which time it has exercised the franchise. Down to the passing of the Reform Act, the electors were the householders and freemen resident, when they received their freedom. Registered electors in 1849-50, 664. The boundaries of the mun. and parl. bor. are co-extensive.

The date of the foundation of Hertford is uncertain. At the time of the Doomsday survey, the town and lands were divided between the Conqueror and eight of his followers. In the wars between John and his revolted barons, the castle, originally built by Edward the Elder, was taken from the king, after a month's siege. It was restored in the following reign, and in 1345 was granted, with the earldom of Hertford, to John of Gaunt, who made it his usual residence. The castle was afterwards inhabited by the queens of Henry IV., V., and VI.; and here, also, 150 years later, Queen Elizabeth occasionally resided and held her courts. (*Chauncy's Hist. of Hertfordshire; Britton's Arch. Antiq. of Great Britain; Parl. Rep.*)

HESSE-CASSEL, or ELECTORAL HESSE (Germ. *Kurhessen*), a state of W. Germany, consisting of a central territory, (having N.W. Prussian Westphalia and Waldeck, N.E. Hanover and Prussian Saxony, E. Weimar, S.E. and S. Bavaria, and W. Frankfort, Nassau, and Hesse-Darmstadt), and several small detached portions, the chief of which are the co. of Schaumberg to the N., and the lordship of Schmalkalden to the E. The whole territory lies between lat. 50° 5′ and 52° 25′ N., and long. 8° 30′ and 10° 40′ 30″ E., and is subdivided as follows: —

Provinces.	Area in Eng. sq. m.	Pop. 1838.	Ch. Towns and Pop.
Lower Hesse -	2,085	338,500	Cassel - - 31,000
Upper Hesse -	875	116,200	Marburg - 7,700
Fulda - -	887	135,000	Fulda - 9,900
Hanau - -	583	115,200	Hanau - 15,000
Total -	4,430	704,900	

This is the statement of Berghaus; but, according to the *Almanack de Gotha*, the pop. in 1837 amounted to 812,540; a discrepancy which we are without the means of reconciling.

On entering the Electorate of Hesse Cassel, from Saxony, the country and the men present a different appearance. There is more of the forest; the country is a heap of moderately elevated ridges, stretching across each other in every variety of form and direction, and principally covered with beech woods. (*Tour in Germ.* in 1820-22, i. 329.) The greater part of Hesse-Cassel belongs to the table-land of central Germany, of which it forms the N. extremity, called by Berghaus, the "Hessian terrace." Its N. part is traversed by the Werra mountains; its central portion is occupied by the plateau of Fulda; and its territory towards the S.E. and S. covered by the Rhön, Spessart, and other mountain ranges, which enter Hesse from Bavaria. No summit, however, rises higher than the *Meissner*, belonging to the Werra range, which is 2,327 ft. above the level of the sea. The co. Schmalkalden, between the Prussian, Saxe-Meiningen, and Saxe-Gotha territories, is covered by the Thuringian forest-mountains, and Schaumberg, between Hanover, Lippe Detmold, and Prussia, by ramifications of the Harz. Electoral-Hesse belongs principally to the basin of the Weser, which bounds it on the N., and receives the Fulda, Werra, Eder, Schwalm, Diemel, Lahn, &c.; the Main bounds it on the S., and receives the Kinzig, and Nidda. There are many large ponds, especially in the N., though none is large enough to be called a lake. The climate is healthy, but in winter the cold is severe, except in the prov. Hanau, S. of the elevated plateau of Fulda, and in the vale of the Werra, where some wine of an inferior sort is grown. The medium temp. of the year throughout the Electorate is about 50° Fahr. The soil is stony, sandy, and no where particularly fertile, except in Hanau. It is there very productive, and rye is reported to yield 16 or 20 fold, and wheat and barley in good situations as much as 24 fold, but such statements are uniformly almost greatly exaggerated. The whole country, however, is capable of being rendered much more productive than at present; only the narrow valleys and the lower portion of the hill-slopes are cultivated, and the valleys, which, from their confined extent are exposed to excessive moisture, are very imperfectly drained. A degree of indolence pervades the people in the rural districts; the villages have more of the Bavarian than the Saxon character, being often composed of mere ruinous wooden hovels; and the inhab. are commonly dirty, squalid, and slovenly. Agriculture is their chief occupation; it is in the most forward state in the valleys of the larger rivers. More corn is grown than is required for home consumption; it is principally rye, barley, and oats. These are every where cultivated; wheat is grown chiefly in Lower Hesse: the yearly produce of these four species of grain is estimated by Berghaus at 4,000,000 *scheffel*. Buckwheat is grown only in Schaumberg, and some parts of Fulda; and maize is confined to Hanau. About 350,000 *scheffel* of pulse of various kinds are annually grown, and from 700,000 to 800,000 *sch*. of potatoes; these products compose the chief articles of food in the higher districts, besides which, potatoes are used to some extent in distilleries. Tobacco, esteemed the best in Germany, is grown in Hanau, and on the banks of the Werra in Schmalkalden: its annual produce averages from 17,000

to 20,000 cwt. Flax, also, of good quality, is largely cultivated in the 3 N. provs., and about 150,000 *steis* are obtained yearly. Wine, which is almost exclusively produced in Hanau, does not amount to above 1,000 *eimers* a-year. Orchards are everywhere numerous; hemp, hops, chicory, poppy-seed, and culinary vegetables, are the remaining articles of culture. Hesse-Cassel is one of the most richly-wooded countries of Europe; nearly 1-3d of its surface, particularly in Fulda, Hanau, and Schmalkalden, is covered with forests. In the Thuringian forest, and in Hanau, firs are the principal trees; in the more level country oak, elm, beech, &c. predominate: the oaks are in some parts very fine. Juniper-berries form an article of considerable export from Lower Hesse. The pastures are good, but cattle are not numerous. In 1833 there were, in all, about 817,300 head of live stock: more than half the number being sheep of improved breeds. Hogs and poultry are plentiful; not so bees. Game is not very abundant, and fisheries contribute but little to the support of the inhab. The peasantry, like their neighbours throughout Westphalia, are principally hereditary tenants; and the author of a *Tour in Germany*, &c., remarks, "You will find men among them who boast of being able to prove that they still cultivate the same farms on which their ancestors lived before Charlemagne conquered the descendants of Herrman (*Arminius*), or, for any thing they know, before Herrman himself, drawing his hordes from these very valleys, annihilated the legions of Varus." (i. 330.)

Mining is pursued, more or less, in all the provs. About 56,000 cwt. of iron, 5,140 cwt. of cobalt, and 1,000 cwt. of copper are obtained annually. There were formerly some tolerably productive silver mines near Frankenberg, in Upper Hesse, but they have long ceased to be wrought: a small quantity of silver still, however, is obtained near Bieber, in Hanau. About 235,000 cwt. of rock-salt, 300,000 cwt. of coal, 400,000 cwt. of bovey coal, and turf in large quantities are annually produced. Coal of a good quality is abundant throughout the country; but the inhab. have a prejudice against it, and it has not been brought into general use. Manufactures have not yet reached any high degree of importance, but they are said to be rapidly increasing. Linen weaving and spinning are the most widely diffused, and form throughout the country the common auxiliary employments of the small farmers and their families. The fabrics are of every quality, from the coarsest household cloths to the finest damask. The town and prov. of Fulda are the chief seats of this branch of industry, and it is estimated that from them alone 140,000 pieces of linen are exported, a large proportion of which are sold under the denomination of Osnaburgs. Schmalkalden is, however, the only district in which there is any approach to manufacturing establishments on a large scale; it is the seat of extensive iron works, and manufactures of fire-arms, cutlery, hardware, &c., though these articles have not attained to any great degree of perfection. Iron and steel wares are also made in the valley of the Weser. Coarse woollens, stockings, camlets, carpets in Hanau; leather, tobacco, glass, crucibles, porcelain and earthenware, paper, hats, gunpowder, tar, wooden wares, and musical instruments are among the other chief articles of manufacture. There are many bleaching and dyeing establishments, breweries, and distilleries. Cassel and Hanau are the principal manufacturing as well as commercial towns.

The great article of export is linen cloth, about 200,000 pieces of which, of the value of 1,000,000 dolls., a year, are exported by way of Bremen and Frankfurt, chiefly to Holland, Denmark, and America. The other principal exports are linen yarn, woollen cloth, hats, jewellery, hides, sheep-skins, paper, iron and steel wares of all kinds, crucibles, timber, corn, dried fruits, spirits, &c. The chief imports are colonial goods, drugs, wine, flax and hemp seed, silk, fine wool, and woollen fabrics, mirrors and other glass wares, herrings, stock fish, horses, cattle, tin, gold, silver, tobacco, &c. The imports and exports nearly balance each other; but the most profitable branch of commerce to the Electorate is the transit of trade; the grand routes of communication between Frankfurt and Hamburg, Berlin, Dresden, &c. passing through the territories of Hesse Cassel. The dollar current is that of Prussia = 3s. The Hessian ell is = ·623 English yard, the foot = ·943 English. The *viertel* of corn = ·55 English qr.; the cwt. is nearly equivalent to the English.

The *Government* is a limited monarchy, hereditary in the male line only. The different orders in the state are represented in one parliamentary chamber, composed of 52 members, consisting of the heads of the collateral branches of the electoral family, the mediatised nobles, the family of Riedesel (hereditary lords-marshal) and the secularised convents of Kaufungen and Wetter, 6 deputies from the nobles and knights of Hanau, Fulda, and Hersfeld; 16 from the towns, and 16 deputies sent by the peasantry. The peasantry are, however, debarred from being representatives of their own order, by the circumstance of their habitually speaking only a Low German dialect, the vernacular tongue of the country, while the discussions in the assembly are carried on in high German. The states assemble at least once in 3 years. The inhab. of Electoral Hesse in the last century suffered much from the oppression and rapacity of their rulers, who were accustomed, amongst other acts of tyranny, to traffic largely in the blood of their subjects, by hiring out their troops in the service of other European powers. The supply of Hessian troops to England during the American war brought to the Electoral treasury the sum of 21,276,780 crowns between 1776 and 1784. The conquest of the country by the French put an end to this white slave trade. Though popular at first, the obstinate attachment of the late elector to abuses, and the growing demand of the people for reforms, produced a revolt in 1830, the changes consequent on which have rendered the present government one of the best and most liberal in Germany. The constitution of 1831 guarantees equality under the laws, the free exercise of religion, free right of appeal, and eligibility to every office under government; economy in every department of the public service has since been strictly enforced, and the educational institutions have been materially reformed. For civil and criminal justice there is a high court of appeal in Cassel, and a superior provincial court in the cap. of each of the four provinces, and in Rinteln for the co. Schaumburg. With each of these a forest court is connected, and subordinate to them are the district judicial and rural police courts. The town police is under a separate commission; and each of the provincial caps. has a head police court, as well as medical, manufacturing, and commercial tribunals, subordinate to head tribunals of the same kind in the cap. About 4-5ths of the pop. are Protestants, 1-6th part Rom. Catholics, and the remainder chiefly Jews. Except the latter, and between 1,000 and 2,000 individuals, the descendants of emigrants from France, at the revocation of the edict of Nantes, all the pop. are of the German stock. The reigning family is Lutheran, but 3-4ths of the Protestant inhab. are Calvinists. Since 1818, both Calvinists and Lutherans have been united for ecclesiastical government under 3 consistories, at Cassel, Marburg, and Hanau; the Rom. Catholics are under the Bishop of Fulda. The principal establishment for education is the university of Marburg, founded in 1527, which has 57 professors, and is usually attended by from 230 to 250 students. There are *lyceums*, or colleges of arts, &c., at Cassel and Fulda, teachers' seminaries at Cassel, Marburg, and Hanau; gymnasia, or high grammar schools, in the 5 principal towns; several schools of drawing, forest economy, &c., and numerous primary schools. Education was formerly more backward in the Electorate than in any other state in Germany, but such is no longer the case. The armed force is raised by conscription, and every male under 50 years of age capable of bearing arms is liable to be called on to serve. The contingent furnished to the army of the Germ. Confederation is 5,679 men, or, including the corps of reserve, about 7,600 men.

Financial System. — The sum voted for the public expenditure during the triennial period 1837-39, amounted to 11,558,780 dollars; the ways and means for the same period were estimated at only 11,264,780 dollars, and to cover the deficiency a temporary loan of 291,000 dollars was agreed to by the states.* The public debt, in 1837, did not exceed 1,540,850 dollars, of which amount 901,650 were in the hands of the government. The direct taxes for the period 1834-36, averaged 628,220 and the indirect 698,400 dollars a year. The former are levied according to the valuation of the produce of the land, or rent of property; and a capital of 25 florins is assumed for every 5 florins of revenue. Every 4 metzen (about a bushel) of rye, and cwt. of hay, is estimated as worth 1 florin, on which a rate of 3½ kreutzers is levied. A tax is also paid on cattle. An industry tax, paid monthly, is laid upon all merchants and tradesmen; it being calculated according to the capital supposed to be employed by them. Labourers are rated per month at one day's pay (the price of a day's food having been deducted). The government domains produce to the treasury about 632,000 dollars annually; the forests, &c., 356,000 dollars; the mines, forges, salt works, &c., 200,000 dollars; salt is a government monopoly. The expenses of the court are about 471,600 dollars; of justice, 264,800; the interior, 879,600; the finance department, 798,910; and the army, 742,300 dollars a year. According to the convention of 1831, half the revenues of the electoral property belong to the public treasury; the other half is at the free disposal of the elector; but fresh disputes have since arisen between the electoral house and the nation, respecting the claim to

* The *Encyc. des Gens du Monde* says, that according to the last yearly budget the public revenue amounted to 3,490,000 dollars, and the expenditure to only 3,162,000 dollars.

the property of the landgrave of Hesse Rotenburg, deceased in 1834.

History. — The house of Hesse-Cassel was founded by William the Sage, in 1567. The landgrave was raised to the dignity of elector by the treaty of Luneville, in 1801, which title he retained when restored to his dominions in 1815, though there was no longer an emperor to elect. From 1806 to 1813 Hesse-Cassel formed a part of the kingdom of Westphalia, of which Cassel was the cap. The electorate holds the 8th rank in the German confederation, having three votes in the full council, and one in the committee. (*Berghaus, Allg. Länder*, and *Völkerkunde*, iv. 316—328.; *Encyc. des Gens du Monde, &c*)

HESSE-DARMSTADT, or the GRAND DUCHY OF HESSE, a state of W. Germany, consisting of two principal and not very unequal tracts of country, separated from each other by the territories of Hesse Cassel, and Frankfurt on the Main, and of some smaller detached portions chiefly inclosed within the territory of Waldeck, the whole lying between lat. 49° 12′ and 51° 19′, and long. 7° 52′ and 9° 40′ E. Upper Hesse, the most N. of the two principal tracts, is bounded W. by Prussian Westphalia and Nassau, and encircled on all other sides by Hesse Cassel; the other principal tract has N., Nassau, Frankfort, and Hesse Cassel; E., Bavaria; S., Baden; and W., Rhenish Bavaria and Prussia; and is separated by the Rhine into the provs. of Starkenberg and Rhenish Hesse. According to Berghaus, the area, pop., &c. of the Grand Duchy are as follow: —[See top of next column.]

Provinces.	Area in sq. m.	Pop. 1858.	Ch. Towns and Pop.
Upper Hesse -	1,570	296,500	Giessen - 7,300
Starkenberg -	1,145	280,000	Darmstadt - 23,000
Rhenish Hesse	525	206,900	Mayence - 40,500
Total -	3,240	783,100	

The surface is very diversified. Rhenish Hesse and the W. part of Starkenberg consist mostly of a level plain of great fertility; the E. part of Starkenberg is occupied by the richly-wooded Odenwald, a hilly tract, along the foot of which runs the picturesque and celebrated *Bergstrasse*, a very ancient line of road, extending in nearly a straight direction from Frankfurt to Heidelberg. Upper Hesse is hilly or uneven throughout, being intersected by the Taunus, Westerwald, Vogelsgebirge, and other mountain ranges, the last named of which separates the basin of the Weser from that of the Rhine. The loftiest summits of the Vogelsgebirge are about 2,500 ft. in elevation. Next to the Rhine, the chief rivers are its tributaries, the Main, Weschnitz, Selz, and Nahe, in Starkenberg and Rhenish Hesse; and in Upper Hesse the Wetterau, Nidda, Lahn, Eder, Fulda, &c. There are many large ponds, but none worthy of the name of a lake. The climate is generally healthy, but varies very much in different parts. The mean temp. of the year in the plain of the Rhine is about 55° Fah.: in Upper Hesse it is little more than 51°, and snow lies on the Vogelsgebirge for 8 or 9 months of the year.

Hesse-Darmstadt is especially an agricultural country. Its surface, according to Berghaus, is occupied as follows, reckoning in *morgen* of about 2-3ds of an acre: —

Provinces.	Arable.	Meadow.	Pasture.	Vineyards.	Gardens.	Woods.	Total Surface.
Starkenberg - -	506,740	119,496	15,541	2,863	340	492,903	1,137,883
Upper Hesse - -	655,801	238,128	14,051	174	859	566,984	1,475,997
Rhenish Hesse -	427,093	35,784	4,595	35,131	2,575	21,523	514,706
Total -	1,589,634	381,408	34,187	38,173	3,774	1,081,410	3,128,586

The plains of Rhenish Hesse and Starkenberg, with the adjacent parts of Baden and Nassau, are amongst the best cultivated, as well as most fertile tracts of Germany; a circumstance which accounts for their supporting a pop. nearly as dense as that of Ireland in comparative comfort, without manufactures, and with but little trade. Rhenish Hesse, in particular, is covered with corn fields, vineyards, orchards and villages; and besides supplying the demand for home consumption, exports corn in considerable quantities. Wheat is the principal produce of the low lands, buckwheat of the Odenwald, and rye of Upper Hesse; but in the higher parts of the latter province little else than barley and oats are grown. In Rhenish Hesse the rotations of crops are various, and studied with constant reference both to the soil and seasons, and the land is never fallow. Poppy seed, rape, tobacco of good quality, and fruit are extensively cultivated in this province; and its vineyards yield some of the finest growths on the Rhine. The total produce of wine in Hesse Darmstadt, is estimated at 180,000 *ohm*, (6,342,500 imp. galls.), two thirds of which are exported. Flax, hemp, hops, and garden vegetables are the other chief objects of culture. Cattle-breeding is practised most extensively in Upper Hesse, where there is an active trade in live stock, including sheep and hogs; but many cattle, &c. are also fattened in the Odenwald, chiefly for the supply of Frankfurt. The principal forest trees are beech, oak, hornbeam, pine, fir, &c.; and in the Vogelsgebirge, maple, elm, and larch. Large quantities of timber and wooden wares are sent from Upper Hesse and Starkenberg, down the Main and the Neckar. In Rhenish Hesse, however, timber is exceedingly scarce and dear, owing to the great destruction of the woods during the French dominion; and nearly all the material required for fuel has to be brought from the Black Forest or Spessart mountains. The forests are mostly either communal or grand ducal property; they belong to the communes, especially in Rhenish Hesse, where, from their scarcity, they are highly valued. In the latter province, and in Starkenberg, property is very much subdivided. The following statement respecting its subdivision throughout the Grand Duchy, has been extracted from the tax-lists of 1834.

No. of individuals paying	Land-tax only - -	53,487
— — —	Land-tax and Industry tax	601
— — —	— and Personal tax	68,420
— — —	Land, Personal, and Ind. taxes	41,374

The first item shows the number of possessions belonging to foundations and corporations, as well as those under litigation; the third shows the number of landed proprietors of the upper classes; and the fourth the small landed proprietors, all of whom carry on some little manufacture, as weaving, &c., for which they are rated. Hoffmann estimates the trading capital of the Grand Duchy, as rated for the industry tax, in 1831, at about 911,700 florins, the number of labourers employed in trade being about 65,460, and the number of agricultural hired labourers at the same period, 43,870. The surplus of the exported over the imported agricultural produce, for the three years ending 1831, is estimated, by the same authority, at — corn, principally wheat, 209,628 qrs.; flour, 203,650 cwts.; dried fruits, 10,700 cwts.; tobacco, 39,000 cwts.; spirits, 60,000 cwts.; vinegar, 10,000 cwts.; poppy and rape oils, 38,460 cwts.; though the harvests within that period were by no means abundant.

The condition of the lower classes of agriculturists, who are here, as all over Germany, a kind of copyhold possessors of the land, has been very much improved since the peace. Personal services of all kinds have been redeemed, on easy terms, by the interference of the government, which began by giving up those due for crown lands at a moderate valuation. The tithes on new enclosures were voluntarily resigned both by the crown and by land-owners, and the existing tithes were converted into fixed redeemable rent-charges, for the purchase of which the state advances capital at the rate of 3 per cent. interest to the land-owner. A charge to cover this outlay appears annually in the budget.

Mining is the occupation next in importance. Salt mines are wrought at Wimpfen, in a detached portion of territory to the S., enclosed between Baden and Wirtemburg, where this mineral is found in great abundance; and for the supply of Rhenish Hesse, two mines near Kreutznach on the Nahe have been rented from Prussia. Berghaus estimates the produce of salt at 180,000 cwt. annually. Copper is obtained at Thalitter in upper Hesse, where a vein is profitably wrought, though the ore yields only from 1·6 to 2 per cent. of metal. At Biedenkopf, and on the estates of Prince Solms, in the mountainous parts of Upper Hesse, and in the Odenwald, extensive iron mines are wrought. Coal of inferior quality is abundant in Upper Hesse, and in scattered beds through the other provs.; but the total yearly produce is not more than 280,000 cwt. Turf, building stone, slates, marble, gypsum, and potter's clay, are the other chief mineral products, and there are traces of lead and mercury.

Manufactures on any extended scale cannot be said to exist in the grand duchy. Spinning and weaving linen and hemp are, as above mentioned, an auxiliary occupation of the agricultural classes, particularly in the N. and N.W. parts of Upper Hesse, at Lauterbach, Schlitz, Herbstein, &c. Among these are damasks and other fine fabrics; but the linens of Hesse Darmstadt cannot compete with those of Westphalia or Silesia. Some silk-weaving is carried on at Offenbach, and stockings are woven there and at Baben Hausen. Coarse woollens are manufactured in several places, principally in the N. Tobacco is prepared for use at Offenbach, the principal manufacturing town in the grand duchy. Few metallic articles are made, except needles and pins. Paper, glazed pasteboard for export to Russia, brandy, vinegar, dyes, leather (not enough for home consumption), earthenware, and chemical products, comprise most of the remaining manufactures. The chief articles of export

have been before mentioned, to which may be added linen goods, iron, and Offenbach manufactures. (*See* OFFENBACH.) The principal imports are colonial goods, horses, cattle, hides, leather, leaf-tobacco, and wine. But the transit trade is the most considerable branch of commercial industry. It was very profitable to Mayence as long as obstacles existed to the free navigation of the Rhine, and all wares were forced to be shifted into boats owned in that city. This barbarous privilege has been given up of late years, but a toll is still raised upon boats passing up and down the river. An indemnity has been afforded to the citizens for this apparent sacrifice, by the rapid increase of their markets for corn and wine. Mayence is the emporium of the fruitful districts of the Upper Rhine, as well as of those on the Maine and Neckar. The quantity of wares which came down the Rhine to Mayence, in 1834, amounted to 48,000 tons' weight, of which 20,000 were sent on to the Lower Rhine. Besides these goods, 224,000 cubic metres of fir planks and boards, with 41,700 cubic metres of oak planks, were sent down from the forests on the Rhine to Maine and Neckar. The imports from the Lower Rhine in the same year amounted in weight to 43,900 cwts., while 21,750 cwts. were forwarded up the Maine.

Hesse-Darmstadt was a mem. of the German Customs' Union for many years before it was joined by Frankfurt; and a successful attempt was made, while that city held out against the proposals of the Union, to establish a rival fair at Offenbach. The government of the Grand Duchy raised the tolls on the Maine, and the mart of Offenbach was making a considerable progress towards prosperity, when the adhesion of Frankfurt to the Union occasioned the abandonment of the experiment.

The florin in circulation, equivalent to 1*s.* 8*d.*, is divided into 60 kreutzers. The chief weights and measures are the pound = 1·1 lb. Eng., the *ohm*, = 35·2 galls., the *malter* = 44 Eng. qrs., the foot = ·82 ft. Eng., and the *morgen* = ·62 Eng. acre.

The Government is a limited monarchy, hereditary in the male line. The States consist of 2 chambers. The first is composed of members of the Grand Ducal house, the mediatised nobility, the R. Catholic bishop, the head Protestant ecclesiastic, the chancellor of the university of Giessen, and 10 citizens nominated for life by the grand duke. The second chamber consists of 6 deputies from the knights or inferior nobility, who pay direct taxes to the amount of 300 florins annually, 10 deputies from the towns, and 34 from the freehold landowners, contributing each direct taxes of 100 florins a year. The deputies are elected every 6 years, and the chambers meet at least once in 3 years. No changes in the laws can take place without their sanction, but they never assume the initiative in legislation; they have only the right of petitioning for new laws, which are then submitted to them by the minister. By the constitution of 1820 every subject enjoys freedom of person and property, and the free exercise of religion; all are equal under the law; and all, except the members of the mediatised noble houses, are liable to military service from 20 to 25 years of age. This service may, however, be performed by substitute, and there is a government office, through the agency of which substitutes are obtained on moderate terms. The contingent furnished to the army of the Confederation is 6,195 men; but the peace establishment amounts to 6,462 men. Mayence, the most important fortress in Germany, is garrisoned by equal numbers of Austrian and Prussian troops. The press is free, and the abuse of its freedom is cognisable only by the civil law. The executive powers are in the hands of a prime minister, and 5 others. Justice is administered in municipal and cantonal tribunals; high courts in the caps. of the provs.; a military tribunal at Mayence, and a superior court and court of appeal in Darmstadt. In Rhenish Hesse the courts of justice are modelled upon the French system, and trial by jury is in force, on which privilege a high value is placed. The laws of the Grand Duchy are, however, obscure, complex, and not embodied in any general code — defects which are loudly complained of.

About 5-7ths of the pop. are Protestants, 1-4th R. Catholics, and 23,000 Jews, besides whom there are a few Mennonites, &c. The Catholics reside principally in the S., and are subordinate to the bishop of Mayence. The two Protestant confessions have been organised into one, and have assumed the ritual and discipline of the Prussian evangelical church. The reigning family is Protestant. Public instruction has advanced rapidly within the last 25 years, especially in Rhenish Hesse, where, before the peace, the inhabitants generally were grossly ignorant.

In Mayence, which was the seat of a university, there was, in 1815, not a single bookseller, and mass-books and catechisms were the only works printed. The institutions for education are now excellent. One elementary school at least exists in every parish, besides which there are 4 citizens' schools, 7 gymnasia, 3 seminaries for schoolmasters, 4 colleges, a military academy, a university at Giessen, attended usually by from 200 to 400 students, and many special academies for the arts, sciences, &c. The communes elect their own headboroughs, and the usual restrictions with respect to marriage and settlement are enforced, as in the neighbouring German States. (*See* BADEN, &c.) Commissioners for the support of the poor are appointed in the towns, and, in Mayence especially, the charitable establishments are very well organised. A house of correction for secondary punishment has been established on an improved principle at Marienschloss, in which 350 convicts are confined, who both contribute by their labour to the support of the establishment, and earn a sum which is paid to them on their discharge.

The budget voted for the period 1839—1841 amounted to 7,078,462 fl. for the supplies, the ways and means to meet which were estimated at 7,087,181 fl. The sum voted for the civil list was 830,000 fl. The revenue is raised in the following manner: — 1. Land-tax on the appraised value of the land; 2. House-tax on the rental of the house; 3. Industry-tax, for which each man's trade is valued in classes, varying in rank according to the size of the town in which they are carried on. (There are three classes of towns, and in each town seven classes of trades.) The national rental calculated in this manner was, in 1836, estimated at 13,771,642 fl. net revenue; and as the direct taxes amounted in that year to 1,983,361 fl., the rate was 14½ per cent. per annum. In the province of Rhenish Hesse, the French patent tax, as well as the door and window tax, are retained in the place of the industry and house taxes. Hoffmann gives, however, an instance of the low valuations at which the land-tax is estimated, by citing the sale of an estate for 558,300 fl., which was valued in the tax registers at an income of 16,261 fl. A personal tax is further levied upon persons of independent fortunes, artists, and professional men, who are not included in the industry tax, or who have revenues distinct from their business. This tax is rated according to the value of the house or lodging occupied by each person. The revenues of the crown lands; the tolls on the Rhine at Mayence, and on the Maine at Seligenstadt and Heinheim; the legacy and stamp duty; the excise on wine, beer, and slaughtered beasts; the octroi at the gates of the larger towns; the salt monopoly; and, lastly, the import duties established by the German commercial league, form the other sources of national revenue. The national debt, in 1838, amounted to 9,188,422 fl. The present Grand Duke is the 10th in descent from Philip the Magnanimous, between whose four sons the dominions of Hesse became separated towards the end of the 16th century. The grand duchy of Hesse Darmstadt holds the 9th rank in the German Confederation, having 3 votes in the full diet, and 1 in the committee.

HESSE-HOMBURG (LANDGRAVIATE OF), a state of W. Germany, and one of the smallest in the Confederation, consisting of two detached portions, Homburg and Meisenheim, about 45 m. apart, the former enclosed between Hesse Darmstadt and Nassau, and the latter surrounded by the territories of Prussia, Oldenburg, and Rhenish Bavaria. United area, 166 sq. m. Pop. 23,600. The Homburg division is on the S. declivity of the Taunus mountains, the highest point of which, the Feldberg, is within its limits. The soil is not in general rich, but it has been rendered sufficiently productive by the industry of the inhabitants to furnish more corn than is required for home consumption, besides fruit, garden vegetables, flax, timber, &c. There are manufactures of woollen stuffs, linen fabrics, and stockings, which, after supplying the home demand, find a ready sale at Frankfurt. Meisenheim, W. of the Rhine, is partially covered with ranges from the Hunsdrück mountains. Its N. part is high, and its climate cold; but the surface of its S. portion is much less elevated, its temperature mild, and it yields a good deal of wine. Corn and cattle are plentiful, as are timber, coal, iron, and building stone. A little linen cloth, some linen and woollen yarn, glass, &c., are made; and there are a few iron-forges. The government is wholly in the hands of the Landgrave, who appoints his own ministers and executive officers, consisting of the government director, and the ministers of justice and finance. There is a superior court of justice in Homburg, with appeal to the High Court of Appeals in Darmstadt. The pop. is mostly Calvinist; there are, however, about 6,000 Lutherans, 3,000 Rom. Caths., and 1,000 Jews. The public revenue is about 150,000 fl. a year; the public debt amounts to 500,000 fl. The contingent furnished to the army of the Confederation is 200 men. Hesse-Homburg has one vote in the full Diet only. The late Landgrave married a daughter of George III. of England, since whose recent death, we believe, this territory has been united to Hesse-Darmstadt.

HETTON-LE-HOLE, a village and township of England, par. Houghton-le-Spring, co. Durham, N.E. div. of Easington ward, 6 m. N.E. Durham. Area of township, 1,590 acres: pop., in 1831, 5,887, having increased

from 919 in 1821. This astonishing increase is wholly attributable to the establishment of a large colliery, connected by a railway with the port of Sunderland. This populous village, chiefly inhabited by pitmen, consists, like most other pit-villages in Durham, of numerous cottages fronted by little gardens, and interspersed here and there with houses of a better character. A church, dependent on that of Houghton-le-Spring, several places of worship for dissenters, and some good and well attended schools, have been established since the place has risen to its present importance. (*See* Houghton-le-Spring.)

HEXHAM, a market town and par. of England, co. Northumberland, S. div., Tyndale ward, 20 m. W. Newcastle, and 33 m. E. Carlisle. Area of par., 28,370 acres. Pop. of township, in 1841, 4,742; do. of par., 5,989. The town stands on a high bank S. of the Tyne, a little below the confluence of its N. and S. branches, on the railway from Newcastle to Carlisle, and in the midst of a rich and well cultivated country. A handsome stone bridge of 9 arches connects it with the N. bank of the river. The streets, though narrow and irregular, contain several good houses; and the market-place, with the conduit in the centre, is a handsome quadrangle, on the S. side of which is an old market-house, supported by pillars, and beneath it are stalls for butchers and country dealers; on the E. side, surmounted by a stone tower, formerly used as the town gaol, is the ancient town-hall, where the manor court and petty sessions are held; and on the W. side is the Abbey church, partly in ruins, and now consisting only of a transept and choir of mixed Norman and Gothic architecture, with a square tower, 90 ft. high, rising from the centre of the building. The living is peculiar to the prov. of York, and the great tithes are appropriated to one of the stalls in York cathedral. The Rom. Catholics have a handsome chapel, besides which there are places of worship for Wesleyan Methodists, Independents, and others. A free grammar-school, founded by Queen Elizabeth in 1598, was subsequently endowed with property for the education of the youth of this and of the adjoining towns and parishes. The foundation boys, whose number is not limited, pay a stipend of 7*s.* 6*d.* a quarter, and about 40 more are educated with them, the instruction not being exclusively classical. A mechanics' institute, a savings' bank, and a dispensary have been established of late years.

Hexham has long been famous for a peculiar description of gloves, called "tan-gloves;" they were formerly much worn, but of late years have fallen into comparative disuse. Hats and coarse worsted goods are also made in considerable quantities; and about half the pop. are employed in these branches of industry. Markets on Tuesday and Saturday, but chiefly on the former; and cattle markets on every alternate Tuesday. Fairs, Aug. 5. and Nov. 8., for live stock and woollen goods. The annual sales in the Hexham market average 4,000 qrs. of wheat, 2,000 qrs. of oats, and 1,500 qrs. of rye.

The site of the town close to Hadrian's wall, and the discovery of many Roman inscriptions, altars, and other monuments, have led to the supposition that it occupies the site of the Roman station Axelodunum. St. Wilfrid, archbishop of York, introduced into Hexham the arts of France and Italy. This prelate made it a bishop's see and a co. palatine; but in 883 it was united with Lindisfarne, and finally, in 1112, was annexed to one of the prebends in York cathedral. David, king of Scotland, shortly before the battle of Neville's Cross, halted here for three days. The church, which had been ruined, was rebuilt by Thomas, Archbishop of York, who also founded a priory of Augustine canons, the annual revenues of which amounted, at the dissolution of the monasteries, to 138*l.* (*Hutchinson's History of Northumberland; Britton's Cathedrals and Churches; Dugdale's Mon. Angl.*)

HIÈRES, or HYERES, a town of France, dép. Var, cap. cant. on the S. declivity of a conical hill, 3 m. from the Mediterranean, and 34 m. S. W. Draguignan. Pop. (1836) 4,246. It commands beautiful and extensive views, but its internal appearance is far from corresponding with its situation, its streets being steep, narrow, crooked, dark, and very badly paved. Its highest point is crowned by the ruins of an ancient fortress, from which descend on either side the traces of a line of thick walls, that formerly surrounded the whole town. In the *Place Royale*, a large but gloomy-looking square, is a column, surmounted with a fine marble bust of the most illustrious of its citizens, Massillon, born here on the 24th of June, 1663. The suburb at the foot of the hill is much pleasanter, and more frequented by visiters, than the town itself: it has some excellent hotels. It is said that Hières was formerly a sea-port; at present, a plain of great fertility intervenes between it and the sea, covered with orange plantations, the best in France, vineyards, and olive grounds. The town has manufactures of orange-flower water, and other perfumes; brandy, oil, silk twist, &c.; and trades in these articles, olives and other fruits, and wine. Under the name of *Arcae*, this was one of the colonies anciently established by the Greeks on the shores of the Mediterranean: the Romans called it *Hicros*, but the monuments with which they embellished the city have entirely disappeared.

Hières, Isles of (an. *Stœchades*), a group of four small islands in the Mediterranean, about 10 m. S.E. Hyères, and 14 m. E.S.E. Toulon. Porquerolles, the largest, is 5 m. long by 2 m. broad: it is fortified, and has about 100 inhab. Port-Croz has also a garrison, and about 50 inhab. The other islands are surrounded by several rocky islets. None of them is fertile. (*Hugo*, art. *Var, &c.*)

HIGHAM-FERRERS, a bor., market town, and par. of England, co. Northampton, hund. of same name, near the Nen, 14 m. E.N.E. Northampton. Area of par., 1,871 acres: pop., in 1831, 965. The town stands on a rocky height, commanding a fine view over the valley of the Nen. The church has a finely ornamented W. front, and a tower and spire 160 ft. high. A monastic college founded here in 1422 was surrendered in 1543, and a portion of its revenues was devoted to the endowment of the present free school, recently rebuilt in a handsome style. Higham-ferrers, which, a few years ago, had a respectable lace-trade, is now quite insignificant as a place of industry; and the business originating in its position on a great north road, has been greatly lessened by the recent opening of the railways. This insignificant place, which is a bor. by prescription, sent 2 mems. to the H. of C., from the reign of Philip and Mary, down to the passing of the Reform Act, by which it was disfranchised. The franchise, though nominally vested in the freemen, was really exercised by Earl Fitzwilliam, the proprietor of the greater part of the borough.

HIGHGATE, a village and chapelry of England, partly in Hornsey, and partly in St. Pancras par., co. Middlesex, hund. Ossulston, 4 m. N. London. The pop. is estimated at 4,000. The village stands on the top and sides of a hill about 450 ft. high; and many of the houses are well built, being occupied by opulent merchants and others belonging to London. On the top of the hill, on the road towards Barnet, is the Gate-house, formerly a toll-gate at the boundary of the Bishop of London's estates. For many years a tavern has existed here, in which strangers are "sworn at Highgate;" that is, in which an old custom is kept up of swearing them not to drink small beer when they can get strong, &c., "*unless they like it better.*" The old chapel, built in 1565 as a chapel of ease to Hornsey, was replaced in 1832 by a neat church in the pointed style, contiguous to which is a spacious cemetery. The dissenters have 3 places of worship, to all of which are attached large Sunday schools. The grammar-school, founded in 1562, was for many years almost useless; but, in consequence of the representations of the charity commissioners, a reform was effected in its management, and it has lately become an efficient well-attended classical school. Its master, who has a salary of 150*l.* a year, is the reader and preacher at the church. Many good boarding-schools for boys and girls are established in and about the village. There are almshouses for 12 poor persons, and 2 well-supported charity schools. E. of Highgate runs the great north road in an excavated hollow, about 60 ft. deep at one spot, where it is crossed by a bridge or archway, forming the thoroughfare to Hornsey. Close to the opening of the archway-road is the mercers' hospital, a handsome Elizabethan structure, with 2 wings, and a chapel in the centre. Caen-wood, the beautiful seat of the Earl of Mansfield, lies between Highgate and Hampstead.

HIGHLANDS. *See* Scotland.

HILDESHEIM, a town of Hanover, cap. of princ. and *landdrostei*, on the Innerste, a tributary of the Leine, 19 m. S.S.E. Hanover, and 41 m. S. Göttingen. Pop., in 1838, 15,000, of whom about one third, with the bishop, are Rom. Cath. It is a large old town, surrounded with ramparts, now used as public promenades, irregularly built, and having extremely narrow streets. Among its churches, the cathedral, erected by Louis the Pious, in 818, is remarkable for its fine bronze gates of the 11th century, its paintings on glass, and for a hollow pillar of greenish stone, supposed to have been a Saxon idol, and now surmounted by an image of the Virgin Mary. This, and 3 other churches, belong to the Rom. Caths., who have also a consistory and a divinity college attended by 42 students. The other educational establishments are a Lutheran gymnasium with a good library, 9 schools, and a large and admirably regulated poor-school connected with a house of industry. The other public buildings and institutions are the episcopal palace, council-hall, treasury, lunatic asylum, three orphan houses, and an establishment for the deaf and dumb. The trade of Hildesheim is inconsiderable, except in coarse linen cloths and yarn: its other products are leather, soap, starch, snuff, bleached wax, and earthenware; but cattle-fairs are held here said to be the largest in the kingdom.

HILLAH. *See* Babylon.

HIMALAYA MOUNTAINS (THE), (San. *Himaálaya*, abode of snow; an. *Imaus* or *Emodus*,) an extensive mountain range of Asia, and the loftiest of which we have any knowledge, bounding the low and level plain of Hindostan on the N., and separating it from the table-land of Thibet, which stands 10,000 ft. above the sea. This chain is continuous westward with the Hindoo-koosh and Belur-tagh, and E. with the table-land of Yun-nan; but the term Himalaya is usually restricted by geographers to that portion of the range lying between the passages of the Indus and Brahmapootra, or Sanpoo; the former being in lat. 35° N., and long. 75° E., and the latter in lat. 28° 15′ N., and long. 96° E. The direction of the range, as thus defined, is S.E. from the Indus to the Gunduk, and thence E. to its termination. Its entire length is 1,900 m., its average breadth 90 m., and the surface which it covers is estimated at 160,000 sq. m. The N.W. extremity of the chain, called the Gosseie mountains, extends in a S.E. direction along the sources of all the Punjab rivers, except the Sutledje, and separates the hilly part of Lahore from Little Thibet. E. of the Sutledje, which cuts a passage through the mountains, in lat. 31° 30′ N., and long. 77° 40′ E., the range, still running S.E., crosses the heads of the Jumna and Ganges; it then, in its course E., gives rise successively to the Gogra, Gunduk, Cosi, Mahanunda, and Teesta, and is bounded on both sides at its E. extremity by the circuitous channel of the San-poo, to which, however, it contributes few affluents of importance. The average height of the Himalaya chain has been estimated at 15,700 ft.; but numerous peaks far exceed in altitude the Chimborazo of the Andes, so long supposed to be the highest point on the globe. The principal of these are as follows, with their situation and height from the sea.

Name.	N. lat.	E. long.	Height.
			Feet.
Jumnotri, in Gurwhal - -	31° 2′	78° 36′	21,155
Budrinath, do. - -	30 42	79 20	23,441
Dhawalir, in Kumaon - -	30 22	79 57	25,749
Dhawalagiri, in Nepaul - -	28 30	83 30	26,862
Kunchinganga, E. Peak, in Sikhim	27½ 0	88 0	28,178
— W. Peak, do. -	- -	- -	27,826
Chamalari, in Bootan - -	28 4	89 23	23,980

The passes over the main ridge, as far as we know at present, amount to about 20, a few only of which are practicable for horses, sheep being chiefly used as beasts of burden over the steeper passes. Their height above the sea varies from 10,000 to 18,000 ft.; the principal are, the Kandriball pass, between Cashmere and Ladak; the Paralaha (16,500 ft. high), leading from the Upper Chenab valley to Ladak; the Shatool, Boorendo, and Piming passes, all much frequented, on the road N. up the valley of the Sutledje; the Ghang-tang-ghaut (10,150 ft.), practicable for horses, and leading up the bed of the Bhagirathi to Chaprung, a Chinese post on the Upper Sutledje; the Netee-ghaut (16,814 ft.), used by the great caravans passing between Thibet and N. Hindostan; the Dooraghaut (17,790 ft.), also a much frequented route, connecting the valley of the Kalee with Dumpo, in Thibet; and the Mastang pass, near the source of the Gunduk: the passes to the E. of this river are little known. The glens, through which these mountain-tracks run, are usually at right angles with the main range, and the N.W. face is invariably rugged, and inclined at an angle of 50°, while the S.E. slope is more smooth, and has an inclination of only 20° or 30°. (*Lloyd and Gerard*, ii. 29. 61.) The limits of perpetual congelation in the Himalaya chain, which, according to Leslie's theory, would be 11,400 ft. above the sea, have been ascertained, by the observations of Webb, Gerard, &c., to be generally higher; and they have likewise proved that, while the snow-line on the S. slope is at an elevation of 12,400 ft., the mountains on the side of Thibet are free from snow in summer as high as 16,600 ft. This unexpected circumstance is attributed by some to the difference between the serene climate of Thibet and the foggy atmosphere of Hindostan; but by Lyell and others, with more probability, to the influence of the heat radiated by a great continent in moderating the cold. (*Lyell's Geol.*, i. 181.)

Geology.—The only rock sufficiently extensive to characterise the geological formation of the great chain is gneiss, which constitutes the substance of the highest ridges and crests. Granite veins occur on the surface only in some directions, intersecting the gneiss; but Captain Johnson and other travellers are of opinion, that granite forms the base of the mountains, and that gneiss is superimposed on the general bed. On leaving the centre of the range, schistus and clay-slate, primitive and secondary limestone, and red sandstone are successively met with on either side. Even in the centre of the chain, however, masses of limestone and sandstone have been found at an elevation of 16,000 and 18,000 ft., locked here and there in upraised crystalline rocks, a phenomenon observable also in the Alps and Pyrenees. (*Geog. Journal*, iv. 64.) The fossil remains found in the Himalaya mountains consist of bones of many different species of ruminating animals (some of which were found by Captain Webb at an elevation of 16,600 ft.), of ammonites, belemnites, and various kinds of land and fresh-water shells. The chief minerals hitherto found are sulphur, alum, rock-salt, gold dust, copper, lead, iron, antimony, and manganese; and the mines of Nepaul are reported by Buchanan Hamilton to produce large quantities of lead, copper, and sulphur. (*Hamilton's Nepaul*, introd.) There are no direct traces of volcanoes in the districts explored by the English; but the numerous thermal springs (that of Jumnotri having a temperature of 194° Fahr.), and many shocks of earthquakes felt by travellers in different parts of the range, indicate it to be the focus of subterraneous movements and derangements of the earth's crust. Among the physical phenomena observed on this great chain may be mentioned the falls of the Pabur, the highest known, and exceeding 1,500 ft., and the dripping-rock of Sansdarrah, near Deyra Doohl, in Gurhwal, resembling, though on a larger scale, those of Knaresborough in Yorkshire, and Roslyn, near Edinburgh. This rock, situated in a glen surrounded by mountains rising almost perpendicularly to the height of 5,000 ft., and clothed to the very top with the most beautiful wood, overhangs a small basin of water like the roof of an open piazza, extending about 50 yds. in length; and above it is a small stream, which being absorbed by the marshy nature of the soil, is filtered through it, and falls into the basin in a continual shower. The roof of the rock, and also of a neighbouring cave, are covered with stalactitic incrustations, which in some cases have descended to the floor, having the appearance of sparkling pillars. (*Capt. Johnson*, in *Geog. Journ.* iv. 43.; and *Hamilton's Gaz.*)

Vegetation. — The height at which plants and trees flourish on the Himalaya range varies on the N. and S. slopes, nearly proportionally to the difference in the altitude of the snow-line. On the S. slope, grain cultivation is not attempted higher than 10,000 ft.; the highest habitation is at an elevation of 9,500 ft.: pines (which form by far the largest proportion of forest in every place) show their best growth at a height of 10,300 ft.; but beyond 11,000 ft. they grow in smaller quantities, and are of less girth and growth. The rhododendron grows up to 12,000 ft., and birches are found as high as 13,000 ft. above the sea. (*Gerard and Lloyd*, i. 343., ii. 9.) On the N. side, villages are found between 11,000 and 13,000 ft. high, and grain cultivation advances to a height of 13,500 ft.; birch-trees rise to 14,000 ft., and vegetation is found up to an elevation of 17,500 ft., that is, upwards of 3,000 ft. higher than on the S. slope. The grains found on these heights are wheat and barley, bhatoo (*Amaranthus anardhana*), cheenah (*Panicum miliaceum*), khoda (*Paspalum scrobiculatum*), ooa (*Hordeum cœleste*), and phapur (*Panicum tartaricum*). Strawberries and currants thrive on the S. side at a height of 11,600 ft., and 1,000 ft. higher on the opposite side.

Zoology. — The mammalia of the Himalaya range are chiefly confined to ruminating animals, a few varieties only of the horse and cat tribe being found in these regions. The wild horse is seen on the N. side of the mountains; but the principal tenants of the hilly pastures are the yak (*Bos prophagus*), much used as a beast of burden by the Tartars, the ghurl (*Caper ægagrus*), of which the Cashmere and Thibet goats are varieties, the musk-deer, the Nepaul stag, the black deer, the *Cervus Capreolus*, the chirn or one-horned antelope, the goral, and the nylgau. Among the birds of the Himalaya may be mentioned the lammer-geyer (*Gypäetus barbatus*), the chuccoree (*Perdix rufa*), the common cuckoo, the Impeyan pheasant (*Lophophorus refulgens*), the red-legged crow, and the wood-pigeon. (*Ritter's Asia*, ii., iii.; *Geog. Journ.*, iv.; *Lloyd and Gerard's Tour in the Himalaya*; and *Berghaus's Asien, with Maps.*)

HINCKLEY, a market town and par. of England, co. Leicester, hund. Sparkenhoe, 12 m. S.W. Leicester. Area of par., 6,200 acres: pop. of town, in 1841, 6,356 do. of par., 7,291. The town stands on a commanding eminence close to Warwickshire, from which it is divided by the old Roman Watling Street: it is well built, though old, and near the centre stand an ancient town-hall and school-house. The church is a fine old Gothic building, with a tower and steeple 120 ft. high. The dissenters have 5 places of worship, connected with which and the church are Sunday schools, attended by 1,200 children. There are also an endowed national school, with 150, and an infant school, with 180, children. The staple manufacture of the place is hosiery, introduced about 1640, and now employing in the town and neighbourhood upwards of 2,000 hands. Coarse substantial stockings are said to be made here in larger quantities than in any other part of England. Markets (well attended) on Monday: fairs 1st, 2d, and 3d Monday after Epiphany; Easter Monday, Monday

before Whit-Sunday, and Whit-Monday, for horses and live stock; Aug. 26., and Monday after Oct. 28.

Near the Ashby-de-la-Zouch canal, which passes close to the town, are the remains of a Roman fortification, and the remains of a wall and ditch, traceable all round, indicate Hinckley to have been formerly a place of some importance.

HINDOSTAN, or India on this side the Ganges or Brahmaputra. *Name and Limits.*— The ancient inhabitants of India had no common name for themselves or their country; but their Persian neighbours called the people Hindoos, and the country, as far as they knew it, Hindostan; words which, in old English, would have been accurately as well as literally rendered, "Negro," and "Negroland." The comprehensive sense in which the term Hindostan is now employed, as distinctive of the entire territory S. of the Himalaya mountains, over which the institution of castes prevails, is of European origin; the people of the country confining the term to the territory lying N. of the Nerbuddah, and calling all to the S. of that river the Deccan, a word derived from the Sanscrit, and meaning "the right hand," and also "the south." In the European sense, Hindostan comprises the whole of that vast triangular country extending from the borders of Little Thibet, in about the 35th deg. of N. lat. to Cape Comorin, in about the 8th deg. It is bounded on the N. by the highest range of mountains in the world, the Himalaya; and by the two great rivers, the Brahmaputra and Indus, on the N.E. and N.W.; and in every other direction by the ocean. It comprises in all an area of between 1,200,000 and 1,300,000 sq. m., or about a third part of the estimated area of Europe; but from the absence of gulphs, inland seas, and lakes, the proportion of solid land is greater.

Surface and Geology.—The surface of Hindostan, taking this word in its widest acceptation, is of a very marked character. On the N., constituting the base of the triangle, we have three great ranges of mountains, with elevated valleys between. These chains rise, the one higher than the other as we proceed northward, the last constituting the highest mountains hitherto discovered. For 1,000 m., from China to Cashmere, a plain might be extended, resting on peaks 21,000 ft. high, while some are even 6,000 ft. above this elevation. The valleys themselves are from 2,000 to 4,000 ft. above the level of the sea. Primitive rocks alone compose the higher ranges. Gneiss predominates; but with it is found granite, mica slate, hornblende schist, chlorite slate, crystalline limestone, and marble. On these repose clay slate and flinty slate. In the lowest or southern range, sandstone composes that portion which terminates in the plain of the Ganges. Crossing this plain, and proceeding southward, we come to another chain of mountains, the Vindhyan range, running nearly E. and W. across the centre of Hindostan, in about the 23d deg. of lat. This is the basis of a triangle of mountain ranges which supports the vast table-land of Central India. The formation here is primitive, consisting chiefly of gneiss; but where it terminates in the plain of the Ganges, and forms the S. barrier of the latter, the formation is sandstone, as on the N. side of the same plain. The great W. range of mountains commonly, though improperly, called ghauts*, commences on the N.W., where the Vindhyan range terminates, and runs in a direction nearly N. and S., to between the 10th and 11th deg. of latitude, until at Coimbatore they meet the E. range, or Ghauts. The formation of this chain is primitive; but to the N. there is a great extent of overlying trap, columnar, prismatic, tabular, and globular. To the S., again, the overlying rock to a great extent is laterite, or clay iron-ore. The W. is much more elevated and continuous than the E. Ghauts, and some of its highest granitic peaks rise to the height of from 6,000 to 8,700 ft. It is remarkable for the absence of valleys of denudation, and of rivers running W., but is covered with extensive forests. In fact, the sea, in some situations, comes up to the very foot of the mountains, and nowhere leaves anything more than a narrow belt of low land, much broken by deep and narrow inlets. This is the coast of Malabar, exposed to all the violence of the S.W. monsoon, blowing without interruption for six months from the coasts of Africa and Arabia. Where the E. and W. Ghauts meet, commences the remarkable valley or gap of Coimbatore, which leaves a clear breach in the mountain chains, extending from the E. to the W. sea. A single chain of the same formation as the E. Ghauts then runs all the way to Cape Comorin, leaving the plain of Travancore to the W., and the more extensive plain of Madura and Tinnevelly to the E. The E. chain, or Ghauts, may be said to commence at the Neilgherry hills, which are among the highest mountains of S. India. From this point they diverge in an E. direction, and soon break into a succession of parallel ranges less elevated and more broken than the W. Ghauts. In their further progress to the N., the E. Ghauts break into subordinate ranges and valleys, which give passage to the great rivers that drain nearly all the waters of the peninsula into the Bay of Bengal. This range terminates nearly in the same parallel of latitude to the W. Granitic rocks, especially sienite, form the basis not only of the E. chain, but of the range which runs from the gap of Coimbatore to Cape Comorin. The sienite discovers itself at all the accessible summits, from Cape Comorin to Hydrabad, from the 8th up to the 17th deg. of latitude. Resting on the granite, gneiss, and talc-slate, that form the sides and bases of the E. chain, are sometimes seen clay, hornblende, flinty and chloride slate, with primitive marble of various colours. At the Pennar river, in the 14th and 15th deg. of latitude, clay iron-ore, or laterite, expands over a large surface, and sandstone begins to appear. At Visagapatam, Ganjam, and Cuttack the same formation continues, and the laterite extends through Midnapore up to Beerbhoom, sometimes reposing upon sandstone. A cellular carbonate of lime, called kankar, peculiar to the geology of India, is found over all the district now named, as well as in many other parts of Hindostan. We come now to the great coal-field, which runs for 65 m. in length, and 12 in breadth, on both sides the river Damoda. It is supposed to cross the Ganges, and to extend all the way to Sylhet and Cachar, from which places abundant specimens of surface coal have been brought. The rock formation here consists of sandstone, clay-slate, and shale, the latter, as usual, lying immediately over the coal. Mr. Jones, an English miner, opened the first colliery in India, in the year 1815, at this place. Three pits only have as yet been sunk, and to the depth of 90 ft.; seven seams of the mineral have been met with, one of them of the thickness of 9 ft.: coal is now largely consumed in Calcutta, chiefly for forges and steam navigation. From the Damoda river to Benares granitic rocks prevail. On approaching the river Sonne, however, sandstone becomes the surface rock, and, one interval excepted, extends to the N. of Agra, as far as the 28th deg. of latitude. The exception alluded to occurs in the lower portion of the province of Bundlecund, where granite again prevails, while the upper consists of sandstone. The great surface formations of the table-land itself are granitic, including always gneiss and sienite, with sandstone and the overlying rocks. Basaltic trap extends over the provinces of Malwa and Sagur, proceeds by Nagpore, sweeps the W. portion of the Hydrabad territory down to the 15th deg. of lat., where it bends to the N.W., and running all the way to the coast of Malabar, forms the shores of the Concan. In all, it seems to cover an area of about 200,000 sq. m. We may observe here that the geological formation of India is extremely simple, compared with that of European countries, consisting only of four classes of rocks, viz., the granitic, the sandstone and clay-slate, the trap, and the alluvial. Of the latter we have examples on a great scale in the plains of the Ganges and Indus, which meet between the 28th and 31st deg. N. lat., and the 76th and 77th deg. E. long.; as well as in the plain lying between the E. Ghauts and Bengal from Cape Comorin to Cuttack.

After this view of the surface and geology of Hindostan, the following natural geographical divisions may be made: 1. The ranges of the Himalaya with their valleys. 2. The Gangetic plain, comprising only the tract of inundation, and which rises very little above the level of the sea. 3. The upper plain of the Ganges, from the province of Bahar inclusive, up to the foot of the first range of the Himalayas, where the Ganges and Jumna issue from the hills to the N., bounded to the S. by the Vindhyan range, and to the W. by the great desert. The height of the E. portion of this division may be about 500 ft. above the level of the sea, and the land rises gradually as we proceed N., until, where the great rivers emerge into the plain, it has an elevation of 1,000 ft. 4. The N. portion of the great central table-land, as far S. as the valley of the Nerbudda, which generally intersects the table-land in question from E. to W. The height of this portion of the table-land ranges from 1,700 to 2,000 ft., as at the towns of Oojien, Indore, and Mhow. 5. The portion of the table-land which lies S. of the valley of the Nerbudda, down to the junction of the E. and W. Ghauts, and the valley of Coimbatore. The height of the table-land ranges here from 2,000

* Ghaut means a pass or passage of any kind, not a mountain.

ft. to 2,400 and 3,000, as at Poonah, Seringapatam, and Bangalore. 6. From the gap of Coimbatore inclusive to Cape Comorin. 7. The narrow strip of low land lying between the W. Ghauts and the sea, or coast of Malabar, including the W. acclivities of the mountains themselves. 8. The alluvial plain, of unequal breadth, which lies between the E. Ghauts and the Bay of Bengal, generally called the Carnatic, rising gradually from the shore to the foot of the mountains: at the town of Arcot, 60 m. inland, it is 490 ft. above the level of the sea;—and 9. The peninsula of Gujrat, with the adjacent country, containing much mountain-land and a few plains. All these differ so materially in their physical aspect, climate, geological formation, animal and vegetable productions, as well as in the character of the nations and tribes which inhabit them, as fully to warrant this distribution.

Rivers.—The rivers of India have their sources either in the Himalaya mountains, or within the great central table-land. The first class are by far the largest and most important. Beginning from the E., the first great river which occurs is the Bramahputra. The source of this stream is not exactly ascertained; but its course has been estimated at about 860 m., and it is believed to discharge a larger volume of water than even the Ganges. Its course in the plain of Bengal, from Goyalpara to the bottom of the Bay of Bengal, where it debouches, is but 350 m.; and having a rapid current, and passing generally through a wild and inhospitable country, it is of comparatively little service to commerce or navigation. The Ganges, called *Ganga* by all the Indians, has its origin in two principal branches, about 31° N. lat., and between 70° and 80° E. long. Its whole course is reckoned at about 1,350 m.; but from its entrance into the plain at Hurdwar, its course to the sea, into which it falls within a few m. of the Bramahaputra, is about 1,200 m. Within the plain, all its branches are navigable for boats; and the Bhagherettee, its most W. branch, usually called by Europeans the Hooghly, is navigable for ships of 400 tons burden, as far as Calcutta, 100 m. from the sea. According to Major Rennel, the principal branch discharges 80,000 cubic ft. of water per second. The greatest of the affluents of the Ganges is the Jumna. It also has its origin in two branches within the highest masses of the Himalaya, to the W. of the sources of the Ganges. Its course within the mountains is about 120 m.: it issues into the plain about 30 m. W. of the Ganges, and here its bed is about 1,200 ft. above the level of the sea. In the course of a few miles, however, passing over some falls, it takes a lower level. After a course of 450 m., passing by the Mohammedan capitals of Delhi and Agra, and being navigable for a great part of its course, it joins the Ganges at Allahabad. The other principal affluents of the Ganges which take their source from the Himalaya, are the Ram Ganga, which joins the Ganges above Canoge; the Goomtee, which passes by Lucknow, and after a winding course, whence it derives its name, joins the Ganges between Benares and Ghazeepoor; the Gogra, with a course of 600 m., and the largest of the affluents of the Ganges on this side the Himalaya, after passing through Fyzabad and Oude, joins the Ganges above the town of Chupra; the Gunduck, which has a course of 450 m.; the Bagmutty, which passes close to Cat-mandoo, the capital of Nepaul; and the Coosy, originating in the table-land of Tibet, and which enters the Ganges at Boglipoor. The great delta of the Ganges may be said to commence at Sicligully. The first bifurcation of the Ganges itself commences at Sooty, 20 m. below Rajamahal, at which last place the river is pressed in by some low hills of that name. The Ganges receives, after this, from the Himalaya, the Mahanada and Teesta, which have their sources in the mountains of Nepaul and Bootan, with courses of from 230 to 300 m. After the junction of these, the Ganges communicates with the Brahmaputra by a variety of branches. The rivers which fall into the Ganges, or its affluent the Jumna, from the N. acclivity of the central table-land, are the Soane, the Betwah, and the Chumbul: the latter has a course of 400 m. Both it and the Betwah fall into the Jumna. The Soane is an affluent of the Ganges, and falls into that river a little above Patna. (*See* GANGES.)

Lakes. — India is remarkably deficient in lakes, and in fact contains no large collections of water, fresh or salt, such as the lakes of N. America, N. Asia, Switzerland, or even Scotland. In the N. parts of Bengal there are a few freshwater lakes of some extent, but the greater number of this description found throughout the country are supposed to be nothing more than the old channels of rivers which have taken a new course. Of the same character, in some respects, are the Chilka lake in Cuttack, and the Colair lake in the Circars; the first of which communicates with the Mahanuddy, and the last with the Godavery and Kistna. The Chilka lake is 35 m. long and 8 broad, and contains several islands, and abounds in fish: it is separated from the sea by a sand-bank not above ½ m. broad. The Colair lake is 24 m. by 12 in the dry season, but during the periodical rains, expands from 40 to 50 m. in length. During the latter period, the whole flooded country, including the islands of the lake, are fertilised by the deposit of mud brought down by the two rivers; and hence Major Rennel, with some propriety, compares the neighbouring country to the delta of the Nile. In the sandy desert to the W. of the plain of the Ganges several salt lakes occur, the largest of which, however, does not exceed 20 m. in length. Collections of salt water, more or less connected with the sea, are of more frequent occurrence. Several considerable ones of this nature are to be found on the lower E. coast of the continent; but the greatest and most remarkable is the Runn, lying between the Gulph of Cutch and the mouths of the Indus, which is believed to occupy a space of 5,000 sq. miles.

Coast outline. — The outline of the coast of Hindostan is comparatively little broken by any considerable inlet of the sea. From the mouths of the Indus to those of the Ganges there are but three great gulphs, those of Cutch, Cambay, and Bengal; if the latter, indeed, which, though it breaks the coast of Asia, does not break the coast of Hindostan, can be reckoned in this class. Harbours are even less frequent. Along the W. coast, over 14 deg. of lat., there is but a single good one, Bombay; and from Cape Comorin to the W. mouths of the Ganges, a distance of 1,500 m., there is not one. In this unfavourable feature of its geography India resembles more the W. coast of America, or the E. and W. coast of Africa, than the E. coast of America, or the shores of the N. countries of Europe. The Indian coasts are also in a great measure destitute of islands. Unless we include Ceylon, which can hardly be included, there is not one on the E. coast; and on the W. there are, very few, and these of inconsiderable size. In this respect, Hindostan is remarkably distinguished from the two great corresponding Asiatic promontories of Malacca and Cambodia, the coasts of which are thickly studded with islands, many of them of considerable magnitude.

Climate. — In a country which embraces 27° of latitude, which contains extensive plateaus, elevated from 2,000 to 3,000 ft. above the level of the sea — some of the most extensive plains in the world, almost on a level with, or but a few hundred ft. above, the sea — the highest range of mountains in the world — tracts of bare rock — deserts of mere sand, and deep primeval forests, — it is needless to say that there must exist a very great diversity of climate. But besides the diversity arising from these causes, the distribution of rain is another source. The whole continent of India, up to the 35th deg. of lat., is subject to the influence of the monsoons, which blow from the N.E. during the serene temperate months of winter, and from the S.W. during the tempestuous and hot or rainy months of summer and autumn. This is the general rule; but in India, as in other countries of Asia under the influence of the monsoons, and where there are ranges of mountains running N. and S. of sufficient elevation to intercept the clouds, the time of the periodical fall of rains is reversed. To the W. of the great chain of the W. Ghauts, on the one hand, over 11° of lat., the periodical fall of rains corresponds with that of other parts of India, or takes place during the W. monsoon. E. of the Ghauts, on the other hand, over 8° of lat., the fall of rain takes place during the E. monsoon; while the table-land which lies between the two ranges partakes, to a moderate degree, in both falls. As a general rule, the year is divided in India into three well-defined seasons: a hot, corresponding with part of spring and summer; a wet, corresponding with part of summer and autumn; and a cold, corresponding generally with our winter months. With respect to temperature, much of India being within the tropics, and the remaining portion within 12° of the tropic, the whole is entitled to the designation of a hot country. On the low plains within the tropic, and up to about the 18th deg. of lat., winter is scarcely perceptible, and the year may be said to be divided into wet and dry. From that parallel N., winter becomes more and more distinct, and beyond the 27th deg. lasts for six months, during which the climate is not inferior in point of agreeableness or salubrity to that of Italy. This is, however, counterbalanced by the severity of the hot and dry season, which lasts for three months, and is so intense as nearly to destroy all appearance of vegetation. On the elevated central plateaus, the temperature is generally from 6° to 10° Fahr. lower than in the same latitudes on the low lands, and the fall of rain being more equally distributed, the necessary effect is a climate in general temperate and agreeable, though not always salubrious. In the valleys between the two great chains of the Himalaya, the same order of seasons generally prevails as in the plains, and here the thermometer is rarely less than 18° or 20° lower than in the plains under the same parallels. A few examples may be given of temperature, as indicated by the thermometer. The mean temperature of Bombay is 82° Fahr., and in the table-

land in the same latitude, at an elevation of 1,700 ft., it is 77°. At Madras the mean annual temperature is 84°, and at Darwar on the table-land it is 75°. At Utakamund, in the Neilgherry mountains, 7,000 ft. above the level of the sea, the mean temperature is 56°, or 28° lower than that of Madras. Here the thermometer sometimes rises as high as 69°, and rarely falls as low as 20°. In the peninsula of Gujrat, and on the level of the sea, the thermometer occasionally rises to 100° in summer, and falls to 45° in winter. The mean annual temperature of Calcutta is 79° Fahr. In May, the hottest month, it is 86°, and in Jan., the coldest, 67°. In summer, however, the thermometer frequently rises above 100°, and in winter falls so near the freezing point that, with a trifling assistance from evaporation, ice is easily obtained. Within the upper portion of the plain of the Ganges, both the latitude and elevation contribute to reduce the temperature. From the middle of Dec. to the middle of Feb. the thermometer sinks every day below the freezing point, and small pools of water are covered with ice, and the average temperature of Jan. is 37°. From April till the middle of June, when the rain falls, the thermometer gradually rises to 90°, and even to 110°; and at Delhi, Agra, and other places on the W. bank of the Jumna, in the whole period from March to June, scorching S.W. winds, proceeding from the desert, prevail. It is in these same countries that, during the whole period from the beginning of Nov. to that of March, the climate equals that of S. Italy.

Nations and Tribes. — Besides foreigners, who, as peaceable immigrants, or conquerors, have settled in India during the last twelve centuries, but chiefly during the last eight, the number of aboriginal races distinguished by differences of language, manners, states of society, and great variation, if not difference, of religious belief, is still very great; and undoubtedly was much greater before the blending which must have been more or less the result of the extensive conquests of the N. invaders. These have been in active operation for nearly 7 centuries, and, in all likelihood, have been materially promoted by the conquests of the more powerful Hindoo states over the smaller. There are at present spoken in India, by the most civilised races, not less than 25 distinct languages or dialects, indicating the existence of as many distinct nations; but, including tribes more or less savage or barbarous, at least 50 languages, indicating the presence of at least as many distinct tribes. Of the more civilised nations, eight may be said to be distinguished from the rest by some superiority of civilisation, as implied in the possession of a national literature, a national alphabet, superior population, superior industry, a greater progress in the useful arts, with the richer and more extensive territory which they are found to occupy. These are the Bengalee, Ooriya, Mahratta, Gujratee, Telinga, Tamul, Karnata, and Hindi or Hindostanee nations. The Bengalee nation occupies above 80,000 sq. m. of fertile land, chiefly within the delta of the Ganges, and amounts in numbers to nearly 25,000,000. The Tamul nation occupies 56,000 sq. m. at the S. extremity of the peninsula, and numbers between 6,000,000 and 7,000,000 people. The Telinga nation occupies 100,000 sq. m. of the N.E. portion of the peninsula, and numbers probably between 7,000,000 and 8,000,000 people; and the Ooriya nation occupies at least 17,000 sq. m. of the low land which connects the delta of the Ganges with the S. peninsula, and numbers nearly 4,000,000. The Mahratta nation extends probably over 200,000 sq. m. of territory, lying between the 22d and 23d degrees of N. lat., and its numbers may be roughly computed at 12,000,000. The Karnata or Canara nation, occupying a central portion of the table-land S. of the 18th degree of lat., may occupy about 75,000 square m. of territory, and their numbers may be taken at about 5,000,000. The nation speaking the Hindostanee or Hindee language occupies at least 100,000 sq. m. of the upper portion of the valley of the Ganges, and cannot amount to less than 20,000,000, physically and intellectually the most vigorous of all the Indian races. The most enterprising of these nations, it is to be observed, have occasionally passed, either as conquerors or colonists, into the territories of each other or of their neighbours. Thus we find colonies of the Tamuls settled in Malayalim; of Telingas in Karnata and the Tamul country; of Mahrattas in the Tamul, Telinga, and Karnata countries; of Karnates colonised in the countries below the E. Ghauts; and colonies from the upper plain of the Ganges settled as far as Gujrat, Bengal, Nepaul, and even Malabar. These colonies, of whatever nation, not unfrequently preserve their national language, their original manners, and even the purity of their descent, in their adopted countries. The barbarous and savage tribes of India are universally to be found in the recesses of mountainous and hilly regions, never within the fertile plains or extensive table-lands; and there is scarcely any considerable range throughout India in which some of them are not to be found. They are, however, most numerous on the E. frontier of Bengal, in the fastnesses of the mountainous and sterile region of Gundwana, and generally in the ranges of hills which lie between the Gangetic plain and the great central *plateau*. These barbarous tribes have been supposed by some observers to be the aboriginal natives of the country driven from the plains to the hills by strangers and invaders; but this hypothesis seems little better than a gratuitous assumption; the mountaineers are no doubt aboriginal, in common with the inhab. of the plains, and their barbarous condition seems naturally enough accounted for by the unfavourable circumstances of their situation, and their remaining in that condition to the hostility of the powerful occupants of the lower and more fertile lands.

Foreign Settlers. — Besides the original and peculiar inhab. of Hindostan, a crowd of foreign colonists or settlers of different nations, either scattered indiscriminately over the country or confined to particular spots, from the accident of their arrival or other chance, forms a considerable proportion of the present population of the country. These, following generally the order of their arrival, or supposed arrival, are as follows: — Jews, Syrian Christians, Arabs, Armenians, Persees, Persians, Afghans, Tartars, Turks, Abyssinians, Portuguese, English, Dutch, French, Danes, and Chinese.

Hindoo Religion. — The forms of religious worship which prevail are the Brahminical, Buddhist, Jain, Seik, Mohammedan, Jewish, and Christian. These, and especially the most prevalent of them, are again divided into many sects. But besides national, colonial, and religious distinctions, there are other nearly innumerable divisions of the great mass of the people. Many are distinguished by the profession which they have immemorially followed; many by their condition as slaves; and many as outcasts, without being slaves: some are in the hunter, and a few in the pastoral state: some are freebooters, others pirates; and there are whole tribes who have, time immemorial, been illustrious as thieves, robbers, highwaymen, and professional assassins. These distinctions into tribes and families are all hereditary; each section and even subsection is isolated by nearly impassable limits from the rest of the society. In the prov. of Malabar, for example, which contains but 6,000 sq. m. and about 900,000 inhab., there are about 300 different tribes, few of which are founded on distinctions strictly religious or national. In Canara, with an area of 7,700 sq. m. and 657,000 inhab., there are, exclusive of strangers and foreign settlers, 104 native castes; and in the rural district of Burdwan, in Bengal, it was found that in 26 villages, containing a pop. of about 40,000, there existed, independent of strictly religious distinctions, no fewer than 44 castes, chiefly discriminated by the trades or professions which they followed, each caste being known by a distinct name, each being hereditary, and each incapable of eating, drinking, intermarrying, or in any other manner intimately associating with the others!

The circumstances on which this almost infinite distinction is founded are often trivial, and sometimes even ludicrous; and yet the practical separation is not therefore the less real. For example: one tribe of oilmakers in Telingana, who use two oxen in the mill, will hold no intercourse with another following the same profession, but who use one only; they will neither follow the same gods nor the same leaders. The great division of the *right* and *left hand*, which prevails throughout the S. parts of India, but which is not known in the N., does not appear to be of a religious character. One of these tribes ranges itself on one side and another on the opposite; and serious disturbances of the public peace are not unfrequently the result of senseless quarrels which concern neither religion nor politics. It results from this account of the national, colonial, religious, and other distinctions which prevail throughout Hindostan, that society is there composed of an infinity of discordant and heterogeneous materials, incapable of union or combination, and therefore easily overcome, and as easily retained in subjection; and hence one great cause of the facility with which, in all ages, foreigners have overrun India, and held it in subjection.

Under the general name of the Hindoo religion are comprised many different doctrines, and an infinity of sects and castes, which it would be useless, and all but impossible, to describe, or even to enumerate. This religion, perhaps beyond any other, pervades the entire frame of civil society, and mixes itself up with every concern of life, public, private, and domestic. A Hindoo can neither continue his species, be born, die, eat, drink, or perform any of the most ordinary or even vulgar functions of the animal economy, unembarrassed by its trivial and unmeaning ceremonies: military enterprises, the details of commerce, and the operations of agriculture, are more or less under its guidance; it is part and parcel of the code of laws, or, to speak more correctly, it is itself the law. Almost every act of a Hindoo may, in fact, be said to be more or less a religious act. The most civilised and instructed of the Hindoos, but these only,

believe in the immortality of the soul, and in a future state of rewards and punishments. The belief in the transmigration of souls is somewhat more general, but far from universal. There are reckoned to be four orthodox sects, whose principles are determined by the preference they give in their worship to some one of the greater gods of the Hindoo pantheon; for there are gods, great and small, some almost omnipotent, particularly for mischief, and others so feeble as to be all but contemptible, and no match even for an ordinary Brahmin! According to the best authorities, the Hindoo pantheon is peopled by precisely 333,000,000 deities; but as no one has attempted to name them, it can only be concluded that the Hindoo deities are in reality innumerable. They consist of three principal gods, who are supposed to represent (but their powers and functions are frequently interchangeable at the caprice of their votaries) the powers of *creation*, *destruction*, and *preservation* or *regeneration*; and of the families of these, with deifications of the elements and powers of nature, of heroes, and especially of saints and abstract ideas. Among the lower orders of the people, and especially among the ruder tribes, a sort of feticism prevails; and trees, rocks, and rude masses of stone are worshipped or abandoned, according to the fears, hopes, or caprices of their votaries. The present race of Hindoos are tolerant in all matters of religion, or, to speak more correctly, they are indifferent: in fact, they go even beyond indifference, and in cases of emergency are ready to invoke any strange god, or strange saint, by whose aid they may hope to profit. The Mahratta chiefs are in the frequent practice of invoking Mohammedan saints; and Madajee Scindia, the chief of the Mahratta state, a shrewd and politic prince and a great conqueror, was in the habit of making frequent offerings at the tomb of a celebrated saint in Ajmeer, the same to whose shrine Akbar, the most illustrious of the Mogul emperors, walked 230 m. barefooted. The Mohammedans of the lower orders, who in some parts of the country are indeed little better than Hindoos, return the compliment, and in their need propitiate the gods of the Hindoos; and each will join in the religious festivals and processions of the other. In the S. of India the Hindoos, in their distress, will not unfrequently propitiate even the Catholic Christian saints, and the Christian Hindoos reciprocate. It is not, as already stated, to matters of doctrine or morality, that the Hindoos attach importance. In the same tribe, or even family, will be found sectarians of the Destroying Power, of his consort, of the Preserver in several of his incarnations, (the Creator among the Hindoos has no worshippers), all intermarrying with each other, and the wife adopting the opinions of the husband without any difficulty. Some of the Christians of S. India intermarry with the Hindoos of their own tribe, without any forfeiture of caste on either side, provided external observances be attended to. Persecution in recent times is the exception: but the sectaries of Nanak or the Seiks, have been considerable persecutors in their way: they have destroyed most of the mosques within their territory, and will seldom allow Mohammedans to assemble in the few that remain: they forbid them from eating beef or praying aloud, according to law. What, however, the Hindoos really attach importance to are not doctrinal matters, but distinctions of caste, ceremonies connected with marriage and funeral rites, and the whimsical observances respecting supposed purity and impurity in regard to food and other matters connected with ordinary domestic life. The distinctions of caste are the most remarkable of these, and form indeed the characteristic mark of Hindoo society. Every one has heard that the Hindoos are divided into four great classes or castes, founded upon the great distinctions which prevail amongst all people in their first advance towards civilisation; that is, into priests, soldiers, traders, and labourers. As such, a distinction into tribes is natural, and indeed known to have existed among other people, it is highly probable that it prevailed with the first rude tribe or nation with which the Brahminical form of worship originated, and that it constituted the foundation of the present superstructure of the castes.

The first in rank among the four great classes, of course, is the Brahmin or priest; and next to him comes, very naturally, the soldier: at a great distance follows the industrious capitalist or trader; and far removed from all is the labourer. These divisions are hereditary, impassable, and indefeasible. Such is the theory of the distinctions of Hindoo society; but the practical and real distinctions are very different indeed. The attributes of the different classes, as they are described in the ancient books of the Hindoos, we may be sure never could have been practically in operation. These books, it must be recollected, were written by Brahmins who claimed an exclusive right to expound them, and all but the monopoly of reading them; and it was their interest to dwell on the immeasurable superiority of their own order; but it is hardly credible that any society should be able to hold together for a moment, in which laws such as we find in the Hindoo sacred books were *bonâ fide* enforced. For example, it is enacted among myriads of the same sort, that if a labouring man sit upon the carpet of a priest, he shall be punished, either by having a hot iron thrust into his buttock, or by being branded, or banished the kingdom, or having the offending buttock cut off! Many, in fact, of the Hindoo laws appear to have been framed by the Brahmins more for the purpose of deterring, through the terrors of superstition and punishment, the other classes from interfering with their privileges, than for any other object. Whatever may have been the original attributes and privileges of the great classes, at their first institution, it is certain that these classes themselves can hardly be said at present practically to exist. In the advance of society, the increase of population, the extension of commerce and conversion, and the operation of the human passions, they have given way to a different order of things. They are referred to by the tribes into which Hindoo society is at present divided, as a matter of genealogy; some tribes claiming their pedigree from one or other of the original castes; their neighbours denying the authenticity of the claim, and setting up claims of their own; but the greater number of the people making no pretence to this purity of descent, for such it is considered even in its lowest ranks. In the most ancient Hindoo work extant, the *Institutes of Menu*, which has been computed to be about 2,700 years old, there already existed nearly a hundred castes; and it must be supposed that the enumeration was confined to that part of the country in which the work was written. The number of the castes not coming within the pale of the four great divisions, suggested the notion of the mixed castes, supposed to originate from an illegitimate intercourse between the four great orders, with the crosses which again sprung from these. This was clearly an afterthought — a new theory made for the occasion, and wholly inadequate to explain the actual state of society as we find it. This may be made sufficiently plain by a few examples. Among the 25,000,000 of people who speak the language of Bengal, there are none who even pretend to be of the second or third order, that is, of the military or mercantile classes: all who are of these two orders are comparatively recent immigrants from the north, and identified as such. In so far as the four great orders are concerned, the native inhabitants of Bengal consist, in fact, of Brahmins, and those who are not Brahmins. The Brahmins themselves consist here of two classes; viz. those who can trace their pedigree to the N. of India and who are held in the highest repute, and of those who cannot, — far less esteemed. The Brahmins of Bengal, including all of both these classes, consist of no less than 169 subdivisions, claiming various degrees of purity, and not one of which will eat, drink, or intermarry with another! The next most important caste in Bengal is denominated Chysta, and is chiefly engaged in mercantile pursuits: this is the tribe whose name has been supposed by many to have furnished the English language with the word *caste*; but this is a mistake, for the term is simply the Spanish and Portuguese word *casta*, meaning race or lineage. They are reckoned pure Sudras, or persons of the original servile class, and amount to 83 subdivisions, equally unsocial among themselves with the Brahmins. Among the people speaking the Orissa language, the military order is altogether wanting, and there are but a few families generally reputed of the third class. In Malabar and Canara the second and third orders are wanting, the first of these being supplied by the military aristocracy of the Nairs, who are considered to be pure Sudras, or of the servile class, that is, of the class represented by the Hindoos as being in the last degree of degradation: they are, notwithstanding, the lords of the soil, and, before very recent conquest, the real sovereigns of the country. The celebrated Rajpoots, the most distinguished military order among the Hindoos, have, according to the Sanscrit writings, a vulgar origin; they are sprung from the mercantile classes on the paternal side, and from one of the mixed classes on the maternal. All the warlike and conquering nation of the Mahrattas, who are not Brahmins, are deemed to be of the fourth, or servile order. In every part of India there is a considerable portion of the inhab. who are utter outcasts, or, at least, beyond the pale of the Brahminical religion, condemned to this exclusion by their servile condition, their poverty, or the meanness of the employment in which they are engaged, the proportion of this degraded class being, contrary, perhaps, to what might have been expected, always found to be greatest in the least civilised parts of the country.

In the district of Dinagepore, in Bengal, out of a Hindoo population of 800,000, it was found that 8¼ per cent. only were considered pure tribes, 46¼ impure, 19¼ very low, and 26¼ abominable. In Malabar, out of a population of 720,000, 100,000 are in a state of slavery, and treated by the Brahmins and Nairs as if they were hardly human. Even a great proportion of the free and industrious classes must not approach, owing to their alleged impurity, the person of a Nair nearer than a

prescribed number of paces, this Nair himself being, as already mentioned, the lowest of the original classes; a being, according to the ancient Hindoo writings, expressly created for the purpose of performing servile offices to the Brahmins and other superior classes. What is still more remarkable, and the same thing obtains with respect to many other impure classes in the S. of India, the Brahmins refuse to afford them instruction or spiritual comfort: in fact, they are not of the Brahminical religion at all; never enter the Brahminical temples, or offer worship to the gods of the Brahmins; but have their own peculiar deities, priests of their own caste, and, contrary to the creed of the Brahmins, usually have no knowledge of a future state. The Brahmins, although they are to be found throughout India, and have a vast influence every where, are divided into more numerous families and varieties than any of the other classes; and while each is revered by its own immediate followers among the laity, they almost all hold each other in contempt as pretenders. They go the length of reckoning no less than 2,000 separate distinct families of their order. The order of the Brahmins composes the very essence of Hindooism: the Brahmin who lives by charity, or the voluntary contributions of the laity, and who performs no part of the common ritual of the Hindoo worship, is held in the highest repute. Next to him comes the Brahmin who lives by his industry and temporal employments, provided they be such as become the dignity of the order; but which commonly exclude holding the plough, and performing any of the manual employments of agriculture. The lowest rank of all is assigned to those Brahmins who perform the common ritual of the Hindoo worship; and among these last, the meanest office of all is that of performing the service of the gods in the temples. To exercise even the office of astrologer or village priest, is far more respectable. The service of the temples, indeed, has fallen into such disrepute, that the Brahmins in some cases have abandoned it to the inferior classes. Fastidiousness in respect to food is a characteristic mark of purity of caste, and no people ever carried this matter to so absurd and extravagant a length as the Hindoos. On this point the most essential thing of all is to abstain from eating the flesh of the cow. He who eats beef is no Hindoo, but an utter outcast. He who kills an ox by accident ought to be excommunicated; and he who kills one designedly ought to suffer death. This is perhaps the only religious precept which is of universal acceptance among all Hindoos; pretty much in the same way as an abstinence from the flesh of the hog is imperative upon all Jews and Mohammedans. The higher classes commonly abstain from eating the flesh of all domestic animals except that of the goat or sheep. Hindoos generally partake readily of almost all descriptions of game, the wild boar included. The impure classes and outcasts, a numerous body of the people in many parts of India, hardly reject any kind of attainable aliment, and devour, without scruple, such articles as carrion, rats, and river tortoises, that feed most impurely: the higher castes commonly eat but once a day, and a few of the most fastidious only when the sun is out; so that in cloudy weather they are occasionally put to very trying inconvenience. To abstain from spirituous and fermented liquors, and intoxicating drugs, is a general precept of the Hindoo religion; and the degree in which abstinence from them is observed marks the purity or impurity of the class. Brahmins and persons of the mercantile order generally abstain altogether from the use of spirituous liquors, while the impure classes and outcasts partake of them very freely.

The distinctions of caste, founded upon employments, though not always rational, is generally much more so than any others. The most honourable employment is that of the priesthood, provided the individual exercising it live on eleemosynary gifts, confine himself to giving instruction, and that that instruction be not given to any person of an impure caste, that is, to those who cannot afford to pay handsomely for it, which would be very discreditable. The military profession, and the wholesale mercantile profession, are almost equally honourable. Agricultural employment is creditable almost every where; its respectability being, however, somewhat impaired where slaves are numerous, and principally employed in the labours of the field. All the more ordinary trades, immemorially exercised by the Hindoos, are respectable in their way; such as potters, braziers, goldsmiths, weavers, and barbers. All trades or employments implying the death or destruction of animals, or of which the material is an animal substance, are either low or very impure; such as fishermen, washermen, hunters, snake-catchers, lime-shell burners, curriers, shoemakers, and butchers. Palm-wine drawers and distillers are impure, from the impurity of the objects they produce. Sweepers, washers, burners or buryers of the dead, and public executioners are utterly abominable, and indeed sheer outcasts. There are, of course, endless anomalies in this, as in every thing else connected with the Hindoo religion. Bankers in Bengal, for example, rank below barbers. All professions which imply poverty in the parties exercising them are mean employments. Basket-making is a mean employment, and the precarious search for drugs and honey in the forests is also mean. Almost every employment above a handicraft trade is open to Brahmins, and of course to all that are below Brahmins.

It must not be supposed from what has now been said, that the tribes or families exercising each profession or trade are always the same; on the contrary, they differ in every province of India: even in the same province, two or three tribes, or a dozen tribes, may exercise the same profession or craft. In each family, trades and professions are generally hereditary, as a matter of convenience, as happens in all rude societies, but there is no impassable barrier between one profession and another, there is nothing that should prevent the son of a potter from becoming a goldsmith, or the son of a goldsmith from turning his hand to the loom, except that in particular situations the parties might forfeit some hereditary perquisite annexed to their employment by the change. Reckoning the entire British army in India, perhaps there is hardly a caste, or sect, or religion, which is not to be found in its ranks — from the purest to the most impure, and most abominable — from the most orthodox to the most heretical. Brahmins may there be seen commanded by Sudras; and men of pure castes may be seen in the ranks, with men of no caste for their officers. The Brahmins under these circumstances are as exemplary for their subordination as any other class; a satisfactory refutation, upon a large scale, of the fallacy and vanity of the pretensions set up for them in the ancient writings of the Hindoos, and maintained by some European commentators on those writings. The institution of the castes, as now described, is universal throughout Hindostan.

Other Forms of Religion. — These are the Jain, Buddhist, Seik or Singh, the Mohammedan, and Christian. The period or the place in which the first of these had its origin is unascertained: at present, it prevails chiefly in the great province of Gujrat and in Talawa, on the western shore of India, but it is to be found more or less scattered through every part of the country. The Buddhist worship originated in Bahar, within the great plain of the Ganges, and, according to statements which have a considerable air of probability, in the sixth century before Christ, or about 200 years before the expedition of Alexander. This form of worship, so prevalent in Ceylon, and in all the countries to the E. and N. of Hindostan, is nearly extinct in that country itself. Nanak, the founder of the Seik heresy, confined to the countries lying near to or amongst the five great tributary rivers which eventually constitute the Indus, was born in 1419; so that this religion is of little more than four centuries' standing. The Mohammedan religion began to make some impression in India about the beginning of the 11th century, and the descendants of foreign settlers, or the converted nations of this persuasion, are at present supposed, for all India, to amount to about a *seventh* part of the entire population. It is remarkable that they are not most numerous in those parts of the country which were the seats of Mohammedan power, but rather at the extremities, such as the remote border provinces of Bengal, in which more pliant materials for proselytism were found. The Christians abound most in the S. parts of India: the greater number are Nestorians, who are supposed to have embraced Christianity, through the labours of Greek missionaries from Syria, as early as the second and third centuries of the Christian æra. Most of the remainder are Catholics, the descendants of Portuguese, or persons converted by Portuguese missionaries.

Population.—Of the whole territory of Hindostan, supposed to contain, as already mentioned, 1,300,000 sq. m., the population may be estimated at about 130,000,000, or about one half the population of Europe. The ratio of pop. to the sq. m. is therefore near 100 to 1; whereas that of Europe is very little more than 63 to 1. This pop. is very unequally distributed. The well-watered alluvial plains and valleys are every where thickly, and the mountainous or hilly regions always thinly, inhabited. From the extreme S. point at Cape Comorin, up to the 10th deg. of lat., the pop. is in some parts as low as 74 inhabitants to the sq. m.; at Madura, watered by the river Vay, it rises to 160; at Tanjore, watered by the Cavery, it rises to 225, being the densest pop. of the whole of the S. portion of India. In the Carnatic, or plain lying between the E. Ghauts and the sea, it is about 96. On the table-land between the Ghauts, and up to about the 16th deg. of latitude, where the land is high and dry, with little other than artificial irrigation, the rate drops to 72. In the narrow plain between the W. Ghauts and the sea, and from the 10th deg. of lat. up to the 20th, it is estimated at about 100. Of the whole table-land, extending from the 16th deg. of lat. up to the Vindhyan range, and S. border of the Gangetic plain, probably the pop. does not exceed 50 to the sq. m. The

pop. of the great peninsula of Gujrat rises to about 170. More than half the whole pop. of Hindostan is contained in the great plain of the Ganges: computing the area of this tract at 290,000 sq. m., and the pop. at 60,000,000, the average rate per sq. m. exceeds 200, which is a higher ratio than that of our own island. Within this wide range, however, there is a great difference in the rates of population. From the bottom of the Bay of Bengal up to the W. confines of Bahar, which comprises, of course, the tract of inundation, a territory of upwards of 80,000 sq. m. contains a pop. of more than 300 to the sq. m. The tract of inundation itself far exceeds this. Thus the district of Burdwan has a density of 593; that of Hooghly, 548; the districts of which Calcutta is the centre, 540; and that of Moorshedabad, above 400. As the country becomes mountainous to the E., the population diminishes. Thus Backergunge has but 450; Chittagong, 235; and Tipperah, 200 to the sq. m. In the low lands to the S. of Bengal, including Midnapore and Cuttack, the ratio is but 225. From the W. confines of Bengal to the confluence of the Jumna with the Ganges, the country is far beyond the reach of inundation, and although very fertile, the pop. is only at the rate of 220 to the sq. m.; but in this is included the large, hilly, and wild district of Rhamgur, which has no higher ratio than 100. The whole of the plain to the W., from the confluence of the Jumna till it terminates in the Great Desert, may be computed to have a density of population not exceeding 180 to the sq. m., and the proportion generally diminishes as we proceed westwards. The Punjab, or plain watered by the five affluents of the Indus, probably does not contain a pop. of more than 100 to the sq. m., and 50 would be a large estimate for the delta of the Indus. The extensive desert lying between the western limit of the Gangetic plain most probably does not contain 10 inhabitants to the sq. m.

History. — The Hindoos, it is now fully admitted, have no history; they do not even possess any rational, connected, and authentic narrative of their own affairs for a single century. The oldest inscription found in Hindostan, and it is of doubtful authenticity, dates but 23 years before Christ: one of the most authentic æras dates but 57 years before that of Christ; and another of extensive currency dates 78 years after Christ, the origin of both being buried in fable. The earliest of these dates is but three centuries before the invasion of Alexander, and about five centuries more recent than the commencement of authentic history in Europe. The temple of Juggernaut is but 640, and a ruin connected with it 1,142 years old, the latter being, however, a date which rests on tradition only. In so far, then, as history is concerned, had it not been for the companions and successors of Alexander, who describe the Hindoos as in many respects resembling what they are at the present day, we might, for all that their own history teaches, be led to believe that they were not an ancient, but a comparatively recent people. Independent of history, however, there remains abundant evidence to show that the Hindoos had been very early civilised. The most remarkable, perhaps, is the existence amongst them of the literature of at least three languages, which have long ceased to be spoken by any living people. These are, the Sanscrit, a language of complex grammatical structure, like the Greek, Latin, or Arabic; the Sariswati, or Pracrit, a language derived from the Sanscrit, but of simpler structure, and bearing something like the relation to it which the Italian does to the Latin; and the Pali, a language also of a simpler structure, derived from the Sanscrit, but formed in a different part of the valley of the Ganges. The first of these is at the present day the sacred language of all who follow the Brahminical religion, as the last is that of those who follow the Buddhist worship, whether in India or beyond it. All these languages appear to have been dialects of people who lived in the upper portion of the valley of the Ganges. The Hindoos and their ancient writings point very distinctly to the territory lying W. of Delhi, on the right bank of the Jumna, the principal affluent of the Ganges, as the seat of the people who spoke the Sanscrit. There are certainly many arguments in favour of the belief that the Brahminical worship originated in this quarter, and that the nation that propagated it, and spread civilisation over India, inhabited this country. Thus, the upper and elevated portion of the plain of the Ganges is as much the principal scene of all the great events of Hindoo mythology as Greece was of those of the Greek mythology. Here are the scenes of the wars of the Mahabarat, of the kingdom of Rama, of the localities of the adventures of Krishna, Hastinapura, Ayodha, and Matthura. The principal holy places are also here; as Gya, Allahabad, Benares, Hurdwar; not to mention the great Ganges itself, the Jumna, and their sacred tributaries. The evidence afforded by language and religion tends to corroborate this supposition. Thus, the Sanscrit most abounds, and exists in greatest purity in the dialects of the upper portion of the valley of the Ganges, and gradually diminishes both in amount and purity in proportion as we recede from it to the E., and particularly to the S. The distinction of castes is also most strongly marked in this quarter, and diminishes as we recede from it, as already mentioned. The country itself, also, it may be added, from its fertility, salubrity, and freedom from rank vegetation and forest, must at all times have been more favourable to the development and progress of an early civilisation than any other portion of India. Although the incursion of Alexander (B. C. 325) made India known to the European world, its effect upon the people of India was scarcely greater than that of any one of the thirteen expeditions of Mahmoud of Ghiznee. It is highly probable, however, that the influence of the kingdom which his successors established in Bactria, and which lasted for 130 years, was much greater. The Greek princes of Bactria appear to have conquered several of the N.W. provinces of India; and from this source, in all likelihood, the Hindoos derived their knowledge of astronomy. The real history of India commences with the first Mohammedan invasion, in the year 1,000, between 13 and 14 centuries after the invasion of Alexander. The hero of these invasions, for there were thirteen of them, was Mahmoud, sovereign of Ghiznee, in Affghanistan, the son of a man who had been a Turkish slave, but who had raised himself to sovereign power. Mahmoud pushed his conquests, or rather incursions, as far as Canoge, Bundlecund, and Gujrat. India was at this time divided amongst many sovereigns, most of them petty ones; and the resistance made to the conqueror was hardly more formidable than that which the Americans offered to the Spaniards. Towards the close of the 12th century, the Affghans made their first appearance on the theatre of Indian history. A chief of this nation, of the district of Gaur, raised himself to independent sovereignty, and while the Turkmans seized upon the provinces of the Ghiznian empire, he and his successors seized upon the capital and its eastern provinces, while the second prince of the race, Mahomed Gauri, invaded Hindostan. His favourite general, Cootub, originally a Turkish slave, pushed the Affghan conquests as far as Gujrat; and Mahomed dying without children, Cootub seized upon the Indian conquests of his master, and fixed the seat of his government at Delhi in the year 1193. This may be considered as the date of the first effectual conquest of Hindostan. From this period down to 1526, or in 322 years, twenty-six Affghan princes reigned in Delhi. But it is not to be supposed that the Delhi sovereigns of this race ever ruled over all Hindostan; for in the Deccan, Gujrat, Malwah, Juanpore, and Bengal, there were independent Mohammedan princes, who conquered, and ruled for themselves, and many Hindoo sovereigns continued unsubdued. During the reign of the Affghan princes of Delhi, in 1398, Timour invaded India, but his expedition was a mere plundering incursion. In 1525, India was invaded by Baber, the fifth in descent from Timour, and the sovereign of the little principality of Firghana, a territory lying between the Pamer mountains and river Jaxartes to the S., and Kashgar and Samarcand to the E. and W. He had first conquered Caubul and Candahar, and from the first of these entered Hindostan, defeated and killed the last Affghan sovereign, and seated himself on the throne of Delhi. With him began the race of princes, improperly called Mogul by Europeans and Indians, for neither Baber nor his ancestor, Timour, were Moguls, but Turks. All the conquerors of Hindostan, in fact, who were not Affghans, were Turks, or natives of the great province or kingdom of Transoxiana, whose native tongue was Turkish. Neither were any of them Persians, though the language of the latter people, being a more cultivated tongue than their own, was adopted by both the Turkish and Affghan races of princes. It will be observed that the last Mohammedan conquest of India, took place [illegible] years after Vasco de Gama found his way to that country. The Mogul empire was consolidated under Aurungzebe, who died in 1707, and it began to decline immediately on the death of his son and successor, in 1712. The Mohammedan power acquired its greatest extent under Aurungzebe; but even under him, was much inferior, not only in resources but in extent, to the empire now held by Britain in the same country. The passage by the Cape of Good Hope opened the way to a new and more formidable race of conquerors. The Portuguese, by whom it was effected, never acquired more than a petty territory on the W. coast; and the continental acquisitions of the Dutch were limited to a few commercial factories. The French, at one time, seemed to be on the high road to the establishment of a great Indian sovereignty; but, in the end, they were completely worsted, by the greater resources and superior maritime strength of the English, and by the extraordinary talents, courage, and enterprise of Clive. Our first territorial acquisition consisted of a patch of 5 sq. m. of land on the Coromandel coast,

where Madras now stands. The real foundations of our Indian empire were laid in the interval between 1750 and 1765, when Clive defeated the lieutenants of the Mogul, and the Mogul himself, and acquired Bengal, the richest of all the Indian provinces, the most easily defended, and that which has afforded us, throughout, those resources which have enabled us to conquer and to preserve all our subsequent acquisitions.

Political Divisions.— The following estimate of the area and population of the different states into which Hindostan is divided will give the reader a tolerable notion of the political division of the country*: —

	Area in sq. m. (Eng.)	Population.	Pop. to sq. m.
Paramount State.			
British Dominions - -	512,873	83,473,417	
Tributary States.			
Travancore and Cochin -	9,400	1,407,789	149
Nizam's Dominions - -	108,800	9,136,929	96
Mysore do. - -	29,750	2,314,602	77
Oude do. - -	25,300	4,103,866	162
Scindia do. - -	42,400	3,677,627	86
Berar do. - -	64,270	5,574,554	86
Holkar do. - -	17,600	1,526,562	86
Guicowar do. - -	36,900	3,200,575	86
Coorg do. - -	3,230	189,935	58
Kurnool do. - -	3,500	272,763	77
Sikhim do. - -	4,400	166,038	37
Bhopaul do. - -	7,360	638,380	86
Sattarah, Colapoor, &c. -	21,600	2,376,000	110
Cutch - - - -	6,100	205,121	33
Bundlecund Chiefs - -	19,000	638,900	33
Rajpoot States, &c. - -	165,000	5,548,431	33
	564,610	41,278,092	
Independent States.			
Nepaul - - -	53,000	2,000,000	37
Lahore - - - -	60,000	4,000,000	66
Sinde - - - -	24,000	1,000,000	41
	137,000	7,000,000	
Paramount State (British) -	512,873	83,473,417	162
Tributary States - -	564,610	41,278,092	73
Independent States - -	137,000	7,000,000	51
Total - - -	1,214,483	131,751,509	108

It will appear from this statement that the British government possesses about 42 parts in 100 of the whole area of India, its tributaries about 46 parts, and the independent states but 12 parts. England and her tributaries, in fact, possess 88 parts out of 100 of the whole of India. The amount of population is much more in favour of the British dominions, which contain twice as many inhabitants as the tributary, and about twelve times as many as the independent states. The density of pop., as expressed in the third column of the table, is an index, to a certain extent, of fertility of territory, and of favourableness of position. The British dominions, tried by this test, are twice as populous as the tributary, and more than three times as populous as the independent states.

Resources.—The public revenues of India are derived from the land-tax, or rather from the appropriation, by the sovereign, of a very large portion, and often, indeed, of the whole rent of the land; from taxes on houses, arts, and professions; from customs and transit duties; and from fees and fines. All other taxes are inconsiderable in comparison with the land-tax, which, in every native state, constitutes about 95 parts in 100 of the entire public income. Under the British government, it amounts in round numbers to 12 millions sterling. If it bore the same proportion to absolute population, it would in the tributary states be nearly 6 millions, and in the independent states nearly 1 million. This is by no means likely, however, to be the ratio, and the probability is, that the land-tax follows the proportion of the relative density of population. On this hypothesis the land-tax of the tributary states will be about 2,700,000*l.*, and that of the independent states about 320,000*l.*: adding 10 per cent. to the two last for other taxes, and knowing from positive data what the whole revenue of the British government is, we may make an approximate estimate of the entire public revenue afforded by the people of India, and state it in round numbers:—

British territories	- - -	£17,000,000
Tributary states	- - -	3,000,000
Independent states	- - -	350,000
	Total	£20,350,000

These results, which are probably not very wide of the truth, while they partially exhibit the relative resources of the different political parties, exhibit, at the same time, the essential poverty of the Indian people. Notwithstanding that every thing is taken from them that it seems practicable to take, they do not contribute half the sum that is contributed by the inhabitants of this kingdom, though not amounting to a fifth part of their numbers. With an oppressive system of taxation, the Indians are barely able to contribute 8*s.* a head, while the inhabitants of the United Kingdom contribute, with infinitely greater facility, twelve times that amount!

Languages.—It has been stated, that there are no fewer than 25 native languages spoken throughout Hindostan, independent of the dialects of tribes in a very rude state of society. "The extensive region," says Mr. Colebrooke, "which is nearly defined by the banks of the Saraswatty and Ganges on the N., and by the sea to the E. and W., contains, according to some, 57 provinces, and, according to others, 84, and each has its peculiar dialect." The Hindoos of the N. portion of Hindostan are acquainted with three dead languages, viz. the Sanscrit, the Saraswatty, or Pracrit, and the Pali. Of these three the Sanscrit contains internal evidence of being the oldest. It was the language of a people who, according to a very probable Hindoo tradition already referred to, occupied the right bank of the Jumna, a little way to the N.W. of the city of Delhi, and with it probably originated the Brahminical religion, and the first dawn of Hindoo civilisation. The Saraswatty or Pracrit was the language that succeeded it in the same country, and it seems to bear the same sort of relation to it that the Italian does to Latin. The Pali is a language which sprung up in the province of Bahar. Of this, also, the Sanscrit forms the groundwork, and the relation between them may be supposed to bear a similar relation to that which subsists between the Spanish, or French, and the Latin tongue. With the people speaking the Pali language sprung up the religion of Buddh; and Pali is, to the present day, the sacred language of all the Asiatic nations who have Buddhism for their national worship. The existence of these three languages, that have successively ceased to be spoken, affords, as before observed, satisfactory evidence of the great antiquity of Hindoo civilisation. One or other of the languages in question is more or less mixed up, not only with every language of Hindostan, but also with the languages of most of the neighbouring countries. To the N. they form the groundwork of these languages, as Latin does of Italian; to the S., on the contrary, they are engrafted on the language in something like the manner in which the French is engrafted on our own Saxon tongue. The literary Hindoos reckon that there are ten cultivated languages, having a written character and a literature, viz. five to the N., called *the five Gaurs*, and five to the S., called *the five Dravirs*. The enumeration, however, is not very clear and distinct, at least as applicable to present times. The *Gaurs* are the Saraswatty, Canoj, Gauva or Bengalee, Maithila or Tirutiya, and the Oorissa. The first of these is the dead language already mentioned. The Maithila is confined to a small portion of the district of Tirhoot, the Gauva is the language of the numerous people of Bengal, already mentioned, and the Oorissa or Urya, of the people of Cattack. The Canoj, as such, is an extinct language, but is considered, on good grounds, to be the parent of the modern Hindee, the most cultivated and generally spoken of all the native languages of Hindostan. Upon the language of Canoj has been grafted the Persian, the court and literary language of the Mohammedan conquerors of India. This language, in fact, is found to exist in the Hindoo, very much as the French is found in our own Saxon tongue, its introduction having been effected exactly in the same manner.* Besides the local language of each district, the Hindee is commonly spoken by all persons of education throughout all parts of India, and almost universally by all persons of the Mohammedan persuasion. Its prevalence, it may be observed, is probably owing as much to the parent language having been, previously to the conquest, the language of a numerous and powerful nation, as to the subsequent influence of the conquerors. Without this supposition, it is difficult to believe that, in the comparatively short period which elapsed from the first permanent conquest of the Affghans, at the end of the 12th century, until it acquired its existing form, it should have acquired so wide an extension as it is found to possess.

The five Dravirs are the Tamul, called by Europeans, very improperly, the Malabar; the Maharashtra or Mahratta; the Karnata or Canara; the Telinga or Talugu, improperly called by Europeans, the Gentoo; and the Gujrati. The groundwork of all these languages is peculiar; but upon all of them is engrafted more or less of the Sanscrit language, or its derivative, the Pracrit; the amount of words decreasing, as we proceed S., until, in the ancient Tamul, it disappears altogether. The Tamul, the Telinga, and the Canara are divided into two dialects, an ancient and a modern; the first containing the national literature, and being nearly unintelligible to the people at large.

Besides these more cultivated tongues, there are at

* Lahore and Sinde are here reckoned among the independent

* Sir James Mackintosh has pointed out this resemblance in his "Epitome of the History of England."

least 20 languages spoken by nations tolerably civilised, and of considerable numbers, as the Assami, spoken in Assam; the Nepali, Rosali, and Dogari, three languages spoken in Nepaul; the Cashmeri, spoken in the celebrated valley of Cashmere; the Punjabi, spoken in the country of the five affluents of the Indus; the Multani, the dialect of the prov. of Multan; the Sindhi, spoken by the Sindhians, at the mouth of the Indus; the Bikaneri; the Marwari; the Jayapuri; the Odepuri, four languages spoken in Rajpootana; the Haruti; and the Braja, spoken in the higher portions of the valleys of the Ganges and Jumna, and derivatives of the Saraswatty or Pracrit; the Magadhi, spoken in the S. portion of the prov. of Bahar; the Malwa, spoken in the prov. of the same name; and the Bundela, spoken in the prov. of Bundlecund. Many of these languages are in course of gradual extinction and absorption by the Hindee, as the Celtic dialects of our own country are in progress of extinction by the English; the Armorican by the French, and the Basque by the Spanish. To the S. we have the Konkani, the language of the Concan; the Tulawa, or language of the country which Europeans call Canara; and the Malayalim, spoken by the inhab. of the S. portion of coast lying below the W. Ghauts, as far as Cape Comorin.

Of the languages of rude or savage tribes, such as the Garrows, Coolies, Cattles, Gonds, Coles, &c., not less than 30 may be easily enumerated. Besides the three dead languages, one of them, the Sanscrit, as much studied as Latin is in Europe, there are in India eight languages, each spoken by a numerous pop.; 20 spoken by people less numerous, but still civilised; and at least 30 spoken by rude tribes; making in all 58 living languages. This simple fact may satisfy us at once that all India never was subject to one government, or never even thoroughly united in large masses. To the native languages now enumerated must be added the Persian, still as much studied, and much more generally written, than Latin is in Europe; the Arabic, often studied, from religious motives, although not spoken; the Portuguese is a good deal spoken on some parts of the maritime coast, especially by the converts to Christianity; and the English, which has begun to make considerable progress.

Literature. — The best and largest portion of Hindoo literature is contained in the dead Sanscrit; that which is contained in the seven living languages already enumerated being for the most part little else than translations, or rather paraphrases, from it. To Hindoo literature in any language, prose composition is hardly known. Every thing is in verse, from works of imagination to history, to treatises on theology, astronomy, medicine, grammars, and even dictionaries. These facts are at once evidence of antiquity and of rudeness, while they show that, for 2,000 or 3,000 years at least, native literature has made little progress. The Hindoos have been said to be, at the present moment, in the condition, in reference to literature, of the Europeans of the middle ages; who had no books but such as they inherited from the Greeks and Romans. But it is obvious that they are in a much worse condition, inasmuch as their models are incomparably inferior. The two most celebrated works of Hindoo literature are the Mahabarat and the Ramayana; the one giving an account of the wars of the sons of Bharat, and the other the adventures of Rama, king of Ayndhya or Oude, a supposed incarnation of Vishnu, the "Preserver of the Hindoo Triad." The scene of both is laid in the upper portion of the valley of the Ganges. Mr. Mill's description of these poems, some of the best specimens of which have been translated into English, is not unjustly depreciatory: — "These fictions," says he, "are more extravagant, and more unnatural, not only less correspondent with the physical and moral laws of this globe, but, in reality, less ingenious, more monstrous, with less of any thing that can engage the affection, awaken sympathy, or excite admiration, reverence, or terror, than the poems of any other, even the rudest, people with whom our knowledge of the globe has yet brought us acquainted. They are excessively prolix and tedious. They are often, through long passages, trifling and childish to a degree which those acquainted with only European poetry can hardly conceive." (*History of British India*, i. 362., 4to. edition.)

Science. — The sciences in which the Hindoos have made some progress are, arithmetic, algebra, geometry, and astronomy. The first and second are probably the only ones in which, perhaps, they are entitled to lay any claim to originality. They are probably the inventors of the system of notation, which the Arabs borrowed from them, and we from the Arabs. It is not necessary, however, to add that the Hindoos are clumsy arithmeticians; and that, as in the case of gunpowder, certainly invented in China, it is in Europe only that the art has been perfected.

In geography, medicine, botany, and the physical sciences generally, the Hindoos, like other Asiatic nations, may be considered as profoundly ignorant. In metaphysical and ethical speculations, more consonant to the genius of such a people, they have indulged to a much greater degree; and their speculations in grammar especially, if not distinguished for utility, are remarkable for ingenuity. The Sanscrit language, distinguished for the complexity and variety of its structure, has afforded an ample field for such discussions. It may be remarked that it is the only one of their languages that is subjected to rules, and that they have never composed a grammar of any of the living languages. Geometry is another science, the invention of which is ascribed to the Hindoos; but their earliest treatises are of the 7th century, 1,000 years after they had been in contact with the Greeks of Bactria, and at least 15 centuries after the first knowledge of the science in Greece itself. In astronomy, the Hindoos make large claims to antiquity, reckoning their tables from the commencement of the Cali-yuga, or iron age of the Hindoo mythology, 3,102 years before Christ. Of such an antiquity, however, there are great doubts; and the more general opinion seems now to be, that the astronomy of the Hindoos was either derived from the Bactrian Greeks, or intermediately from the Arabs of the middle ages. The coincidence between it and the Greek astronomy, is at all events, both remarkable and suspicious. Thus, the days of the week are seven in number, and named after the seven planets; while they follow in the same order as they do in the Greek. The ecliptic is divided, as among the Greeks, into 12 signs, with the same names, emblems, and arrangement; and the signs are also divided into 30 degrees. As these matters are purely arbitrary, they cannot but have had the same source. Two things seem to be agreed upon by all parties; viz., that the Hindoo astronomy is empirical, and not founded on general principles; and that, among the Hindoos, astronomy has only been used as an auxiliary to astrology, and never applied to any useful practical purpose; with the exception, and this in a very rude manner, of reckoning time.

Arts. — The arts in which the Hindoos have made the greatest progress are, agriculture, weaving, dyeing, and architecture. The ox, buffalo, horse, ass, elephant, hog, dog, sheep, and goat have been domesticated, and used by the Hindoos from the earliest antiquity. The camel, probably, has been equally long known in Upper Hindostan. The common poultry is also of great antiquity among the Hindoos; and is supposed, and most likely with good reason, to have spread from them to the W. world. The buffalo and ox only are used for agricultural purposes; the horse generally for war or pleasure, now and then for burthen; the elephant for pleasure or burthen; the camel and ass, with few exceptions, for burthen only. With the exception of the horse, camel, sheep, and goat, every one of the animals above enumerated are still found in many parts of India in the wild state. The agricultural implements used by the Hindoos are simple and rude, such as might naturally be expected among poor occupants, cultivating each a small patch of land upon an uncertain tenure; and the process is equally rude. It should however be observed, that neither the one nor the other are so much inferior to those of the S. part of Europe as a native of this country, accustomed to the more perfect implements and processes of English husbandry, would expect to find them. The greatest exercise of the skill and labour of the Hindoos in agriculture is displayed in works of irrigation; and the reader will not be surprised at this, when he understands that through means of irrigation the produce of the land is, according to circumstances, always multiplied never less than five fold, and often as much as ten. The works for this purpose consist of immense embankments, reservoirs or tanks, and wells. The delta of the Ganges, and the celebrated mound of the Cavery in S. India afford examples of the first description of works: *reservoirs or* tanks are sometimes of vast extent, and capable of converting 4,000 or 5,000 acres of what is often a dreary desert of sand into productive corn fields: these are most frequent in S. India. Wells, which are often sunk to the depth of between 200 and 300 ft., afford the principal means of irrigation in the upper portion of the valley of the Ganges. In a few cases there exist canals for irrigation resembling those of Lombardy, but these are of Mohammedan, not Hindoo, origin.

The articles cultivated by the Hindoos from very early times, are wheat, barley, rice, millet, several pulses, the sugar-cane, sesame, mustard, the cocoa, areca, and other palms; cardamoms, ginger, black pepper, cotton, the mulberry, indigo, madder, the mango, and the banana. From the Mohammedans they received the vine, the fig, the apple, peach, and pear; the pomegranate, limes and oranges; the carrot, onion, and melon, *with the* opium poppy. From Europeans they have received maize, oats, common potatoes, the batata, or sweet potato, the ground pulse, or arachis, the capsicum, guava, and pine-apple, by way of America; the shadock, from Java; the lichi, from China; and most of the common pot-herbs, direct from Europe. The sugar-cane is most probably a

native of Hindostan, and the art of manufacturing coarse sugar from it is traced by the etymology of the word *gour*, to Bengal. The art of granulating sugar, and separating it from the molasses, was most probably introduced into India from China, as the name of the commodity *Chini*, would seem to imply. The art of candying or crystalising sugar, the only mode of refining practised in the East, was taught the Hindoos by the Mohammedans, who themselves appear to have first practised the art in Egypt, as the name of the article *Misri* (that is, Egyptian), would seem to import.

The Hindoos had made a far greater progress in the art of weaving, than in any other. It was confined to materials which their country either produced in great abundance, or of great excellence; or of which, in fact, in ancient times, they may be considered to have possessed nearly a monopoly, viz. cotton, silk, and the hair of the Tibetian goat. With the exception of silk, which they had in common with China, India may be considered as the native country both of the material and manufacture of the others. The cotton-plant is grown almost every where, from the S. extremity of India up to the valleys of the most N. range of the Himalaya, and it may be traced from India to every warm country by its original Sanscrit name. The quality and nature of the fabric varies every where with the quality of the plant; and hence a vast variety of fabrics, known by the names of the districts producing the raw material: thus, the fine textures known in Europe as Dacca muslins, were produced only in that district, in which is cultivated, within narrow limits, a variety of the plant, with a staple remarkable for fineness and beauty, not found any where else.

Silk weaving, like that of cotton, is an art which has been practised from remote antiquity in India. In the Sanscrit language there is a peculiar name for the class of persons exclusively employed in the feeding of silk worms. The variety of the latter bred in India differs from that of China and Europe; and the species of mulberry grown for the food of the worm is a distinct one from that used either in Europe or China. But as the Hindoos are much inferior in skill and ingenuity to the Chinese, the silk fabrics of Hindostan have never equalled those of China; nor is the raw material, even now, equal to that of the Chinese, though under the superior care and skill of Europeans. The Cashmerians, the manufacturers of the well known shawls which bear their names, are descended from genuine Hindoos; and though the shawl goat be not a native of their country, they were the nearest civilised people to the rude nomadic tribes, to whom it belonged. They naturally, therefore, became the manufacturers; and the invention of the shawl manufacture may, therefore, be fairly ascribed to the Hindoos. From these statements, it will appear that the discoveries now described, and the progress in manufacturing industry which they imply, are rather owing to the accident of position than to any superiority of skill and ingenuity. This is at once apparent, by the little skill which the Hindoos evince in arts, where they possess no superiority in the raw material, as in woollen textures, iron fabrics, and earthenware, in respect to which there are few nations ruder and more unsuccessful. Orme, who is followed by Mill, ascribes the superiority of the Hindoos in the manufacture of cotton fabrics to the peculiar softness and delicacy of the Hindoo hand; but this is a fancy for which there seems to be no ground whatever. The Hindoos, comparing them with other nations in the same state of society, and to Europeans until comparatively recent periods, had attained considerable skill in the art of dying, producing colours that are both fast and brilliant. Here also, however, they had several advantages of the same nature as those already described, such as the possession of indigo, lac, and madder, three of the finest and most durable of all known colouring materials. Inferior dyes, such as the carthamus, morinda, turmeric and sappan, are also natives of the country. Their dying processes, however, have always been, and are, tedious, operose, and empirical.

Nearly the whole architecture of the Hindoos which deserves notice is dedicated to religion. The people have always lived in huts, and even their chiefs and princes were satisfied with very mean accommodation; and the only palaces have been those of the gods. But even their temples are more distinguished for magnitude, the substantial nature of the materials, and the elaborate character of the ornaments, than for beauty, grandeur, or propriety. Many of the most remarkable consist of caves, or subterranean grottoes; and the rest have, for the most part, a pyramidal form. One class of religious monuments which makes so conspicuous a figure in the architecture of Christians and Mohammedans, is wholly wanting among the Hindoos,—those erected in honour of the dead; a circumstance no doubt arising from the universal practice of burning the corpse, and the belief in the doctrine of the metempsychosis.

Of a far higher order is the architecture introduced into India by the Mohammedans, particularly since the time of the Turkish dynasty, the descendants of Timour. These consist of mosques and mausoleums, in the style of architecture introduced by the Arabs into Spain; and are so remarkable for beauty and chasteness of design, grace of proportion, and excellence of material and workmanship, as to be entitled to be compared with the finest remains of Grecian or Roman art. In these Mohammedan buildings, white and coloured marbles are largely employed, a material never seen in any Hindoo building, though very abundant in many parts of the country. The most remarkable of the Mohammedan monuments, well known to Europeans by the name of the Tajemahal, is situated near the city of Agra, on the right bank of the Jumna. It is a mausoleum occupying, with its gardens, a quadrangle of forty acres; the principal building, with its domes and minarets, being almost wholly of white marble. This was built by the Emperor Shah-Jehan, about two centuries ago. Even the palaces of the Mohammedan princes, and the houses of the omrahs were built in very superior style to those of the Hindoos of the same rank. In fact, the Mohammedan architecture exhibits unquestionable evidence of superior science, taste, and civilisation.

In useful architecture, such as the construction of roads, bridges, and public accommodation for travellers, the Hindoos have made very little progress, as may be seen by an examination of the more S. portion of India, which Mohammedan influence hardly reached. The ancient Hindoos were unacquainted with the arch, and hardly ever built a bridge of any sort. Down to the present day the principal rivers of the Deccan are crossed on wooden floats, or in baskets covered with leather. Now and then a few miles of good road lead to some celebrated place of pilgrimage, and on the ways leading to such places inns for the accommodation of travellers, called *choultries*, are not unfrequently met with. These consist of bare walls and a roof, without food, furniture, or attendance. Both these roads and inns have been constructed from religious motives only. In this department of architecture, also, the Mohammedans have made considerable improvements: the only bridges existing in India are of their construction; and the same thing may be said of public roads.

Effects of British Rule.—The great body of the Indian people had, for six centuries before the commencement of our government, been under the dominion of foreigners; but of foreigners more energetic than themselves, and a good deal more civilised. Upon a fair retrospect of what they have lost and gained by the Mohammedan dominion, they must, upon the whole, be considered as having been considerable gainers. The conquerors being Asiatics, and approaching to the native inhab. in complexion, manners, customs, and state of civilisation, assimilated with the latter, and, to a certain extent, adopted their language and customs. Even in matters of religion, where the difference was widest, a considerable share of toleration was established; and Hindoos, converts to Mohammedanism, and mixed races were in time admissible to the highest offices of the state, and not unfrequently promoted to them. This condition of things was superseded by the British rule, which may now be considered as having been practically constituted for a period of about eighty years. The British government, as established in India, and as it is now in operation, may be considered an enlightened despotism, a good deal controlled by the public opinion of Englishmen on the spot, and to a smaller extent by parliament and public opinion in England, and possessing some advantages over, but also many disadvantages which did not belong to, the Mohammedan government, which it superseded. It may be divided into three periods: the first being that which intervened between the victory of Plassy in 1757, and the first effectual interference of parliament in 1784, but not practically enforced till 1793, an interval of 36 years. This was a period of pretty general anarchy, accompanied by constant, or at least frequent wars. The government was carried on upon the principles of the Mohammedan system, and did not pretend to be bottomed upon any other. The taxes were levied with more than Mohammedan rapacity; and the administration of justice followed the Mohammedan law with less than Mohammedan intelligence. The only modification in any of these particulars depended wholly on the moral and intellectual character of a few public functionaries. At the same time the industry of the country was subjected to a commercial monopoly, exercised by the government itself, and the aim of which, as of all similar institutions, was to obtain possession of as much as possible of the produce of the country at less than it cost, and to sell it for more than it was worth. It cannot be supposed that the British government during the period in question could possibly be productive of beneficial results to the native inhab. of the country; and it certainly produced none to the parent country, whose resources were wasted, and whose commerce was not augmented, by the possession of India.

The next period of our administration embraces the

twenty years from 1793 to 1813. During this time the land tax, the greatest burden of the Indian people, was established in perpetuity throughout the greater part of the Indian territory. Regular courts of justice were instituted, and the judicial and fiscal administrations were carefully and completely separated, after the example of European nations. The commercial monopoly continued as in the previous period, but it was exercised with greater leniency and forbearance, except in so far as concerned the settlement and resort of British subjects to India, the laws against which were more rigorously carried into effect than ever. Parliament never effectually interfered in the affairs of India during this period; every thing was presumed to be going on prosperously. The wars that were carried on in India in the meantime nearly doubled the extent of our territory, and raised the territorial debt to 30,000,000*l.* sterling. But instead of reaping any direct advantage from these acquisitions, parliament was obliged, on the lapse of the charter, to exonerate the E. I. Company from a long arrear of a tribute of about half a million sterling a year, which it was wholly unable to pay. The entire advantage conferred upon the people of India, during the period now mentioned, resolves itself into the permanency of the land-tax, with some ameliorations in the administration of justice, and freedom from foreign aggression and invasion. The English nation derived no benefit whatever from India; our commerce with it, which was but of trifling importance, continued stationary; we paid a monopoly price for every Indian commodity we consumed, and were obliged to forego the whole of the paltry tribute we had bargained for.

The third and last period commences in 1814, and comes down to the present time. In 1814 the Indian trade was, in a great measure, thrown open; and in 1834 the last vestige of monopoly, and even the company's commercial character, was finally put an end to,—a measure which, with some drawbacks, has been productive of much advantage both to the people of India and of England, though in a greater degree to the latter. The exports of India to this country have more than doubled; and the people of India and of England respectively receive each other's productions for about from a half to a third part of what they cost them under the monopoly. The influx of Europeans into India since 1814 has been followed by a great influx of British capital; and something like a public and independent opinion has sprung up at the principal seats of commerce, to control the despotism of a virtually absolute government. This public opinion finds a voice in a press formerly under a rigorous censorship, but now thrown open, and which employs itself greatly to the advantage both of the governors and the governed, in the exposure of public and private abuses. A system of effectual native education may be said to have begun in 1814; and the native inhab. of the principal towns, who before considered all education to be comprised in the study of the Persian, a foreign language, or of the Sanscrit, a dead one, have betaken themselves with great ardour to the study of the language of the conquerors; and have, in many cases, made an extraordinary progress in the knowledge, not only of our language, but of our literature. What is wanted in India is not a system of education that shall make the people acquainted with the niceties of Sanscrit grammar, but a system that shall communicate to them the elements of useful knowledge, and that may pave the way for their emancipation from the gross prejudices and superstitious observances by which they have been so long enslaved. We doubt, however, whether this can be done by instructing them in English. It is true that English schools have been extraordinarily successful in Calcutta, and other large towns; and the proficiency of many of the natives in our language and literature is far greater than could have been rationally anticipated. But though no means should be left untried to extend instruction in English, still we have no idea that it can ever be diffused generally throughout the country, or be made to exert any powerful national influence. To bring about the regeneration of India, the better way, as it appears to us, would be to have proper school and other elementary books compiled in the languages of the different provinces, and to introduce them into the native schools and seminaries. This plan, though it would not introduce the language of England, would do what is of still more importance; it would introduce the rudiments of European science and literature, and would apparently be the most powerful means for promoting the improvement and civilisation of the natives that it is possible to bring into the field. (The latest and most authentic information with respect to education in India, may be found in Mr. Trevelyan's excellent work on that important subject.)

Since 1814 may also be dated the abandonment, on the part of many of the most wealthy and enlightened inhab. of the towns, of the gross superstitions of their forefathers, and the adoption of rational opinions in matters of religion; and it may be remarked as extraordinary, that this species of conversion has been most frequent with the Brahminical order, where we should least expect to find it. Commerce, in fact, the great engine by which civilisation, as well as improved morals, have been produced in Europe, has begun to do its work in Hindostan also. The value of knowledge and of character has begun to be felt, and already there may be counted among the merchants of Calcutta, Bombay, and other places where commerce is carried on upon a large scale, Hindoo, Mohammedan, and Parsee merchants, as faithful to their engagements, and of as strict probity, as any community can boast of.

The disadvantages of our position for carrying on the administration of India are sufficiently obvious. Ours, in the first place, is not a national government, nor is it as yet a government carried on by conquerors who have made the slightest progress towards naturalisation or amalgamation with the party governed. We are aliens in blood, in manners, in language, and in religion, carrying on the administration of 80 millions of people, and exercising a control over 50 millions more, at a distance of 12,000 m. The local government is purely vicarial, and the essential administration rests with men residing at a vast distance, who never saw the country, and who have no accurate knowledge of its manners and institutions. These men themselves are perpetually changing, and look upon Indian affairs as matters of very secondary importance to domestic and European politics. The local governments, instead of being responsible to the parties whose administration they conduct, are only amenable for their acts to their political friends in Europe, while the affairs of India are too complex, too extensive, and too remote, to be understood by, or, for the most part, to excite any interest in, the people and parliament of England. In India, generally, the acts of the local government are secretly prepared without consulting or attempting to conciliate the parties for whom the laws are made.

One of the great disadvantages of the British government in India is the vast expense at which it is conducted, and the consequent weight of taxation to which the people are necessarily subjected. In India there are five local governments, and in England two departments connected with the government, all which are paid for out of the Indian revenue, on a scale of expense of which the rest of the world affords no example. Thus the salary of the governor-general is equal to five times that of the first lord of the treasury, while an Indian secretary is more highly paid than an English secretary of state. There are about 1,000 civil officers engaged in the judicial, magisterial, and fiscal administration of India, every one of whom costs the Indian people, including his pension on retirement, more than a puisne judge of the Court of King's Bench costs the people of England. As we maintain our dominion not through the affections and goodwill of the people, but partly through their docility, and partly by the sword, a vast army of 200,000 men becomes necessary. Thirty thousand of these must be carried over the Atlantic and Indian Ocean, and, mortality included, are maintained at double the expense of the same force in Europe. The officers of the whole Indian army amount to about 5,000, and these, retiring pensions included, cost about three times what the same number would cost in Europe.

It is not, however, to be supposed, that the large salaries allowed to those engaged in the administration of the Indian government originate in extravagance merely. It may, in fact, be doubted whether it be possible, on any reasonable ground, to make any sensible diminution in their amount; and whether the excess that might be deducted from some departments should not go to balance a deficiency in others. The salaries of Europeans in India must be high; *first*, because of the expensive style of living in the country, and the immense number of servants and retainers that a person in any prominent situation must keep; and, *second*, because of the many expenses attending the training and fitting out of a young man for the Indian service. Till one or both of these sources of expenditure be diminished, of which there is but little prospect, it is idle to talk of materially reducing the cost of European functionaries in India.

The greatest revenue which a colonial empire ever yielded, and, in fact, the largest public revenue in the world, that of Britain and France excepted, is unequal to meet so enormous an expenditure; and one of the worst forms in which bad government can present itself, oppressive and grinding taxation, is the necessary consequence. Nor is it, perhaps, in the power of the best disposed administration much to ameliorate this state of things, so long as government is conducted on the principles hitherto persevered in. The Indian revenue approaches to 20 millions, and considering the poverty of the people, as indicated by the low rate of wages, and the comparatively small amount of capital and industry in the country, this is said to be equivalent to an annual public revenue in England of about 100 millions; and it should be remarked that the Indian revenue never diminishes, but, on the contrary, may be considered a perpetual war taxation, from which there is no

relief or abatement. While India is subjected to this amount of taxation, there is reason to fear that her prosperity will not make any considerable advance, nor the people be attached, or even reconciled, to the dominion of strangers, especially while at the same moment they are carefully excluded (which never happened to them under any previous foreign dominion) from all respectable or responsible share in their own government.

But, without inquiring whether it be possible materially to diminish the amount of taxation imposed on India, it is certainly possible to do what is of equal importance, that is, to change the mode in which it is assessed. We have already given some account of the perpetual settlement adopted under Lord Cornwallis for the assessment of the land revenue in Bengal (see *antè*, p. 357); and, whatever may have been the defects of that settlement, there can be no doubt that, by limiting the amount of the assessment, it has been productive of the greatest advantage. But in the Madras provinces, and in the greater part of India, exclusive of Bengal, under our dominion, the land-tax is not only oppressively heavy, but a system has been adopted in regard to the management of the land and the assessment of the tax that seems to be wholly subversive of the security of property, and to be calculated only to discourage, or rather extinguish, industry. (For proofs of this, *see* INDIA (BRITISH), and MADRAS.) But this is not of the essence of a land-tax: it is an abuse discreditable to those by whom the system was originally recommended, and still more discreditable to those by whom it is maintained, after experience has fully demonstrated its pernicious influence. The first thing essential in India is to establish the security of private property; to make the occupiers of the land feel that they have an interest in its improvement; and that the produce obtained by superior industry and intelligence will not be wholly swallowed up by fiscal rapacity. Even if we cared nothing for the interests of the people of India, but took it for granted that Providence had consigned them to our keeping, merely that we might extract from them the utmost possible amount of revenue, this would be our best course. The real, and, in the case of India, the only way to increase revenue, is to increase the wealth of the people; and this will be best done by giving them a permanent interest in the improvement of the soil, and by making the assessment fixed, if not for ever, at least for a lengthened period.

Notwithstanding the vast demand in this and other European countries for sugar, coffee, cotton, hemp, and other staple products of India, and her illimitable capacities for their production, they have hitherto been exported only to a comparatively trifling extent. This is ascribable principally to the poverty and ignorance of the cultivators in India, arising from the uncertainty of the land tenures and the oppressive amount of the land-tax, and partly to high discriminating duties laid on East India produce in Great Britain and those European states that have colonies in the West Indies. But it is abundantly certain that the adoption of a more liberal system with respect to taxation in India, and of an equal tariff at home, combined with a little judicious encouragement at the outset on the part of the Indian government, might provide for an indefinite increase in the culture of the great articles of Indian produce suited for the European markets. The wonderful extension of the indigo culture shows conclusively what may be expected from a liberal course of policy. But no considerable improvement need be looked for in the greater part of the country while the land-tax continues to be assessed as at present. This forms at once an insuperable obstacle to the investment of British capital in the cultivation of the land, and to the acquisition of wealth by the native cultivator, and is, in fact, destructive alike of the means and the hope of improvement.

One advantage the people of India certainly derive from British rule, which they never enjoyed, at least to the same extent, before — freedom from civil war, and from foreign aggression and invasion. But it must, at the same time, be acknowledged, that these benefits have been purchased at no inconsiderable price — the suppression of all competition and emulation between different parts of the country; and the entire sacrifice of national independence, accompanied with an utter hopelessness of those successful insurrections by which other Asiatic people rid themselves of tyranny, and procure, at least, a momentary melioration of their condition. What probability, it may be asked, is there of the stability and permanence of our dominion? This is a question more easily put than answered. No people under the same circumstances ever possessed such an empire before, or any thing resembling it; and we have, therefore, no precedent to guide us in attempting a reply. We shall, therefore, content ourselves with stating, that India appears to be unassailable, except by a nation that has the command of the sea. Her land frontier is fenced by impassable mountains, and by deserts and rivers that could not be traversed by an invading army without great difficulty and loss. No doubt, however, if we voluntarily cross the natural barriers that protect India, and advance into Central Asia, we may meet Russian troops on ground congenial to them; and if so, the prestige that has hitherto attached to our arms in the East will run a considerable risk of being dissipated. But so long as we confine ourselves within the proper limits of India, and preserve our superiority at sea, we have little to fear from foreign aggression. An attack by Asiatic powers is out of the question; and the danger of French and Russian invasion is far more chimerical than real. Our superior national resources, commercial enterprise, and naval power, gave us our Indian empire, and maintain our supremacy over it. Any nation that should deprive us of these might possess itself of India without any extraordinary difficulty; for in the hour of need the natives would not certainly render us any effectual support. But, in so far as can be surmised at present, we have nothing to apprehend from the superior power of foreign foes or rivals: and as to danger from internal insurrection, we have the best security against it in the singular docility of the people, their want of nationality or patriotism, their political ignorance, the innumerable divisions which exist amongst them, and their incapacity of combination for any great purpose. Our greatest danger arises from our advancing into Central Asia, from the vast expenditure of our government, the frequency of our wars, and the grievous taxation to which these lead, a taxation which cannot but engender a discontent and disaffection, the results of which no one can at present foretell.

Bodily and intellectual endowments. — The Hindoos, as already stated, constitute six sevenths of the population of Hindostan; but the remaining inhabitants, though the stocks were in many cases originally different, are now so much assimilated with them through a mixture of blood, and the adoption of Indian manners and customs, that for our present purpose the whole population may be considered under one head. In point of race, the Hindoos have been regarded by naturalists as belonging to what they call the Caucasian, and even to the same family of that race as the white man of Europe! But this is a fantastical notion, for which there is hardly even so much as the shadow of a foundation. The only three points in which any analogy has been discovered between the Hindoo and European are the oval form of the face, the shape of the head, and traces of a certain community of language. In every other respect the points of contrast are incomparably more decisive than those of resemblance. The European is white, the Hindoo black. The European (and his is the only race that is so distinguished) has an infinite variety in the colour of the hair, from flaxen to black, and great variety in the colour of the eye, from light blue or grey up to dark brown: with the Hindoo, the colour of the hair is ever black, and the colour of the eye ever dark brown. The European is taller than the Hindoo, more robust, and more persevering. Even in the rudest states of civilisation, the European has exhibited a firmness, perseverance, and enterprise, which strikingly contrast with the feeble, slow, and irresolute character of the Hindoo. In the performance of ordinary labour in those employments where there are means for drawing a just comparison, the labour of *one* Englishman is equal to that of *three* ordinary Indians. Three Indian seamen will hardly perform the work of one English seaman, and three battalions of sepoys would not, in any case, supply the place of a single battalion of Europeans. There is little doubt but that an equal inferiority would have been the result of a trial of strength with a Roman legion or a Greek phalanx. When the skill required in any particular employment rises in amount, and the European is enabled to avail himself of improved tools which the Hindoo either cannot or will not use, the disparity becomes still greater: thus; — A master shipwright, or a master carpenter, in India, finds it as cheap to employ a single European at 8*l.* per month as eight Hindoos at the same amount of wages! In physical force and continuity of labour the Hindoo is unquestionably not only below the European, but below the Arab, the Persian, and, above all, the Chinese. When, therefore, we hear of the price of labour being low in India, we must confine it to the roughest and rudest kind, viz. rural labour; and even then it must be taken with much allowance. Looking at the *quantity of labour* performed, and the manner in which it is executed, the rate of Indian wages is high; and it is only the nominal rate, or that paid for labourers employed by time, that is low.

In one physical quality there is a striking distinction between the Hindoo and European. The European is born with an inflexible and comparatively rigid fibre; the Hindoo with a fibre more pliant and soft than that of our women. This distinction, however, is a mere affair of climate, for the quality supposed in this instance to be peculiar to the Hindoo frame is common to that of natives of every warm climate; even Creole Europeans, in the very first generations are distinguished by it.

This flexibility in the animal fibre has been supposed, by some observers, to be accompanied with great sensibility and acuteness in the organs of sense, conferring upon the Hindoo a remarkable advantage in some of the nicest of the manual arts. But there is no truth in this hypothesis any more than there would be in imagining, contrary to all experience, that the nicer and more pliant fingers of a woman confer upon her an advantage in skilled labour over a man. In the nicer processes of mechanic art, habit soon gives to the rigid hand of the European artisan a nicety of touch and a dexterity of execution which no Hindoo has ever yet attained: in general, the Hindoos possess more agility than the Europeans, and their nimbleness is assisted by the lightness of their persons. They are, to a remarkable degree, the best runners, the best wrestlers, and the best climbers, of Asia. In these respects the Persians, Arabs, and Chinese, are not to be compared with them. Hence it follows that, as ordinary seamen, they are far more dexterous and useful than any of these nations, yet a certain want of firmness and presence of mind incapacitate them for officers, or even for steersmen, and, in this latter capacity, the natives of the Philippine Islands are so preferable to them, that, whenever they can be obtained, they are always employed, to the total exclusion of the Hindoos. A Hindoo cannot be urged to any personal exertion for a great length of time without producing failure or exhaustion. Even in their own country and climate the sepoys have been beaten by European troops, in a long succession of forced marches.

Among the Hindoo nations, though the common features of their physical and intellectual character are generally well preserved, much variety exists;—more, probably, than among the nations of Europe. This variety has been ascribed to difference of latitude and climate, and to diversity of aliment: it has been affirmed, that the inhabs. of the south, whose chief aliment is rice, are smaller and feebler than those of the north, whose chief bread corn is wheat and millet. Experience shows that this opinion is without any foundation. The smallest and the feeblest family of Hindoos are the natives of Bengal, whose locality is between the 21st and 26th deg. N. lat.; those living a dozen degrees farther south, and upon the same vegetable aliment, are taller, more robust, energetic, and hardy. The natives of the table-land, whose vegetable aliment is neither rice nor wheat, are equal but not superior to the inhabitants of the Carnatic, or of the low damp coast of Malabar. The tallest and most robust, but not the most active or agile, are the inhabs. of the upper portion of the valley of the Ganges, where a few of those in easy circumstances live only on wheat; the majority of the people on barley or millet.

It is the quantity and not the quality of the vegetable aliment which has the most material influence in India; it may be said, that in Hindostan generally there is a wider distinction in physical development between the classes in easy circumstances and the poor, than in any other country. The Hindoos of the upper and more distinguished classes, are almost invariably larger, stouter, and handsomer than the poor and degraded classes. The most inattentive observer cannot fail to notice the superiority of the military, mercantile, and above all the sacerdotal classes over the common labouring pop. The sepoys of the army of Bengal, who are a selection from the numerous yeomanry of the northern and central provinces, though very inferior in strength and energy, are equal, if not superior, in stature and personal appearance to the common run of European troops; and even in the streets of Calcutta, a stranger cannot fail to be struck with the disparity in the appearance of the well-fed merchant, or broker, and the squalid half-starved labourer or artisan. The mountaineers, and generally all the semi-barbarous tribes, are short, emaciated, and ill-looking, particularly those who gain their livelihood by the chase, or by collecting the natural products of the forests, such as honey, wax, and drugs. Where slaves are few in number, and this is the case in all the populous parts of the country, they are in personal appearance nearly on a level with the rest of the peasantry, and not to be distinguished from them. Where, however, they are numerous, and whole tribes are in a servile state, they may be easily distinguished from the rest of the community by their ugliness, small stature, and feeble frame. As a general rule it may be laid down, whatever be the climate, and whatever the general aliment, that wherever the price of labour is low, and the people consequently compelled by necessity to live upon the lowest description of food, or upon the smallest possible quantity of a better description that will support life, the great mass of the inhab. are the most degraded in body, as well as in mind.

It is a popular but erroneous notion that the Hindoos live almost entirely on a vegetable diet: such a fact would be inconsistent with the physical nature of man, who, in reality, is omnivorous. The most fastidious of the Hindoos in point of diet are great eaters of milk and butter; fish is also extensively used near all the sea-coasts, and on the shores of the principal rivers; and none of the people of India hold this description of food as abominable, except the inhab. of the remote interior, who have no means of procuring it. Even flesh, however capricious in the selection, is occasionally eaten by the greater portion of the Hindoo people, and it is the want of means, rather than religious scruples, that makes them refrain from it. In cases of urgent necessity, even religion authorises any kind of food, and in the event of famine, a brahmin may eat the limb of a dog.

Upon the intellectual and moral qualities of the Hindoos, a very few words will suffice: the more educated classes, and it is from a consideration of the character of these only that any fair conclusion can be drawn, may be pronounced without hesitation to be a shrewd, wary, and acute people. Subtlety, perhaps, more than strength, is the prominent character of their intellect. Good imitators, they have hitherto discovered no original powers of invention. They have little imagination, for the poor distempered dreams of their theology and literature are not entitled to this name. In practical good sense they are decidedly below the Chinese. In vigour and manliness of mind, they are below the Arabs, the Persians, and those Mohammedan nations of Tartary who sent forth the men that invaded and conquered them. We make no comparison with European nations, because the contrast is too great to admit of any parallel. The departments of industry, in which their intellectual faculties appear to most advantage, and for which they seem best fitted, are the administration of justice and finances, and such branches of trade as do not imply the possession of comprehensive knowledge and bold enterprise. Orme's account of their character in this respect is strictly just. "They are," he says, "the acutest buyers and sellers in the world, and preserve through all their bargains a degree of calmness which baffles all the arts that can be opposed against it."

The moral character of the Hindoos is the growth of probably many thousand years of anarchy and oppression. Such a condition of society produces no demand for candour, integrity, or ingenuousness; and among the Hindoos these qualities can hardly be said to exist. Rapacity, violence, fraud, and injustice characterised the native rulers; and the usual weapons of defence, viz. falsehood, artifice, chicane, and deceit, have, consequently, sprung up in abundance among the people. In reality, for generations, integrity may be said to have been at a discount in India, and dissimulation at a high premium. Probity and candour are virtues which, in fact, could not be practised with any regard to personal freedom, life, or property; in such a state of things, such a simpleton as an honest man would have become the inevitable prey of a host of knaves, and would have been laughed at and despised. Generally it may be said that the Hindoos seldom speak the whole truth without some mental reservation. Judicial perjury is practised in Hindostan perhaps on a wider scale than in any other country in the world. Our courts of justice have been blamed for encouraging the crime, and probably, to a certain extent, they do so; but, upon the whole, they can only be looked upon simply as an arena for the exhibition of this vice upon a great scale. Falsehood and equivocation are inseparable from such a condition of society as that of Hindostan, and have characterised the manners of the Hindoos from the æra when Europeans first acquired any authentic information respecting them. The description which Bernier, one of the most accurate of travellers, has given of the Hindoos under Aurungzebe, is strictly applicable to the present times. Sir William Jones, often their indiscriminate eulogist, declared from the bench his conviction, that affidavits of every imaginable fact might as easily be procured in the streets and markets of Calcutta as any other article of traffic; adding, on the subject of oaths, that even if a form the most binding on the consciences of men were established, there would be found few Hindoo consciences to be bound by it.

With singular exceptions in favour of the military classes, timidity, and even pusillanimity, characterise a very large portion of the Hindoo pop. This opposes the most serious obstacle to their good government. The great body of the people have neither the spirit nor courage to defend themselves or their property, or to resist oppression in a straightforward manner, and consequently they become easy victims to every possessor of power, by whatever means obtained. The Arab, the Persian, the Chinese, and the Malay knows how to defend himself from insult and robbery, by some means or other, however rude; but the Hindoo puts up with oppression without directly resenting it, and, like the weaker animals that are the natural prey of the stronger and more ferocious, trusts to artifice and cunning for his defence.

This view of the Hindoo character is not inconsistent with a wrangling and litigious disposition among themselves. They brawl and scold with infinite animation, but rarely come to blows. A very frequent mode of settling, or at least prosecuting family feuds, is an action or suit at law.

Among the better qualities of the Hindoos may be reckoned frugality, patience, docility, and even industry. But the first of these virtues makes, in many cases, too near an approach to avarice. This is a quality of the Hindoo character which it is not very easy to explain. The usual effect of bad government, by rendering property insecure, is to make the people prodigal, and if not indifferent to possession, at all events careless of accumulating. Undoubtedly opposite effects have been the result among the Hindoos. Mr. Orme, endeavouring to account for it, says, "Slavery has sharpened the natural fineness of all the spirits of Asia. From the difficulty of obtaining, and the greater difficulty of preserving, the Gentoos are indefatigable in business, and masters of the most exquisite dissimulation in all affairs of interest." This states the fact very correctly, but leaves the cause wholly unaccounted for; for undoubtedly slavery has produced no such effect on the Arabs, the Turks, the Persians, the Chinese, or even the Mohammedans of India. The docility, too, of the Hindoos is very much akin to passiveness; they are almost as easily trained to submit to oppression and rapacity, as to endeavour to improve and amend their condition. (For further details, *see* INDIA (BRITISH), and the arts. BENGAL, BOMBAY, MADRAS, &c.)

HIRSCHBERG, a town of Prussian Silesia, and a considerable emporium for the linen manufactures of that prov., cap. circ., on the Bober, near the Riesengebirge, 25 m. S.W. Liegnitz. Pop. (1838) 7,000. It is fortified and well built; has 4 suburbs, 5 churches, one of which is Protestant; a gymnasium, deaf and dumb and orphan asylums; and is the seat of the council, and superior courts for the circle. Fine lawn is woven in the neighbourhood, in which there are also many sugar refineries, bleaching establishments, and paper-mills. Its manufactures are, however, said to have fallen off very much since the middle of last century. Warmbrunn, the most celebrated watering-place of Silesia, is at no great distance from this town. (*Berghaus; Murray's Handb.*)

HIRSCHFELD, or HERSFELD, a town of Hesse-Cassel, prov. Fulda, cap. distr. and principality of the same name, on the Fulda, which is here crossed by a stone bridge, 32 m. S.S.E. Cassel. Pop. 6,450. It is walled, and has 2 churches, an hospital, an orphan asylum, numerous other charities, and the best-conducted Calvinist college in the electorate. It has also some woollen cloth factories, tanneries, &c.

HITCHIN, a market town and par. of England, co. Hertford, hund. Hitchin and Pirton, 31 m. N. by W. London, and 13½ m. N.W. Hertford. Area of par., 6,150 acres; pop. of do., in 1831, 5,211. The town stands at the foot of a steep hill belonging to the Chiltern range, and consists of several streets, irregularly laid out, and lined with old but well-built houses. The church, in the ornamental Gothic style, has a low embattled tower, surmounted by a spire and a S. porch, a fine specimen of Tudor architecture: the interior, which is richly ornamented, contains a curious font, and many splendid monuments. There are 3 places of worship for dissenters, 2 endowed schools, with 70, 2 Lancastrian schools, with 300, children, an infant school, and some almshouses. The trade of Hitchin, which in the 14th, 15th, and 16th centuries, was a large wool-staple, is now chiefly confined to mealing and malting, its markets being well attended and abundantly supplied with grain. Straw-plaiting employs many hands; and there is a silk-mill. The town is divided into 3 wards, each governed by 2 constables and 2 headboroughs, appointed by the lord of the manor. Petty sessions are held by the county magistrates every Tuesday, the market day. Fairs, Easter and Whit Tuesday, for sheep and pedlary.

HOANG-HO, or YELLOW RIVER. *See* CHINA.

HOCHSTADT, a small town of Bavaria, circ. of the Upper Danube, on the N. side of the Danube, 23 m. N.W. Augsburg, and 2 m. W. Blenheim. The great victory gained here on the 13th Aug. 1704, by the English and Imperialists under the Duke of Marlborough and Prince Eugene, over the French and Bavarians, is called by the French and Germans the battle of Hochstädt: we call it the battle of Blenheim. *See* BLENHEIM.

HOF, a town of Bavaria, circ. Upper Franconia, cap. of a distr. on the Saale, 27 m. N.E. Baireuth. Pop. 6,800. It is walled, and has 2 suburbs, a gymnasium, with an extensive library, and several charitable institutions. Its manufactures consist of muslins and other cotton fabrics, on an extensive scale; and of cotton yarn, woollen stuffs, leather, paper, colours, &c. It has 2 annual fairs. Iron mines and marble quarries are wrought in its vicinity.

HOGUE, or HAGUE (CAP DE LA), a bold prominent headland of France, on the English Channel, at the N.W. extremity of the dép. la Manche, 16 m. W. by N. Cherbourg, lat. 49° 43′ 33″ N., long. 1° 45′ 15″ W. This cape is famous in naval history, from the great battle fought in the adjacent seas on the 19th, 20th, and 22d of May, 1692, between the combined English and Dutch fleets under Admiral Russell, and the French under Tourville. The allies, who were superior in force, gained a decisive victory; about 20 of the French ships, including that of the admiral, were taken or destroyed. This engagement may be considered as the æra of the naval preponderance of England over France.

HOHENLINDEN, a village of Bavaria, circ. Isar, 19 m. E. Munich. Near this village took place, on the 3d of December, 1800, one of the greatest conflicts of the revolutionary war, between a French and Bavarian army, under Moreau, and the Austrians, under the archduke John. The former gained a complete victory. Besides killed and wounded, the Austrians lost 10,000 prisoners and 100 pieces of cannon. Campbell's noble ode, entitled *Hohenlinden*, has rendered the name at least of this battle familiar to most Englishmen.

HOLBEACH, a market town and par. of England, co. Lincoln, wap. Elloe, parts of Holland, 37 m. S.S.E. Lincoln, and 89 m. N. London. Area of par., 20,240 acres; pop., in 1831, 3,890. The town, situated on the Bedford Level, between the Glen and the Nen, and about 6 m. from the sea, is old and badly built. The church is large and handsome, having a tower surmounted by a light octagonal spire, which is visible from a great distance across the fens. A chapel for Wesleyan Methodists, a well-endowed free school, and an hospital for 14 poor old men, are the only other public buildings. Holbeach is one of the polling places for the S. division of the co. Markets on Thursday: horse-fairs, well attended, May 17., Sept. 11., and Oct. 11.

HOLLAND, or THE NETHERLANDS, comprising the territories formerly included within the SEVEN UNITED PROVINCES, now a secondary European kingdom, but which, in the 17th and 18th centuries, was an independent republic, raised by the industry, economy, and enterprise of its inhabitants to the first rank as a commercial and maritime power. The kingdom of Holland (exclusive of Dutch Limburg and Luxemburg) lies in N.W. Europe, between lat. 51° 12′ and 53° 30′ N., and long. 3° 22′ and 7° 12′ E.; having E. Hanover and Rhenish Prussia, S. Belgium, and W. and N. the North Sea. Length, N.E. to S.W., about 200 m.; average breadth about 65 m. The W. half of Limburg, which belongs to Holland, joins the above territory on the S.E., and is enclosed by Belgium W. and S., and Rhenish Prussia E. That part of the grand duchy of Luxemburg which belongs to Holland is situated between lat. 49° 28′ and 50° 13′ N., and long. 5° 45′ and 6° 30′ E.: it is detached from the rest of the Dutch dominions, and surrounded by those of Prussia, Belgium, and France. The area, pop., subdivisions, chief towns, &c., of these territories are as follows: —

Provinces.	Area in sq. m.	Pop. (Jan. 1849.)	Pop. to sq. m.	Chief Towns, and Population.
HOLLAND: —				
North Brabant	1,976	392,263	198	Bois-le-Duc, 19,000. Breda, 12,700.
Guelderland	1,965	368,855	188	Arnheim, 16,300. Amersfort, 13,000.
North Holland	958	463,760	484	AMSTERDAM, 212,000. Leyden, 39,000.
South Holland	1,173	558,916	476	Rotterdam, 80,000. The Hague, 67,000.
Zealand	671	155,271	231	Middelburg, 16,000.
Utrecht	535	151,321	283	Utrecht, 45,000.
Friesland	1,261	245,013	194	Leeuwarden, 22 000.
Over-Yssel	1,290	212,707	165	Zwoll, 17 000. Deventer, 14,500.
Groningen	1,000	189,700	190	Groningen, 31,000.
Drenthe	1,028	84,013	81	Assen, 1,300.
Limburg	763	198,467	260	Maestricht, 31,000.
Luxemburg	975	185,485	191	Luxemburg, 12,000.
Total	13,598	3,206,801	236	

Physical Geography. — With the exception of some insignificant hill-ranges in Guelderland and Utrecht, and a few scattered heights in Over-Yssel, the whole k. of Holland is a continuous flat, partly formed by the deposits brought down by the rivers intersecting it, and partly conquered by human labour from the sea, which is above the level of a considerable portion of the country. Holland is consequently at all times liable to dangerous inundations. The W. coast, however, from the Helder to the Hook of Holland, is partially protected by a natural barrier composed of a continuous range of sand-banks, or *dunes*, thrown up by the sea, of great breadth, and frequently 40 or 50 ft. in height. As the sand, which is very fine, is easily blown about by the winds, the dunes are carefully planted with the *Arundo arenaria*, or brent, which binds them firmly together, obviating the injury that would otherwise be caused by their spreading over the country, and rendering them an effectual barrier against the encroachments of the sea. But, in other parts of the country, particularly in the provs. of Zealand, Friesland, and Guelderland, the sea is shut out by enormous artificial mounds or dykes, any failure in which would expose extensive districts to the risk of being submerged. In nothing, indeed, is the industry and perseverance of this extraordinary people so conspicuous as in the construction and maintenance of these dykes. It being necessary to shut out not only the sea, but the rivers, the channels of which are in parts elevated considerably above the level of the land, the extent of dykes is immense, and the expense and labour required to keep them in repair is very great. They are constructed principally of earth and clay, sloping very gradually from the sea or the river, and usually protected in the more exposed parts by a facing of wicker-work formed of interlaced willows: sometimes their bases are faced with masonry; and they are in parts defended by a breastwork of piles, intended to break the force of the waves. The most stupendous of these dykes are those of W. Capelle, in the island of Walcheren, and that of the Helder; but there are many others of hardly inferior dimensions.

The rivers of Holland have mostly a W. or N. direction. The principal is the Rhine, which, for the most part, separates N. Brabant from Guelderland and S. Holland, and after receiving the Meuse, divides into two principal arms, called the Maese and Hollands-Diep. Before reaching Nimeguen, it has given off a branch to the N., which, though of less size, preserves the name of the Rhine instead of the main stream, and itself gives off the Yssel: these two branches discharge themselves into the Zuyder Zee. The main stream from the above point, near Nimeguen, takes the name of the Waal, and after its junction with the Meuse is called the Merwe. A branch called the Lech unites the lesser Rhine with the Merwe E. of Rotterdam. (*See* RHINE.) The Meuse traverses the S. E. part of Holland; the Scheldt, its S. W. extremity. The Maese, true Rhine, and Scheldt discharge themselves into the North Sea. The æstuary of the Ems forms the N. W. boundary of Holland. Lakes are extremely numerous, especially in the N. provs.; and there are some extensive marshes, as the *Bourtang* on the N.E. frontier, the *Peel* in N. Brabant and Limburg, &c. The islands may be classed in two groups: the S. group, composing a great part of the prov. Zealand and a portion of S. Holland, is formed at the mouths of the principal rivers, and comprises Cadsand, N. and S. Beveland, Walcheren, Schonwen, Tholen, Over-Flakkee, Voorn, Beyerland, Yssermond, &c.; the N. group follows the line of coast stretching from the Helder to near the mouth of the Ems, and includes the Texel, Vlieland, Ter Schelling, Ameiland, &c. There are several small islands in the Zuyder Zee. (*Balbi, Abrégé*, pp. 352, 353.; *Dict. Géog.; De Cloet, Descr. Géog.*, &c. *des Pays Bas*.)

Climate. — Holland is colder than any part of England in the same lat., and all passage for ships on the great canal between Amsterdam and the Helder is annually stopped by ice for three months. The mean temperature of the year throughout the country is stated in the *Journal de Travaux* of the French Statistical Society to be 47° Fahr. According to official tables published in 1829, the range of temperature from 1815 to 1824 inclusive was from 23° below zero to + 102° Fahr. The climate generally is variable, and the atmosphere much loaded with moisture, especially in the W. provs., where intermittent fevers, dropsies, pleurisies, rheumatisms, and scurvy are frequent diseases. Guelderland is the healthiest prov., but all the E. parts of the country are warmer and more salubrious than the others. Holland is continually subject to strong winds, without which, indeed, to remove the exhalations from the stagnant marshes, canals, &c., the country would be very unhealthy. This circumstance is also taken advantage of for turning innumerable windmills, by the help of which the drainage of the land is chiefly effected. (*See post.*) In winter the winds sometimes rise to violent tempests, and in spring are often very high. They are particularly liable to cause inundations by raising the tides on the coast higher than usual, when they blow strongly from the W. or N.W. In winter N. or N.E. winds are the most common; snow falls abundantly, and even the Zuyder Zee is sometimes frozen over. In summer cold nights often succeed to days of intense heat. (*De Cloet*, p. 35.; *Lettres sur la Hollande*, i. 87. &c.)

Natural Products.—The soil being almost every where alluvial clay and sand, Holland possesses little, if any, mineral wealth. It has no mines of any description. Some bog-iron is met with, but no other metal. No coal deposits are found, but, extensive beds of marine peat, of a most excellent quality, abound, especially in Friesland and Holland. Potters' clay, fullers' earth, and some calcareous products, are met with, but scarcely any stone is found from one end of the kingdom to the other. Holland, however, is abundantly supplied with granite and limestone, conveyed from Limburg by the Meuse; but the greater part of the lime used in the marit. provs. is obtained by burning sea shells. The country contains very little wood. There is some timber in the E. provs., and at the Hague, Utrecht, and Haarlem, there are woods of oak, elm, beech, &c., but, speaking generally, most of the trees have been planted. The principal canals, especially in and near the towns, are lined with rows of willows and poplars; and in various places along the sandy shore firs are produced. In other respects the vegetation is very similar to that of England. The fringed buckbean (*Menyanthes nymphæoides*), however, which is rare in the latter country, here floats in the greatest profusion on the surface of the canals, and the more rare *Senecio paludosus* is not unfrequently met with. The zoology, also, is in most respects like that of our own country. The larger kinds of wild animals are not met with. Hares and rabbits are pretty plentiful, but not winged game. The preservation of game is an object of great interest to most proprietors; and notices to that effect are fixed up, and great vigilance exercised to prevent the trespassing of sportsmen and others. In dry seasons, in some districts, field mice multiply to such an immoderate degree as to produce serious loss to the farmers, by destroying the roots of the grass in the meadows, where they burrow by millions. The pools and marshy grounds abound with frogs and other reptiles, which are a favourite food of storks. These birds are particularly numerous in Holland, where they remain from the middle of February to the middle of August. They are great favourites, and severe penalties are enforced upon their wilful destroyers. In the towns they build their nests on the houses; and in those parts of the country that are destitute of trees, buildings, or other *points d'appui*, an old cart-wheel is very often raised upon a high pole, to afford them facilities for the same purpose. Water-fowl are very abundant. The principal fish that frequent the Dutch coasts are cod, turbot, soles, and other flat fish. The herring fishery, an important source of wealth, will be afterwards noticed. (*Dict. Géog.; Chambers's Holland*, pp. 23—38. &c.; *Barrow's Tour in S. Holland*, p. 59.; *De Cloet*, pp. 36—39.; *Jacob*, pp. 8. 17.)

Public Works, Dykes, Canals, &c. —There is perhaps no country for which nature has done so little, and man so much, as this. The first and greatest of the works of art are the stupendous *dykes* before alluded to. The construction and repair of these prodigious bulwarks is placed under the control of a particular department of the government (*Waterstaat*), and of a corps of engineers especially appointed for this important service. The expenditure of this department amounts to a large sum annually. The cost of each dyke is defrayed by a tax laid on the surrounding lands, assessed according to long-established usage, and levied by commissioners appointed for the purpose. The expenditure in labour, though great, is generally much exceeded by that in willows and timber. The former are raised in extensive plantations near the places where they are wanted.

If there be any danger of an inundation, the inhab., on a signal being given, repair *en masse* to the spot. There is never any backwardness on these occasions, every one being fully aware, not only that the public interests are at stake, but that his own existence perhaps, and that of his family and friends, would be involved in extreme hazard should the waters break through the dykes. Hence, the most strenuous efforts are made to ward off the impending danger, and every possible device is adopted by which the dykes may be strengthened, and the threatened inroad prevented, or its violence mitigated. In despite, however, of these precautions and efforts, Holland has on numerous occasions sustained extreme injury from inundations. That extensive arm of the sea called the Zuyder Zee, between the provs. of Holland, Guelderland, and Friesland, occupying an area of about 1,200 sq. m., was formed by successive inundations in the course of the 13th century. The Haarlem Meer or Lake owes its origin to an inundation in the 16th century, which proved fatal to great numbers of the

inhab.; and very many inundations have taken place within a comparatively recent period. Owing, however, to the improved construction of the dykes, and the greater skill in engineering, these calamities are now neither so frequent nor so destructive as formerly. But they still occasionally occur.

Some of the interior parts of the country traversed by the great rivers are probably even more exposed to the dangers of inundation than those contiguous to the shore; and when the *débacle*, or breaking up of the ice, takes place in the upper part of the river, before it has begun nearer the sea, as is sometimes the case, the risk of inundation is extreme. On such occasions every effort is made, not excepting even the employment of artillery, to break the ice and facilitate the exit of the water, but sometimes without the desired effect. The following is an instance of this sort of calamity. "One of the richest tracts of country, in the vicinity of Arnheim, has been often exposed to tremendous inundations. These are frequently felt at the breaking up of a long frost; but in no instance so calamitously as in the winter 1808-9. A violent tempest from the N.W. had raised the waters of the Zuyder Zee some feet above the highest mark of the spring tides, and the waves beat with unusual violence against the dykes constructed to break their fury. The thaw on the Upper Rhine had increased the quantity, and the force of its waters, which brought down masses of ice 14 ft. in height, and more than half a mile in length; to which the embankments, softened by the thaw, and somewhat injured, presented an insufficient barrier. A breach made in one part soon extended itself, and the torrent quickly covered the country, bearing before it by its force the villages, the inhab., and the cattle. The height of the Zuyder Zee prevented the water from finding an outlet; and it consequently remained on the ground for a long period, in spite of the exertions of the surviving inhab. By this event, more than 70 houses were totally destroyed, a far greater number irretrievably damaged; and of 900 families, more than 500 were rendered utterly destitute: more than 400 dead bodies were left on the borders of the current; and at the city of Arnheim 500 persons, mostly women and children, with many hundred head of cattle, were rescued from a watery grave, by the hazardous heroism of the inhab., who ventured in boats to their rescue." (*Jacob's View of the Agric. of Holland, &c.*, pp. 57, 58.)

The general aspect of Holland is different from that of any other country in Europe. Its surface presents one immense network of canals, which are there as numerous as roads in England, the purposes of which, indeed, they for the most part answer. The greater number are appropriated to the drainage of the land; many, however, are navigable by large vessels. The principal is the Grand Ship Canal of N. Holland, between Amsterdam and Niewdiep, near the Helder. This noble work, the greatest of its kind in Europe, is about 50½ m. long, 125 ft. broad at its surface, and 36 at bottom, with a depth of 20 ft. 9 in.; it extends from Amsterdam to the Helder, and was completed between 1819 and 1825, at an expense of 950,000*l*. It has a towing path on each side, and admits of two frigates or merchant vessels of the largest size passing each other. The lock-gates at its entrance exceed in dimensions the largest in the docks of Liverpool. By means of this canal, ships avoid the delay and danger they were formerly subject to in navigating the Zuyder Zee, and reach the Texel from Amsterdam in 18 hours. As a commercial speculation, it has been but indifferently successful; but it is of incalculable benefit to Amsterdam, to which it has given all the advantages of a deep-water harbour on the most accessible part of the Dutch coast. The other chief canals are — the *Zederik*, in S. Holland, from Vianen to Gorcum; that from Bois-le-Duc to Maestricht, available for vessels of 800 tons; and that between the Ems and Harlingen, in Friesland. As they run through an entirely level country, locks are generally unnecessary, except at their mouths. One of the finest monuments of scientific skill to be seen in Holland, is a succession of locks or sluices of enormous size and strength, constructed in 1809, at the mouth of that branch of the Rhine on which Leyden is situated. This mouth was for a long period choked up with sand, but it is now kept quite clear, the locks being closed with the flow and thrown open by the ebb of the tide. The larger canals are commonly about 60 ft. broad, by six deep; and though often below the level of the sea, not only their surface, but their bottom, is frequently higher than the adjoining country. The smaller canals, by which the country is drained, traverse and surround sections of land protected from inundations by means of dykes.

Such sections are termed *polders*. A tract of land on being rescued from the sea or a river is in the state of a morass or marsh; and the next process is to dry it, so as to render it suitable for tillage or pasture. To effect this, the marsh is intersected by water-courses, and windmills are employed, as in the Fens in England, to lift up the water. These mills are erected on the dyke or rampart, excluding the sea or river, and raise the water to a ditch or canal on the other side. Pumps are seldom employed for this purpose, wheels being by far the most generally used. Sometimes the marsh is too extensive to be drained simultaneously, in which case it is divided into compartments by subordinate ramparts and water-courses; and mills being erected on them, each portion is separately divested of water. In many cases, however, the depth of the marsh below the level of the sea or river is too great to allow of the drainage being effected by one series of ramparts and ditches; and in these cases, two or more series of ramparts, ditches, and mills are constructed at different elevations, the water being lifted up successively from one to another, till it be finally brought to the desired level and conveyed away. We may form some idea of the labour and patience required in an undertaking of this kind, when we learn that the surface of some of these polders is as much as 24 ft. below high-water mark, and 30 ft. below the level of the highest tides! The soil of the polders is of very various sorts. Where it is clayey, and the drainage perfect, they are extremely fertile, and are not unfrequently cultivated; but where the soil is mossy, or the drainage incomplete, they are employed as meadows.

In sailing along the arms of the sea, the rivers or canals of this singular country at a considerable elevation above the surrounding fields, one is forcibly reminded of Goldsmith's verses:—

"To men of other minds my fancy flies,
Embosom'd in the deep where Holland lies:
Methinks her patient sons before me stand,
Where the broad ocean leans against the land,
And, sedulous to stop the coming tide,
Lift the tall rampire's artificial pride.
Onward, methinks, and diligently slow,
The firm compacted bulwark seems to grow;
Spreads its long arms around the watery roar,
Scoops out an empire, and usurps the shore:
While the pent ocean rising o'er the pile
Sees an amphibious world beneath him smile;
The slow canal, the yellow-blossom'd vale,
The willow-tufted bank, the gliding sail,
The crowded mart, the cultivated plain,
A new creation rescued from his reign."

The facility with which the country may be laid under water, contributes materially to its strength in a military point of view. This, indeed, is not a resource to be resorted to, except on extreme occasions; but it was repeatedly made use of in the war of liberation, and also in 1672, when Louis XIV. invaded Holland. It is said that in 1830-32 every thing was prepared for an inundation, had the threatened inroad of the French taken place.

The roads and private estates are commonly fenced by canals or ditches alone; hedges are rare. The highways in the central provs. are among the best in Europe. They run for miles in a straight line along the summits of the dykes, and are thus at once dry and elevated, so as to command extensive views. Between the large cities they are broad, and usually paved with a kind of small hard bricks called clinkers, mostly made of sand mixed with the clayey mud obtained in cleaning the canals. They are fitted so exactly to each other, when laid down, that scarcely a crevice is to be seen; and being well covered with sea sand, they sustain little injury from carriages. Elsewhere, the roads are made of sea-shells and the common soil, well compounded together; which mixture, though soft, is not much cut by the wheels; where water conveyance is so abundant, it may be easily supposed that few carriages will travel on roads burdened with tolls so high as to amount to nearly as much expense as the post-horses. In fact, all the transport of farm-produce and other bulky goods is carried on by means of water; and persons travelling, unless they belong to the opulent classes, commonly make use of the canal barges, or *treckschuits*, towed by horses. This is especially the case in the N.E. provs., where the roads are so bad as to be scarcely passable in wet weather. A railroad, intended to connect Amsterdam with the other chief commercial cities, is said to be now in progress. (*Jacob's View of the Agric., &c.*, pp. 15—17.; *Chambers*, pp. 8. 10—24.; *De Cloet, Descr. des Pays Bas.*)

Distribution of Land. Farms. — Of about 7,600,000 acres, which the total surface of Holland (ex. Limburg and Luxemburg) comprises, there were estimated to be, in 1833, 5,310,000 acres of cultivated land; 2,000,000 ditto uncultivated; 220,000 ditto occupied by canals, ponds, &c.; and the residue by roads, buildings, and public walks. The richest lands are in the S. and central provs.; the poorest, for the most part, in the N.E.: in Over-Yssel and Drenthe, especially, heath and waste lands prevail to a great extent. A good deal of waste land, originally of a very unpromising quality, has, of late years, been brought into cultivation by the pauper population settled upon it. According to Mr. Jacob, the highest price that meadow land bears in any part of the central provs. is about 54*l*. sterling the acre; such land, when let, produces a yearly rent of about 2*l*. 10*s*. an acre, the landlord

paying a land-tax of 25 per cent. The minimum value of pasture land in the same districts is estimated at from 45*l.* to 50*l.* the morgen (about 1½ acre); it lets from about 1*l.* 12*s.* to 2*l.* the morgen, and is subject to a like deduction for land-tax. Money vested in land in Holland, can scarcely be made to pay more than 2½ to 3 per cent. interest. The farms in the island of Cadsand, and the adjacent parts of Zealand, &c., vary from 100 to 200 arpents (166 to 330 acres) each. In one of the medium size of 150 arpents, about 20 arpents are generally in fallow, 20 are sown with barley or rapeseed, 40 with wheat, 30 with beans, and 10 with clover, carrots, or potatoes; 20 are in meadow; and trenches, &c. occupy the remaining 10. The Cadsand farms surpass those of Flanders in fertility, the soil being so rich that manure is seldom used. They are commonly let on leases of 7 years: the land-tax varies, according to the quality of the soil, from 10 to 14 florins the arpent. It is estimated, that on a medium-sized farm the farmer must expend about 750*l.* before he begins to derive a return by the sale of his crops. (*Radcliffe's Agriculture of Flanders, &c.*, pp. 182—206.)

In S. Holland the proportion of pasture to arable land is about 2 to 1. The average size of farms is from 40 to 50 *bunders* (the same as the French *hectare*, nearly 2½ acres each); large farms run from 70 to 100 bunders. The principal proprietors usually let their land on lease to the peasantry; the proprietor paying the property-tax, and the dues on dykes, polders, and water-mills; and the farmer a personal tax and the tax on servants. In some instances the landlords furnish or pay for seed and manure, and go halves in the crops with the tenants on the *métayer* principle; but even when this is not the case, the rent is always paid in kind. The leases are commonly for 6 years. In N. Holland, farms average no more than 20 bunders, or 50 acres, each; on which from 16 to 18 cows, 4 calves, a horse, and 15 or 20 sheep, besides a few hogs, may be kept if the soil be good. The rent of pasture-land varies from about 18 to 50 florins, of arable land from 35 to 50 florins the bunder: garden grounds near the towns let somewhat higher. In Friesland, the quantity of pasture is more than 8 times greater than that of arable land. The common size of a farm is from 75 to 100 acres; but some are nearly twice as large. They are generally let on leases of 5 or 7 years, the proprietor paying the land-tax, and the cultivator the other assessments; though in some parts the proprietor contributes his quota to the maintenance of dykes and dams. Few proprietors cultivate their own land. The best clay pasture in that province fetches a rent of from 3*l.* to 4*l.* the bunder; but a considerable proportion of the soil is sandy and inferior, and lets for only from 30*s.* to 50*s.* the bunder: there are also about 300 bunders marshy and unproductive, some yielding a rent of no more than 10*d.* a bunder. (*Parl. Reports on Agriculture*, 1837.) In Guelderland there is some good land, but a great deal more is very indifferent; and in the S.W. vast tracks have been planted with Scotch firs and Weymouth pines; many hundred acres have also been sown with acorns, without any hope of the oaks ever reaching the size of timber, but merely for the sake of the underwood. Some of this kind of land has been sold for about 15*l.* the acre; but after having been improved by the propretor, does not pay more than 2½ per cent. interest for the capital invested. In some parts of the prov., however, as for instance Dresburg, there are rich meadows worth from 55*l.* to 70*l.* the acre, and adequate to fatten an ox to the weight of from 2,500 to 3,000 lbs. (*Jacob's View of the Agric., &c. of Holland*, pp. 48—52. 61.)

Crops, Mode of Agriculture. — The principal grains cultivated are rye and buckwheat; next to these come oats and barley. About 1,000,000 lasts of wheat are produced yearly, 10 per cent. of which is estimated to be consumed in breweries, distilleries, and starch and other manufactories. (*De Cloet*, p. 44.) Wheat is a good deal grown round Utrecht, the country there being more elevated and suitable for it, than most other parts of Holland; the wheat of Friesland, however, is extremely good, and the prov. of Zealand yields more than is required for its own consumption. In both the last-named provs. pulse and garden vegetables are abundantly grown, besides woad and madder (about 20,000 quintals yearly, *De Cloet*) in the former, and millet and horse-radish in the latter. Flax is raised in large quantities in the S., and especially round Dort, which is the centre of a considerable trade in that article. There is an abundance of fruit in Guelderland and Holland; but in the N. provs. only apples and pears come to any perfection. The vine is cultivated only in Luxemburg. Utrecht and Guelderland are noted for their tobacco; 30,000 quintals yearly were formerly sent into the market, from those provs. (*De Cloet*, p. 49.) Potatoes, rapeseed, hemp, chicory, mustard, hops, beet-root, and some medicinal plants, are the other principal articles of produce. The ancient passion of the Dutch for tulips and other bulbous plants still exists, though it be now confined within comparatively reasonable limits; there are some large flower-gardens, in the neighbourhood of Haarlem especially, from which great numbers of bulbs are annually exported.

In S. Holland wheat is the grain most cultivated, the quantity of it raised being double that of barley, which comes next to it in importance. Wheat is said to produce from 12 to 15 fold, and other grains in proportion; but such statements are seldom worthy of much confidence. The rotation in this prov. is usually as follows: — Rapeseed, winter barley, or rye, succeeded by rapeseed, barley, or wheat; flax, beans, or oats, succeeded by summer grains, and these by potatoes; rye, oats, beans, and clover; and the last year the remainder of the clover — after which the ground is fallowed. In N. Holland, rape and mustard seeds, barley, oats, peas, and horse and pigeon beans, are generally grown in the rotation, though no fixed rule is observed. There are no fallows in this prov. In Friesland the better sorts of land are appropriated to wheat, barley, rye, and rapeseed, and the inferior to summer grains, as buckwheat and oats. Rapeseed, after fallows, is succeeded next year by wheat or barley; on wheat lands the alternate crops are barley or beans, flax or potatoes; on rye lands, buckwheat and oats. (*Parl. Reports.*) Near the W. border of Guelderland, the land when cleared is manured and sown with buckwheat; after that, a second dressing of dung is administered, and after a single ploughing rye is sown. The rye is usually harvested in July, when turnips are sown after a single ploughing. There are thus regularly 3 crops in every 2 years. The average produce of buckwheat is from 20 to 22 bushels per acre, and rye 2 bushels more. Probably 7 or 8 cart-loads of manure are applied to an acre of land before buckwheat or rye. Further E. the land improves considerably. Near Dresburg, the usual rotation is, first beans; then wheat, in which clover is sown; and after the clover, oats. Some of these lands are of a stiff texture, and on these it is usual to make a year's clean fallow; after which the same rotation is pursued.

When Mr. Jacob travelled in Holland, the turnip and potato culture were ill understood. Madder is very extensively grown in S. Holland, and usually produces 4,000 lbs. to the acre, but it tends to exhaust the most fertile soils. It is frequently followed by colewort, sometimes by turnips; to these succeed wheat or oats; after which the land is laid down to grass, the growth of which in a short period becomes very luxuriant. The land destined to the culture of tobacco in Guelderland is laid out in very small patches of not more than a quarter of a rood each, slightly fenced by a few dry sticks, around which scarlet runners are trained, to protect the plants against the wind. When gathered, the tobacco is hung on sticks in the houses and barns, and where the cultivation is extensive, large buildings, with sliding weather-boards, are erected, for the purpose of drying it. During the war, the project of supplying continental Europe with tobacco from its own soil, gave a temporary stimulus to its culture in Holland. Dutch tobacco soon rose to a high price, and large sums of money were laid out on its cultivation; but the article being very inferior to that of America, and more expensive, its price fell, after the peace, as rapidly as it had risen, and the capitalists who had embarked in the speculation suffered a heavy loss.

Pasture-farms, Cattle, and Dairy-husbandry. — The rearing of live stock and dairy-husbandry is a much more important source of national wealth than tillage. Between the capital and Utrecht, the land is almost wholly rich pasture, on which numerous cows are kept. The farms there seldom comprise more than from 50 to 100 acres. Their price, including buildings, averages 60*l.* an acre, though the rent they yield is scarcely more than 2½ per cent. interest on the capital. On these farms numerous cows are kept. The lean cattle, brought from Denmark and Germany, fatten with great rapidity in the Dutch polders, and an important branch of the trade of Friesland is the supply of the capital with fatted cattle. Artificial grasses are but little cultivated, and cattle are seldom stall-fed: indeed, it is too common to suffer the cows to remain in the open damp fields, both day and night, except in winter. The horned cattle of Holland are remarkable for their beauty; in S. Holland they resemble the Devonshire breed, but are rather larger, not, however, equalling the size of the Lincolnshire or Sussex cattle. The Dutch horses are good, and well adapted for draught; the best are those of Friesland; but many are reared in Groningen to be sent to Amsterdam. The breeds of sheep are bad or indifferent: they are mostly long-woolled, with white faces, polled, and long heads and legs. They yield a great deal of coarse wool.

In the neighbourhood of large towns it is found to be most profitable to retail the milk produced on the farms; but at a distance from such markets, it is nearly all appropriated to the making of butter and cheese. In some of the dairy farms near the Hague, the average stock is about 60 cows; and a good cow may be esti-

mated to produce 80 lbs. of butter, and 180 lbs. of cheese, during the six summer months. Throughout the greater part of Holland, butter is made of the cream only, and cheese of the skimmed milk; but in some districts the whole produce of the cow is devoted to making cheese. A good deal of butter is sent to England. The yearly export of cheese is estimated at 350,000 cwts. The dairy, the cows, and the cow-keeper's family occupy the same building, and in many instances the same apartment; but the cleanliness of the Dutch dissipates any feeling of repugnance that the idea of such an arrangement might produce in a stranger.

A farm of 52 bunders in S. Holland requires, at an average, 5 servants, the family of the farmer assisting. The wages of servants vary from 60 to 150 florins a year; those of a maid-servant understanding the making of butter and cheese average 100 florins. The rate of day wages is, in summer, 18 to 20, and in winter, 14 to 16 stivers. The women are employed in the dairy business, in weeding, hay-making, and binding sheaves in harvest-time. The severer labour required in the making of cummin-seed cheese is generally performed by men, to whom also milking is often left. All regular servants board and lodge with the farmer, and eat at the same table with the family. Their food chiefly consists of wheat and rye bread, potatoes, turnips, French beans, bacon, fresh and salt beef, and pancakes of buckwheat flour and bacon. Fewer servants are generally required on the farms in N. Holland. On one on which 20 cows are milked, a man and a woman, exclusive of the farmer and his wife, are sufficient. The wages of regular servants in N. Holland vary from 80 to 100 florins a year; they board and lodge with the farmer, but their food appears to be hardly so substantial as in the last-named prov. The wages of a day-labourer are about 20*d.*, without food. The clothing of the labouring classes generally is much the same as in England — fustians, velveteens, and stout woollens for the men, and cottons and linsey woolsey stuffs for the women. Wooden shoes are, however, in pretty general use. (*Jacob*, *Radcliffe*, *Chambers*, *&c.*, passim; *Parl. Reports*, 1837.)

Fisheries. — The herring fishery formerly carried on by the Dutch, though the most absurd notions were entertained by foreigners of its vast importance, was undoubtedly a considerable source of wealth and employment. It is now, however, confined within comparatively narrow limits, not employing more than about 80 *busses* of 50 or 60 tons burden, manned by 12 or 14 men each. The herrings cured by the Dutch are decidedly superior to those of the English or any other people. "The whole process is conducted on shipboard. Immediately on being caught, the herrings are bled, gutted, cleaned, salted, and barrelled. The bleeding is effected by cutting them across the back of the neck, and then hanging them up for a few seconds by the tail. By being thus relieved of the blood, the fish retains a certain sweetness of flavour and delicacy of flesh which unbled herrings cannot possibly possess. The rapidity of the process of curing must likewise aid in preserving the native delicacy of the animal; for the herring is salted and in the barrel in a very few minutes after it has been swimming in the water. The first herrings caught and cured, to the extent of two or three barrels, are instantly despatched, by a fast-sailing vessel, for Holland, where their arrival is anxiously expected. On their landing at Maas-sluis, one barrel, decorated with flowers, and with flags flying, is despatched to the Hague, as an offering to his majesty, who on this occasion presents the fortunate fishers with 1,000 guilders. The other barrels are sold by public auction, and generally fetch from 900 to 1,100 guilders. These precious barrels are then subdivided among the dealers, who retail them at a high price. A single herring of this first importation brings 1½ to 2 guilders, — that is, 2*s.* 6*d.* to 3*s.* 4*d.* each. So highly are they esteemed, that a single herring is considered a handsome present; and it is a custom to make such gifts to friends and acquaintances on this auspicious occasion. Livery servants may be seen passing through the streets with a plate, on which lie one or two herrings, covered with a fine white cloth and a neat card of presentation." (*Chambers*, p. 43.)

Manufactures.—The government of Holland is anxious to encourage manufactures; and coal, on which a heavy duty is ordinarily levied (in order to promote the use of peat, and the collateral formation of *polders*), may be imported duty free, if for their use. The principal manufactures are those of woollen cloths, in Leyden and Utrecht; silks and velvets, in Utrecht, Haarlem, and Amsterdam; linens, cotton goods, in Haarlem; paper, leather, cordage, hats, ribands, needles, white lead (the best made in any country), borax, glue, vermilion, saltpetre, tobacco, liqueurs, &c. There are numerous distilleries, and the town of Schiedam in S. Holland is particularly celebrated for its Geneva or Hollands. In Amsterdam, and other places, there are many sugar refineries. Haarlem has extensive bleaching factories, for which its water is supposed to be especially adapted. At Utrecht and Leyden, large quantities of tiles and bricks are made. Amsterdam is famed for its lapidaries and diamond cutters. Steam engines are employed to turn the machinery in the new and extensive cotton factory established at Haarlem; but in general windmills are used to perform offices to which steam engines are applied in Great Britain. Though most of the windmills are for the purpose of draining the land, a great many saw timber, crush rapeseed, grind snuff, &c. They are of larger dimensions than in England; the length of their sails varying from 80 to 120 ft.; they are always in sight in a Dutch landscape, and in the suburbs of the larger cities vast numbers of them are always congregated. They have all moveable roofs, so as to present their front to the wind at every change. The Dutch have attained to the highest excellence as millwrights, and some of their draining mills are of sufficient power to raise 700 tons of water to the height of 4 ft. in a minute! At an average, they discharge 250 tons a minute. The ships constructed by the Dutch are built mostly at Rotterdam and Amsterdam. They are stout without being clumsy or heavy; and round sterns, and the other modern improvements in naval architecture followed in our own dock-yards, are also practised in those of Holland. The Dutch E. India-men are handsome ships, well rigged, manned, and armed; and are not surpassed either in speed or durability by any similar class of merchantmen in Europe. (*Chambers*, p. 7.; *Barrow*, p. 101.; *De Cloet*, pp. 43—54. 71—94.)

Commerce.— The commerce of Holland was formerly the most extensive carried on by any European state; and the wealth which it brought into the country furnished her with the means of supporting the vast expense of her lengthened struggle with Spain, and of her subsequent contests with France and England. The circumstances under which the Hollanders have been placed, the natural poverty of their country, and the necessity of unremitting vigilance to prevent its being submerged, made industry and economy a condition of their existence. Holland being destitute of iron, coal, timber, and many other indispensable articles, the prosecution of commerce is there not a matter of choice but of necessity; and hence it is that, in the earliest periods, we find the Batavians distinguished for their fisheries, their shipping, and their commercial enterprise. For a lengthened period they engrossed nearly the whole sea-fishery of Europe; and they were long the carriers and factors of the principal European states. In 1594, the Dutch appeared, for the first time, in India; and, in the course of a few years, they wrested Amboyna and the Moluccas from the Portuguese; and having obtained with them the monopoly of the spice trade, laid the foundations of an empire in the East, second only in magnitude and importance to that established at a later period by the English. Holland had long, also, a preponderating influence in the trade with the Baltic, from which she has, at all times, drawn a large supply of some of the principal necessaries. But, without entering into particulars, it is sufficient to state, as illustrative of the former extent of the trade of Holland, that, in 1650, when it had attained to a maximum, Sir William Petty estimated the whole shipping of Europe at 2,000,000 tons, of which he supposed the Dutch to possess 900,000 tons; and it is believed, that this estimate was rather within than beyond the mark.

The decline of commerce in Holland was occasioned partly and principally by the natural growth of trade and navigation in other countries, and partly by the increase of taxation occasioned by the numerous contests in which the republic was engaged. During the occupation of Holland by the French, first as a dependent state, and subsequently as an integral part of the French empire, her foreign trade was almost entirely destroyed. Her colonies were successively conquered by England; and, in addition to the loss of her trade, she was burdened with fresh taxes. But such was the vast accumulated wealth of the Dutch, their prudence and energy, that the influence of these adverse circumstances was far less injurious than could have been imagined; and, notwithstanding all the losses she had sustained, and the long interruption of her commercial pursuits, Holland was still, at her emancipation from the yoke of the French, in 1814, the richest country in Europe. Java, the Moluccas, and most of her other colonies, were then restored, and she is now in the enjoyment of a large foreign trade. This is in part owing to her extensive command of capital, and the possession of so fine a colony as Java, and in part to the advantageous situation of the country at the mouth of some of the principal continental rivers. This circumstance renders her an entrepôt for a considerable portion of the Continent; and gives her advantages that will necessarily continue to increase with the progress of the countries supplied through her intervention.

The connection of Holland with Belgium was an unfortunate one for both countries. The union was not agreeable to either party, and was injurious to the

former. Belgium was an agricultural and manufacturing country; and was inclined, in imitation of the French, to lay restrictions on the importation of most sorts of raw and manufactured produce. A policy of this sort was directly opposed to the interests and the ancient practice of the Dutch. But though their deputies prevented the restrictive system from being carried to the extent proposed by the Belgians, they were unable to prevent it from being carried to an extent that materially affected the trade of Holland. Whatever, therefore, may be the consequences as to Belgium, there can be little doubt that the separation between the two divisions of the kingdom of the Netherlands will eventually redound to the advantage of Holland. It must ever be for the interest of England, America, and all trading nations, to maintain the independence of a state by whose means their productions find a ready access to the great continental markets. It is to be hoped that the Dutch, profiting by past experience, may adopt such a liberal and conciliatory system towards the natives of Java, as may enable them to avail themselves to the full of the various resources of that noble and rapidly improving island. And if they do this, and freely open their ports, with as few restrictions as possible, to the ships and commodities of all countries, Holland may still be the centre of a very extensive commerce, and may continue to preserve a respectable place among mercantile nations. Even at this moment, after all the vicissitudes they have undergone, the Dutch are, beyond all question, the most opulent and industrious of European nations. And their present, no less than their former state, shows that a free system of government, security, and the absence of restrictions on industry, can overcome almost every obstacle; "can convert the standing pool and lake into fat meadows, cover the barren rock with verdure, and make the desert smile with flowers."

The merchants of Holland have never been charged with any want of enterprise. On the contrary, they have been, at all times, ready to engage in any adventure, however remote or hazardous, that held out a reasonable prospect of even a moderate profit. But, notwithstanding, Holland is, and always has been, a country of short credit. A discount is usually given for prompt payment, at the rate of 1 per cent. for six weeks, and of 2 per cent. for two months; but the terms of credit, on most articles, and the discount allowed for ready money, have been fixed by usage, and are regarded as essential conditions in all bargains:—"Rien, en effet, de plus facile que de s'établir à Amsterdam; mais rien de plus difficile que de s'y soutenir sans de grandes resources. Dans cette ville, où l'argent abonde, où on le prête contre des sûretés à si bon marché, il est pourtant impossible de s'en procurer à crédit; et sans argent, il n'y a pas plus de possibilité d'y travailler, que de trouver quelqu'un qui veuille se charger d'un papier nouveau qui ne serait pas appuyé d'un crédit que l'opinion, la protection, ou des effets réels feroient valoir à la bourse. Les Hollandois suivent là-dessus des maximes très-austères même à l'égard des maisons d'une certaine considération. Il est extrèmement difficile de trouver sur la bourse des personnes qui prennent du papier d'un négociant pour des plus fortes sommes que celles que peuvent comporter les affaires qu'on lui connoit." (*Ricard.*, *Traité Général du Commerce*, i. 212. ed. 1781.)

This extraordinary caution is not, however, a disadvantage, but the reverse. It hinders commerce from degenerating, as it has done in other places, into gambling adventures, and places it on a comparatively solid foundation. As a proof of the excellence of this system, it is enough to state, that bankruptcies are rarer in Holland than in any other country. Notwithstanding the loss and interruption to all sorts of businesses, occasioned by the occupation of the country by the French in 1795, the failures in that and the subsequent season were not, comparatively, so numerous as in England in ordinary years. And during the convulsions that grew out of the separation of Belgium from Holland, no suspicion was ever entertained of the solvency of any considerable Dutch house.

The imports principally consist of sugar, coffee, spices, tobacco, cotton, tea, cochineal, indigo, wine and brandy, wool, grain of all sorts, timber, pitch and tar, hemp and flax, iron, hides, linen, cotton and woollen stuffs, hardware, rock salt, tin plates, coal, dried fish, &c. The exports consist partly of the produce of Holland, partly of the produce of her possessions in the East and West Indies, and other tropical countries, and partly of commodities brought to her ports, as to convenient *entrepôts*, from different parts of Europe. Of the first class, are cheese and butter (very important articles), madder, clover, rape, hemp, and linseed, rape and linseed oils, Dutch linen, &c. Geneva is principally exported from Schiedam and Rotterdam; oak bark principally from the latter. Of the second class are spices, Mocha and Java coffee; sugar of Java, Brazil, and Cuba; cochineal, indigo, cotton, tea, tobacco, and all sorts of Eastern and colonial produce. And of the third class, all kinds of grain, linens from Germany, timber, and all sorts of Baltic produce; Spanish, German, and English wools; French, Rhenish, and Hungarian wines, brandy, &c. The trade of Holland may, indeed, be said to comprise every article that enters into the commerce of Europe. Her merchants were formerly the most extensive dealers in bills of exchange. And though London be now, in this respect, far superior to Amsterdam, the latter still enjoys a respectable share of this business. We subjoin an account of the quantities of the principal articles of produce imported from Holland into the United Kingdom in the year 1838.

Articles.		Quantities.	Articles.		Quantities.
Bark for tanning and dyeing -	cwts.	186,786	Flax and tow	cwts.	191,602
Butter -	—	164,314	Madder -	—	42,556
Cheese -	—	225,694	Nutmegs -	lbs.	110,487
Cloves -	lbs.	124,966	Mace -	—	3,613
Wheat -	qrs.	82,010	Clover -	cwts.	14,576
Oats -	—	23,681	Flax Seed, &c.	bush.	45,630
			Geneva -	galls.	483,684

The subjoined account shows that the trade of this country with Holland is rapidly increasing.

ACCOUNT of the declared Value of British and Irish Produce and Manufactures exported from the United Kingdom to Holland, from 1833 to 1838, inclusive.

Year.	Value.	Year.	Value.
	L.		*L.*
1833	2,181,893	1836	2,319,622
1834	2,470,267	1837	3,040,089
1835	2,648,402	1838	3,549,419

There belonged to Holland, in 1837, exclusive of small craft, 1,394 ships, of the burden of 111,824 lasts. During the same year, there entered the different ports 2,565 ships under the national flag, 964 do. under the British flag, and 1,858 under other foreign flags. (For further details as to the trade of Holland, *see* AMSTERDAM, ROTTERDAM, &c.)

Money — Weights and Measures. — The most common coin, and that by which accounts are generally reckoned, is the guilder, or Dutch florin, equivalent to 1*s.* 8*d.*, and divided into 20 stivers (1*d.*) and 100 cents (cent = 1-5th of a penny). The dollar is worth 2*s.* 6*d.*, and the rix-dollar 4*s.* 4*d.* Eng. The William, a gold coin, is valued at 17*s.* The Dutch schippoond is 3 quintals, the quintal 100 lbs., and the liespoond 15 lbs.: 100 lbs. Dutch are equivalent to 108 lbs. English. The Dutch quart is equal to 6 8-10ths gall. Eng. The Dutch foot = 11·7 in. Eng.; the ell = 27·1 in. Eng. The Dutch mile, or league, = 3½ Eng. m. nearly.

Government. — Previously to its occupation by the French in 1795, and its subsequent erection into a kingdom by Napoleon, Holland was a republic, governed by the states-general, with the executive power lodged in the hands of a stadtholder. And there can be no question that the great commerce of the Dutch in the 16th, 17th, and 18th centuries, their wealth and industry, were materially promoted by their free institutions and the nature of their government. At a time when England, France, and most other European states, were a prey to civil wars, caused by religious and political differences, the Dutch had the wisdom to establish and maintain a system of universal toleration, and to make their country an asylum for *all* persecuted and oppressed strangers. Though complex and not very popular, in practice the constitution gave free scope to all deserving individuals to attain to the highest dignities, at the same time that it effectually secured them against violence and oppression. The utmost latitude was given to every one to dispose of property by will as he thought best; justice was speedily and impartially administered; and though taxation was heavy, the revenue was faithfully and economically expended. Hence the political conspired with the physical circumstances under which the Hollanders were placed to call forth their talents and enterprise, and to render them industrious and economical. That the difficulties incident to their situation, the *duris urgens in rebus egestas*, have done much to make them what they have been and what they are, cannot be disputed; but it is easy to see that they are, at the same time, largely indebted to the freedom of their civil and religious institutions. Holland is now a constitutional monarchy, hereditary in the family of the Princes of Orange, the founders of the independence of the country, and in whom the office of stadtholder was latterly made hereditary. The king is also grand duke of Luxemburg, in which capacity he belongs to the German confederation. His person is inviolable, his ministers alone being responsible; he nominates to all civil and military offices, proposes and promulgates the laws, declares war or makes peace, and holds, in his own hands, the entire government of the colonies. The states-general consist of 2 chambers: the first is composed of from 40 to 60 members, nominated for life by the king, who must be already 40 years of age, and who receive each about 250*l.*

a year for travelling expenses. The second chamber consists of 55 deputies of the nobility, towns, and rural districts of the several provinces; Holland sending 22, N. Brabant 7, Guelderland 6, Friesland 5, Over-Yssel and Groningen 4 each, Zealand and Utrecht 3 each, and Drenthe 1. Luxemburg has its own separate diet. The states-general are convoked annually, and one third part of the second chamber is annually re-elected. The system of election is indirect, and very far from popular. In towns, for example, the plan is, for the higher order of ratepayers to elect a certain number of persons called *kiesers*, or choosers, who elect the *raad*, or town-council, which is chosen for life; the town-councils send deputies to the different provincial governments, and the latter elect the members of the states-general, or commons. It is plain, that in this plan a preponderating influence is vested, in so far as the city representation is concerned, in the *raads*, or town-councils; and these being elected for life, and consequently exempted, in a great degree, from popular control, it is clear that their representatives in the provincial councils and states-general, cannot be expected to have much sympathy with the public. The system tends, in fact, to establish a government by an oligarchy; and is, in many respects, most objectionable. The states-general impose all taxes and imposts; but the financial budget, instead of being debated, as in England, every year, is voted for 10 years; so that, during the intermediate period, the chamber is, as it were, deprived of its most important function; but this regulation is much complained of, and will, most probably, be speedily changed. All persons are eligible to public offices, without distinction of religion, and all are equal under the law.

The different provs. have each its own states, composed of deputies of the 3 orders of the pop. above mentioned. The deputies for the rural districts, like the members of the different town-councils, are elected at second hand by bodies of *kiesers*, chosen in the different districts; and the qualification required in voters for the *kiesers* being such as greatly to restrict their numbers, the country representation is but little more popular than that of the towns.

Justice. — The different provs. have their own local magistracy and laws established by their own states; the judges are nominated by the king for life, on the recommendation of the provincial states, or the states-general. The provs. are divided into arrondissements, cantons, and communes, similar to those of the French deps., and superintended in like manner. The local courts are also similar to those of France; in each canton there is a court of justices of the peace, and in each arrond. one of original jurisdiction: there are tribunals of commerce in the principal commercial districts. The supreme judicial court, and high board of taxation (*cour des finances*), sit at the Hague, which is also the usual residence of the court. Trial by jury is not in operation; in other respects, the mode of administering justice is much the same as in France. The police is under the control of a central director, a sub-director in each prov., and commissaries in the arrondissements. Perhaps no country has so little crime: only 3,195 individuals were in confinement throughout 1836. The systems of prison discipline and correctional police are admirable. No mendicants or disorderly persons are suffered to offend the public eye, and education is carefully administered to juvenile offenders. There is no imprisonment for debt, except in the case of dishonoured bills. (*De Cloet*, pp. 121—124.; *Chambers; Parl. Report*, 1837.)

Religion. — By the last census, the pop. was divided into 1,541,798 Protestants, 836,920 R. Catholics, and 45,493 Jews, besides a few thousands belonging to other sects. The Calvinist or Reformed Church of Holland is professed by the reigning family as well as the greater number of the inhabitants, and is very similar, in most respects, to the Presbyterian church of Scotland. In 1838, the number of persons belonging to this establishment was 1,518,700. It may therefore be called the religion of the state: but since Holland threw off the yoke of Spain, it has always been distinguished by its religious freedom and toleration, and at this moment, the clergy of all religious persuasions receive salaries from the public purse. The ministers of the Dutch reformed church are allotted to certain districts in proportion to the pop.; there being 1 pastor generally to about every 2,000 or 3,000 people. Their *maximum* salary is 200*l.*; their *minimum* 50*l.* The sum expended in ecclesiastical stipends, in 1840, was 1,737,000 guilders.

The Military Force amounts, at present, to about 42,000 men; but in time of war it may be readily raised to 70,000. It is maintained by voluntary enrolment, or by engagements for a limited time, and augmented by the recall of those who have served, and by calling out the militia, which latter body is composed of all the youth between the ages of 19 and 23. The principal fortresses, next to Luxemburg, are Maestricht, Breda, Bergen-op-Zoom, Bois-le-Duc, Flushing, and the Helder. Luxemburg is at present garrisoned by Prussian troops.

The Navy consists at present (1839) of 8 ships of the line, the largest carrying 84 guns; 21 frigates; 15 corvettes; 21 brigs; and 95 gun-boats. There are 472 officers, and the crews in active service amount to about 5,000 men.

The Public Revenue is derived from a heavy land-tax, or *contribution foncière*, from numerous and heavy personal and assessed taxes, excise duties, which, among other articles, are imposed on turf, coal, &c., and from taxes on stamps, registrations, tolls, harbour dues, customs, the post-office, lotteries, &c.; but still the revenue is usually less than the expenditure. The estimate of the latter, for 1840, as given in the budget, was as follows: —

	Florins.
1. The King's household - - -	1,425,000
2. The Secretary of State and Superior Boards	534,100
3. Foreign affairs - - - - -	831,600
4. Justice - - - - - -	1,468,000
5. The Interior - - - -	3,222,000
6. The Reformed Church - - -	1,391,200
7. The Rom. Cath. Church - - -	400,000
8. The marine - - - - -	5,250,000
9. Finances: — A. National debt -	21,458,205
B. Departmental expenses, pensions, &c. -	6,111,795
10. War - - - - -	14,191,500
11. The colonies - - - -	94,000
Total -	56,378,500

Besides 5,600,000 florins for paying the interest of the 5 per cents., and 500,000 florins for extraordinary expenses.

The ways and means during the same year were estimated at 56,386,298 fl.; but in this sum is included the large item of 11,220,000 fl., which, it is taken for granted, will be furnished from the revenue of the colonies! But it is very problematical whether this last item will be realised; the more especially as it depends on the negotiation of a loan for the colonies!

The truth is, that taxation in Holland is very oppressive, and that the state of the finances is very far from satisfactory. This unfavourable state of things has arisen partly, and principally, from the great public debt of the kingdom (amounting probably to about 165 millions sterling), and the necessity of providing for the interest thereon; and partly from the disproportionally heavy expenses the kingdom has latterly had to sustain from the uncertain state of her relations with Belgium and the disputes as to Luxemburg and Limburg. Now that this uncertainty is well nigh put an end to, and that the disputes in question have been adjusted, it is to be hoped that some material deductions may be made from the annual expenditure. Since 1830, it has almost uniformly exceeded the income: and there has, in consequence, been a constant increase of the public debt. The Dutch are too sagacious a people not to see in what this state of things, if not obviated, must necessarily terminate; and hence the growing dissatisfaction with the budgets. A nation may advantageously contract debt during war; but a nation unable during peace to provide for her expenditure must either retrench or prepare for bankruptcy, or, perhaps, revolution!

Provision for the Poor, and Charitable Institutions. — Though pauperism be discouraged, and mendicancy punished, the Dutch are very charitable and liberal in their support of the poor. The institutions for the relief of the indigent consist of *hospices* for the aged and infirm, orphan-houses, workhouses for towns and districts, the poor colonies, and private charitable institutions. The funds for their support are mostly derived from endowments and voluntary contributions, the direct tax not being more than about 1,800,000 fl., or 150,000*l.*, per annum. Boxes, inviting the donations of by-passers for their relief, are stationed in many public ways: the establishment of any new public work excites a fresh call on behalf of the poor; and a tax of about a penny in a shilling, to the same end, is levied on tickets to all places of public amusement. The hospitals, asylums, and other charitable foundations, are very numerous in the towns: in Amsterdam only there are 23. (*Chambers.*)

An institution worthy of particular mention is the "Society for the Promotion of the Public Good," an association which originated in 1784 with a few benevolent individuals, but which has now 220 branches throughout Holland, and is supported by 14,000 members, each of whom pays a small sum — about 10*s.* — yearly. Under the direction of this society, savings' banks, libraries, schools of various kinds, including those for the higher branches of knowledge, &c., are established; prizes and rewards are given for superior essays, works of art, or acts of humanity; and in the winter season, public lectures on literary, scientific, or moral subjects are delivered. The establishments of this society formerly extended into Belgium; but since the revolution of 1830, they have mostly ceased to exist in that country. (*Chambers*, pp. 14—18 34, 35.; *Nicholls's Reports.*)

Among the classes able to labour, a state of even

temporary dependence is considered disgraceful, and great exertions are made by the labouring population to avoid it. No sense of degradation attaches to orphan establishments. There are 3 great workhouses for the whole of Holland, — one at Amsterdam, another at Middleburg, and the third at Nieuve-Pekel-A, in Groningen. In these the inmates work at looms, &c.; the sexes are kept strictly separated; the food is very inferior and somewhat scanty, the clothing coarse; and the inmates are not suffered to go abroad. All beggars are apprehended by the police; if aged or infirm, they are sent to the workhouses, — if able to work, to the penal colonies. In the latter establishments, the paupers labour with the spade, in brick-making, or in manufactures. Guards on horseback, who patrol the boundaries of the colony; rewards given to those who bring back any colonist that has attempted to escape; and a uniform dress, are the means adopted to prevent desertion from these settlements.

Public Education — Public Press. — Holland has been much and deservedly celebrated for its system of public education. In England, in 1833, only 1 in 11 of the pop. was receiving primary instruction: in the Dutch provs. of Drenthe and Over-Yssel, in 1835, the proportion was about 1 in 6 (*Ducpetiaux, L'Instruction en Belgique, &c.* p. 103.); and throughout Holland generally it is 1 in 8. There is scarcely a child 10 years old, of sound intellect, who cannot both read and write; almost every one receives instruction at some period, the expense of which is for the most part, and in some instances entirely, defrayed by the state, without the inculcation of any particular religious creed; the interference of the government being exerted only to exclude improper and incompetent teachers, and to regulate the mode of instruction by a system of inspection.

The department of education is under the superintendence of the minister of the interior, assisted by the inspector-general of instruction, from whom all changes and new regulations emanate. The inspection of schools is devolved chiefly upon local inspectors, of whom there are 70, or one for each school district into which the kingdom is divided. These inspectors are assisted by local boards; and each inspector is responsible to the provincial board for the efficiency of the schools within his district; the provincial board being itself responsible for its proceedings to the minister of the interior and the inspector-general. In Holland, no person can open a public school, or even receive private pupils, without first having received a certificate of his ability to teach, granted after inquiry and examination by a board of examiners consisting of district surveyors, who meet for this important purpose. This board grants four sorts of certificates; but one only is granted at a time; and to obtain the highest certificate, four successive examinations must be undergone at different intervals. Having obtained his certificate, the candidate must next apply for leave to open a school to the school committee of the town or district in which he proposes to establish it, who do not grant his request unless when they think such additional school is really required. Very grave doubts have been and may be entertained as to the policy of this last regulation, but there can be none as to the policy of subjecting all persons intending to open schools to the necessity of undergoing an examination as to their fitness. The utility and importance of this regulation are alike obvious and undoubted; and we have no hesitation in saying, that its adoption in this country would do ten times more to improve education than all the measures that have been adopted with respect to it during the last century. The district inspectors assemble three times a year in the chief town of their respective provs., where they hold a conference, each inspector making a report, in the presence of the provincial governor, on the state of education in his district. Sometimes the government assembles a council at the Hague, consisting of deputies from each provincial board of education, when every thing pertaining to the system is discussed and reviewed in presence of the minister of the interior and the inspector-general. (*Cousin, on Education in Holland; Eng. Trans.; Westminster Review*, No. lvi., &c.)

In 1835, there were, in Holland, 2,832 primary schools (2,190 public, and 642 private), attended by 304,459 pupils, whose instruction cost the state 381,480 francs, or 1 fr. 25 cent. each. In the same year there were 62 Latin schools, attended by 1,255 students, and costing the state 79,850 fr., or 63 fr. 63 cent. each individual. There are 3 universities — those of Leyden, Utrecht, and Groningen, — which, with the athenæum of Franeker in Friesland, had, in the above year, 1,571 students, the expense to the state of whose education was 613,140 fr., or 390 fr. 28 cent. each. By the royal ordinance of 1815, an athenæum was to be established in 6 of the 9 provs.; but, excepting that of Franeker, already named, only one, at Harderwyk in Guelderland, is supported by the state. There are two normal schools for the education of teachers in Holland; one at Groningen for the N. provs., and the other at Haarlem for the centre and S. of Holland. The primary schools are divided into *Armen*, or poor, and *Tusschen*, or intermediate, schools. In both pretty much the same kind of instruction is afforded, including reading, writing, arithmetic, geography, the history of Holland, and vocal music; but the latter are attended by the children of parents above the condition of the poor, and the fee, though still very trifling, is somewhat higher. In the poor-schools, as in all the rest, a small sum is generally paid, and in many instances daily, by the parents of the children educated. This circumstance does not retard the progress of education amongst the poor, but has perhaps rather a contrary effect, inasmuch as it removes that sense of degradation which frequently associates itself with the notion of receiving eleemosynary instruction. No law, as in Prussia, exists in Holland directly compelling parents to send their children to school; but the poor are not allowed relief from the public funds unless they comply with this regulation. There is, however, little need of such a proviso, since a just sense of the great value of education is found to exist amongst all classes. (*Nicholls's Report.*) In the superior private schools, German, French, English, and other modern languages are taught, in addition to the ordinary elementary branches of knowledge. In the Latin schools, which are analogous to the *gymnasia* of Germany and the colleges of France, pupils are instructed in Latin and Greek, the modern languages, mathematics, physics, geography, history, and the other higher branches of education, for the most part as preparatory to their studies at the athenæums or universities.

In these seminaries, pupils of all religious persuasions are received indiscriminately, and at stated times attend their respective clergymen for religious instruction. The monitorial system of teaching is scarcely at all introduced. The public schools, like the public charities, make little or no outward display, and are conducted on the most rigid system of economy. The efficiency of the elementary instruction supplied by the schools in Holland is universally admitted; but, with all its excellence, the course of education comprises only the more elementary divisions of mental culture; the study of philosophy, of the principles of politics and political economy, of the higher branches of literature — of all those pursuits, in short, that tend to expand and elevate the mind, is comparatively neglected. Still, however, it is abundantly certain, that the low state of the higher branches of literature in Holland is not owing to any defects in the system of education, but to the vexatious restraints laid on the freedom of the press. Neither political nor moral science can flourish where the press is restricted; and in Holland, no book, newspaper, or even so much as a handbill can be printed without a license, specially granted on application. There are in Holland 14 literary journals, but only 2 or 3 rise above insignificance. There are, also, some religious journals, a few almanacs, and 25 newspapers, but none of the latter deserves to be cited, and some of these are mere trading circulars. Certainly, however, the Hollanders of the present day are nowise inferior to their ancestors in the days of Erasmus and Grotius. The different circumstances under which they are placed accounts for the wide difference between them. Remove the shackles from the freedom of the press, popularise the government, and give free scope to genius and invention, and we venture to say, that the literature of Holland will again rank with the first in Europe.

The Dutch school of painting has attained to great celebrity. Its masters excel chiefly in delineations of common life, and animated objects: in accuracy and excellence of colouring, and the management of light and shade, they are surpassed by none. But the subjects of their pictures are, not unfrequently, so very coarse, vulgar, and low, as to be, in many respects, the antithesis of those of the Italian school. The Dutch school can boast of Rembrandt, Teniers, Jan Steen, Ostade, Gerard Dow, Mieris, &c.: besides whom, Wouvermans, Paul Potter, Berghem, and Ruysdael excel in landscapes and cattle; Vandervelde and Backhuysen in sea-views; and Weenix, Hondekoeter, Vandenheyden, Heemskirk, Breghel, &c. in other departments. Many of the best works belonging to this school are to be found in Holland, and especially in the galleries of the Hague, Amsterdam, and other chief towns. The Dutch are fond of music, but they do not excel in it. (*De Cloet*, pp. 99–102.; *Chambers; Murray's Handbook.*)

People, their Customs, &c. — Of about 2,600,000 inhab. in Holland (exclusive of Luxemburg) in 1831, 1,908,000 were Dutch, 280,000 Walloons or Flemings, 252,000 of German descent, 150,000 Frisons, and 50,000 Jews. (*Journal de Travaux, &c.*) In stature, the Dutch are much the same as the English: the women are comparatively taller than the men; they are decidedly handsome, and, when young, have naturally good complexions, which they might preserve to a later period, did they take more exercise in the open air, and abandon some injurious customs, such as the incessant use of the *chauffepied*, a

box of burning peat, which accompanies them every where. "Nothing," says Mr. Nicholls, "can exceed the cleanliness, the personal propriety, and the apparent comfort of the people of Holland. I did not see a house or fence out of repair, or a garden that was not carefully cultivated. We met no ragged or dirty persons, nor any drunken man; neither did I see any indication that drunkenness is the vice of any portion of the people. I was assured that bastardy was almost unknown; and although we were, during all hours of the day, much in the public thoroughfares, we saw only two beggars, and they in manners and appearance scarcely came within the designation. The Dutch people appear to be strongly attached to their government, and few countries possess a population in which the domestic and social duties are discharged with such constancy. A scrupulous economy, and cautious foresight, seem to be the characteristic virtues of every class. To spend their full annual income is accounted a species of crime. The same systematic prudence pervades every part of the community, agricultural and commercial; and thus the Dutch people are enabled to bear up against the most formidable physical difficulties, and to secure a larger amount of individual comfort than probably exists in any other country." (*Report on the Poor of Holland, in* 1838.)

The women are very domestic in their habits, and carry cleanliness in their houses to the greatest possible extent; though personal cleanliness does not always receive the same attention. The ancient national costume, the wide breeches, full petticoats, and broad hat, are now mostly confined to the fishers and peasantry; in the towns, the people dress like the French and English. The most remarkable element of costume in use is the head-dress of the Friesland women. The latter, who are the descendants of the ancient *Frisii*, so often referred to by Tacitus, and whose blue eyes, flaxen hair, and fresh ruddy complexions declare them to be of the Gothic race in perhaps its greatest purity, wear on both sides of the head large plates of gold or silver, connected together by a band of the same metal passing behind, and ornamented with two singular appendages, of a ram's-horn shape, to which are attached pendants of various kinds. The whole is covered by a rich cap of lace: it not unfrequently costs 16*l*. or 20*l*., and often composes the whole dowry of a Friesland girl. The Dutch, though in general frugal, live well and substantially. Coffee, tea, beer, and native gin, but especially the first, are the favourite drinks: the tobacco-pipe is in universal use amongst all classes. The houses in the towns do not aim at any external grandeur, and are in general plainly furnished; but those who can afford it are extremely fond of collecting china, and other kinds of curiosities. The *luists*, or pleasure-houses forming the residences of retired merchants, are mostly built on the same plan. "These edifices are usually of brick, plastered and painted to look as trim and tidy as if just taken out of a box; and, with their close-shaven bit of lawn in front, their narrow wet ditch separating the domain from the public thoroughfare, their little bridge, dashing wooden gateway, clusters of dahlias, fresh painted summer-house," &c. form the *beau-idéal* of a Dutchman's wishes. On the gateway there is invariably some motto, indicative of the taste or temper of the owner.

The Dutch are very regular in their habits; precision, decorum, and a fixed routine govern every thing. Intoxication is, generally speaking, very rare; but in September an annual festival takes place, which lasts for 10 days, during which great excesses are said to be committed. So soon, however, as this festival terminates, the people return at once to their former habits of sobriety till the next yearly occasion. Their amusements are not very intellectual, nor do they include many sports out of doors. They are mostly similar to the entertainments afforded by the tea-gardens and secondary theatrical establishments in England. (*Chambers; Lettres sur la Hollande.*)

History. — In the time of the Romans, Holland was inhabited chiefly by the *Batavi* and *Frisii*, the former of whom, after the conquest of Belgium by Julius Cæsar, concluded an alliance with the Romans. This was afterwards silently changed into subjection to Rome, and it is said that Claudius Drusus, a Roman governor, about the beginning of the Christian æra, erected the first dyke to ward off the encroachments of the sea. In the reign of Vitellius, the Batavians endeavoured unsuccessfully to throw off the Roman yoke; in the 2d century, their country was overrun by the Saxons; in the 8th it was conquered by Charles Martel; and it subsequently formed a part of the dominions of Charlemagne. From the 10th to the 14th century, the Netherlands were divided into many petty sovereignties, under the dukes of Brabant, the counts of Holland and Flanders, &c. In 1383, however, by marriages and otherwise, the whole passed into the hands of the dukes of Burgundy; thence to the house of Austria; and lastly, in 1548, under the rule of the Emp. Charles V. The union with Spain was a most unfortunate event for Holland. The Dutch had long been in the enjoyment of many political rights and privileges; they had extensive fisheries and trade, and they had for the most part embraced the doctrines of the early reformers. Philip II., who regarded the privileges enjoyed by the Dutch as usurpations on his own prerogative, and who detested the reformed faith, resolved to recover the former, and to suppress or extirpate the latter. To accomplish this purpose, he sent, in 1567, Ferdinand de Toledo, Duke of Alva, with a powerful army into the Low Countries. But the proscriptions and massacres with which this sanguinary though able soldier filled the country, failed of their object. The Dutch, instead of being subdued, were at length driven into open rebellion. The malecontents captured the Briel in 1572; and after a struggle unequalled for duration, for the sacrifices it imposed on the weaker party, and for the importance of its results, the independence of the republic was acknowleged by Spain in 1609. Except that it was occasionally darkened by internal feuds, the half century that succeeded this event is the brightest in the Dutch annals. The commerce of Holland attained to an unrivalled magnitude; and while she extended her colonies and conquests over some of the most valuable provinces in the E. and W. Indies, she successfully resisted the attacks of Louis XIV., contended with England for the empire of the sea, and was justly regarded as one of the bulwarks of the Protestant faith.

From the death of Louis XIV. down to the French revolution, the influence of Holland gradually declined, not so much from any decay of her own resources, as from the growth of commerce and manufactures in other states, especially in England. The policy of Holland had long been peaceful; but that could not protect her from being overrun by revolutionary France. In 1806 she was erected into a kingdom for Louis, a brother of Napoleon; and, on the downfall of the latter, she was united with Belgium, and formed into a kingdom, under the family of Orange, the founders of her liberties. But this union was never cordial. The Dutch and Belgians are, in fact, totally dissimilar in their religion, character, and pursuits; and the connection between them was dissolved by the revolt of the Belgians soon after the French revolution of 1830. Holland, therefore, has now pretty nearly the same limits as before her occupation by the French in 1795. The King, William I., abdicated the throne in favour of his eldest son William, now William II., in 1840. (*De Cloet, Descr. Géogr. Historique, &c.* pp. 9—19.; *Dict. Géogr.; Chambers, &c.*)

HOLLAND (NEW). *See* AUSTRALIA.

HOLSTEIN, a duchy at the N.W. extremity of Germany, belonging to Denmark, bounded W. by the North Sea, S. by the Elbe, E. by the Baltic, and N. by Sleswick. It is of a compact form, comprising an area of about 3,330 sq. m.; and had in 1834 a pop. of 435,528. Surface and soil considerably diversified; the E. part is somewhat hilly, and, besides fertile plains, has woods, lakes, and picturesque scenery: the middle part is comparatively barren, and is in many parts covered with heath; the W. district along the Elbe, and the German Ocean, consists principally of flat, low-lying, rich marsh land, secured by dykes and sluices against the overflowings of the sea. Principal rivers Elbe and Stor; the only lake worth notice is that of Ploen. The canal of Kiel separates the duchy from Sleswick, and is of great importance, as well for inland as for foreign navigation. (*See* KIEL.) The lat. of Holstein being the same as that of the N. of England, its productions are also similar, consisting of wheat, barley, and oats; potatoes, hemp and flax, with hops and fruit, &c.; but it is chiefly celebrated for its excellent cattle and horses, raised in large numbers in the luxuriant pastures of the marsh-land, and which are an important article of export. The half-dried beef, so abundant in Hamburg, and which is decidedly superior to any thing of the sort met with in this country, is principally derived from Holstein. Agriculture has been much improved; and the country being in many parts enclosed and well cultivated, is little inferior, in appearance, to the best districts of England. Minerals not very important. Lime is, however, met with; and there is a brine spring at Odersloe. Fishing is prosecuted to some extent along the coasts. The only important sea-port is Altona, near Hamburg. Gluckstadt, a much smaller sea-port, situated lower down the Elbe, is the cap. of the duchy; but the states (*see* DENMARK) meet at Itzehoe, a town of 5,600 inhab. The other principal towns are Rendsburg and Kiel. Exclusive of cattle and horses, wheat, oats, barley, &c., with butter and cheese, are exported. Manufactures, excepting those carried on at Altona, unimportant.

HOLYHEAD (in Welsh *Caer-Gybi*, "the castle of Gybi"), a sea-port, parl. bor., market town, and par. of N. Wales, on a peninsula at the W. extremity of the isle and co. Anglesey, 22 m. W. Bangor, 67 m. W. Liverpool, and 224 m. N.W. London; lat. 53° 17′ N., long. 4° 35′ W. Pop. of par., in 1831, 4,282. The peninsula, on the N. side of which the town stands, and which is insulated at high water, ends, towards the sea, in an immense

precipice of serpentine rock, hollowed out here and there into most magnificent caves, the haunts of almost innumerable sea-fowl. The town is clean and well paved, comprising two main, and several cross streets; it has a fine open market-place, public baths, government establishments, &c., and contains many superior residences. The church, formerly collegiate, and now in the patronage of Jesus College, Oxford, is an embattled cruciform structure, in the decorated English style, with a square tower and low steeple; and the churchyard is enclosed by a low wall, said to have formed part of a Roman fortification. There are also four places of worship for dissenters, a free school, established in 1745, and several other day and Sunday schools, furnishing instruction to a great many children. Holyhead has no particular branch of commerce or manufacture: its importance principally depends upon its being, next to Liverpool and Bristol, the chief resort of passengers to and from Ireland. The erection of the Menai Bridge, the improvement of the Holyhead road, and the establishment of steam-packets to Dublin, caused a great increase of the intercourse by Holyhead. But the removal of the London and Dublin mail packets to Liverpool, in 1838, greatly diminished the number of passengers by this route. (*Bound. Rep.*) One mail packet, however, still continues to run; and there is considerable business in shipbuilding and in the coasting trade. The harbour, which forms a basin in the shape of a horse-shoe, used to dry at low water; but great efforts have been made of late years to improve it; and a pier has been projected about 200 fathoms into the sea, having 12 ft. water at its head at low springs. This pier, formed on the rocky island of St. Gybi, is joined to the town by a swivel bridge, and at its other extremity is a lighthouse. The peninsula of Holyhead is terminated by a high rocky promontory called the S. Stack, surmounted by a lighthouse, with a revolving light, 211 ft. above low-water mark. The Skerries, a small island 7 m. N. of Holyhead, is also marked by a lighthouse. The town of Holyhead, with a small surrouding suburb, is a parl. bor. contributory to Beaumaris, which returns 1 mem. to the H. of C. Markets on Saturday. (*Nicholson's Camb. Guide; Bound. Rep.*, &c.)

HOLY ISLAND (an. *Lindisfarne*), a peninsula, wholly insulated at high water, on the N.E. coast of England, co. Durham, ward Islandshire, 11 m. S.E. Berwick-on-Tweed. Area, 3,320 acres: pop., in 1831, 836. Its form is that of an irregular four-sided figure, more than half of it towards the N. being covered with sand, and abounding with rabbit-burrows: the remainder, however, has been very productive since its enclosure in 1798. The prospect from the island is extremely beautiful, commanding views, northward, of Berwick, and of Bamborough Castle, at nearly the same distance, southward. At the S.W. angle of the island is a small fishing village, formerly more extensive, near which are a small harbour and an old castle, situated on a high conical rock, of primitive formation. The inhabs. are chiefly engaged during winter in catching lobsters for the London market, and at other times in getting cod, ling, and haddock. Limestone, coal, and iron ore are abundant; but the influx of the tide makes the working of them exceedingly laborious. The great glory of the island, highly esteemed by Anglo-Saxon scholars, is the abbey (with its connected church), formerly the residence of many literary monks. It was founded by St. Aedan in 635, under the patronage of Oswald, king of Northumbria, who erected Lindisfarne into a bishopric. The monastery was all but demolished by the Danes, in 867, and was then removed (with the bishop's see) to Durham, a few monks only remaining at the establishment after the partial rebuilding of the church and abbey. The ruins of the abbey, which had been constructed of red freestone, and aptly termed by Sir W. Scott "a solemn, large, and dark red pile," show that it was built at different periods. It cannot be better described than in the words of the great minstrel in the 2d canto of Marmion: —

In Saxon strength that abbey frown'd,
With massive arches broad and round,
That rose alternate, row and row,
On ponderous pillars short and low,
Built ere the art was known,
By pointed aisle and shafted stalk,
The arcades of an alley'd walk
To emulate in stone * *
* * * * *
Not but that portions of the pile,
Rebuilded in a later style,
Show'd where the spoiler's hand had been.

Various fragments of the monastery are extant, and traces of walls are scattered over a space of nearly 4 acres. The main walls on the N. and S. sides of the church still remain, the measurement of the building being 138 ft. in length, and 36 ft. in breadth. S. of Holy Island are 17 small islands, called the Farne Islands, on the largest of which is a lighthouse. (*Hutchinson's & Surtees's Durham; Views of Coast and Harbours of England.*)

HOLYWELL, a market town, parl. bor. and par. of N. Wales, co. Flint, hund. Mold, on the great road from Chester to Holyhead, 14½ m. W. by N. Chester, 56 m. N.N.W. Shrewsbury, and 178 m. N.W. London. Area of par., 1,790 acres; pop., in 1831, 8,969. The town is pleasantly situated on the slope of a mountain extending towards the æstuary of the Dee, and is large, well paved, and lighted with gas. The streets are irregular; but there are many good and substantial houses. The church, a plain structure, with a strong embattled tower, stands quite at the bottom of the hill: there are also 2 Roman Catholic chapels, and several places of worship for dissenters. A beautiful Gothic chapel, dedicated to the legendary saint, Winifred, who lived in the 7th century, and now used as a school house, is erected over a well, from which water issues so copiously as to turn a large portion of the mill-machinery in the town. The lower part of the building is open, and the sanatory virtues of its holy water are even at the present day not wholly discredited by the inhab. The town, which was inconsiderable till the commencement of the present century, is now the largest in the co., and remarkable for its activity in mining and manufactures. Lead, zinc, copper, and coal are extensively worked in several very productive mines close to the town. These mines, and the smelting-houses, foundries, &c., in the vicinity of the town, employ from 600 to 700 hands, at wages varying from 10*s*. to 15*s*. per week. The chief metallic products are copper wire and copper bolts, nails, and sheathing, which are sent to Liverpool, and shipped in large quantities for the W. Indies and S. America. There are four cotton mills, established by the Holywell Cotton and Twist Company, and which employ 714 hands. A small trade is also carried on in the manufacture of galoons and doubles: the present factory contains 60 looms, worked chiefly by women, who earn from 6*s*. to 13*s*. per week, according to the quality of the fabric on which they are engaged. Work is plentiful, and the weavers are not worse off than their fellow-labourers. A short distance from the town is the Mark, a kind of quay, on the Dee, unapproachable by ships at low water, and at all times inconvenient. Holywell was made by the Reform Act a parl. bor., contributory to Flint, which sends 1 mem. to the H. of C., and its boundaries comprise parts of the townships of Holywell and Greenfield.

HONDURAS a state of Central America. *See* GUATEMALA.

HONDURAS (BRITISH), a settlement belonging to Great Britain, on the E. coast of Central America, chiefly between lat. 16° and 18° N., and long. 88° and 90° W., having N. Yucatan, W. and S. Guatemala, and E. the Bay of Honduras. It is very extensive, but the pop. is said not to exceed 4,000, of whom only about 300 are whites. The coast is flat, and surrounded with an abundance of reefs and low verdant islands, called *keys*. The approach to the shore is very dangerous, especially during N. winds, and the different *keys* resemble each other so much as to make the navigation of the channels between them extremely difficult, except to experienced pilots. Proceeding inland, the surface rises gradually from the coast into an elevated region, covered with primeval forests, interspersed with marshes. Rivers numerous, and some of them large; the principal, the Balize, is navigable for 200 m. The climate is moist, but is reported to be more healthy than that of the W. India islands, especially in the wet season. The heat during most part of the year is moderated by sea breezes; the average annual temp. is about 80° F. The rains are so heavy that the Sibun river sometimes rises 50 ft. in a few hours: they are frequently accompanied with violent thunderstorms. Volcanic products, and marble or other limestone formations, are found in various parts; the shores, banks of the rivers, &c. are covered with a deep and rich alluvial soil, capable of growing most European as well as tropical products. The forests abound with some of the finest timber trees, including mahogany, logwood, and many other valuable trees. The two now specified are the staple product of the settlement, and their cutting forms the chief occupation of the settlers. The mahogany (*Swietenia mahogani*) is one of the most majestic of trees, and is probably 200 years in arriving at maturity. It is seldom found in clusters or groups, but single, and often much dispersed; so that what is termed a *mahogany work* extends over several sq. m. There are two seasons in which the trees are cut down; one beginning shortly after Christmas, or at the end of the wet season, and the other about the middle of the year. At such periods, all is activity, the pop. being mostly employed in felling or removing the trees. The gangs of negroes employed in the work consist of from 10 to 50 each, at the head of whom is the *huntsman*, whose chief occupation is to search the woods, and find labour for the whole. An expert negro of this description was formerly often valued at 500*l*.

"About the beginning of August the *huntsman* is despatched on his errand. He cuts his way through the

thickest of the woods to the highest spots, and climbs the highest tree he finds, from which he minutely surveys the surrounding country. At this season, the leaves of the mahogany tree are invariably of a yellow-reddish hue; and an eye accustomed to this kind of exercise can discover, at a great distance, the places where the wood is most abundant. He now descends, and to such places his steps are now directed; and without compass or other guide than what observation has imprinted on his recollection, he never fails to reach the exact point to which he aims." The mahogany tree is commonly cut about 12 ft. from the ground. The body of the tree, from the dimensions of the wood it furnishes, is deemed the most valuable; but for purposes of an ornamental kind, the branches or limbs are generally preferred, the grain of these being much closer, and the veins more rich and variegated. Part of the wood is rough-squared on the spot; but this work is generally postponed till the logs are rafted to the entrance of the different rivers. The rafts often consist of more than 200 logs, and are floated as many miles. "When the floods are unusually rapid, it sometimes happens that the labour of a season, or perhaps of many, is at once destroyed by the breaking asunder of a raft, the whole of the mahogany being hurried precipitately to the sea." (*Henderson.*) Mahogany at Honduras produces from 16*l.* to 30*l.* (Jamaica currency) per 1,000 ft.; but when of very fine quality it is worth much more. Not less, in fact, than 3,000*l.* has been paid in London for 3 logs of mahogany, the produce of a single tree! (*Comm. Dict.*) The profits of the trade are, however, much diminished, and very precarious. Logwood cutting is much less expensive; but the price of logwood fluctuates even more than that of mahogany; varying from 7*l.* to 14*l.* a ton. The trees are cut in logs of about 3 ft. in length, and sent to Europe in that form. (*See* CAMPEACHY, p. 514.) The logwood and mahogany do not grow adjacent to each other; the former inhabits a swampy soil, while the latter flourishes most in high and exposed situations. Every settlement at Honduras has its plantain walk, and many of these comprise an extent of at least 100 acres. Cassava, yams, arrow root, maize, &c. are grown, but only for home consumption; the sugar-cane, coffee, and cotton succeed well, but are little cultivated; cocoa, and an inferior kind of indigo, are indigenous. European cattle, and other domestic animals, thrive greatly. The American tiger, the tapir, armadillo, racoon, grey fox, deer of various kinds, and a vast number of monkeys, inhabit the settlement; birds and fish are in great variety, and *testacea* particularly plentiful. Many turtles are taken by the inhab. living upon the keys, or islands of the coast, a few of which find their way to London.

The following were the quantities of the principal articles exported from British Honduras in 1836: —

Mahogany -	superf. ft. 9,768,293	Hides - -	No. 8,269
Logwood -	tons 992	Cocoa-nuts -	— 150,509
Cochineal -	serons 3,585	Cedar	ft. 37,000

In the same year, 132 ships, burden 28,313 tons, chiefly from Great Britain and the U. States, entered, and 134, of 29,493 tons, left the ports of the colony.

Honduras is governed by a superintendent, nominated by the crown, and seven magistrates, elected annually by the inhab., who form a council, the members being subject to the approval of the superintendent. The latter officer has a salary of 1,500*l.*; the services of the other members of the legislature are gratuitous. Trial by jury is in force. From decisions of the central court, an appeal lies to the sovereign in council. Total public rev. (1836), 20,071*l.*; expenditure, 15,204*l.* Amount of compensation received by the proprietors of slaves at their emancipation, 101,959*l.* The average value of a slave, from 1822 to 1830, was 120*l.* 4*s.* 7*d.*, being a larger sum than in any other colony.

The only town in the settlement is Balize, at the mouth of the river of the same name, in lat. about 17° 29′ N., and long. 88° 8′ W. It consists of about 500 houses, chiefly of wood; the streets are regular, and the whole town is shaded by groves of cocoa-nut and tamarind trees. Its chief edifices are the government house, a church, and several chapels: it has a public school, which had 126 pupils in 1836, and several private schools.

This coast was discovered by Columbus, in 1502; the date of its first settlement by Europeans is uncertain. It was transferred from Spain to England by treaty, in 1670, but its occupation was contested at different times by the Spaniards, down to 1798, since which it has remained quietly in our possession. (*Henderson's Account of Honduras; Parl. Papers, &c.*)

HONFLEUR, a sea-port town of France, dép. Calvados, cap. cant.; on the æstuary of the Seine, nearly opposite Havre, from which it is 6 m. S.E., and 30 m. N.E. Caen. Pop. (1836) 8,490. It is ill built, and *triste*; its streets being mostly narrow, crooked, dirty, and ill ventilated, and its public edifices more remarkable for antiquity and oddity than elegance. Its port, enclosed between two jetties, is difficult of entrance, and encumbered with mud, so as to be inaccessible, except at high water, and then only for ships of small burden. It has two basins connected with it, which serve as harbours for numerous fishing boats and coasting vessels. Many of the inhab. are engaged in the herring, mackarel, and whiting fisheries, and numerous vessels sail annually from Honfleur for the cod, whale, and seal fisheries. It is more a commercial than a manufacturing town; it has, however, some building docks, rope walks, and manufactures of copperas, nails, ship biscuit, lace, &c. Its export and import trade is considerable; butter, fruit, and eggs, in large quantities are sent to England from Honfleur. A good deal of corn, and melons of very fine quality, are grown in its vicinity. Honfleur was taken from the English by Charles VII. in 1440. (*Hugo.*)

HONITON, a parl. bor., market town, and par. of England, co. Devon, hund. Axminster, near the Otter, 142 m. W. by S. London, and 16 m. E.N.E. Exeter. Area of par. and parl. bor., which are co-extensive, 2,880 acres. Pop. (1841) 3,895. The town, which stands in an extensive vale celebrated for fertility and beauty, consists chiefly of a single well paved and lighted street, nearly a mile long, lined with neat and respectable houses, built in the middle of the last century, after a destructive fire which laid nearly the whole place in ruins. The inhab. are supplied with water from a brook that runs along the whole length of the street. The church, a quarter of a mile distant, is a small but neat structure, enlarged in 1482, and remarkable for a curiously carved screen separating the nave and chancel. All-hallows chapel, built of flint in 1765, is a compact building with a square embattled tower. There are 3 chapels for dissenters, a free grammar-school, scantily endowed, a boys' national school, and a girls' working school, and an hospital.

The industry of Honiton consists of serge-weaving and lace-making; but both branches are on the decline. Some years ago, more serge was woven here than in any other town of Devon, and at the beginning of the present century the lace manufacture had arrived at that perfection, was so tasteful in the design, and so delicate and beautiful in the workmanship, as not to be excelled even by the best specimens of Brussels lace. (*Commercial Dictionary*, p. 730.; *Parl. Papers.*) During the late war, veils of Honiton lace were sold in London at from 20 to 100 guineas, whereas they may now be obtained for 8 or 10 guineas. The competition of the bobbin-lace machinery, which became active in 1820, has of late years greatly impaired the trade of Honiton, though not to the extent that it has impaired the lace trade of Bedfordshire and Buckinghamshire. Shoemaking and coarse pottery employ several hands, and there is a large trade in butter, the chief portion of which is sent to the London market. Markets on Tuesday, Thursday, and Saturday; the largest on the latter day: an annual fair, the first Wednesday after July 19th, for cattle, &c.

Honiton was granted by Henry I. to Richard de Rivers, from whom it descended to the Courtenays, earls of Devon, who for many years have been the patrons and lords of the manor. It is a bor. by prescription. A portreeve and bailiff are annually elected at the manor court, the civil jurisdiction, however, is vested in the county magistrates. This bor. first sent mems. to the H. of C. in the 28th of Edward I.; but it was only twice represented prior to the reign of Charles I., since which time it has continued to send 2 mems. Previously to the passing of the Reform Act, the franchise was vested in the inhabitant housekeepers. The Boundary Act extended the limits of the parl. bor., so as to make it include the whole par. of Honiton. Registered electors in 1849-50, 240. (*Polwhele's Devon; Com. Dict.; Parl. Papers.*)

HOOBLY, a town of the Deccan, Hindostan, prov. Bejapoor, presid. Bombay, 13 m. S. Darwar; lat. 15° 20′ N., long. 75° 15′ E. Pop. estimated in 1820 at 15,000. It has long been a place of great trade, its merchants and bankers frequently transacting business at Surat, Hyderabad, Seringapatam, &c. It has two forts, but neither is very strong, and there are no public buildings worthy of notice. It was taken by Sevajee in 1673, and by a son of Aurungzebe in 1685.

HOOGHLY, a distr. of Hindostan, presid. and prov. Bengal, between lat. 22° 15′ and 23° 10′ N., and long. 87° 30′ and 88° 45′ E.; having N. the districts Burdwar and the Jungle Mehals, E. Nuddea, Calcutta, and the 24 Pergunnahs, W. Midnapore, and S. the Bay of Bengal. Area, 2,260 sq. m. Pop. (1822), 1,239,150. It is a low, level tract of great fertility, but much of it is waste; and the sea-coast, which is very unhealthy, is densely covered with jungle. Besides the Hooghly river, a great many other branches and tributaries of the Ganges intersect it; it has therefore an extensive inland navigation. On the banks of the rivers, near the sea, a good deal of salt of excellent quality is made. Land revenue in 1829-30, 1,102,874 rup. About 3-4ths

of the pop. are Hindoos, and 1-4th Mohammedans. Education is more extended in this than in most districts in Bengal; but suttees and gang robberies have notwithstanding been in general more prevalent than in most other parts of India.

HOOGHLY, a considerable town of Hindostan, presid. and prov. Bengal, cap. of above distr., on the river of the same name, 23 m. N. by W. Calcutta. "It occupies an elevated and commanding site, and is picturesque in its broken and irregular disposition; the buildings being in one place clustered together in thick groups, in other places wide and straggling, and divided by trees and patches of bamboo. A handsome Christian church rises with bold and imposing effect, conspicuous above the temples of the Hindoos and the *ghats* upon the bank, to the style and architecture of which it forms a striking contrast." (*Bacon*, i. 241.) The town was once of much greater importance, having been, under the Moguls, the station for collecting the custom and river duties; it is still large, prosperous, well inhabited, and a government civil station. It has a *madressa* or college, in which English, Persian, and Arabic, are taught, which, in 1824, was in a very flourishing state, having 83 students, and a revenue of nearly 16,000 rupees a year. The Dutch established a factory here in 1625, and the English founded another in 1640; the Portuguese and Danes also had settlements at Hooghly. It was at Hooghly that the first serious quarrel occurred between the Moguls and Europeans, in 1632, when a large Portuguese fleet was destroyed by the Mohammedans; it was here also that the first engagement took place between the British and the Moguls, in 1686; on which occasion the English fleet cannonaded the town, and burned 500 houses.

HOOGHLY RIVER. (*See* GANGES.)

HOORN, a sea-port town of N. Holland, cap. distr., on the Zuyder-Zee, 20 m. N. by E. Amsterdam. Pop. about 10,000. It is surrounded with old ramparts, is tolerably well built, and has 10 churches, and various other public buildings. Its port is the best along the coast on which it is situated, and large quantities of butter and cheese, cattle, herrings, and other kinds of provisions are exported from it. Hoorn has manufactures of woollen cloths and carpets, and ship building is carried on in it to a considerable extent. It was the birthplace both of the navigator Schouten, who in 1616 discovered Cape Horn, and of Tasman, the discoverer of Van Diemen's Land and New Zealand. (*De Cloet; Dict. Géog.; Murray's Hand-book.*)

HORNCASTLE, a market town and par. of England, co. Lincoln, soke same name, parts of Lindsey, on the navigable river Bain, 18 m. E. Lincoln, and 116 m. N. London. Area of par., 2,510 acres; pop., in 1831, 3,988. The town, which stands in a valley, and is almost surrounded by streams connected with the Witham navigation, comprises a well-built principal street, crossed by others of inferior character, and has a church, three places of worship for dissenters, a grammar-school, founded in 1571, two charity schools, a large dispensary, and a union workhouse. Tanning is extensively carried on, and the Horncastle navigation gives rise to a considerable traffic with the surrounding districts. Petty sessions are held here, and it is one of the polling places for the N. division of the co. Horncastle is the chief town of a poor-law union comprising 68 parishes; and the maintenance of the poor within this par. cost 1,350*l*. in 1839. Markets on Saturday: large horse-fairs, June 22., Aug. 21., and Oct. 29.

HORNSEY, a par. and village of England, co. Middlesex, hund. Ossulstone, 5 m. N. London. The par., which comprises the hamlets of Muswell-hill, Crouch-end, the chief part of Highgate, and a part of Finchley,) had, in 1831, a pop. of 4,856. This retired village is long and straggling, containing many handsome and picturesque residences, inhabited by wealthy bankers and merchants; and the New River, which meanders through it, adds greatly to the beauty of the scenery. The church, a building of the 16th century, and recently restored, comprises a nave, S. aisle, and chancel, with a handsome "ivy-mantled" tower at the W. end. The living is a rectory, in the gift of the bishop of London, and several bequests have been made at different times for the relief of the church poor. A good charity school is attached to the church. Dissenters have 3 places of worship within the village. At a short distance is a coppice called Hornsey Wood, at the S. end of which is a good house of entertainment.

HORSHAM, a town, parl. bor., and par. of England, co. Sussex, rape Bramber, hund. Singlecross, on the Adur, a tributary of the Arun, in the centre of a fertile and richly-wooded tract, 18½ m. N.W. Brighton, and 31½ m. S.S.W. London. Area of par., 20,040 acres. Pop. of do., in 1841, 5,765, since which period it has greatly increased. "The town consists of two streets, crossing each other at right angles, with an open space on the S., in which stands the court-house, and a green on the N. The mixture of trees among the houses gives it a more sylvan aspect than most other country towns have. The houses are generally timber-built, but new faced with brick, and in the street leading to the church rows of trees afford to the dwellings an agreeable shade. The town is well paved with stone, obtained from the excellent quarries in the neighbourhood, and is as well supplied with water." (*Horsfield's Hist., &c.*) Considerable improvements have taken place in Horsham within the last few years, many excellent private houses have been built, and the town is now well lighted with gas, and watched. There are numerous good inns and hotels. Several handsome public edifices are in progress of erection, including a chapel of ease, in the Gothic style, a vicarage, school-house, &c. The par. church, at the S. extremity of the town, is a spacious and venerable structure, of early English architecture, with a tower surmounted by a lofty spire: it contains some interesting monuments. The town-hall and court-house, a castellated building, with a stone front, was enlarged and improved by the Duke of Norfolk, in 1806, but since that period has been greatly neglected. The county gaol, near the E. extremity of the town, is a commodious prison, built partly with brick, and partly with stone from the neighbourhood, comprising 56 wards, besides day-rooms, &c., and has accommodation for about 180 prisoners. It is under the jurisdiction of the high sheriff of the co., who appoints the governor: at present it is almost solely appropriated to debtors. During the year ending Sept. 1839, the committals to it were 64, the expenditure for the year being 619*l*. (*Gaol Returns*, 1839.) Adjacent to the gaol were formerly some barracks, and a magazine, but these have been long removed. Horsham has chapels belonging to the General and Particular Baptists, Independents, Wesleyans, Friends, and Rom. Catholics; and many charitable endowments for the poor, the chief of which is Collier's school, founded in 1532, for 60 scholars, with a master, at a salary of 10*l*. a year. This establishment is now in a very flourishing state: the present rental of the endowment is upwards of 400*l*. per annum, the master's salary being 120*l*., and the usher's 80*l*. The rudiments of education, and English and Latin grammar, are taught. There are also a Lancastrian and some other free shools, an infant school, and several superior private seminaries. Horsham was, till lately, the seat of the spring assizes for the co., and the midsummer quarter sessions for the W. div. of Sussex are still holden in it. Until the passing of the Mun. Corp. Act the town was governed by a steward and two bailiffs, chosen annually at the court-leet of the lord of the manor. Horsham is a bor. by prescription, and sent 2 mems. to the H. of C. from the time of Edward I. till the passing of the Reform Act, which deprived it of one mem. Previously to that act the right of voting was vested in the holders of burgage tenures, but it was, in fact, a mere nomination bor. at the disposal of the Duke of Norfolk. The limits of the parl. bor. are now made identical with those of the par. Registered electors, in 1849-50, 346. Horsham is a polling-place for the W. div. of the co. The town has neither manufactures nor wholesale trade of any consequence; the inhab. deriving their chief support from the retail of goods to the surrounding district. There are two tolerably large weekly markets; one on Saturday for corn, and on Monday for poultry, a good many of which are reared for the London market. The living is a vicarage; patron, the archbishop of Canterbury. (*Horsfield's Hist., Antiq., and Topog. of Sussex*, 835, vol. ii.; *Parl. Reports; Private Inform.*)

HOUNSLOW, a market town of England, situated partly in Heston and partly in Isleworth par., co. Middlesex, hund. Isleworth, 11 m. W.S.W. London. The pop. is included in the returns of the above parishes. The town stands on the W. edge of an extensive heath, bearing the same name, but now to a great extent enclosed; it consists of a single street, in which are numerous inns and posting-houses, once busy and prosperous, but comparatively deserted since the opening of the Great Western Railway. The chapel of ease is a modern erection at the W. end of the town, built on the site of an old priory; and connected with it is a charity school attended by 200 children of both sexes. There are 3 places of worship for dissenters. On the heath are cavalry barracks erected in 1793, for the accommodation of 600 men; and in another part of the heath are two extensive powder-mills. Market-day, Thursday.

HOWDEN, a market-town and par. of England, a dependency of the co. of Durham, but situated in the E. rid. co. York, wap. and lib. same name, 17 m. S.S.E. York, 155 m. N. London. The entire par., which contains 14 townships, has an area of 14,510 acres, and had a pop. of 4,860, in 1841: the township of Howden contains 2,820 acres, and had, in 1841, 2,332 inhab. The town stands in a low but richly cultivated plain, about a mile N. of the Ouse, where there is a small harbour for boats, and a ferry. Streets narrow, badly paved, and only partially lighted: houses mean, and the supply

of water insufficient. The church, formerly collegiate, is a spacious cruciform structure, in the decorated English style, with an elegant square embattled tower, 235 ft. high, rising from the centre upon pointed arches, supported by clustered pillars. The chapter-house, built in the middle of the 14th century, is of octagonal shape, resembling the chapter-house at York, but of much less extent. The delicacy, richness, and symmetry of its architecture are equalled by few specimens of the kind in the country, except Melrose Abbey, in Scotland. (*Hutchinson's Hist. of Durham*, iii. 466.) On the S. side of the church are the remains of an ancient palace, formerly used as a summer residence by the Bishops of Durham, especially the celebrated Hugh de Pudsey, who died here in 1195. The ruins consist of a centre, front, and W. wing, with some detached parts, used as granaries. The site of this palace is held on lease from the see of Durham, and the venerable ruins, patched up with modern building, are now converted into a farm-house. Besides the church there are 3 places of worship for dissenters.

A grammar-school has for many years been kept in a building contiguous to the church by the successive curates of Howden; but it has never been endowed, and furnishes no gratuitous education, except to 12 children, whose instruction in English is provided for by an income of 24*l.* yearly, arising from a bequest made in 1803. (*Charity Comm. Rep.* part ii. 763.) The national school is supported by subscription, and gives instruction to 300 children of both sexes. Numerous other charities and benefactions exist for the relief of the poor of the par. and township. Market on Saturday. A great horse-fair, the largest in the E. riding, is held here on Sept. 25., and 6 following days: besides this, there are fairs on every alternate Tuesday for horses and cattle. Howden is one of the polling places appointed in the Reform Act for the election of members for the E. riding.

HUDDERSFIELD, an important manufacturing town, parl. bor., and par. of England, W. riding, co. York, wap. Agbrigg, on the Colne, a tributary of the Calder, 162 m. N. by W. London, and 15 m. S W. Leeds. The par., which lies chiefly in this river-valley, extends nearly 12 m. N. of the town, and includes 7 townships, with an area of 15,080 acres, and a pop., in 1841, of 38,454, being an increase of 259 per cent since the census of 1801, when the pop. was 14,848. The township of Huddersfield, which is co-extensive with the parl. bor., extends over 3,950 acres; and had, in 1841, a pop of 25,068, which, when compared with that of 1801 (7,268), exhibits an increase of 347 per cent. in 40 years! The present town has little appearance of antiquity, and appears to be wholly the result of manufacturing industry. It is situated on the slope and summit of an eminence rising from the Colne, and is surrounded by other hills of greater height: the streets are regular, well paved, and lighted with gas; and the best houses, which are numerous, built of a light-coloured stone. The market-place is spacious, and surrounded by handsome buildings. The town is well supplied with water from reservoirs about 4 m. W., in the township of Golcar. The chief ornaments of Huddersfield are its churches, cloth-hall, and other public buildings. The par. church, built in the reign of Henry VIII., was taken down in 1834, and rebuilt by public subscription, at the cost of 8,952*l.*, including 500*l.* expended on a very handsome painted east window: this is at once an elegant and a commodious structure, and does credit alike to the taste and liberality of the town's people. The vicarage is in the gift of the Ramsden family; the average income about 400*l.* a year. There are 7 churches in the par., of which the vicar has the patronage. Trinity Church, built and endowed at private expense, and opened in 1819, is in the pointed Gothic style, and has an embattled tower at the W. end; it holds conveniently 1,500. Its situation, on an eminence, N.W. of the town, renders it a striking object from any point overlooking Huddersfield. St. Paul's Church, erected in 1831, and fitted to accommodate 1,250 persons, is a good modern imitation of the early English style: it may be distinguished by its tower surmounted by a light spire. This, and another church at the Paddock, have been built by funds provided by the parl. commissioners. There are 7 places of worship for dissenters, the most ornamental of which belongs to the Rom. Cath. The most capacious, however, is one of two belonging to the Wesleyan Methodists: it is the largest ever built by that sect, and will hold 2,400 persons. Sunday-schools are attached to all the churches and chapels. Among the secular buildings the chief is the cloth-hall, erected in 1765 by Sir John Ramsden, and enlarged by his son in 1780. It is a circular edifice 2 stories high, bisected, as respects its lower story, by an arcade, on one side of which are separate compartments or warehouses, let out to the larger manufacturers; on the other, an open space taken up by stalls held by the country weavers, and subdivided by passages between the rows of stalls. The attendance on a market-day (Tuesday) averages 600 traders, and the rules of the market make all the business be completed half an hour after noon. The removal of goods is allowed after 3 P.M. The light of the building is wholly admitted from within, a contrivance intended to secure it the better both from fire and depredation. Among the other public buildings may be mentioned the Philosophical Hall, a Grecian structure very lately erected by a thriving mechanics' institute founded in 1825: it is well adapted for lectures, and other useful purposes to which it is devoted. The Huddersfield and Agbrigg infirmary is an elegant stone edifice with wings, having a portico supported by 4 fluted Doric columns. A dispensary assists the infirmary in giving medical relief to the poor of the town. About ½ m. from the town, on the Sheffield road, is a sulphureous spa, over which have been built spacious and beautiful rooms fitted up with every convenience for bathers. The educational and religious institutions of Huddersfield are as follow:—a church-collegiate school, intended to supply the want of a regular grammar-school; a proprietary college furnishing a good general education, open to all sects; with national and other schools, furnishing instruction for a great many children.

Huddersfield is one of the principal seats of the woollen manufacture. It owes its importance in this respect partly to nature and partly to art. It stands in the midst of a rich coal-field, and there is an ample supply of water for mills from the neighbouring rivers. The means of cheap and convenient transit for its products, and the raw materials of its industry, have also been provided.

Sir J. Ramsden, on whose estate the town is built, obtained, in 1774, an act for making a canal to connect this town with the Calder. It commences at King's mill, close to Huddersfield, and running N.E. for 3¾ m., joins the Calder navigation at Cooper's bridge, from which point there is a communication with the Humber æstuary. The connection with the towns and ports of Lancashire is effected by means of the Huddersfield canal, completed in 1806: it takes a S.W. direction past Slaithwaite to Marsden, where, at a summit level of 656 ft. above the sea (the highest canal level in England), it enters a tunnel 5,450 yards long, cut through Standedge hill, and thence runs down the vale of Diggle in Saddleworth, and past Staley bridge to its junction with the Ashton and Oldham canal. Its entire length is 19¾ m., and it cost 300,000*l.* (*Priestley's Canals*, pp. 371. 567.)

This facility of intercourse has since been vastly increased by the completion of railways between the town, Manchester, and Leeds, and which, consequently, connect it with all parts of the Kingdom. "Huddersfield carries on a very flourishing trade both in cotton and woollen goods, particularly the latter: every factory seems to have full employment, and every thing about the town bears the appearance of opulence." (*Bound. Rep.*) The following table gives an account of the number of mills and people employed in them in 1839: (*Factory Returns*, p. 278.)

Description.	No.	Water Wheels.	Steam Engines.	Power.	Hands employed.
				Horses.	
Woollen mills	100	20	31	846	2,881
Cotton	3	2	1	41	263
Silk	3	3	2	96	284
Total	106	25	34	983	3,428

Besides the factory work-people there are many others employed in hand-loom weaving, warping, winding, &c. and in making mill machinery. The entire working pop. is estimated at above 8,000. The goods manufactured in this par. are narrow and broad cloths of superfine and inferior qualities, kerseymeres, flushings, and corded cloths of all descriptions. Cloths of wool and cotton mixed, especially fancy articles, are an increasing object of industry, and large quantities are now sent to the foreign markets. Valencias and twills for waistcoats, of stuff and silk, are also much made, and highly prized for superior texture and elegance of pattern. In the last few years shawl-making and merino-weaving from British wool have been introduced with advantage. The Huddersfield Joint-Stock Banking Co. has its head office in the town, and there are branches of other banks. The savings' bank had on the 20th Nov. 1848, 70,272*l.* of deposits.

The Reform Act conferred on Huddersfield, for the first time, the privilege of sending 1 mem. to the H. of C. Registered voters, in 1849–50, 1,019. Petty sessions are held here every week; and there are 2 courts, for the recovery of debts under 15*l.*, one for the honor of Pontefract, and the other by a recent local act for the parish, along with certain adjoining parishes. A county-court is also held here, before which 3,102 plaints were entered in 1848. The cloth-market is held on Tuesday, which is always a day of great bustle. Fairs for cattle, &c., March 31. May 4. Oct. 1.

Huddersfield is said by Dr. Whitaker (*Hist. of Leeds*, p. 347.), to be identical with the Oderfelt of Domesday Book, and to have been at that time "a mere waste."

The parish, according to the same authority, was, like Halifax, "separated from Dewsbury, and erected into an independent parish, by the influence of one of the earlier Lacys, to whose piety and munificence this neighbourhood has been greatly indebted, as the founders of its parish churches." The manor of Huddersfield, which originally belonged to the earls of Halifax, came into the possession of the Burton family, who sold it in the 16th of Eliz. to Sir Gilbert Gerard. How soon the Ramsden family, its present possessors, acquired it, is uncertain; but one of them applied, as lord of the manor, during the reign of Charles II., for the privilege of holding a market in the small town of Huddersfield: from this time forward it has been a market-town. It is indeed indebted to the Ramsden family for many privileges, which have greatly contributed to raise it to its present importance. (*Parl. Papers; Baines's Gaz. of Yorkshire; Whitaker's Hist. of Leeds. Private Information.*)

HUDSON, a town or city and port of entry of the U. States, New York, co. Columbia, of which it is the cap., built chiefly on a rocky promontory on the Hudson River, 90 m. N. by E. New York. Pop. (1835), 5,531. It is regularly laid out; the streets are spacious, and cross each other at right angles: Warren Street, the principal, is upwards of a mile in length. Opposite the river is a handsome promenade, and on either side the promontory forming the site of the town is a spacious bay, with depth enough for vessels of any burden, and on which some quays, docks, &c. have been constructed. Here is a new and handsome court-house, comprising also a gaol and other offices. Hudson has several places for public worship, a Lancastrian and several superior private schools, a private lunatic asylum, a bank with a capital of 150,000 dollars, many good hotels, several printing establishments, and stores of various kinds. It is a place of considerable trade, but is a port of delivery only, dependent upon the port of New York. Twelve ships, of the aggregate burden of 4,000 tons, were owned in Hudson in 1836, 11 of which were engaged in the whale fishery. There are manufactures of cotton and woollen fabrics, with establishments for calico printing and bleaching. It was founded in 1784, and incorporated under a mayor, recorder, and aldermen, in the succeeding year. (*New York Gazetteer; American Almanack.*)

HUDSON'S BAY, a large bay or inland sea of N. America, extending between 51° and 64° N. lat., and 78° and 95° W. long., and surrounded on all sides by the partially explored British territories N. of Canada. Its length, N. to S., is about 800 m.; greatest breadth, estimated at 600 m.; area, probably near 300,000 sq. m. Its S. extremity is called James's Bay. It communicates with the Atlantic by Hudson's Straits, a sea about 500 m. in length, and generally upwards of 100 m. in breadth. Hudson's Bay is navigable for only a few months in the year, being at other times frozen over or obstructed by drift ice. It is full of sand-banks, reefs, and islands, and inhabited by few fish. Its shores are rocky and barren. On its W. coast are several settlements of the Hudson's Bay Company, which monopolises nearly all the fur trade of British N. America. This company was incorporated by a charter from Charles II., in 1669. In 1837, the numbers of the principal furs, &c. imported and exposed for sale by the company were, — beaver skins, 82,927; marten do., 156,168; fox do., about 25,000; musquash do., 838,550; lynx do., 31,887; mink do., 27,570: quantities generally much above those of the years immediately preceding. The company in the same year imported 1,259,000 goose and swan quills, 461 lbs. sea-horse teeth, besides castor, isinglass, and other articles.

HUDSON RIVER, the principal river of the state of New York, U. States, through the E. part of which it flows, generally in a S. direction, from near lat. 44° N. to its mouth in the Atlantic, below New York city, about lat. 40° 40′ N. Throughout the greater part of its course (that is, from where it passes over a ledge of primitive rock, and forms what are called Glenn's Falls, in lat. about 43° 15′) it runs through a very remarkable depression or valley. This valley extends from the Atlantic to the St. Lawrence, having in its N. part the Lake Champlain with its outlet the Richelieu river, and, though enclosed by lofty mountain ranges on either side, the highest level of its surface is only 147 ft. above the level of the tides in the Hudson. The total length of Hudson River is about 280 m., 120 of which, or up to 5 m. beyond the town of Hudson, are navigable for the largest ships. Sloops pass as far up as Troy, 150 m. from the sea, to which distance the influence of the tide is felt, and thence through a lock to Waterford, a few miles further. Near the head of the tide the mean breadth of the Hudson does not reach a mile; but in the lower part of its course it is much wider, and below New York it expands into a spacious basin 4 m. broad, which forms the harbour of that city. Its only tributary worthy of notice is the Mohawk, which joins it from the W. Owing to its small rate of descent, the current of the Hudson below tide is slow; and, except in the season of floods, it appears rather like an inland bay. At Albany, about the middle of its course, during the 19 years from 1818 to 1836 inclusive, its navigation was at an average closed by frost for about 90 days annually.

The banks of this river are almost everywhere abrupt and lofty. The chief towns on it are New York, Albany, Newbury, Hudson, and Catskill. It is connected with the basin of the St. Lawrence by the Champlain and the Erie canals. (*Gordon's New York Gazetteer*, pp. 24—26.; *Darby's View of the U. States*, pp. 134—141.; *American Almanack*, 1838.)

HUE′, or HUE′-FO, the cap. city of the empire of Anam, on the river of same name, about 10 m. from the Chinese Sea: lat. 16° 19′ N., long. 107° 12′ E. Pop. uncertain. This remarkable city, which has probably no parallel in the East, was fortified early in the present century, in the European style, and, it is said, upon the model of Strasbourg. The work was undertaken by the king of Cochin China, and was carried on under the instructions of some French officers previously in his service. "The new city is completely insulated, having the river on two sides of it, and a spacious canal of from 30 to 40 yards broad on the other two. The circumference of the walls is upwards of 5 m. The form of the fortification is nearly an equilateral quadrangle, each face measuring 1,180 toises. The fortress has a regular and beautiful glacis, extending from the river or canal to the ditch, a covert way all round, and a ditch which is 30 yards broad, with from 4 to 5 feet water in it all through. The rampart is built of hard earth, cased on the outside with bricks. Each angle is flanked by 4 bastions, intended to mount 36 guns apiece. To each face there are also 4 arched gateways of solid masonry, to which the approach across the ditch is by handsome arched stone bridges. The area inside is laid out into regular and spacious streets, at right angles to each other. A handsome and broad canal forms a communication between the river and the fortress, and within is distributed by various branches, so as to communicate with the palace, arsenal, granaries, and other public edifices. By this channel the taxes and tributes are brought from the provinces, and conducted at once to the very doors of the palace or magazines. In the whole of this extensive fortification, there is scarcely any thing slovenly, barbarous, or incomplete in design. The banks of the river and canal, forming the base of the glacis, are not only regularly sloped down every where, but wherever the work is completed, they are cased from the foundation with a face of solid masonry. The canal within the walls is executed in the same perfect manner; and the bridges which are thrown over it have not only neat stone balustrades, but are paved all over with marble brought from Tonquin." (*Crawfurd's Embassy to Siam, &c.* i. 384—386.) The palace is situated within a strong inner citadel, consisting of two distinct walls or ramparts. The barracks surround the whole of the outer part of the citadel, and in 1821 would have done no discredit to the best military estab. in Europe. From 12,000 to 13,000 troops were then constantly stationed in the cap. The arsenal contains a vast number of cannon, shot, shells, &c., all manufactured in the country. The public granaries are also of enormous extent, and kept full of corn. The fortress of Hué, from its immense size, which is its greatest fault, would require at least 50,000 troops to garrison it, in case of an attack from Europeans: against Asiatic enemies it is impregnable. There are some building-docks on the river, and a large fleet of galleys is usually stationed at Hué. The river is not above 400 yards wide at its entrance, but within is little inferior in breadth to the rivers of Saigon, or Bankok: owing to a bar at its mouth, however, it is fitted only for ships of small draught. Its entrance is completely commanded by a stone quadrangular fort, built in the European style. Its banks are well raised, and in some places extremely picturesque. The neighbourhood of the cap. is every where in a high state of cultivation, with rice, mulberry trees, cotton, fruit, &c., and thickly interspersed with villages. Mr. Crawfurd remarks, that Hué is probably the only city in India, in the vicinity of which there are good roads, bridges, and canals. About 10 leagues N. is the royal mausoleum, surrounded by magnificent grounds, laid out by a late king of Cochin China. (*Crawfurd's Embassy*, i. 368—400.; *White's Voyage, &c.; Finlayson; Ritter, Asien Erdkunde*, iii. 1006—1012.)

HUESCA (an. *Osca*), a town of Spain, prov. Aragon, cap. partido same name, and a bishop's see, 35 m. N.E. Saragossa, and 135 m. W. by N. Barcelona. Pop., according to Miñano, 9,200. It stands on a slope close to the Isuela, a tributary of the Cincas, is surrounded by walls now falling into decay, and contains many respectable houses. The chief public buildings are a cathedral, 4 par. churches, 15 convents, a foundling hospital, cavalry barracks, 2 schools, and a university; the latter, entitled *Sertoriana*, comprising 4 colleges, was founded, in 1354, by Peter IV. of Aragon, and further endowed by subsequent monarchs; but the endowment, as in most Spanish universities, is wretchedly small, and the education is of a very inferior description. The industry of

the town is confined to tanning and the weaving of coarse linens; but the neighbourhood abounds in grain, wine, and other fruits, and large flocks of sheep graze on the surrounding hills. An annual fair is held there, and much frequented. The town was originally founded by Quintus Sertorius, *anno* 77 B.C., and was known in the time of Augustus as *urbs victrix Osca*. It subsequently fell into the hands of the Moors, from whom it was taken by Peter I. of Aragon, after the battle of Alcoras, in 1096. (*Miñano; Dict. Géog.*)

HULL (KINGSTON ON), a large and important commercial town, river-port, mun. and parl. bor. of England, and co. of itself, locally situated in co. York, E. riding, Harthill wap., on the N. bank of the Humber æstuary, 22 m. from the Spurn-head, 34 m. S.E. York, and 155 m. N. London. Lat. 53° 45′ N., long. 0° 20′ W. Pop. of parl. bor., (which includes, besides the town pars., those of Sculcoates and Drypool, and a portion of the par. of Sutton,) 65,670 in 1841. The co. includes also the pars. of Ella, Hessel and N. Ferriby, with a pop. of 2 614 persons, chiefly engaged in agricultural pursuits. The town, which stands close to the confluence of the navigable river Hull with the Humber, has been greatly enlarged and improved during the last half century. It is well paved and lighted with gas; the principal streets extend nearly 2 m. along the Humber, and about the same distance along the W. bank of the Hull; and from these others branch off, crossing each other in different directions, and covering an extensive area. Almost the whole town is built with brick: the older streets are inconveniently narrow; but many recently laid out are wide and regular, containing handsome residences. The public buildings are numerous, but, generally speaking, not remarkable for beauty: the principal, besides the churches, are the Mansion-house (in which is the court-house and court of requests), the guildhall, exchange, corn-exchange, custom and excise offices, the Trinity-house, the gaol (built at an expense of 22,000*l*.), the theatre, and the citadel, a regularly-garrisoned fort on the E. side of the river Hull, which is here crossed by a stone drawbridge of 3 arches. A good market-house was built some years ago, and in the market-place is an equestrian statue of William III. The town has also a handsome Doric column, surmounted by a colossal statue of Wilberforce, the great advocate for the abolition of slavery. Within the parl. bor. are 8 churches, among which that of the Holy Trinity, in the market-place, begun in the 14th century, is remarkable as one of the best specimens in England of the Gothic style, at different periods. It is a cruciform, cathedral-like building, from the centre of which rises a highly ornamented embattled tower with pinnacles, 140 ft. in height. The interior is 280 ft. long, and 72 ft. broad. St. Mary's, in Lowgate, was originally built at nearly the same time as that last mentioned; but having been partly destroyed by Henry VIII., it was afterwards restored at different periods, and with little taste in the architecture. There are also 20 places of worship for Dissenters, a Jews' synagogue, and a floating chapel for the use of Dissenters; to all of these large Sunday schools are attached, which furnish instruction to upwards of 7,000 children. The principal schools are, the Grammar School, founded by Bishop Alcock, in 1486, and chartered by Queen Elizabeth, in which the instruction is general as well as classical, the Vicar's School, established in 1734 for 60 boys; Cogan's charity school, endowed with 400*l*. a year for the maintenance and instruction of 40 girls; the nautical school for 36 boys, attached to the Trinity House; with National, Lancastrian, and other schools, attended by a great many children. The means of procuring a sound education have been greatly increased of late years, by the establishment of 2 proprietary colleges, which furnish instruction in classics, history, natural science, &c., on a plan similar to that pursued at the University and King's Colleges, London. Among the numerous endowed charities of the town, the oldest is the Trinity House, founded in 1369, for the support of decayed seamen and their widows, and chartered by Henry VIII. The present building, erected in 1753, consists of 4 sides enclosing a square; the E. front is an elevation of the Tuscan order, and the interior comprises 2 large and well-proportioned council-chambers, besides offices and apartments for 32 pensioners. A school within the building gives a useful nautical education to the sons of seamen intended for the merchant service. The Charterhouse hospital (originally endowed in 1380 for poor monks) was re-established in 1640, and devoted to the maintenance of poor pensioners. The revenues are stated by the Charity Commissioners (*Analyt. Digest*) to average 1,500*l*. a year; and there is accommodation for 60 persons, besides a chaplain. Six other endowed hospitals or alms-houses give relief to about 70 persons. The charity-hall is a kind of poor-house, established by an act obtained in 9 and 10 William III.: it was built by subscription, and is now maintained by the poor-rates raised within the bor. The Infirmary, a brick building ornamented with stone, was erected in 1782; it accommodates 70 in-patients, and furnishes advice and medicine to an unlimited number of out-patients: the annual expenses are defrayed by voluntary subscription. A dispensary, opened in 1814, has also been extensively useful in giving medical relief to the poor in this increasing town.

The port of Hull, which ranks fifth or sixth amongst those of the British empire, has extensive accommodations for shipping, which have been greatly enlarged during the present century. The old dock formed in 1775 occupies the place of the old wall and ramparts: it is 1,700 ft. long, 250 ft. broad, and 24 ft. deep. Its wharfs, quays, &c., occupy an area of 13 acres, and the entrance is on the E. side from the Hull, about 300 yards above its mouth. In 1807, the accommodation was further increased by the construction of a dock opening directly into the Humber: its dimensions are 920 ft. in length, 350 ft. in breadth, and 30 ft. in depth, the wharfs, &c., covering an area of 9 acres. A third dock, connecting those above mentioned, was completed in 1829, at an expense of 180,000*l*.: its water-surface exceeds 6 acres, and affords accommodation for about 70 square-rigged vessels.

The commerce of Hull, which is very large, depends principally on her advantageous situation. She is the principal emporium of the extensive and fertile countries situated on the Humber æstuary, and those traversed by the numerous and important rivers that have their embouchure in it, including the Trent, Don, Ouse, &c. The natural facilities for internal communication thus enjoyed by Hull, have been greatly extended by artificial means. She is now united, partly by rivers, canals, and railways, with Sheffield, Leeds, Manchester, Liverpool, &c.; so that she has become not merely the principal port for the W. Riding of Yorkshire, but also for a considerable portion of the trade carried on between Lancashire and the N. parts of the Continent. The great articles of export are cotton stuffs and twist, woollen goods, hardware, earthenware, &c. Of imports, the leading articles are wool, bones, timber, hemp and flax, corn and seeds, madder, bark, turpentine, skins, &c. The rise of Goole (which see) has somewhat injured the trade of Hull; and it may probably, also, sustain some injury from the improvements now going on at Grimsby; but its superior facilities for trade and navigation will always ensure for it a decided superiority over the other ports on the Humber and its affluents. Hull used to be very largely engaged in the N. whale-fishery; but that branch of business had so fallen off, that in 1842 she only sent 4 ships to the fishery Latterly, however, it has revived, and last year she sent 14, and this year (1850) she has sent 12 ships to Greenland and Davis's Straits. There belonged to the port on the 1st of Jan., 1850, 195 sailing vessels of less than 50 tons each, their agg. burden being 7,091 tons, and 259 do. of more than 50 tons each, agg. burden 54,730 tons, with 7 steamers of less and 24 of more than 50 tons. Gross customs' duty in 1846, 460,203*l*. A regular intercourse is kept up between Hull and London, and Hull and some of the continental ports, by means of steamers.

The manufactures of Hull are not very important. A flax and cotton mill employed, in 1838, 339 hands; there is also a woollen mill, with extensive oil mills and sugar houses. In 1848, 3,275,445 lbs. of soap were made in Hull: sail-cloth and cordage are also extensively produced; and there are white lead works, ship-builders' yards, and the other works necessary to a considerable port. The Hull Joint Stock Banking Co., established in 1833, has its principal office here: and here also is a branch of the Bank of England. A savings' bank, established in 1818, has been very extensively useful. It had on the 20th Nov. 1848, 349,573*l*. 17*s*. 4*d*. of deposits, and a school is attached to the bank which, it is said, "has conferred incalculable benefits on the depositors." There are four newspapers. The mun. bor., which received its first charter in the 27th of Edward I., was enlarged by the Mun. Reform Act, so as to be co-extensive with the parl. bor., and was divided into seven wards, the government being vested in 14 aldermen (one of whom is mayor) and 42 councillors. Corp. revenue, in 1848, 26,649*l*. Quarter and petty sessions are held under a recorder. A county court is established here, before which 4,014 plaints were entered in 1848. Hull has sent 2 mems. to the H. of C. since the 33d of Edward I., and the franchise, previously to the passing of the Reform Act, was vested in freemen, by birth, servitude, purchase, or gift (about 1,000 previously to 1832). The limits of the present parl. bor. include (besides the old bor.) the entire pars. of Sculcoates and Drypool, a small portion of the par. of Sutton, and the extra-parochial district called Garrisonside. Reg. electors, in 1849-50, 5,298; but some of these are registered on different qualifications. Markets on Tuesdays and Saturdays; fairs for horses, July 10., Oct. 10., and Dec. 10. The name of Kingston-on-Hull was given to it by Edward I.,

who, seeing its eligibility for becoming an important station, erected a fortress, and constituted it a chartered town and port. When Edward III. invaded France, in 1359, Hull contributed 16 ships and 470 mariners. The fortifications, commenced early in the 14th century, were completed by Sir Michael de la Pole, a great benefactor to this town during the reign of Richard II. The plague made great ravages here during the 15th, 16th, and 17th centuries.

In the reign of Charles I., Hull was the first to close its gates against the king, who shortly after besieged it, and would have taken it by stratagem, if the treachery of Sir John Hotham, its governor, had not been discovered in time to prevent its surrender to the royalists. The town was afterwards besieged by the Marquis of Newcastle, and successfully defended by Lord Fairfax. The fortifications were greatly improved by Charles II., and the citadel was occupied by a large body of troops in order to keep in awe the inhabs., who were considered to be disaffected to the Stuart dynasty. At the close of the reign of James II., the town, fort, and garrison being in the hands of the Jacobite party, the place was surprised, and the Prince of Orange proclaimed king; the anniversary of which event is still kept as a holiday. (*Forster's Sketches on Hull; Official Documents; Private Information.*)

HUMBER, a great river, or rather æstuary, on the E. side of England, between Yorkshire and Lincolnshire. It extends from Goole E. to Hull; and thence S.E. to its embouchure between the Spurn Point on the N. and the opposite coast of Lincoln on the S. This æstuary receives the waters of some of the most important of the English rivers. At its W. extremity it is joined by the Ouse (after the latter has been augmented by the Derwent, the Aire, &c.), and by the Don; and a little lower down it is joined by the Trent, and still lower down by the Hull river. Hull is the principal port of the Humber, and next to it are Goole and Great Grimsby. At Hull spring tides rise about 22, and neaps about 13 ft.; and as there is at all times a considerable depth of water in the fair-way of the channel, Hull is accessible by very large vessels. Goole, which is about 22 m. more inland, may be reached by vessels drawing 15 and 17 ft. water, provided they take advantage of the tide. The basin of the Humber, or the country drained by the Ouse, Trent, and other rivers falling into this great æstuary, embraces an extent of about 10,000 sq. m., comprising some of the most populous and fertile districts in the kingdom.

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New-street-Square.

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